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A. B. Lloyd, *JEA* 68 (1982), 57.

B. J. Kemp, *Amarna Reports*, 1 (London, 1983), 57.

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Any of the accepted systems of transliteration may be used (but *q* for *k*). Any hieroglyphs used in the body of the text should be accompanied by Gardiner sign list numbers, or, in the case of signs not in Gardiner, by slightly enlarged ink versions on a separate sheet. The latter also applies to cursive signs. Lengthy hieroglyphic passages should also be supplied separately. Captions for all figures and photographs should be provided. Manuscripts which do not conform to these conventions will be returned.

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CONTENTS

	PAGE
EDITORIAL FOREWORD	vii
MEMPHIS, 1988	D. G. Jeffreys and Lisa L. Giddy 1
TECHNIQUES OF DECORATION IN THE HALL OF BARQUES IN THE TEMPLE OF SETHOS I AT ABYDOS.	John Baines 13
A POSSIBLE SOURCE OF COPPER ORE FRAGMENTS FOUND AT THE OLD KINGDOM TOWN OF BUHEN	El Sayed El Gayar and M. P. Jones 31
A PROTECTIVE MEASURE AT ABYDOS IN THE THIRTEENTH DYNASTY	Anthony Leahy 41
AN EARLY EIGHTEENTH DYNASTY MONUMENT OF SIPAIR FROM SAQQARA	Jaromir Malek 61
WALTER SEGAL'S DOCUMENTATION OF CG 51113, THE THRONE OF PRINCESS SAT-AMUN	M. Eaton-Krauss 77
DOMESTIC SHRINES AND THE CULT OF THE ROYAL FAMILY AT EL-'AMARNA	Salima Ikram 89
SOME REMARKS ON THE TRIAL OF MOSE	S. Allam 103
A WORD FOR 'CAUSEWAY' AND THE LOCATION OF 'THE FIVE WALLS'.	Paul John Frandsen 113
A THEBAN TOMB AND ITS TENANTS	Aidan Dodson and Jac. J. Janssen 125
TAKELOTH II—A KING OF THE 'THEBAN TWENTY-THIRD DYNASTY'?	D. A. Aston 139
STATIONS AND TOWERS ON THE QUSEIR-NILE ROAD	Ronald E. Zitterkopf and Steven E. Sidebotham 155
CHRISTIAN PAINTINGS FROM TEBTUNIS	C. C. Walters 191
MUSEUM ACQUISITIONS, 1987	Janine Bourriau 209
BRIEF COMMUNICATIONS	
AN OLD KINGDOM EXPEDIENT FOR ANCHORING INLAID EYES	Henry G. Fischer 213
THE TRANSCRIPTION OF THE ROYAL NAME PEPY	Henry G. Fischer 214
THE CHIEF BAKER	John Coleman Darnell 216
CALEMBOUR, TROMMELWETTSTREIT ODER KAMPF AUF LEBEN UND TOD IN DER AUTOBIOGRAPHISCHEN STELENINSCHRIFT DES EMHAB	Alfred Grimm 220
HATSHEPSUT AND 'HER FATHER' MENTUHOTPE II	Aidan Dodson 224
EARLY SQUEEZES MADE IN THE TOMB OF KHAEMHET	J. Malek and E. Miles 227
AN ARTISTIC INTERPRETATION OF SETY I'S WAR RELIEFS.	Clive Broadhurst 229

BELZONI, THE EGYPTIAN HALL, AND THE DATE OF A LONG-KNOWN SCULPTURE	C. N. Reeves	235
ZWEI BEMERKUNGEN ZU GEBEL ES-SILSILA NR. 100	Karl Jansen-Winkeln	237
WAHIBREEMAKHET AT GIZA	Lisa Montagno Leahy	239
FURTHER NOTES ON STELE ASWAN 1057	J. D. Ray	243
THE NATURE OF THE HIEROGLYPH 𓆎	P. M. E. Jones	245
ON THE ACCURACY OF SEXING OF SKELETONS IN ARCHAEOLOGICAL REPORTS	George E. Mann	246
DQR, SPINNING AND TREATMENT OF GUINEA WORM IN P. EBERS 875	R. L. Miller	249
REVIEWS		
JOHN BAINES, <i>Fecundity Figures</i>	Reviewed by James K. Hoffmeier	255
D. G. JEFFREYS, <i>The Survey of Memphis, I</i>	Michael Jones	256
ANTHONY JOHN SPALINGER, <i>Aspects of the Military Documents of the Ancient Egyptians</i>	William J. Murnane	259
MARK LEHNER, <i>The Pyramid Tomb of Hetep-heres and the Satellite Pyramid of Khufu</i>	I. E. S. Edwards	261
RAINER STADELMANN, <i>Die ägyptischen Pyramiden</i>	Erhart Graefe	265
LABIB HABACHI, <i>Elephantine IV. The Sanctuary of Heqaib</i>	Rita Freed	266
ASHRAF I. SADEK, <i>The Amethyst Mining Inscriptions of Wadi el-Hudi, II</i>	Edmund S. Meltzer	270
M. EATON-KRAUSS AND E. GRAEFE, <i>The Small Golden Shrine from the Tomb of Tutankhamun</i>	Kate Bosse-Griffiths	271
R. HARI, <i>La tombe thébaine du père divin Neferhotep (TT 50)</i>	Lise Manniche	273
WILLIAM J. MURNANE, <i>The Road to Kadesh</i>	K. A. Kitchen	276
GEOFFREY THORNDIKE MARTIN <i>et al.</i> , <i>The Tomb-chapels of Paser and Racia at Saqqâra</i>	Alain-Pierre Zivie	278
DOMINIQUE VALBELLE, <i>"Les Ouvriers de la tombe" Deir el-Médineh à l'époque ramesside</i>	M. L. Bierbrier	279
JEAN-CLAUDE GOYON, <i>Les Dieux-Gardiens et la genèse des temples</i>	J. Gwyn Griffiths	281
HEIKE STERNBERG, <i>Mythische Motive und Mythenbildung in den ägyptischen Tempeln und Papyri der Griechisch-römischen Zeit</i>	J. Gwyn Griffiths	283
JEAN LECLANT AND G. CLERC, <i>Inventaire bibliographique des Isiaca, L-Q (IBIS)</i>	J. Gwyn Griffiths	285
WIKTOR ANDRZEJ DASZEWSKI, <i>Corpus of Mosaics from Egypt, I. Hellenistic and Early Roman Period (Aegyptiaca Treverensia 3)</i>	D. M. Bailey	286
SOPHIE KAMBITSIS (ed.), <i>Le Papyrus Thmouis I, colonnes 68-160</i>	J. David Thomas	288
NAPHTALI LEWIS (ed.), <i>Papyrology</i>	Revel Coles	289
SUSAN A. STEPHENS, <i>Yale Papyri in the Beinecke Rare Book and Manuscript Library, II</i>	Bärbel Kramer	291

CONTENTS

v

<p>MICHAEL FACKELMANN, <i>Restaurierung von Papyrus und anderen Schriftträgern aus Ägypten</i></p> <p>COLETTE SIRAT <i>et al.</i>, <i>Les Papyrus en caractères hébraïques trouvés en Égypte</i></p> <p>E. C. KRUPP (ed.), <i>Archaeoastronomy and the Roots of Science</i>.</p> <p>Other books received</p>	<p>Adam Bülow-Jacobsen 295</p> <p>J. B. Segal 297</p> <p>Rolf Krauss 298</p> <p>. 298</p>
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EDITORIAL FOREWORD

THE preliminary report on the season's work at Memphis appears separately below. The achievements of our other expeditions are summarized here.

El-Amarna: The main party assembled in Cairo on January 14th, and left for the site on the 18th. Work began on January 23rd and ended on April 6th. The team consisted of Barry Kemp (director), Christopher Kirby, Imogen Grundon, Peter Sheehan, Wendy Horton (site supervisors), Michael Mallinson, Katherine Spence, David Hills (architects), Richard Hughes (building conservation), Pamela Rose, Paul Nicholson, Catherine Powell (pottery), Ann Cornwell (organics registrar), Willemina Wendrich (basketry), Ian Mathieson (resistivity survey), Andrew Boyce (artist), Frances Weatherhead (painted wall plaster), Margaret Serpico (registrar), Gwilym Owen (photographer), Dr Rosemary Luff (bones) and Delwen Samuel (botany). The Egyptian Antiquities Organization was represented by Talaat Fawzi Habib assisted by Attar Makramallah Mikhail at the Small Aten Temple, as well as by engineer Ashraf Mustafa Mohammed.

The expedition wishes to express its gratitude to the chairman and officers of the Permanent Committee of the Egyptian Antiquities Organization for granting permission to carry out the projects, and to Dr Ali Hassan and Dr Ali el-Khouli in Cairo, and Mahmoud Hamza, Adel Hassan and the staff of the Minia Inspectorate for facilitating the expedition's work.

Part of the work was supported by a substantial donation from the McDonald Foundation of the University of Cambridge. Support for the expedition and for individuals was also received from the British Academy and Leverhulme Foundation, George Brown, Stanley Hattie, Edward Henderson, Alfred Baxendale and Cementone-Beaver, and the friends of the Egypt Exploration Society in Cairo.

The excavations at Kom el-Nana have been in part a continuation of last year's work, and in part an investigation of a new area, namely the remains of the central temples. One of the former was the clearance of the group of houses at the south-east corner of the enclosure, and further clarification of the stratigraphy which points to this building having been an addition to the enclosure. The other continuation has been within the bakery along the northern edge of the enclosure where excavation showed that a second similar set of chambers with ovens ran inside and parallel to the first, facing south. Of particular interest is the variety of ovens and kilns present.

The new part of the excavation focused on the remains of ceremonial and religious architecture, comprising a northern and a southern stone temple and a large brick platform. Because the site of the northern temple is largely covered by one of the mounds of the late Roman/early Christian settlement, excavation was limited to a strip to the west, which turned out to run along the western edge of the temple foundations. Beside it there seems to have been a brick-edged garden with trees growing in pits, and beyond it the ground was covered with a mud pavement apparently painted white which continued towards the southern temple. Evidence was recovered to suggest that a major brick wall dividing Kom el-Nana into two largely separate enclosures crossed the excavation trench and so separated the northern from the southern stone temple.

This year's excavations at the southern temple began by reclearing part of a large pit made in 1963 and gradually extended to cover a block of eight five-metre squares. This exposed areas of a smooth flat layer of gypsum mixed with stone chippings which had served as a foundation layer on which the plan of the temple was set out and the lowest course of stone blocks laid on their own bed of gypsum mortar. When the temple was demolished after the Amarna Period the mortar bed left an outline plan of the building, which had consisted of a series of chambers in the rear part, and rows of columns towards the front.

Both temple sites together produced about 4000 fragments of carved and painted blocks from wall decoration and from architectural elements. They must represent only a fraction of what remains to be recovered. Limestone was the dominant material at the southern temple, but in the northern temple sandstone was more common. A small number of fragments from finely carved statues, mostly in quartzite, were also found, amongst them the corner of a base bearing the name of the Princess Meritaten. The names of both Akhenaten and Nefertiti occurred several times, in no instance of the latter showing traces of replacement by the name of another person. The many Aten cartouches were of the early form, with one possible instance of the late form.

The third area of excavation in the new sector lies just beyond the southern limits of the stone chippings and had the form of a conspicuous gravel-covered mound. About one third of it has been excavated revealing a platform which had been reached by a ramp and upon which had been built chambers and columns resting on heavy brick foundations. One of the chambers had been remodelled in such a way as to suggest an earlier phase when the floor was lower. From this area came part of a quartzite torso of a life-size statue probably of the king. The remains of two secondary burials of uncertain date were found on the top of the mound, the bones, examined by Dr Luff, showing interesting pathological conditions.

The work of the 1989 season in the small Aten temple continued that of previous seasons. Further removal of drift sand and old excavation dumps allowed fresh planning and archaeological examination. The work was focused along the front of the north pylon, around the Priest's House, in the south-east corner of the second court, and along the outside face of the southern enclosure wall. Along the front of the north pylon new details included the base of what was probably a large buttress perhaps originally matching those on the side walls, and evidence for phasing within the side gateway. Around the Priest's House the new walls discovered last year proved to belong to an earlier phase of the temple's history, something which agrees with previous results around the Great Altar. Investigation of the ground around the Priest's House led to clearance of the south-east corner of the second court, and investigation of the well-preserved original flooring of the temple, a mixture of gypsum and limestone chippings and Nile mud. Along the outside of the south wall traces were also found of what appears to be an earlier enclosure wall built slightly outside the line of the later one. Examination of the surface of the street along this face has revealed numerous details of the ancient surface, including irregularly placed tree-pits and buried pottery vessels.

The brickwork of the temple requires some consolidation, both where the foundations have been eaten into and where parts of the surface have been undercut. As a result of experiments conducted by Richard Hughes an improved method of making new bricks was devised and repairs were carried out on various part of the building.

Pamela Rose and Dr Paul Nicholson concentrated sherd survey in the North Suburb, one of the purposes being to compare modern observations with the results of the Frankfort and Pendlebury work (recently revised by means of the excavation archives) which show curious anomalies. Additional survey points were also examined in the desert of the southern sector of the Amarna plain, where interesting concentrations of sherds and

associated huts were discovered. Dr Rosemary Luff briefly joined one of the surveys in the North Suburb to collect animal bones from the surface of the old excavation dumps. This produced an interesting range of species including pig. Ian Mathieson continued his overall resistivity survey at Kom el-Nana, identifying many features of interest to future excavation. He also carried out a brief investigation of the subsoil in the first court of the Small Aten Temple.

Throughout the season the regular processes of registration and recording of material continued, a particularly pressing task being the initial registration and storage of the sculptured pieces from Kom el-Nana. The research project into Eighteenth Dynasty pottery technology saw two monitored firings of the replica Eighteenth Dynasty kiln which contained, in addition to unfired pottery vessels, a range of sample tiles made from a wide variety of local clays and tempers and prepared by Catherine Powell, who also carried out a range of successful experiments involving replicas of ancient Egyptian potter's wheels. The results greatly enhance the view that much of the Amarna pottery was produced from local materials on a small domestic scale. Further research on the expedition's collections was undertaken by Fran Weatherhead on painted wall plaster, Willemina Wendrich on basketry and cordage, Dr Rosemary Luff on bones, and Delwen Samuel on plant and seed remains accompanied by experiments into cereal grinding practices.

Amarna Reports V is scheduled to appear in late summer 1989. It contains a full account of the 1987 excavations of the potter's workshop and large well, and a first account of the re-examination of the Small Aten Temple. Technical reports include studies of pigments, botanical remains, cordage, basketry and matting from Amarna, and accounts of experimental work in ceramics and cereal grinding

Saqqâra: This year the Expedition undertook a season of study and recording in the tomb of Maya and Meryt. The work lasted from 16 January to 18 March 1989. The members of staff were Professor G. T. Martin (Field Director), Dr D. A. Aston, Dr J. van Dijk (representing the Society), and Professor H. D. Schneider, and Dr W. R. K. Perizonius (representing Leiden). The Organization of Egyptian Antiquities Chief Inspector present on the site was Mr Fawzy Abdel-Halim Omer.

No work was possible underground this year, so all our efforts were concentrated on the superstructure, and on recording objects, pottery, and skeletal material from previous seasons. The work carried out was as follows:

A full record was made of the reliefs in the pylon entrance of the tomb, and the recording of scenes in the Statue Room was completed. Additional notes were made on the architecture. Most of the material is now to hand to enable a full publication of the superstructure to be undertaken in the immediate future. This will take into account the scenes and texts recorded by Lepsius (some of which have disappeared since 1843), as well as the few blocks in museum collections and the magnificent series of blocks found by Quibell in the Monastery of Apa Jeremias at Saqqâra in the early part of this century. Some final checking of reliefs and texts was also carried out in the tomb of Tia and Tia.

Fragmentary objects remaining over from the 1988 season were examined and recorded for publication. A full record was prepared of the ink docketts on pottery jars found in the subterranean complex of the tomb. The material comprises ten honey docketts, ten sesame-oil docketts, and ten moringa-oil docketts, all specifically prepared 'for the funeral procession' of Maya. In addition there are six docketts mentioning water, the latter being drawn, as we are told, from different localities in Egypt. Three of these toponyms are in the Delta, three others are very faint in the writing and at the moment defy precise identification. Other docketts specify fresh fat (a single example, dated to Year 9, certainly of Horemheb), 'first quality moringa-oil' with gum-oil and mandragora, dedicated by an official, Nebre. Such

substance are sometimes mentioned in Egyptian sources in connection with love poetry. For their presence in the tomb the inference is obvious. Four docketts mention different varieties of *mrht*-oil, while sundry sherds bear references to wine and *šdh*. Finally, an ostrakon has parts of the opening lines of the text known as the 'Teaching of Ammenemes to his Son'. All the work detailed above augments and supplements the report in *JEA* 74 (1988), 14.

A great quantity of blue-painted pottery from the burial chambers was examined, reconstructed and recorded. It can now be proved that the large deposit of sherds found in 1988 on the south side of the forecourt of the tomb, adjacent to the pylon, also forms part of the funerary equipment. It is already clear that provision was made in the latter, in some instances, for sets of vessels comprising four vases.

Two osteological investigations were carried out. The first consisted of a preliminary analysis and identification of the New Kingdom skeletal remains found in the substructure in 1988. Only tiny fragments of bone remained after the activities of the ancient tomb robbers, and these were found scattered throughout the several rooms of the lower level of the substructure. On present evidence (which may need revision next year) some six individuals were buried there, including no doubt Maya and Meryt. The second investigation was concerned with dental research, specifically on the 67 intrusive skeletons dating to the Third Intermediate Period, found in the burial chambers of Iurufef within the funerary complex of Tia and Tia in 1983 and 1985. This work is the first in a projected series entitled 'Diachronic dental research on human skeletal remains excavated in Egypt'. Emphasis will be laid on dental caries (occlusal, proximal and cervical), periapical lesions, and ante-mortem tooth loss. Dental data are presented *per* age group. The results will be published in the monograph dealing with the Tomb-Chambers of Iurufef, now being prepared.

It is something of a rarity to be able to report new permanent appointments in Egyptology in Britain, yet in the past year there have been two. Dr Stephen Quirke, a Cambridge graduate who has completed a dissertation on kingship in the Thirteenth Dynasty, has been made Assistant Keeper at the British Museum, with special responsibility for the large collection of hieratic papyri. Mr David Jeffreys, well-known to members as the Director of our Memphis Survey, has been appointed to a lectureship at University College, London. That Department has also been considerably strengthened on the philological side by the transfer of Dr W. J. Tait from Durham, where the teaching of Egyptology has, regrettably and absurdly, ceased. On the international scene, Dr Dietrich Wildung has become Curator of the West Berlin Museum, and has been succeeded at Munich by Dr Sylvia Schoske. In the United States, Dr Rita Freed has been appointed Curator at the Museum of Fine Arts in Boston. Change has also come to Chicago House in Luxor. After a long, successful and, no doubt, exhausting period as Director of its Epigraphic Survey, Dr Lanny Bell has 'retired' to a Professorship at the Oriental Institute, Chicago. Scholars visiting Chicago House were sure of a generous reception from Lanny and Martha, however trying the times, and we are confident that this tradition will continue under the new Director, Dr Peter Dorman.

A former Director of the Epigraphic Survey is one of two widely-respected scholars, both members of the Society for many years, whose loss has, sadly, to be reported. On 19 November 1988, Charles Nims died in Chicago. His book, *Thebes of the Pharaohs*, illustrates the breadth of knowledge of Theban monuments he acquired

in many years at Chicago House, as epigrapher and photographer and then, from 1964-72, as Director. Among other things, Professor Nims developed an early interest in demotic studies, to which he made an important contribution at a time when it was not yet the very fashionable and active branch of study that it is today. J. J. Clère, formerly Professor at the École Pratique des Hautes Études, and twice a visiting Professor at Brown University, died in Paris on 30 May 1989. Although he always had a special interest in the publication of hieroglyphic texts, Clère ranged widely over the whole pharaonic period in his many articles, contributing with equal facility and meticulous scholarship to Egyptian philology, religion, history and geography.

It must also be recorded with sadness that last year's volume was the last to be printed by Oxford University Press. The closure of the Printing Division in Walton Street at short notice earlier this year, when this volume was already in hand, has ended a long era. O.U.P. has printed the *Journal* for some fifty years, and many of the Society's *Memoirs* since the last war. The skill and experience of their compositors, and the eagle eyes and seemingly boundless knowledge of their readers, have served us well during that time. The present editor would like to express his personal thanks to Mr Pat Duffy, who has done much to ease his task and to ensure the smooth production of recent volumes.

Happily, our new printers and typesetters have responded keenly to the challenge presented by the *Journal* and by Oxford's standards, and, at the time of writing, it is confidently expected that this volume will appear on time

MEMPHIS, 1988

By D. G. JEFFREYS *and* LISA L. GIDDY

Excavation continued on Kôm Rabî'a with further investigation of the Thirteenth Dynasty terraced building; by the end of the season ceramically earlier contexts, probably of the Twelfth Dynasty, had been reached. A sounding was made in the SW corner of the excavation to clarify the early New Kingdom sequence. Drilling continued in the southern part of the ruin field, concentrating on the SE quadrant (Kôm Qal'a) and the Hellenistic waterfront.

STAFF for the 1988 Survey of Memphis season arrived in Egypt from 9 September onwards. Excavation ran from 15 September to 3 November with intermissions for the usual public holidays and occasional recording days, and was followed by three weeks for post-excavation recording and analysis and further survey work (drill cores). The staff members were: Steven Adamson, Signe Biddle, Janine Bourriau, Sarah Buckingham, Mark Collier, Barbara Ditze, Dr Rita Freed, Peter French, Barbara Ghaleb, Dr Lisa Giddy, Susan Goddard, David Jeffreys, Christopher Kirby, Fiona Macalister, Dr Paul Nicholson, Amanda Parrish, Margaret Serpico, Professor H. S. Smith and Mrs H. F. Smith, and Ana Tavares. Professor and Mrs Smith arrived towards the end of the season to continue publication work on the Sacred Animal Necropolis, and closed the season on 14 December.

Our thanks again go to the officers of the Egyptian Antiquities Organization: to its Chairman Dr Abd el-Halim Nur el-Din and his staff at Abbâssiya (especially Mr Ahmed Moussa and Mme Fawzia), and locally to Dr Huleil Ghaly, Director of Antiquities for Memphis and Saqqâra, and the Chief Inspector of Memphis Mr Mohammed Rashid, who also represented the EAO on the survey and excavation work. Thanks also to our other friends and colleagues at Saqqâra, and to the staff of the EES house, who all in various ways made our stay easier and more productive. Once more we are grateful to Memphis State University, Memphis, Tennessee, for financial support and for sending their student Steven Adamson, as well as letting Dr Freed be with us this year; to the University of Sydney for allowing Dr Giddy to attend the excavation for the full period; and as in recent years it is a pleasure to acknowledge the support of Michael and Amanda Pike who, as Organisers for the Friends of the EES in Cairo, arranged several functions on our behalf during the season. David Jeffreys continued to be supported by a fellowship from the Leverhulme Trust during this year's work.

Excavation site RAT

During seven weeks of full excavation the main objects were:

(a) to reduce further the occupation levels of the Thirteenth Dynasty terraced build-

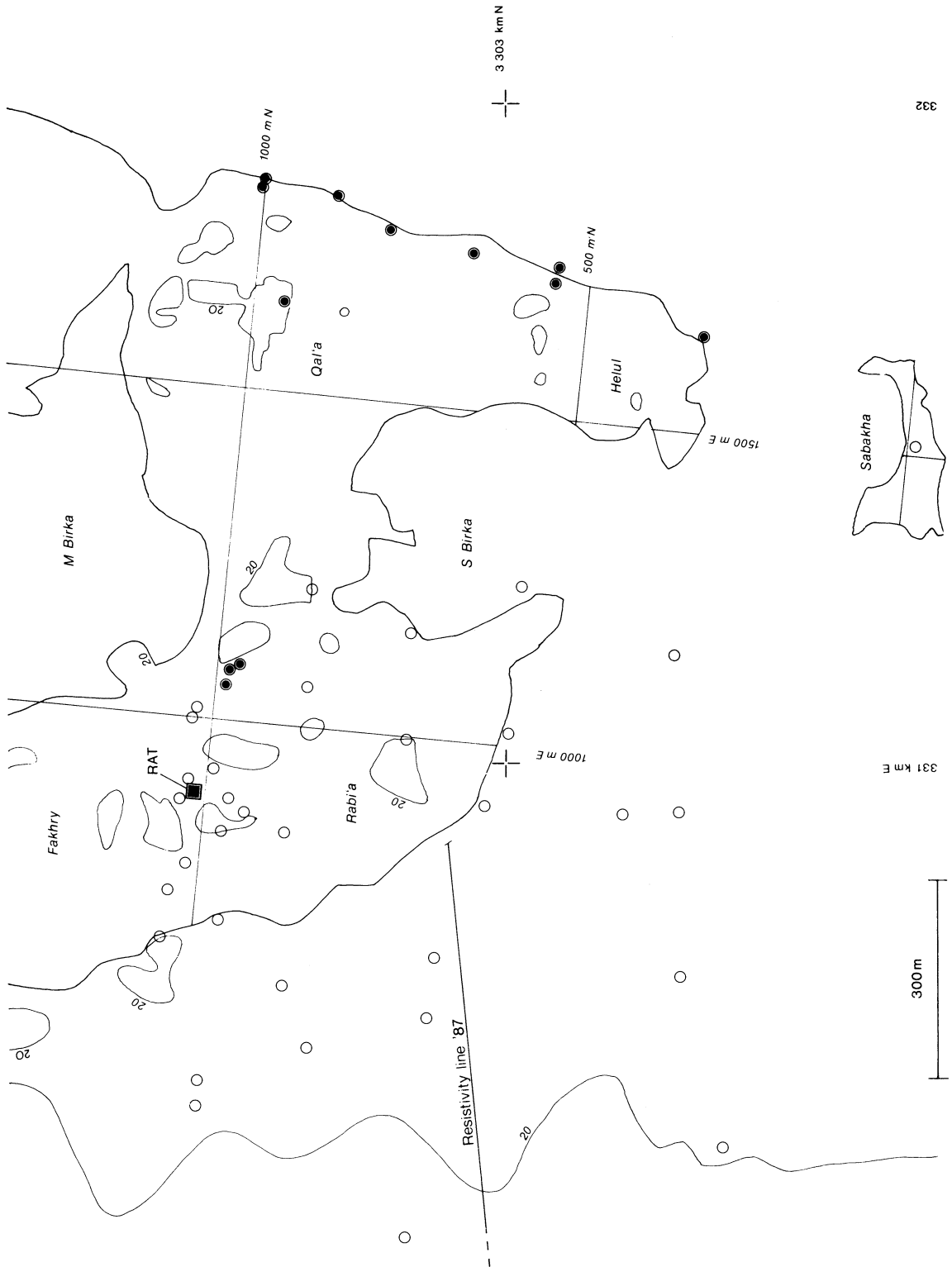
ing first exposed in 1986 and partly removed in 1987;¹

(b) to resume excavation in the south-west corner of the site with the aim of investigating the deep early New Kingdom foundations, and to try to recover for study more pottery of this date.

The highest (western) terrace of the late Middle Kingdom building (Level VI, see *JEA* 74 (1988), 20 fig. 3) was first removed to allow work to continue on the lower terraces. The retaining wall of this terrace was found to be broadly contemporary with a series of rebuilt walls to the east and south (fig. 2), and we have allotted a distinct phase number (Level VII) to the preceding architectural level. Beneath the south wall of the Level VI structure we found a discarded platter or shallow dish, decorated on the inside with an elaborate and attractive motif of fish and gazelles (fig. 3 and pl. I). Dr Nicholson suggests that the ceramic ware (Marl C) of this dish (perhaps for fish-scaling) with its cream-coloured slip over a red fabric, was deliberately chosen to highlight the slashes made to indicate fish scales in a kind of sgraffito technique. While such vessels have been found in some quantity at settlements (Kahun, Yahudiya) as well as at contemporary cemeteries in the area (Lisht, Dahshur), this is a rare intact example from a well-contexted settlement site. The two rooms immediately within the eastern 'casemate' wall of the building, which are at a similar level and communicate with each other, were found to have been used for food storage and preparation in both Levels VII and VI: in the more easterly room (or court) a deep sequence of ash floors and hearths testifies to fairly intensive cooking activity and has provided a series of soil samples rich in plant remains.

The east wall itself apparently survived through several rebuilds and functional changes: eventually it was a rubble-filled casemate with occasional cross-walls, but at least late in Level VII the core seems to have been hollow and used as a thoroughfare, with access from the east. Beyond the wall in the north-east corner of the site the large circular brick wall recorded in 1986–7 was removed and found to have been built on more washes of soft sand and silt. This unprecedented accumulation of such deposits, interspersed with ashy lenses, on the east side of the terraced building has strengthened our conviction that they are flood deposits from abnormally high Niles. Cut into the bank formed by the washes was a large refuse pit or midden, again full of organic material, whose edges lie within the boundary of the later circular feature. The entire area within and east of the 'casemate' wall has yielded a significant proportion of imported Nubian sherds (variants of 'Pan-grave' ware), which may conceivably be evidence of a foreign community settled or quartered at or close to the river's edge. At the deepest level reached this season, in the extreme north-eastern corner, a wide brick wall was revealed running north–south beyond the edges of the exposed area, again sealed by coarse sands and this time associated with pottery of distinctly earlier (late Twelfth Dynasty?) appearance (on-site observations by Janine Bourriau).

¹ *JEA* 74 (1988), 17–19.



332

331 km E

FIG. 1. Southern part of ruin field showing work done in 1988. Filled circles indicate drill cores taken this season.

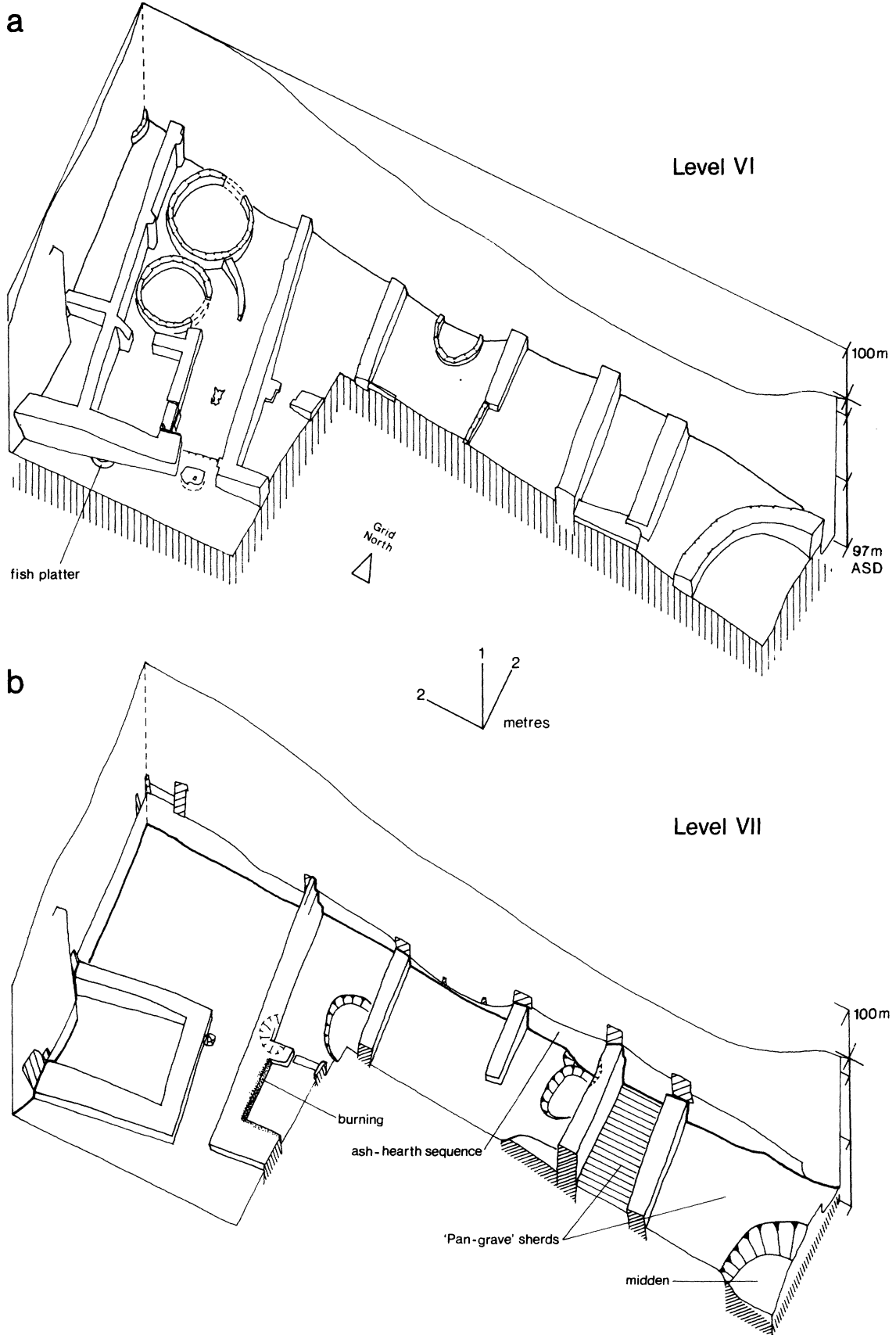
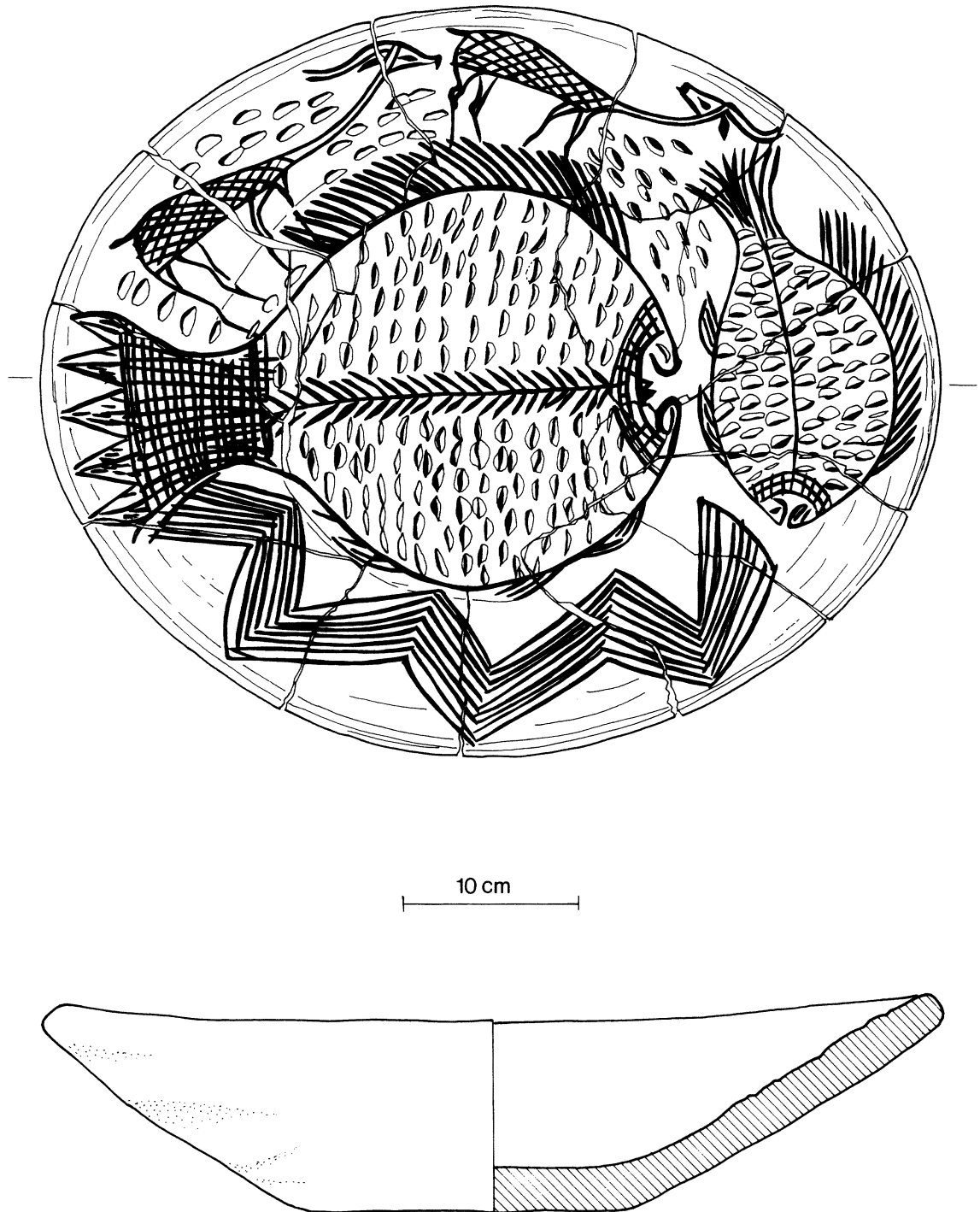


FIG. 2. Excavation site RAT showing (a) RAT 1987 with Thirteenth Dynasty Level VI; (b) RAT 1988 with late Twelfth Dynasty Level VII.



SoM RAT 1988 Pot 4465-76 1003

FIG. 3. Pottery dish for scaling fish (?) with incised decoration (cf. Petrie, *Illahun, Kahun and Gurob*, pl. V, 3).

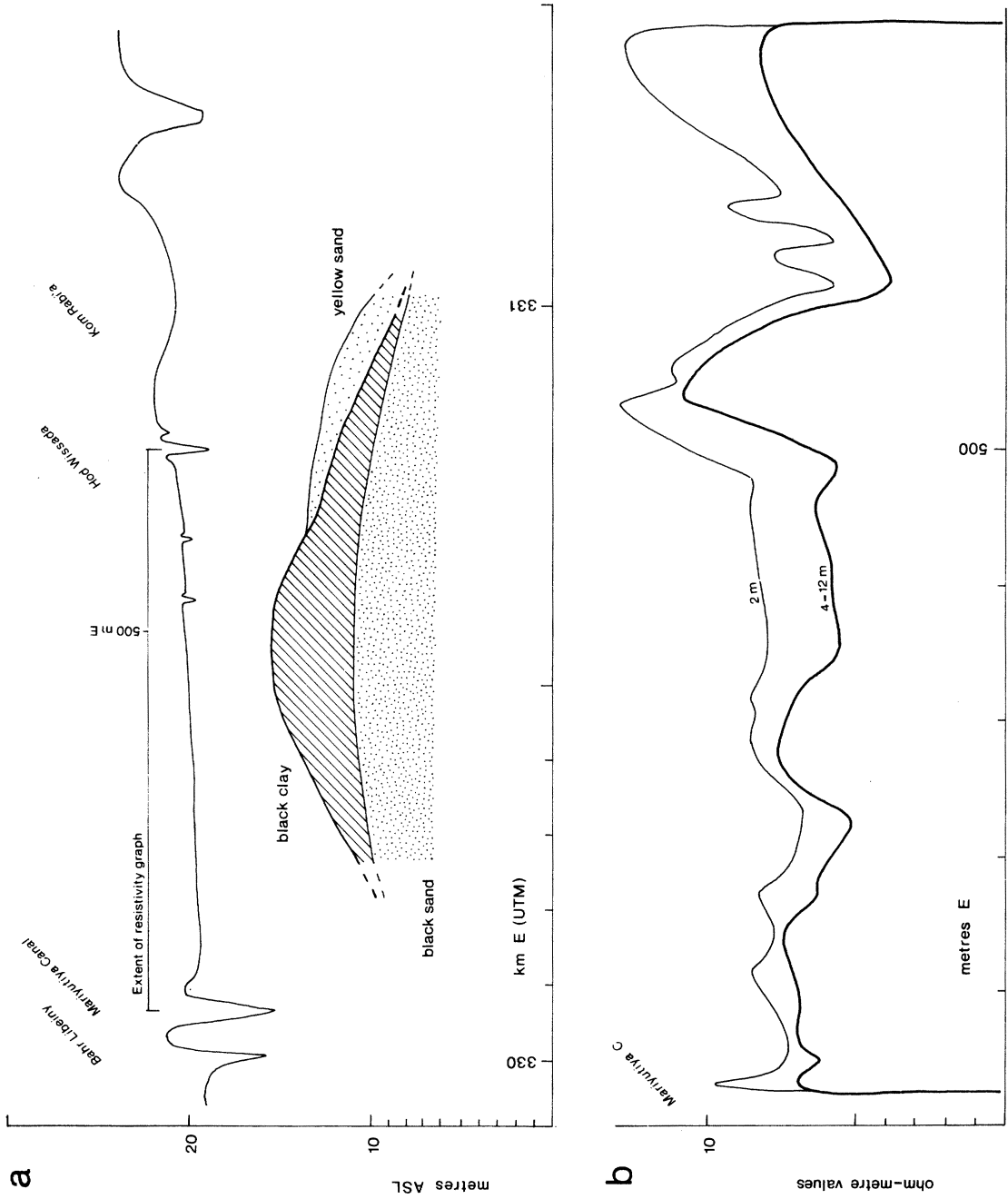


FIG. 4. Profile of clay bank beneath cultivation to SW of ruin field (a) compared with resistivity profile (b).

In the south-west corner of the site excavation was resumed, an area of 25 sq m being opened immediately south of the early New Kingdom terrace wall, and the existing baulk on 1020 N being maintained to avoid any possible contamination of material. Here we hoped to recover more pottery for the early Eighteenth Dynasty corpus, and to explain the peculiar phenomenon of trenching down the New Kingdom foundations into underlying Middle Kingdom layers to produce an artificially low terrace or basement. Although the base of the earliest terrace wall has yet to be reached, an interesting feature here is the subsequent cutting of a wide deep construction trench for a very substantial wall of dense grey clay bricks, which follows a rather uneven east-west line (fig. 4). This may have been a construction device to support a small square building recorded in 1986 which seems to be associated with a small number of cultic items, such as a limestone altar stand. Through the fills of this trench, a complex sequence of pits and robber trenches has been cut before any more architecture appears.

A possible candidate for an original (?) foundation trench for the early New Kingdom terrace wall contained one near-intact New Kingdom pot with clay lid, but otherwise only Middle Kingdom sherds, and we anticipate that this trench is cut into Twelfth or Thirteenth Dynasty deposits which already sloped down to the south at the time the terracing was introduced.

The unusually rich organic deposits encountered this year have resulted in a large collection of soil samples and faunal remains which now await analysis, and it seems appropriate to include here a brief report by Barbara Ghaleb on sampling strategy and initial results.

This season's fieldwork included the excavation of approximately 400 distinct archaeological contexts dating to either the Thirteenth or early Eighteenth Dynasty, and has resulted in the recovery of hundreds of fragments of animal bone from a variety of species, both domestic and wild, and including mammals, birds, reptiles, fish, and molluscs.

The bioarchaeological recovery strategy employed on site was designed to sample quantitatively for both macro- and micro-animal and plant remains. In order to determine the nature and quantity of both types of remains from the diversity of archaeological contexts revealed (e.g. living floors, hearths, walls, collapsed walling/roofing), bulk soil samples of known weight (in kg, with only objects and pottery removed) were collected to ensure total recovery. Some primary processing of the bulk samples was carried out on site (fine dry sieving down to 1.0 mm mesh size), and in the project workroom (water sieving and flotation down to 0.4 mm mesh size).

The concurrent zooarchaeological work consisted primarily of the cleaning, labelling, and initial sorting of the macro-bone remains. The 1989 season is to be a study season during which large-scale processing of the bulk samples for both micro-animal and plant remains will be done by froth-flotation technique.

The entire assemblage of bone remains from Memphis represents subsistence-related refuse from both primary and secondary depositional contexts. The nature of the animal remains is as one might expect from this kind of burial within a settlement area: highly comminuted and from a wide range of both domesticates (cow, sheep, pig, cat, dog) and wild animals (various bovid, bird, fish, reptile and mollusc) species exploited by the ancient Egyptians.

The accurate identification of the species requires access to a fairly comprehensive modern comparative collection of species which could have been exploited locally or transported from other regions. The scarcity of useful reference collections makes it desirable to establish such a collection on site, and with the help of contacts at various scientific institutes in Cairo it seems feasible at present to begin such an undertaking.

Drill cores and resistivity meter survey

A series of cores were taken from selected sites across the southern part of the ruin field, within this year's concession of Kôm Rabî'a and Kôm Qal'a. On Rabî'a three cores (fig. 1, 1200 E 0970 N) were sunk at site RCF 1987 in order to test the findings of last year's resistivity-meter survey (fig. 6), and high-resistivity readings were found to correspond either to concentrated limestone chippings or to impenetrable stone, supporting the theory that the anomaly recorded here might well reflect an underlying limestone structure (supposed by us to be another, probably Ramesside, temple building).²

On Qal'a the cores were sunk primarily along the eastern edge of the mound (fig. 1) with the aim of confirming the presence of the Roman riverside wall, recorded further north during the early years of the Survey.³ In the most northerly of these cores we recorded at 1.5 m concentrated limestone fragments and fired brick, which disappeared south of 0700 N. One explanation of this is that the stone-built section of the riverside wall extends only from approximately 0700 to 1600 N (or further), i.e. roughly the extent of the eastern frontage of the Ptah temple enclosure facing the river, and corresponds perhaps to the Ptolemaic (and Roman) *proasteion*.⁴ It is hoped to verify the course of this feature by resistivity-meter survey in 1989. In addition, a core taken from behind the Throne Room of the Merneptah Palace (fig. 1, 1700 E 0960 N) has confirmed Clarence Fisher's observation that the deep foundations of the Palace walls were built directly on virgin silts reclaimed from the receding river. After 2.5 m of occupation deposits we recorded another 3 m of archaeologically sterile sands and clays. Interestingly, the palace walls themselves appear to have been made from bricks of a very dense dark grey clay which may have been particularly accessible near the river's edge.

Although unfortunately for logistical reasons no resistivity-meter work was possible in 1988, further treatment of last year's readings has provided some interesting results. The survey results on Kôm Rabî'a (site RCF 1987⁵) has now produced three-dimensional plots (fig. 6) showing the configuration of anomalies at 2 m intervals of vertical depth below ground level which will enable us to pinpoint likely wall lines with greater accuracy. Meanwhile the complete plot of a traverse across the fields to the west of Rabî'a, which last year had seemed unremarkable during the actual fieldwork, now seems to have picked up the underlying sand and clay bank

² JEA 74 (1988), 23.

³ SoM site ADD, JEA 71 (1985), 9, pl. I [2].

⁴ D. J. Thompson, *Memphis under the Ptolemies* (Princeton, 1988), 18–19.

⁵ JEA 74 (1988), 23 fig. 1.

whose existence was discovered by drilling (fig. 5).⁶ We now hope to pursue work in this area further in future seasons. Meanwhile a more detailed account of the processing of last year's figures is given here by Ian Mathieson.

As in previous seasons the method used was to run overlapping profiles consisting of linear arrays of 24 copper electrodes controlled by a multi-selection switch. The ohm-metre values are calculated from readings taken by a Strata-Scout analogue resistivity meter, and the results are then computerized for smoothing and removal of background 'noise' prior to plotting and graphical solution. A further expansion of the plotting software now allows the presentation of a 3D impression of the ohm-metre values along with a contour plot. Both plots can be contour-shaded to highlight the areas of interest. This method ensures an unbroken depth penetration down to 8 m with samples values at 10 m and 12 m.

The first objective was to run a long profile from the existing ruin field westwards to the Mariyutiya Canal as shown in fig. 1. The reasons for this were (a) to look for any indication of enclosure walls or boundary earthworks running north-south beneath the silt deposits; (b) to pass close to boreholes in an attempt to correlate the sediments with resistivity ohm-metre values.

This was the first time that a profile of this length has been attempted over an area of cultivated ground which shows no surface indications. No anomalous readings were encountered and it can be safely assumed that there are no large-scale stone features in this profile. However if the readings are inspected closely it can be seen that there are fluctuations in the values of the sediments at the same depths, most probably caused by heavier sands or clays built up by the river over several thousand years. If the results of the boreholes in the vicinity of the profile are taken into consideration, it appears that the heavy blue-grey clay encountered in boreholes 16 and 22 might be the reason for the higher resistivity.

The second objective was to improve the coverage of Kôm Rabî'a by breaking down the existing 50 m squares of resistivity profiles into 10 m squares, in an effort to trace buildings or other small features which might not be indicated in the 50 m network.

After strong anomaly readings on the first runs (on 0960 N, 0950 N, 1050 E) a total of 2000 readings were made and computed to generate 3-dimensional colour projections. The final picture is of a structure composed of walls and voids with occasional large blocks (pylons?) If the anomaly is seen in the context of the surrounding topology it seems likely that another temple or similar building is the cause of the anomaly.

After six seasons of work there is emerging an empirical table of resistivity values which should enable interpretation of results to be made in the field. The feature on Rabî'a is the second major anomaly to be recorded in this area, and it is important that further empirical evidence for the correlation of resistivity readings with actual structures should be made.

In addition to the Society's own work a number of jobs should be mentioned which were done in cooperation with the Egyptian Antiquities Organization. Apart from acting in a consultive capacity for two new EAO sites at Memphis (at Kôm Fakhry, on an extension site for the secondary school; and at Kôm Qal'a, on a proposed site for an EAO magazine), the Survey offered the services of the Pottery Group on an occasional basis to help record material from a new excavation south of the Unas valley temple, where a series of Coptic pottery kilns associated with the Jeremias monastic community has been found, and helped provide survey points for

⁶ *JEA* 74 (1988), 19-20 figs. 4, 5.

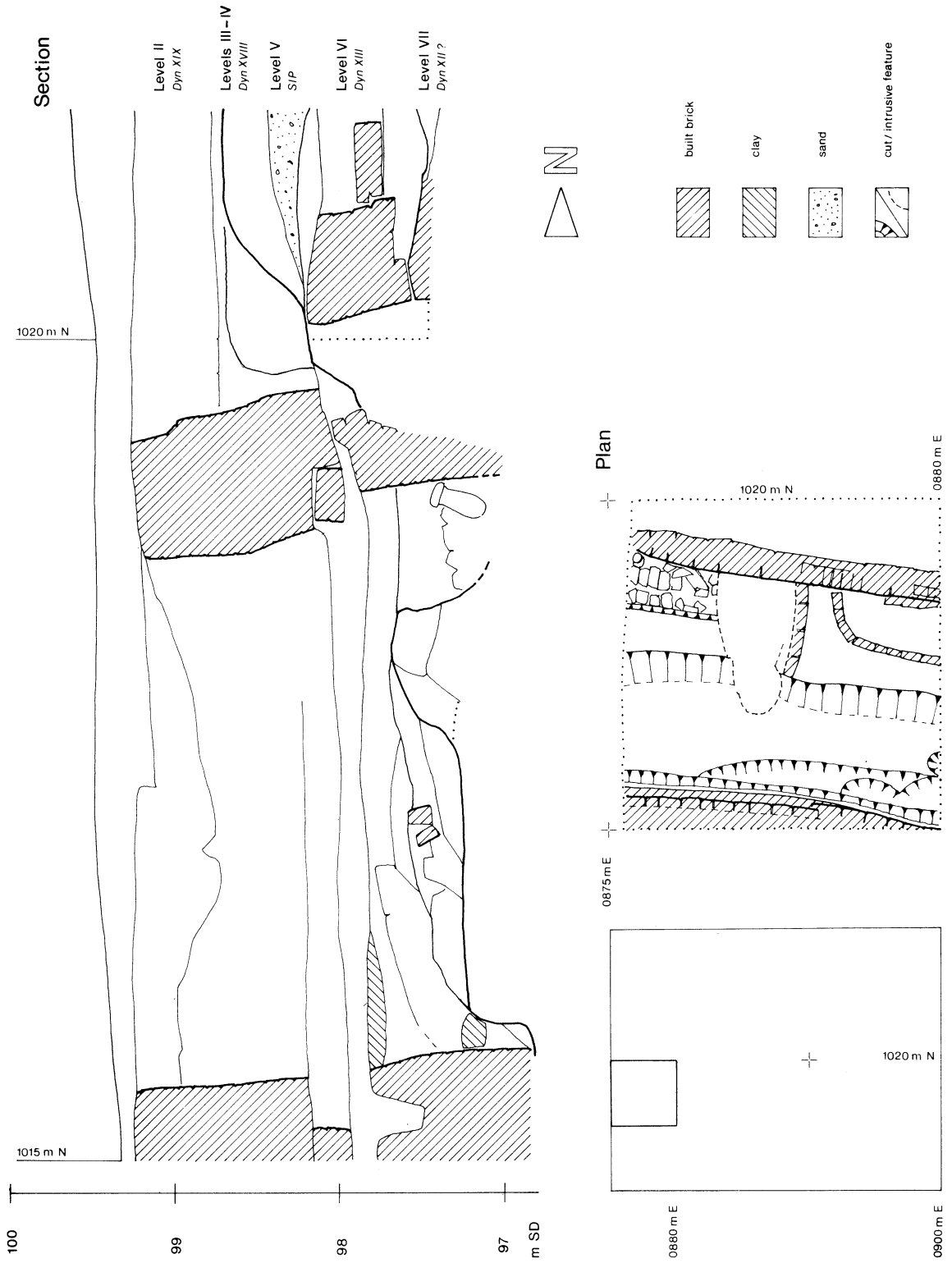


FIG. 5. SW corner of RAT 1988: New Kingdom construction trenches shown in W section (top) and in plan (bottom).

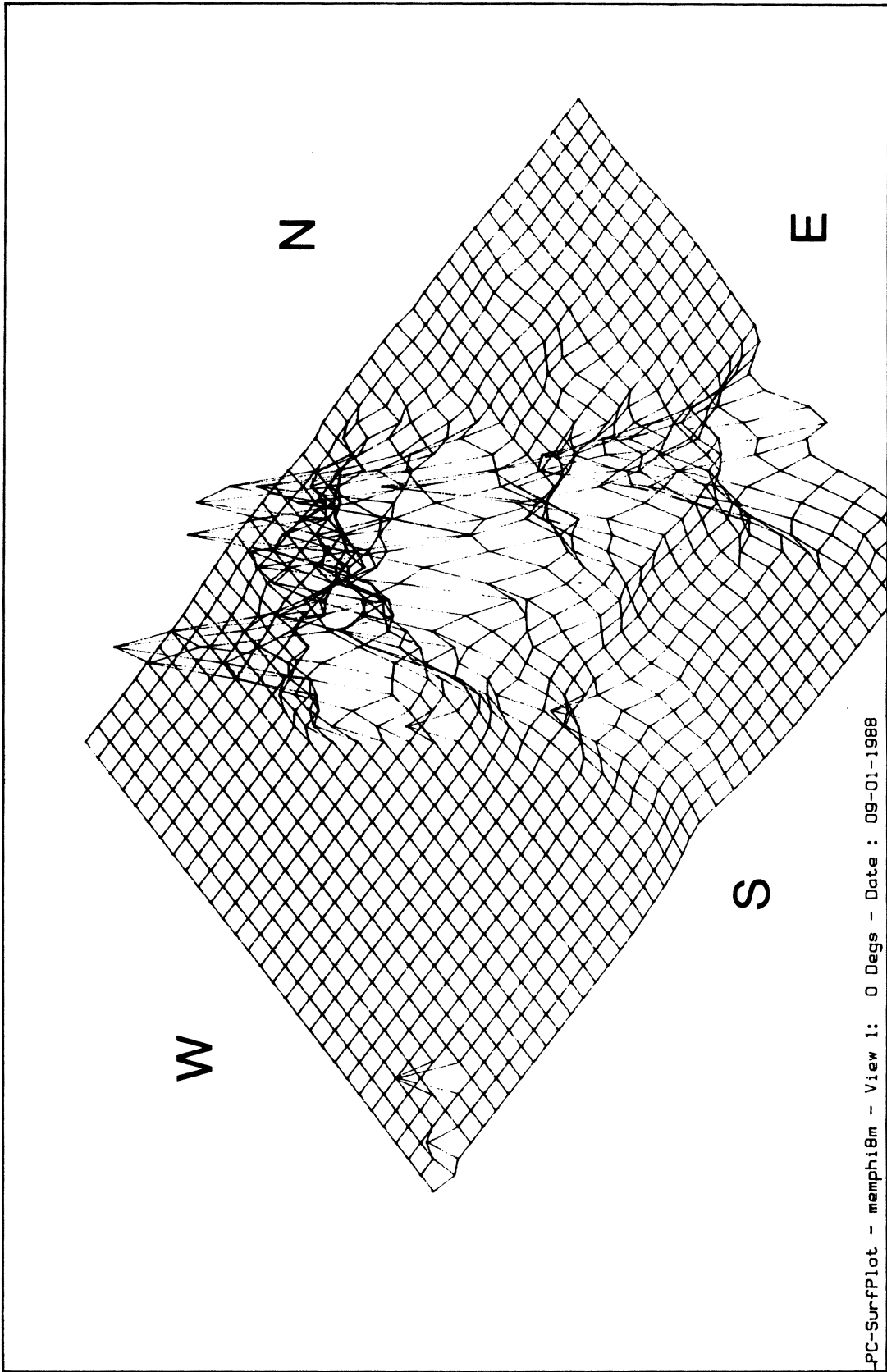
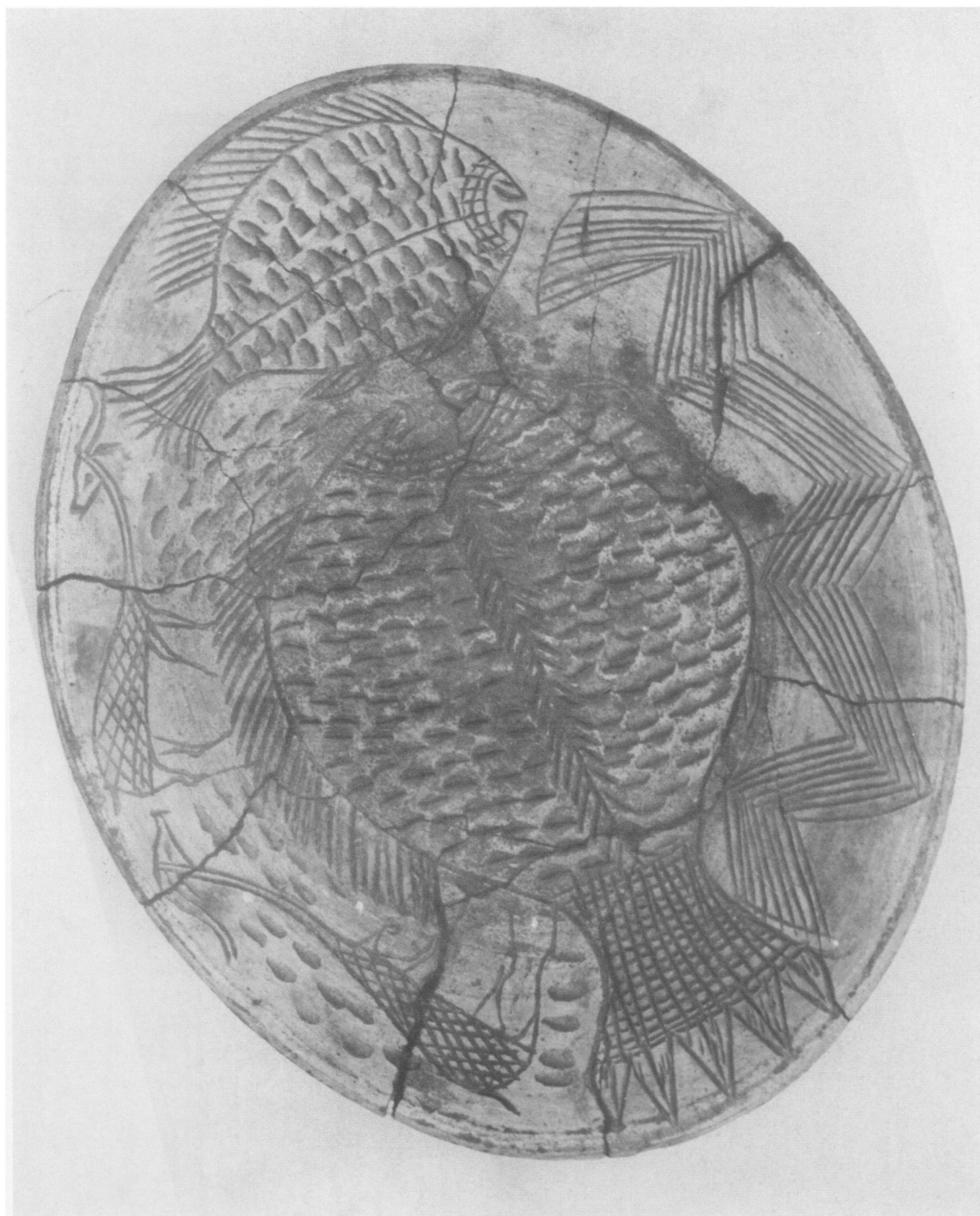


FIG. 6. Kóm Rabi'a: computer plot of resistivity anomaly (SoM site RCF, 1987) at 8 m depth.

this site as well as for other excavations within the Late Period or Ptolemaic Bubastieion enclosure.⁷ The Survey also prepared for the Saqqâra Inspectorate maps of the North Saqqâra plateau, incorporating both Survey of Egypt and EES survey points as well as triangulation points recently established by the Survey Department of Cairo University. Since these maps are drawn on the basis of the 1978 UTM maps at 1:5000 used by the Ministry of Housing and Development they should be of use for the plotting of current and future work at the necropolis.

⁷One site is of particular interest in view of the imminent appearance of *Anubieion*, 1: it appears to be a gate through the east wall of Bubastieion, confirming the position of the enclosure-wall which was not visible at the time of the Temple-town survey in 1976.



Pottery fish-scaling (?) dish with incised decoration in form of fish and gazelles. Length 51 cm (p. 2)

MEMPHIS 1988

TECHNIQUES OF DECORATION IN THE HALL OF BARQUES IN THE TEMPLE OF SETHOS I AT ABYDOS¹

By JOHN BAINES, *With Appendices* by RICHARD JAESCHKE and JULIAN HENDERSON

In 1983 and 1988 the Egypt Exploration Society's Abydos Mission recorded the paintings and reliefs in the Hall of Barques of the temple of Sethos I at Abydos. The paintings of Sethos I were executed in 9 main stages, from initial design to the final painting of details. Many corrections can be identified, both small ones in paint in the drafts and larger changes where the surface was recovered in plaster. Before the figures were painted, the figure area was covered with a fine plaster wash, to which black outlines were applied while it was still damp. There was a chemical reaction between black paint and plaster and little black is preserved. The black pigment contains an iron-rich pigment which is poorly crystalline (Appendix 2). Sunk relief carving within the outlines of the paintings was partly carried out under Ramesses II. Different levels of skill and divisions of labour in carving can be identified; problematic hieroglyphs were left to a later hand. Both relief and painting are characterized by speed of execution. The painting in the south-east corner of the hall was cleaned and recopied in 1988; the techniques used are described in Appendix 1.

In two seasons' work in 1983 and 1988, the Abydos Mission of the Egypt Exploration Society has recorded the fragmentary paintings on the east and south walls of the Hall of Barques in the temple of Sethos I at Abydos and on the staircase leading from there to the roof.² In the 1988 season, the east end of the south wall was cleaned and consolidated by Richard Jaeschke and subsequently recopied. The inscriptions and scenes on the columns were recorded at the same time. This intensive study of poorly preserved painted surfaces has provided a favourable opportunity for analysing methods of decoration, from the initial drafts on prepared surfaces to final coats of paint. Mr Jaeschke's meticulous work and observations have been particularly valuable. Awareness of the stages of execution and how they go to build up finished paintings is essential when copying material in fragmentary condition, so that this study contributes directly to the creation of the record for publication. In addition, the unfinished state of some of the reliefs has enabled us to make less extensive observations of how they were carved. Finally, the analysis of pigment samples, undertaken in order to improve our understanding of the techniques and decay of the paintings, has produced some unexpected results (Appendix 2).

I present this material here in place of a conventional preliminary report on the 1988 season, which I describe in this paragraph. Appendix 1 contains Richard Jaeschke's report on conservation procedures. The expedition consisted of John Baines (director and epigraphy), Christopher Eyre (epigraphy and photography) and Richard Jaeschke (conservator). The Egyptian Antiquities Organization was represented by Hamdi Ahmed Abdel-Gelil. Work began on site on 20 March and finished

¹ I am very grateful to Julian Henderson, Richard and Helena Jaeschke, and Gay Robins for commenting on a draft of this article, and to Richard Parkinson for much help with bibliography.

² See *JEA* 70 (1984), 13-22.

on 14 April. We are very grateful to all those who assisted us in the work: in the Egyptian Antiquities Organization: Mutawwa Balboush and Ahmed Moussa in Cairo, Shawqi Nakhla, Director of Conservation, Yahya el-Masri in Sohag, and Ahmed el-Khatib in el-Balyana. Hamdi Ahmed Abdel-Gelil went out of his way to help us. In Cairo George Drennan of Lilley Misr most kindly lent us essential scaffolding, and Amanda Pike contributed very greatly to the setting-up of the work. At Abydos, we are once again extremely grateful to the Pennsylvania–Yale expedition for lodging us in their house and many other kindnesses, and especially to David O'Connor and Janet Richards.

The picture we have built up of how the decoration was executed differs significantly from received views of Egyptian painting procedures,³ especially in the evidence we have found for something like 'fresco' techniques. Since these results may be of wider interest than some other aspects of the temple publication and are distinct from its main purpose, I discuss them here in advance of the final volume. It is almost impossible to photograph the very faint traces of different stages of work which we have recorded in line and in note form, so that for the discussion of painting this article relies on verbal description rather than pictorial illustration. Pls. II–IV show how much of the painting and relief could be recorded photographically in the 1930s.⁴ Our drawings are to be published in the completed volume. As explained in *JEA* 70 (1984), 15, they attempt to record all recoverable stages of the painting process, not just the final result which was the painters' goal. They therefore contrast in particular with the technique of Norman de Garis Davies, whose chief attention in his numerous tomb publications was devoted to the completed work and what could be reconstructed of it. The scientific analysis of a pigment reported in the Appendix has proved unexpectedly revealing; further questions about the use of colour, surface preparation and finishing might be illuminated by additional sampling and analysis.

Painting

The paintings in the temple—as against the painted reliefs—were temporary. They were intended for replacement with relief, and this was being done under Ramesses II in the Hall of Barques when work was abandoned. The paintings used a limited repertory of colours, with very little blue or green; some elements normally painted in those colours were shown yellow or red. This rather unusual feature might

³The literature on these techniques is quite extensive. See, most recently, M. Müller, *LA* III, 1168–73, with bibliography. Earlier important studies include C. Ransom Williams, *The Decoration of the Tomb of Per-Neb: the Technique and the Color Conventions* (New York, 1932); W. Stevenson Smith, *A History of Egyptian Sculpture and Painting in the Old Kingdom*² (Boston and London, 1949), 244–72; Nina M. Davies and A. H. Gardiner, *Ancient Egyptian Paintings*, III (Chicago, 1936), xxii–xlvi; A. Lucas, rev. J. R. Harris, *Ancient Egyptian Materials and Industries*⁴ (London, 1962), 338–61. The complete process of creating a flat surface, inscribing it, carving relief and painting it is presented by F. Teichmann, 'Das Werkverfahren', in E. Hornung, *Das Grab des Haremhab im Tal der Könige* (Bern, 1971), 32–7. Most books on Egyptian painting include presentations of the technique.

⁴The plates reproduce unretouched glass plates of Amice M. Calverley, taken in the 1930s. For the paintings, photography is not entirely satisfactory, but they are valuable for their record of the wall's condition more than fifty years ago. The area to the left of the column of inscription behind the king on pl. II has been cleaned by Richard Jaeschke.

suggest that the technique of the paintings could be different from that of more permanent decoration. I would, however, largely discount any such possibility, although the paintings do seem to have been made quickly (see below). All Egyptian pure painting was inferior in painstakingness and durability to painted relief. Within the realm of painting, the Abydos examples are much more formal and carefully detailed than the freer brushwork in Theban non-royal tombs, for example.⁵ Thus, the fact that these were temporary paintings is insufficient reason for assuming that the techniques employed were untypical of large-scale painting on royal monuments, although it remains to be established how widespread they were. In discussions of these techniques, painting and painted relief should always be kept apart.

I now present the processes of painting as a set of stages. Those that can be distinguished as successive are numbered for clarity and convenience. These numbers should not be taken as separating processes rigidly, nor should it be deduced from them that there were substantial time-lapses between one and the next. Some stages may have followed others immediately, while others could have come after long gaps.

(1) An essential prerequisite for creating the painting on the wall is an initial design, presumably at a greatly reduced scale, on papyrus or on wooden board.⁶ The iconography of the scenes is complex and is unlikely to have been devised on the walls themselves.⁷ Some of the detail is so fine that it could hardly be present on a preparatory drawing at the same scale as the general outline. There could have been a key drawing for the whole with larger details, or details could have been worked up directly on the wall. For the fecundity figures on the west wall of the staircase leading out of the hall, the latter possibility is supported by substantial changes in the offerings which some of them carry. How far the design for each area was a single drawing is thus open to question.

(2) The stone was prepared for painting, in a process independent of the design. All the painted walls are constructed of limestone except for a few sandstone elements, such as the door lintels and columns. Much more painted limestone than painted sandstone is preserved. We have few distinctive observations on the

⁵ See e.g. A. Mekhitarian, *Egyptian Painting* (Geneva, 1954), 22–37; W. S. Smith, *The Art and Architecture of Ancient Egypt*, rev. W. K. Simpson (Harmondsworth, 1981), 286–95. The technique of paintings at el-'Amarna, which were rapidly executed and often replaced, should also be mentioned here: F. W. von Bissing, *Der Fussboden aus dem Palaste des Königs Amenophis IV. zu el Hawata im Museum zu Kairo* (Munich, 1941), 11–15.

⁶ Such designs are not preserved from dynastic times, but a drawing on a board with a figure of Thutmose III shows the potential for their existence in various forms: E. Iversen, *JEA* 46 (1960), 71–9. A papyrus with a preparatory drawing for a wooden shrine on a squared grid is also relevant here: H. S. Smith and H. M. Stewart, *JEA* 70 (1984), 54–64. This design was made on a papyrus of larger format than is otherwise known; wall designs would similarly have needed either to be on large sheets or not to have included details. An ostrakon with a window of appearance scene perhaps derived from that at Medinet Habu but bearing the names of Ramesses IX could be a draft for a similar composition elsewhere: W. H. Peck and J. G. Ross, *Egyptian Drawings* (London and New York, 1978), no. 44. It is also worth mentioning here the design for a pyramid preserved on a nearby pyramid at Meroe: F. W. Hinkel, *ZÄS* 108 (1981), 105–24; 109 (1984), 27–61, 127–47. There is no parallel from Egypt for this convenient location.

⁷ This would be almost impossible for temple reliefs of the Graeco-Roman period. See e.g. D. Kurth, *Die Dekoration der Säulen im Pronaos des Tempels von Edfu* (Wiesbaden, 1983).

preparation of either stone for decoration. The limestone was dressed and patched with gypsum plaster⁸ to form a level ground for painting. This stage produced numerous lines of abrasion, but nevertheless created a satisfactory base for painting. One noteworthy feature is that near a few major outlines the stone was rubbed in the direction of the painted outline, perhaps with a hard stone tool or a pebble. This resulted in a characteristic grooving which is visible, for example, at the back waist and tail of the figure of the king on the north part of the east wall. This surface wear relates to the shape of the figures, but it is impossible to say whether it is a by-product of painting or an extra stage of preparation intended to ease the drawing of outlines. If it was the latter, it would have had to be done after the placing of the figures on the wall had been established.

We have found no trace of an initial plaster wash over the whole area of limestone. These washes are generally assumed to have been present on stone,⁹ but might be otiose when the figured areas were to receive an extra coating (6 below). I therefore assume that the grids and initial outlines were applied to the bare, smoothed and patched limestone wall. Scientific analysis might be necessary to settle this question.

The surface of the sandstone, which was unsuitable to receive paint, was sized with a wash of white plaster. This coating was thin enough for subsequent red drafting lines to penetrate it, leaving occasional traces on the sandstone itself, but nevertheless it formed a smoother, and probably more evenly absorbent, surface than the bare stone. The grid lines preserved on the bare sandstone, or on the sandstone with a thin wash, have a distinctive pink colour, paler than the red of such lines on a plaster or limestone surface.

There is a difference in the treatment of sandstone between stray blocks in the limestone walls and the columns, which are all of sandstone. On the columns, colour preservation is as it is on limestone walls, and this suggests that they received two plaster washes, one over the whole sandstone surface before there was any decoration, and the other within the painted outlines or outlines of signs. Preserved grid traces are mostly on the bodies of figures, that is, on areas which had two plaster washes. The second wash presumably fell away more readily than the final coat applied between figures. (See further (7)–(8) and Discussion below.)

(3) The surface was covered in guidelines and canonical grid lines. First, marks were made at the sides to define entire compositions, including occasional parts that were not covered by compositional grids. Guidelines defined the edges of the decorated area and the bands to be occupied by inscriptions, while most of the space within the edges, including the parts to be filled with inscriptions, was covered in grid lines. In some cases, as on the easternmost scene on the south wall, grids began below the inscriptions, but this might not have been true of the preparatory design. The majority of scenes had grids with a single square module, presumably

⁸ The analysis reported in Appendix 2 established that the ground from which paint samples were taken consisted of gypsum and quartz particles; the latter almost certainly derive from the sandstone blocks on which the black paint was preserved.

⁹ E.g. Lucas, rev. Harris, *Ancient Egyptian Materials and Industries*⁴, 77.

based on the proportions of the major figure, which was almost always the king. Apart from the human figures, many further major lines in the design run along grid lines. In the south-east corner of the hall, where the decoration runs without a break as far as the half landing of the staircase leading to the Upper Gallery,¹⁰ the base line of the decoration slopes and the area above has at least three grid modules. The junctures between these can be established and consist of vertical bands where there are two sets of check marks; these are less than a grid square wide. Thus, basic procedures presupposed grids over the entire decorated area, whether these were executed or not.¹¹ This method is well suited to the enlargement of the design from a small-scale working drawing of the type posited in (1), which would also have had a grid. Some changes in grid module could have been worked out on the wall rather than on the original design, so that the drawing from which this wall was executed would not necessarily have taken account of the slope.

The check marks for the grids are of varying shape. Some are unusually prominent and dark in colour, and may have been renewed during different stages of the work. Most are small ovals of paint, probably applied with a brush, contrasting with the grid lines. Some consist of elongated pairs of such ovals, forming shapes like crosses. These may have been major points of reference. The grid lines and other guidelines were made by snapping a string dipped in red paint against the wall surface, a procedure which left remarkably few spatters on the surface as a whole. Vertical grid lines seem remarkably true and were probably made with plumb bobs. We have not found check marks for them at the base of the scenes. This negative finding would fit with the use of the plumb lines, but may be only a chance of preservation. Reliance on plumb bobs is again suggested negatively by the fecundity figures on the staircase leading to the Upper Gallery.¹² These lean forward and stand on sloping plinths. They were not set on grids but on proportionate check marks. The leaning caused difficulties in positioning and execution, and many more changes were made here than anywhere else.¹³

Sets of four guidelines defined the bands for the vertical columns of inscription. The inner pair was later replaced in black by the vertical lines defining the normal moulding between columns. The outermost lines separated the moulding lines from the central bands of the columns, within which the hieroglyphs were to be drafted.

(4) After the grids and guidelines had been drawn, the preliminary outlines of the paintings and inscriptions were drafted in red. It is impossible to say how soon this draft was made, but the paint of the grids would have dried quickly, and work could have proceeded almost at once. The red outline could be corrected later in various ways, or it could form the basis of the finished painting. For inscriptions, signs were sometimes drafted in black in cursive and then replaced with the full hieroglyphic

¹⁰ See *JEA* 70 (1984), 18–21.

¹¹ These remarks on grids and lines are deliberately brief. The hall contains much evidence of canonical grids; I hope that it will be possible to include a proper discussion of this in the final publication.

¹² *JEA* 70 (1984), 19 fig. 3.

¹³ The scene on the slightly sloping lower part, whose grids are mentioned in (3), does not lean.

form; changes could be made at this stage. Some repetitive elements, such as *hkr* friezes, were drafted in a similar schematic form before being executed in full.

(5) Major changes in design or redraftings for complete elements could be achieved by covering the faulty patch with a layer of plaster and then replacing the design with new outlines. Examples on the east section of the south wall are the head of the king in the easternmost scene and the right carrying pole of the image stand he worships. Of these two, the king's head was subsequently defaced by scratching and can thus be seen to be about 2 mm thick. These redraftings were made before any final outlining or painting of complete areas, so that they can be seen only by close examination of the wall surface. More minor changes, including a re-angling of the king's arm on the figure mentioned,¹⁴ are visible simply as different sets of lines, of which an earlier or later version may be more visible according to accidents of preservation. In the final painting (with an exception noted below), these variations would have been invisible.

(6) The next stage was to prepare the areas defined by the red outline for full painting. This was done by covering them with a fine wash of plaster, which extended a little way beyond the outlines and therefore obliterated them or rendered them very hard to see. Especially on hieroglyphs on the sandstone columns, it is visible as a slight change in colour or patina in relation to the surrounding stone. In a raking light its texture appears clearly, showing that it was applied with rapid strokes of a large, coarse brush; it was thus between a paint and a plaster in consistency. Where figures and hieroglyphs are poorly preserved, this outline is often the only trace of the wall decoration. In our record of the paintings, a copy of the outline gives the general shape of what was there, but its appearance is rough and it is over-large. Despite these drawbacks, these plaster outlines provide vital information, both for the technical process of painting and for its content. They are equally important on limestone and on the sandstone columns. (For the special treatment of cartouches, see the discussion of relief carving below.)

(7)–(8) In the following two stages, the final outlines were painted and solid areas of colour filled in. The outlines always sit within the area of plaster wash just discussed. In most cases the outlines were applied first, but this order probably varied and they could come last, as when red was used both for outlines and for areas of colour. Where detail was added over solid colour, the paint was applied in several stages. The outlines show extraordinary sureness of touch, apparently defining large features, such as the king's artificial tail on an over-life-size figure, with a single stroke executed at one time. This extended sweep was not, however, universal. Thus, under the stand for a cult statue of Min is a set of four miniature figures of the king, painted yellow as a representation of gold, which are broad in comparison with normal proportions. There were some changes in plan in their execution, including the covering-over of part with a plaster layer, in the way described above. In addition, their red outlines were almost impressionistically

¹⁴ The sloping base line may have contributed to the need to redraft, as on the adjacent staircase.

drawn in a web of lines within the gold paint, making completed figures with normal proportions. These lines intersect and cross but generally describe the same forms as one another. It is not possible to choose a final one among them, and there does not seem to have been an intention that one of them should be final. These lines can now be seen partly as red traces and partly as paler residues on the gold paint where the red has disappeared.

Here as elsewhere, paint areas and lines are recognizable much more as gaps and cavities than in remains of the final pigment. Variations in patina are also important evidence for lines. The most revealing example of this phenomenon is the almost total absence of black from the paintings (see also Appendices below). This colour was the most important for outlining hieroglyphs in particular, but now remains only on the areas of paint which were applied to sandstone blocks within the limestone walls. This is a quirk of preservation, rather than showing a special affinity between sandstone and black paint. Black is preserved here because of the extra preparatory layer of plaster; this was evidently dry and set before the secondary wash, with which it may have fused quickly—in part because of the absorbency of the earlier wash—creating a more stable base than any coating on limestone. This description does not apply to the sandstone columns, for which procedures were similar to those on limestone and black was as unstable (see (2) above). Thus, sandstone blocks in the limestone walls must have received their special treatment at an early stage; on the columns, the two stages may have succeeded each other more closely.

On the east wall of the Hall of Barques, green and blue patches are preserved on offerings and barques, but not on the human figures, which had the same limited colouring as elsewhere. Like black, the green and blue created cavities in the surface, so that the extra plaster wash is missing where they have flaked away. Green and blue were much thicker than the other colours and therefore probably carried more moisture; for this reason they may have reacted chemically with the plaster. Alternatively, they may, like black, have been applied at the beginning of the painting process when the ground was not fully dry. However this may be, there are similarities between the interactions of black, green and blue with the painting ground. Where blue and green were used, they are better preserved than black. Some of the best preserved blue is on the sandstone lintel above the entrance to the hall.

The painting of details, principally in yellow and red, was very elaborate; on human figures up to 3 m high, features as small as a couple of millimetres were included, without regard to whether such minutiae would be visible from the ground. Levels of detail on the painted reliefs in the central parts of the temple are comparable,¹⁵ except that hardly any carved figures as large as those in the Hall of Barques were completed in paint, so that the contrast between scale and detail is not so striking there. Where patches of surface are intact, detail can be preserved better than the general outlines of decoration. This stability of the detail is probably due to

¹⁵ See A. M. Calverley and M. F. Broome, ed. A. H. Gardiner, *The Temple of King Sethos I at Abydos*, 1-IV (London and Chicago, 1933-59), *passim*.

its being applied after the rest of the decoration had dried out. The painting of the details will have taken much longer than any of the earlier stages, except, no doubt, for the elaboration of the original design.

There could be several layers of final painting, and the number of layers would vary with different features of a composition. The commonest instance of this possibility is in white clothing painted over flesh-coloured limbs, which serve to render bodily forms while indicating garments. The thin wash of white of the garment modifies the already applied colour of the limb but does not efface it, and areas that were unpainted at the previous stage are white—which implies that there was a light general background. This treatment is well known, and is characteristic of Theban tomb paintings. It also occurs in temples where kings wear the elaborately pleated long garments of the New Kingdom.¹⁶ Among the paintings considered here, an example is the long flowing kilt of the figure of the king offering before the barque of Harendotes on the south wall (pl. II). This overlaps the offering stand before the figure. The stand was painted in full before the kilt overlaid it. How this treatment relates to the underlying draft outlines is unknown. The complete execution of the stand would have provided some check on the geometric form of the parts that were to remain visible, while the practice of using a light paint wash for the kilt in order to suggest its diaphanous fineness might require that anything to be overlapped by it be fully painted; otherwise, the fineness would not be brought out so clearly, and the underlying part of the object might look as if it were not there. The result of the double painting is that a yellow colour otherwise unparalleled in the hall was created.¹⁷ This overlapping contrasts with that of the king's foot immediately beneath; it too shows that the stand was fully executed, but the foot paint was thicker and intended to obscure the stand completely.

(9) The final stage of decoration was to paint over the spaces between the figures in white, obscuring the grids and any other marks of preparation and execution, including changes in design. This paint layer would not have changed the colour of the surface very much, because fresh limestone is white, so that the contrast that can now be seen between the white of completely preserved scenes and the pale yellow of bare stone is a misleading product of the ageing process. A rather different result of this final coat of paint was that the finished surface became more or less level, which it had previously not been, because of the extra thickness of plaster under the figures and inscriptions.¹⁸

We have found no trace of any top sealer coat of varnish that might have covered the entire painted surface. Such a coat could probably be identified only by detailed

¹⁶ E.g. *ibid.* III, pl. 7.

¹⁷ Gay Robins (*pers. comm.*) points to cases in Theban tombs where the sequence of painting shows that the special paler colour of flesh overlapped by a garment was separately mixed and applied. Thus, the procedure I describe was not universal.

¹⁸ This placing of the filling-in of the background at the end of the painting process is necessary, because the over-large plaster wash outline would render any precise filling of the background impossible until the scene as a whole had been painted. In Theban tombs where there was no extra plaster layer, Gay Robins (*pers. comm.*) suggests that the order was the opposite.

analysis. There is no reason for expecting it to have existed, but the possibility should not be excluded.

Discussion

The discrepancy between preservation on the individual blocks of sandstone and on limestone suggests that the plastered limestone base was not a chemically stable surface for receiving the black paint. Where black is preserved, it sits on the surface like any other pigment, but where it has been lost from the plaster wash on limestone, cavities are left (as they are by blue and green), and these, together with the plaster outlines, are the principal evidence for the final appearance of the paintings. Two factors could have contributed to this reaction between black and the plaster wash: possible instability of the gypsum, and special properties of black. These need not be mutually exclusive, but black is similarly lost from many paintings where there is no reason to suspect the use of a non-standard black pigment,¹⁹ so that an explanation in terms of general painting techniques is more appropriate than one that applies only to the works discussed here.

In order to test for special characteristics of the black pigment, we took microscopic samples of the black pigment from a well preserved area of paint on sandstone. One set of these was deposited for analysis with Shawqi Nakhla, Director of Conservation in Cairo, and a second was analysed by Julian Henderson. The results of the latter set of tests are given in Appendix 2 below. They establish that the black pigment is a complex mixture of a poorly crystalline iron-rich pigment (perhaps Fe_3S_4 or FeOOH or $\text{Na}_2(\text{AlFeMg})_5\text{Si}_8\text{O}_{22}\text{OH}_2$) and gypsum, a hitherto unreported form of black on Egyptian monuments. I discuss implications of this finding below.

Since gypsum itself seems unlikely to react with the black pigment in its normal dry state, the possibility that it was not stable implies that it was not dry. Instabilities could then be due in part to dampness in the gypsum or to the wet binding medium of the paint, but the latter is implausible, because there was no such instability on the sandstone blocks in the walls. This argument of elimination implies that the plaster wash over the areas to be painted was still wet when painting began. Black was the first colour to be applied and was affected by the damp plaster. It was drying rapidly, so that by the time other colours were added, they were not affected. Extra colours, and colours applied slowly in detailing, were put on when the surface was completely dry and most of them did not react chemically with what went before, although in some cases they did not bind with it, so that they fell away without trace.

This reconstruction of the initial painting process implies that execution was rapid—and this speed should be related to the large size of the areas covered with paintings.²⁰ The wash over the preparatory red outlines obscured them, so that in redrawing the figures the painter had to rely on memory, invention and/or a small-

¹⁹ An observation I owe to Gay Robins and Charles Shute.

²⁰ Compare a rather different case where decoration was executed rapidly in a variety of styles, the tomb of Ramose at Thebes: C. F. Nims, *JNES* 32 (1973), 181–7.

scale draft beside him. He would wish to paint his black lines as soon as possible after the wash. The first grids and outlines are not likely to have been drawn long before the plaster wash and black, because the considerable redrafting would probably have been done with reference to the underlying design even when deviating from it. There was some use of gypsum to make corrections, and this might not have integrated well into the painted surface if it was done long after the rest of the work; it could also have left inconsistencies, of a kind that does not seem to occur, in the completion of the composition. The first design would be an essential point of reference throughout. Larger changes that involved plaster might be made to adjust the painting on the wall to the design, but they could equally well correct the effect as it appeared at the new large scale.

The obvious reason for covering the area to be painted with a plaster wash is to improve the painting ground. In what way the gypsum would have achieved this is not clear. It could have rendered it smoother, or it could have increased the adhesion of the paint through being more absorbent than the bare limestone. I see no reason for assuming that the gypsum would have been less porous than limestone, so that the theoretical alternative of preventing absorption and the spreading of lines does not seem likely; in any case, the preparatory outlines applied to the bare limestone did not spread. If absorption is desired, it will be increased by applying to a wet ground, and if the paint was deliberately applied to a wet ground, the model of medieval and Renaissance fresco painting would be quite closely approached—an idea that is almost universally rejected in the Egyptological literature.²¹ This rejection is probably correct, because only black shows any positive reaction with the ground, and the rest of the painting was completed when the plaster wash was dry; any advantage gained from applying black to a damp ground would be marginal, and the effects appear if anything to have been deleterious. Further, the medieval and Renaissance plaster layer was quite thick, whereas the Egyptian one is as thin as practicable, scarcely thicker than a heavy coat of paint; such a thin layer could not stay wet for long. None the less, there is a striking analogy between the Egyptian practice and the Western one, where the outline or *sinopia* was painted and then obliterated by the plaster on which the final painting was executed.²² An essential concomitant in both cases is speed of execution, but in Egypt this speed seems to have contributed to the correct completion of the design, rather than to creating a durable surface.

Speed of execution is a relative concept, and it would be difficult to suggest a length of time for the process. Over any area, however, the transition from painted

²¹ E.g. Ransom Williams, *The Decoration of the Tomb of Per-Neb*, 31 n. 59; Lucas, rev. Harris, *Ancient Egyptian Materials and Industries*⁴, 355–6; J. R. Harris, *Egyptian Art* (London, 1966), 19.

²² See e.g. U. Procacci, 'The Technique of Mural Paintings and their Detachment', in *The Great Age of Fresco Painting: Giotto to Pontormo* (Metropolitan Museum of Art, New York, 1968), 18–45 = *Frescoes from Florence* (Hayward Gallery, London, 1969), 15–43. Note the use of snapped guide-lines and grids for enlarging designs from drafts onto the wall, used in some cases in a semi-mechanical procedure (e.g. New York edn., 28 fig. 5, London edn., fig. 31; Cat. no. 68).

outline, through plaster wash, to final black outline should have lasted no longer than it took for the plaster to dry; in other words, the crucial stages would be completed in much less than a day. These might include the application of solid colour to large parts of a painting. The duration of the preparatory painting, which involved a revision, was probably greater, and similarly the evidence of details, which were added when the main part was completely dry, suggests a relatively long period until full completion, which also involved the final filling of the background with white paint. None the less, the technical evidence still favours a short period for the entire process of decorating over quite large areas, perhaps a few days. This would contrast strongly with the design of the decoration, which was closely related to the conception of the structure as a whole and had to fit a general conception of its meaning, as well as involving the study and copying of ancient texts²³ and other models. While the initial plan must have been made early in the reign of Sethos I, the detailed elaboration of the design may have taken years.

It should be asked how widespread the techniques I have described are likely to be. Only fieldwork can answer this question, but one or two points can usefully be made. The partial preparation of the surface with a wash is appropriate only where the surface can receive paint without modification. It is thus probably limited to limestone and similar substances. As we have seen, sandstone was treated in a different way, while mud plaster, the commonest background in the Theban necropolis, had to be fully plastered before painting.²⁴ Selective plastering would also probably be inappropriate for small-scale painting, because the essentially rapid technique would be unduly painstaking in small areas. In such cases, one would expect the wash to cover the entire surface before any grids or guidelines were painted. Thus, large-scale painting on limestone, as in the Hall of Barques, is the obvious location for these techniques. Their adaptation on the sandstone of the columns, however, shows that the principles behind them could extend further. Here, the large areas of sandstone relief in late New Kingdom temples might provide parallels, except that almost all of them were worked in sunk relief, which would destroy almost all trace of their use. In the Abydos paintings the grid traces tend to be found in the spaces between figures where there was no plaster wash, whereas in Theban tombs they are often within the bodies, in areas of decayed white paint on garments. The Theban method would probably have left the grids visible until a later stage in painting. There was no such easy visibility when an extra layer of plaster was applied, but where this was desirable, there should have been a considerable advantage in confining the extra plaster wash to the areas to be painted, since it minimized the painter's problems in working with few drafting lines. Rapidity could theoretically have been at less of a premium in painting on mud plaster, because the

²³ See 'An Abydos List of Gods and an Old Kingdom Use of Texts', in J. Baines *et al.* eds., *Pyramid Studies and Other Essays Presented to I. E. S. Edwards* (London, 1988), 124-33. The text discussed there is not the only ancient one in the temple.

²⁴ The gypsum plaster coat on mud plaster was necessary to give the correct colour. In the case of sandstone, the newly carved material was almost as white as limestone, but yellowed more rapidly. Colour might therefore be an additional contributory reason for coating it in plaster.

draft would be visible at all times, but the development of Theban brushwork suggests otherwise.²⁵

A final question relates to the significance of the unique black pigment. We did not sample the yellows and reds, but the yellow reacted chemically to burning by becoming a red that is indistinguishable from the red pigment. This change is commonly attested for the normal yellow ochre—for example elsewhere in the temple of Sethos I and in the neighbouring one of Ramesses II—so that there is *prima facie* evidence for red and yellow being the common pigments and not the New Kingdom ‘royal’ pigments, the sulphides of arsenic orpiment and realgar.²⁶ Similarly, visual inspection of the green and blue shows the granular form well known for the normal colours; these too are probably not exceptional pigments. The black therefore appears to be a special phenomenon in this context. But despite the probable absence of exotic yellows and reds in the hall, their existence on other royal monuments offers some sort of parallel. With all these pigments, the use of a new substance does not seem to be motivated by its hue, which is indistinguishable to the naked eye from more conventional materials.²⁷ Thus, some symbolism probably attaches to these rare pigments. This need be no more than the fact that they were exotic and exclusive, and they may have been restricted to royal monuments or ones closely associated with royalty, as I imply by terming orpiment and realgar ‘royal’. If any deeper or more complex symbolism was associated with them, it would be difficult to recover.

Relief

A special feature of these temporary paintings is that they were intended for replacement with carved reliefs. In the parts of the temple decorated under Sethos I, the relief is raised and has obliterated all trace of the designs on which it was based. It is therefore impossible to say whether normal preliminary drawings or full paintings were used, or whether the inner parts were carved directly in relief and the outer

²⁵ See nn. 5, 18 above.

²⁶ Orpiment (As_2S_3), also known as ‘king’s yellow’, has been found, for example, on the Berlin painted bust of Nefertiti: H. G. Wiedemann and G. Bayer, ‘The Bust of Nefertiti: an Analytical Approach’, *Analytical Chemistry* 54 (1982), 619A–628A (not seen; *AEB* 82.0589). Realgar (AsS), an orange-red pigment, occurs in Anatolia and is probably mentioned in New Kingdom pigment lists (J. R. Harris, *Lexicographical Studies in Ancient Egyptian Minerals* (Berlin, 1961), 141–2; Harris remarks that these two pigments were not fully distinguished in antiquity). The substance has been identified among pigments discovered in a box in the courtyard of the tomb of Kheruef (TT 192, temp. Amenhotpe III–IV): S. A. Saleh, Z. Iskander, A. A. El-Masri and F. M. Helmi, ‘Some Ancient Egyptian Pigments’, in A. Bishay (ed.), *Recent Advances in Science and Technology of Materials*, III (New York, 1974), 141–55 (not seen: *AEB* 74634). Orpiment has been studied by Heiner Jacksch, ‘Farbpigmente aus Wandmalerien altägyptischer Gräber und Tempel. Technologien der Herstellung und mögliche Herkunftsbeziehungen’ (Dissertation, Heidelberg, 1985), 125–43, who concludes with good arguments that it had royal associations and symbolism, rather as I do here. (I am grateful to Erika Feucht for making this work available to me.)

²⁷ There could have been a difference in antiquity before weathering, but the Egyptians were not strongly concerned with particular shades, so that this seems an unlikely reason for using these substances. Similarly, they might have believed that the new substances were longer-lasting, but in view of the great stability of their normal pigments, this is not an obvious reason for changing their practice. As indicated in Appendix 2, the identity of the iron-rich pigment does not help us to understand why it was used.

ones painted, which seems most likely. In any case, the carvers used the outlines of the full paintings and carved their sunk relief—as it is in the Hall of Barques—just within them. The same was probably done in the Corridor to the north, where there are traces of a grid on the north wall.²⁸

There were several stages to the carving work, apart from any painting of the finished relief, which never occurred in the Hall of Barques. The carving of sunk relief on the basis of the paintings was a separate process of the reign of Ramesses II, and would not have been done under Sethos I, when the rest of the structure was being decorated in raised relief. The Hall of Barques contains unusually explicit evidence for this unconventional carving process; most of the stages visible there probably had parallels in less exceptional contexts. The work is not of the quality of that of Sethos I, and is rather different in style.

The reliefs in the hall were carved from the entrance and from right to left, round the walls toward the west and then south and east back to the entrance (sample pl. IV). Work stopped when the south wall was nearly finished (pl. II) and the east wall had been begun (pl. III). The carving was done at three or more levels, possibly by three teams of artists, in a pattern that exploited scaffolding to the full. First, the frieze and mouldings at the top of the walls were carved; this stage was completed to the end of the south wall. Next came the central section, down to waist level on the main figure of the king and to the carrying pole of the divine barque he adores. The third area of unfinished carving is on the south wall, and consists of the bottom part, in an area sloping down from right to left: parts of the stern of the divine barque were worked, as were the carrying poles and the equipment next to the barque stand. Here, it is as if the carvers were working on a nearby area that did not require scaffolding while the similar parts of the south wall were inaccessible. Within the general right-to-left organization of the work, individual parts might be carved from left to right, as with the inscription above the king in front of the barque of Harendotes. Left-to-right cutting within the rightward orientation might be convenient for a right-handed artist.

These areas of work were not exclusive or neatly defined.²⁹ The junctures between carved and uncarved sections do not follow straight lines. Across these divisions runs a distinction in expertise between the less skilled, who cut the simpler outlines, and more experienced artists, who would have carved the more intricate hieroglyphs and the king's face, both of which were never completed. The repetitive patterns of frieze, top mouldings and uraeus friezes over the baldachins were rather crudely executed and may have been done by junior artists. In addition, stray sections throughout the scenes were carved separately, perhaps in order to fill in time or because they offered some sort of challenge. The name of Harendotes in the inscription in front of that god's barque was cut, unlike the surrounding text; there was an obvious precedence for these signs.

²⁸ PM VI, 26 (236)–(237).

²⁹ Compare the rather different order of carving noted by Peck and Ross for a relief from the tomb of Nespaqashuti: *Egyptian Drawings*, 38–40.

The procedures of carving were slightly different for figured relief and hieroglyphs, but the different stages were closely parallel and may have been carried out in a single process. I present them separately.

For pictorial representations, a line was first incised along the edge of an area to be carved.³⁰ This was very shallow and defined the relief area more than it created a relief figure. Next, much of the thickness of the sunk relief was cut away with crude chisel strokes roughly perpendicular to the outline and often sloping down slightly from left to right. Where there was a large, relatively flat area of relief, the entire surface was reduced with chisel marks, as on the aegis of the south barque on the east wall. This second stage left some of the original wall surface intact, especially where a figure was to be cut in quite bold relief, as in the case of the main figures of the king. The crucial example, which is the figure offering to the barque of Harendotes on the south wall, is unfinished, so that although the approximate depth of carving can be assessed, the full depth was never achieved. This figure was being carved from top to bottom and left to right, and work stopped at waist height. The back of the skull is carved, but the front of the head preserves the painted form. This most important feature may have been left to be carved by the principal artist, creating an irregular pattern of execution. Such a distribution of labour between assistant and master has many parallels in Western art.

The third and apparently final process in figure carving consisted in completing the modelling to its full depth, adding interior detail, and smooth-dressing the modelled surface. This stage, which may have had numerous subdivisions according to the elaboration and depth of the carving, must have taken many times as long as the previous two, but the only areas where it is incomplete are where small elements, such as details of temple furniture on the east wall, have rough interior modelling; these could have been left in this state in the second stage and their final reworking overlooked.

As with painting, the carving of relief seems to have been rapid. Areas that are cut only are near others that have the first rough carving completed and others again that are fully modelled. Any stage can be absent quite near others that are complete if there is some reason for omitting a part, such as the king's face waiting for the principal sculptor. The distribution of patches of carving, with groups probably working simultaneously in several places, again favours quick execution. Whereas with painting the technical process itself required speedy completion, this is not so true of relief. Instead, the speed seems to be required by the organization and distribution of different skills.

Before inscriptions were carved, the painted drafts had to be altered from the titulary of Sethos I to that of Ramesses II. Throughout the hall, very few painted

³⁰ Such carving can have a misleading appearance. A chased block joint in the baldachin above the stand with a figure of Min is probably a repair to the surface, later filled with plaster or a stone inlay, and not a representational line. Its angle of cutting is more oblique than that of normal relief, but this difference could easily be overlooked.

traces of the names of Sethos I can be found and none are clearly enough preserved to show that they were not erased. There are two, perhaps complementary, explanations for this. The cartouches could have had an extra preparatory plaster wash, applied shortly before painting, which would have made them especially prone to losing traces of paint in the long term. Because of their distinctive white background within the outline, such a treatment is not unlikely. Alternatively, the name of Sethos I may have been erased in all of the paintings in preparation for inscribing with that of Ramesses.

Inscriptions were carved first as lines. The cartouches of Ramesses formed part of the initial carving. The moulding lines between columns were carved at the same time as the signs. Probably in a second stage, the areas enclosed by the lines were roughly hollowed out. The edges of the signs were not yet defined by sharply incised verticals, which were presumably to be cut in a finishing process. Later they were fully carved, and perhaps at the same time the rather roughly carved lines were given a final smoothing. Above the figure of the king in front of the barque of Harendotes, the final carving seems to have proceeded from top to bottom and from left to right; the uppermost signs are complete, but not those below. At the end of this stage, as with figured relief, the deepest parts of the carving were next to the outlines. This treatment was, however, variable, with many signs being almost flat, while sun disks and other round signs had a convex relief form. The flat profile predominates among the completed inscriptions.

As with relief carving, certain parts were left for later execution. In the first two columns of the inscription just mentioned, only the upper sections were completed; the reason for this is not clear. In the third column a complicated falcon hieroglyph, whose painted draft can be recovered, was left uncarved, probably because the clearly inexpert carver of the rest of the inscription was leaving it for the principal artist; since the sign can be read to this day, there can hardly have been a problem of reading the draft.

One last process in relief decoration that never occurred in the south-east corner of the hall was a redressing or cleaning of uncarved areas. The existence of this stage is made probable by the total absence of grid traces and other signs of painting from the reliefs in the rest of the hall. The entire Harendotes bark and baldachin, much of which was completed in relief, shows such traces, but they are absent from the next scene to the west. This suggests that the cleaning was done a whole scene at a time, after all the relief had been completed. It was not always carried out, as is shown by the grid preserved in the Corridor (n. 28 above). This conclusion sits rather uneasily with the piecemeal approach suggested by the relief cutting, and it may imply that the final cleaning was done just before scaffolding for the whole area was removed, or that it was done from ladders, whose placing was unrelated to the positioning of supports for carving. If I am right in positing such a stage of cleaning, and the cleaning was a regular part of the carving process, this may help to explain why so very few traces of grids and other preparatory work have been found on sunk reliefs (the process of raised relief carving obliterated them in any case).

The painting of reliefs was separate from their carving. None of the reliefs in this part of the temple received any paint, except for some hieroglyphs in the southernmost scene of the east wall in the Gallery of Lists.³¹ These do not have the characteristic shades of the New Kingdom painting, and may be Graeco-Roman in date.

Conclusion

As so often in studying Egyptian art, our findings from examining the techniques at Abydos tend to bring out the complexity of procedures and the large amount of planning and content the finished—or in this case temporarily finished—works incorporate. At the same time, the indications of rapidity in execution give an insight into the planning of one of the most important projects of the reign of Sethos I and its continuation under Ramesses II. The opportunity offered by the state of preservation of this decoration is unusual, but the stages and features we have isolated are unlikely to be unique. Future research in the same area should seek to exploit more than we have done the potential of scientific techniques of analysis for improving understanding. Other approaches that might yield additional insight include the use of special forms of photography to bring out underlayers of painting, as has been the practice in Western art history for decades.

APPENDIX 1: CONSERVATION REPORT

By RICHARD L. JAESCHKE

THE area of wall chosen to be cleaned was about 3 m square (pl. II, to the left of the king; mainly off the plate). There was much evidence of burning across the wall. The fires seem to have been small but positioned very near to the wall. This gives the combined effect of small patches of severe heat damage (20–40 cm in diameter) surrounded by lesser heat effects such as colour changes in the pigment, with wider areas of sooty smoke staining. The entire section of wall—both burnt and unburnt parts—was covered in various degrees with a concretion composed of leached and condensed minerals and incorporated dirt. Both the effects of burning and the concretion obscured the underlying decoration.

The wall was first photographed and then brushed and blown with a hard bulb to remove loose dust. Tests using a variety of solvents and chemicals were carried out to determine the best cleaning method. An aqueous solution of 10–15% di-sodium salt of ethylene-diamine-tetra-acetic acid, 5–10% sodium hexametaphosphate and about 5% non-ionic detergent (Synperonic N) was found to be effective in removing much of the concretion.

The areas of very thick concretion were reduced mechanically with a scalpel. The cleaning solution was then swabbed over small areas with medical grade cotton wool rolled on a stick. In order to reduce the build-up of water in the stone, only a small area (about 5 cm²) was wetted and scrubbed clean at a time, using the minimum amount of the solution; in this way the danger of mobilizing and inducing soluble salts to the surface was minimized. After the concretion had been removed, the patches of thick underlying soot could be reduced by swabbing with ammonium hydroxide. Some of the decoration was revealed even in badly

³¹ PM VI, 25 (226)–(227).

scorched areas. In the most severely burnt parts the surface was converted to a blue-grey tone with little decoration remaining. In painted areas where there had been high heat, the yellow colour (a hydrated iron oxide or ochre) was converted to red (a dehydrated iron oxide or ochre).

Black paint is preserved only in very small quantities (occasionally with a faint purple tone), although its use seems to have been very much more widespread. The features presumed to have been black are mostly visible as slightly indented 'shadows' in the underlying paint or plaster. This seems to indicate that the black was removed either by mechanical weathering or by chemical deterioration, perhaps aided by the fires.

Once the cleaning was complete, the entire area was buffed lightly with a soft brush and a thin coating of a 5% solution of Paraloid B72 (an acrylic co-polymer), in acetone, was applied. This was applied to form a protective coating to allow the epigraphic work to be done. Once the tracing and copying was finished, the coating was removed with swabs of acetone. The remaining traces of consolidant will be confined to the cracks and will give strength to the wall without unduly sealing the surface.

APPENDIX 2: SCIENTIFIC ANALYSIS³²

By JULIAN HENDERSON

Research Laboratory for Archaeology and the History of Art,
University of Oxford

Introduction. Forbes lists four separate sources of black pigments used in Egypt.³³ These are carbon black (soot), charcoal, iron oxide (haematite) and stibnite (antimony sulphide). Most Egyptian black pigments analysed to date appear to contain carbon. Noll³⁴ found that a black pigment used for painting on Naqada II ceramics was of an iron-manganese oxide mixed crystal ($a\text{-(Fe, Mn)}_2\text{O}_3$).

Analysis. Two samples of black pigment still attached to a white granular material were investigated. Initial examination under magnification of pigment particles showed that in both transmitted and reflected light the pigments appeared black.

Firstly, analysis of the pigment was carried out to establish the qualitative nature of the substance. Both samples were analysed using energy-dispersive X-ray fluorescence analysis (XRF) in the Research Laboratory for Archaeology and the History of Art. The system has a rhodium X-ray tube and a lithium-drifted silicon detector and can be operated under vacuum. It is capable of detecting elements down to sodium (atomic number of 11). This analysis showed that iron was present in the pigment layer, together with small amounts of magnesium, aluminium, silicon, sulphur, potassium and calcium.

Further, more detailed, analysis was carried out using an energy-dispersive spectrometer attached to a JEOL JSM-840 scanning-electron microscope. Through the analysis of 2 μm –3 μm spots on the 'clean' pigment surface, analysis confirmed the results obtained using the X-ray fluorescence system, with variable, but significant quantities of iron (c. 2–5 per cent). A detector with an ultra-thin window allowed carbon and oxygen to be detected.

³² This appendix gives a summary of results. A fuller discussion is planned for publication in *Archaeometry*.

³³ *Studies in Ancient Technology*, III² (Leiden, 1965), 228, Table xxiii.

³⁴ 'Mineralogy and Technology of the Painted Ceramics of Ancient Egypt', in M. J. Hughes (ed.), *Scientific Studies in Ancient Ceramics* (British Museum Occasional Paper 19, 1981), 143–54.

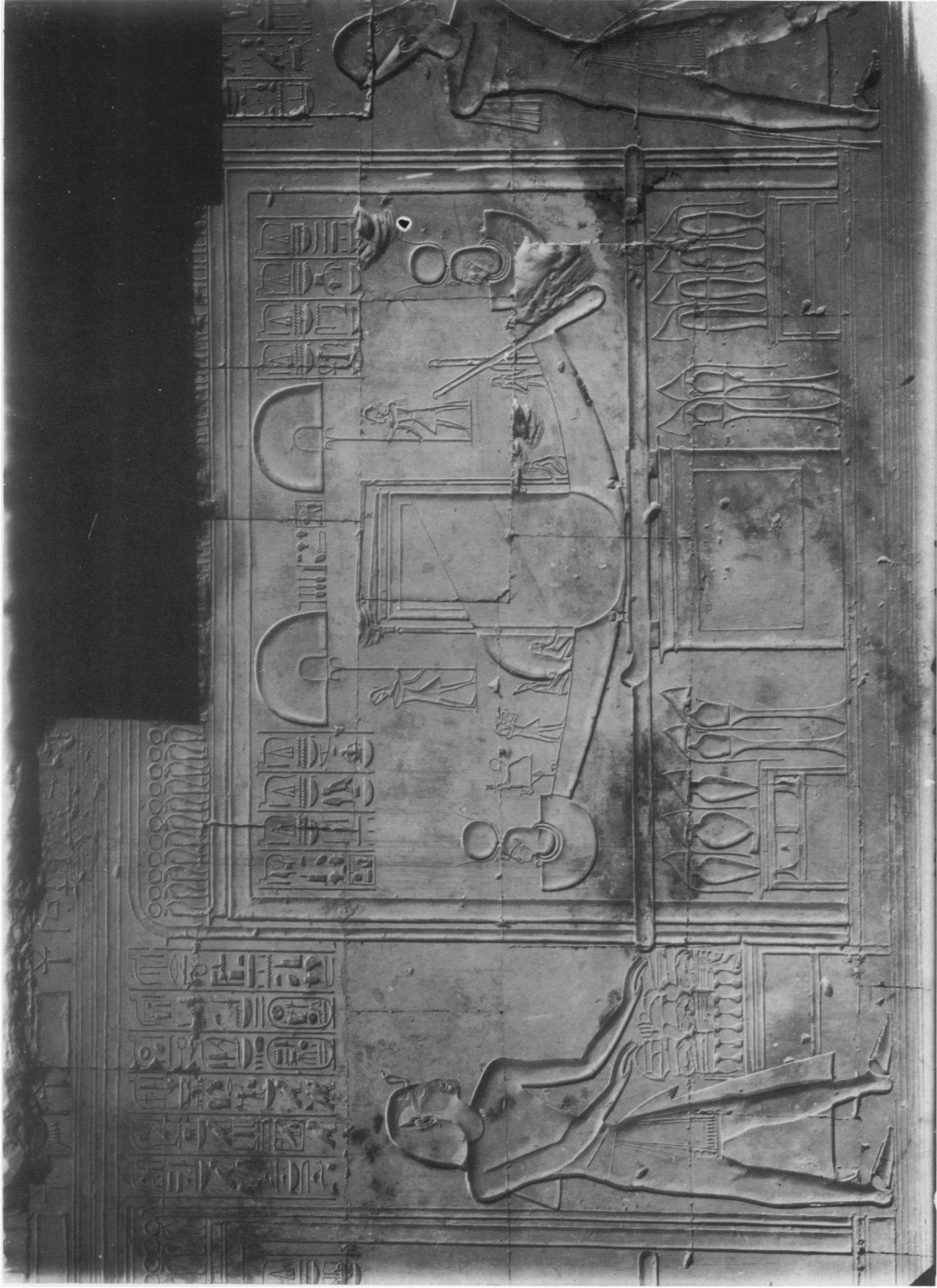
Carbon was detected and might *possibly* contribute to the black colour; however, equally, its presence might be explained by the presence of a carbonate. The sulphur probably forms part of gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) and anhydrite (CaSO_4), both detected using X-ray diffraction (see below). No discrete concentration of an iron-rich mineral colourant was found using the scanning-electron microscope. The use of this technique therefore suggests (along with the X-ray diffraction analysis) that the iron-rich component is mixed with gypsum and quartz in the pigment layer, and is probably amorphous or poorly crystalline.

In order to attempt to identify the pigment used more comprehensively, X-ray diffraction (XRD) analysis was used to examine both the white crystalline backing material and the black pigment. The result of the XRD analysis of the white material was not surprising: it was found to consist of a mixture of gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$), anhydrite (CaSO_4) and quartz. In view of the previous identifications of black pigments listed above, that found to have been used here is perhaps more surprising: the identity is not entirely clear because the iron-rich component is probably either poorly crystalline or amorphous. Possible iron-rich components which would provide a black colour are FeOOH , iron spinel, Fe_3S_4 or $\text{Na}_2(\text{AlFeMg})_5\text{Si}_8\text{O}_{22}\text{OH}$; the XRD pattern suggests the presence of one of these (haematite was not detected). Whichever is the case, its presence is unusual and interesting. The pigment is therefore formed from a natural raw material and can be added to the range of black Egyptian pigments already identified.



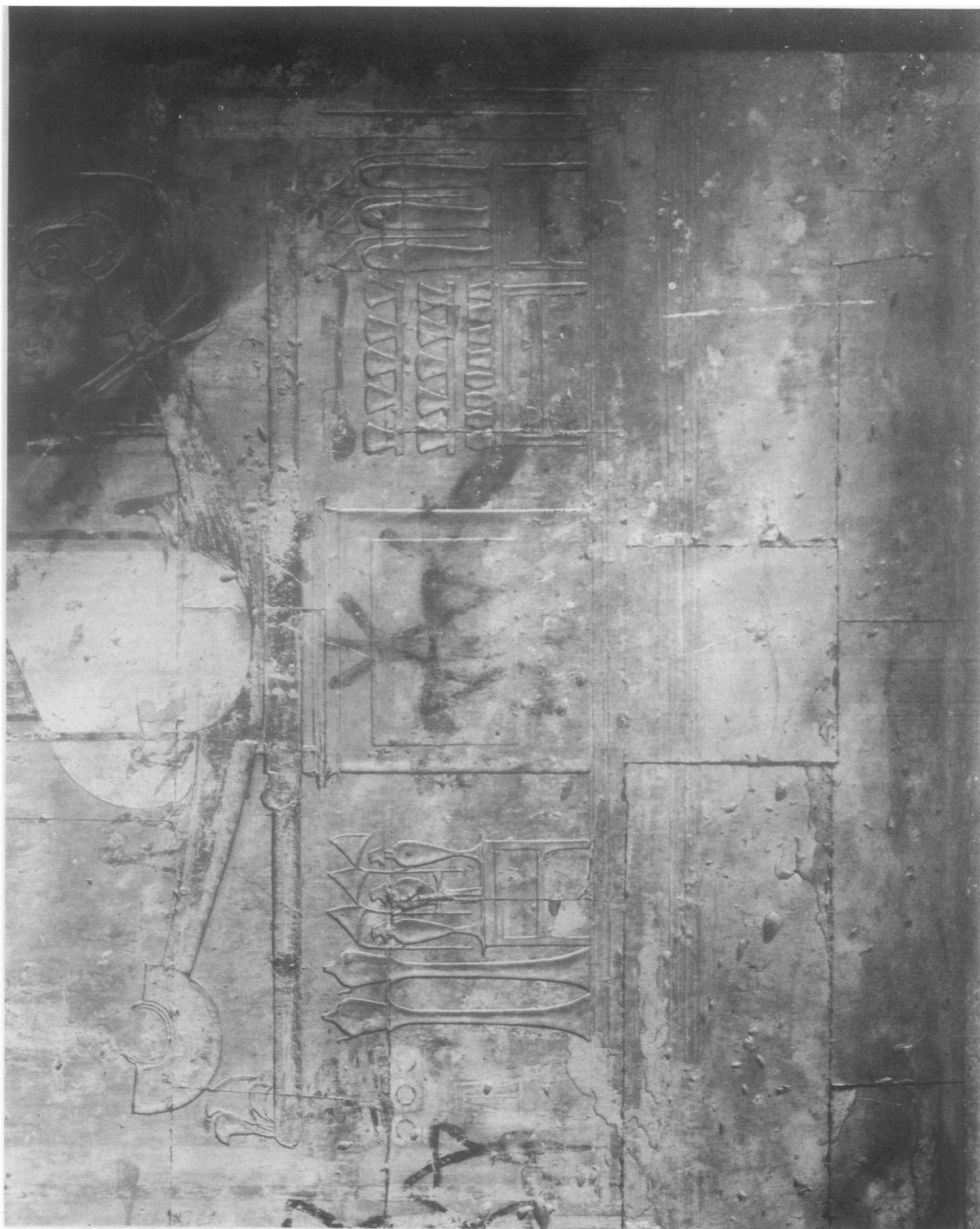
Figure of Sethos I/Ramesses II adorning the barque of Harendotes. Hall of Barques, south wall, east section. *Photo. by Amice M. Calverley* (pp. 13-30)

TECHNIQUES OF DECORATION IN THE HALL OF BARQUES



Partly carved barque. Hall of Barques, east wall, south section. *Photo. by Amice M. Calverley (pp. 13-30)*

TECHNIQUES OF DECORATION IN THE HALL OF BARQUES



Ramesses II adores the barque of Isis. Hall of Barques, south wall, central section. *Photo. by Amice M. Catverley* (pp. 13-30)

TECHNIQUES OF DECORATION IN THE HALL OF BARQUES

A POSSIBLE SOURCE OF COPPER ORE FRAGMENTS FOUND AT THE OLD KINGDOM TOWN OF BUHEN

By EL SAYED EL GAYAR *and* M. P. JONES

An archaeological investigation of the Old Kingdom town of Buhen in 1962 revealed an ancient copper 'factory', some copper ore fragments from which have been examined by modern analytical methods. The results show that the main copper-bearing mineral in the ore is malachite but this has been extensively altered (*in situ*) to the green copper chloride, atacamite. The ore also contains a very high proportion of gold. The mineralogy of the 'Buhen' ore has been compared with known copper ores from Egypt and Northern Sudan. These other ores either do not match the Buhen specimens or they occur very long distances from the town. The only mining activity close to Buhen was at the gold mines of Kush, some of which were on the Nile immediately up-stream of the town and were worked in Middle Kingdom times. No mineralogical details of the Kush ores are known but it is possible in view of their location, and also because of the high proportion of gold found in the Buhen specimens, that it was the Kush ores which were used, in the Old Kingdom, for the extraction of copper.

Introduction

AN ancient copper smelting 'factory' at Buhen, on the Upper Nile, was excavated in 1962 and some of the materials found at the site were deposited for safe keeping in the Petrie Museum of Egyptian Archaeology at the Department of Egyptology, University College, London. Samples from these materials were made available for mineralogical study at the Royal School of Mines, London. The samples included a fragment of copper ore; some of the smelted copper metal and the copper-smelting slag; pieces of a smelting crucible; and a small artefact made from the smelted copper. Modern analytical methods, such as x-ray microanalysis, x-ray fluorescence, x-ray diffraction, and thermogravimetric analyses, have been used, in particular, to determine the chemical and the mineralogical compositions of the *ore* specimen. The results are compared with the mineralogical information that was already available about the copper deposits that occur in Egypt and in Lower Nubia and a suggestion is put forward concerning the likely source of the copper ore that was found at the Buhen site.

General Background

The town of Buhen was sited on the rocky, unprotected, west bank of the river just north of the Second Cataract, where the river cuts through the highly resistant igneous and metamorphic rocks of the Batn el-Hagar. The remains of Buhen are

Acknowledgements Dr. El Gayar was supported by a grant from the Suez Canal University, Egypt. The authors wish to thank Prof. B. Rothenburg, Institute of Archaeometallurgy, London for arranging the loan of the copper ore specimen. They also wish to express their appreciation to Dr. Rogers, Imperial College, London for allowing some of the analyses to be carried out in the Materials Department. The photographs were produced by Mr. V. Harris.

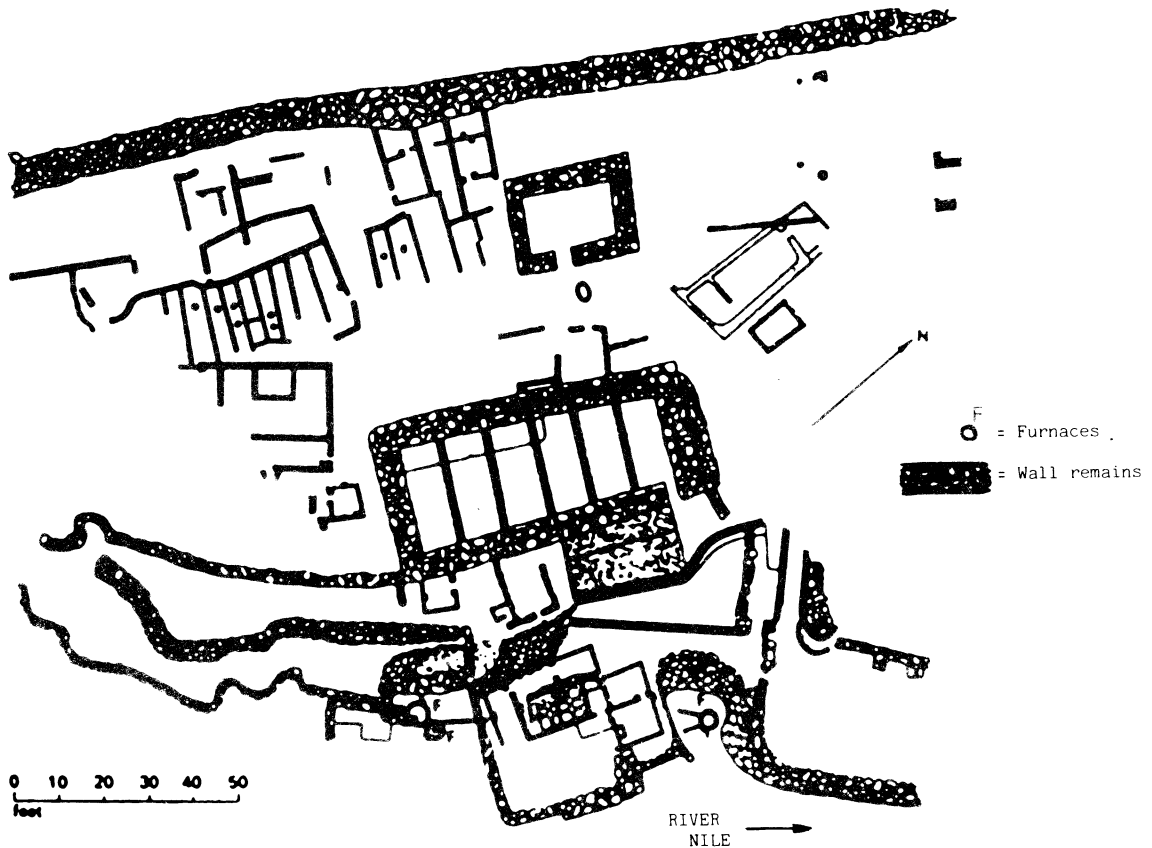


FIG. 1. Plan of part of the Old Kingdom town of Buhen showing three furnaces immediately adjacent to the west bank of the Nile (after Emery).

now submerged under Lake Nasser. The town dates from the Old Kingdom and is the earliest known permanent Egyptian settlement in Nubia. During this period the town became a centre for the production of copper metal. Emery investigated the remnants of a copper smelting 'factory' located very close to the bank of the Nile in this settlement.¹ He found 'large quantities' of unsmelted copper ore near the remains of three well-preserved smelting furnaces (fig. 1). In addition he found rough stone mortars for pounding the ore, broken pottery crucibles in which, he claims, the ore had been smelted, and ingot moulds for casting the smelted metal. He also found some of the charcoal that was used during the smelting operation, along with copper slag and 'droplets' of the copper metal produced by the smelters. The results of a series of mineralogical and chemical analyses carried out on these materials will be given elsewhere.

The siting of any ancient copper smelter was controlled by the availability of: (1) the appropriate human skills, (2) water, (3) clays for making ceramic furnaces, moulds, crucibles etc., (4) supplies of timber for conversion to charcoal, (5) suitable

¹ W. B. Emery, *Kush* 11 (1963), 116-20.

mineral-based flux to produce fluid slag during the smelting procedure, and (6) suitable ore in adequate quantities. It is clear that the town of Buhen must, during the Old Kingdom, have provided a particularly convenient place where all these features could be brought together to produce small quantities of copper metal. Skilled smelters could easily have been brought to Buhen from Egypt; the Nile would have provided an unfailing source of water; there are readily available clays all along the Nile valley; and, although the timber supplies in the Buhen area are now very limited, Trigger suggests that the area may, in Old Kingdom times, have had a significantly higher rainfall than at present and that, as a result, sufficient timber may have been available along the Nile and in the local wadis to support the small-scale copper smelting factory without the need to bring in supplies from a distance.² The slags from the factory area are rich in iron (and low in manganese) showing that a ferruginous flux was used: small deposits of iron oxide occur all along the Nile valley.

However, the source (or sources) of the copper *ore* that was smelted at Buhen, is not known. This information would be of very great archaeological interest, particularly since there are no records of any copper deposits having been worked in the immediate vicinity of the town. In fact, all the known copper deposits in Egypt (and also those in the Northern Sudan) are a long way from Buhen and it is significant that these deposits are all sited to the *east* of the Nile.

Mineralogical Details of a Copper Ore Fragment Found at Buhen

The copper ore specimen that was provided measured 8 cm by 5 cm and weighed approximately 150 grams. Portions of this specimen were prepared as polished sections and were used for optical examinations and for microanalyser tests whilst other portions were ground up and used for x-ray diffraction and chemical analyses. The results of the microscopic examinations and the x-ray diffraction analyses show that the most important copper-bearing mineral in the ore is malachite, the green, basic carbonate of copper, $(\text{Cu}_2\text{CO}_3(\text{OH})_2)$. This mineral is a common weathering product of the copper sulphide mineral, chalcopyrite, and is frequently found at the outcrops of copper-bearing rocks. The malachite is accompanied by considerable proportions of quartz, trace amounts of siderite (an iron carbonate) and, unusually, the specimen also contains a large amount of the green copper chloride, atacamite, $(\text{Cu}_2(\text{OH})_3\text{Cl})$ —see fig. 2. The ore fragment does not contain any discernible sulphide minerals.

The mineral atacamite occurs mainly around the outer zones of the available ore fragment and also along cracks within that fragment. This unusual spatial distribution strongly suggests that the chloride mineral had been formed *after* the fragment had been broken to the particle size found at Buhen and, therefore, that the atacamite had been produced at the Buhen site since the time that the smelter had been abandoned. This mineralogical change was probably achieved by the reaction of the original malachite with chloride ions derived from the Nile waters that periodically

² B. G. Trigger, *Nubia Under the Pharaohs* (London, 1976), 23–4.

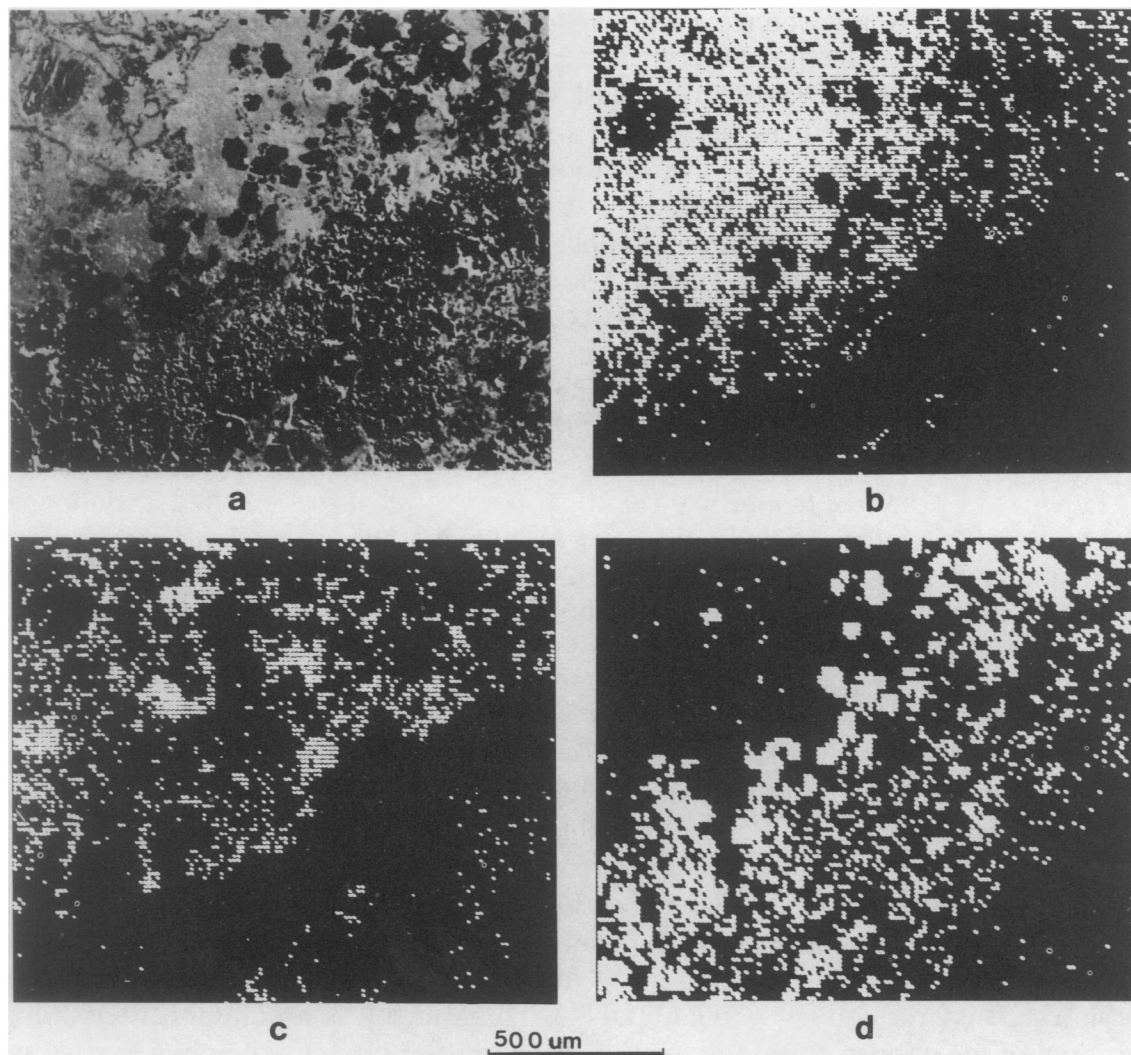


FIG. 2a. Back-scattered electron image of a portion of the copper ore fragment. The dark, rounded grains are quartz and the brighter areas contain copper. Figs. 2b, 2c, and 2d show the distributions of copper, chlorine, and silicon (respectively) in the same area as Fig. 2a. The brightness of the element image at any point is proportional to the concentration of the stated element.

inundated the factory site. The overall reaction is:



Tables 1a and 1b show the results of a bulk chemical analysis of the ore specimen along with its *calculated*, overall, mineralogical composition. The malachite and the atacamite are intimately intergrown and Table 2 and pl. V, I, 1 show the variations in the malachite:atacamite ratios that occur in different portions of that specimen.

A further series of 30 microanalyses of small areas on the ore specimen showed that parts of the ore contain remarkably high proportions of gold. These gold values

TABLE Ia. *Bulk Chemical Analysis of the Ore*

(By atomic absorption analysis)		(By wet chemical analysis)	
Element	Weight per cent	Element	Weight per cent
Li	0.0030	C	1.63
Na	0.0500	SiO ²	43.96
K	0.1000	Cl	5.41
Rb	0.2000		
Be	0.0005		
Mg	0.1160		
Ca	1.3700		
Sr	0.0064		
Ba	0.3600		
Al	0.0500		
La	0.0100		
Ti	0.0600		
V	0.0050		
Cr	0.0100		
Mn	0.0150		
Fe	0.0400		
Co	0.0100		
Ni	0.0810		
Cu	33.0000		
Ag	0.1160		
Zn	2.3000		
Cd	0.0074		
Pb	0.4800		
P	0.0400		

(By Electron Probe Microanalyser)	
Element	Weight per cent
Gold	0.183

TABLE Ib. *Overall Mineralogical Composition of the Ore Specimen—Calculated from its Bulk Chemical Analysis*

Mineral	Weight per cent
Quartz	44
Malachite	23
Atacamite	32
Others (mainly calcite, smithsonite? and cerussite)	1

range from zero to, a most unusual, 0.574 per cent. The calculated overall gold content of the complete ore fragment (based on these analyses) is 0.183 percent. This gold would be concentrated in the copper metal during the smelting operation and, therefore, it is not surprising that the copper metal specimen produced in Buhen also contains an unusually high proportion of gold (see fig. 3 and pl. V, 2).

The ore fragment contains a large proportion of finely dispersed quartz grains (fig. 2d) and it would have been necessary to use a flux containing a high proportion of hematite (iron oxide) in order to produce a slag that was sufficiently fluid at the comparatively modest temperatures that were attainable during the smelting procedures used at that time. No specimens of such a flux have been reported from the factory site.

TABLE 2. *Variation of Malachite and Atacamite Contents in Small Analysed Volumes of the Copper Ore Fragment (determined by X-ray Microanalysis) (See pl. V, 1)*

Analysed area	Total copper	Copper as malachite	Copper as Atacamite	Malachite: atacamite ratio
1	30.05	17.0	12.6	1.4
2	34.88	17.5	7.4	2.4
3	41.36	14.2	27.1	0.5
4	28.87	11.3	17.6	0.6
5	15.80	9.0	6.8	1.3
6	5.76	3.2	2.6	1.2
7	28.19	10.0	18.2	0.5
8	7.13	5.8	1.4	4.1
9	40.21	32.5	7.7	4.2
10	36.69	25.0	11.7	2.1
11	47.19	26.4	20.8	1.3
12	47.53	22.8	24.8	0.9
13	13.98	13.1	0.9	14.6
14	13.48	12.6	0.9	14.0

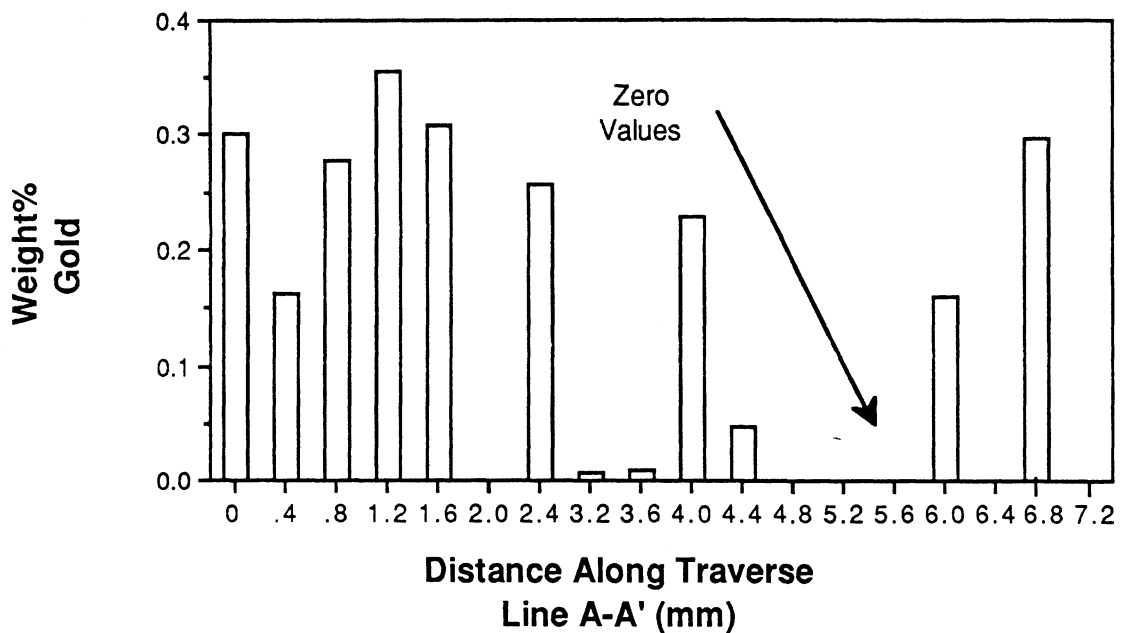


FIG. 3. Variation in gold values across a polished section of copper metal (see pl. V, 2).

Possible Sources of the Copper Ores Used at Buhen

Lucas gives the locations and very brief details of all the copper deposits and copper mining sites which are now known to exist in the Eastern Desert of Egypt.³ For example, extensive copper workings, which are about 16 m deep and have several shafts, occur at *Um Semiuki* (Gebel Abu Hamamid: fig. 4). The copper-bearing

³ A. Lucas, rev. J. R. Harris, *Ancient Egyptian Materials and Industries*⁴ (London, 1962), 205-6.

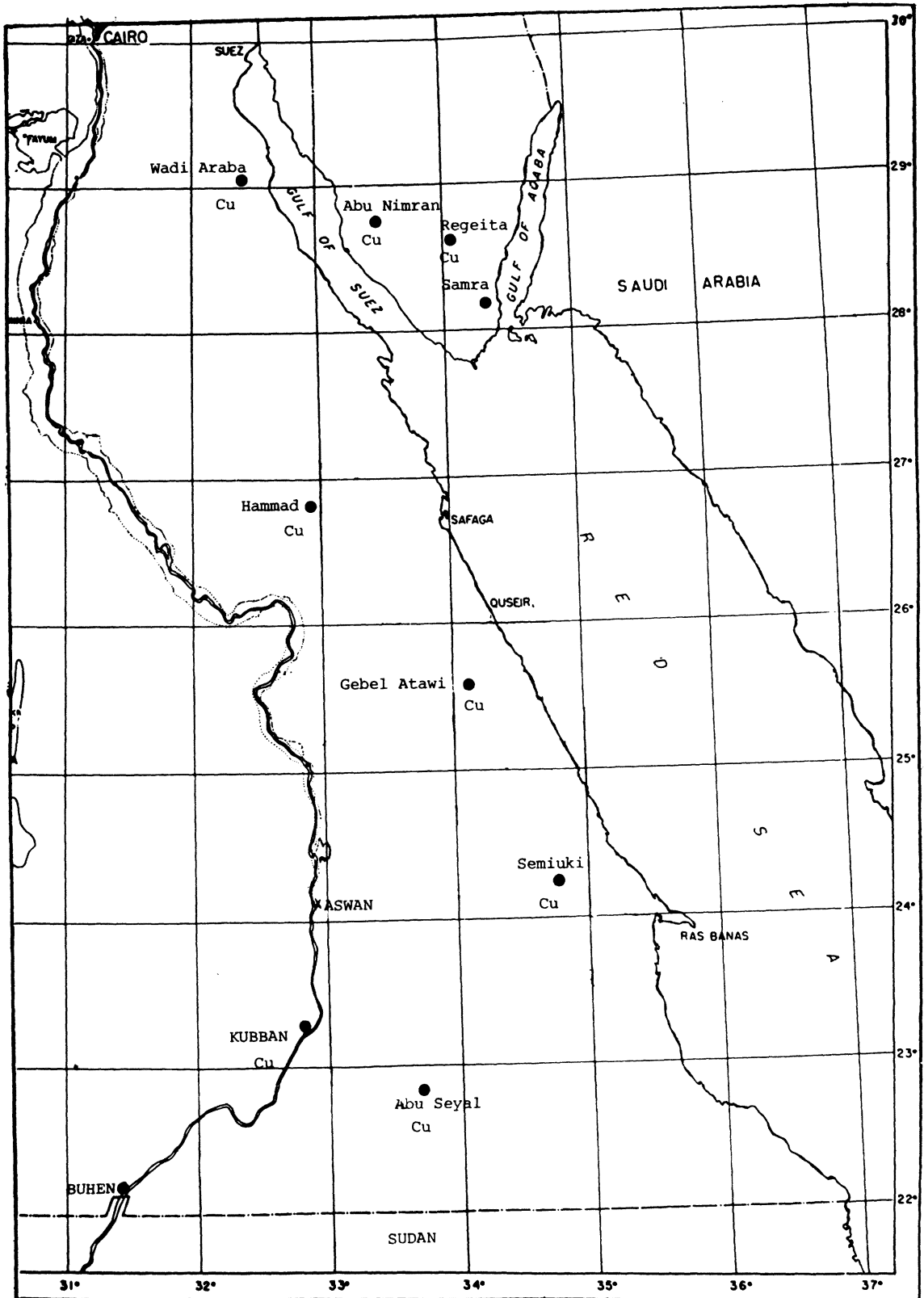


Fig. 4. The known locations of copper ore deposits in Egypt (after Elshazly).

minerals in the top 7 m of this deposit are the green copper carbonate and the blue copper carbonate—malachite and azurite—respectively. (Mixtures of sphalerite, galena, and an unspecified group of copper sulphides occur at greater depths in this mine). However, the remains of ore crushers and heaps of smelter slag at this location shows that some, at least, of the ore from Um Semiuki was smelted at the mine site. Furthermore, this location is far from Buhen and it is, therefore, very unlikely to have been the source of the ore used there.

The deposit at *Wadi Araba* (29°08'N 32°32'E) is known to have been mined during the New Kingdom although the amount of copper ore that was available must have been very small. However, specimens of ore taken from this orebody are said to contain 'over' three per cent (and up to about twenty per cent) of copper. The main copper-bearing mineral is the blue mineral chrysocolla (a colloidal copper silicate) rather than the green malachite that was smelted at Buhen. Furthermore, this mine is many hundreds of kilometres north of Buhen. El Shazly and Sabet have described an ancient copper mine at *Gebel Atawi* (approx. Lat. 26°N) in the Eastern Desert of Egypt.⁵ The copper-bearing mineral in this deposit is malachite (which occurs with hematite) and there are no records that any of the primary sulphides of copper or of iron were mined here. However, despite some mineralogical similarities with the Buhen sample, the El Atawi site is about 800 km from Buhen.

A copper-bearing deposit at *Abu Seyal* (Lat. 22° 47'N) was extensively mined in ancient times, particularly in the time of the Middle Kingdom. A specimen of the unaltered ore from this mine contains about thirteen per cent copper in the form of chalcopyrite (CuFeS₂)—with some pyrrhotite (an iron sulphide) but, as with the Wadi Araba deposit, the only copper-bearing mineral exposed at the surface of this deposit is the copper silicate, chrysocolla. The presence of this mineral, plus the fact that some, at least, of the ore is known to have been smelted at the mine, strongly suggests that this is not the source of the ore that was smelted at Buhen.

In addition to the mine locations mentioned above, there is a copper smelting (but not a copper mining) site, with its attendant slag heaps, on the east bank of the Nile at Kubban (Lat. 23°10'N). The mass of slag in these heaps has been estimated as over 200 tonnes and it is assumed from this value that the smelter at Kubban produced, in all, a total of about twelve tonnes of copper metal (n. 3 above). Between 100 and 1000 tonnes of ore would have been needed to produce this quantity of copper metal. Although the origin of this ore is not known, it is likely that it was derived from Abu Seyal (see above), which is also on the east bank of the Nile and is comparatively near to Kubban.

Whiteman gives the locations of three small copper deposits in the Red Sea Hills area of the Sudan.⁴ These deposits are to the east of the Nile and are immediately south of the present Sudan–Egypt border at approximately the same latitude as Buhen. Only very scant details are known about the mineralogy of these deposits but two of them, at *Shashitaib* (21°59'N, 36°03'E) and *Ferokit* (21°36'N, 36°39'E) contain

⁴ A. J. Whiteman, *The Geology of the Sudan Republic* (Oxford, 1971), 230–4.

⁵ E. M. Elshazly and A. H. Sabet, A Preliminary Report on El Atawi Copper Deposit, Eastern Desert. Geol. Survey, Egypt, Cairo. Paper 2, 5pp. 1955.

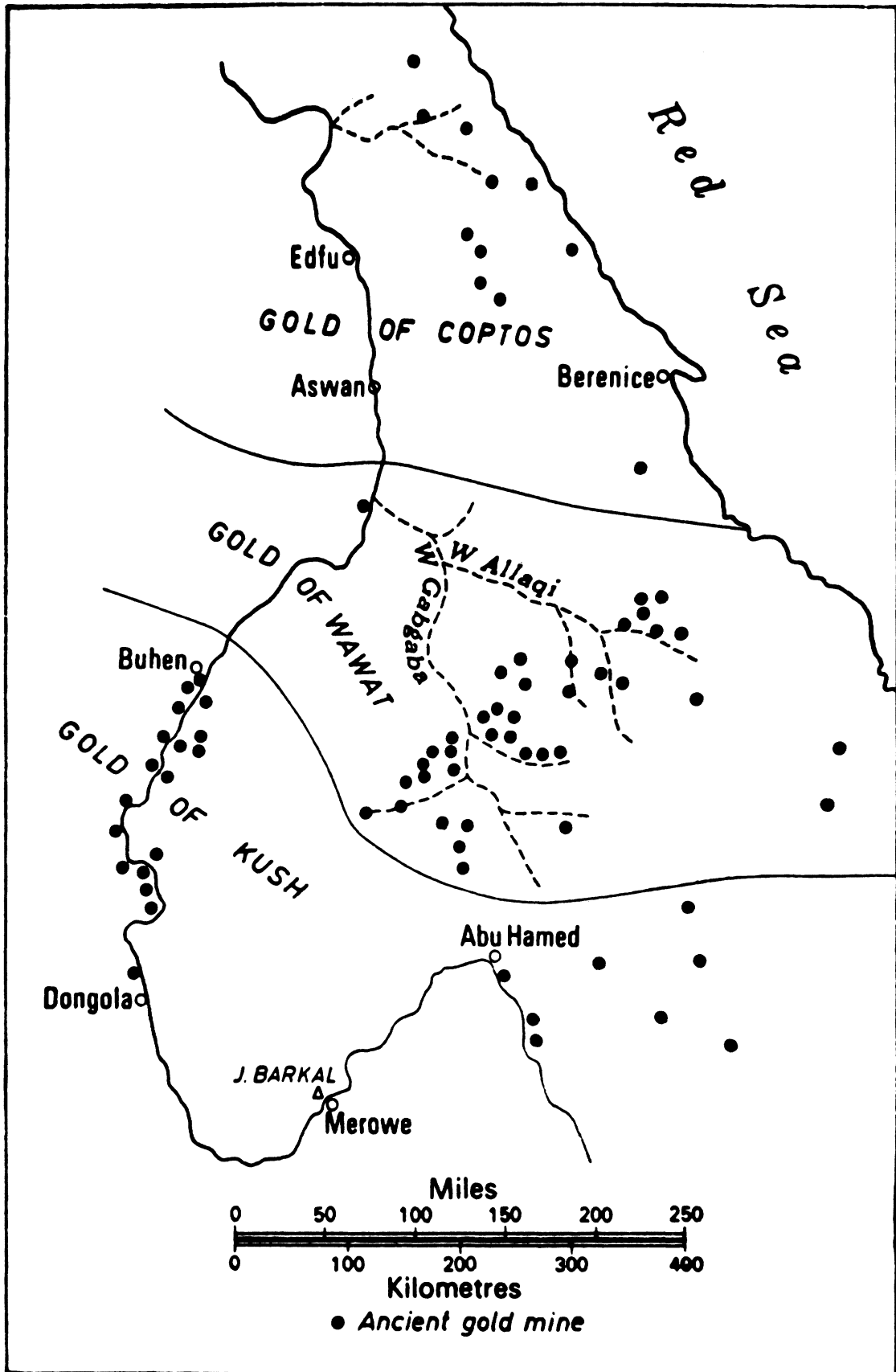


FIG. 5. Ancient gold mines of Sudan and Upper Egypt (after Vercoutter).

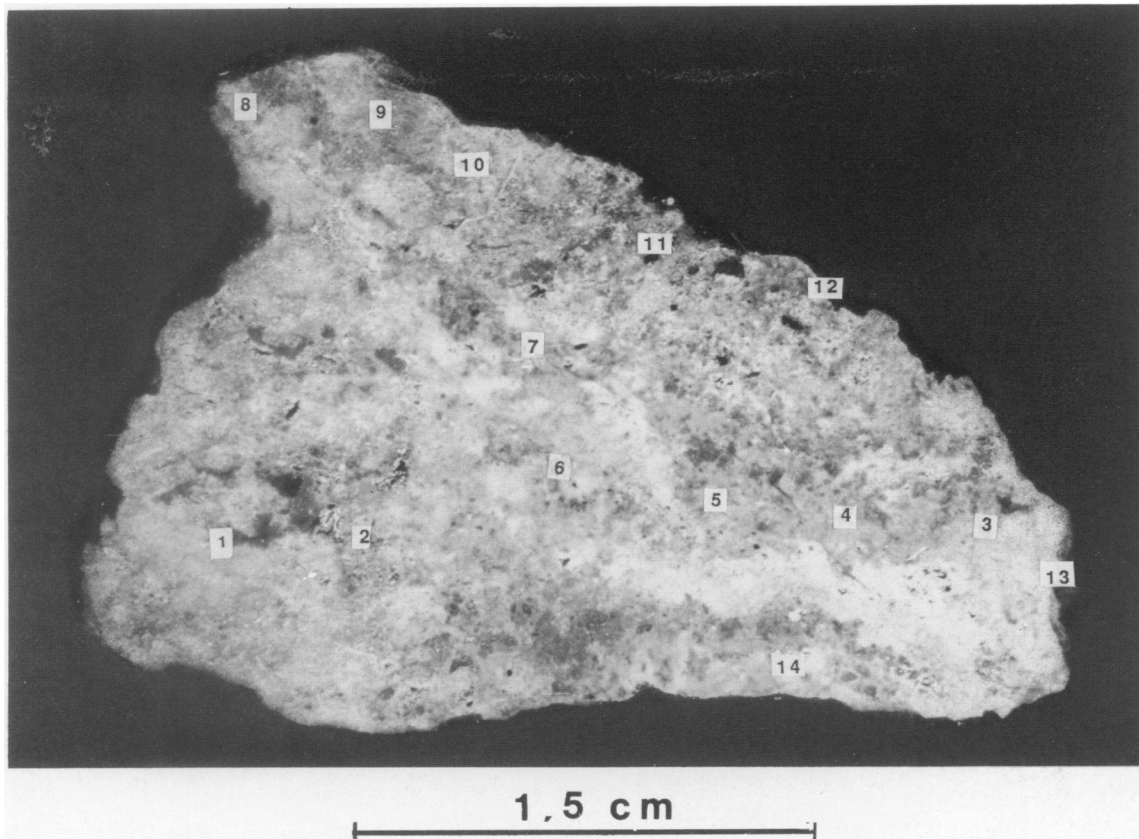
traces of copper carbonates. Once more, however, these deposits are very far from Buhen and are, therefore, unlikely to have been the sources of the Buhen ore specimens.

Discussion of Results

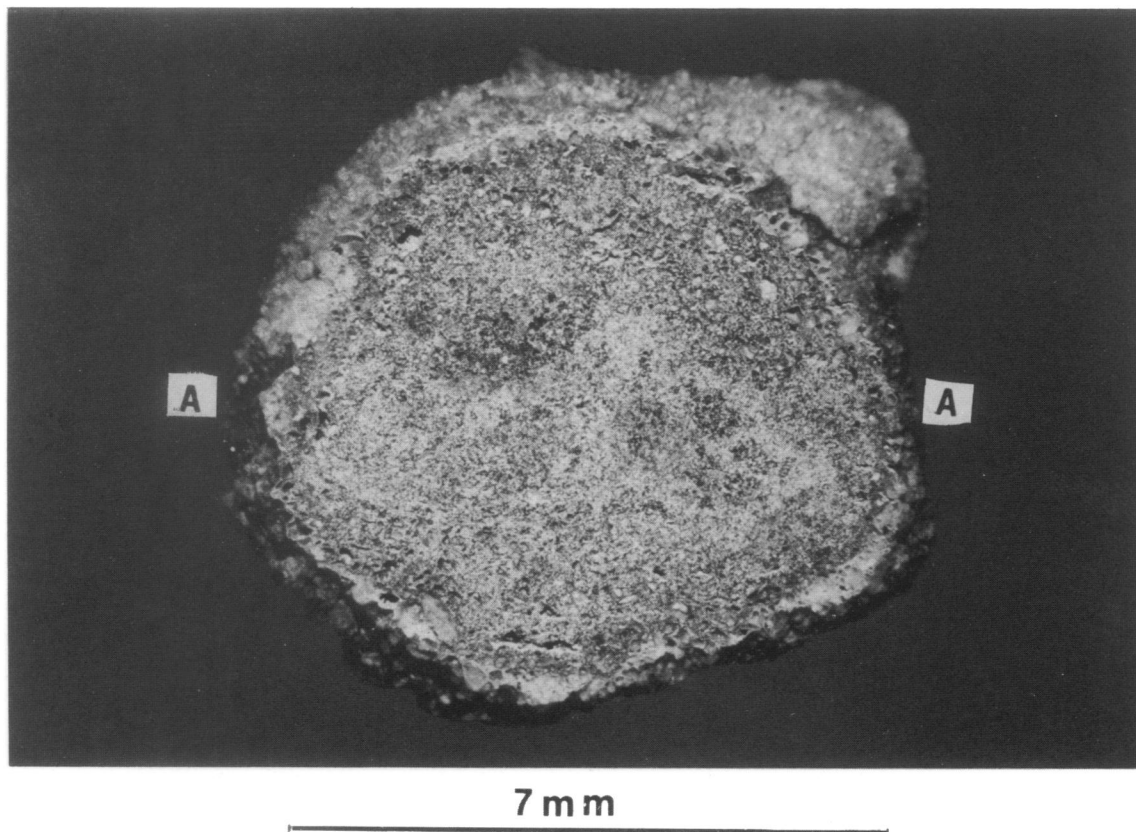
It is well to remember that the amount of ore needed to sustain any ancient smelter was miniscule when compared with present day requirements: a few hundred tonnes of hand-sorted ore would have sustained a typical early smelter for a long time. Evidence of the modest amounts of ore required by an ancient Egyptian smelter is provided by the one at Kubban which, from the size of its slag heaps, probably only required a few hundred tonnes of ore during its whole period of operation. The remains of the smelting furnaces found at Buhen suggest that the copper ores were treated by the comparatively sophisticated method of crucible smelting; a single charge for such a furnace, consisting of ore, flux, and a reducing agent, would have weighed, in all, only a few tens of kilograms. Furthermore, since there were no significant heaps of smelter slag in, or near, Buhen it is likely that the Buhen smelting operation was even smaller than the one at Kubban. It is probable that the 'oxidised', brightly-coloured, and therefore easily found, outcrops of quite small copper deposits would have provided all the ore required by a copper 'factory' of the size found at Buhen.

As shown above, the mineralogical details of the copper deposits of Upper Egypt and the Sudan either do not match those of the ore specimens found at the Buhen copper 'factory', or else the deposits are located a very long way from the town, and are, furthermore, on the 'less-favourable', east bank of the Nile. One of the chemically distinctive features of the Buhen ore fragment is its high gold content. It is likely that this specimen is a reasonably representative sample of the ore fragments that were smelted at Buhen since the copper *metal* fragments found at the Buhen factory also have high gold contents. It is of interest, therefore, that during *Middle* Kingdom times a number of small gold mines were being worked in the Kush area (fig. 5).⁶ These small mines are immediately upstream of Buhen and many of them occur on the same, *west* bank of the Nile as the copper factory. Unfortunately, no details of the mineralogy of these gold ores have been found, but it is geologically feasible that they may also have contained useful proportions of copper-bearing minerals. It is possible, therefore, that the Kush deposits were initially exploited for their *copper* contents during the Old Kingdom times and that the copper ores were, at that time, smelted at Buhen. Subsequently, in the Middle Kingdom, these same deposits (and any secondary alluvial or eluvial products derived from them) may have become much more valued for their gold contents. Furthermore, since the gold in these ores would, in all probability, have occurred as the native metal it would have been recovered by physical, mineral treatment methods and there would have been no necessity for the smelter at Buhen to have continued in operation.

⁶ J. Vercoutter, *Kush* 7 (1959), 120-53.



1. A polished section of an outer fragment of the ore specimen. The light grey mineral is malachite, the dark grey areas are atacamite, and the white areas quartz. (cf. Table 2, p. 36 for analysis of the numbered areas)



2. Cross-section of a copper prill showing the outer rim of copper chloride (atacamite) seen through the transparent mounting material and the line A-A along which the gold analyses were carried out (cf. fig. 3, p. 36)

A PROTECTIVE MEASURE AT ABYDOS IN THE THIRTEENTH DYNASTY*

By ANTHONY LEAHY

A new edition of stela Cairo JE 35256, discovered at Abydos at the turn of the century, which records a royal edict usurped by Neferhotep I protecting a sacred area dedicated to Wepwawet. The original promulgator of the decree is identified as Khutawyre Ugaf, and it is argued that the area in question is the depression which runs from the Osiris temple to the Umm el-Qa'ab. This served as a processional route between the temple and the tomb of Djer, already identified as that of Osiris, and was threatened by tombs encroaching from the North Cemetery. The development of the cult of Osiris at Abydos is briefly traced, and the importance of the Thirteenth Dynasty in the process emphasised.

THE stela discussed here (fig. 1 and pl. VI) was discovered by Mace at Abydos in the early years of this century.¹ It is now on display in the Cairo Museum, as JE 35256.² A facsimile copy with a translation by Griffith was included in the excavation report, and Breasted published another translation soon afterwards,³ but, although aspects of it have since been studied, no analysis of the whole text has been attempted. As a text of some importance in understanding the development of the cult of Osiris at Abydos, and as one of the few extant royal decrees of the Middle Kingdom, it merits closer attention.

The stela is of red granite, the inscription shallowly-cut and the surface scratched, so that the text is occasionally difficult to read. The task is sometimes eased, sometimes made more demanding, by the chalk with which the surface has at an unknown date been dusted to highlight the signs, and which has spread rather erratically. It is a matter of regret that it was not possible to produce a wholly new copy of the stela, but I have collated the inscription on several occasions using both natural and artificial light. Since the text as published is substantially correct, fig. 1 is based on the original plate, courtesy of the Egypt Exploration Society, with corrections indicated in red. These improved readings are also noted below, and, where appropriate, discussed in the commentary on the translation.

*In the preparation of this article I owe much stimulus to Barry Kemp, who has done so much to clarify the history and topography of the temples and cemeteries of Abydos, and with whom I first discussed this stela some years ago. I am also much indebted to Vivian Davies for undertaking his own collation of the text of the stela and for a number of epigraphic observations resulting from it.

¹D. Randall-Maciver and A. Mace, *El Amrah and Abydos* (London, 1902), 64, 84, 93 and pl. xxix. The original plate is reproduced in J. K. Hoffmeier, *'Sacred' in the Vocabulary of Ancient Egypt* (Freiburg and Göttingen, 1985), 256. The copies of the text given in F. T. Miosi, *A Reading Book of Second Intermediate Period Texts* (Mississauga, 1981), 1-3, and W. Helck, *Historisch-biographische Texten der 2. Zwischenzeit*² (Wiesbaden, 1983), 18-19, seem to be taken, without collation, from *El Amrah*, although Helck standardises some signs.

²The stela also bears the Temporary Catalogue no. 12.4.22.5. The number CG 20786 used by J. Clère, *MDAIK* 14 (1956), 29, refers to an intended publication by him: cf. M. Trad, *ASAE* 70 (1984-5), 354

³*BAR* 1, 337-8, §§766-72.

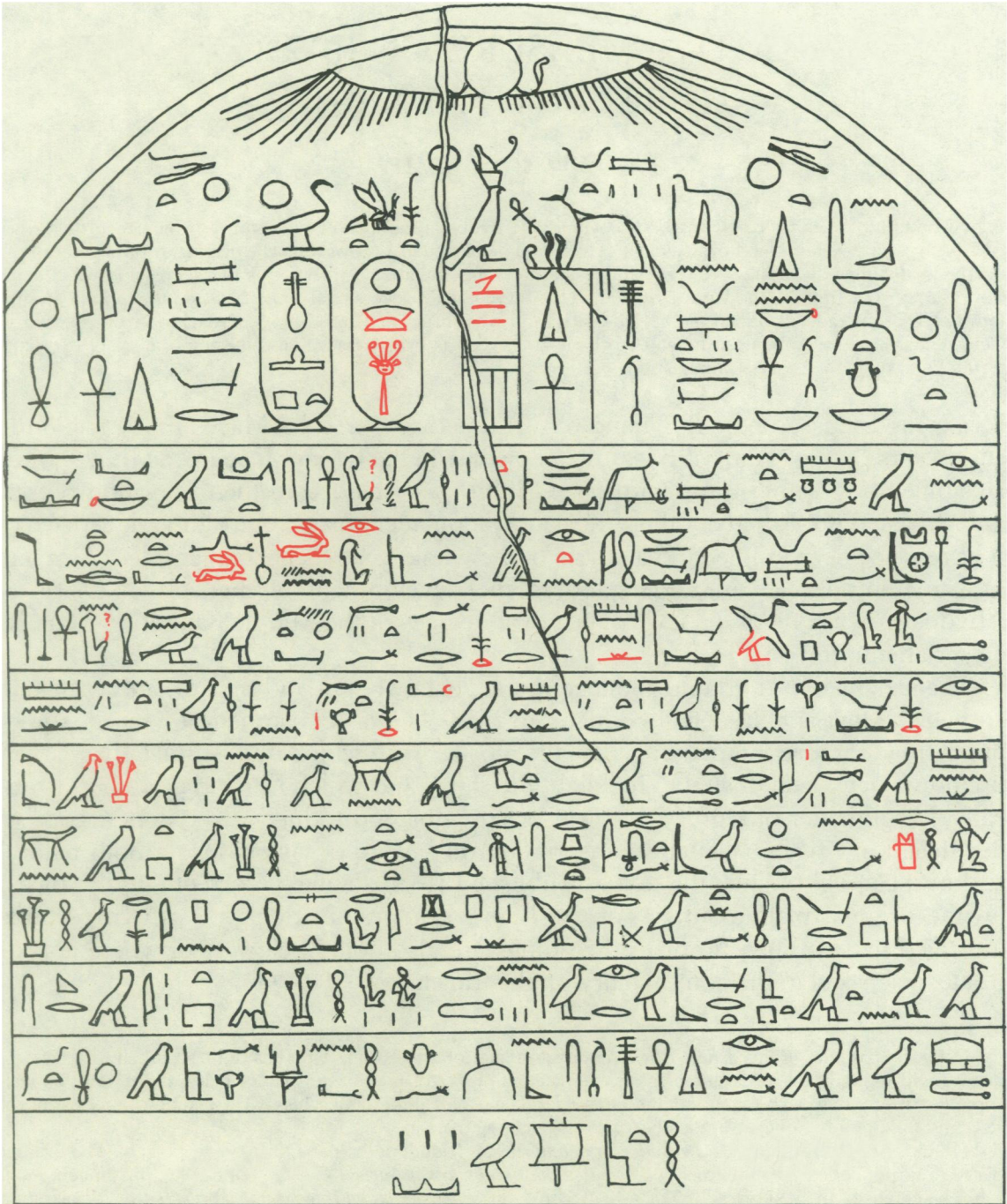






FIG. 1.






Notes on new readings



Arc.  is clear in the serekh; there is little room for the xx underneath suggested by J. Von Beckerath, *Untersuchungen zur politischen Geschichte der Zweiten Zwischenzeit in Ägypten* (Glückstadt, 1964), 244 (8), and *Handbuch der ägyptischen Königsnamen* (Munich/Berlin, 1984), 70 and 205, and I could not see it.

 is clear in the prenominal. As noted by Von Beckerath, *Untersuchungen*, 244 (8), the bottom sign is the Hathor sistrum , not the sceptre, as often in texts of the period and standard in the writing of this king's name.




The handle is visible at the back of the basket in the suffix pronoun of *n.k*, and in *mk* in line 1.


Line 1. Part of  is visible in *hst-sp*. The royal figure may be holding something, here and in line 3.

Line 2.  is visible between  and . The expected  is visible just above . The hare of *wnt* is clear.

Line 3. The *p*-bird is intact; the determinative of *smn* is , not ; the *rsy* sign has the expected base here and twice in line 4.

Line 4. The word *r* is written with the open hand, not one holding a stick; *hr* has a stroke determinative.

Line 5. *r* has a stroke determinative;  instead of  is clear. The following bird is .

Line 6. The form of the *hn* sign seems to be the normal , the 'protrusions' in the published copy being incidental marks.

The overall effect of these mostly minor corrections is to show that the orthography, palaeography and grammar of the text are more orthodox than appeared to be the case.

Translation

Right half of upper section: Wepwawet, who gives life, prosperity and dominion. Words spoken by Wepwawet, lord of the necropolis: It is to you that I have given^a all life and dominion, all health, all joy, like Re forever.

Left half: Horus Gereg-tawy, King of Upper and Lower Egypt Khasekhemre, Son of Re Neferhotep, beloved of Wepwawet, lord of the necropolis, given life like Re.

Main text: (1) It is for his father Wepwawet, lord of the necropolis, that he has made as his monument:^b Year four, My Majesty, l.p.h., decrees the protection^c of the holy land (2) south of Abydos for his father Wepwawet, lord of the necropolis, like that which Horus did for his father Osiris Wennefer,^d forbidding^e (3) anyone to trespass^f upon this^g holy land. Two stelae are to be set up^h on its south and two on its north, carved with the great nameⁱ of My Majesty, l.p.h. (4) The south of the holy land is to be defined by those stelae which shall be set up on the south side, and the north by those stelae which shall be set up^j (5) on the north side. As for^k anyone who shall be found^l within these stelae, except^m for a priest (6) about his duties, he shall be burnt.ⁿ Moreover, as for any official^o who shall cause a tomb^p to be made for himself within (7) this holy place, he shall be reported and this law applied^q to him and to the necropolis-guard^r as (is the case) today. But as for (8) everywhere outside this holy place, (it is) an area where people may make tombs for themselves^s and where (9) one may be buried. May he make for him 'Given life, stability, dominion'. May his heart rejoice with his ka upon the throne of Horus, like Re forever.

(10) 'Provider of breath'^t

Notes

(a) This form may be an 'emphatic' or nominal *sdm.n.f.*, L. Žabkar, *ZÄS* 108 (1981), 168–70. H. Polotsky's view, *Pharaonic Egypt: The Bible and Christianity*, ed. S. Groll (Jerusalem, 1985), 380, that the spelling of the emphatic form of this verb is *rdi*, does not seem to be universally valid, cf. E. Doret, *The Narrative Verbal System of Old and Middle Egyptian* (Geneva, 1986), 78 ex. 126 and 80 ex. 132. An alternative interpretation of *di.n.(i)* in this context as a 'performative' (elaborating on Gunn's 'synchronous present'), is proposed by P. Vernus, in *Pharaonic Egypt*, 307–16.

(b) *mnw* need not imply a physical structure, *contra* Hoffmeier, 'Sacred', 139, but is intrinsically an abstract concept, cf. G. Vittmann, *WZKM* 69 (1977), 21–32; Vernus, *RdE* 39 (1988), 153 n. 10. The object of *iri*, semantically, is the act of protection enshrined in the whole text of the decree which begins with *hst-sp*; grammatically, *iri* is used 'absolutely' or intransitively. For the interpretation of *ir.n.f.* as a nominal *sdm.n.f.*, emphasising the identity of the addressee, see my discussion in *Lingua Sapientissima: A seminar in honour of H. J. Polotsky* (Cambridge, 1987), 57–64, and Doret, *Narrative Verbal System*, 80, no. 2, nn. 908–13. Recent translations embody different views as to precisely what adverbial element is emphasised. In one case, Doret's rendering implies that it is the recipient of the dedication (80 ex. 129), as suggested here; in another, it is an aspect of the dedicator, a phrase extraneous to the formula (159 ex. 281). Vernus, *RdE* 38 (1987), 168 (2), places the emphasis on *m mnw.f.*, which seems to me unlikely since it is an unvarying and uninformative part of the formula. For the earliest examples, see now S. Tawfik, *Mélanges Gamal eddin Mokhtar* (Cairo, 1985), II, 309–13.

(c) The phrase *mk-hwi* is characteristic of royal decrees of protection, cf. A. Theodorides, *LÄ* 1, 1040. For the possibility that it has the more specific meaning of 'consecrate' here, see Hoffmeier, 'Sacred', 139–40, following Gardiner, *EG*³, § 307.

(d) Since the \ominus is clear (see above), the form is the relative *sdmw.n.f.*, and the treatment of it as a rare example of the *sdm.n.f.* after a preposition (Gardiner, *EG*³, § 156, n. 2; Lefebvre, *Grammaire du Moyen Egyptien*, § 732) redundant. For the alternation of *mi wd.n.f./mi wdt.n.f.*, see now Vernus, *RdE* 38, 172, esp. n. 49.

(e) Lit. 'not allowing'. *n wnt* was already becoming obsolete in Middle Egyptian (Vernus, *RdE* 36 (1985), 153, n. 1; for doubtful anomalous uses, id. ib. 167, n. 86).

(f) *hnd* usually has the neutral sense of 'tread' (*Wb.* III, 312–13), but the notion of transgression or violation present here is attested in e.g. P. Harris I, 77, 4.

(g) *p* acts here as a 'specifier', in the manner discussed by D. Silverman, *RdE* 33 (1981), 64–5, signifying 'the aforementioned', and this sense is continued by the feminine *t st dsrt* (lines 7–8); cf. Hoffmeier, 'Sacred' 138. It has the same function in its only other occurrence in this text (n.(q) below), as do the plural forms *nn/nv* (lines 4–5), used interchangeably to qualify *wdw*, 'stelae', after the first mention.

(h) The principal verb forms used to express the royal wishes are passive. *smn*, *irr*, *wd* and *qrs* are *sdmw.f.*, here the counterpart of the nominal *sdm.f.*, in contrast to *wbd.t(w).f* and *smi.t(w).f*, which are the counterparts of the prospective.

(i) For *rn wr*, see M.-A. Bonhême, *BIFAO* 78 (1978) 360–8. Here, as elsewhere in the Second Intermediate Period, it designates the Horus name and the two cartouches, rather than the whole titulary.

(j) The group *mn* at the beginning of line 5 is palpably dittography.

(k) For the 'valeur connective' of *rf* after *ir*, with reference, *inter alia*, to this passage, see Vernus, *RdE* 33 (1981), 95 (k).

(l) *ir rf nty nb tw r gmt.f* has attracted grammarians (Gardiner, *EG*³, § 333; Lefebvre, *Grammaire*, § 758). The position of *tw* between *nty* and *nb* has led some to translate as if *nb* qualified *tw*, '...him/one whom anyone shall find...' (*BAR* 1, § 770, followed by D. Lorton,

JESHO 20 (1977), 18, §11). However, in comparable clauses, *nb* invariably refers to *nty* (e.g. P. Lacau, *Une stèle juridique de Karnak* (Cairo, 1949), 16) and the transposition here was probably governed by graphic considerations. In parallels such as the Nauri decree of Seti I, lines 53-4: *ir rmt nb nty iw.tw r gmt.f. tw* has the expected auxiliary support.

(m) It is here that the published copy is least satisfactory. Griffith, in *El Amrah*, 93, n. 1, recognised that 'except' was the translation that gave best sense, and B. Gunn, *JEA* 25 (1939), 218, sought to substantiate this by reading **m-ms* as a 'wild' writing of *m-s*, and giving the latter a meaning not otherwise attested before Coptic. With the correction to read *m-h*(*w*) (see above), the problem disappears. Although *m-h*(*w-hr*) in the sense of 'except' is not especially common (Gardiner, *EG*³, §178, p. 133 top), it is a natural extension of the root notion of 'excess'.

(n) For *wbd* meaning 'burn' and not 'brand' as proposed by Lorton, *JESHO* 20, 18, following Breasted, see my discussion in *JESHO* 27 (1984) 199, adding to the literature cited there on burning as a punishment, J. Yoyotte, *Annuaire EPHE*, Ve section, 89 (1980-1), 29-102, G. Posener, *Le Papyrus Vandier* (Cairo, 1985), 32-3, 75-7; M. Smith, *The Mortuary Texts of Papyrus B.M. 10507* (London, 1987), 90, n. 372.

(o) For *sr* as the generic term for an official, see A. Théodoridès, *RIDA* 20 (1973), 66-82. The limitation of the edict against tomb construction to this class clearly does not mean that others were allowed the right of burial in the sacred area, but assumes that only officials would have the means or the presumption to offend in this respect.

(p) In two Old Kingdom inscriptions, *hit* describes a burial location within a tomb (*is*), so that the translation 'shaft' seems required (Doret, *Narrative Verbal System*, 78, n. 892 for references). It is almost never found on the abundant Middle Kingdom monuments from Abydos, on which *is* and *mcht* predominate, although its use in a variety of literary and legal, as well as religious, texts of the period suggests that it was current (*Wb.* III, 12, 19-21). In these examples, the wider sense of 'tomb' seems appropriate.

(q) *wd p' hp hr.f* seems to have no exact parallel, cf. Lorton, *JESHO* 20, 54-5. *p'* (n. (g) above) refers back to the specific legal pronouncement enunciated in the previous clause, so J.-M. Kruchten, *Le Décret d'Horemheb* (Brussels, 1981), 217, n. 60 (214-23 on *hp* generally).

(r) *iri smit* (*Wb.* III, 445, 5) is the title of the person responsible for the supervision of the necropolis (so *BAR* 1, §770) who would be implicated, by negligence or complicity, in the construction of any tomb in the sacred area, and subject to the same penalty. A different interpretation, suggesting that *iri smit* is a phrase qualifying *p' hp* (Griffith, in *El Amrah*, 93; H. Kees, *Ancient Egypt* (London, 1961), 243; Lorton, *JESHO* 20, 54), is improbable given the force of *p'* here.

(s) Breasted, *AR* 1, §771, and E. Otto, *Egyptian Art and the Cults of Osiris and Amon* (London, 1968), 44, understood the passage *bw irrw n.sn rmt hrwt im* broadly in the way proposed here. An alternative view of *bw* as an early example of the Late Egyptian negative is implied in Griffith's translation ('where men have not made themselves tombs'), and made explicit by Clère, *MDAIK* 14, 29, followed by B. Kroeber, *Die Neuägyptizismen vor der Amarnazeit* (Tübingen, 1969), 63 ex. 5 ('in welchem sich die Leute keine Gräber zu machen pflegten'). This is grammatically difficult, since a paratactic relative use of the perfective *n/bw sdm.f* would not explain the morphologically distinctive *irrw*, in which, at this date and in such a 'classical' context, gemination and ending are unlikely to be without significance: there are no superfluous endings elsewhere in the text.

The socio-linguistic context is also against it. A monumental inscription recording a royal decree of the high Middle Kingdom is not the setting in which one would expect *bw* to appear first, some three hundred years before the next attested instance, especially as all the other pre-Amarna examples of *bw/bn* cited by Kroeber, *Die Neuägyptizismen*, 62-3, are in letters, apart from the Annals of Tuthmosis III, where *bn* appears in a courtiers' speech to

the king. There is no such narrative/dialogue distinction or status differentiation here to justify the introduction of a vernacular spelling (cf. Doret, *Narrative Verbal System*, 13–14; Vernus, *RdE* 30 (1978), 137–42, esp. 140, n. 143, for the alternation of Middle and Late Egyptian negatives in different microcontexts within an inscription). Clère, *MDAIK* 14, 29 n. 2, was probably right in identifying *bw* in Middle Kingdom names such as *B(w)-rh.f* as the negative particle (Vernus, *Le Surnom au Moyen Empire* (Rome, 1986), 126 n. 160; cf. Kroeber, *Die Neuägyptizismen*, 63 n. 2), but this has no bearing on the present instance, since personal names by their nature may antedate the realisation of change in more formal contexts by a considerable time.

(t) From the determinative *htm trw* is likely to be a name for the sacred area, as suggested by Griffith, loc. cit., although a positive sense for *htm* (*Wb.* III, 196–7) seems preferable to his ‘Extinguisher of Breaths’ (cf. *Wb.* III, 197–8).

Commentary

The date of the decree

The original royal titulary has been recut with the names of Neferhotep I. The date of year four, however, belongs to the king initially responsible for the inscription. Suggestions as to his period have ranged from the ‘XIth or early XIIth dynasty’ of Mace to the early Thirteenth favoured by Clère and by Von Beckerath.⁴ The latter specifically proposed Sebekhotep III, Neferhotep’s immediate predecessor, arguing that the carving of the decree was overtaken by the accession of Neferhotep, whose workmen changed the titulary but forgot to alter the year date. This is a tempting solution, but reasons for rejecting it are given below. Potential dating criteria are provided by the style and language of the decree, the formal arrangement of the arc, and the remains of the original names.

The few extant royal decrees of the Middle Kingdom are diverse in nature and form and none offers clear parallels.⁵ Since the early Thirteenth Dynasty seems to have continued the administrative traditions of the Twelfth, this aspect would not provide very precise guidance in any case. The same limitation holds for the language of the text, although this hints at a date later, rather than earlier, in the Middle Kingdom.

The arc is more promising. In a discussion of jackal gods on private stelae, Malaise argues of this stela that, contrary to a Thirteenth Dynasty dating, ‘la parenté iconographique avec les cintres du milieu de la XII^e dynastie nous inciterait plutôt à la dater de cette époque’.⁶ The position, context and significance of the jackal are all different here, however, from the other examples with which Malaise compares it. The latter are all private, and there the jackal is placed on one side of a cartouche

⁴ Mace, *El Amrah*, 64; Clère, *MDAIK* 14, 29 n. 1; Von Beckerath, *Untersuchungen*, 56.

⁵ For the royal decrees of the Middle Kingdom and Second Intermediate Period, see O. Berlev, *OLP* 6–7 (1975–6), 36–7; Vernus, *Annuaire EPHE*, Ve section (1977–8), 81–4; more generally Théodoridès, *LÄ* 1, 1037–43. For royal stelae of the period recording specific achievements, see E. Blumenthal, in *Agypten und Kush*, ed. E. Endesfelder (Berlin, 1977), 79, and Vernus, *ASAE* 68 (1982), 129–35.

⁶ M. Malaise, *Orientalia J. Duchesne-Guillemin Emerito oblata*, *Hommages et opera minora* IX, ed. J. Kellens and P. Lecoq (Leiden, 1984), 401 n. 60.

containing the king's prenomen at the top of the stela, with Osiris on the other side. Whether or not Malaise's explanation of the divine figures as 'protecting' the royal name is correct, there is no overriding need for the jackal to be depicted, and its appearance is to some extent a matter of fashion in funerary stelae. In the present case, instead of being confined to the upper arc, the jackal occupies, with the royal names, the offering area. It is depicted because a dedication is being made to Wepwawet, and the serekh and cartouches symbolise the king's presence before the god.

In fact, the composition of the arc points strongly to the Thirteenth Dynasty, since the titulary consists of the serekh and both cartouches. On the evidence available, the serekh is accompanied by only one cartouche on stelae of the Twelfth Dynasty.⁷ The earliest example in which both cartouches appear in such a case dates to the reign of Amenemhat III, and this combination becomes normal in the Thirteenth Dynasty.⁸

A more precise dating can only be obtained from the titulary itself. A crucial point is that all the original signs in the serekh and both cartouches were chiselled down in the usurpation of the monument, except for the sun-disc in the prenomen (pl. IX, 1). The implication is that the earlier names had nothing in common with those of Neferhotep except the sun-disc, since the removal of shared elements would have been unnecessary labour. Such logic may not always have prevailed, but a broadly contemporary parallel does support this interpretation, as do instances from later dynasties. At Medamud, on a doorway usurped by Sekhemre Sewadjtawy Sebekhotep (III) from Khutawyre Ugaf, the sun-disc of the prenomen was retained in the transition despite the fact that it occupied a much larger area of the original cartouche than of the usurper's and necessitated a cramped writing of the remainder of the latter's prenomen.⁹ The sun-disc remained intact in cartouches usurped by Horemheb from Tutankhamun.¹⁰ There are also numerous examples in which ☉ and †₆, both common to the *prenomina* of Shabako and the usurping Psammetichus II (*Nfr-kꜣ-rc/Nfr-ib-rc*), were left untouched by those responsible for the

⁷ Sesostri I: Florence 2540 (S. Bosticco, *Le stèle egiziane*, 1 (Rome, 1959), pl. 29), Cairo CG 20539 (H. Lange and H. Schäfer, *Grab- und Denksteine des Mittleren Reiches*, IV (Berlin, 1902), pl. xli), Cairo JE 59483 (R. Engelbach, *ASAE* 33 (1933), pl. ii, 3), Cairo JE 71901 (A. Sadek, *The Amethyst Mining Inscriptions, Wadi el Hudi*, II (Warminster, 1985), pl. 23); Sesostri III: Berlin 1204 (W. K. Simpson, *The Terrace of the Great God at Abydos* (New Haven and Philadelphia, 1974), pl. 1), BM 852 (= *HTBM* IV, pl. 10); Sesostri III and Amenemhat III: Cairo CG 20538 (Lange and Schäfer, op. cit. pl. xl). Where the king is followed by his ka bearing his Horus name, he is again identified by a single cartouche, e.g. Durham 1935 (S. Birch, *Catalogue of the Collection of Egyptian Antiquities at Almoick Castle* (London, 1880), pl. iv opp. p. 269); E. Naville, *The XIth Dynasty Temple at Deir el-Bahari*, 1 (London, 1907), pl. xxiv.

⁸ Amenemhat III: Cairo JE 59488 (Engelbach, *ASAE* 33, pl. iii, 3); Sebekhotep III: Louvre C. 8 (W. M. F. Petrie, *A History of Egypt* 1 (London, 1894), fig. 121), rock stela, M. F. L. MacAdam, *JEA* 37 (1951), pl. 6; Neferhotep I: Cairo JE 6307 (A. Mariette, *Abydos. Description des fouilles exécutées sur l'emplacement de cette ville*, II (Paris, 1880), pl. 28); Sebekhotep IV: Simpson, *MDAIK* 25 (1969), 156 fig. 1, pl. vii a; Menkhaure Senaib: Cairo CG 20517 (Mariette, op. cit. II, pl. 27b). An apparent exception with a single cartouche and serekh (BM 1346) belongs in the Twenty-fifth Dynasty, not the Thirteenth; see D. Franke, *Orientalia* 57 (1988), 250, and Leahy, *GM* 108 (1989), 53, n. 39. In the Thirteenth Dynasty, where the king is followed by his ka with the serekh, both cartouches identify him (e.g. Petrie, *Abydos*, 1 (London, 1902), pl. lix).

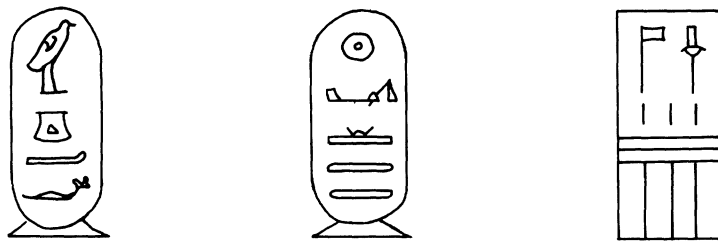
⁹ P. Montet, *RdÉ* 8 (1951), 163-70.

¹⁰ R. Hari, *New Kingdom Amarna Period* (Leiden, 1985), pl. xxxvb.

alterations.¹¹ If the changes here simply marked a change of reign, without special animus, there would be all the more reason to keep the work to a minimum.

This inference—that none of the signs erased from the titulary were common, in that position, to both kings—has useful implications. It excludes the numerous kings of the early Thirteenth Dynasty whose Horus name contains the word *trwy* (XIII, 2, 4, 7, 12, 14, 15, 21 of Von Beckerath's sequence). Nos. 12 and 21 are additionally eliminated by the fact that their nomen, 'Sebekhotep', is identical in its second part to 'Neferhotep', and the former because he also shares the *hr* of his premen (*hr-mh-rr*) with Neferhotep I. Von Beckerath's suggestion that the king in question is Sebekhotep III thus becomes untenable.

Although the field can be narrowed in this way, numerous, mostly obscure, possibilities remain, especially as some *nomina* and many Horus names of the period are still unknown. The erasure of the original names was thorough, and only at the bottom of the two cartouches do positive clues survive. In the nomen, the bottom line of \triangle is slightly higher than that of the adjacent \square , and is concave rather than flat. The impression is strong that the bottom sign was originally 𓂏 and that the recutting made use of the lines of this in forming the new group (𓂏 , pl. VII, 1). In the premen two parallel horizontal lines, over which the sistrum was cut, can just be discerned in the lower half of the cartouche. These suggest *trwy* and would suit XIII.I, 3 and 16, but a terminal *f* in the nomen allows only XIII.I, Khutawyre Ugaf, whose Horus name *shm ntrw* would have had to be removed entirely to accommodate *grg trwy*, or XIII.19, Sehetepkare Intef, whose Horus name is unknown.¹² The combination of the two criteria points to Ugaf, a hypothesis which finds support in the marked upward curve at the right-hand end of the *htp* sign in the premen, suggesting an underlying tusk hieroglyph. This would require a reconstruction of the names as follows (or similar):



If the reading is correct, this is the most northerly attestation of Ugaf, who is otherwise known through objects from Semna, Mirgissa, Elephantine, Medamud and Karnak.¹³ The only obstacle to it is the evidence of the Turin Canon. If the now

¹¹J. Yoyotte, *RdE* 8 (1951), 235–6, d-f; a particularly clear illustration is in M. and A. M. Jones, *JARCE* 22 (1985), 23, 26–7.

¹²For Sehetepkare Intef, see W. V. Davies, *A Royal Statue Reattributed* (London, 1981), 24, no. 16, 33, n. 22, and Von Beckerath, *Handbuch der ägyptischen Königsnamen*, 69, no. 19. Amenemhat-senbef (XIII, 2) is excluded by his Horus name (see above).

¹³For Ugaf, see Von Beckerath, *LÄ* vi, 838, to the bibliography of which should be added the studies of Montet (n. 9 above); J. Vercoutter, *RdE* 27 (1975), 222–34; Davies, *A Royal Statue Reattributed*, 22, nos. 1–2; Franke, *Orientalia* 57, 249. For possible members of Ugaf's family, see Franke, *Personendaten aus dem Mittleren Reich* (Wiesbaden, 1984), 139, no. 177.

generally-accepted equation of Ugaf with the Khutawyre who occupies first place in the king-list is correct, he is given only two years, three months and four days in the reconstructed Turin Canon.¹⁴ However, the relevance of the entry to Khutawyre depends on the placing of two unattached fragments which, *pace* Gardiner, is not beyond doubt.¹⁵ If the position is substantially accurate, a fractional adjustment of the relationship shown in Gardiner's plate would still just allow an additional, lost vertical stroke in the number of years reigned, giving a reading of 'three years...'. Three completed years would allow a decree to be dated in 'Year four'.

Even if Gardiner's reading is accepted, the Turin list need not be correct. Given the paucity of comparable information, there is a natural reluctance to disregard any of its data, but no such record is likely to be infallible for a period over half a millennium before it was compiled. Our ignorance of the sources on which the Turin Canon was based and the rarity of dated inscriptions from the Second Intermediate Period make it impossible to control, or even to gain any useful impression of, the accuracy of the now fragmentary figures it gives for individual kings of the period. There may be errors even for the more stable Twelfth Dynasty, as the recent debate over the length of reign of Sesostris III suggests.¹⁶ It does not therefore constitute an incontrovertible objection to identifying the king responsible for the edict as Ugaf. The significance of the change of name, and any connection with either the usurpation at Medamud of another of Ugaf's monuments (see above), or other erasures of royal names of the period at Abydos,¹⁷ must remain open questions.

The purpose of the decree

The main points of the text are:

- (1) A statement of intention to protect an area sacred to Wepwawet.
- (2) An order to set up four stelae as boundary markers.
- (3) The establishment of penalties for intruders: anyone found within the limits, except a priest on duty, is to be burnt, while any official having a tomb built there is to suffer the same fate, as is the necropolis-guardian.
- (4) A reminder that anywhere outside the sacred region is a legitimate place for the construction of tombs and for burial.

The king seeks by decree to prevent burial or trespass in an area which had probably previously relied on custom for its integrity. The severity of the penalty must reflect the sacrilegious nature of the offence (n. (n) above). Previous commentators have been content with a general interpretation of the text and have not sought to relate it to the topography or archaeology of the site. One view has been

¹⁴ A. Gardiner, *The Royal Canon of Turin* (Oxford, 1959), pl. III, col. VI5. On the identity of Khutawyre with Ugaf, see Vercoutter, *RdÉ* 27, 222-7.

¹⁵ *op. cit.* fragments 73-4, comment on p. 16. The text on the *recto* is compatible with the placing of the fragments, without being decisive.

¹⁶ See J. Bourriau, *Pharaohs and Mortals: Egyptian Art in the Middle Kingdom* (Cambridge, 1988), 4-5, for a convenient summary. On Middle Kingdom chronology generally, see now Franke, *Orientalia* 57, 113-38, 245-74.

¹⁷ Leahy, *Orientalia* 46 (1977), 424-34 (the Osiris 'bed'); Petrie, *Abydos*, I, 29, pl. lviii (Thirteenth Dynasty rather than Seventeenth?).

that *tꜣdsr* was a cult precinct.¹⁸ Another, that it was a part of the necropolis already occupied by tombs, is most fully expressed by Von Beckerath: ‘Das bereits über und über mit Gräbern, Kenotaphen und Stelen besetzte “Heilige Land” (to djoser) sollte durch einen königlichen Erlaß geschützt werden; die Anlegung weiterer Gräber, die ja nur auf Kosten der bereits vorhandenen geschehen konnte wurde bei Androhung der Todesstrafe untersagt’.¹⁹

The latter interpretation may have been influenced in part by the assumption that *tꜣdsr* here means ‘cemetery’, which goes back to Breasted,²⁰ and in part by the mistaken translation of the last section of the decree as allowing burials ‘where men have not made tombs for themselves’ (n. (s) above). If it were correct, the prohibition on entering the sacred area would prevent many from visiting tombs of relatives or wandering in the cemetery, which would be a restriction alien to Egyptian practice. In fact, although the edict implies an immediate threat from tomb *construction*, it does not support the view that its purpose was to protect *already existing* tombs, of which there is no mention.

The question can be resolved by a closer evaluation of the content of the text against the topography and history of the cemetery, and particularly consideration of the situation at the time of the decree and immediately afterwards. The statement that the area lay ‘south’ of the town of Abydos helps to locate it only in a very general way; ‘south’ here is probably local south, aligned to the Nile.²¹ However, the revelation that there were four stelae,²² two on the ‘north’ and two on the ‘south’, is illuminating given the position of the sole excavated example. This was discovered at the extreme south-western end of the North Cemetery, on the north-western side of the wadi which is such a conspicuous topographical feature, and which divides the ancient necropolis into two main areas.²³ Although the excavation report provides no detail on the discovery,²⁴ there is no reason to suppose that the stela was not found in its original position, especially as a heavy granite stela, c. 1.67 m in height, is not likely to be moved without good reason. In the following discussion, I assume that it was *in situ*, and that it is one of the four in question.

It is not stated whether the extant stela belongs to the northern or southern pair, or whether it is the western or eastern exemplar of either pair, so all these possibilities must be scrutinised. The four broad corollary configurations of *tꜣdsr* are illustrated in the sketch-map in fig. 2. The distance between stelae, and thus the area

¹⁸ Kees, *Ancient Egypt*, 243; Otto, *Egyptian Art*, 43–4; Simpson, *Terrace*, 3 n. 16.

¹⁹ Von Beckerath, *Untersuchungen*, 56; cf. Randall-MacIver and Mace, *El Amrah*, 63–4.

²⁰ BAR 1, §768; Griffith, loc. Cit. translated ‘Sacred Land’. Hoffmeier, ‘*Sacred*’, 138–9, has also recognised that it does not mean ‘cemetery’ here.

²¹ E.g. Petrie, *The Royal Tombs of the First Dynasty*, 1 (London, 1900), 3; T. E. Peet, *The Cemeteries of Abydos*, 11 (London, 1914), xiv; cf. D. O’Connor, in *Mélanges Mokhtar*, 11, 162 n. 2. Magnetic north is used here.

²² Breasted’s suggestion, *AR*, I, §769, that there were only two stelae must be a Homeric nod.

²³ *El Amrah*, 63–4, pl. xxiii. For the prominence of the wadi, see the photographs in D. O’Connor, *Expedition 10*, 1 (Fall, 1967), 22, and M. Lichtheim, *Ancient Egyptian Autobiographies Chiefly of the Middle Kingdom* (Freibourg and Göttingen, 1988), pl. ix.

²⁴ The excavator recorded his impression, from the disposition of objects around it, that the stela became an object of veneration in the new Kingdom (*El Amrah*, 64).

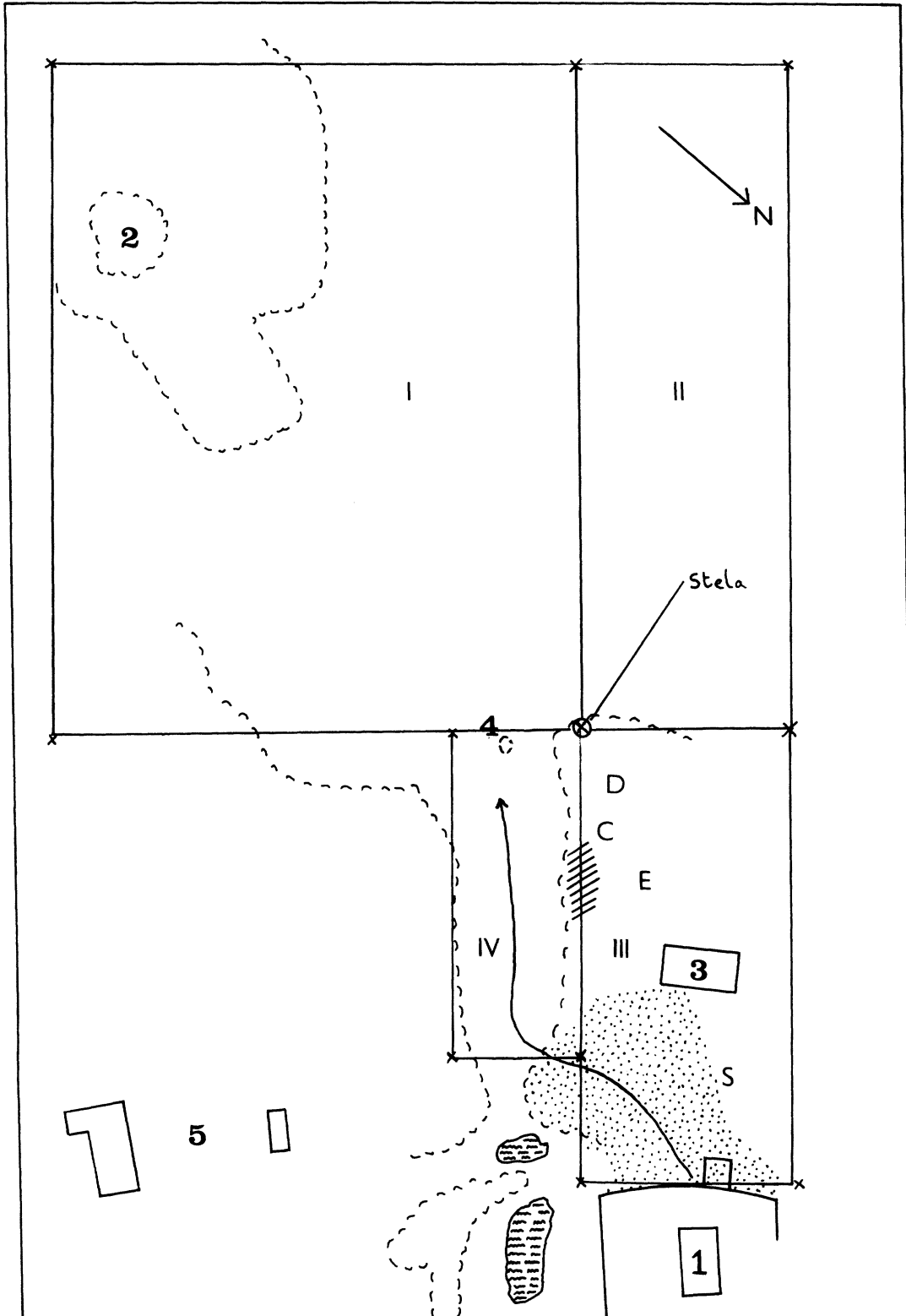


FIG. 2. Sketch-map of Abydos

x = hypothetical stela positions. Rectangles designated by Roman numerals = possible areas of reference discussed in the text. Letters = cemetery areas. ▨ = Garstang's 1907 excavations on the edge of the wadi. □ = approximate limits of Mariette's 'nécropole du nord'. ← = suggested processional route.

1. Osiris temple; 2. Um el-Qa'ab; 3. Shunet el-Zebib; 4. Petit temple de l'ouest; 5. Approximate location of chapel of Sebekhotep I.

encompassed, is obviously a matter of conjecture and the alignments (local north) need not be as rectilinear as suggested here. The reconstruction of the topographical relationship between the different 'cemeteries' marked is complicated by the history of poor recording in excavation at Abydos.²⁵ The sketch-map represents the best that can currently be achieved by the exploitation of unpublished photographic archives and written records as well as published reports.²⁶

Each of these sectors has its distinct features:

(I) Although the royal monuments of the Archaic Period at the Umm el-Qa'ab, especially the tomb of Djer/Osiris, provide an obvious motive for protection here, one would expect the area to be sacred to the latter, rather than to Wepwawet. A few Middle Kingdom votive objects have been found in the area,²⁷ but it was not threatened by tomb-building.

(II) With the exception of an isolated building of uncertain nature and date, which contained a probably reused Middle Kingdom stela,²⁸ nothing seems ever to have been built in this sector, probably because it was so far from the temple enclosure. Like I, II can be rejected because the decree would have no relevance to the actual situation; in both cases, too, the western pair of stelae would be redundant.

(III) If the reference were to the whole, or to any part, of the North Cemetery, the area would have included a substantial section at its south-western end not occupied at the time of the decree, which would have been completely ignored subsequently, since it was precisely in this direction that Second Intermediate Period and New Kingdom occupation developed. It is also hard to see why it should have been desired to prevent a south-westerly extension of the cemetery. These decisive objections emerge sharply from a brief review of the archaeological evidence.

Middle Kingdom remains were most densely concentrated in Mariette's 'nécropole du nord', the north-eastern section of the North Cemetery, between the Osiris temple precinct and the Shunet el-Zebib.²⁹ It was here that the vast majority of the stelae published by Mariette are said to have been found, and this is probably also the source of similar ones found earlier in the nineteenth century. Many may come from 'cenotaphs' such as those recently uncovered on the immediate south-west of the temple, beneath the 'Portal' of Ramesses II. These may represent the core of an area within the 'nécropole du nord' devoted exclusively to such memorial-chapels, as distinct from burials,³⁰ and may also correspond to at least part of the 'Terrace of the

²⁵ For a brief history of excavation at the site, see Kemp, in T. G. H. James (ed.), *Excavating in Egypt* (London, 1982), 77; see also Simpson, *Terrace*, 1-16.

²⁶ B. J. Kemp and R. Merrillees, *Minoan Pottery from Second Millennium Egypt* (Mainz, 1980), 106, fig. 36, 287-9. The sketch-map in PM v, 30 is misleading in its positioning of some of the areas excavated. A preliminary report on fieldwork by J. Richards, *Newsletter ARCE* 142 (Summer, 1988), 5-8, announces a contour map for the North Cemetery and success in pinpointing three areas worked by unspecified earlier excavators.

²⁷ PM v, 89-90.

²⁸ E. R. Ayrton, C. T. Currelly and A. E. P. Weigall, *Abydos*, III (London, 1904), 10; cf. Kemp, *LÄ* 1, 37.

²⁹ For the limits of the area, see Mariette, *Abydos*, II, 42 §240; Kemp and Merrillees, *Minoan Pottery*, fig. 36 no. 7, with p. 288.

³⁰ O'Connor, in *Mélanges Mokhtar*, II, 161-77.

Great God',³¹ so often referred to on Middle Kingdom stelae as a desirable area for commemoration. However, the decree is concerned with tombs (*ḥrw*), not chapels (*mḥrw*), and absence of mention in the decree of the latter, or of the 'Terrace', militates strongly against the idea that the decree encompasses this area or that the aim was to preserve a separate chapel area from actual burials.

The main development of the North Cemetery in the later Middle Kingdom is reasonably clear: a spread south-westward, away from the Osiris temple enclosure and Peet's cemetery S, towards and then beyond the Shunet el-Zebib, along the north-western edge of the wadi.³² This is clearly seen in Garstang's cemetery E,³³ and in the area on the southern edge of that, 'immediately to the north-west of the valley', excavated by him in 1907 and described as 'full of tombs of the Middle Kingdom and the Hyksos Period'.³⁴ The inscriptions from both consistently suggest a late Middle Kingdom and later date. Apart from the stela of Khusobek, who died under Amenemhat III,³⁵ they include a stela of Amenysenb, who was responsible for temple restoration under Khendjer,³⁶ and two examples of the distinctive stelae dedicated to Min-Horus, characteristic of the later Thirteenth Dynasty.³⁷ Parts of the region beyond, still further south-west, were excavated by Peet, who characterised them as of the Second Intermediate Period. He concluded: 'Before the beginning of the XVIIIth Dynasty the whole region (*scil.* the North Cemetery) was completely occupied, except the western portion near the Neferhotep stela'.³⁸

That 'western portion' was Mace's cemetery D. It and the adjacent area excavated by Amélineau contained New Kingdom and later remains, with the exception of some poor pit burials of the Second Intermediate Period. According to Mace, the distance between the Shunet el-Zebib and the south-western edge of the cemetery, comprising areas D and E, was 'about five hundred yards' (c. 450 m).³⁹ Ugaf's stela

³¹ Simpson, *Terrace*, 9–10, suggests that it was the area around the west gate of the enclosure, Lichtheim, *Autobiographies*, 129–34, that it was the temple. Kemp, *LÄ* 1, 32, 35, takes it to refer to the whole of the North Cemetery, on the ground that stelae stating that they were set up at the Terrace have been found away from the immediate environs of the temple. However, the number of such stelae is small, and possible reuse may invalidate the inference. For example, the stela of Khusobek (n. 35 below), was certainly found in Garstang's cemetery E, but it comes from a very mixed context containing Late Period objects.

³² This pattern was noticed by Peet, *Cemeteries of Abydos*, II, xv, 54. For his cemetery S, see Kemp and Merrillees, *Minoan Pottery*, fig. 36 no. 8, with p. 288; Simpson, *Terrace*, 6–8.

³³ J. Garstang, *El Arabah* (London, 1901).

³⁴ This remains largely unpublished. For a brief description of the location, see Garstang, *LAAA* 5 (1913), 107–11. It is marked as 3b on the map in Kemp and Merrillees, *Minoan Pottery*, fig. 36, and discussed on their pp. 107–8, 288.

³⁵ Garstang, *El Arabah*, 44, pls. iv–v; recent discussion, J. R. Baines, in *Form und Mass Festschrift für Gerhard Fecht*, ed. J. Osing and G. Dreyer (Wiesbaden, 1987), 43–61. For the dating of Khusobek, see Franke, *Personendaten*, no. 455. For other late Middle Kingdom stelae from cemetery E, see Bourriau, *Pharaohs and Mortals*, nos. 39–40 = *El Arabah*, pls. vi, iv respectively.

³⁶ Liverpool E. 30, for which see Bourriau, *Pharaohs and Mortals*, 60–63, no. 48, and Lichtheim, *Autobiographies*, 80. Lichtheim wrongly attributes the stela to Cemetery 'E'.

³⁷ Kemp and Merrillees, *Minoan Pottery*, 234–6. On stelae dedicated to Min-Hor, see also E. Bresciani, *Le stèle egiziane del museo civico archeologico di Bologna* (Bologna, 1985), 28–9, no. 5, and Franke, *JEA* 71 (1985), 176 n. 2; cf. Malaise, *SAK* 9 (1981), 279–81.

³⁸ Peet, *Cemeteries of Abydos*, II, xiv–xv, 54; cf. Kemp and Merrillees, *Minoan Pottery*, 289 and fig. 36 on the location of area C. According to Peet's sketch-map, areas B, X and F were slightly further out.

³⁹ *El Amrah*, 63, pl. xxiii.

was thus erected perhaps half that distance from the nearest tomb, and was not reached by building until the Eighteenth Dynasty, over two hundred years after Neferhotep I. The fact that tomb-construction continued so consistently and implacably towards the stela surely eliminates the possibility that any part of the North Cemetery is the object of the edict.

(IV) If, on the other hand, the wadi is *tꜣ dsr*, as has been proposed by Kemp,⁴⁰ the purpose of the decree becomes apparent. The wadi was threatened by the dense building of monuments in the North Cemetery, encroaching on its north-western edge as far as Garstang's and Peet's work. Some stelae from the 'nécropole du centre' of Mariette suggest that the south-western edge of the north-easterly end of the wadi may also have come into use at this time.⁴¹ It needed to be kept clear because it was the processional route from the Osiris temple to the Umm el-Qa'ab, yet, for precisely this reason, people sought locations for their tombs as close to it as possible. Apart from the fact that it is the natural means of access for most of the way from the temple to the Archaic tombs, this role for the wadi is supported by Mariette's 'petit temple de l'ouest'⁴² which stood towards its south-western end. Although nothing earlier than the Nineteenth Dynasty was found in it, the building could well have replaced an earlier one, and the best explanation for its isolated position is that it was a bark-shrine.

The north-eastern end of the wadi may not have been included in the area marked off for use. Processions are likely to have run from the south-west gate of the temple enclosure, through the memorial-chapel area and across the high ground of the 'nécropole du nord', so that the owners of monuments there could 'see' them, before descending into the wadi and turning out towards the Umm el-Qa'ab (fig. 2).⁴³ This stretch might also have been encompassed by the decree. The reason for the dedication of the area to Wepwawet also becomes clear; it was he who, as 'Opener of Ways', led the sequence of processions in the Osiris mysteries.⁴⁴ The fact that no burials were made in the wadi before Roman times,⁴⁵ whereas the areas on either side of it were used and reused, confirms both the identification and the success of the decree.

⁴⁰ Kemp, *LÄ* 1, 35-6, and in James (ed.), *Excavating in Egypt*, 78-9.

⁴¹ Mariette, *Catalogue des monuments d'Abydos* (Paris, 1881), nos. 817-18 etc.—some twenty-five stelae in all. None of Mariette's Eleventh and Twelfth Dynasty stelae are recorded as coming from that side of the wadi.

⁴² *Abydos*, II, 36-7; Kemp, *LÄ* 1, 37 (II), 29-30, no. 7 on map.

⁴³ Simpson, *Terrace*, 9-10. Thus burials in Mariette's 'nécropole des "chanteuses"' (Mariette, *Catalogue des monuments d'Abydos*, 441, and *Abydos*, II, 42 §241, 45 §255), which would seem to have crossed the wadi at its north-eastern end, even if in the wadi itself, need not have interfered with the route and could have been outside the protected area.

⁴⁴ On the role of Wepwawet at Abydos in the Middle Kingdom, see e.g. H. Satzinger, *MDAIK* 25 (1969), 126-30; J. Spiegel, *Die Götter von Abydos* (Wiesbaden, 1973), 54-9.

⁴⁵ Roman burials were found in another area excavated by Garstang in 1907, marked as 3a in Kemp and Merrillees, *Minoan Pottery*, 107, 288, fig. 36; for the numerous demotic stelae found there, see Aly Abdalla, *Graeco-Roman Funerary Stelae from Upper Egypt*, forthcoming. According to Barry Kemp (personal communication), pits dug in 1967 around the site of the Pennsylvania-Yale expedition house, which lies further out along the wadi, showed no trace of ancient use.

The Umm el-Qa'ab

That the Umm el-Qa'ab became a cult centre associated with Osiris is proved by the granite bier with a recumbent figure of the god found by Amélineau in the tomb of Djer, and by the numerous votive objects dedicated to him there.⁴⁶ It has been widely accepted that the association of Djer's tomb with Osiris did not occur until the Eighteenth Dynasty, more specifically the reign of Amenhotep III.⁴⁷ This is based on Petrie's comments on the offering pottery heaped up there, supported by the late date usually ascribed to the bier, and by the paucity of pre-New Kingdom material found at the Umm el-Qa'ab, which is little enough to be explicable as brought at a later date.⁴⁸ Petrie stated that 'in the XVIIIth Dynasty the site had been adopted as the focus of Osiris worship, the earliest of the pottery heaped over it being the blue-painted jars which came in under Amenhotep II, or III.'⁴⁹ All his remarks about the 'Eighteenth Dynasty' date of renovations, such as the introduction of a staircase into the tomb of Djer, seem to be based on this view of the pottery.⁵⁰ In a slightly later analysis, Hall presented a different view, ascribing some of the pottery to the Old Kingdom and dating the next phase to the Nineteenth Dynasty.⁵¹ They agreed, however, that there was nothing of the Middle Kingdom.

If the Umm el-Qa'ab were not already a cult centre of Osiris in the Middle Kingdom, then the case for the wadi as a processional route in need of protection would be weakened, but there are good reasons for rejecting Petrie's inference. Illustration of the offering pottery is notably lacking from his publication, as is any analysis of it, and no work has been done since.⁵² As his primary concern at the time was the recovery and publication of the Archaic material, his assessment of the later pottery may have been impressionistic: the blue-painted ware may have been merely the most easily recognisable. Even if he was correct, it need only mean that the custom of depositing vessels as offerings began in the Eighteenth Dynasty; it need not mark the earliest actual commemoration of Osiris at the site.

Inscriptional evidence suggests a much earlier starting point. The remains of the partially-erased text on the Osiris bier show that it dates to the Second Intermediate Period, and probably to the reign of Khendjer,⁵³ early in the Thirteenth Dynasty, *not*

⁴⁶ PM v, 78-81; Leahy, *Orientalia* 46, 424-34.

⁴⁷ I elaborate here on arguments I expressed briefly in *GM* 70 (1984), 48-9. The misconception as to the date at which Djer's tomb was identified as that of Osiris survives in works as recent as D. Eigner, *Die monumentalen Grabbauten der Spätzeit in der thebanischen Nekropole* (Vienna, 1984), 163, where the attribution of the Osiris 'bed' to the Late Period is also perpetuated.

⁴⁸ Kemp, *LÄ* I, 37.

⁴⁹ Petrie, *Royal Tombs*, I, 7; cf. id. ib. II, 8. The pottery may have appeared as early as Tuthmosis III, but it was produced most abundantly in the period of Amenhotep III and Akhenaten, cf. C. Hope, *Medelhavsmuseet Bulletin* 12 (1977), 10-11.

⁵⁰ The only later building activity which is actually datable is that of the Twenty-sixth Dynasty, see Leahy, *GM* 70, 46-50.

⁵¹ H. R. Hall, in E. Naville, *The Cemeteries of Abydos*, I (London, 1914), 38, pls. xiii, xv, xvi.

⁵² Kemp, *LÄ* I, 37. The recent German investigations seem to have been concerned only with the Archaic remains, W. Kaiser and G. Dreyer, *MDAIK* 38 (1982), 211-69.

⁵³ Leahy, *Orientalia* 46, 424-34; cf. Davies, *A Royal Statue Reattributed*, 21; Von Beckerath, *Handbuch der ägyptischen Königsnamen*, 69; Bourriau, *Pharaohs and Mortals*, 63; B. Fay, *MDAIK* 44 (1988), II and n. 79. E. Chas-

to the Late Period. Again, this does not necessarily represent the beginning of cult activity. Another object from the Umm el-Qa'ab may point to the Eleventh Dynasty as a decisive era—the offering-table dedicated by Sesostri I to Sankhkare Mentuhotep.⁵⁴ These two kings, together with Nebhepetre Mentuhotep, were responsible for rebuilding the temple of Abydos after the First Intermediate Period,⁵⁵ and the offering-table could mark Sesostri's recognition of Sankhkare's role in a separate but related enterprise, the rediscovery of the Umm el-Qa'ab.⁵⁶ The archaic stelae set up there provide a likely inspiration for the round-topped stelae which appear in such profusion at Abydos, and also at Thebes, from the Eleventh Dynasty onwards.⁵⁷

A development of some importance in the Osiris cult at this time is further indicated by the appearance of the 'Abydos formula' on Theban stelae,⁵⁸ and the introduction of the 'Journey to Abydos'⁵⁹ as a motif in tomb decoration. As in the case of the shrine of Heqaib at Elephantine, the Theban rulers encouraged a popular cult which had grown up during the First Intermediate Period, and this had wider consequences for Abydos. Inscriptions from the reign of Sesostri I⁶⁰ show that the Osiris mysteries were already flourishing by then, that processions to Poken were part of the festival, and that 'pilgrims' were already coming to Abydos. The identification of Djer's tomb as that of Osiris would have provided exactly the stimulus needed for these developments.

There is no trace of Osiris at the Umm el-Qa'ab, or anywhere else, in the Archaic Period, when the site was used for the burial of the kings of the First, and some of the Second, Dynasty.⁶¹ The choice of the site was perhaps governed by its remote, slightly elevated position, and its prestige probably derived from the kings themselves, not from any prior divine association. How, then, did a royal tomb become a divine cult centre? The process is lost in the mists of the First Intermediate Period, but the destruction of cemeteries in the Thinite nome may have facilitated it,⁶² in that it is a prerequisite that the Archaic kings individually had been forgotten. The association of the tomb of Djer with Osiris would not have been possible if any clear

sinat's ingenious suggestion, *Le Mystère d'Osiris au mois de Khoiak* (Cairo, 1966), 255, that the bier itself was dragged to the Umm el-Qa'ab from the temple to serve as a focus for the continuation of an underground pagan cult in early Christian times, commands admiration but not acceptance.

⁵⁴ A. Kamal, *Tables d'offrande* (Cairo, 1909), CG 23005.

⁵⁵ PM v, 41; for the history of the temple, see Kemp, *MDAIK* 23 (1968), 138–55.

⁵⁶ Helck, *ZDMG* 27 (1952), 46 n. 1, suggested that the discovery might be the result of a deliberate search, although assigning this to the Eighteenth Dynasty.

⁵⁷ Malaise, *Orientalia J. Duchesne-Guillemin Emerito oblata*, 394. For the early appearance of the round-topped stela at Thebes, see H. G. Fischer, *ZAS* 100 (1973), 20 n. 8.

⁵⁸ Lichtheim, *Autobiographies*, 55–8. The epithet *mr-hrw* makes its appearance as an epithet after personal names at this time, cf. W. Schenkel, *Frühmittelägyptische Studien* (Bonn, 1962), §28a.

⁵⁹ H. Altenmüller, *LÄ* 1, 42. The earliest example is the tomb of Dagi, of the late Eleventh Dynasty: see B. Jaros-Deckert, *Das Grab des Jnj-jtj.f* (Mainz, 1984), 131, for dating.

⁶⁰ A good example is the stela of the vizier Mentuhotep, Cairo CG 20539.

⁶¹ J. Gwyn Griffiths, *The Origins of Osiris and his Cult*² (Leiden, 1980), 41–4. The recent excavations at the Umm el-Qa'ab have, however, uncovered an early reference to Khentamentiui on an Archaic seal with a list of kings: Dreyer and Kaiser separately, *MDAIK* 43 (1987), 33–43 and 115–19.

⁶² Cf. J. Vandier, *Manuel d'archéologie*, II (Paris, 1954), 476. Petrie observed signs of burning, which he thought was accidental (*Royal Tombs*, I, 7), and was certain (*Royal Tombs*, II, 9) occurred between the Archaic Period and the renovations for Osiris worship, and was not connected with Coptic vandalism.

recollection had survived of who the owner of the monument actually was.⁶³ The indiscriminate approach subsequently adopted to the monuments at the Umm el-Qa'ab shows that this had indeed happened: 'Offerings began to be made to the kings at their tombs; but very blindly, as several places which did not contain any royal tomb were heaped up with potsherds, while some of the royal tombs...had scarcely anything placed on them'.⁶⁴

Both Petrie and Hall⁶⁵ thought that the Archaic kings were initially the intended beneficiaries of these offerings, and made a vague connection between this revival and the quickening of interest in the past in the New Kingdom as reflected in its king lists. It is true that the offerings to royal ancestors are well-represented in the temples of Sety I and Ramesses II⁶⁶ and that the list includes Archaic pharaohs, but different names from those on the Archaic monuments are used and the Ramesside list does not seem to derive from local archives (see below). Nor is there evidence of any corresponding ritual at the Umm el-Qa'ab, or any trace in priestly titles of a subsequent local cult of these kings, comparable to those attested for them in the Memphite region.⁶⁷ No doubt there was one initially, and while the site continued in use, but it soon ceased, and there is no reason to assume a revival of it. By the early Middle Kingdom, the site was hazily remembered as one of great antiquity, the burial place of remote kings, whose precise identity was forgotten, and whose funeral rites could thus be transmuted into the ritual of Osiris.⁶⁸ The mental process involved was probably simple: Abydos was, according to myth, the burial place of Osiris, the Umm el-Qa'ab contained very ancient royal monuments, therefore Osiris' tomb had to be there. How the initial association of Osiris and Abydos came about cannot be known, nor the reasons for the selection of Djer's tomb in particular.

The Umm el-Qa'ab and Poker

Amélineau's conviction that he had found the tomb of Osiris, and with it proof that Osiris was a historical king, cannot be sustained. But what had he found? Is the tomb of Djer the *mḥrt* of Osiris, which Ikhernofret records as being located at Poker?

Poker has often been equated with the Umm el-Qa'ab, and I have argued elsewhere that Peftjauawyneith's description of work carried out under Apries and Amasis, when related to the archaeological evidence, confirms the hypothesis, while

⁶³ This was recognised by Chassinat, *Le Mystère d'Osiris*, 254, who adduced the dedicatory inscription of Ramesses II at Abydos to show that 'Les Égyptiens n'ont jamais perdu complètement le souvenir du lieu où les corps de leurs plus anciens rois avaient été déposés'. In fact, the text merely refers to the *hwwt* and *mḥrw(t)* of the *nswyw imyw-hst*, which probably means the 'cenotaph' structures of the Middle and early New Kingdoms, of which a number are known (on these, cf. Kemp, *LÄ* 1, 37-8; Simpson, *LÄ* III, 389-90).

⁶⁴ Petrie, *Royal Tombs*, 1, 7; the evidence does not support Helck's suggestion, (*ZDMG* 27, 46 n. 1), that Heqreshu hill was an earlier cult centre than the Umm el-Qa'ab proper.

⁶⁵ Hall, in Naville, *Cemeteries of Abydos*, 1, 38.

⁶⁶ D. Redford, *Pharaonic King-lists, Annals and Day-books* (Mississauga, 1986), 18-21, and ch. 5.

⁶⁷ The false-door of an overseer of priests of Sened and Peribsen published in Amélineau, *Les nouvelles fouilles d'Abydos, 1897-8*, 1 (Paris, 1904), pl. xx, and consequently included in PM v, 90, is from Saqqāra, not Abydos, cf. D. Wildung, *Die Rolle ägyptischer Könige im Bewusstsein ihrer Nachwelt*, 1 (Berlin, 1969), 47 n. 2; cf. id. ib. 113 on the absence of a later cult at Abydos.

⁶⁸ Helck, *ArOr* 20 (1952), 72-85.

possible interpretations of the name *Pqr* also suit such a location.⁶⁹ Others have taken a different view. Gessler-Lohr,⁷⁰ elaborating on an argument of Chassinat's,⁷¹ opposes the identification on the ground that Middle Kingdom texts describing the ceremonies imply both a journey by water to Poker, and the existence of a lake there, neither of which is compatible with the location of the Umm el-Qa'ab. She suggests that the latter was one of a number of 'Kultstätte' associated with Osiris, but that Poker should be sought elsewhere. She tentatively proposes that it lay in an area to the south-east of the Osiris temple enclosure, and also revives Mariette's identification of one of two lakes which existed there in his day as the sacred lake of the temple.⁷²

If the latter is correct, the lake may well have been the scene of some part of the ritual, but several factors militate against the location of Poker here. The stelae on which a desire to watch or participate in the mysteries is expressed were concentrated on the south-west of the temple, and expanded out into the desert. By contrast, the high ground south and south-east of, and overlooking, the lakes, which ought to have been a prime situation if this were the site of Poker, was not extensively used for tombs or other monuments in the Middle Kingdom, or at any period.⁷³ The proximity of the lake to the temple scarcely allows a journey of any consequence, and it is more likely to have been part of the 'Terrace' than of Poker. Gessler-Lohr's reading may also be too literal: even the most detailed account, that of Ikhnofret, is obliquely phrased.⁷⁴ The episodes described may not all have taken place in the same setting, so that part of the ritual could have been performed on water. If ceremonies were characterised by symbolic gesture and recital, a 'boat journey' could be no more than a group of priests carrying the divine image in the *nšmt* bark along the route, stopping at predetermined places for the enactment of key events.⁷⁵ References to water travel may also be a legacy from the Archaic ritual for the kings, if the *prt ʿwt* of Osiris derives from the journey of the dead king from Memphis to Abydos.⁷⁶ On balance, the evidence seems to me strongly in favour of the location of Poker at the Umm el-Qa'ab; there is certainly no serious alternative known. The modesty of provision⁷⁷ at the latter is no barrier, since Poker is never said to be a place where monuments were set up. The Umm el-Qa'ab probably does therefore

⁶⁹ Leahy, *GM* 70, 46-50.

⁷⁰ B. Gessler-Lohr, *Die heiligen Seen ägyptischer Tempel* (Hildesheim, 1983), 425-37.

⁷¹ Chassinat, *Le Mystère d'Osiris*, 254-60.

⁷² Gessler-Lohr, *op. cit.* 433-4; G. Maspero also placed the sacred lake here, *The Dawn of Civilization*⁵ (London, 1910), 510.

⁷³ Kemp and Merrillees, *Minoan Pottery*, 289 and fig. 36, no. 10.

⁷⁴ For a brief survey, see Lichtheim, *Autobiographies*, 100 n. 4; cf. L. B. Mikhail, *Dramatic Aspects of the Osirian Khoiak Festival* (Uppsala, 1983). I have not heard or seen M. Lavier's discussion of 'Les mystères d'Osiris à Abydos', presented at the Fourth International Congress of Egyptologists in Munich in 1985, and to be published in *SAK Beihefte*, III. For various possible interpretations of a phrase as 'simple' as *mš nfrw*, see Satzinger, *MDAIK* 25, 129-30.

⁷⁵ On these difficulties, see J. Yoyotte in, *Les pèlerinages*, Sources Orientales 3 (Paris, 1960), 34-5 and n. 45.

⁷⁶ Helck, *ArOr* 20, 82.

⁷⁷ Kemp, *MDAIK* 23, 148. Chassinat, *Le Mystère d'Osiris*, 254, saw this as a further argument against the identification of the Umm el-Qa'ab with Poker.

house the 'tomb' of Osiris. Its relationship with other memorials and reliquaries of the god is too large a question to be pursued here.⁷⁸

The Thirteenth Dynasty and Abydos

The decree protecting the wadi was probably usurped in connection with Neferhotep I's visit to Abydos to participate in the Osiris mysteries. This event, in his year two, is described in detail on another stela, found by Mariette at Abydos.⁷⁹ Both the edict and its usurpation belong in a period of particularly intense royal interest in Abydos, from the reign of Sesostri III to the later Thirteenth Dynasty. Sesostri III began the tradition of separate royal mortuary chapels there, and may have been followed in this by Amenemhat III and Khaankhre Sebekhotep I.⁸⁰ Khendjer installed the bier in the tomb of Djer/Osiris as a physical symbol of the nature of the monument, and, through a local official, Amenysenb, renovated the main temple built by Sesostri I.⁸¹ Subsequently, Neferhotep I's brother, Sebekhotep IV, renewed construction in the temple area,⁸² and Khuiker at some point added a doorway.⁸³

Two additional developments in practice distinguish the rulers of the Thirteenth Dynasty from those of the Twelfth. One is the dedication of stelae which show the king worshipping a god, but are not explicitly commemorative of anything specific. These begin with Neferhotep I and include some commemorating lesser-known kings of the late Thirteenth Dynasty whose area of rule was probably limited.⁸⁴ The second development is the commemoration of members of the royal family, a practice in which the relatives of Sebekhotep III are particularly well-represented.⁸⁵ Thus, in addition to formal contributions by the crown to the framework of the Osiris cult, the period saw greater personal involvement by the kings in the Osiris festival—epitomised in Neferhotep I's actual participation where Sesostri III had sent

⁷⁸ Cf. Eigner, *Die monumentalen Grabbauten*, 163–9.

⁷⁹ Cairo JE 6307, not currently locatable, PM v, 44. Text in Helck, *Historisch-biographische Texten*,² 21–9, no. 32; most recent study by R. Anthes in *Festschrift zum 150-jährigen Bestehen des Berliner Ägyptischen Museums*, ed. U. Luft et al. (Berlin, 1974), 15–41. Neferhotep I is probably also recorded on a stela (n. 84 below) and a fragment from the temple area (Petrie, *Abydos*, I, pl. lix; Von Beckerath, *Untersuchungen*, 244 (10)—the same as 244 (13)?, cf. PM V, 48).

⁸⁰ On stela Cairo CG 20538, vs. 21–2, the address includes the wab-priests of Amenemhat III and Sesostri III, and 'the priesthood of their temples which are in this town'. Sesostri's temple was probably part of his complex in Abydos South, and Amenemhat's may also have been built there. For Sebekhotep I's chapel, between the temples of Sety I and Ramesses II, see Bresciani, *EVO* 2 (1979), 11–20. It may have been among the earliest of a series stretching south-east from the Osiris temple along the edge of the cultivation, cf. Kemp, *LÄ* 1, 38.

⁸¹ Louvre stela C. 11–12; Lichtheim, *Autobiographies*, 81–2.

⁸² Petrie, *Abydos* I, pl. lix; II, pl. xxviii. A limestone lintel of the same king was found at Abydos by Garstang in 1909 (Brussels E. 5262, PM v, 100). A statue of his may originally have come from the site (Davies, *A Royal Statue Reattributed*, 26, no. 27).

⁸³ Petrie, *Abydos*, II, pl. xxxii.

⁸⁴ A Neferhotep (Cairo CG 20601) and a Sebekhotep (CG 20146), usually seen as I and IV respectively, were followed by Menkhaure Senaib (CG 20517), Merheteptra Sebekhotep VI (CG 20044) and Wepwawetemsaf (BM 969). See Franke, *Orientalia* 57, 259, for local dynasts.

⁸⁵ The mother, a brother, and two daughters of Sebekhotep III are commemorated on separate stelae: Ayrton, Currelly and Lóat, *Abydos*, III, pl. xiii, Vienna 64, and Louvre C. 8. The attribution of the last of these to 'Koptos' (e.g. Von Beckerath, *Untersuchungen*, 241 (8), and Helck, *Historisch-biographische Texten*,² 17) is contradicted by internal evidence. A son and daughter of king Pentjeni appear on BM 630 (Petrie, *Abydos*, II, pls. xxxi–ii). Other Thirteenth Dynasty royal offspring are commemorated on e.g. Cairo CG 20058 and 20450.

an official—but also embracing ancillary or newly-popular cults such as those of Wepwawet or Min-Horus.⁸⁶ This direct interest recalls their recent elevation from a non-royal background and may reflect a combination of religious and political factors. Such comparative abundance of local commemoration makes the complete omission of the Thirteenth Dynasty kings from the Abydos King List puzzling. In the local context, it can hardly be explained by ephemerality,⁸⁷ since the feeble First Intermediate Period successors of Pepy II, whose impact at Abydos was negligible, are included. The explanation may rather be that the list was of Memphite origin.

Although almost all the dated private stelae of the Middle Kingdom are of the Twelfth Dynasty,⁸⁸ recent studies have suggested that a substantial number of those not dated belong in the late Twelfth and early Thirteenth Dynasties,⁸⁹ so that this period probably also saw the continuation of private commemoration and burial that necessitated Ugaf's intervention, at the height of the site's popularity. Von Beckerath⁹⁰ saw this as resulting from a decline in kingly control: in the Twelfth Dynasty, the cemetery had been restricted to a privileged few by royal favour, whereas in the Thirteenth Dynasty commemoration at Abydos became much more widespread. There is, however, little evidence for controls of the kind envisaged. The vizier Mentuhotep recorded a decree of Sesostri I giving him a *mehet* at the Terrace,⁹¹ but there the king was probably only financing the building. If royal permission were needed, one would expect reference to it to be common. Local regulation is more likely but its basis and criteria are unknown.⁹² If there was increased commemoration, and of wider social classes, at Abydos in the Thirteenth Dynasty—and analysis has not yet answered these questions—it could as well be explained by the greater popularity of the cults, to which the kings contributed, as by a collapse in cemetery regulation. The decree discussed here is better seen as an example of the Thirteenth Dynasty kings' interest in Abydos, and in control of its cemetery area, than as evidence for belated intervention to remedy a situation which a declining monarchy had allowed to get out of hand.

⁸⁶ See the stelae cited in n. 84: the first three are dedicated to Min-Horus, the other two to Wepwawet.

⁸⁷ Redford, *Pharaonic King-lists*, 18–20, 193.

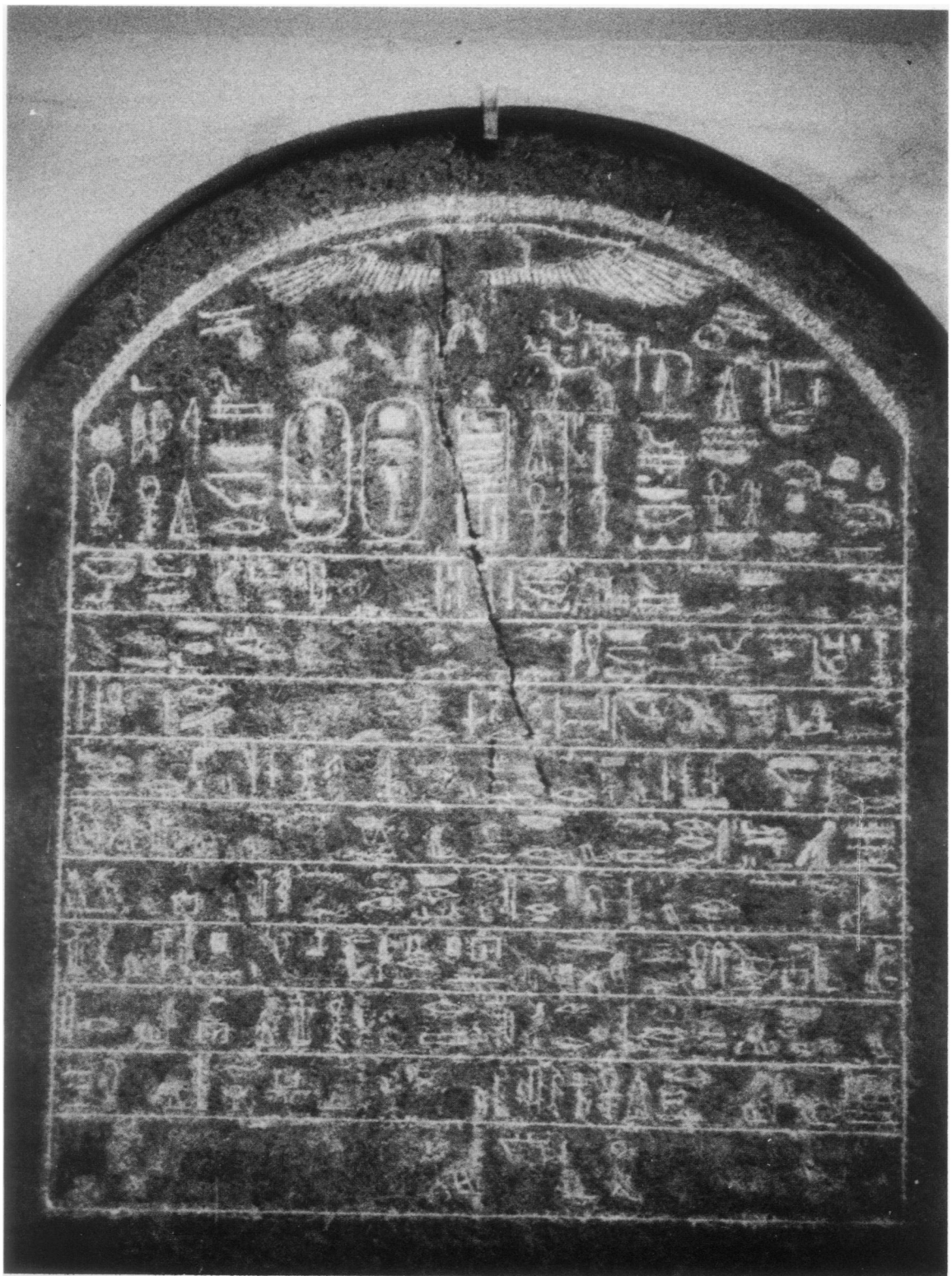
⁸⁸ Even during the Twelfth Dynasty, only a small percentage of stelae bore a year-date or cartouche(s). These belong mostly to people with a specific court or central administration connection, for whom the reigning king was a personally important reference point.

⁸⁹ Since the stimulus of Simpson's *Terrace*, the literature has been abundant. For recent studies in the dating of Middle Kingdom and Second Intermediate Period monuments, see references in H. De Meulenaere, *CdE* 60 (1985), 75–84, and Vernus, *Le Surnom*, 1 n. 1; Franke, *Personendaten*, 15–17; Malaise, n. 6 above and *SAK* 5 (1977), 187–98.

⁹⁰ *Untersuchungen*, 56.

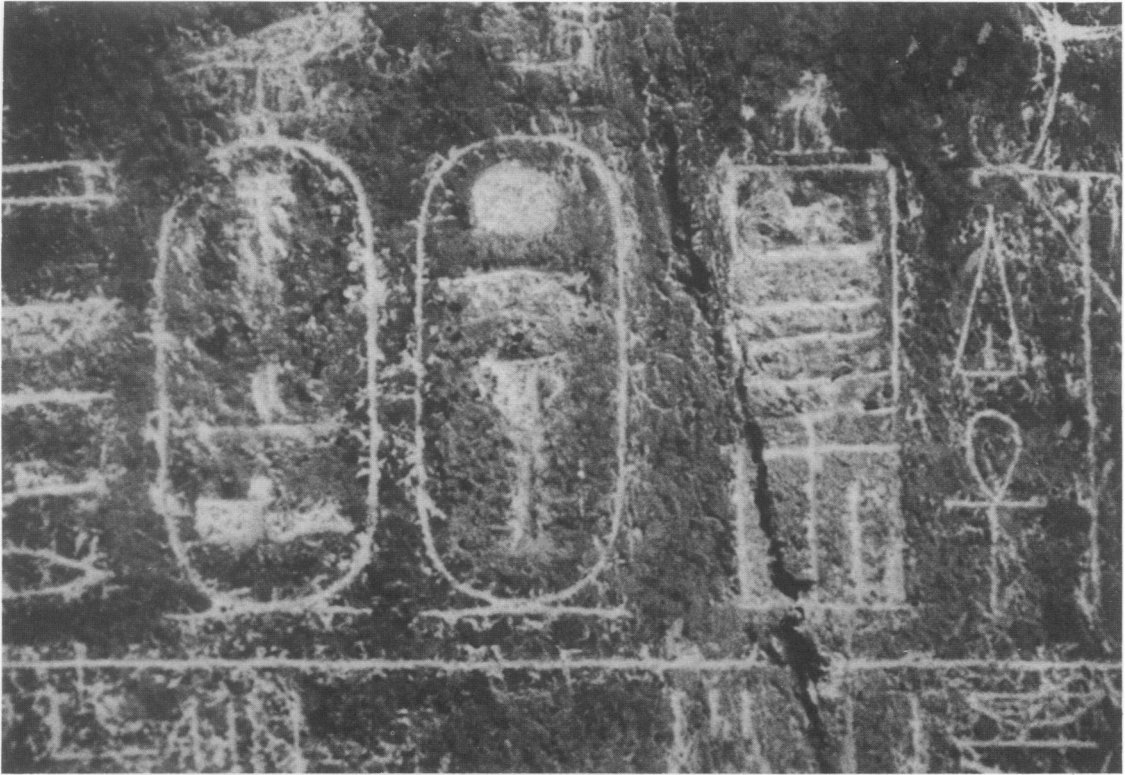
⁹¹ Cairo CG 20539, Simpson, *Terrace*, 9.

⁹² Satzinger, *MDAIK* 25, 129–30, suggests that different degrees of privileged access may be seen in the phraseology of inscriptions.



Cairo JE 35256 (pp. 41-60)

A PROTECTIVE MEASURE AT ABYDOS



1. Cairo JE 35256, detail (p. 48)

A PROTECTIVE MEASURE AT ABYDOS



2. Gardner Wilkinson papers (vii. 49) from Calke Abbey, Bodleian Library, Oxford, by kind permission of the National Trust (p. 62)

AN EARLY EIGHTEENTH DYNASTY MONUMENT

AN EARLY EIGHTEENTH DYNASTY MONUMENT OF SIPAIR FROM SAQQÂRA*

By JAROMIR MALEK

The monument discussed here may have been the pedestal of a stela, but is only recorded in copies made by Hay and Wilkinson early in the last century (a small fragment which used to be in Berlin is now lost). Sipair was an 'Overseer of the treasury', probably under Amosis. His presumed tomb at Saqqâra would be the earliest New-Kingdom tomb known in the area. One of Sipair's epithets refers to chariotry, and the hieroglyph used in it is the earliest representation of a horse from ancient Egypt. Memphite examples of titles connected with chariotry are listed, and Second Intermediate Period and early Eighteenth Dynasty evidence from the Memphite area reviewed.

I. Memphite tombs of the first half of the Eighteenth Dynasty

OUR knowledge of Saqqâra tombs of the pre-Amarna phase of the Eighteenth Dynasty has derived much benefit from the work, still in progress, directed by A.-P. Zivie.¹ When published, the results will at least partly mirror the advances which are being made in the exploration of later, mainly Ramesside, tomb-chapels in the area south of the causeway of Unas.² Several *rock-cut* tombs, mostly of the reign of Amenophis III (but at least one earlier, *temp.* Hatshepsut/Tuthmosis III), have so far been found by Zivie at northern Saqqâra.³ Some of them are decorated in relief, but it remains to be seen whether the walls of pre-Amarna *free-standing* tomb-chapels carried similar decoration.⁴

2. The monument of Sipair

2.1. *Documentation.* Pls. VII, 2, VIII, fig. 1.

The monument⁵ discussed here was copied by Robert Hay (British Library, Depart-

*This is a belated, but not less sincere, token of respect and appreciation of the contribution made to our subject by Dr. Miriam Lichtheim. I wish to thank Dr. H. Guksch, Professor G. T. Martin, and Professor C. Vandersleyen for answering queries addressed to them while I was working on this article. It is hackneyed to stress that any mistakes are solely due to the author, but here it does not seem out of place. I am grateful to Mrs. M. E. Cox for the line-drawings in figs. 1 and 2.

¹ Reports in *BSFE* 84 (March 1979), 21-32 and 98 (Oct. 1983), 40-56; *ASAE* 68 (1982), 63-9 and 70 (1984-5), 219-32; *Le Courrier du CNRS* 49 (1983), 37-44; *RdE* 31 (1979), 135-51; *Mélanges Adolphe Gutbub* (Montpellier, 1984), 245-52; *Memphis et ses nécropoles au Nouvel Empire* (Paris, 1988), 103-12.

² By the Faculty of Archaeology of Cairo University and a combined team of the EES and the Museum of Antiquities in Leiden.

³ The tombs of Aper-El = Aperir (*temp.* Amenophis III or IV), Meryre (*temp.* Amenophis III), Resh (*temp.* Amenophis III), Mer-sakhmet (probably *temp.* Amenophis III), and Nehesi (*temp.* Hatshepsut-Tuthmosis III). It is reasonable to expect that much of the eastern escarpment of the *gebel* at Saqqâra contained rock-cut tombs, at least some of them of the first half of the Eighteenth Dynasty. Others may be buried under the massive dumps of earlier excavators. For those near the valley temple of Unas see Malek, *JEA* 67 (1981), 158 n. 17.

⁴ At present, the argument centres on the tomb-chapel of *Mrrj-mrrj* (PM III², 705-6), see Malek, *SAK* 12 (1985), 44 n. 2.

⁵ PM III², 732, as 'niche with statues(?)'.

ment of Manuscripts, 29812, 85 = pl. VIII)⁶ and Sir John G. Wilkinson (Oxford, Bodleian Library, papers from Calke Abbey, vii. 49 = pl. VII, 2) in the first half of the last century. In 1878, a fragment of it was acquired by the Berlin Museum (no. 7781) through Travers.⁷ This was destroyed during the Second World War,⁸ and the rest of the monument is lost, or at least I have not been able to locate it in any collection.

Hay's copy is accompanied by the following note: 'This stone lays (*sic*, J.M.) at the foot of the sand hills at Sackara on wh(ich) the tombs are, close to the white sarcophag(u)s—it is of the white cherty stone, much chipped in many parts wh(ich) renders the hierog(lyph)s difficult to be read independent of the stone not admitting of their being sharply and finely executed as in the softer stones.—The fig(ure)s, large, are in relief coarse and clumsy, tho' the [incavol offering fig(ure)s are in the good style.—The measurements in length—2 ft. 11 (in.) (= 88.9 cm, J.M.), in depth 2 (ft.) 1½ (in.) (= 64.8 cm), in thickness 1 (ft.) 3¼ (in.) (= 40 cm). It seems to have belonged to one of the tombs above.'⁹

Hay's copy shows the monument most completely, but is unsystematic and generally less accurate than the copy by Wilkinson. The Berlin fragment represents the left half of face A copied by Hay and the publication of its text¹⁰ is of great importance for the reconstruction of the monument. Wilkinson only copied face B, but even he was clearly in a hurry. This, unfortunately, means that sometimes the copies are ambiguous. Nevertheless, the monument is important for our understanding of Eighteenth Dynasty Saqqâra, and I hope that collective knowledge may improve on the interpretation offered here.

The copies are presented by kind permission of the National Trust and the British Library.

2.2. Description

Each of the two faces of the monument has an inscribed horizontal band at the top, with the text running from its centre in both directions, and continuing as a vertical column at the left and right edges, thus in effect providing a frame for the two registers. The *upper register* contains three figures with their arms raised in a gesture of adoration. They are represented *en face*, and show, from left, Sipair's father Wedehu-senbu, Sipair himself, and his wife Iunen, on face A, and his mother Ahmosi, Sipair again, and his wife, on face B. On both faces, approximately in the middle of the *lower register*, there is a figure of the son, facing left, censuring and libating. A text in vertical columns is on either side.

Face A was seen by Hay still complete, while the right edge of face B was already lost.

⁶ It seems that Newberry was interested in Hay's copy, since a photograph and its typewritten transcript are among his papers at the Griffith Institute.

⁷ *Ausführliches Verzeichnis* (Berlin, 1899), 157.

⁸ Information Dr. K.-H. Priese. There is no additional documentation in Berlin.

⁹ Hay's indications of the measurements are rather ambiguous. I assume that his 'depth' is what we would describe as 'height', i.e. that the decorated vertical face(s) measured 88.9 by 64.8 cm, and that the block was 40 cm thick.

¹⁰ G. Roeder, *Aegyptische Inschriften... Berlin* (Leipzig, 1924), II, 231–2.

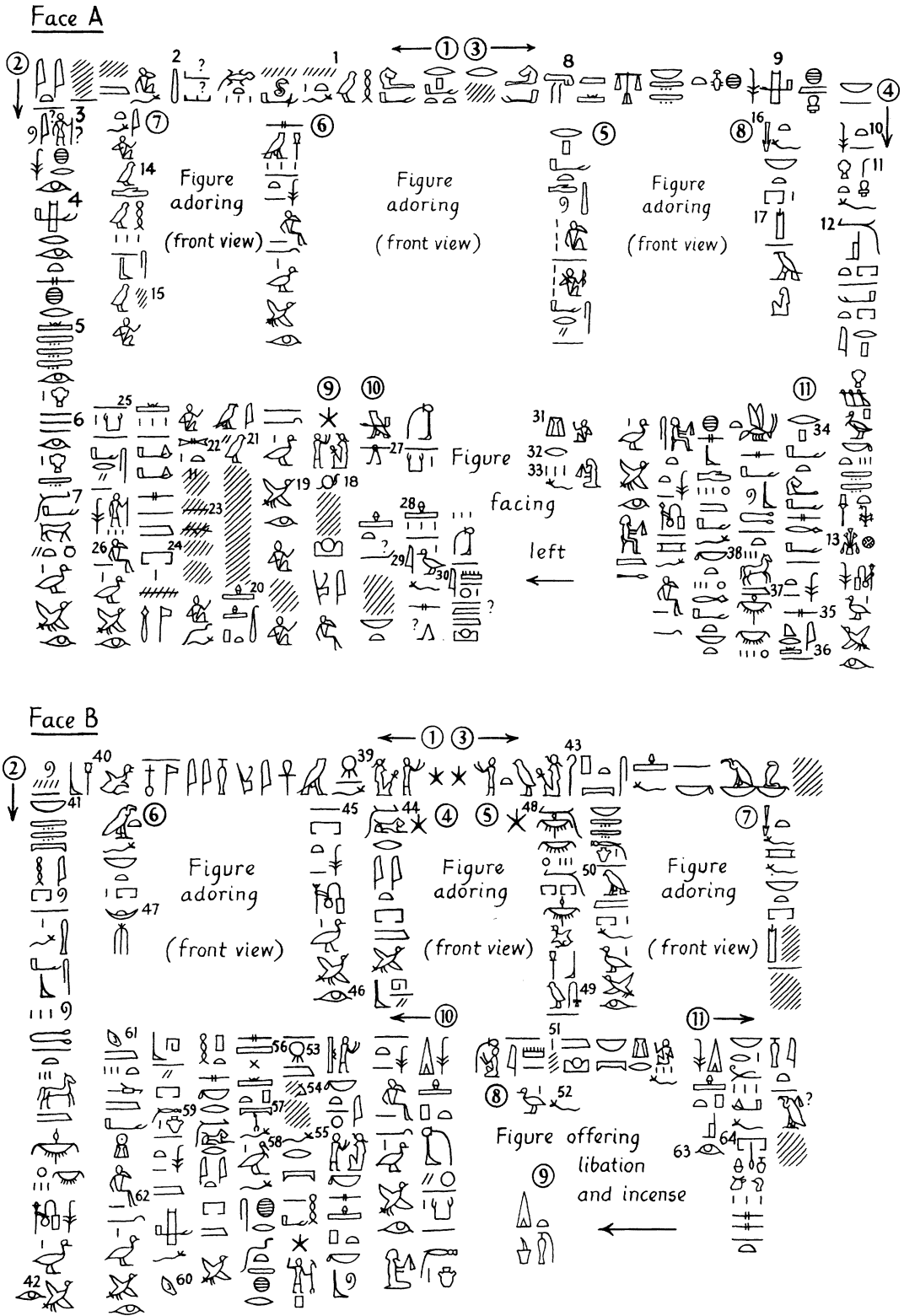
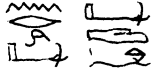




























































































FIG. 1. The text of Sipair's monument, reconstructed from the copies by Hay and Wilkinson and the publication of the now lost Berlin fragment.

Notes on readings: (H.= Hay; W.= Wilkinson)

- 1 These two groups perhaps to be restored as  .
- 2 Perhaps mdw  ; H. has  .
- 3 This is a mere guess. H. has  .
- 4 Thus Aeg. Inschr., but H.'s rendering as  may be palaeographically more accurate. Note that both H. and W. render the sign as  in B.10.
- 5 H.:  , omitting one  sign.
- 6 H.:  .
- 7 H.:  .
- 8 A rather diffident interpretation of H.'s  .
- 9 H.:  .
- 10 H. has  instead of  .
- 11 H.:  .
- 12 H.:  .
- 13 H.:  .
- 14 H. omits  of Aeg. Inschr., but he could have miscopied  . I have retained both signs.
- 15 Aeg. Inschr.:  , suggesting a possible flaw in the stone. H. quite unequivocally  .
- 16 H.:  :  .
- 17 H.:  .  .
- 18 Probably to be completed as  . The // of Aeg. Inschr. may be just the tail-feather of Horus rather than .jj, since H. has  immediately preceding  .
- 19 Thus Aeg. Inschr. H. omits all before  at the bottom of the column.
- 20 Thus Aeg. Inschr. H. omits the first  and the tall sign before  .
- 21 H.'s sign looks more like b3.
- 22 H.:  .
- 23 Thus Aeg. Inschr., H. omits.
- 24  in Aeg. Inschr. only.
- 25  in Aeg. Inschr. only.
- 26 Aeg. Inschr. only; kp seems to have been left out, but the accuracy of this detail in the published copy may be queried.
- 27 H.:  .
- 28  for  ? Or should H.'s  be disregarded?
- 29 H. has  for  .
- 30 H. may have simply overlooked  . His  may, misplaced, belong to Jmn-Rc or to Rc-Hr-m-3ht. Turning  into  , however, strains credulity somewhat, and although H. clearly was capable of such mis-copying, I shall leave the problem open.

- 31 H.:  .
- 32 H.:  .
- 33 H.:  .
- 34 H. has | for  .
- 35 H.:  .
- 36 H.:  for  , and  for  .
- 37 H.:  instead of  .
- 38 H.:  .
- 39 W.:  for  ; H.:  instead of  .
- 40 H. has  for  , while W. omits b and indicates a damaged area. Neither H. nor W. gives any determinative for 3bw.
- 41 H. omits  ; W. omits  .
- 42 H. omits  .
- 43 W.'s copy stops here. H. has | for hq3.
- 44 H. has  for  .
- 45 W. and H.:  .
- 46 W.:  .
- 47 H.:  .
- 48 H. has  twice; W. gives  instead of hd.
- 49 Neither H. nor W. gives the determinative clearly. H. has | ; W. ! .
- 50 H. omits  .
- 51 H. has    , W.    . An interpretation of  as  assumes that the form has been retained from the right-to-left direction of writing.
- 52 Not in H.'s copy.
- 53 Both W. and H.  .
- 54 W. only.
- 55 W. only.
- 56 H.:  .
- 57 H. separates  .
- 58 H. has  , perhaps for | ?
- 59 H.:  for  .
- 60 Thus W.
- 61 Thus W.; H. has  .
- 62 Probably thus W.; H. omits  .
- 63 W. stops here.
- 64 H.:  for  .

2.3. Texts. Fig. 1.

Face A:

Framing-text: (from the centre outwards)

A.1 *r-pctj hstj-c hzw [dr(?)] t.f [nrw(?)] šst sdm(?) m dw.f m***A.2** *šnjt n(t) srjw(?) hr nszw jr ch(nsw) r jrt šhr trw jr(rw) hr mw jr(rw) hr tš jmj-r chnwtj S₁-p₁-jr***A.3** *r-[pctj] hstj-c mtj mšc(?) mhst nb trwj th ch nszw htm(t) nb(t) n(t)***A.4** *nszw hr dbct.f jmj-r st n(t) ct jrp hrj šsp bškt trwj hrpt Šm cw T₁-mhzw šš nszw S₁-p₁-jr*

Upper register, texts accompanying figures:

(Sipair) **A.5** *r-pct(j) m dw n mšc scrj n(?)* **A.6** *smrw n nszw hr dw n kp S₁-p₁-jr*(father) **A.7** *jt.f Wdhzw-snbzw*(wife) **A.8** *snt.f nbt pr šwonn*

Lower register:

(before the son) **A.9** *dws R[-Hr-] šht(j) jn h rdw n kp S₁-p₁-jr [rdj].j jrw [...] htp**s(?) htp.j tšt [...] m-ht(?) [...] dfzw n dd.sn m pr n ntr cš n kš n scrj smrw n nszw hr dw n (kp) S₁-p₁-jr***A.10** *ms htp nbt wcb(t)(?) n kšw jn s.f [...] wcb n šmn [...] -m-šht Hr.w.f*(behind the son) **A.11** *r-pct(j) hstj-c cš n nszw šqr n bjtj scb t-nt-htr m hđ nbw šsbd mfkst ct nbt špst šš nszw n(j) mr(wt).f hr dw n kp S₁-p₁-jr mšc-hrw*

Face B: (from the centre outwards)

Framing-text:

B.1 *dws R cwbn.f m cnh jn hšjj n ntr nfr tšj* **B.2** *šbw n nb trwj hrj jhzw n hm.f scb t-nt-htr m hđ nbw šš nszw S₁-p₁-jr***B.3** *dws.tw R c hqš pt šhtp.f n.k nbjtj [...]*

Upper register, texts accompanying figures:

(Sipair) **B.4** *dws jmj-r rjtt m pš hbnj n pr nszw šš(nsw) S₁-p₁-jr***B.5** *dws jmj-r hđ nbw jmj-r prwj hđ tšj šbw n nb trwj mh jb n Hr m pr.f S₁-p₁-jr*(mother) **B.6** *mwt.f nbt pr šch-ms*(wife) **B.7** *snt.f mr(t).f nbt pr šwonn*

Lower register:

(son) **B.8** *sš.f wcb n šmn Hr-m-šht(?) nb pt Hr.w.f* **B.9** *rdjt sntr qbhzw*(before the son) **B.10** *htp dj nszw wcb sp-sj n kš n mh jb n nszw hr dw n kp S₁-p₁-jr dws.k štn**dws.k R c šhtp.k wbn m [...] .f r pt hnc Šh psš-pt.f bš.f hr.s(t) dt hr Pth-Skr jmj-r rjtt m pš hbnj mh jb n nszw m ch.f sdm sdmt wrw m hrt-hrw hr dw(n) kp S₁-p₁-jr*(behind the son) **B.11** *htp dj nszw Wsjr nb Rš-stšw dj.f prt-hrw t hnqt kšw špdw ssnt hšjt n mwt [...]*

Translation:

A.1 'The hereditary prince, count, one whose hand(?) strikes fear(?) (in) the multitude(?),^a one whose words are listened to among the entourage **A.2.** of courtiers with the king, one whom the (royal) palace appointed to administer the lands everywhere,^b chamberlain, Sipair.'**A.3** 'The hereditary prince, count, one truly exact, the balance of the Lord of the Two Lands, the plummet of the royal palace,**A.4** one under whose seal all the sealed things of the king are, overseer of the department of the wine-cellar, head of the collection of taxes of the Two Lands and of the dues of Upper and Lower Egypt, royal scribe, Sipair.'**A.5** 'The hereditary prince, spokesman of the army, one who presents **A.6** courtiers to the king, child of the nursery, Sipair.'

A.7 'His father, Wedehu-senbu.'

A.8 'His wife, mistress of the house, Iunen.'

A.9 'Adoring Re-Harakhti by the child of the nursery, Sipair. I adore...I am satisfied with the share of offerings...after...the food which they give in the house of the great god, to the *ka* of one who introduces courtiers to the king, child of (the nursery), Sipair.'

A.10 'Bringing all pure offerings of food by his son, [...] priest of Amun [and Har]makhis, Kheruef.'

A.11 'The hereditary prince, count, one promoted by the king of Upper Egypt (and) enriched by the king of Lower Egypt, one who provides chariotry with silver, gold, lapis lazuli, turquoise, and all precious stones,^c king's scribe beloved of him, child of the nursery, Sipair, justified.'

B.1. 'Adoring Re when he appears in life, by one praised by the perfect god, bearer B.2 of the branding iron of the Lord of the Two Lands, stablemaster of His Majesty, one who provides chariotry with silver and gold, royal scribe, Sipair.'

B.3 'One adores Re, ruler of the sky, when he sets, so that he pacifies the Two Ladies^d for you...'

B.4 'Adoring'. 'The overseer of the gate of ebony^e of the king's house, (royal) scribe, Sipair.'

B.5 'Adoring'. 'The overseer of silver and gold, overseer of the treasury, bearer of the branding iron of the Lord of the Two Lands, confidant^f of Horus in his house, Sipair.'

B.6 'His mother, mistress of the house, Ahmosi.'

B.7 'His wife beloved of him, mistress of the house, Iunen.'

B.8 'His son, priest of Amun and [Har]makhis (?) lord of the sky, Kheruef.'

B.9 'Censing and libating.'

B.10 'A doubly-pure offering which the king gives to the *ka* of the confidant of the king, child of the nursery, Sipair. You adore the Aten, you adore Re, you pacify one who shines...he...to heaven with Orion and his half of the sky,^g his *ba*-soul being with them eternally, and with Ptah-Sokar, (you) overseer of the gate of ebony, confidant of the king in his palace, one who hears what is heard in private in the course of every day, child of the nursery, Sipair.'

B.11 'An offering which the king gives to Osiris, Lord of Ra-setau, so that he gives an invocation offering consisting of bread, beer, oxen, fowl, breathing (the north wind, to) one praised by [her?] mother...'

Notes on readings: see pp. 64-5

Notes on translation:

^aVery tentative. The key expressions *nrw* and *ꜥšꜣt* also occur in *Urk.* IV, 1927, 11-12: [*pr.n.j*] *r hr nr.n.j ꜥšꜣt* 'when I went] out, the multitude was in fear of me' (reference from Dr. H. Guksch).


^b'on the water (and) on the land', *Wb.* II, 50, 13.

^cSee discussion below.

^di.e. *Mrtj*, the two divine songstresses.

^eCompare the use of *pꜣ* in the autobiographical text of Ahmose, son of Ibana, discussed by C. Vandersleyen, *CdE* 45 (1970), 68-75.

^f'one who fills the heart'.

^gThe lacuna could have contained *n*, to read *psš n grh*, though 'midnight' (E. Dévaud, *Kêmi* 1 (1928), 30-1[III]) is hardly suitable here. Wilkinson's copy suggests more than a low flat sign, and the reading *psš-pt.f* has, at least, the merit of accommodating the following *.f* and reflecting Orion's prominence in the southern sky (H. Behlmer, *LÄ* IV, 609-11). Both Wilkinson and Hay agree that the last sign is .

2.4. *The type of monument*

The monument recorded by Hay and Wilkinson is unusual, and does not seem to have a direct parallel from Saqqâra. Clearly, it is not a wall-relief, and G. Roeder wondered whether it could be part of a pyramidion.¹¹ The *en face* representations do, indeed, remind one strongly of the kneeling figures in the niches on many Memphite pyramidia.¹² Similar figures occasionally occur on stelae¹³ and architectural elements (wall-panels or pillars/pilasters, possibly substituting for statues),¹⁴ found in the same area. The solar hymns are commonly attested on New-Kingdom pyramidia from various parts of Egypt, including Memphis,¹⁵ and also on 'subsidiary stelae' in Memphite free-standing tomb-chapels.¹⁶ The monument copied by Hay and Wilkinson does not, however, resemble any of these.

It may be a pedestal which supported a free-standing monument. If my interpretation of Hay's measurements is correct, the top horizontal surface would have been long (88.9 cm) and narrow (40 cm), more suitable for receiving a stela rather than a statue. Also the orientation of the figures of the son in the lower register of both longer sides is not in favour of a monument with a clearly defined front, since the two figures face in opposite directions.

2.5. *The date*

The monument of Sipair can be dated by

1. the owner's name which suggests the late Seventeenth or early Eighteenth Dynasties,¹⁷
2. his titles, which are unlikely to be later than the Amarna period,¹⁸

¹¹ Op. cit. 231.

¹² E. Berlin 2276, *temp.* Amenophis III (R. Anthes, *ZÄS* 72 (1936), 61 [iii, 4d] pl. iii [4d]); Leiden Inv. AM.6 and Florence 2610, *temp.* Amenophis III (A. Rammant-Peeters, *Les Pyramidions égyptiens du Nouvel Empire* (Louvain, 1983), 35-7 pl. xxi [61] and 14-15 pl. vii [19]); Louvre D 14, late Dyn.18 or early Dyn.19 (G. Perrot and C. Chipiez, *Histoire de l'art*, I, fig. 154); Louvre D 21, early Dyn.19 (Rammant-Peeters, op. cit. 59-60). Others were not included in PM III², but I would accept them as Memphite: Cairo JE 41665, late Dyn.18 (id. ib. 23-4 pls. xiv [40], xv); Cairo JE 48840, late Dyn.18 (id. ib. 24-5 pl. xvi [43]); Copenhagen, Nationalmuseet, Aa.d.20, Dyn.19 (id. ib. 9-10 pls. iv, v); Louvre D 15, probably Dyn.18 (id. ib. 55-6); Louvre D 20, Dyn.19 (id. ib. 58-9). Most of these date between the reign of Amenophis III and the end of the Eighteenth Dynasty. Niches are, however, also found on similar monuments from outside the Memphite area.

¹³ Stelae Leiden Mus. Inv. AP. 11 + London UC 14463, *temp.* Amenophis III (K. Bosse-Griffiths, *JEA* 41 (1955), 56-9, pl. xiv) and Florence 2357 (S. Bosticco, *Le stele egiziane del Nuovo Regno*, 41-2 figs. 34 a-c).



¹⁴ Copenhagen, Thorwaldsen Mus. 349 (O. Koefoed-Petersen, *Archiv Orientalní* 20 (1952), 432-3 pl. xlv); Leiden Mus. Inv. AM.14a, 15-17 (P.A.A. Boeser, *Beschreibung der ägyptischen Sammlung...Leiden*, v, pl. xiv); Leningrad, State Hermitage Mus. 1079 (N. Landa and I. Lapis, *Egyptian Antiquities in the Hermitage* (Leningrad, 1974), pl. 48); Cairo JE 89046 (G. A. Gaballa, *MDAIK* 30 (1974), 21-4 pl. 2 [b, c]. See Malek, *RdE* 38 (1987), 123.

¹⁵ Rammant-Peeters, op. cit. 139-64.




¹⁶ e.g. the stela of Ipuia, Cairo JE 44722 (J. E. Quibell and A. G. K. Hayter, *Teti Pyramid, North Side* (Cairo, 1927), 32-3, pl. 9), and the stelae of Haremhab in Leningrad, State Hermitage Mus. 1061 (Landa and Lapis, op. cit. pl. 44) and London, BM 551 (I. E. S. Edwards, *HTBM* VIII, 31-3 pl. xxviii). For the term 'subsidiary stela' see Malek, *JEA* 74 (1988), 127.

¹⁷ The best known among the small number of persons called Sipair is prince Ahmose Sipair. His parentage is not entirely clear; most recently, C. Vandersleyen suggested that he was a son of Seqenenre (*SAK* 10 (1983), 311-24).

¹⁸ Helck's statement (*Verwaltung*, 254) that the title *hrdw n kp* is not attested after the Amarna period remains valid. E. Feucht (in S. I. Groll, ed., *Pharaonic Egypt, the Bible and Christianity* (Jerusalem, 1985), 38 and 43) has

3. the orthography of the name of Sipair's mother Ahmose. According to C. Vandersleyen,¹⁹ the palaeography²⁰ of the sign for *jḥ* () indicates a date not later than year 22 of Amosis. Caution demands a *caveat*, none the less: if there are undiscovered exceptions to the 'Vandersleyen rule', the monument will fit quite happily into a later reign in the first half of the Eighteenth Dynasty. I am particularly concerned about the date of a certain army scribe of the Lord of the Two Lands (*šš mšr n nb trwj*) called Ahmose, in whose name  also appears. At least one monument of this man was found to the north of the pyramid of Teti, and its photograph was included in the display organized by the EAO at Saqqâra on the occasion of the Fifth International Congress of Egyptology in October/November 1988. It seems to me that Ahmose's monument may be of the mid-Eighteenth Dynasty, perhaps even post-Amarna, but while it remains unpublished and the circumstances of its discovery unknown it is futile to speculate. The study of Memphite hieroglyphic paleography during the New Kingdom has hardly begun.

3. Sipair's family and career

Sipair's father, *Wdhw-snbw* , is not known from any other monument, and the name is not otherwise attested. *wdhw* here seems to derive from 'offerings' or 'offering-table', *Wb.* I 393-4, rather than *wdh*, 'weanling', *Wb.* I, 410, because of the plural strokes,²¹ but a play on words or inconsistent orthography cannot be excluded. The name of Sipair's mother, *Jḥ-ms*, is very common during Eighteenth Dynasty, and the name of his wife, *Jwnn* , is not unique.²² Sipair's son *Hrw·f*  holds titles, one of which, if my reading is correct, is remarkable. During the Eighteenth Dynasty the Great Sphinx at Gîza began to be identified with Harmakhis, the Gîza manifestation of the god Horus.²³ The earliest monument which attests to the existence of the cult dates from the reign of Amenophis I.²⁴ Kheruef, however, was probably born and may have started his career under Amosis. The combination of the priesthoods of Amun and Harmakhis in his titles need not present problems.²⁵

Systematically listed, Sipair's titles are as follows:

pointed out two possible exceptions. However, the first, *Mnw-htp* on stela Cairo T. 18.12.19.1, seems to date to the reign of Amenophis II (*Urk.* iv, 1512), while the other man, *Hqj-nfr*, probably spanned the period from the reign of Amenophis III to the end of the Eighteenth Dynasty (W. K. Simpson, *Heka-nefer* (New Haven and Philadelphia, 1963), 27), and the title would have dated to the beginning of his career.

¹⁹ *Les Guerres d'Amosis* (Brussels, 1971), 205-28.

²⁰ Hay's and Wilkinson's copies basically agree, although the former misunderstood the sign.

²¹ E.g. J. J. Clère and J. Vandier, *Textes de la Première Période Intermédiaire* (Brussels, 1948), 5 [no. 7. 4].

²² Ranke, *PN* I, 17, 19.

²³ Most comprehensively, C. M. Zivie, *Gîza au deuxième millénaire* (Cairo, 1976), particularly pp. 305-28, but the earlier study by S. Hassan, *The Great Sphinx and its Secrets* (Cairo, 1953), also contains a wealth of information. For Harmakhis see J. Assmann, *L'Â* II, 992-6.

²⁴ Zivie, *op. cit.* 51-2.

²⁵ Cf. e.g. a stela with Tuthmosis IV before Amun-Re 'lord of the sky' and Harmakhis, found near the Great Sphinx, U. Hölscher, *Das Grabdenkmal des Königs Chephren* (Leipzig, 1912), 108-9, fig. 160.

A. *Ranking and honorific:*A1. *r-pꜣtj* 'Hereditary prince' (A.1, A.3, A.5, A.11)A2. *ḥꜣtj-ꜣ* 'Count' (A.1, A.3, A.11)B. *Scribal:*B1a. *šš nsw* 'Royal scribe' (A.4, B.2, B.4)B1b. *šš nsw n⟨j⟩ mr⟨wt⟩.f* 'Royal scribe beloved of him' (A.11)C. *The palace:*C1. *ḥrdw n kp* 'Child of the nursery'²⁶ (A.6, A.9 twice, A.11, B.10 twice)C2. *jmj-r ḥnwtj* 'Chamberlain'²⁷ (A.2)C3. *jmj-r st n⟨t⟩ ꜣt jrꜣ* 'Overseer of the department of the wine-cellar'²⁸ (A.4)C4a. *jmj-r rjt m ꜣ; ḥbnj* 'Overseer of the gate of ebony'²⁹ (B.10)C4b. *jmj-r rjt m ꜣ; ḥbnj n ꜣr nsw* 'Overseer of the gate of ebony of the king's house' (B.4)D. *The royal stables:*D1. *ḥrj jḥw n ḥm.f* 'Stablemaster of His Majesty'³⁰ (B.2)E. *The treasury:*E1. *jmj-r ꜣrwj ḥd* 'Overseer of the treasury'³¹ (B.5)E2. *jmj-r ḥd nbw* 'Overseer of silver and gold' (B.5)E3. *ḥrj šꜣꜣ ꜣkt tꜣwj ḥꜣꜣꜣꜣ t Šmꜣꜣw Tꜣ-mḥꜣw* 'Head of the collection of taxes of the Two Lands and of the dues of Upper and Lower Egypt' (A.4)E4. *tj ꜣbw n nb tꜣwj* 'Bearer of the branding iron of the Lord of the Two Lands' (B.1-2, B.5)*Laudatory epithets:*

see the translation above, and section 4 below.

²⁶ Comments with summaries of earlier views, particularly those of Helck, Simpson, and Desroches-Noblecourt, by A.-P. Zivie in *RdE* 31 (1979), 140-1[e], and Feucht, op. cit. 38-47. Sipair is to be added to the list on pp. 45-6, n. 32 of Feucht's article.

²⁷ H. Gauthier in *BIFAO* 15 (1918), 169-206; Gardiner, *AEO* 1, 44*-45* [123]; Helck, *Verwaltung*, relevant pages; A.-P. Zivie in *RdE* 31 (1979), 142 [h].

²⁸ The 'wine-cellar' was part of the palace household, Helck, *Verwaltung*, 257.

²⁹ For the title *jmj-r ꜣrjt/rjt* see Helck, *Verwaltung*, 65-70. An extended usage of the term was common (A. H. Gardiner, *JEA* 37 (1951), 109 n. 2). It seems useful to quote here a note from Sir Alan Gardiner's copy of *Wb.* II, 407, 12: 'It is perfectly clear...that the word is nearly synonymous with *ꜣr-nsw*. Perhaps it was the official meeting-place of Pharaoh and his administrators.' The specification in Sipair's title of the material of which the *rjt* was made is, to my knowledge, unparalleled. It suggests that at least at the beginning of the Eighteenth Dynasty the original meaning 'door', 'gate', was still felt. P. Spencer, *The Egyptian Temple* (London, 1984), 202, and C. Wallet-Lebrun, *VA* 4 (1988), 69-86, are perhaps too categorical when they insist on their definition of the meaning as 'entrance'. The detailed study of G. P. F. van den Boorn, *JNES* 44 (1985), 1-25, helps to appreciate the importance of the man in charge of the *rjt* of the palace.

³⁰ A. R. Schulman, *Military Rank, Title, and Organization in the Egyptian New Kingdom* (henceforth *MRTO*), 51-3, 148-9; id. in *JARCE* 2 (1963), 94-5. For observations concerning the social status of stablemasters and their role in land cultivation during the Ramesside Period see S. L. D. Katary in J. K. Hoffmeier and E. S. Meltzer (eds.), *Egyptological Miscellanies. A Tribute to Professor Ronald J. Williams* (= *The Ancient World*, vi [1-4], 1983), 71-93.

³¹ For the state treasury during the New Kingdom see Helck, *Verwaltung*, 182-91.

Sipair was a successful courtier whose career can be reconstructed from his titles. It evolved mainly around the palace and the treasury. He belonged to the palace 'nursery' and, like several other Eighteenth Dynasty officials of similar background, became a 'chamberlain' with tasks connected with the palace household.³² In this capacity he was 'overseer of the department of the wine-cellar' and was entitled to use the epithet(?) 'one under whose seal all the sealed things of the king are'. He was also the influential 'overseer of the gate of ebony of the king's house' who controlled access to the palace and the king.

Officials connected with the 'nursery' often held titles with military connotations,³³ but 'stablemaster of His Majesty' was not an active military rank, and 'spokesman of the army' was an epithet, not a title proper.

The most important office attained by Sipair was 'overseer of the treasury'. It is logical to expect that during the New Kingdom the administrative partition of the land between the two viziers was reflected in the division of the state treasury. W. Helck has, however, pointed out the absence of references to the northern (Memphite) treasury in the Eighteenth Dynasty.³⁴ The fact that Sipair was 'head of the collection of taxes of the Two Lands and of the dues of Upper and Lower Egypt' provides a further indication that the current view may be unduly coloured by surviving evidence. Also Sipair's title 'bearer of the branding iron of the Lord of the Two Lands'³⁵ is probably to be interpreted as being connected with his treasury functions rather than cattle-administration proper.

4. Sipair's epithet *sꜥb t-nt-ḥtr m ḥd nbw ḥsbd mfkꜣt ꜣt nbt špst*

Gardiner defined the basic meaning of *t-nt-ḥtr* as 'the (troop) concerned with horses'³⁶, i.e. chariotry.³⁷ The earliest instance of the term is from the reign of Kamose.³⁸ The king boasts to 'the Asiatic' in Avaris: *šꜥd.j mnꜣw.k grm.n.j ḥmꜣwt.k r wꜣndꜣwt nḥm.j tꜣ-nt-ḥtrj*, 'I am cutting down your trees, I have herded your women into the ship-holds, I am capturing your *tꜣ-nt-ḥtrj*'.³⁹ Schulman⁴⁰ has pointed out that this early mention of *tꜣ-nt-ḥtrj* on Kamose's stela cannot be interpreted as evidence for

³² Id. ib. 252-3.

³³ A.-P. Zivie in *Mélanges Gamal Eddin Mokhtar* (Cairo, 1985), II, 386.

³⁴ *Verwaltung*, 187.

³⁵ For a discussion of cattle-branding and examples of branding irons see A. Eggebrecht, *LÄ* 1, 850-2, and H. W. Müller, *Der Waffenfund von Balata-Sichem und Die Sichelschwerter* (Munich, 1987), 72-7; for the lexicography, *Wb.* 1, 6 and 7. A branding iron of Amosis at University College London, UC 36437, W. M. F. Petrie, *Tools and Weapons* (London, 1917), 57 pl. lxxi [43], is of particular interest. I am grateful to Miss Rosalind Hall for the following information: the iron is 10.25 cm long, and its head measures 4.4 by 1.95 cm. This, however, makes it rather small for cattle-branding, and so it may have been used for another purpose.

³⁶ *AEO* 1, 113* [237], expanding on *Wb.* III, 200, 6 ff.

³⁷ For chariotry see in particular Schulman, *MRTO* 14-16; id. *JARCE* 2 (1963), 84-98. The existence of mounted troops which could be described as 'cavalry' has recently been suggested by A.-P. Zivie in *Mélanges Mokhtar*, 379-88, to supplement the earlier discussion by Schulman, *JNES* 16 (1957), 263-71. It is unlikely that such troops are referred to in the instances discussed here.

³⁸ L. Habachi, *The Second Stela of Kamose* (Glückstadt, 1972), 36.

³⁹ H. S. Smith and A. Smith, *ZÄS* 103 (1976), 57, 60 for this passage, and 48-76 for the text in general and its background.

⁴⁰ *MRTO*, 14-15.

the existence of chariotry as a separate arm of the army,⁴¹ and this is readily accepted. Later, however, he queried whether the text referred to horses at all, rather than to farm animals (cattle).⁴² Lexicographically, his doubts do not seem to me to be justified. While the term *ḥtr* could describe 'yoke' (of oxen or similar),⁴³ as well as 'chariot horse team', it surely is not possible freely to interchange *ḥtr* and the collective *t-nt-ḥtr*. The expression was followed by a determinative in Kamose's text⁴⁴ but, as Habachi's almost certainly correct restoration shows, it was the general 'animal' determinative which is of little help in identifying the species. Nevertheless, the very fact that *t-nt-ḥtrj* is used shows that more than animals is referred to. The term may cover the chariot personnel + chariot horse-teams + chariots, but as valued booty the emphasis in Kamose's text would have been on the horses and chariots. The writing of Sipair's epithet leaves no doubt that *ḥtr* in *t-nt-ḥtr* means 'horses'. If, as it seems, Sipair's monument dates to the reign of Amosis, *t-nt-ḥtrj* in the inscription of his predecessor is almost certainly to be understood in a similar way. The hieroglyph for *ḥtr* on Sipair's monument (fig. 2) is the earliest representation of a horse known from ancient Egypt, predating the scarab of Tuthmosis I in the British Museum.⁴⁵

Sipair's epithet *sb t-nt-ḥtr m ḥd nbw ḥsbd mfkst ʿt nbt špst*, 'one who provides chariotry with silver, gold, lapis lazuli, turquoise and all precious stones', is rather interesting. The 'overseer of the treasury' played an important part in the rewarding

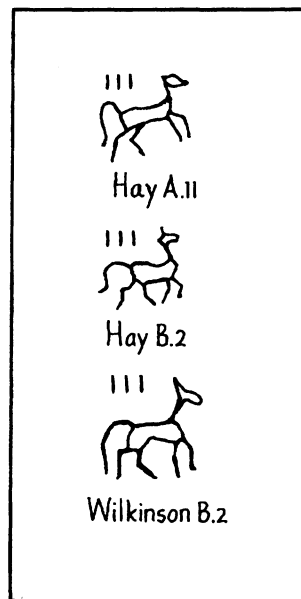


FIG. 2. The hieroglyph of a horse as rendered by Hay and Wilkinson.

⁴¹ This was not formed before the reign of Amenophis III.

⁴² *JSSSEA* 10 (1979-80), 112-13.

⁴³ See e.g. R. A. Caminos, *Late-Egyptian Miscellanies* (London, 1954), 572-3.

⁴⁴ *Contra* Schulman, *JSSSEA* 10 (1979-80), 112. Habachi, *op. cit.* figs. 22-3 on pp. 36-7, mistakenly separates the determinative and the strokes.

⁴⁵ BM 17774, C. Desroches-Noblecourt, *RdE* 7 (1950), 43 pl. ix [8].

of officials and military men,⁴⁶ and as such would have been responsible for the distribution of jewellery,⁴⁷ the usual way in which this was effected.⁴⁸ The intensive military campaigns at the beginning of the Eighteenth Dynasty were reflected in the often recorded rewards bestowed on their participants by the king.⁴⁹ Egyptian kings of the first half of the Eighteenth Dynasty were passionate charioteers,⁵⁰ and the new method of waging war, and a novel means of transport, enjoyed much popularity. The role of chariots in the military history of this period has now been radically reassessed by Schulman.⁵¹ Even if the chariots are no longer credited with the decisive combat importance they were once thought to have, there is no denying the prestige and importance of those who drove them. The earliest attestations of specialized terms to describe the warriors (particularly *snmj* and *kdn*) associated with chariots are, however, only from the reign of Tuthmosis I.⁵² The *t-nt-ḥtr*, 'chariotry', in Sipair's epithet, therefore, carried an emphasis on the personnel, and in this sense its use may slightly differ from the same expression employed in the text of Kamose.

During the New Kingdom, Memphis probably accommodated a substantial military garrison which would have included chariots and horses, but only a limited number of corresponding title-holders are known from the area (from Saqqâra unless stated):⁵³

jmj-r ssmt 'overseer of the horse'⁵⁴

1. A son of the tomb-owner Aper-El, *temp.* Amenophis III or IV (A.-P. Zivie, *BSFE* 84 (March, 1979), 26).
2. *P-rn-nfr*,⁵⁵ represented as a minor figure in a tomb-chapel, *temp.* Tutankhamun (*LD* III, 24Ib).
3. *Jmn-m-ḥt*⁵⁶ dedicator of a votive stela, probably late Dyn. 18 (PM III², 572).
4. *Rjj*, tomb-owner, late Dyn. 18 or early Dyn. 19 (PM III², 715-16).
5. *Rr-ms*, tomb-owner, probably Dyn. 19 (PM III², 592, and Malek, *JEA* 67 (1981), 158 n. 17).

ḥrj jḥw 'stablemaster'⁵⁷

1. *S-r-jr*, probably tomb-owner, *temp.* Amosis (published here).

⁴⁶ Helck, *Verwaltung*, 185.

⁴⁷ The listing of the materials in the epithet is, however, a formula rather than an accurate description.

⁴⁸ The other possibility, that the materials were handed over to the manufacturers of chariots and harnesses (as an 'overseer of the treasury' Sipair would have been in charge of workshops attached to the palace, and Memphis was renowned as a place of manufacture of arms, S. Sauneron, *BIFAO* 54 (1954), 7-12), seems to me less likely.

⁴⁹ e.g. those listed in the autobiographies of *Jḥ-ms*, son of *Jbn*, *Urk.* IV, 1-11, *Jḥ-ms P-n-Nḥbt*, *Urk.* IV, 32-9, and others (*Urk.* IV, 39-41).

⁵⁰ A reference to the chariot of Amosis in *Urk.* IV, 3,6; from then on often, see W. Decker, *Die physische Leistung Pharaos* (Köln, 1971), 125-35.

⁵¹ *JSSSEA* 10 (1979-80), 105-53.

⁵² *Id.* ib. III.

⁵³ Not all of these were necessarily Memphite residents.

⁵⁴ *MRTO*, 46-7, 145-6. An 'overseer of the horse' is also mentioned in the legal text of Mose, *temp.* Ramesses II, Gaballa, *The Memphite Tomb-chapel of Mose*, 23 pl. lxi [N 18].



⁵⁵ The beginning of the title is lost.

⁵⁶ Traces only, thus interpreted by B. Grdseloff.

⁵⁷ A stablemaster as a person in charge of (field-)workers at Memphis in P. Turin 1882 vs. 4, 2, A. H. Gardiner, *Late-Egyptian Miscellanies* (Brussels, 1937), 124, 8, and Caminos, *Late-Egyptian Miscellanies*, 456, 508.

2. *Mn-hpr-Rc-snb*,⁵⁸ owner of statue Cairo CG 547, found at Memphis, *temp.* Tuthmosis III (PM III², 865).
3. *Rš*, tomb-owner, *temp.* Amenophis III (A.-P. Zivie, *RdE* 31 (1979), 139 and 140 [d]).
4. *Nhmjj*, probably tomb-owner, probably *temp.* Amenophis III (PM III², 737).
5. *Tjj*,⁵⁹ tomb-owner, end of Dyn. 18 (V. Loret, *BIE*, 3^e ser., 10 (1899), 100, and PM III², 553).
6. *Mj*, shown in the tomb of *Rjj*, late Dyn. 18 or Dyn. 19 (relief E. Berlin 7278, PM III², 716).
7. *Tꜣw-hꜣꜣꜣw*,⁶⁰ mentioned in P. Bibl. Nat. 211 vs., *temp.* Sethos I (W. Spiegelberg, *Rechnungen aus der Zeit Setis I.* (Strassburg, 1896), 27 pl. xiv b[c, 5]).
8. *Pth-ms*,⁶¹ a son of the tomb-owner *Pth-ms*, *temp.* Ramesses II (J. Berlandini, *BIFAO* 82 (1982), 91).
9. *Nb-nfr*, mentioned in the legal text of Mose, *temp.* Ramesses II (G. A. Gaballa, *The Memphite Tomb-chapel of Mose* (Warminster, 1977), 24 pl. lxii [N 31]).
10. *Hjj*, as above (Gaballa, op. cit. 23 pl. lx[N II]).
11. *Srj-nfr*, as above (Gaballa, op. cit. 25 pl. xxxviii).
12. *Pn-Shmt*, probably a son of the tomb-owner *Hqꜣ-mꜣꜣꜣt-Rc-nhh*, *temp.* Ramesses IV (Malek, *SAK* 12 (1985), 57[C] fig. 9).

kꜣn 'charioteer'⁶²

1. *Mrjj-Rc*, whose female slave is mentioned in P. Bibl. Nat. 209 vs., *temp.* Sethos I (Spiegelberg, op. cit. 23 pl. x a[II, 4 a]).
2. *Rc-ms*, mentioned in P. Bibl. Nat. 211 vs., *temp.* Sethos I (id. ib. 27 pl. xivb [c, 7]).
3. *Hrj*, as above, *temp.* Sethos I (id. ib. 26 pl. xiv a [19]).
4. *Hrj-nfr*, whose '*hrw*   which is in the south part of Memphis' is mentioned in P. Bibl. Nat. 210 rt., *temp.* Sethos I (id. ib. 24 pl. xi a [a, 4]).
5. *Nmtj-ms*,⁶³ Dyn. 19 (PM III², 737).

snnj 'chariot warrior'⁶⁴

1. *Pꜣ-wr* (or *Pꜣ-sr*), mentioned in P. Bibl. Nat. 209 rt., *temp.* Sethos I (Spiegelberg, op. cit. 21 pl. ix b [III, 1]).
2. *Mjj*, as above, *temp.* Sethos I (id. ib. 20 pl. ixa [II, 21]).

hrj snnjw 'commander of chariot warriors'⁶⁵

1. name not known, late Dyn. 18 or Dyn. 19 (G. T. Martin, *The Tomb of Hetepka* (London, 1979), No. 132 pl. 38; id. *Corpus of Reliefs of the New Kingdom* (London, 1987), I, No. 47 pls. 16, 47).

⁵⁸ 'of the Residence'; this probably refers to Pi-Ramesse rather than to Memphis, and the 'Great Stable of Ramesses II' and that 'of Merneptah' were probably located there.

⁵⁹ 'of the Lord of the Two Lands'. The title quoted in PM III², 553 is based on Loret's 'chef de la cavalerie', but I may have taken his rather free translation too literally.

⁶⁰ 'of the stable of Sethos I, l.p.h.'

⁶¹ 'of the Lord of the Two Lands'.

⁶² *MRTO*, 67-8, 162-3. A charioteer whose name is lost, *temp.* Sethos I, is mentioned in P. Bibl. Nat. 211 rt. (Spiegelberg, *Rechnungen aus der Zeit Setis I.*, 26 pl. xiii b [c, 2]).

⁶³ 'of His Majesty'.

⁶⁴ *MRTO*, 59-62, 155-6.

⁶⁵ *MRTO*, 156.

5. Memphis and Saqqâra under the Hyksos and at the beginning of the Eighteenth Dynasty

The record of events at Memphis following the end of the Middle Kingdom and in the early New Kingdom is sketchy. Several rulers who continued in the tradition of the Twelfth Dynasty, and probably resided at It-taui (el-Lisht), the Middle Kingdom capital further to the south, were buried in pyramids in the traditional Memphite area (Saqqâra and Dahshur). Saqqâra served as a necropolis of lesser importance for private individuals of this period.⁶⁶ The royal line was brought to an end by the Hyksos. Josephus, quoting Manetho,⁶⁷ states that the Hyksos king Salitis had his seat at Memphis (or It-taui), and in the remains of the Epitome preserved by Africanus⁶⁸ the fact that the 'Shepherd Kings' seized Memphis symbolizes occupation of the whole country. Kamose complains of his inability to reach *Hwt-Pth* and the Nile beyond.⁶⁹ A fragment of a red granite vessel of *ꜥꜣ-qnn-Rꜥ* Apophis II comes from Mît Rahîna,⁷⁰ and a burial containing a dagger with the cartouches of *Nb-hpš-Rꜥ* Apophis III was found at Saqqâra.⁷¹

It is likely that control of the Memphite area was already contested by Kamose, but may only have been achieved in the second half of the reign of Amosis.⁷² The ship in which Ahmose, son of Ibana, served before the first skirmishes near Avaris took place, was named *⟨ꜥꜥh-ms⟩-hꜥ w-m-Mn-nfr*, '⟨Amosis⟩ who Appeared in Memphis'.⁷³ Towards the end of the reign of Amosis, in his year 22, there is a record of stone being extracted at Maꜥsara for the construction of the Memphite 'Mansions of the Millions of Years' (i.e. the memorial temple).⁷⁴ It was probably also during the reign of Amosis that Neshi, represented on the 'Second' Kamose stela, was given a plot of land in the area to the south of Memphis which became the subject of the prolonged series of lawsuits recorded in the Saqqâra tomb-chapel of his descendant Mose during the reign of Ramesses II.⁷⁵

Memphis' rise to new prominence, therefore, probably occurred early in the Eighteenth Dynasty.⁷⁶ It became the seat of northern administration of the country, and the monument of Sipair adds evidence for this development. Its strategic

⁶⁶ e.g. the coffin published by J. Malek and D. N. E. Magee in *BSEG* 9-10 (1984-5), 176-80 figs. 2, 3.

⁶⁷ *Contra Apionem*, i. 14, after W. G. Waddell, *Manetho* (London, etc., 1940), 79-81.

⁶⁸ After Waddell, op. cit. 91.

⁶⁹ Carnarvon Tablet I, 4, A. H. Gardiner, *JEA* 3 (1916), 98-9; Smith and Smith, *ZÄS* 103, 70.

⁷⁰ Berlin 20366, PM III², 874.

⁷¹ Cairo CG 52768, PM III², 552.

⁷² Vandersleyen, *Les Guerres d'Amosis*, 31-2, argues strongly in favour of placing this event not before year 11 of Amosis. W. Helck's correction (*GM* 19 (1976), 33-4) may affect the precise date, but not the argument.

⁷³ *Urk.* IV, 3, 9. This would also be the earliest reference to the city as *Mn-nfr* but for the scarab of a *hꜥtj-ꜥ⟨n⟩ Mn-nfr ꜥmn-m-hꜥt-snb* (G. T. Martin, *Egyptian Administrative and Private-Name Seals* (Oxford, 1971), no. 182), whose name and title suggest that he belongs to the Second Intermediate Period.

⁷⁴ *Urk.* IV, 25, 9-11.

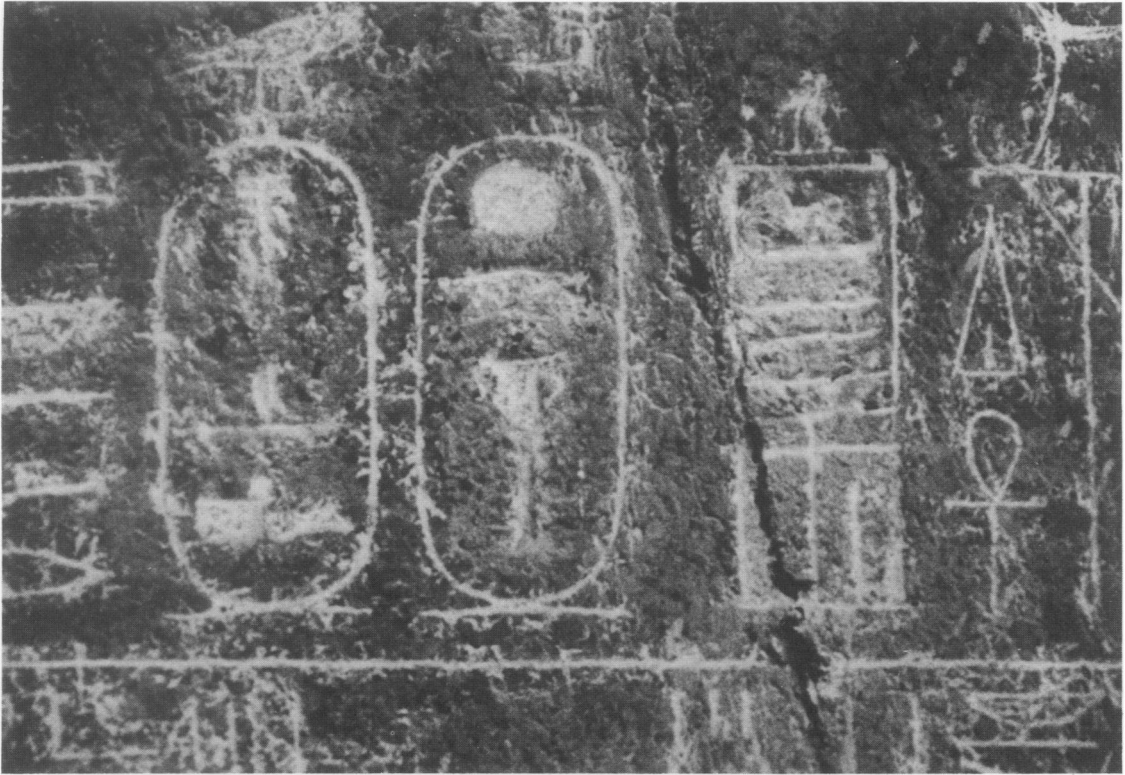
⁷⁵ For the identification see G. Posener, *RdE* 16 (1964), 213-14. Further comments, Habachi, *The Second Stela of Kamose*, 56-7, and Gaballa, *The Memphite Tomb-Chapel of Mose*, 28.

⁷⁶ J. van Dijk in A.-P. Zivie (ed.), *Memphis et ses nécropoles*, 37-45, used my statement in *SAK* 12 (1985), 44 as a starting point for his argument, but I fear that I was misunderstood.

location enhanced its importance during the military campaigns undertaken in Palestine and Syria. The palaces in the Memphite region started playing host to royal princes awaiting a call to the highest office in the land.

Material evidence from the city itself, particularly of an early Eighteenth Dynasty date, is still scarce. The pre-Ramesses II temple of Ptah is hidden under the houses of Kôm Fakhry at Mît Rahîna, but recent work (October 1987) of the EES probably identified Ramesside additions at its eastern extremity.⁷⁷ Small sections of the city, which seem to be contemporary with the Eighteenth Dynasty, are being excavated by the EES and the Faculty of Archaeology of Cairo University, and this work may dramatically change the present picture.

⁷⁷ J. Malek, *Archaeology Today* 9 [4] (Apr. 1988), 45; D. G. Jeffreys and J. Malek, *JEA* 74 (1988), 23.



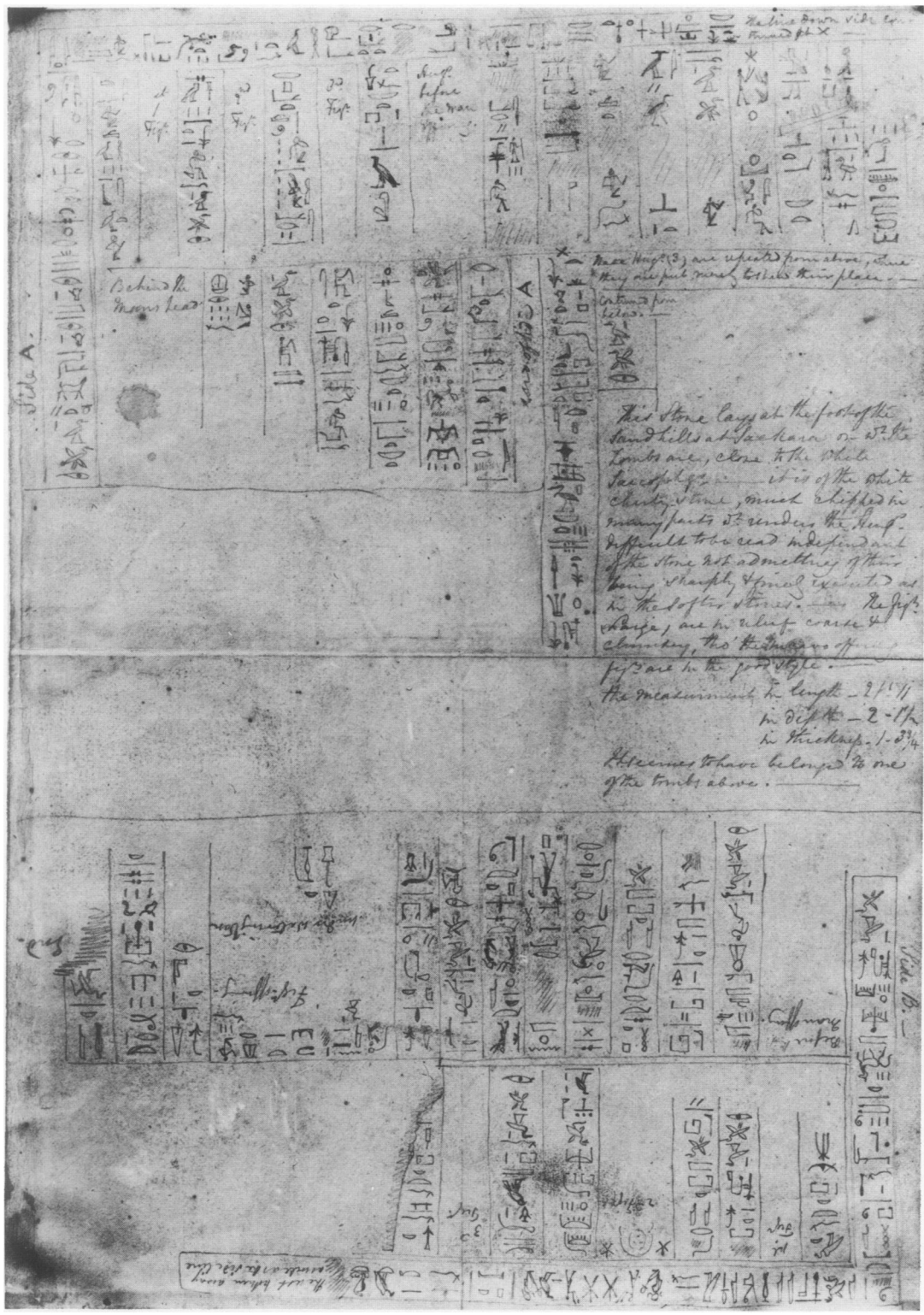
1. Cairo JE 35256, detail (p. 48)

A PROTECTIVE MEASURE AT ABYDOS



2. Gardner Wilkinson papers (vii. 49) from Calke Abbey, Bodleian Library, Oxford, by kind permission of the National Trust (p. 62)

AN EARLY EIGHTEENTH DYNASTY MONUMENT



Hay MSS. 29812, 85, by kind permission of the British Library (p. 62)

AN EARLY EIGHTEENTH DYNASTY MONUMENT

WALTER SEGAL'S DOCUMENTATION OF CG 51113, THE THRONE OF PRINCESS SAT-AMUN

prepared for publication by M. EATON-KRAUSS

In 1935, the architect Walter Segal studied the ancient Egyptian chairs and stools in the collection of the Egyptian Museum, Cairo. Segal's record of CG 51113, including scale drawings, is here published with a brief commentary by the editor of his Egyptological papers.

THE throne of Princess Sat-Amun, discovered among the furnishings in the tomb of Tuyu and Yuya (KV 46), was first described (by P. E. Newberry) and illustrated in T. M. Davis' publication of the tomb in 1907.¹ The following year, J. E. Quibell's treatment of the throne appeared in a volume of the *Catalogue général* devoted to objects from KV 46.² Recently, it has been illustrated in colour and summarily described in the catalogue of the Nofret exhibition.³

The scale drawings and notes on the chair's construction reproduced here were made by Walter Segal in August 1935.⁴ In April of that year, following a season as architect with the mission of the Ludwig Borchardt Institute at the funerary temple of Thutmosis III,⁵ Segal initiated a study of the remains of ancient Egyptian chairs and stools in the collection of the Egyptian Museum in Cairo.⁶ His project was undertaken with the full cooperation of the museum authorities; each piece was removed

¹ T. M. Davis, G. Maspero, P. E. Newberry, H. Carter, *The Tomb of Louiya and Touiyou* (London, 1907), 27–42, with three figures in the text and pls. xxxiii–xxxiv.—The circumstances of the tomb's discovery and clearance are considered in Chapter 8 of C. N. Reeves' monograph *Valley of the Kings. The decline of a royal necropolis*, in press.

² *The Tomb of Yuua and Thuiu* (Cairo, 1908), 53–4, pls. xxxviii–xliii.

³ D. Wildung, S. Schoske, eds., *Nofret—Die Schöne. Die Frau im Alten Agypten* (Cairo–Mainz, 1984), No. 37, with detail photos of the decoration on the front of the back-rest as end papers. The catalogue entry does not include the chair's measurements, an omission rectified (together with errors in the bibliographical references) in the French version of the catalogue, *La femme au temps des pharaons* (Mainz, 1985), 86 q.v. The following selected references may be added to PM i², 563: H. S. Baker, *Furniture in the Ancient World. Origin and Evolution 3100–475 B.C.* (London, 1966), 63–6, with figs. 68–72 and colour pl. iv b (illustrating a facsimile of CG 51113 made in Cairo 'soon after the discovery'); *Toutanchamon et son temps*, exhibition catalogue, Petit Palais (Paris, 1967), No. 11; M. Metzger, *Königsthron und Götterthron* (Neukirchen-Vluyn, 1985), 75–6 with pls. 31: 226, 32: 229.

⁴ Segal was born in Berlin in 1907, and died in London in 1985. The following remarks on his Egyptological work are based on conversations and correspondence with him as well as on a perusal of his papers in my possession (see further, below). For a biography, see J. McKean, *Learning from Segal/Lernen von Segal. Walter Segal's Life, Work and Influence/Walter Segals Leben, Werk und Wirkung* (Basel, Boston, Berlin, 1989). A concise sketch of Segal's career may be found in the brochure prepared in conjunction with the commemorative exhibition 'An Architecture of Understanding' that was shown at the Royal Festival Hall, London, 17 May–12 June, 1988.

⁵ See H. Ricke, *Der Totentempel Thutmosis' III.* (Cairo, 1939), 1, where Segal's participation in the campaign is cited.

⁶ To the best of my knowledge, this work has been mentioned in print only by A. Lucas, *ASAE* 41 (1942), 147, whose comment is to be corrected insofar as Segal did not study the beds from the tomb of Tutankhamun. Lucas himself contributed occasionally to Segal's notes by identifying some of the materials used in the construction and decoration of the chairs and stools.

from the exhibition galleries to a study room on the third floor of the museum where Segal examined, measured, drew and photographed it. The corpus, which includes some 92 items,⁷ was completed in October 1935 when he departed Egypt.⁸

Beginning in February 1936, Segal recorded several pieces in the collection of the British Museum.⁹ That summer, however, he found regular employment in London¹⁰ which seems soon to have put an effective end to his Egyptological research.¹¹ After the outbreak of hostilities between Germany and Great Britain in 1939, Segal entrusted his files to a safety deposit box with Barclay's Bank, London, where they remained until December 1984 when he withdrew the material and turned it over to the writer.

The dossier includes eighteen folders of varying volume; twelve of them are devoted to the documentation of extant chairs, stools and fragments thereof that Segal personally examined. The material is arranged typologically (e.g., 'niedrige Hocker und Schemel'; 'Klappstühle'; 'Sessel mit Armlehne'). The documentation of each item consists of a hand-written, detailed description of its construction, scale drawings (in pencil),¹² and photographs, for which this publication should serve as an example.¹³

Segal's records of the *Sitzmöbel* from KV 62 furnish the basis for a study entitled 'Thrones, Chairs and Stools from the Tomb of Tutankhamun' that will appear under our joint authorship.¹⁴ The writer's contribution to the publication includes copies

⁷ The highest JE number included in the collection is 65737. Since that number was assigned in 1935 (see B. V. Bothmer, in *Textes et langages de l'Égypte pharaonique*, III (Cairo, 1974), 116), it seems that Segal's file was quite current.

⁸ In November he was in Naples where he visited the Museo archeologico nazionale.

⁹ According to the contents of a letter addressed to Sydney Smith, the Keeper of Egyptian and Assyrian Antiquities, British Museum, Segal began his work on February 27th. (I am indebted to T. G. H. James for providing a copy of this and another letter written by Segal from the files of the Dept. of Egyptian Antiquities.)

¹⁰ Mentioned in a letter to Segal dated August 22, 1936, from his colleague the architect O. Königsberger, author of *Die Konstruktion der ägyptischen Tür* (Glückstadt, 1937), among the papers in my possession.

¹¹ Only a single drawing among Segal's papers is dated later than 1936: in April 1939, he recorded an animal-legged stool in the possession of Dr. H. Burg. According to B. V. Bothmer, whom I wish to thank for help in identifying the person in question, Dr. Burg was an art dealer in Berlin who emigrated to the U.S.A. prior to World War II.

¹² Unless otherwise specified, all measurements are in centimetres. Only in the case of a few items are drawings not included in Segal's record. One example is JE 62030, the so-called ecclesiastical throne from the tomb of Tutankhamun. For this object, see now O. Wanscher, *Sella Curulis. The Folding Stool. An Ancient Symbol of Dignity* (Copenhagen, 1980), 29–64 passim, with illustrations on pp. 29, 31, 33, 35, 39, 41 and 43.

¹³ Some minimal editing of the notes was necessary and in accordance with Segal's wishes. (For example, a few spelling errors have been corrected and commas inserted to facilitate understanding.) Furthermore, as indicated below, a paragraph quoting the Davis' publication has been omitted. The file on CG 5113 includes thirteen photographs of which only three—two showing hitherto unpublished views of the chair—are reproduced here.

¹⁴ See *GM* 76 (1984), 7–10, written without knowledge of Segal's work. The monograph will include the thrones Obj. nos. 87, 91, 349 and 351, the chairs Obj. nos. 39 and 82, and the stools Obj. nos. 78, 81, 83, 84, 139, 140, 142b/149, 412 and 467. Obj. nos. 66, 67, 457 and 595 were not recorded by Segal. According to the object cards at the Griffith Institute, Oxford, both Obj. no. 66 and 595 were in a precarious state of preservation at the time the tomb was cleared. Neither is entered in the Journal d'Entrée or in the Temporary Register of the Cairo Museum. Obj. no. 595 is not a seat but a footstool. Finally, Segal, like Howard Carter, did not consider Obj. no. 457 to belong to a chair.—My sincere thanks are due to Jaromir Malek for providing access to Carter's documentation of the *Sitzmöbel* from the tomb and for permission to make use of it. His cooperation is here gratefully acknowledged.

and translations of the hieroglyphic texts inscribed on the thrones, description of the decorative elements from an Egyptological point of view and presentation of the comparative material.

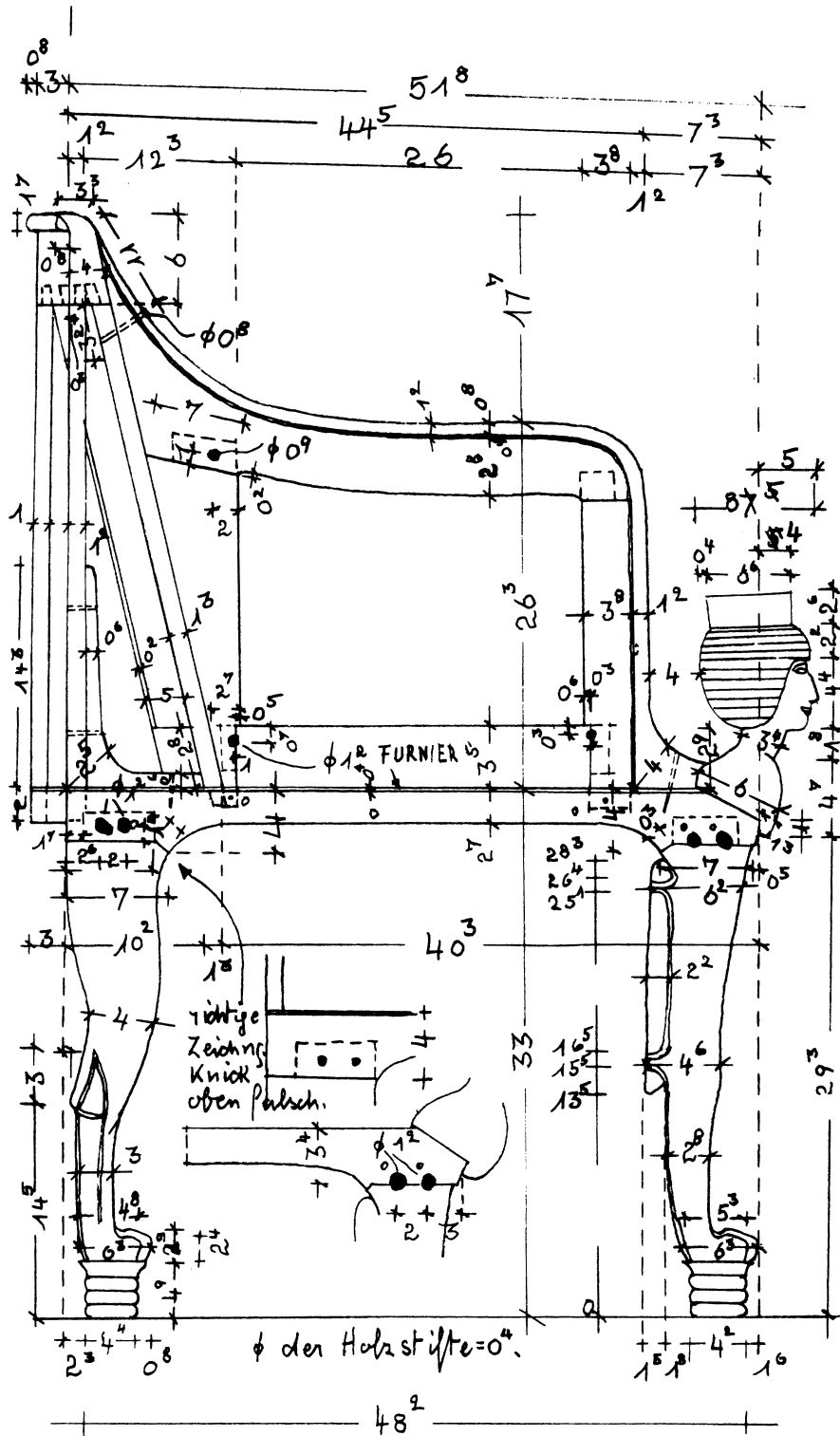
Segal was not trained as an Egyptologist. His documentation of a particular piece includes only exceptionally a copy of an inscription, as with the short texts on the back-rest of CG 51113 (below). In the present case, the hieroglyphs have been redrawn by the writer and are not facsimiles. The commentary below has been kept to a minimum since the decoration of Sat-Amun's throne has been frequently considered in the past.

KAIRO 51113

Lehnstuhl der Prinzessin Sat-Amun, Enkelin des Yuua und der Tuiu, Tochter Amenophis' III. und der Königin Teye

Sessel mit nach hinten geneigter, durch 3 Stützen abgestrebter Rückenlehne und hohen Seitenlehnen (figs. 1-2). Er hat Löwenbeine auf nach unten zu konischen Zapfen. Diese Zapfen bestehen je aus 4 Teilen, 3 unteren Wülsten und 1 mit Hohlkehle versehenen oberen Endstück. Sie waren mit einer Stuckschicht überzogen (auf Leinwand?^a), die in den Rillen noch besseren Halt finden mochte, und versilbert (heute schwarz). Von diesem Überzug sind an allen 4 Beinen noch Reste vorhanden. Die Vorderfüße haben je 4 Zehen und je eine Krüppelzehe, die Hinterfüße nur je 4 Zehen. Vorder- und Hinterbeine sind je untereinander mittels der üblichen Astgabelverstrebung verfestigt, zu der in etwa 19 cm vom Boden noch je eine Querstrebe tritt. Diese endet nach beiden Seiten in je einer Papyrusdolde, auf die sich die Enden der Astgabel aufsetzen. Diese Dolden und ein Stück des Stengels sind vergoldet, der übrige Teile der Strebe ist ohne Überzug oder Farbanstrich. Die Astgabel selbst war ehemals versilbert (heute schwarz).

Der Sitzrahmen weist die übliche Form mit den angearbeiteten Stuhlbeinteilen auf. Die einzelnen Rahmenstücke sind durch einfache Verzapfung und Holzstifte wie sonst auch miteinander verbunden. Das hintere nach außen geschweifte Rahmenstück besteht aus 2 voneinander etwa $1\frac{1}{2}$ cm entfernten Rahmenhölzern, deren vorderes das Geflecht des Sitzrahmens und die Rückenlehne aufnimmt, während das hintere die 3 Streben hält, die die nach hinten geneigte Rückenlehne abstützen. Die Löwenbeine greifen mittels Zapfen in die angearbeiteten Stuhlbeinteile des Sitzrahmens ein und sind durch Holzstifte miteinander verfestigt. Zur besseren Befestigung traten dann später je 2 Bronzenägeln hinzu (erstes Mal!), die wohl auch dekorative Bedeutung haben mochten. An dem vom Beschauer gesehen rechten Hinterbein ist einer dieser Nägel verlorengegangen. Der Sitzrahmen ist an der Oberseite mit einem 4 mm starken Fournier aus dem gleichen guten und harten Holz^b überzogen, aus dem die anderen Teile des Stuhles bestehen. Das Fournier ist mittels Holzstiften mit dem Sitzrahmen verbunden. Die Kantenstöße in den Ecken sind ebenso wie bei dem Sitzrahmen gerade.



- Bunte Nägel sind voll gereicht.
- Holzstifte nur in Kontur.

FIG. 2. Seitenansicht, CG 51113 (cf. pl. IX, 3).

An den beiden Seiten des vorderen Sitzrahmens ist je ein Prinzessinnenköpfchen befestigt, das über den Sitzrahmenteil herunterreicht und mit dem Sitzrahmen durch Holzstifte sowie durch eine schwärzlich harzartige(?) Masse verbunden ist. Ich halte beide Köpfchen für Porträts der Prinzessin Sat-Amun. Sie sind bis auf die Perücke vergoldet. Diese ist anscheinend schwarz gewesen(?), heute ist nur der Holzton vorhanden. An den Vorderbeinen (deren Dorne übrigens vergoldet sind) sowie z.T. an den Hinterbeinen finden sich mehrfach Stellen aus hellerem Holz. An der Vorderseite der Vorderbeine und des linken Hinterbeins (vom Beschauer) sind in den Oberschenkeln ganz am Ende Stücke aus dem gleichen helleren Holz eingesetzt(?) → oder ist das nur als eine Art von Einschnitten anzusehen, für die aber jede Erklärung fehlt? Am rechten Vorderbein ist dieses Stück mittels Holzstiften befestigt. Bei den anderen Beinen scheinen diese Stücke durch eine schwärzliche harzartige(?) Masse befestigt worden zu sein. Im übrigen scheinen all die helleren Holzstücke aus gleichem Holz zu bestehen wie die sonstigen Stuhlteile, auch ihre Maserung verläuft im gleichen Zuge.

Die Rückenlehne besteht aus einem Rahmen, dessen Füllung nach der Vorderseite zu bündig liegt. Der Rahmen selbst besteht nur aus einem oberen waagerechten und 2 in dieses eingreifenden senkrechten Teilen, die sich in den Sitzrahmen einzapfen (das untere waagerechte Rahmenstück fehlt also) (cf. fig. 3). In diesem Rahmen sitzt die Füllung, die aus einem oberen und unteren waagerechten Rahmenholz besteht, die in den obigen Rahmen eingezapft sind und außerdem durch 3 senkrechte Streben miteinander verbunden sind, der Art, daß 4 freie Felder gebildet werden. An der Vorderseite dieses so entstandenen Rahmens befindet sich ein 4 mm starkes Fournier, das wie schon erwähnt mit den Vorderseiten des Hauptrahmens der Lehne bündig liegt und die eigentliche Lehnfläche bildet. Es ist mit den dahinter liegenden Streben und sonstigen Rahmenteilern durch Holzstifte verbunden und besteht anscheinend aus 3 Teilen, einem unteren waagerecht liegenden, aber krumm geschnittenen Stück und 2 daraufstehenden breiten Blättern; doch sind diese oberen Fournierteile vielfach rissig und gesprungen. Sie tragen eine in Stuck mit Vergoldung ausgeführte Darstellung sowie Schrift. An der Hinterseite (s. pl. IX, 1) sind die 4 Felder zwischen den Streben mit Stuck überzogen und versilbert (jetzt schwarz). Auf ihnen zeigt sich dasselbe Schuppenmuster, das sich gelegentlich bei der Darstellung von Göttersitzen, manchmal auch von Königssitzen findet (vgl. CG 51112).^c Die Schuppen laufen waagerecht, je eine Reihe von 6 Schuppen wechselt mit einer von 7 Schuppen. Bei der Verbindung der 3 Rahmentteile des eigentlichen Lehnrahmens findet sich an den oberen Stößen je ein Bronzenagel, der hier die Holzstifte ganz zu ersetzen scheint.

In das obere waagerechte Rahmenstück, dessen Wulst nach der Hinterseite übersteht und vergoldet ist, greifen auch die 3 Streben ein, die die Lehne abstützen. Sie fassen mit schwalbenförmigen Zapfen in den Sitzrahmen, und die beiden äußeren sind zur besseren Verfestigung noch durch vergoldete Astgabelstreben mit dem Sitzrahmen verbunden.

Die Seitenlehnen sitzen 7 mm hinter den Außenkanten der seitlichen Rahmenhölzer des Sitzrahmens (cf. fig. 2). Sie bestehen aus einem in Gegensatz zur Rücken-

lehne vollständigen 4-teiligen Rahmen und einer innenbündig liegenden Füllung, die nach außen nur 4 mm zurücktritt. Die Rahmenteile stoßen gerade aneinander, der Stoß ist gegen die Innenkante des anliegenden Holzes um 2–5 mm versetzt. Die Verbindung geschieht wie sonst durch Verzapfung, die Befestigung durch Bronzenägeln (je 4 an jeder Seitenlehne; an der linken Seitenlehne – links vom Beschauer – ist der Nagel rechts oben abhandengekommen). Die Seitenlehnen sind mit dem Sitzrahmen durch Einzapfung ihrer durchgehenden senkrechten Rahmenhölzer und mit der Rückenlehne durch Holzstifte verbunden. An der linken Seitenlehne (links vom Beschauer) finden sich auch die oben erwähnten helleren Holzteile, die jedoch in der Maserung ebenso mit den anderen übereinstimmen wie diese. Die auch sonst bei Seitenlehnen auftretende vordere Astgabelverstrebung zur weiteren Befestigung von Lehne und Sitzrahmen ist bei diesem Sessel um den oberen Rand der Lehne herumgeführt und läuft schließlich gegen die Rückenlehne aus. So bildet diese 2,7 cm breite Einfassung, die am oberen Ende mit je 2 Bronzenägeln mit der Rückenlehne, sonst aber durch Holzstifte mit dem Rahmen der Seitenlehne verbunden ist, zugleich eine Art Auflagefläche für den Arm des Sitzenden. Diese Einfassung liegt jeweils mit den Außenkanten der seitlichen Sitzrahmenhölzer bündig. Ihre eigentliche Astgabelstrebe läuft gegen das kurze Rückenstück des Köpfchens der Sat-Amun aus, wird durch dieses begrenzt und ist mit dem Sitzrahmen durch je einen Holzstift verbunden. Die ganze Einfassung nebst Astgabel ist vergoldet. Die Vergoldung macht es hier ebenso wie an anderen Stellen des Sessels nicht möglich, die Zahl und Lage aller Holzstifte festzustellen, die außerdem auch in großer Zahl zum Füllen von Astlöchern verwendet worden sind.

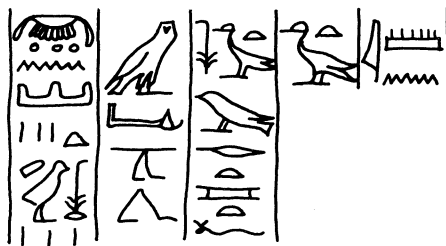
Dekoration

Sie ist in flach-erhabenem und z.T. flachem Stuckrelief ausgeführt und vergoldet. Die Darstellungen beschränken sich auf die Vorderseite der Rückenlehne und auf die Innen- und Außenseiten der Seitenlehnen.


Die Darstellung an der Vorderseite der Rückenlehne (pl. IX, 3) zerfällt in 2 Teile, die zueinander symmetrisch jede die gleiche Darstellung aufweisen, deren jede in der entsprechend anschließenden inneren Seitenlehnendekoration ihre Ergänzung findet. Auf der Rückenlehne ist also 2 mal die gleiche Darstellung: die Prinzessin Sat-Amun sitzt beidemal auf einem Sessel mit Löwenbeinen auf nach unten zu konischen Zapfen mit nach hinten geneigter abgestrebter Rückenlehne und verhältnismäßig niedriger Seitenlehne, deren Füllung aus dem gleichen Schuppenmuster besteht, das sich an der Hinterseite des wirklichen Sessels (und bei dem Stuhl der Königin Teye in Darstellung auf der Rückenlehne des kleineren Sessels aus dem gleichen Grabe zeigt, der von Sat-Amun und Teye den Eltern bzw. Großeltern ins Grab gestellt worden war) befindet.^d Das gleiche Muster ist auch an der geflügelten Sonnenscheibe und wie schon erwähnt als Füllung von Götter- und Königssitzen verwendet worden. Beide Figuren kehren einander den Rücken zu, die Stühle stehen aber auf derselben Matte.^e Beidemal liegt auch vor dem Sessel eine Fußbank oder ein flaches Kissen, auf das die Prinzessin die Füße setzt. Die

Prinzessin trägt ein enganliegendes Oberkleid und einen langen bis auf die Fußknöchel reichenden Faltenrock. Um den Hals trägt sie einen breiten Halskragen und an den Armen ebensolche Armbänder aus Gold. Auf dem Kopf trägt sie eine kurze Perücke, die durch ein schmales um den Kopf geschlungenes Band festgehalten wird, das hinten zu einem Knoten gebunden ist, und dessen Enden herunterhängen. An der Stirn ist ein kleiner Antilopenkopf mit Hörnern befestigt.^f Auf dem Kopf trägt sie weiter eine Krone, aus der 3 langstielige Lotusblumen und zwischen ihnen 2 Knospen herausragen.^g Die Prinzessin hält in der einen Hand ein Sistrum, in der anderen ein Menat.^h Von ihrer Krone hängt nach beiden Seiten ein breites Band bis auf ihre Brust herunter.ⁱ Vor ihr steht jedesmal eine Dienerin, die ihr auf einer Matte (die wohl über ein Tablett gebreitet ist) einen goldenen Halskragen entgegenreicht. Sie ist ebenfalls in ein enganliegendes Gewand und einen langen waagrecht gemusterten Rock gekleidet, der durch einen Gürtel gehalten wird. Sie trägt ebenso Halskragen und Armbänder, einen ähnlichen Kopfputz nebst Perücke wie die Prinzessin, doch ohne Blumen und Bänder. In den Ohren hat sie ebenfalls Ringe.^j Im übrigen steht sie nicht mit auf der Matte sondern auf dem Fußboden, der durch ein die Darstellung nach unten abschließendes Ornament gebildet wird.

Über den beiden Seiten der Darstellung befindet sich, rechts und links, jedesmal die gleiche Inschrift in erhabenen, vergoldeten Hieroglyphen, sorgfältig ausgeführt in 3 senkrechten und einer waagrecht zu lesenden Zeile:



Die ganze Darstellung ist von einem Bandfries gerahmt (das wohl Blumenstiele darstellen mag, die durch Bindung zusammengehalten sind). Von der oberen Umrahmung hängen abwechselnd Lotusblüten und -knospen friesförmig nach unten Stück, vergoldet. Über dieser Darstellung befindet sich die geflügelte Sonnenscheibe, deren Flügel ebenfalls das Schuppenmuster aufweisen, mit den beiden

Uräen und mit der Inschrift:  Auch diese Dekoration ist in flach-erhabenem

Relief aus Stuck ausgeführt und vergoldet.

An diese Darstellung auf der Rückenlehne schließt sich an den beiden Innenseiten der Seitenlehnen folgende Ergänzung an: 4 Dienerinnen, die der Dienerin vor der Prinzessin zu folgen scheinen, die ebenfalls auf einer Art Tablett goldene Ringe tragen, um sie der Prinzessin darzubringen. Sie sind ähnlich wie die erste Dienerin gekleidet in enganliegende Oberkleider, reich gewirkte und durch Gürtel gehaltene Röcke, tragen aber im Gegensatz zur jener auf dem Kopf Blumen, 2 von ihnen in der

gleichen Anordnung wie die Prinzessin. Die Umrahmung der Darstellung wird durch denselben Fries gebildet wie bei der Rückenlehne.

Die Darstellungen an den Außenseiten der Seitenlehnen weichen voneinander ab. Auf der linken Außenseite (links vom Beschauer) steht eine löwenköpfige Toëris zwischen 2 tanzenden Bes, deren vorderer ein Tambourin hält, während der hintere 2 Dolche schwingt. Auf der rechten Außenseite tanzen 3 Besfiguren (pl. IX, 2). Die beiden linken schlagen Tambourine und kehren sich dabei den Rücken zu, während der dritte die üblichen beiden Dolche beim Tanzen schwingt. Auch diese Darstellungen sind ebenso eingefäßt wie die übrigen und ebenfalls in flach-erhabenem Relief in Stuck ausgeführt und vergoldet.^k

Der Stuhl ist *sehr solide* gebaut, er muß vor seiner Bestimmung als Grabbeigabe der Prinzessin Sat-Amun im täglichen Gebrauch gedient haben, wie an der abgeriebenen Vergoldung der Rückenlehne, den Seitenlehnen, den kleinen Prinzessinnenköpfchen und anderen Stellen deutlich erkennbar ist. Das Gleiche beweist übrigens auch die Aufschrift.

Die kleinen Köpfchen scheinen dem Gesicht der Prinzessin in den Darstellungen auf der Rückenlehne recht ähnlich zu sein. Sie tragen auch eine ähnliche Krone, die von Lotusblumen und -knospen miteinander abwechselnd umgeben wird. Die aufrecht- und freistehenden Blumen, die die Prinzessin trägt, sind hier aus begreiflichen Gründen fortgefallen.^l Hinzuzufügen ist noch, daß die Fournierarbeit in Bezug auf ein sauberes und ästhetisch befriedigendes Einpassen der einzelnen Teile unter dem Niveau der sonst bei dem Sessel geleisteten Arbeit steht. Die Bronzenägel scheinen wohl erst angebracht worden zu sein, als der Sessel als Grabbeigabe bestimmt wurde.^m

Geflecht des Sitzes (fig. 4)

Besteht aus feinem Schnurgeflecht. Je 4 Schnüre bilden zusammen eine Spannung von denen je 6 auf ein Loch kommen, je 3 in einer Richtung kreuzen sich in Über- und Untergeflecht mit den 3 entgegengesetzt laufenden des Nebenloches. Die Schnüre aus Hanf(?) sind 1,25 mm stark.

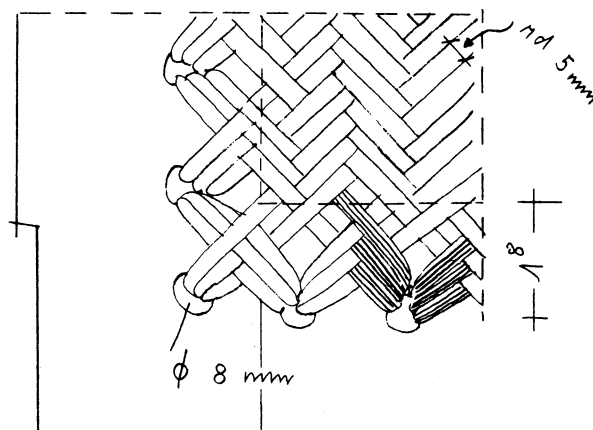


FIG. 4. Schema des Geflechts, linke Ecke vorn.

Notes

^a For this standard gilding technique, see G. Möller, *Die Metallkunst der alten Ägypter* (Berlin, 1924), 60 n. 112.

^b This description is at odds with that of Newberry, in Davis *et al.*, op. cit. 27: 'The back and frame of the seat are constructed of a common wood veneered with a rarer one, probably walnut...' Newberry's tentative identification of the veneer as walnut was never confirmed by analysis nor is it credible, since walnut is otherwise unattested in ancient Egypt; cf. A. Lucas, rev. J. R. Harris, *Ancient Egyptian Materials and Industries*⁴ (London, 1962), 429-48.

^c The use of imbricated ornament in the decoration of divine as well as royal thrones is discussed by K. P. Kuhlmann, *Der Thron im alten Ägypten* (Glückstadt, 1977), 57, 83, who describes the motif as *schuppenförmige Federplättchen*. – Drawings and a detailed description of CG 51112, Queen Teye's armchair from KV 46, that is cited by Segal here and below, are included among his papers.

^d The conceit of depicting the owner of a chair in its decoration as seated upon a chair of comparable type is not limited to royal examples. Reniseneb is depicted on the front of the back-rest of his chair (Metropolitan Museum of Art 68.58) seated upon a chair of similar type: see H. G. Fischer, *L'écriture et l'art de l'Égypte ancienne* (Paris, 1986), 190-2, pls. 86-8; P. De Bruyne, *Vorm en Geometrie in de Oud-Egyptische Meubelkunst*, exhibition catalogue, Museum voor Sierkunst (Ghent, 1982), no. 13.

^e For the mat shown beneath the throne in two-dimensional representations, see Kuhlmann, op. cit. 70, 90.

^f The gazelle diadem has been discussed most recently by L. Troy, *Patterns of Queenship in ancient Egyptian myth and history*, Boreas 14 (Uppsala, 1986), 129-30 with fig. 59 illustrating the representations of Sat-Amun on CG 51113. Troy notes the diadem's connotation of subordinate ranking among royal women. (Her interpretation of the gazelle's reference is, like much of her analysis, speculative; cf. the remarks of B. Lesko, *VA* 3 (1987), 287-90, in a review of Troy's study.)

^g The modius with floral decoration atop it is an iconographic feature likewise considered by Troy, op. cit. 121-2. It occurs in combination with the gazelle diadem (and earrings) already in the representation of Menena's daughters, in TT 69 (temp. Thutmose IV?; *ibid.* fig. 50) who, like Sat-Amun, carry sistra. (The second hand of only one of the women is preserved; it is empty.) C. C. van Siclen, in *JNES* 33 (1974), 152, tentatively suggested that this headdress was 'peculiar to those queens who married their own fathers'; in the decoration of CG 51113, Sat-Amun is styled only *sst njswt*, not royal wife, a title documented, however, for her elsewhere. Note that the same headgear is worn by the princess Amenemopet shown sitting on the lap of the scribe of recruits Haremhab in the paintings of his tomb (see A. and A. Brack, *Das Grab des Haremhab* (Mainz, 1980), 28 with pl. 36a).

^h The caption to Troy, op. cit., fig. 59, a detail of the decoration on the back-rest of CG 51113, implies that the attributes of sistrum and menat designate Sat-Amun a priestess of Hathor, but this office is not documented among her titles. In this connection, note that the references to Sat-Amun, daughter of Amenhotep III, have been confused in Troy's index with those of Sat-Amun, daughter of Ahmose (?). Furthermore, her *Belegliste* for the former is to be compared with the more complete list of Chr. Meyer, *LÄ* v, 486 n. 1 (to which add no. 16, *ibid.*, 487, and the relief fragment from the funerary temple of Amenhotep III, cited *ibid.* 486 n. 13). Troy's item 18.35/9 (= 18.33/3) is by no means attributable with certainty to Sat-Amun (cf. the circumspect consideration of this document by Meyer, op. cit.). Similarly, none of the 'bracelet plaques' in the Metropolitan Museum of Art purported to derive from KV 22 (Troy's 18.35/10 = 18.34/8) bears Sat-Amun's name (see Hayes' description of their decoration, *Scepter* II, 242 f.). Thus these documents should be deleted.

ⁱ The 'breites Band' (Newberry described it as a 'flap'—Davis *et al.*, op. cit. 38) is in fact an elaborately plaited side-lock worn in combination with the short, round wig. Although this coiffure is most familiar from depictions of the king's female relatives (not only daughters, but also a sister-in-law: cf. the depictions of Nefertiti's sister, e.g., in N. de G. Davies, *The Rock Tombs of el Amarna*, II (London, 1905), pls. v, vii), its use does not seem to have been restricted to royalty (at least during the Amarna Period: unlabelled women customarily identified as 'ladies-in-waiting' wear it: e.g., N. de G. Davies, *The Rock Tombs of el Amarna*, I (London, 1903), pl. 19). On the other hand, it does not belong to the iconography of queens who may wear instead the curled side-lock (e.g., Queen Ankhesenamun in the decoration of the small golden shrine from KV 62: M. Eaton-Krauss—E. Graefe, *The Small Golden Shrine from the Tomb of Tutankhamun* (Oxford, 1985), pls. ix (left), xv, xvii and xix). As examples in statuary show, the plaited side-lock was worn on the right side of the head (e.g., B. van de Walle, *CdE* 43 (1968), 45 with fig. 1); in two-dimensional representations, it is, however, regularly depicted on the near side of the head (i.e., in the 'foreground'), regardless of the orientation of the figure.

^j As this comment reveals, Segal noticed the presence of earrings in the depictions of Sat-Amun, but inadvertently omitted to mention them in his description of her figure.

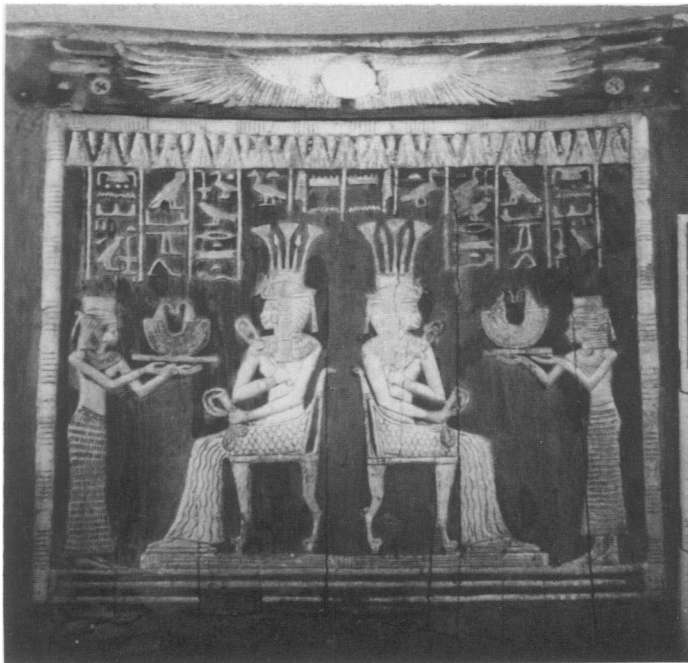
^k In Segal's notes there follows a paragraph (here omitted) on the Toëris representation summarizing the comments in Davis' publication, op. cit. 40 f.

^l The explanation may well account for the omission of the gazelle diadem and the plaited side-lock. Note that the vulture diadem and the tall feathers are not included in the iconography of the female head on Queen Teye's throne as depicted in TT 192 (*The Tomb of Kheruef, Theban Tomb 192*, by the Epigraphic Survey in cooperation with the Dept. of Antiquities of Egypt, OIP 102, Chicago, 1980, pls. 48–9). Comparison of this depiction of a throne with CG 51113 was made as early as 1943 (see J. Leibovitch, in *ASAE* 42 (1943), 103 with fig. 14) and recently by Fischer, op. cit. 196 n. 66 with pl. 93.—The substitution of female for feline heads on the thrones of these royal women transforms the lion of the king's throne into a (female) sphinx, according to both Metzger (op. cit. 76) and Kuhlmann (op. cit. 87 f.). The latter argues further (ibid. and *LÄ* VI, 526 f.) that both throne types embodies their royal owners.

^m Cf. however, Segal's observation above that the bronze nails were probably intended to enhance the throne's stability, certainly an unnecessary precaution if it were no longer to be used in life. Furthermore, two of these nails were lost (viz. on the right rear leg and the left arm-rest, as noted above) before the chair was deposited in KV 46. (This latter argument may not apply, however, should KV 46 represent a reburial of Teye's parents.)



1. Rückenansicht, CG 5113: *Aufnahme: W. Segal* (p. 82) 2. Seitenansicht, CG 5113: *Aufnahme: W. Segal* (p. 86)



3. Vorderseite der Rückenlehne, CG 5113: *Aufnahme: W. Segal* (p. 84)

WALTER SEGAL'S DOCUMENTATION OF CG 5113

DOMESTIC SHRINES AND THE CULT OF THE ROYAL FAMILY AT EL-'AMARNA*

By SALIMA IKRAM

A discussion of the garden shrines found in the enclosures of the houses of Tell el-'Amarna leads to the conclusion that they were dedicated to the royal family as intermediaries between the citizen and Aten.

IN the gardens of many of the houses at el-'Amarna lay small constructions that have in the past been dubbed chapels, kiosks, garden houses or even birth houses (*mammisi*).¹ It is unfortunate that they have hitherto escaped the study that they deserve. This might be partially blamed upon the lack of interest that many of the early excavators displayed towards subsidiary buildings. In their publications,² there are virtually no lists of where specific objects were found, and occasionally the only record of a chapel is in the general site plans, without any mention in the text. For this study, some material had to be gleaned from such plans and from unpublished material; this is particularly the case for the North City, records of which survive in the archives of the Egypt Exploration Society.

I have been able to recognize forty-six such buildings in the city, which can be divided into five types: I—Simple, II—Bipartite, III—Temples, IV—Altars and V—Miscellaneous.

Type I — Simple shrines

This is the most common type of shrine, numbering eighteen in all. The plan shows a sloping flight of stairs, leading up to a platform, upon which is a walled room. The latter might contain an altar of brick or limestone (fig. 1a). These chapels are often separated from the main part of the house garden by a wall and are surrounded by trees. There follows a list of such shrines, with mention of any variations in the basic plan.

*This paper has its origins in a Cambridge University Faculty of Archaeology and Anthropology M. Phil. thesis, supervised by Mr. Barry J. Kemp, to whom my thanks are due for suggesting the topic and much help and advice during its preparation. I must also thank Dr. Patricia Spencer for access to the Egypt Exploration Society's unpublished excavation records, the Committee of the EES for permission to use plans originally published in its memoirs, and Miss Helen Grassley for preparing the isometric reconstructions featured in fig. 3. Lastly, but by no means least, I must express my deep gratitude to Mr. Aidan Dodson, without whose counsel, encouragement and practical assistance this paper would never have seen the light of day.

¹There can be no question of their having been the latter, particularly since they contain no scenes relating to birth, cf. B. J. Kemp, *JEA* 65 (1979), 47–53, and are placed in areas not generally associated with *mammisi*. They could be called garden houses without compromising a status as chapels, given that an appreciation of Nature, Aten's creation, constituted a large part of the religion.

²L. Borchardt and H. Ricke, *Die Wohnhäuser in Tell El-Amarna* (Berlin, 1980) (*Wohnh*); T. E. Peet and C. L. Woolley; H. Frankfort and J. D. S. Pendlebury; J. D. S. Pendlebury, *The City of Akhenaten* I–III (London, 1923–1951) (*CoA*); also preliminary reports in *MDOG* and *JEA*.

Shrine	Area (m ²)	Entered from	Pylon	Material (Brick/ Stone)	House size	House Shrine	Near Water
N 48.1 ³	tiny	NE		B	Lg.		Y
N 49.10 ⁴	11	SE		B	Lg.	Y	
N 50.17 ⁵		SE		B	Med.	Y	
O 48.11 ⁶	2	SE		B	Med.	Y	
O 48.17 ⁷	8	NW		B	Lg.		
O 49.9/10 ⁸	15	NW		B	Lg.	Y	Y
O 49.23 ⁹	6	E		B	Lg.		Y
O 47.22 ¹⁰	11	NW	Y	BS	Med.	Y	Y
O 47.32 ¹¹	24	E	Y	B	Lg.	Y	Y
P 48.2 ¹²	6	E		B	Med.	Y	Y
Q 46.1 ¹³	20	SE	Y	BS	Lg.	Y	Y
Q 46.2 ¹⁴	8	SE	Y	S	Lg.		Y
R 44.1b ¹⁵		S		B	Lg.	Y	
T 34.1a ¹⁶	24	W		B	Lg.	Y	
T 35.9 ¹⁷		E		B	Med.		
T 36.5 ¹⁸	15	E	Y	B	Lg.	Y	
U 25.4 ¹⁹		N/S		B	?		
U 36.54 ²⁰	25	W		B	Med.		

N 48.1 Objects: fragments of statues of Akhenaten and Nefertiti.

N 50.17 There is a small rectangular area on the left side of the chapel which might have been for storage, or alternatively a strong supporting wall.

O 48.11/12 Objects: fragments of statues of the royal family.

³ *Wohnh.*, 171, stpl. iv, plan 52. In this and following tables, area figures are taken, in the main, from P. T. Crocker, *Social and Spatial Grouping among the Domestic Quarters at el-Amarna* (Cambridge, unpublished M. Phil. dissertation, 1984). Under 'House Size', a 'L(ar)g(e)' house is taken to be one whose compound area exceeds 330 m² and a 'Med(ium)' one has a corresponding area of between 190 and 330 m². 'Y' indicates the presence of a feature, a blank means no recorded evidence of such. A 'House Shrine' is any such structure *inside* the house; 'Near Water' indicates wells or ponds in the nearby garden.

Objects listed were found in, or close to, the shrines in question; it is generally unclear from the excavator's notes *exactly* where objects were found.

⁴ *CoA* 1, 20, plan i.

⁵ *Wohnh.*, 306, stpl. vi, plan 101.

⁶ *Wohnh.*, 207-9, plan 60.

⁷ *CoA* 1, 28, plan i.

⁸ *Wohnh.*, 246, stpl. v, plan 78.

⁹ *CoA* 1, 17, plan i.

¹⁰ *Wohnh.*, 131, stpl. iii, plan 32; Borchardt, *MDOG* 55 (1914), 14-16.

¹¹ *CoA* 1, 35, plan ii.

¹² *Wohnh.*, 217-9, stpl. iii, plan 63.

¹³ *Wohnh.*, 23, stpl. i, plan 2, pl. 1-3.

¹⁴ *Wohnh.*, 28, stpl. iii., plan 3.

¹⁵ F.L. Griffith, EES Field Notebook, 1923-4.

¹⁶ *CoA* II, 64, pl. xxii [6]; F. L. Griffith, *JEA* 17 (1931), 237, pl. lxxiv.

¹⁷ *CoA* II, 41, pl. vii.

¹⁸ *CoA* II, 50, plan ix.

¹⁹ EES North City House Record Cards.

²⁰ *CoA* II, 25, plan iv.

O 49.9/10 Objects: a bunch of faience grapes, of the type generally found used as roof decoration.

O 49.23 Objects: fragment of limestone stela, showing the king offering to Aten.

P 48.2 Objects: fragment of limestone statue of royal family.

Q 46.1 Objects: relief of king worshipping Aten.

T 34.1a Of unusual form, in that an exit at the rear led to a set of altars (see T 34.1b, under Type III). Contained a platform for a stela or statue (fig. 1b).

Objects: fragments of limestone stelae and other fragments showing Aten and the pharaoh.

Type II – Bipartite shrines

There are fourteen examples of this type. They are very similar to Type I in plan, but are bipartite. A sloping flight of steps leads to an anteroom or verandah, followed by the cella (fig. 1c). Column bases and fragments of some of the columns themselves have been found in conjunction with the shrines. Many of these chapels lay in separate compounds attached to the house.

Shrine	Area (m ²)	Entered from	Pylon	Material (Brick/ Stone)	House size	House Shrine	Near Water
M 50/51.1 ²¹	18	SE	Y	B	Lg.	Y	Y
N 47.6 ²²	8	NW		S	Med.		
Q 44.1 ²³	24	W			Lg.	Y	Y
T 33.1 ²⁴	5	W		B	Lg.	Y	
T 33.9 ²⁵	21	E		B	Lg.		
T 35.21 ²⁶	39	E		B	Med.		
T 36.11 ²⁷	16	W		B	Med.		
T 36.23 ²⁸	3	E		B	Med.		
T 36.37 ²⁹	18	E	Y	B	Med.		
U 25.11 ³⁰		W		B	Lg.		Y
U 36.15 ³¹	29	W		B	Med.		
U 37.1a ³²	8	W		B	Lg.	Y	
U 37.1c ³²	23	W		B	Lg.	Y	Y
V 37.6 ³³		E		B	Med.		

T 35.21 The largest of its Type, built over an earlier square structure. A brick ramp leads to the court of the chapel. Steps lead down into it and then to a shrine of the usual type.

²¹ *Wohnh.* 280, stpl. vi, plan 93.

²² *Wohnh.* 68, stpl. ii, plan 21.

²³ Griffith, *JEA* 10 (1924), 290, pl. xxv.

²⁴ *CoA* II, 68, pl. x, xxiv [3].

²⁵ *CoA* II, 70-1, pl. x.

²⁶ *CoA* II, 47, pl. viii; EES Record Sheets.

²⁷ *CoA* II, 24, pl. iv; Frankfort, *JEA* 15 (1929), 145-6.

²⁸ *CoA* II, 49-50, pl. ix.

²⁹ *CoA* II, 44, pl. viii, xiv; Griffith, *JEA* 17, 234-5, pl. lxix; EES Record Sheets.

³⁰ Pendlebury, *JEA* 18 (1932), 145, pl. xv; EES Record Sheets.

³¹ *CoA* II, 20, pl. iv.

³² *CoA* II, 13, pl. iii.

³³ *CoA* II, 9, pl. iii.

Objects: stela of Akhenaten and his daughters.

T 36.11 A typical example; two column bases found, together with bunch of grapes from ceiling.

T 36.37 Pylons adorned the entrance to the courtyard and the path leading to the chapel, of normal type.

Objects: limestone stela with Aten-rays; pottery head of a woman.

U 25.11 Objects: limestone stela of Akhenaten offering to Aten.

U 37.1a & c Objects: head of a princess and fragments of statues recovered from nearby well.

Type III – Temples

'Temples', in the context of shrines within private house-enclosures, are distinguished by their much greater complexity, as compared with other types, resembling proper cult temples. They are very rare in Amarna houses, only three being known, each differing in plan:—

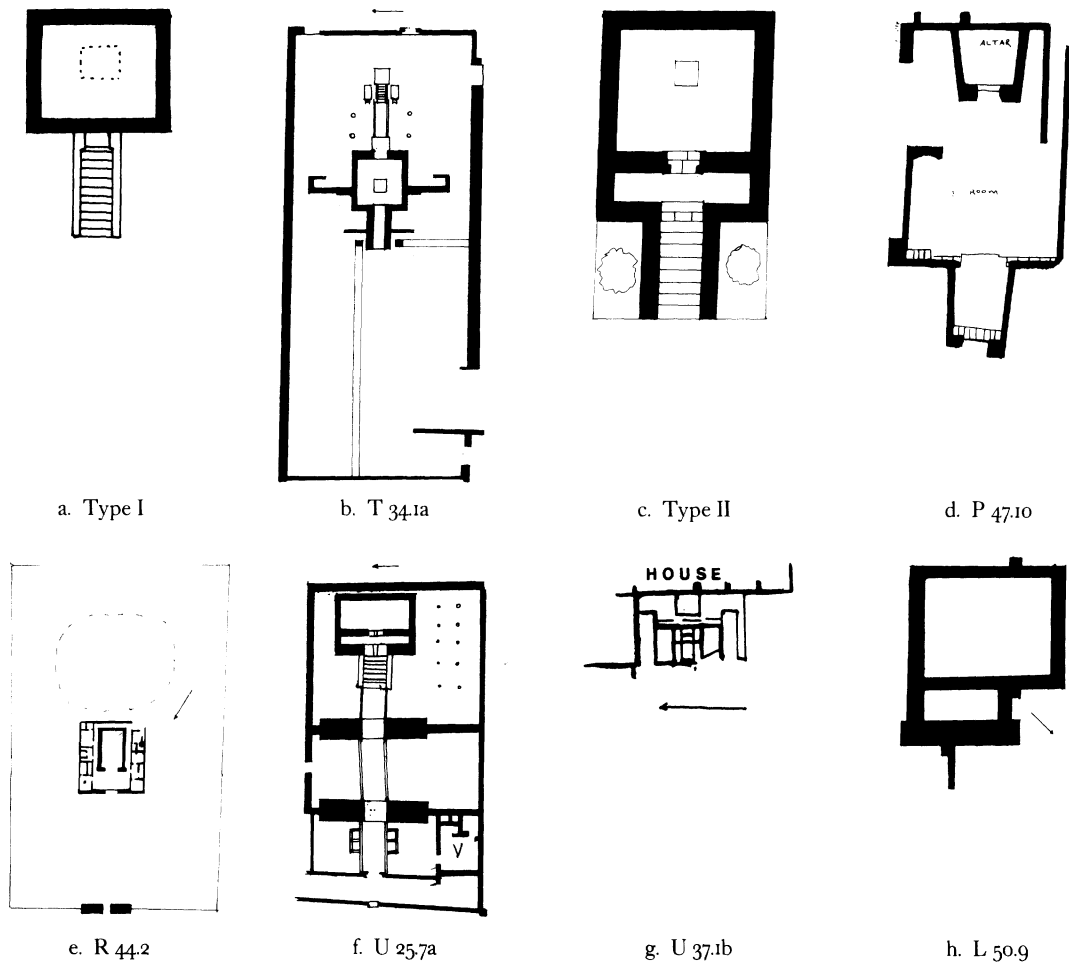


FIG. 1. a, d after Borchardt; b, c, f, g after Pendlebury *et al.*; e, h courtesy B. J. Kemp.

P 47.10³⁴ The extant plan is incomplete (fig. 1d). This is probably the main part of a temple, the subsidiary buildings doubtless destroyed by *sebakeen*. The structure is raised up on a platform and is approximately rectangular, with the main side facing south-west. This is flanked at its north-western and south-eastern ends by large pillars/piers. In front of the south-eastern side lie two hook-shaped tongues, which flanked a flight of stairs. The stairs gave access to a large room, which leads to another of almost equal size, with a platform at the back; this was presumably the altar. It seems that the front room, with the piers, could have been roofed. No such indications survive in the second room.

R 44.2³⁵ This structure is the most like a traditional temple of any private chapel in Akhetaten (fig. 1e). Its entrance is separate from that of the house, the forecourt entered through a pylon, giving access to the main temple enclosure. Here, a smaller set of pylons lead to the main temple itself. The approach to the latter was flanked by two low brick walls, probably with a two-pillared portico on each side of the entrance. The temple itself consisted of a single cella, with a narrow surrounding passage. Small store-chambers (or areas of worship?) led off the passage on the northern and southern sides. The building had cemented floors and was most probably roofed, since the walls were quite high (preserved to a height of 0.6 m). Furthermore, the northern and southern walls were buttressed, with the implication of the need to support a roof.

Objects: fragments of a limestone offering table, of statues of the king and queen and of stelae showing the royal family offering to Aten. A head of Akhenaten from the shrine is Copenhagen, Ny Carlsberg, ÆIN 1640.

U.25.7³⁶ Unique for its type in being built of stone (fig. 1f). The first court was entered from the west by a path set between brick kerbs. In the south-eastern corner was what might be termed the 'vestry'. A path gives access to the second court, through a set of massive pylons. In this court, two mud columns flanked the path, perhaps intended to carry flags. A second set of pylons marked the entrance to the main courtyard, which contained the chapel-proper. The entrance to the latter was marked by two circular mud bases, which flanked it. The chapel is of bipartite type, but is placed in Type III by virtue of the elaborate approach.

Objects: columns and pieces of cornice.

Type IV – Altars

Simple altars are found in a few cases and although the basic idea of a raised platform is the same in all, execution varies. The general plan consists of a raised brick platform for offerings, approached by steps. There is no evidence for any type of superstructure, though it is possible that a smaller portable offering table was placed upon the platform. Otherwise, the altars may have supported a limestone stela or statue.

T 34.1b³⁴ The garden contains a simple shrine (see above and fig. 1b), behind which stand two mud brick altars. It is probable, though, that there was a third altar which has been completely destroyed. The approach to the altars was flanked by trees. The altars are of the

³⁴ *Wohnh.*, III-12, stpl. iii, plan 28.

³⁵ Griffith, *JEA* 10, 302, pl. xxxiii; *JEA* 17, 182, pl. xxvi; EES Notebook.

³⁶ Griffith, *JEA* 17, 240-1, pl. lxxvi, lxxvii [4]; EES Record Sheets.

³⁷ *CoA* II, 64, pl. xxi [6]; Griffith, *JEA* 17, 237, pl. lxxiv, lxxv [4].

above construction with the middle one, including its steps, painted red in front and white-washed at the back. The smaller altar was painted blue and white, the steps white with stripes of blue, yellow and red. These were open air altars and perhaps dedicated to Aten (central), Akhenaten and Nefertiti (side altars) (but cf. below, *Dedication*). Similar altars appear in the Aten temple³⁸ and at the Desert Altars.³⁹

Objects: fragments of limestone stela decorated with a scene of Aten worship; this could have come from the simple shrine.

U 37.1b⁴⁰ Against the west wall of the house, an altar of moulded mud brick stands upon a slightly raised small platform. It was the only altar physically attached to a house. There is no recorded evidence for stairs leading up to the platform; it probably supported a stela or statue. The plan indicates that an offering table stood in front of it (cf. U 37.1a, c) (fig. 1g).
Objects: the head of a princess and fragments of statuary were found in an adjoining well.

Type V – Miscellaneous

A few shrines do not easily fit into any of the above categories, either because their plan is complex and unique or because so very little of their plan remains.

L 50.9⁴¹ This chapel has flower beds and a water source behind it. The surviving plan is peculiar and consists of the base of a platform on which the shrine stood. It is impossible to tell what the whole shrine looked like. The size and complexity suggest that it was of the Bipartite form (fig. 1h).

Objects: two headless sandstone statues of (presumably) Akhenaten and Nefertiti.

M 47.1⁴² The shrine was located in a court of its own. According to the excavators, it consisted of a small rectangular brick structure, reached by a flight of stairs, which was the foundation for a light wooden chapel. A small pylon or narrow terrace stood at the front, above the stairs. In the pedestal-filling, two sections of foundations were laid out lengthwise: the excavators believed that these served as supports for the floor. An alternative reconstruction is that this was a *tripartite* shrine, the stone foundations being very regular and meeting protruding bits of mud brick that emerge from the front of the chapel (fig. 2a).

Objects: head of a woman.

O 49.1⁴³ An area for stairs leads to an entrance level, beyond which stood a verandah, marked by a set of square pillars; this leads in turn to a room containing a shrine (fig. 2b). It was plastered inside, and painted with scenes showing the pharaoh offering to Aten. A bunch of faience grapes was found here. On the left of the shrine is another small room, for whose possible parallel see N 50.17. In their reconstruction, the excavators believed it to have consisted of a flight of steps leading to an entrance area, giving access in turn to a small porch, its roof supported by two square pillars. Behind the porch lay a roofed chamber containing a stela.⁴⁴

³⁸ N. de G. Davies, *Rock Tombs of El Amarna*, v1 (London, 1908), pl. xix–xx.

³⁹ A. Badawy, *History of Egyptian Architecture*, III (Berkeley, 1968), 96; *CoA* II, 101–3.

⁴⁰ *CoA* II, 13, pl. iii, xix [2].

⁴¹ Griffith, *JEA* 10, 303, pl. xxxiv–v; *JEA* 17, 179 ff, pl. xxiii–iv.

⁴² *Wohnh.*, 53–4, stpl. ii, iv, plan 15, pl. iva.

⁴³ *Wohnh.*, 240, stpl. v, plan 75, abb. 35a.

⁴⁴ *Wohnh.*, 240.

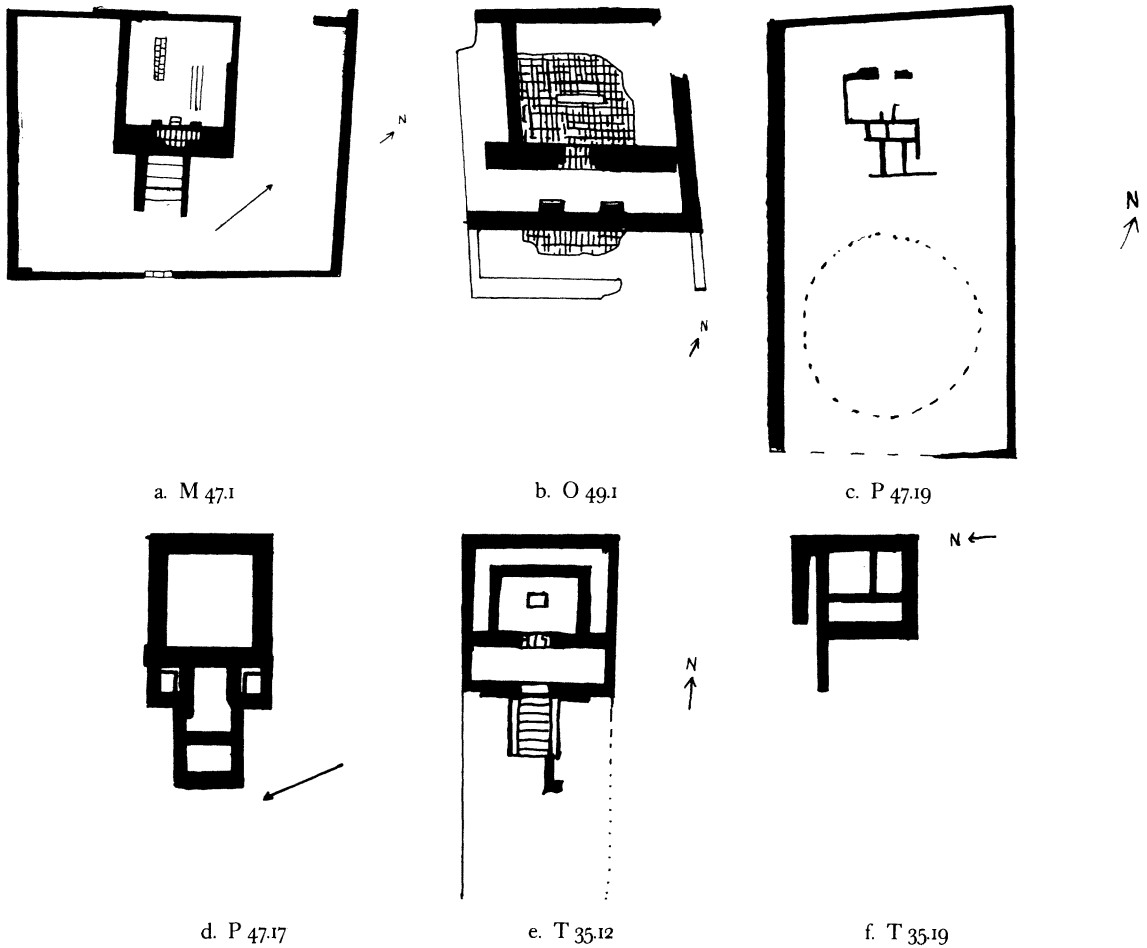


FIG. 2. a-d after Borchardt; e-g after Pendlebury *et al.*

However, as an alternative, one may reconstruct a flight of stairs leading to an entry area, marked by a low screen wall, behind which lay the porch, with two mud brick pillars, which did not extend across the whole front of the shrine. Behind this lay the cella, on whose left side lay a small room for storage.

P 47.17⁴⁵ This structure stands in a separate courtyard whose entrance is marked by pylons. It is similar to the bipartite chapels, except as regards the proportional ratio verandah:room, hence its inclusion in the Miscellaneous category. A square room stands on a pedestal, reached by a flight of stairs. The former's entry is marked by large, almost pylon-like, piers which probably supported a roof, thereby creating a small porch at the central entrance to the shrine (fig. 2d). The interior of the chapel was plastered and decorated with paintings of the royal family offering to Aten.

P 47.19⁴⁶ A pylon leads to a court, behind which are the foundations for a chapel. Nothing of the latter's plan can be clearly determined from the remains (fig. 2c).

⁴⁵ *Wohnh.*, 118, stpl. iii, plan 31, pl. 7-8.

⁴⁶ *Wohnh.*, stpl. iii, plan 19.

R 44.1a⁴⁷ No plan survives of this chapel, called R 44.1C in the field notebooks. It was in an independent courtyard and garden attached to R 44.1, which also contains a chapel (R 44.1b) in its main garden. It was partially or completely constructed out of limestone.

Objects: limestone doorjamb with an inscription to Aten; limestone statue bases and fragments of statues, possibly of the king and queen.

T 35.12⁴⁸ This chapel belongs to house T 35.16 and seems to be an elaboration on the basic bipartite shrine. A flight of stairs with piers at the top leads to a verandah which is followed by a small plastered and whitewashed room, containing an altar. There might have been a walkway/colonnade around the exterior of the small room, but we cannot be sure of this, given the limited information available (fig. 2e).

Objects: fragments of statues.

T 35.19⁴⁹ The remains of this chapel show a back room (cella), the beginning of a porch and a small side room on the left of the naos (cf. O 49.1 and N 50.17). It was probably a bipartite shrine with a side room (fig. 2f).

Objects: fragments of a painted limestone relief showing Akhenaten making offerings to Aten.

U 25.7b⁵⁰ The chapel seems to have been square with two square piers. It fell into disuse quite early on and was replaced by U 25.7a. No reconstruction is possible due to limited information.

The form of the shrines

The outside chapels are somewhat similar to the house altars which are generally found in the central rooms of Amarna houses. In general, internal altars consist of a small brick platform, its perimeter marked by a low wall, with a small flight of steps leading up to it.⁵¹ A space for a stela or statue exists upon the platform. House P 47.22 contains a classic example of such an internal shrine, also possessing a chapel in the garden. These internal constructions are not unique to Amarna: they have been found in the Theban workmen's village of Deir el-Medina, as well as in the houses near the mortuary temple of Ay and Horemheb.⁵²

These latter are mentioned because they may be of help in reconstructing the form of the external altars and chapels, Seton Lloyd probably deriving his JEA 19 reconstruction of the Amarna garden chapel from the Amarna internal shrines, especially that of Panehsi. This, the most complete, and therefore most helpful house altar, was found in his 'Official Residence'. It was made of stone and consisted of a square platform of limestone blocks set against the wall, with a miniature stairway leading up to it. The shrine's entrance was adorned with a broken lintel inscribed with figures of the royal family and Aten. Two little walls connected the entrance

⁴⁷ Griffith, EES Notebook.

⁴⁸ CoA II, 39-40, pl. vii.

⁴⁹ CoA II, 46-7, pl. viii, xxx, xlv.

⁵⁰ Griffith, JEA 17, 240; EES Record Sheets.

⁵¹ Wohnh., 47, taf. 18.

⁵² U. Hölscher, *The Excavation of Medinet Habu*, II (Chicago, 1939), 69.

wall to the back of the room, thus forming the sides of the shrine. A statue of the king probably stood inside the shrine, since fragments of sculpture were found there.⁵³

If one were to use this shrine as a guide to reconstructing the garden chapels, one would have to say that they were open to the sky, with low walls marking the perimeter of the platform and a broken lintel at the entrance. This may have been the case in one or two: it was definitely not the norm. The bits of columns, cornices and faience grapes all indicate partial or complete roofing. The preserved height of the walls is considerable and, as this was only a portion of their total height, it is improbable that the shrines had their perimeters marked merely by low walls. Unfortunately, given the nature of the evidence, it is very difficult to present a firm, verifiable, reconstruction of the shrines. Nevertheless, in spite of the paucity of the evidence, an attempt at reconstructing the various types will be made.

Reconstructions

Although in a few examples the walls of chapels were preserved up to as high as 0.7 m (and in one case nearly 1.0 m), the vast majority are represented by little more than ground plans; thus, reconstructions must be attempted if one is to deal realistically with them.

Type I

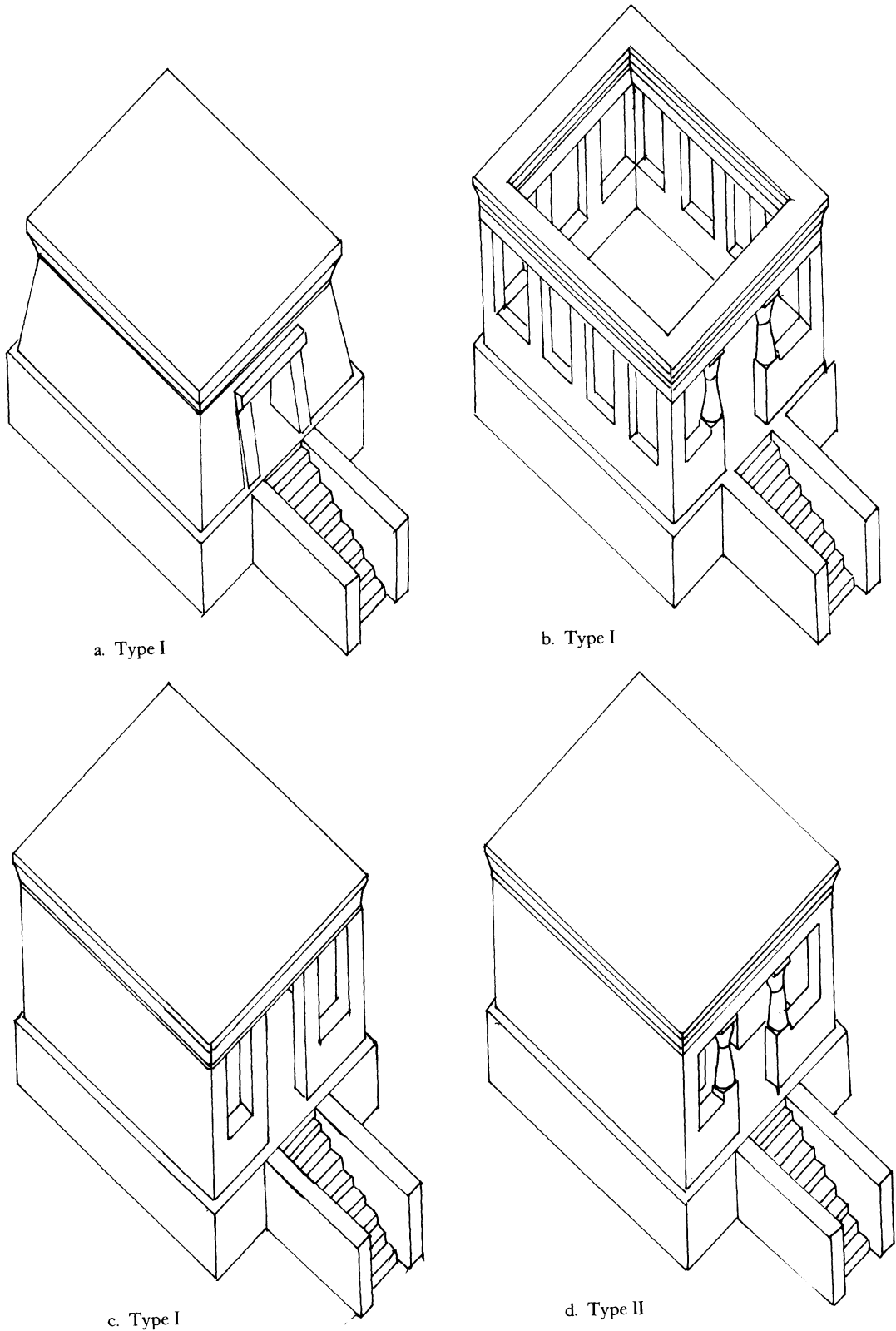
There are three possible reconstructions:

1. Chapel raised on a quadrangular platform fronted by a stairway, and consisting of a walled and roofed chamber with an altar in the middle (fig. 3a). Evidence for this reconstruction lies in the basic preserved ground plans. A roof is included since faience grapes, commonly used to decorate the roofs of Amarna houses were found in chapel O 49.9/10. It also represents a simple and economical design, which may explain the prevalence of this type of chapel. Furthermore, such a closed chapel will have offered some protection for the reliefs, paintings and statues housed within.

2. Chapel raised on a quadrangular platform fronted by a stairway. Superstructure consists of a walled area with low walls marking the perimeter of the platform. There are small columns, supporting an architrave, set in the walls (fig. 3b). The evidence for such a reconstruction is sparse, though being similar to that favoured by the excavators of the site.⁵⁴ The reason that the chapel was thought to be roofless was that the only way to worship a solar deity (Aten) was seen as by having the shrine open to the sky. Furthermore, no evidence of roofing material (matting, etc.), was found. This does not, however, mean that there was none: such material is of a perishable nature and therefore may not have been picked up by the excavation techniques of the time. Also, as the shrines were of minor importance and the site was excavated in a hurry, it is quite possible that surviving evidence was lost or destroyed during excavation.

⁵³ CoA III, 26, pl. xxx-xxxii [6]; Frankfort, *JEA* 13 (1927), 211-13, pl. xlv [2, 3], xlvii.

⁵⁴ Seton Lloyd, *JEA* 19 (1933), 2, pl. ii.



a. Type I

b. Type I

c. Type I

d. Type II

FIG. 3. Reconstructions by H. Grassley.

A problem with such a reconstruction is the preservation of walls up to a height of nearly 1.0 m, only a proportion of their original height; anything much higher would seem unlikely for a screen wall.

3. As described at 1., except that the walls of the entrance are low and had brick piers in front to support the roof (fig. 3c). Being of mud brick, such piers could have disappeared; they would seem more aesthetically pleasing on a small shrine than a solid wall.

Type II

Three possible reconstructions are proposed.

1. Chapel 'raised on a rectangular socle fronted by a stairway and it consists of a minute pillared porch (column bases have been found *in situ* in some shrines) fronted by screen walls, and a roofless shrine with an altar to the Aten'.⁵⁵ Between the shrine and the porch or colonnade, a broken lintel would occur; the roof of the colonnade would have a cavetto cornice.⁵⁶

This is the most popular reconstruction for shrines of this type. However, there are problems with it: there is absolutely no evidence for the broken lintels, although one or two pieces of cavetto cornice were found in the areas surrounding chapels which could have come, however, from the house. As in the case of Type I, one cannot make a firm statement as to the roofing of these buildings.

2. Chapel as above, except that both cella and verandah will have been roofed, without any broken lintel (fig. 3d). Comparable buildings, albeit on a rather larger scale, would be the chapel of Amenophis III at Elephantine⁵⁷ and that illustrated in the Theban tomb of Ipuy (TT 217, time of Ramesses II).⁵⁸

3. As in 1., but without the broken lintel.

General

Out of the above, the most plausible ones for Type I would seem to be either 2 or 3. The essential difference between them is the presence of a roof; the same going for the options for the reconstruction of Type II.

Roofs are suggested for Type I by the appearance of faience grapes,⁵⁹ the preserved height of the walls, and the presence of statues and stelae which might be in need of protection. It is possible that the single example of grapes could have come from the nearby house and that the walls are preserved to near their original height. Also, on the evidence of the great Aten temples, sculpture need not be protected by roofs. Thus, it is quite possible that the shrines could have been unroofed.

Taking the internal Panehsi shrine as a model, the main offering area, the cella, will have been roofless. The porch of Type II shrines would have been roofed, on the

⁵⁵ Badawy, *op. cit.* 96.

⁵⁶ Lloyd, *loc. cit.*

⁵⁷ J. Vandier, *Manuel d'archéologie égyptienne*, II (Paris, 1955), 811, fig. 395.

⁵⁸ Davies, *Two Ramesside Tombs at Thebes* (New York, 1927), pl. xxviii.

⁵⁹ E.g. Cambridge Fitzwilliam E.28.1926 and 29.1926.

basis of grapes, columns and fairly high walls. This would fit in with the main Aten temples – if the chapels were their domestic equivalents.

Many of the stelae from the chapels show the royal family in a chapel/temple adoring and offering to the disc or seated below Aten, whose ‘arms’ extend protectively over the royal family. Unroofed chapels/temples would have allowed his rays to reach the offerings and adorers.

Other sources of influence could have been the ‘Window of Appearance’ balcony where the pharaoh and his family appeared on public occasions and the kiosks which sheltered them on other such occasions.⁶⁰ These seem hypaethral, with Aten’s ray’s reaching in to touch the royal personages. Thus, on balance one would favour the view that the cellae of the garden shrines were open to the air.

The context of the shrines

Shrines only appear in large or medium sized houses, and were obviously a luxury building. They were probably built by important and rich officials who wanted to demonstrate publicly their loyalty to Akhenaten’s regime, as well as their wealth and piety.

Individual types do not seem to be concentrated in particular portions of the city. Occasionally, the same form appears in all the houses of a particular street, but there is no meaningful spatial clustering of types. It is not possible to determine which of the shrine types was the first to appear in Akhetaten.

Surprisingly enough, there is little connexion between the size and complexity of the shrines and that of the houses to which they belong: area (ranging from 2 to 39 m²), type, material, presence of water, the existence of pylons and internal shrines are all unrelated to size of house and neighbourhood.

Dedication

Given all known factors, it is clear that the chapels can only have been dedicated to the king, Aten, or both. I would propose that their dedication was to the cult of the royal family, in their manifestations as part of the triad of Aten, Akhenaten and Nefertiti.⁶¹

Statues of the royal family, stelae of them worshipping Aten, or the family alone, and paintings of the same subjects are found within the chapels. There is only one known example of a stela depicting only Aten, found in T 36.45, possibly belonging to T 36.37,⁶² which is perhaps unique to Egyptian art. As the contents of the chapels, these images of the royal family, in the main Akhenaten and his queen, would seem to have been the recipients of the offerings and homage of the householders. If our speculation of a connexion with royal kiosks and the Window of Appearances is correct, this would be reinforced, as these two architectural features are used exclusively for the royal family.

⁶⁰ Badawy, *op. cit.* 34.

⁶¹ J. Assmann, *Ägypten: Theologie und Frömmigkeit einer frühen Hochkultur* (Berlin, 1984), 252.

⁶² *CoA* II, 46, pl. xl [7].

The idea that the shrines were dedicated to Aten himself may be initially attractive, but may founder on two points. Firstly, they do not have the orientation one would expect from sun altars (e.g. those in the royal mortuary temples), East-West; secondly, under Atenism, the only people to have direct contact with the god were Akhenaten and Nefertiti. 'The manner in which the rays [of Aten] fondle and protect [them] constitutes a graphic illustration of the close tie between the king and queen and the heavenly father (Aten).'⁶³ If any non-royal person wanted to request something from the god, he or she had to go through Akhenaten or Nefertiti. There are many examples of such requests in the Amarna tombs.⁶⁴ Furthermore, one sees that the private area and the small chapel in the big Aten Temple were for the worship of Aten by the royal family, while the exterior colonnaded court containing royal statues was accessible to a favoured few.⁶⁵ By praying to statues of the pharaoh, the son of Aten and his sole representative on Earth, the worshipper might obtain his wish and/or the grace of the god. Thus one sees that the only way individuals had access to the new god was by having house altars and garden chapels containing images of the god's family (the royal family) and, by having it open to the sun, he might be with that family and so indirectly with the worshipper.

⁶³ D. Redford, *JARCE* 13 (1976), 56.

⁶⁴ *BAR* II, 409-20; Davies, *Rock Tombs*, I, (London, 1903) 52, n. 9.

⁶⁵ A. M. Blackman, *Recueil Champollion*, 506.

SOME REMARKS ON THE TRIAL OF MOSE*

By S. ALLAM

This inscription recounts the history of a lawsuit about the ownership of some fields inherited by various members of the family to which Mose belonged. At a certain point there appears a man called Khay who is apparently not related. According to Gardiner's interpretation, this Khay produced forged documents before the highest law-court, presided over by the Vizier, so that the Vizier pronounced in favour of Khay on the basis of forgeries. These forgeries came from the capital Piramesses, where the official registers of landed property were kept. Khay must then have succeeded in tampering with these registers through the complicity of officials. Upon close analysis of the inscription, however, the passages in question turn out to have been wholly misunderstood: Khay had in fact a legitimate title-deed favourable to his claim.

THE legal inscription carved on the north (N) and south (S) walls of the tomb-chapel of the Treasury-scribe Mose at Saqqâra has attracted the attention of Egyptologists ever since its publication by V. Loret in 1901.¹ The first translation and study of its juristic aspects was that of A. Moret in the same year.² Only a few years later, Sir Alan Gardiner published his excellent contribution:³ not only did he collate the text with the utmost care,⁴ he also advanced a far more reliable rendering of the legal proceedings recounted. Since then our interpretation of this unique inscription has been considered to be laid on firm grounds, the more so since the commentary provided by Gardiner has never been seriously questioned.

The bone of contention in the lawsuit is a landed property which occasioned much litigation among members of the family to which Mose belonged. At a certain point there appears one Khay, who, according to Gardiner's interpretation, produced forged documents before the highest law-court (*qnb t r t*), presided over by the Vizier, so that the final verdict went in his favour: Khay must, then, with the collusion (or through the deception) of some officials, have tampered with the official registers, preserved in the Treasury and the Department of the Granary of Pharaoh, or have fabricated some title-deeds favourable to himself.⁵ Confident in the authority of

*Paper delivered at the 'Colloquium on the Delta in Pharaonic Times' in Oxford on 31st August 1988. I am grateful to Dr. J. Malek for access to the dossier of Mose in the archives of the Griffith Institute.

¹ *ZÄS* 29 (1901), 1 ff.

² *Ibid.* 11 ff. Cf. also the study of the inscription by E. Revillout, *RE* 10 (1902), 177-87.

³ Alan H. Gardiner, *The Inscription of Mes* (Leipzig, 1905).

⁴ The inscription has severely suffered since its discovery and some blocks are now missing. The blocks of the north wall are in Cairo Museum, whereas the south wall blocks must have been left somewhere in Saqqâra. For all details regarding the tomb-chapel see G. A. Gaballa, *The Memphite Tomb-Chapel of Mose* (Warminster, 1977). In this monograph the author, after collecting together nearly all fragments so far known to him, focuses on the reconstruction of the tomb-chapel; his translation of the legal inscription relies largely on Gardiner's study. Yet an advantage is to be seen in the publication of photographs which show the present state of the inscription. An important review of the monograph has been written by Malek, *JEA* 67 (1981), 157 ff., who adds some more inscriptions recorded in Gunn's Notebook and further suggests a modified plan of the tomb.

⁵ In fact, the assumption of forgeries dates back to the first treatment of the text by Moret. Although Gardiner improved greatly on this treatment, he was still trapped in this assumption.

Gardiner, Egyptologists have accepted that the trial involved corruption of Egyptian officials.⁶ Upon a close analysis of the text, however, the passages in question turn out to have been wholly misunderstood.

Gardiner's in many respects outstanding study remains the necessary point of departure for any new approach to the text; and to him belongs the credit of having established its main features despite the considerable damage which the inscription has suffered. For the convenience of the reader, however, it might be useful to set out in very broad lines the course of the struggle as illustrated by the preserved text, without taking into account any uncertainties.

Mose, a contemporary of King Ramesses II, had a distant forefather, an 'overseer of ships' called Neshi, who lived at the time of King Ahmose. Probably because of his distinguished services, Neshi was rewarded⁷ by King Ahmose with a tract of land subsequently known as Hunpet-of-Neshi.⁸ Upon Neshi's death the estate passed, evidently undivided, to his heirs; and in the time of King Horemheb the privileged descendants seem to have numbered six, of whom a lady Urnero, possibly the eldest, was appointed 'trustee' or 'administrator' (*rw \overline{d} w*) for her brothers and sisters in the management of the estate.⁹ But soon persistent quarrels arose, and, in order to settle them, successive appeals to law had to be launched, litigation dragging on for generations. After the death of Urnero, her son, the scribe Huy, continued alone the struggle with his aunt Takharu and with her son, the officer Smentawi; on the other hand, he had to face the above mentioned administrator (*rw \overline{d} w*) Khay who, though apparently in no way connected with the family of Huy, pretended to some rights in the estate. On the death of Huy, his widow Nubnofret was prevented from cultivating the land. Thereupon the litigation was conducted before the Vizier as the presiding member of the highest law-court, and Khay won the case. It is possible that some years elapsed, before Mose, the son of Huy and Nubnofret, was of an age to reclaim the estate. In his deposition Mose gave a survey of past events and finally made a

⁶ It is interesting to note the extent to which we have accepted the alleged corruption of Egyptian officials in that some scholars find no contradiction in perceiving the inscription of Mose to be at once evidence for such practices and an indication of the very good functioning of the ancient Egyptian legal system; cf. T. G. H. James, *Pharaoh's People* (London, 1984), 97; A. Théodoridès, in: J. R. Harris, *The Legacy of Egypt* (2nd edition, Oxford, 1971), 310 f.; idem, in: *Le droit égyptien ancien* – Colloque organisé par l'Institut des Hautes Etudes de Belgique les 18 et 19 mars 1974 à l'initiative de A. Théodoridès, 4 ff.; W. Ward, in: *Land Tenure and Social Transformation in the Middle East*, ed. Tarif Khalidi (Beirut, 1984), 64 f. If the official carrying out an order of the Vizier were to be won over (or deceived) by a litigant in the trial so that the vizier passed his judgement on the grounds of forgeries, how can there have been trust in the law and in the processes of law at all?

⁷ Moret, *op. cit.* 29 supposed that Neshi was rewarded by the king on account of his services during the war against the Hyksos. His supposition has been confirmed by the discovery of a stela of King Kamose; L. Habachi, *The Second Stela of Kamose* (Glückstadt, 1972), 44, 50; G. Posener, *RdE* 16 (1964), 213 f.

⁸ Do *hnpt* and *hnbt* have the same meaning? Cf. *Wb.* III, 112; D. Meeks, *ALex.* 1977–79. The estate in question was possibly situated not very far from Memphis, in a district which also bore the name of Neshi, namely Uahit-of-Neshi (*w \overline{h} yt*); Gardiner, *Mes*, 25 n. 3; cf. W. Helck, *Materialien zur Wirtschaftsgeschichte des Neuen Reiches*, II (Mainz, 1961), 238 f. As the same district-name occurs in the great Wilbour Papyrus (A. Gardiner, *The Wilbour Papyrus*, II (Oxford, 1948), 178), scholars are now inclined to place the estate of Neshi on the west bank of the Nile somewhere in the region of Meidum, roughly 50 km south of Memphis; cf. Gaballa, *Mose*, 26 n. 7, who makes clear that the Memphite nome in the Ramesside Period extended thus far.

⁹ For a discussion of the position of women in Egyptian society as reflected in our inscription, see R. Tanner, *Klio* 46 (1965), 64 ff.; *Klio* 49 (1967), 35.

petition that he, together with his coheirs, be examined before the notables of the locality so that his descent from Neshi might be proved; indeed, pleaded Mose, his ancestors had been examined before, and their names were found enrolled.

Gardiner and, before him, Revillout concluded that the main section (N2-20) is composed, not of a single report, but of two – each introduced by the formula *ddt. n NN*.¹⁰ The first part (N2-11) is the deposition of Mose and the second (N11-20) that of Khay. These depositions parallel each other, in their structure and their contents. Both begin with the name and parentage of the speaker, after which are related events said to have taken place in the time of Horemheb (N3-4 and N11-12). Gardiner noted that, subsequently, identical events are narrated; in other words, that the same historical episode, though seen from two distinct standpoints, underlies the two depositions. A central incident, common to both, is the appeal by the lady Nubnofret pertinent to the evidence of official records kept in the Treasury and the Department of the Granary of Pharaoh (N7 and N14). It is a natural conclusion then that the two depositions are the speeches of the two principal litigants in the conflict which is the subject of our inscription; the depositions are in fact the main components of the legal dispute between Mose and Khay.

It is understandable that the disputant parties would not confirm each other's view of the case; rather, each would deliver a personal account of the events and put forward the points favourable to his cause. In the absence of further evidence, our task is to weigh the respective arguments and to try to complement the picture drawn up by one party with elements given in the report of his adversary. We have also to bear in mind that we are ignorant of the outcome of the final stage of litigation. We should not assume that the court verdict must have gone in Mose's favour. The two considerations which might be brought forward to support this assumption cannot be seriously maintained. First, the very presence of the legal inscription in a private tomb should not be regarded *prima facie* as a monument to the victory of its owner. Second, the scene in the tomb depicting Mose raising both arms high before two pairs of seated members of a council called *qnbt* cannot be taken without serious doubts as showing Mose triumphant before the judges in our particular law-suit; any allusion in this direction is indeed wanting.¹¹

The legal dispute which Mose records in his tomb seems to have been an appeal against the court verdict awarded to Khay in previous proceedings. Earlier still, however, the same lands had repeatedly given rise to quarrels among members of the family of Neshi, from which Mose descended. The inscription refers constantly to these contentions. We hear also that the highest law-court was called upon to make a division of the lands in dispute and every heir took cognisance of his share, despite the provision by which the indivisibility of the lands should be maintained

¹⁰ Gardiner, *Mes*, 4 f.

¹¹ For this scene see R. Anthes, *MDAIK* 9 (1940), 93 ff., pl. 17; Gaballa, *Mose*, 10, pls. 15 ff. *qnbt* does not necessarily imply a judicial bench; it is in the main an administrative institution. See my remarks, *JEA* 72 (1986), 194 f.

(N2-4).¹² How often such quarrels occurred we cannot tell and is for our present purpose beside the point.

The matter at issue calls for concentration on the trial between Mose's parents, the scribe Huy and his wife Nubnofret, on one side and the administrator Khay on the other. This is precisely the conflict with which the alleged forgeries are connected. The first we know of Huy is that he stood by his mother Urnero in her struggle with her brothers and sisters before the court of Memphis and the highest court, as Mose reveals in his report (N5). Then we hear of him in the testimony of a stable-master called Nebnufer: 'He (Huy) used to [cultivate his fields from year] to year [acting] according to all his desire(s) and they (used to) gather in for him the harvest of his fields year by year. Then he disputed [with the lady] Takharu (his aunt), mother of the officer Smentawi, and he disputed (later on) with Smentawi, her son, so that [the lands?] should be given [to] Huy, and they were confirmed' (N31-34). This statement is borne out by the sworn declaration of a priest from the temple of Ptah: '... [scribe Huy], son of Urnero; [he] cultivated [his] fields from [year] to year; he used to cultivate them, saying, "I am the son of Urnero"' (N29).

We next turn our attention to the other party, namely Khay, whose descent does not indicate any relationship with Huy's family. In his deposition Khay affirms first of all the following: 'He gave me his share of lands in writings in the time of King *Dsr-hprw-rꜥ stp-n-rꜥ* (Horemheb), granted life, before witnesses... (I) received-(it)-from-[him]/succeeded-to-[him in] the time of King Horemheb-*mry-ḫmn* unto the day when the scribe Huy and lady Nubnofret seized (upon) my share of lands, and she (or: they?) gave them (the lands) to the craftsman Khay-[iry]' (N11-12). This statement, which was not fully considered by Gardiner, seems to be the crucial point in Khay's claims to the lands. Accordingly, Khay's claim is vindicated by a title-deed that can definitely be testified to by witnesses. Note moreover that his title-deed is mentioned in the overall report on the trial given by Mose in his own tomb; in other words, Mose does not deny Khay's right at all.

We should like to know further from whom Khay obtained his right. His statement proper begins with the pronoun 'he', which Gardiner conceived as referring to Khay's father, since the statement follows immediately upon the parentage of Khay.¹³ This assumption is, to my mind, not conclusive. As the inheritance of Neshi's descendants was apparently effective without written documents, why should Khay's inheritance from his father be recorded by writing and before witnesses? Could it not be that 'he' is coupled in this statement with the scribe Huy, in which case Huy would then have ceded¹⁴ his right to Khay? It would not be inconsistent with the usage of this personal pronoun in Egyptian for it to refer to someone mentioned not in the foregoing sentence, but earlier in the text. At all events, even if we reject

¹² On the splitting of the joint property see J. Pirenne, *Histoire de la civilisation de l'Égypte ancienne*, II (Neuchâtel/Paris 1962), 191; Théodoridès, in: *Atti dell'Accademia Romanistica Costantiniana*, 40 convegno internazionale (Perugia, 1981), 638 f.

¹³ Gardiner, *Mes*, 26.

¹⁴ Note that the verb *rdi*, 'give', can also have the connotation 'sell'; cf. T. E. Peet, in: *Studies Presented to F. Ll. Griffith* (Oxford, 1932), 122 ff.

altogether the latter suggestion, we have to retain the fact that, in the time of Horemheb, Khay in one way or another did acquire a certain right in the said estate so that one of his relatives could cultivate in peace his share of fields (N11-12). But this state of affairs did not last long, because the scribe Huy and his wife seized upon the land in question and gave it subsequently (on lease?) to a certain craftsman.

Of the circumstances upon the death of Huy we have a vivid account from the lips of the two disputant parties. In his deposition Mose characterises the events as follows: '(When) Nubnofret my mother came to cultivate the share of (lands of) [Neshi/Huy]¹⁵ my father, she was prevented from cultivating it.¹⁶ (Thereupon) she informed against the administrator Khay...in Heliopolis in the year 14 (+ x) of the King of Upper and Lower Egypt *Wsr-[mꜣꜣt]-rꜣ [stp-n-rꜣ son-of-Re] Ramesses (II) mry-ḫmn*, given life...because I have been cast off from this land of Neshi, my (fore)father. She said, "Let (there) be brought to me the register¹⁷ from the Treasury (and) likewise (from) the Department of the Granary of Pharaoh, l.p.h." (N5-7).

On this laconic and fragmentary account of Mose more light can be shed by the declaration of Khay, who gives a relatively complete description: 'I informed the Vizier in Heliopolis. He allowed me to plead with Nubnofret before the Vizier in the great court (*qnbt ꜣt*). I brought my [testimonies]...in my hand dating back to King *Nb-ḫḫty-rꜣ* (Ahmose); Nubnofret brought likewise her testimonies.¹⁸ They were unrolled before the Vizier in the great court.¹⁹ The Vizier said to..., "As to these writings, (they are) the writings of (each) one, namely (of) the two parties" (N12-14).²⁰ The declaration does not require comment, save perhaps for the last sentence. We understand that both parties came to court equipped with their title-deeds; while Khay's document goes back to the reign of Horemheb (N11), Nubnofret's evidence records the estate as a reward of King Ahmose to Neshi. When the title-deeds were

¹⁵ The traces at the beginning of line N6 were taken by Gardiner, *Mes*, 14 n. 17 for the name of Neshi. But they could equally yield the reading 'Huy'. Such a restoration does not change the general sense of the statement, but would be more plausible since Mose is speaking here of his father's share.

¹⁶ For the last clause an alternative translation such as 'One prevented the cultivating of it' can be suggested; Gaballa, *Mose*, 26 n. 5.

¹⁷ For the technical term *dnyt* 'register' with respect to the official archives of landed property see also the pertinent passage in the Dakhleh stela; Gardiner, *JEA* 19 (1933), 22 l. 10. There, the full expression is *ꜣ dny* which can be understood as 'register-record'. Mention is there made also of a copy (*ihꜣt*) which was issued in accordance with 'the register of Pharaoh'. Returning to our inscription, Nubnofret asked for the register (*dnyt*) to be brought. Her wording is certainly inaccurate, because one cannot bring before the court the whole register, but only an extract thereof. Cf. E. Seidl, in: *Symposium 1977 – Vorträge zur griechischen und hellenistischen Rechtsgeschichte*, ed. J. Modrzejewski and D. Liebs (Köln/Wien 1982), 179 ff.

¹⁸ For a new example of *mtrw*, 'witness document', see W. Ward, *SAK* 9 (1981), 365 f.

¹⁹ In his treatise I. M. Lurje, *Studien zum altägyptischen Recht* (Weimar, 1971), 43 ff, 77 f assumes that the Vizier was approached by the litigant parties during one of his short visits to Memphis. The trial, however, took place before the great court where it normally used to sit; in our case in Thebes (and not in Piramesses), as the estate in dispute was situated within the territory of Upper Egypt under the control of the appropriate Vizier. See above, n. 8.

²⁰ The construction of this sentence is rather clumsy, but is attested elsewhere in our inscription. Cf. *ir Wrnr šrit n Nš'i* (N31) and *ir zš Hwvy šri n Wrnr* (N34). These sentences are elliptical, the main clause being without grammatical subject. Gardiner, *Mes*, 8 and 27, suggested the translation 'These documents were written by one of the two parties'; he understood that 'the Vizier declared that one of the two litigants must have fabricated his title-deeds'. His interpretation cannot, however, be justified by the very nature of the events narrated thereafter.

opened, the Vizier made the observation that they came from the private archives of the parties; consequently they could not reflect the state of affairs to date.

This interpretation is perfectly correct, as can be inferred from the reaction of Nubnofret, who promptly replies to the Vizier: 'Let (then) be brought to me the [register...the Vizier] said to her, "Very good is what thou hast said"'. Khay continues: 'We were taken downstream to Piramesses. One entered the Treasury of Pharaoh, l.p.h., (and) likewise the Department of the Granary of Pharaoh, l.p.h. One brought the two registers before the Vizier in the great court. The Vizier said to Nubnofret "Who is thy heir [among] the heirs who are upon the two registers that are in [our] hand?" Nubnofret said, "There is no heir (of mine) among them". "Thou art (then) in the wrong", said he, namely the Vizier, to her' (N14-15). This dialogue is straightforward and self-explanatory. In accordance with the official registers Huy (and automatically the branch of his family) had already ceased to have any title: Khay has acquired the said title and has become the sole legitimate owner. This change being entered into the official registers, these are therefore absolutely correct up to the date and as source of evidence they cannot fail.²¹ Correspondingly Nubnofret can by no means claim the lands for her heir, her son Mose. No doubt she is aware of this bitter fact; before the Vizier she has consequently to acknowledge purely and simply that her son has no longer any right of succession with regard to the lands in dispute.²² The judgement of the Vizier, properly founded, has of course to go against her.

The text provides further information about the evidence. We hear of a royal scribe who, assisting at the court session, intervenes, apparently on behalf of Nubnofret.²³ The text reveals: "The scribe of the royal table Kha, son of Montu-emin, said to the Vizier, "What is the decision which thou makest (with respect) to Nubnofret?" The Vizier said to Kha, "Thou (belongest) to the Residence."²⁴ Mayest thou go the Treasury in order to look into her concerns." Kha went out. He said to her, "I have examined the writings. Thou art not inscribed therein" (N16). Upon the inspection of the official registers, the scribe had no better tidings for Nubnofret: the registers did not substantiate her claims, but supported those of Khay. It follows then that the Vizier did not content himself with the evidence which the parties themselves brought before the court; he made doubly sure by sending out a royal

²¹ Cf. J. Pirenne, in: *Recueils de la Société Jean Bodin pour l'Histoire comparative des Institutions* 16 – *La preuve, ère partie – Antiquité* (Bruxelles, 1965), 30 ff. For the official registers as proof in a similar case, see E. Seidl, *Ptolemäische Rechtsgeschichte*, 2nd ed. (Glückstadt, 1962), 95; see also n. 17 above.

²² Nubnofret must have been aware of the title previously ceded to Khay, since she together with her husband are said to have seized the land in question, thus despoiling Khay of his acquired title (N12). Had she hoped nevertheless that her son's right to the succession would exclusively take effect?

²³ The assistance of the scribe during the trial is most noteworthy. That at least one court session was assisted by scribes emerges from a list of the court members, (S8). We may recollect in this connection the part played by a scribe in the lawsuit recorded in O. Nash 2 (Théodoridès, *RIDA* 27 (1980), 42; Allam, *Hieratische Ostraka und Papyri aus der Ramessidenzeit* (Tübingen, 1973), 217 f; idem, *Das Verfahrensrecht in der altägyptischen Arbeitersiedlung von Deir-el-Medineh* (Tübingen, 1973), 57 f. Such a repeated occurrence suggests that the scribe as a member of the court has to help with respect to its findings.

²⁴ For the assistance of a royal scribe at court sessions (like the Eisagogeus during the Hellenistic Period) see my observations in *ZÄS* 101 (1974), 3.

scribe for the sake of a direct and fresh inspection of the registers. It is impossible so far to detect corruption of any sort in the dealings outlined above; all participants, officials and litigants, appear to be above the suspicion of bribery or dishonesty.

The verdict pronounced by the Vizier had then to be put into execution. The text informs us about this: ‘The priest of the litter Amenemope was summoned. He was dispatched with (the instruction), “Call together the heirs, show them the lands, and make a division for them.” So did one (instruct) him together with the court (*qnb*) of Memphis’ (N17).

We now turn back to Mose in order to hear his own view of these events. He says: ‘The administrator Khay laid a plaint in the great court in the year 18. The priest of the litter Amen(em)ope, (acting) as official of the great court, was sent forth together with him (having) an incorrect²⁵ (copy/extract) of the register in his hand, (whereby) I was removed as a descendant of Neshi. (Thereupon) the administrator Khay was appointed [administrator?] for his brothers and sisters²⁶ to the place of my heirship, (although) [I] was the heir of Neshi, my (fore)father’ (N7-9).

Mose could not readily accommodate himself to the decision of the court against his mother (and himself). However, he has no other argument than his descent from Neshi (and lady Urnero), quoting no further documentary evidence for his cause (except for the reward bestowed upon Neshi by King Ahmose). Little wonder, then, that he alleges that the official registers, on which the decision of the court was based, were incorrect: they were, to his mind, incorrect insofar as they did not support his claims to the inheritance from Neshi despite the fact that he was one of Neshi’s descendants. It is to be noticed, moreover, that his report is in general badly worded and inaccurate. The fact remains that the said priest was dispatched by the court only after the inspection of the registers had been twice undertaken. In the same manner confusion can be sensed in the passage preceding the excerpt we have just discussed, where Mose states: ‘I am confident that I am the descendant of Neshi. Division was made for me together with them, but the administrator Khay does not acknowledge...’ (N7).²⁷ So far as we can see, such a partition of the lands had never taken place; Mose alludes perhaps to the partition which was formerly made in favour of the lineage of his grandmother Urnero.

The deposition of Mose thus brings no new line of argument against Khay’s claims. Mose merely recapitulates the previous history of the estate, laying particular stress upon the title of his grandmother Urnero to the inheritance; in so doing he

²⁵ For a discussion of the word *rd* in legal and other texts, see R. Parant, in: *Le droit égyptien ancien*, 25-55.

²⁶ It is not certain that these persons are real brothers and sisters of Khay himself; very likely they are the coheirs, who are the genuine descendants of Neshi. The meaning of the decision appears then to be that Khay was made responsible (trustee or administrator: *rwḏw*) for the cultivation of the indivisible estate which he had henceforth to manage on behalf of himself and his coheirs, in the same way as lady Urnero had done for sometime before (N3). Cf. Théodoridès, *RdE* 24 (1972), 191 f.

²⁷ This assertion cannot be attributed to Nubnofret; Gardiner, *Mes*, 15 n. 24. As a matter of fact she cannot be counted among the heirs in question. Owing to the law of succession current in her time, a wife had no legal title to inherit from her husband, inasmuch as a husband cannot pretend to the succession of his wife. For the law of succession see the survey of P. Pestman, in *Essays on Oriental Laws of Succession* (Studia et Documenta ad iura orientis antiqui pertinentia, IX), ed. J. Brugman *et al.* (Leiden, 1969), 58 ff.

mentions the dispute between her and her brothers and sisters, culminating in the partition of the estate which an official commissioned by the great court brought about (N2-5). Thereupon he gives a cursory survey of the lawsuit between his mother and Khay (N5-9). Lastly he appeals against the judgment in favour of Khay, saying: 'I am now in the locality (*wšhyt*) of Neshi, my (fore)father, in which is the Hunpet of Neshi, my (fore)father. Let me be examined that I may find out whether, as for Urnero, (she was) the mother of the scribe Huy, my father...Neshi, although she is not enrolled in the register which the administrator Khay, together with the court official who came with him, made against me. (I) aver that it was an incorrect register that was made against me. (For verily) when I was examined before, I was found upon the record.²⁸ Let me (then) be examined together with my coheirs before the notables of the locality (*dmit*) (and) see whether I am a descendant of Neshi or not at all' (N9-11).

Besides the recurrent allegation concerning the official registers, Mose's expression is here again less than accurate: it would emerge from the course of events, as we have elaborated it above, that Mose, deprived of the inheritance, cannot have been enlisted in the said record; evidently what he means is that the branch of his family was formerly enrolled therein. At all events he obviously fails to produce fresh evidence, had he possessed any, against Khay's title. He appears by no means in a position which would enable him to address the ordinary law-courts, hence his appeal to the notables of the village, who would certainly testify positively, as far as his descent is concerned. We read in fact that the notables were summoned to hear the depositions of some individuals (N2).

A considerable section of our inscription (N20 ff. and S2 ff.) clearly bears upon the evidence, which comprises both oral testimonies and documents. As Gardiner has made clear,²⁹ the testimonies inscribed on the north wall are homogeneous throughout; they grow shorter towards the end and finally add no more information. As to the text on the south wall, we encounter testimonies again, some of which were given before the court (*qnbt*) with mention of the Vizier, in addition to a document relating to the litigation between Urnero and her sister Takharu and the subsequent partition of the estate in year 59 of King Horemheb.³⁰ This latter part (on the south wall) probably deals with the previous lawsuits, in which the direct forebears of Mose were engaged. As to the evidence inscribed on the north wall, its close connection with the appeal of Mose seems to be beyond any doubt. Despite the lacunae which abound in this part of the text, we can easily perceive that the testimonies of all the individuals (six men,³¹ and afterwards three ladies) maintain the essential points in Mose's appeal. They go to prove that the scribe Huy was, through Urnero his

²⁸ For the word *rt* (not to be read *wrt*), see Gardiner, *JEA* 19 (1933), 26; *JEA* 22 (1936), 182 f.

²⁹ Gardiner, *Mes*, 24.

³⁰ This historically too-high date can be explained by the attribution of the reigns of some of his predecessors (very probably the so-called heretic kings) to him; R. Hari, *Horemheb et la reine Moutnedjemet* (Genève, 1965), 405 ff.

³¹ Assuming the reading *ddt.n:f* in N26, in which case no new witness is to be introduced, but the preceding one continues to speak; Gaballa, *Mose*, pl. 61.

mother, a descendant of Neshi; that Huy, like Urnero, had successfully contended for his rights in the lands against some of his near kindred; and that moreover he used to cultivate the lands as he pleased. From these testimonies, however, follows no fresh evidence as regards Khay's claims; and the documents quoted on the south wall apparently do not raise any new issue, as they consist exclusively of records relating to the earlier trials. On the other hand Khay, who on this occasion did bear witness to the descent of his rival, seems, amongst other things, to have denied allegations concerning the cultivation of the lands, thus presumably upholding his own claims (N23-27).

Albeit that the inscription is fragmentary, we shall on the whole not err in concluding that Mose's appeal to the notables of the village would not have been any more successful than his mother's earlier proceedings.³² It is idle to speculate on the would-be decision of the notables upon the hearings. And it would be precarious to formulate further assumptions with respect to a retrial before the great court under the presidency of the Vizier (eventually with a successful outcome for Mose); even then, unless fresh legal arguments were forthcoming, the Vizier would hardly have reversed his previously elaborated judgement.³³ We can finally reflect that Mose

³²The expression *rmṯw ʿw n pꜣ dmit* recurs four times in our description. In one example (S10) the dispute between Urnero and her sister Takharu is dealt with. The priest Iniy, charged by the great court to carry into effect the division of the estate among the coheirs (cf. N3), arrived in the village, where the estate is situated. On this occasion the coheirs were assembled together with the notables of the village, and some depositions were heard, possibly by them. In the second example (N20) the text is fragmentary, but we can grasp the drift. The notables were apparently involved anew in the partition ordered by the court and to be executed by an envoy, the priest Amenemope, in cooperation with the nearest local court, that of Memphis. The third occurrence (N10) is found in Mose's appeal to the notables: 'Let me be examined together with my coheirs before the notables of the locality (and) see whether I am a descendant of Neshi or not at all'. His request was probably met with the response, as we can gather from the fragmentary opening part of our inscription (N2), that the said notables were to hear again certain depositions, namely those of Mose and Khay with nine witnesses.

Due to the fragmentary condition in which the three occurrences are related to us, only thus much may at present safely be gleaned, that the notables represented a local board which could be addressed by the authorities in order to assist with the settlement of disputed matters in a given locality. It emerges from Mose's appeal that this board could equally be approached by individuals to bring about investigations and presumably to decide over conflicts in their locality. It is uncertain whether the notables were empowered to enforce their own decision without recourse to governmental circles. Yet the local notables could generally act as a council (*qnbt*) authorized to decide current affairs in their locality as well as to judge on conflicts arising there (n. 11 above). Since in our inscription the notables are always mentioned as such and do not appear expressly in their capacity as a council (*qnbt*), it would be safe not to identify them with a council at all. Cf. Gardiner, *Mes*, 36 who was inclined to identify them with the court (*qnbt*) of Memphis.

Note also that the word *dmi* does not necessarily refer to a 'town' such as Memphis (cf. its usage with reference to the small community of Deir-el-Medineh; J. Černý, *A Community of Workmen at Thebes in the Ramesside Period* (Cairo, 1973), 92 n. 1; idem, *BIFAO* 27 (1927), 167 ff) so that the notables in our inscription might very well be those of the village where the disputed estate was actually situated. Mention is finally made of the notables (*rmṯw ʿy*: the great men; also *rmṯw ʿry*: the mighty men) appearing on several occasions in a demotic archive from Saqqâra; J. D. Ray, *The Archive of Hor*, (London, 1976), 12 (j); cf. M. Malinine, *RdE* 16 (1964), 211 f.

³³The contention between Mose and Khay was certainly not to be settled by way of a divine judgement, i.e. before a court where a god would be engaged as the supreme judge. See however, the trial (about landed property) recorded on the Dakle stela (n. 17 above), and A. Moret, *CRAIBL* 1917, 157 ff, about a stela from Abydos. It recounts a trial (about a field) before the divine court where one of the litigant parties is named *Pꜣ-sr*, son of *Msmn*. The father of this party has been identified with our Mose by Moret, who assumes furthermore that the trial at Abydos had direct bearing on ours. His argument rests on a very precarious basis, however, cf. Peet, *JEA* 10 (1924), 119.

might have spent his life harbouring a certain resentment at the decision; he might therefore have recorded in his tomb this tale of strife, hoping for a better solution to his case in the world to come.³⁴

³⁴ The name of the individual introducing Mose's deposition (N2) is damaged, and the titles given there are not those of Mose attested anywhere else in the preserved parts of the tomb. It has been suggested therefore that this obscure person speaking first could alternatively be a powerful relative of Mose; cf. Gaballa, *Mose*, 25 n. 2. In this case this individual would appear as the real author of our inscription.

A WORD FOR 'CAUSEWAY' AND THE LOCATION OF 'THE FIVE WALLS'¹

By PAUL JOHN FRANDBSEN

In a recent publication (Ventura, *Living in a City of the Dead*), it has been argued that the so-called five walls of the Turin Strike Papyrus be located to the south of Deir el-Medina. This paper reexamines the evidence and discusses alternative possibilities.

IN his stimulating book on the topography and administration of the royal necropolis of Thebes, Raphael Ventura has devoted a whole chapter to a very thorough discussion of the nature and location of the five guard-posts, the so-called five walls.² After a careful examination of all published, written sources, Ventura arrives at the following cautious verdict: 'Assuming that the watchposts were situated in the vicinity of the village, obviously on the path leading from it to the plain, and assuming further, with Edgerton and Thomas, that these were not massive walls encircling the village, one is still left wondering whether the five *inbw*t guarded the path leading north-east, from the front of the village to the vicinity of the Ramesseum, or, alternatively, the one leading south and then east, starting from the back of the village and emerging near Medinet-Habu. Since neither this example,³ nor any other among those quoted above, provides an answer to this specific question, we can only resort to speculation.'⁴

On the basis of the evidence adduced by Ventura, I am entirely in agreement with this view, but when, in the last analysis, it is suggested that the 'watchposts were necessarily concentrated in the upper part of the wadi leading south from Deir el-Medina, and certainly above the point where one has to turn sharply to the east',⁵ I cannot help wondering whether the author has ever been on the spot. From the suggested location of the watch-posts scarcely anything can be watched, and if the task of the guards was solely to control access to the wadi, why then build five watch-posts – within a distance of a few hundred metres? The aim of this paper is to propose an alternative location and to this end I shall first take issue with Ventura's principal claims and subsequently draw attention to a 'new' piece of evidence.

Ventura has determined the meaning of the Tomb, *pj hr*, in a way that comes rather close to the older, though never clearly defined, concept of the Necropolis: it comprises the tomb of the reigning king as well as the organisation responsible for

¹ I am very grateful to Professor John R. Harris for revising my English text.

² (*L*)*iving in a (C)ity of the (D)ead* (Freiburg, Schweiz, and Göttingen, 1986), 120–44.

³ Ventura is referring to the (*T*)*urin (S)trike (P)apyrus*, rt. 2, 11–12 (= *RAD*, 55, 5–7).

⁴ *op. cit.* 134–5.

⁵ *op. cit.* 140, see fig. 1, after Ventura.

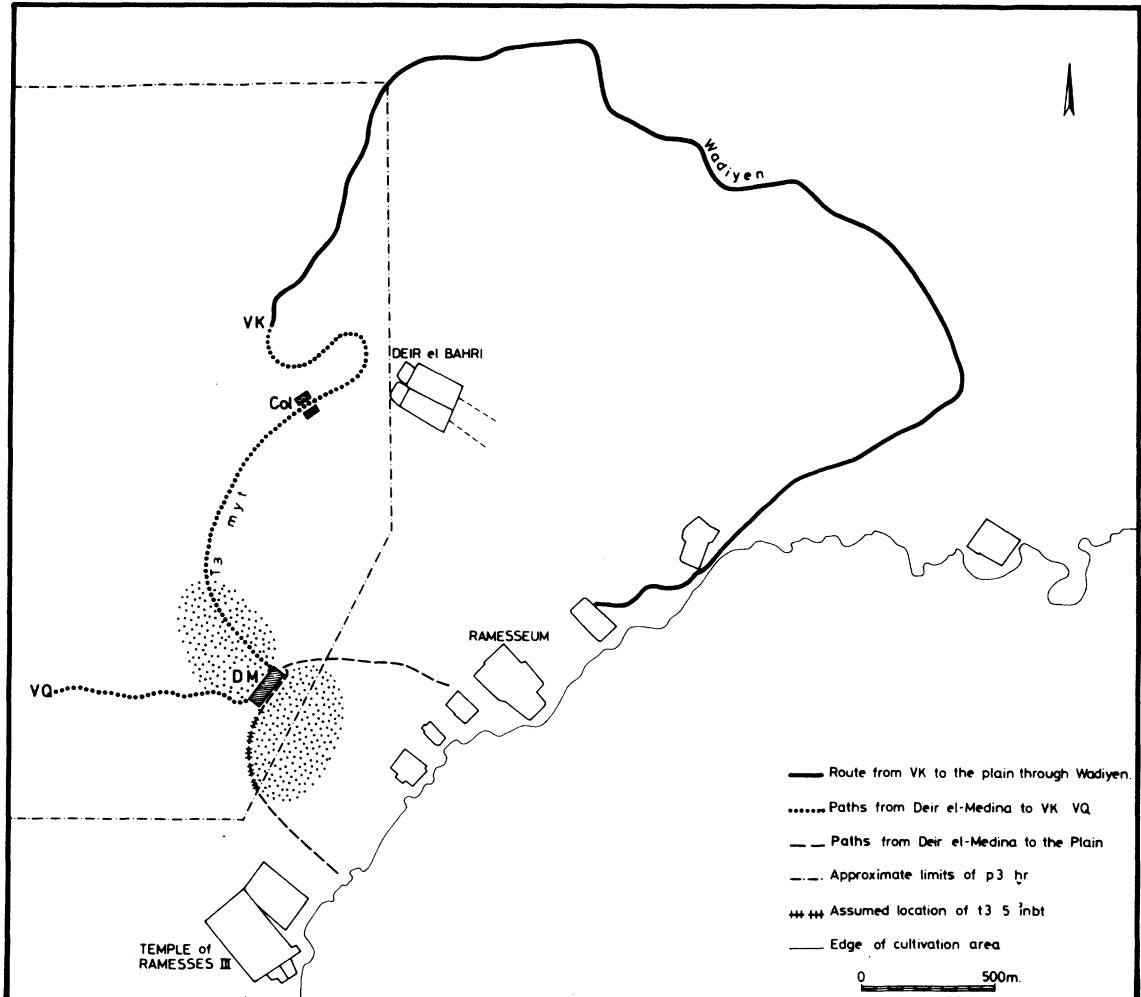


FIG. 1. After R. Ventura, *Living in a City of the Dead*.

its construction, i.e., the community of workmen, and this is in keeping with the views of other scholars.⁶ But when he attempts to extend the definition so as to include and identify also the territory occupied by the Tomb, he is pressing the point too hard; and this becomes even clearer in his analysis of *TSP* rt. 2, 6-7,⁷ which he translates thus:

'Regnal year 29, third month of the Second Season: The crew passed the *inbw*t, they remained in *p3 hr*.'⁸

According to Ventura, this passage supplies the very important information 'that one could pass the watchposts, (obviously on one's way out of the village) and yet remain

⁶ Cf. e.g., D. Valbelle, *Les Ouvriers de la tombe* (Cairo, 1985), 87 ff, and C. Eyre, in M. A. Powell (ed.), *Labor in the Ancient Near East* (New Haven, 1987), 168 ff.

⁷ *RAD*, 54, 13-14 (= Ventura's ex. 4).

⁸ Ventura, *op. cit.* 122.

in *pꜣ hr*.⁹ The phrase *hmsi hr pꜣ hr* 'should be understood not so much as a positive indication of the exact spot in which the workmen decided to stay, but rather as a negative one, implying that this time the crew did not march to the plain (after having passed the *inbt*); in fact they did not march at all (...); they remained in *pꜣ hr*.¹⁰

In spite of his ingenious analysis of this passage, I feel that Ventura has been misled by his own translation of the crucial phrase. There is a nice parallel in *TSP* rt. 3, 14-15,¹¹ which he renders as follows:

'Regnal year 29, first month on the Third Season, day 13: The crew passed the *inbwt* saying: "We are hungry". They sat down at the rear of the Mansion of (...).'¹²

Now the verbal form used in both instances is the infinitive, and – regardless of whether in this particular usage it is labelled 'historical infinitive' – it is a neutral and unmarked form, very characteristic of the terse, departmental style found in many documents. Thus in rt. 2, 6-7 the phrase might equally well be translated: 'they sat down...', and there is therefore no reason not to assume that the workmen did indeed make a march of protest – i.e., passed the walls – but then returned to spend the day in the Tomb – which in this context probably means Deir el-Medina. And this in turn will imply that, even if one were to accept Ventura's idea of the Tomb as a well-defined territory, the passage in question would not 'prove' anything as to the location of the guard-post in relation to the *hr*.

The main argument for locating the five guard-posts to the south of Deir el-Medina lies in Ventura's interpretation of the passage from *TSP* in which it is stated that 'the crew went out to pass the guard-posts at the rear of the village after the three captains had made a great shout against them at the gate of the village'¹³ – but this has to be viewed in the light of one of the basic conclusions of his book, namely, that the Tomb was 'a rather isolated, guarded and only selectively approachable site'.¹⁴ The village had two entrances, the main one being to the north. 'Once the orientation was established and the village took gradually shape, it must have been impracticable to reverse it'.¹⁵ But a problem arose, Ventura feels, because the wadi at the southern entrance was the shortest way to the Valley of the Queens and to Medinet Habu, the administrative headquarters in the Twentieth Dynasty.¹⁶ 'Granted that the main function of the watchposts was to provide the means for keeping an eye on the comings and goings from the plain to the region of *pꜣ hr* and *vice-versa* (...) it stands to reason that whoever had an interest in keeping the population of Deir el-Medina under control had taken measures to seal up efficiently the access from the village to one of those paths while erecting the watchposts along the remaining one. The present situ-

⁹ op. cit. 138.

¹⁰ op. cit. 139, cf. also 140 et passim.

¹¹ *RAD*, 57, 1-2 (= Ventura's ex. 8).

¹² Ventura, op. cit. 123.

¹³ rt. 2, 11-12 (= *RAD*, 55, 5-7).

¹⁴ Ventura, op. cit. 170.

¹⁵ op. cit. 136.

¹⁶ op. cit. 136 and 134.

ation of the ruins at Deir el-Medina, though far from reflecting the state of affairs during the Ramesside period, shows that the area extending towards the north-east could have been obstructed by chapels, houses or just walls, more effectively than the southern outlet could. Moreover, *tꜣ 5 inbt* may well have been an innovation introduced during the reign of Ramesses III,¹⁷ and if so, 'and if making the distance to the administration head-quarters of Western Thebes as short as possible was an important consideration, it would have been an additional argument in favor of leaving the south-going path open (...)'.¹⁸ In short, 'the normal procedure for leaving the village for the plain during Dynasty XX must have been to check out through the front gate, and then either obtain formal permission to proceed through the obstructed and guarded passage due north-east, or walk along the flank of the village and emerge into the south-going wadi. The latter alternative was probably the normal itinerary of the striking workmen'.¹⁹

Although it is not within the scope of this paper to challenge Ventura's general understanding of the data bearing on communications between Deir el-Medina and the outside world, I think that he places far too much emphasis on the notion of seclusion and rules of contact and movement in the area as a whole. The numerous references in the texts to people going to and fro seem to me to suggest a somewhat different picture, and one rather gets the impression that Ventura has looked at the problem in the manner of a city planner behind his desk – whereas what is in fact at issue is whether one should go north or south of Qurnet Mura'i. I cannot see that it makes any significant difference in terms of distance whether one walks 'along the flank of the village' and emerges 'into the south-going wadi', or takes the north-eastern route, if one wants to go to Medinet Habu or even the Ramesseum. And if, as Ventura thinks, the checkpoint between the 'inside' and the 'outside', *pꜣ ḥtm n pꜣ ḥr*, was indeed situated in the immediate vicinity of the Ramesseum,²⁰ why then assume that communication with the outside world was other than through this point of control? The striking workmen used walk-outs as an effective means of communication, and sneaking out by the back way would hardly have given them the audience they wanted.²¹ On this particular occasion they may indeed have gone out through the southern wadi, as we shall see below, but suffice it to say at this juncture that, as opposed to Ventura, I see no reason, *a priori*, for assuming that the five 'walls' are to be sought in the area south of Deir el-Medina, and that, as it happens, there may be positive evidence for locating them to the north of the village.

When the workmen went on strike on day 10, second month of winter, in year 29 of Ramesses III, they made a walk-out. This incident is referred to in three sources, one of which, *TSP*, has two separate entries:²²

¹⁷ op. cit. 135.

¹⁸ op. cit. 136.

¹⁹ op. cit. 137.

²⁰ op. cit. 96, with additional material in *JEA* 73 (1987), 149–60.

²¹ Marching down even to *pꜣ ḥtm n pꜣ ḥr* was not on occasion sufficient, as shown by O.D.M. 571, for which see further below.

²² For an overall discussion and the translation of these documents see the paper 'Editing Reality: The Turin Strike Papyrus', in *Fs. Lichtheim*, to appear in 1989.

'Year 29, second month of winter, day 10. On this day the crew passed the five guard-posts of the Tomb saying: "We are hungry, for 18 days have already elapsed in this month"; and they sat down at the rear of the Temple of Menkheperre. The scribe of the enclosed Tomb, the two foremen, the (two) deputies and the two proctors came and shouted to them: "Come inside". They swore great oaths (saying): "Please come back, we have matters of Pharaoh". They spent the day in this place and spent the night in the Tomb', *TSP* rt. 1, 1-5 (= *RAD*, 52, 14-53, 3).

'Year 29, second month of winter, day 10. The entire crew passed the five guard-posts of the Tomb. They reached the inner part of the Temple of Pharaoh. The three captains, the (two) deputies and the two proctors came (?). They found them seated at the rear of the Temple of Menkheperre in the outer road', *TSP* vs. 3,1 (= *RAD*, 49, 15-18).

'Year 29, second month of winter, day 10. On this day the crew passed the guard-post because of their ration', O.CGC. 25530, 1-3.

The fourth mention of the walk-out occurs in the first two lines of the fragmentary journal O.IFAO 1255.²³ To judge from Černý's transcription, the left edge of the ostracon seems to be intact and thus the entry for day 10 is virtually complete. It may be restored and translated as follows:

(1) (*hrw 10 iw.w*)²⁴ *hr sš tꜣ inb hr pꜣy.w diw* (2) *r-gs pꜣ stꜣ n...ꜣ*) 2 *pꜣt 11 m-mitt*: '(day 10, they) passed the guard-post because of their ration, near the causeway of (ki)ng (Mentuhotp)e. Second month of winter, day 11, likewise'.

The first thing to be noted is that the text provides an additional reference to *tꜣ inb* in a context where *TSP* has *tꜣ 5 inbwꜣt* and, by implication, *nꜣ inbw(t)*. In that passing a guard-post is an unequivocal, formal *démarche* taken by the crew whenever they set out to take action in connection with severe protests against the prevailing conditions, there can be no doubt that the four records relate to the same event. This does not, however, imply that all references to *tꜣ inb* – even in contexts involving demonstrations – should necessarily be taken to refer to the five guard-posts, as Ventura thinks.²⁵ In *TSP* the term *nꜣ inbw(t)*, known also from other types of document, may be a substitute for *tꜣ 5 inbwꜣt*, but the latter term is not attested in other sources, nor does *tꜣ inb* occur in *TSP*. The very existence of all three terms probably therefore shows that they are not interchangeable, and that *tꜣ inb* is not a collective. The possibility that we are dealing with a case of *pars pro toto* cannot, of course, be ruled out, but *tꜣ inb* may very well be what it looks like, i.e., a reference to just one specific guard-post. In other words, when the journals mention the passing of *tꜣ inb* we cannot be sure whether the crew actually passed only one guard-post – which

²³ The ostracon is unpublished, but the transcription by Černý in notebook 17.61, p. 40 has been included in *KRI* VII, 300-302.

²⁴ In this text the pattern used after a date seems always to be the Non Initial Main Sentence. If day 10 was the first entry of the journal it may have included a year-date and a specific mention of the crew. If it is not the beginning of the journal we should probably restore as suggested.

²⁵ 'It (O.CGC 25530) contains the welcome information that what is known as *tꜣ 5 inbt n pꜣ hr* from the Strike Papyrus, could also be termed *tꜣ inb(w)*. Based upon this information we may feel confident to interpret all passings of *inbwꜣt* as an indication of protest, and particularly those that were followed by demonstrations in or near one of the Royal Mortuary Temples, as crossings of the particular complex of watchposts officially known as *tꜣ 5 inbt n pꜣ hr*, even if the text contains some abbreviated form thereof', Ventura, *LCD*, 133.

would presumably be the nearest to the village or the most prominent one – or whether *ṯṯ inb* was used in the manner of *pars pro toto*. For the compiler of the journal it was enough to indicate that they were making trouble.²⁶

Turning our attention to the text itself, we may note that – as often with entries of this type – the exact sense is not immediately apparent. Indeed, were it not that the cartouche is followed by the entry for day 11, our first question might well be whether there is in fact any connection between 11.1 and 2. It is the latter line that is crucial. Who is the king whose name in the cartouche ends with a *ṯ* according to Černý? And what is the *stṯ*?

According to *Wb.* IV, 354, 13–355, 3, *stṯ* means ‘Gang’ and ‘Rampe’,²⁷ ‘etymologically (...) a place over which something is dragged or drawn’.²⁸ It is well known in the compound *r-stṯw*, ‘the beginning of passages’ (‘Necropolis’),²⁹ a term that is probably to be connected with *pṯ r-stṯ*, which in the Turin plan³⁰ is used ‘in the technical sense of “sarcophagus-slide”, i.e. the subway cut below the level of the floor and leading down to the Burial Chamber’.³¹ This ‘the mouth of the passage’ was cut in the fourth *stṯ-nṯr*, ‘god’s passage’, in the tomb of Ramesses IV, *stṯ-nṯr* being the term applied to the passages and corridors of the royal tombs in the New Kingdom; and in his discussion of the latter word Černý argued that ‘*stṯ* alone, contrary to *Wb.* IV, 354, 13, cannot have this meaning’ (i.e., passage), because ‘in the only known example Pap. Turin 107, 16, four stone cutters do something *under* it’.³² Elsewhere, Černý opted for a different interpretation, taking *r-hry* as an adverb and rendering the whole as follows:³³ ‘The king’s butler Amenkheut let the four chief stone-cutters of the alabaster together with two men be brought. They escorted (?) them down the sloping (passage) and the scribe Amennakhte shut them in the *hr*. They spent the night hammering on the outer side of the alabaster shrine and also on its inner side until dawn. They finished and it was again painted with figures’.³⁴ While the passage is not entirely free from problems, it is difficult to subscribe to Černý’s former position, the more so in that a rendering ‘sloping passage’, ‘ramp’ would seem to fit each of the known examples, of which there are at least four, all from non-religious contexts.

²⁶ This may also account for the more circumstantial description in *TSP*. The text is not a journal, and the compiler is not really interested in what the crew actually did. For him the essential distinction is between passing the five guard-posts – as was done at least in the earlier phases of the conflict – and passing only one (*RAD*, 56, 8–16); cf. the paper mentioned above n. 22.

²⁷ The *Wb.* also gives the sense ‘Höhle’, but this is inaccurate, as rightly pointed out by E. Hornung, *Das Amduat* (Wiesbaden, 1963), II, 90.

²⁸ Gardiner, *EHT*, 31.*

²⁹ Literally ‘the mouth of passages’. Cf. Caminos, *LEM*, 147, who translates ‘the place of passages’; and Hornung, op. cit. 90–91 who is more uncertain as to the exact meaning of *r-stṯw*.

³⁰ See H. Carter and A. Gardiner, *JEA* 4 (1917), pl. xxix, W, c and X, c, and cf. Černý, *The Valley of the Kings* (Cairo, 1973), 28 n. 9.

³¹ Gardiner, op. cit. 137.

³² Černý, op. cit. 27 n. 2.

³³ *PdT*, 127, 14–20.

³⁴ *A Community of Workmen at Thebes in the Ramesside Period* (Cairo, 1973), 11–12. I have omitted Černý’s discussion of some of the more obscure points. For a different solution to some of the problems cf. Ventura, op. cit. 32–4; and see also Valbelle, op. cit. 200.

In addition to the two instances mentioned already – the Turin text and the ostrakon under discussion – the word also occurs in the Piye stela and in P. Anastasi I. In the former the army is discussing how to capture Memphis because its walls are high and new: ‘Some people said: “Let us lay siege to (...) for its troops are numerous.” Others said: “Make a ramp to it (*ir stꜣ r.s*) that we may raise the ground to its wall”’, Piye 90–91.³⁵ A famous passage in P. Anastasi I, 14, 2 deals with the building of an ascending ramp made of brick: ‘A ramp of 730 cubits with a width of 55 cubits is to be made (*ir stꜣ n mh...*)’. The description is longer (14, 2–8), but we need not go into all the details of its construction.³⁶ No one has ever questioned the meaning of *stꜣ* here – or in the rendering of the Piye passage – and reviewing all four occurrences we may therefore conclude that *stꜣ* means ramp or sloping passage. More specifically, it may be a (? part of a) corridor in a New Kingdom royal tomb, a ramp for scaling a wall, a ramp *per se*, and for the occurrence in the IFAO ostrakon I would propose ‘causeway’. It can hardly, I think, be disputed, that the translation ‘sloping corridor’ makes rather poor sense in the description of what happened on day 10, and it may therefore be ruled out. ‘Ramp’ is equally inadequate. It is, of course, conceivable that a temporary (building) ramp existed somewhere in the neighbourhood of Deir el-Medina, but it is difficult to think of a royal monument in the course of construction at that time that would have required one, whereas the proposed rendering ‘causeway’ provides a much easier solution to our problem.

Several causeways must have been known to the people of the Twentieth Dynasty, and those at Deir el-Bahari may have been as familiar to them as they now are to Egyptologists. But while the ostrakon might conceivably be referring to one of these ramps, such a solution seems – literally – rather far-fetched. The area between Deir el-Medina and the Ramesseum is the scene of most of the interaction between the Community and the outside world, and the strike-texts also bear out this impression. Thus, immediately following lines 1 and 2, translated above, the present text continues:

‘(3) Second month of winter, day 12. They passed and (they) reached the temple of the King of U. and L. Egypt Wesermaatre-setepenre. (4)...’.

In short, the ramp we are looking for should be located much closer to this area, and is therefore likely to be none other than the causeway leading to the tomb and temple of Sankhkare Mentuhotpe III. This was discovered in 1914 and examined by Winlock,³⁷ who came to the conclusion that it had never been completed, because the tomb and the temple to which it was connected were themselves unfinished.

³⁵ For the latest edition see N.-C. Grimal, *La stèle triomphale de Pi (rankh)y au Musée du Caire* (Cairo, 1981); there is no reason why *ir* could not be an imperative – *pace* Grimal, p. 117 n. 345. The latest translation is that of E. Kausen, in *TUAT*, 1, 557–85.

³⁶ See most recently Hans-Werner Fischer-Elfert, *Die Satirische Streitschrift des Papyrus Anastasi I. Text-zusammenstellung* (Wiesbaden, 1983); id., *Die Satirische Streitschrift des Papyrus Anastasi I. Übersetzung und Kommentar* (Wiesbaden, 1986), 121–32.

³⁷ See H. Winlock, *AJSL* 32 (1915), 1–37, esp. p. 29 ff. and figs 1 and 6–9; id., *BMMA*, part II, Egyptian Expedition 1920–1921, pp. 29 ff., esp. fig. 1; id., *JNES* 2 (1943), 280–1 and pl. xxxii (= id., *The Rise and Fall of the Middle Kingdom in Thebes* (New York, 1947), pl. 7). Cf. also PM 1², plans v and x.

Enough of it though has been preserved to show that it was the only monument in the area around Deir el-Medina that could with any degree of plausibility be described as a *stj*. But this does not mean that the ancient Egyptians knew it under the name that we now ascribe to it – and the measly *q* is scarcely the sort of clue one would wish to be given.

Although at first glance it would seem idle even to speculate as to whose name has been lost in the lacuna, it may nevertheless be worthwhile to consider a few of the possibilities. Was the causeway in fact associated with Mentuhotpe III? That his name, in whatever form – Sankhkare or Mentuhotpe, should have still been attached to this structure in the Twentieth Dynasty is not as unlikely as might be imagined, in that it now appears that the king is attested in the late New Kingdom – although in the intervening period from the Twelfth Dynasty he seems to be mentioned only in the lists of ancestors at Saqqâra and Abydos, in the Turin King List (possibly),³⁸ and on a block from a building of Amenophis I at Karnak, where he occurs in what would seem to be also a list of kings/ancestors, between Nebhepetre and the god's father Sesostris.³⁹

The 'new' evidence is by no means superabundant, and since it is all from the area known as the Valley of the Spanish Pilgrims, Sector E I in the technical jargon of the editors of the monumental *Graffiti de la Montagne Thébaine*, it poses a number of questions. It consists of four graffiti from section 199, all with the name *Sꜣnh-kꜣ-rꜣ*, and this can only be the Eleventh Dynasty king since no other of that name appears to be known.⁴⁰ The first is Gr. 3787, which is incomplete and therefore doubtful. The second, Gr 3801, is difficult to read as a whole, but *nsw-bit Sꜣnh-kꜣ-rꜣ* is very clear. The remaining two are more informative. Gr. 3786, 'The lector-priest X⁴¹ of Sankhkare', would imply the existence of a cult of the king (!), and in Gr. 3789 *Sꜣnh-kꜣ-rꜣ* is juxtaposed to another, fragmentary, cartouche in which only the last sign \llcorner has been preserved. (The editor takes this to be an \ominus , a reading open to several interpretations – and emendations). One should not attempt to press the material too hard, in that although it presumably shows that Sankhkare had not been forgotten at the end of the New Kingdom – the most likely date for the graffiti – it has no obvious bearing on the 'name' of the causeway near Deir el-Medina. There are certainly no causeways in the southern, inaccessible area, and it is difficult to account for the presence here of the four graffiti together with the absence of comparable material in the Valley of the last Mentuhotpe. In short, while Sankhkare is attested somewhere within this period and in the Theban Mountains, his name does not fit the extant *q* of O. IFAO 1255.

³⁸ Cf. *GLR*, I, 246. See also J. von Beckerath, *Handbuch der ägyptischen Königsnamen* (1984), 64; and Helck, *Materialien*, 79–119 (the section on the Theban Mortuary Temples, their names, personnel, lifespan, etc.), which is, however, completely silent as to this king. For material from the Twelfth Dynasty see also Winlock, *Rise and Fall*, 77–90.

³⁹ See L. Habachi, *ASAE*, 55 (1958), 185 ff. and pl. iv.

⁴⁰ Gauthier's ephemeral and uncertain *Sꜣnh-(kꜣ)-rꜣ* from the Second Intermediate Period (*GLR*, II, 62) is read *Sꜣnh-(ib)-rꜣ* by Gardiner, *The Royal Canon of Turin* (Oxford, 1959), col. VIII, 18 (= fr. 101).

⁴¹ The editor, A. F. Sadek, tentatively transcribes the first sign in the (?) name with a 𓆎 , perhaps because one would expect *hry-hb* to be followed by *hry-tp*, but the sign looks like 𓆏 .

With some stretch of the imagination one might possibly think of the name Mentuhotpe, but this is so rare that it seems to be known only from one graffito of uncertain date, and in the usual writing, without 𓂀.⁴² There is some evidence for the writing of *-hṯp* with a final *-w* in the New Kingdom, but all the examples for which the reading *Mntw-hṯpw* has been suggested are very doubtful,⁴³ so that the only certain instances are of Amenhotpe (I) and these are not very numerous.⁴⁴

The possibility that the cartouche contained an abbreviated form or even a nickname should also be considered. By analogy with, e.g., *'Imnw* for *'Imn-m-hṯt*, one might perhaps think of *Mntw* as an abbreviation of *Mntw-hṯp* – even though this particular case is unknown to Ranke.⁴⁵ The dubious *-hṯpw* mentioned above⁴⁶ might represent another abbreviated name, but well-attested forms like *Mnw*, *Msw*, etc. are of course equally possible. The full form *Rc-ms-sw* cannot, I think, be completely ruled out, but the name of a monument would normally be compounded with the premen of a king.

On the argument here put forward, *tꜣ inb* of O.IFAO 1255 was situated in the vicinity of (*r-gs*⁴⁷) the causeway of Mentuhotpe III, and if, as suggested above, it is not synonymous with *tꜣ 5 inbwt*, one may well ask where the other four guard-posts stood. Unfortunately, this question cannot be answered, but I would imagine that all the guard-posts were situated at places where it was possible to keep an eye on traffic over a wide area, and that the angle of survey was made to overlap with those of the adjacent guard-posts. The eastern slope of the ridge that forms the south side of the entrance to the Valley of the last Mentuhotpe and the north side of the entrance to the Valley of the Eagle,⁴⁸ i.e., the point where the causeway and the processional road of Amenophis I intersect, is ideally suited for a guard-post, and the dilapidated brick-wall structure up the hillside⁴⁹ may conceivably have been the site of an ancient guard-post, *in casu* the *inb* of O.IFAO, and the *wꜣ inbt* of *TSP* rt. 3, 10. The peak of plateau of Sheikh 'Abd el-Qurna and/or of Qurnet Mura'i provide other possibilities, but it should be noted that there is no single point upon either from which the entire hill could be watched. Perhaps, therefore, the 'five guard-posts' was the name of a group of guard-posts to the north of Deir el-Medina, as opposed to a

⁴² Gr. 2580 from Sector A2.

⁴³ See Gardiner, *LES*, 91, 14 n.d.; but also Posener, O.D.M., II, pl. 64 line 8 (= (Lopez) O. Turin 57317). Cf. J. von Beckerath, *Untersuchungen zur politischen Geschichte der Zweiten Zwischenzeit in Ägypten* (Glückstadt, 1964), 179, 224 and 284; E. Wente, in W. K. Simpson *et al.* (eds.), *Literature of Ancient Egypt*, 139 n. 3.

⁴⁴ Cf., e.g., Gr. 1110 (no cartouche); 1394 and 1397; and O.D.M. 672.

⁴⁵ Cf. *PN* II, 94 ff.

⁴⁶ n. 43.

⁴⁷ For the meaning of *r-gs* see Ventura, *op. cit.* 56 with n. 129, where in a completely different context he writes: '*R-gs* could be used loosely of a site when there was need to provide a rough indication of its vicinity to a prominent landmark'. 'The chapels of Ptah on the way from Deir el-Medina to the Valley of the Queens are said to be *r-gs tꜣ st nfrw* "in the vicinity of the Place of 'Beauty'". Bruyère, *Fouilles DM 1934-1935, Part II*, pl. 34.'

⁴⁸ See, e.g., *Graffiti de la Montagne Thébaine*, I, pl. cxviii. This publication gives the impression that 'Ouadi en-Nisr' is the local name of 'Vallée de l'Aigle'. For what it is worth I should like to record that in January 1988 this 'name' appeared to be totally unknown to the 'uninformed' local inhabitants, several of whom said that the valley was called 'Wadi Hattasu'.

⁴⁹ For this locality see *op. cit.*, pls. cxviii and cxix where it is said to be 'vestiges d'un monastère Copte'; and further PM I², plan X, pit/cemetery 1152.

group to the south covering the area from the Valley of the Queens to the South-West Valleys.

This brings us now to the final stage of the present discussion, where it will again be necessary to turn to the evidence from two written sources.⁵⁰ The first of these is the extraordinary passage in *TSP* in which the writer exposes the foreman Khonsu's flagrant case of insubordination:

'Year 29, first month of summer, day 2. Amenkhay and Weserhat gave the two sacks of emmer to the crew as ration for the first month of summer. The foreman Khonsu said to the crew: "Look, I tell you, accept the ration and then go down to the market-place to the gatehouse, and have the vizier's children tell him about it". When the scribe Amennakhte had finished giving them the ration they betook themselves to the market-place in accordance with what he (i.e., Khonsu) had told them. But when they had passed one guard-post the scribe Amennakhte went out and said to them: "Do not pass to the market-place. For sure, I have just given you two sacks of emmer. You go then, and I'll have you convicted in any court you'll go to". And I brought them up again (*RAD* 56, 8-16).'

Neither the date nor the exact nature of the second document is clear.⁵¹

'(2) (Amen)re, king of the gods... (3) They passed four guard-posts and they spent the day (4) at (?) the gatehouse (*htm*) of the Tomb,⁵² but it was not noticed... (5). They went down to the market-place (*mryt*) again in year 9, fourth month of summer, day 26. They...(6) the gatehouse of the Tomb and they shouted to (?) the High Priest...(7) (and ?) he came to them at (?) the gatehouse of the Tomb...(8)...(he) spoke...' O.D.M. 571.

The combined evidence from these two sources, the mention of *ḥ 5 inbwṯ* only in *TSP*, and references in the latter as well as in other sources to *nṣ inbwṯ* make it clear that the guard-posts 'had to be passed successively', as was already recognized by Edgerton⁵³ – assuming, that is, that the workmen were making a full parade. They could certainly pass one guard-post without being observed by the authorities, and it was apparently possible also to pass four guard-posts⁵⁴ without being noticed by anyone from the administrative headquarters, the reason for which was very probably that the guard-posts were situated north of Qurnet Mura'i, out of sight from Medinet Habu. This in turn may explain why it was apparently necessary for the workmen of *TSP* to make sit-down strikes in connection with their demonstrations – because only then could they be sure of making an adequate impact on the outside administrators. In other words, a reconstruction that would account for all the data would place one guard-post near the causeway of Mentuhotpe III – presumably near its upper, western portion – with the remaining four either on

⁵⁰ Ventura, *LCD*, 122-3, exx. 7 and 12.

⁵¹ O.D.M. 571, the tentative datings of which range from Ramesses III to Ramesses XI, cf. Ventura, op. cit. 135 n. 83, to which should be added Valbelle, op. cit. 142 n. 9 (R. IX).

⁵² For this locality see above n. 20 and n. 22 (n. 28 in the last mentioned paper).

⁵³ op. cit. 139 n. 10. Cf. also Ventura, op. cit. 138: 'The *inbwṯ* had to be passed in sequence, one after the other, by those who went from the village to the plain'.

⁵⁴ There is an element of contradiction in Ventura's discussion of O.D.M. 571. In op. cit. p. 135 n. 83 he seems to favour a date for this document in the reign of Ramesses III, but on p. 138 n. 94 he has accepted a later date, because this enables him to write: 'Since Ex. 12 (O.D.M. 571) belongs to a different period than the bulk of our other examples, mention of four watchposts instead of five may reflect the situation at the time of its inscription.'

Sheikh 'Abd el-Qurna or forming a series of which the southernmost one would be on the north side of Qurnet Mura'i, e.g., where the remains of the Monastery of St. Mark are still extant.⁵⁵

As we have said above, this does not rule out the existence of another set of – southern – guard-posts, and as a possible point in support of this I should finally like to draw attention to a hitherto unnoticed peculiarity in the passage from *TSP* discussed at the beginning of this paper:

'The crew went out to pass the guard-posts, at the rear of the village (*šm r sš nṣ inbwṯ hr phwy n pṣ dmit in tṣ ist*) after the three captains had made a great shout against them at the gate of the village' rt. 2, 11-12 (= *RAD*, 55, 5-7).

What strikes me as being perhaps significant is the use of the phrase *šm r sš* 'proceeding', 'going out' in order to pass. Of all the instances that refer to the passing of walls (and I have none to add to the corpus collected by Ventura) this is the only one that uses the word *šm* – whereas the rest have just *sš*+ object. In the present case, therefore, the crew had to walk in order to pass the walls, and in that everyone is agreed that they did so from the southern exit of Deir el-Medina – because the captains prevented them from leaving through the normal, northern gate – this could be taken as a further argument against Ventura's idea that *the five guard-posts* lay south of the village. Instead of merely passing the walls, as would have been the case if they had gone through the gate to the north, they had to walk for a distance in order to pass them.⁵⁶

But it is also possible to interpret the passage differently. In this case I would not only emphasize the unusual use of *šm*, but also translate *nṣ inbwṯ hr phwy n pṣ dmit* as 'The Walls-at-the-Rear-of-the-Village' or possibly just 'The Walls-at-the-Rear' of the village, this being then the name of the suggested set of 'southern' guard-posts. The phrase *hr phwy* etc. would no longer qualify *šm*, but the workmen would still have left the village through the southern exit, because they had clearly been stopped from using the north gate. But while this suggestion may in itself be attractive, in that it gives us a clearer idea of the position of the guard-posts – hitherto thought to have been spread out all over the Necropolis in a way about which we could never hope to know anything – it also obliges us to revise our view of the term *nṣ inbwṯ*, the understanding of which must then be inferred from the context of each individual text.

⁵⁵ Cf. G. Castel and D. Meeks, *Deir el-Médineh 1970*, (Cairo, 1980), fasc. 1, pl. 2.

⁵⁶ If this interpretation of the passage is to be preferred it would make for greater clarity to translate 'The crew went out at the rear of the village to pass the guard-posts after...etc.'

A THEBAN TOMB AND ITS TENANTS

By AIDAN DODSON and JAC. J. JANSSEN

In 1857, a tomb was discovered by A. H. Rhind on the Sheikh 'Abd el-Qurna hill, containing rifled mummies, coffins and fourteen labels inscribed in hieratic. The latter, now in Edinburgh, together with two further examples bought on the antiquities market, but now lost, named a series of Eighteenth Dynasty princesses. The labels are to be dated to the Twenty-first Dynasty, the deposit being assessed as a communal reburial made in Year 27 of Psusennes I.

ALEXANDER Henry Rhind (1833–1863),¹ was a young Scottish lawyer forced by ill-health to winter in Egypt between 1855 and 1857, 1862 and 1863; like others in a similar situation, he fell under the spell of the country's ancient civilization, hired a team of workers, and began excavations. Unlike most of his contemporaries, however, he realized the need for a careful record of his researches, and his main published account is certainly ahead of its time.²

Two of his most important discoveries were made on the east side of the Sheikh 'Abd el-Qurna hill, 'at the foot of the hill, about 40 yards west of, and below, Theb. tb. 131'.³ The more southerly tomb of the two was intact, and contained a group of late Ptolemaic/early Roman Period burials,⁴ the other, however, was very different. It had been sealed with a wall, 'carefully built up and the outside plastered with clay impressed in regular rows with a large seal, bearing an *oval*, somewhat indistinct, yet preserving the name of King Amunoph III.', which had been penetrated by robbers.⁵ It comprised chambers on two levels: the upper is described as having four sides of around 15 metres ('40–50 feet') each, the roof being supported by six columns. Its lower companion was entered via a passage sunk in one of the inner corners of the upper chamber, and had been sealed with the Necropolis Seal, the jackal over nine captives.⁶

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¹ W. R. Dawson and E. P. Uphill, *Who Was Who in Egyptology*² (London, 1972), 247–8; Dawson and T. E. Peet, *JEA* 19 (1933), 167.

² *Thebes: its Tombs and their Tenants* (London, 1862).

³ PM 1², 671, based upon Rhind, *op. cit.* 81: a tomb visible on the latter's plate opposite p. 38 is equated with TT 131.

⁴ PM 1², 671.

⁵ Rhind, *op. cit.* 83.

⁶ Rhind, *op. cit.* 83–4.

The tomb was strewn with bones, bandages and a few pieces of 'mummy boxes'; rifled mummies lay in the lower chamber, 'their wrappings ripped up along the throat and breast'.⁷ Apart from them, a 'careful' search of the tomb realized only fourteen wooden labels, inscribed in hieratic,⁸ along with a similarly-inscribed calcareous fragment and a triple seal-impression.⁹ The latter has been the subject of some confusion, being equated with the entrance sealings by Porter and Moss;¹⁰ however, this object, RMS 1956.168,¹¹ is certainly not from any kind of tomb blocking. It comprises a piece of twisted linen cloth 14 cm long, around which has been pressed a blob of clay, the latter bearing the seal impressions (pl. XI). All deriving from the same seal, the centre of their design is a seated figure, a solar disc on its head and holding a *mꜣst*-feather, above a *mr*-sign; to the left is a seated figure of Thoth, to the right, of Anubis. The latter's name is spelt out before him (fig. 1).¹² This group may be read as *Nb-mꜣst-Rꜥmry Dhꜣwtꜣ 'Inpw*,¹³ the whole probably having come from the closure of some kind of container.



FIG. 1.

The group left Rhind somewhat perplexed: the labels apparently referred to royal daughters of the mid-Eighteenth Dynasty,¹⁴ yet even allowing for the all-too-clear work of plunderers, the burials displayed a degree of poverty out of keeping with such a rank for the mummies' owners. He thus suggested that they might have been the communally-buried slaves or attendants of the royal ladies named on what he

⁷ Rhind, *op. cit.* 84.

⁸ *Ibid.*

⁹ S. Birch and Rhind, *Facsimiles of two Papyri found in a Tomb at Thebes* (London, 1863), pl. xii. It has been suggested that a further item came from the tomb, an inlaid cylindrical box, incorporating a figure of Bes (M. A. Murray, *Catalogue of Egyptian antiquities in the National Museum of Antiquities, Edinburgh* (Edinburgh, 1900), 29, 55 [XII] (abbreviated as MC): 325; Loan L. 224.2169; Royal Museum of Scotland, 1956.113). This was found by the National Museum of Antiquities' Dr Anderson, in pieces, amid a box of debris deriving from Rhind's excavations. Reassembled, it was initially published by Petrie, *Proceedings of the Society of Antiquaries of Scotland* 30 (1896), 30-3; finely inlaid with gold and ivory, it once bore the cartouches of Amenophis II, only examples of his prenomen now surviving. The object's obvious magnificence led Aldred to believe that it could only have come from a royal tomb; since the only tomb with royal affiliations amongst Rhind's discoveries was that presently under discussion, he suggested that the casket came from it, *New Kingdom Art in Ancient Egypt* (London, 1951), 58-9, fig. 56.

However, it seems difficult to believe that Rhind would have failed to mention such a discovery in his published accounts of the tomb: even broken up, its details, particularly the cartouches, would surely have excited the interest of the excavator and been listed alongside the labels and sealing. As to its true provenance, one is reduced to speculation; if truly from a royal tomb, it could have come from the debris of the Biban el-Moluk, where Rhind worked, *Thebes*, 143-4. On the other hand, there is in fact no reason why it should necessarily have come from a royal deposit. It is surely just the kind of piece to have been presented by Amenophis II to an honoured member of his court, i.e. any one of the nobles of his time buried on the hill of the Sheikh; if a thief's discarded loot, Rhind could have found it anywhere within his area of operations.

¹⁰ *Ibid.*

¹¹ MC 905; Loan L.224.2897; Birch and Rhind, *op. cit.* pl. xii [16].

¹² Birch's rendering is incorrect in extending the *mr*-sign too far to the left. Since he copied the object, two fragments have been lost.

¹³ Numerous examples of the central monogram occur amongst the seal impressions from Malkata, W. C. Hayes, *JNES* 10 (1951), 158, 167; it is found surmounting the \equiv sign and flanked by deities in *op. cit.* fig. 32 [S65, S67, S69, S72-3, S78, S81 and S88-9], cf. pp. 167-8. No examples survive combining Thoth and Anubis, unless the incomplete S89 included the former god.

¹⁴ The labels stated two ladies to be the offspring of a king whose cartouche was read by Birch as Menkheperre; thus Rhind believed most of the royal women to be the daughters of Tuthmosis III.

termed the 'tesserae', on the analogy of the well-known demotic and Greek mummy labels.¹⁵ These were published in facsimile in the year of Rhind's premature death, the copies of the labels being remarkably accurate.¹⁶ The accompanying text included an account of the discovery which, however, added nothing to that published in *Thebes*.

Subsequent discussions of the group have been rather limited: the first appeared twenty years after Birch's publication, when Alfred Wiedemann devoted a paper to the labels, in which he published another example, purchased by himself in 1881.¹⁷ A decade on, Adolf Erman contributed a short note to *ZÄS*, in which he gave an improved transcription of the Wiedemann tablet.¹⁸ On the basis of the names mentioned therein, he dated it to the Twentieth Dynasty. In his reply,¹⁹ Wiedemann admitted that Erman could be correct on one philological point,²⁰ but disputed the others. As regards the labels' date, he defended his thesis that the ladies had lived under the Eighteenth Dynasty, although allowing that the texts could have been written later 'von einer die Mumien kontrollierenden Commission'.

Flinders Petrie largely followed Rhind's conclusions,²¹ while in 1903 Percy Newberry published yet another label, which he had purchased at Thebes in 1901, for Lord Amherst's collection.²² He ascribed this to a daughter of Tuthmosis IV, but failed to make reference to the similar pieces published earlier. Henri Gauthier quoted the names from the labels in his *Livre des Rois*,²³ dating them to the Eighteenth Dynasty. More recently, there have been but three mentions: Porter and Moss refer to the deposit as simply a 'Tomb, temp. Amenophis III',²⁴ the dating accepted by Elizabeth Thomas.²⁵ The latter was uncertain as to the mummies'

¹⁵ Rhind, *op. cit.* 86-7. On mummy-labels in general, see J. Quaegebeur in *Textes grecs, démotiques et bilingues*, eds E. Boswinkel and P. W. Pestman (Leiden, 1978), 232-59; the Rhind group of labels is mentioned on p. 241 as a 'distant precursor of the custom of fastening stele-shaped wooden tags to a mummy as a means of identification', and dated to 'the New Kingdom'. The earliest mummy labels *stricto sensu* are of Saïte date, though the majority are Roman.

One may also note briefly that Černý transcribed three further hieratic wooden labels in his Notebooks 1 and 130, pp. 5 and 20, respectively. The first is in Durham University's Oriental Museum, ex-Northumberland Collection, N.1454, for which see also No. 2, note k; the other two were copied while in the possession of Tano, the well-known Cairo antiquities dealer. There is also a curious label in the British Museum, EA 59875, bearing a line of extremely cursive hieratic, given by Percy Newberry on 10 October 1930. He read the text as giving the name of Amunhotpe son of Hapu, but such a reading is most questionable: in any case, the writing in no way resembles that on the Rhind group of labels. Thanks are due to C. N. Reeves for notice of this object.

¹⁶ Birch and Rhind, *ibid.* Certain wrongly-copied signs have been noted as a result of collation with the originals.

¹⁷ *ZÄS* 21 (1883), 123-6.

¹⁸ *ZÄS* 31 (1893), 125.

¹⁹ *RT* 17 (1895), 7-8.

²⁰ *s.s.* in its line 3, as against Wiedemann's reading $\begin{matrix} \xi \\ \text{I} \end{matrix} \text{I}$. The new reading had already been proposed by Wilhelm Spiegelberg in a note on the Princess *Ti- α* of our No. 2, below: *RT* 16 (1894), 66. Here, the pertinent text was transcribed and translated.

²¹ W. M. F. Petrie, *A History of Egypt*, II (London, 1896), 143-5.

²² *PSBA* 25 (1903), 360. The identity of script between this label and that found on the Rhind labels, and the close similarity between the content of some of the latter and Wiedemann's item make a common origin very likely. In this case, the spread of acquisition dates would suggest that the inhabitants of Qurna re-entered the tomb at least once after Rhind's departure.

²³ *LR* II, 274, 304-5.

²⁴ *PM* I², loc. cit.

²⁵ E. Thomas, *Royal Necropoleis of Thebes* (Princeton, 1966), 203.

identity, but Cyril Aldred describes the tomb as one 'of royal children dated to Year 27 of Amenophis III, but there is nothing to indicate exactly when they died'.²⁶

Rhind presented his finds to the Society of Antiquaries of Scotland, which were, along with items bequeathed at his death, incorporated into the National Museum of Antiquities, Edinburgh.²⁷ In May 1919, a block of Egyptian objects was transferred on loan to the Royal Scottish Museum, apparently including the pieces from the present tomb; however, the labels were not entered into the museum's records until 1939. They were accessioned by the RSM in 1956.²⁸

Taken with the fragment of limestone from the tomb, the Edinburgh, Wiedemann and Amherst objects form a group of seventeen clearly related items. While, as noted above, they have been discussed by various scholars, each treatment has incorporated misconceptions and has to some extent been incomplete. Thus, before proceeding further, it is desirable to present the evidence together, providing transcriptions and translations of all items, together with an assessment of their script:

1 RMS 1956.154: 59 × 40 mm (pl. X).²⁹

- | | |
|---|--|
| 1) Year 27, IV <i>prt</i> | |
| 2) day II. The king's daughter ^d | |
| 3) <i>Nbtis</i> , ^e daughter of the king's | |
| 4) son <i>Sj-'Itm</i> ^f | |

^aThe *t* below the *nb*-sign is merely a dot.

^bThis is the only place in any of the labels where this determinative occurs. It differs slightly from those in the almost contemporary TT 320 deposit, e.g. on the coffins of *R'ri* and *Mryt-'Imn*.³⁰

This is also the only text that records the name of the lady's father. Together, the two peculiarities point to a different rank for *Nbtis*, as compared with other princesses.

^cActually, only , in fact . One might pause here to question whether, as in a few other instances, was meant, which occurs in TT 320 docketts.³¹ However, in most cases is clear, and so it may be intended throughout, even when the extra point or dash is omitted.

^dEvidently, she was actually the king's granddaughter. This suggests that in other cases *syt-nsu* might mean a female descendant of Pharaoh, not necessarily direct offspring.

²⁶C. Aldred, *Akhenaten, Pharaoh of Egypt* (London, 1968), 262, n. 4. Černý transcribed the texts in his notebooks, 1757, 5-7, finally collated with the originals while on loan at Oxford on 26 July 1954. It is curious that Černý never mentioned the labels in his publications, although he must have been aware of their date.

²⁷The principal exceptions were some papyri, which were for some reason sold by his executor, David Bremner, to the British Museum in 1865 (EA 10057-8, 10250 and 10188); Dawson and Uphill, *Who Was Who*, 39, 248; E. A. W. Budge, *Facsimiles of Egyptian Hieratic Papyri in the British Museum* (London, 1910), ix. Rhind also made a number of financial bequests, including funds for the foundation of an annual series of six archaeological lectures, which continue today.


²⁸Since the amalgamation of the NMA and RSM in 1985, as constituents of the National Museums of Scotland, known as the Royal Museum of Scotland.

²⁹MC 450; L. 224.2198; Birch and Rhind, *ibid.* [1].

³⁰G. Maspero, *Les momies royales de Deir el-Bahari* (Cairo, 1889), 530, 539.

³¹*Ibid.*

^e This name was taken by Petrie and Gauthier to be a variant spelling of *Nbtw*, the name of a wife of Tuthmosis III; see below.

^f Note the unusual  within the name, determining *sr*. For this man, see below, pp. 136–7.

2 RMS 1956.163: 70 × 51 mm (pl. XI).³²

1) The king's daughter *Ti-ḳ*^c of Menkheperure^d

2) of the house of the^e Royal Children.^f



3) Who are looking after^g her:


4) the controller^h *Twgyr*;ⁱ

5) the guardian *S*;^j

6) the guardian *Nfrw-r-hst*.^f

7) the embalmer *Nfr-rnpt*.^k

^a Černý noted 'no doubt about !' The cartouche, however, is almost reduced to a single stroke, and  is omitted through lack of space.

In our Nos 4 and 5 also, *Mn-hprw-Rc* ends with this plural determinative. Note that in the time of Tuthmosis IV the plural determinative was written either  or three *hpr*-signs. Nowhere do three horizontal strokes occur.³³

^b The writing *f+r* is distinctly different from that in the preceding line. This shows how careful one must be in dating hieratic texts on the basis of the shape of single signs.

^c See below, p. 136.

^d Without doubt Menkheperure Tuthmosis IV; Wiedemann's³⁴ readings as *Mn-hpr-Rc* and statements that the princesses were the daughters of Tuthmosis III have caused some of the subsequent confusion.

^e *n:n*: from the early Twentieth Dynasty, the *n* after *n:* is seldom written in hieratic texts. The writing here seems anachronistic.

^f *Ti-ḳ* (as with *Nsw-hct* in No. 17) is said to belong to the House of the Royal Children. This institution appears unknown from elsewhere. It was clearly not the Royal Harim, but probably something similar.³⁵ Perhaps it was the place of residence of the minor royal ladies.

^g In No. 17, we find instead *nty hr šmt m-sr.s*. From these words, and from the titles of the persons thereafter listed, it appears that they were 'looking after' the (re)burial, not personnel belonging to the princesses. As Erman pointed out, they belong to a period later than the Eighteenth Dynasty, although he opted for the Twentieth.³⁶

^h *rwḏw* is a rather general word, used for agents at various levels: cf. the Anglo-Saxon *gerefa*, 'reeve'.

ⁱ A foreign name, not listed by Ranke.

^j A fairly common name during the New Kingdom.³⁷ It was misread by Wiedemann and Erman as , but correctly read by Spiegelberg.

³² MC 459; L. 224.2207; Birch and Rhind, *ibid.* [3]; Spiegelberg, *RT* 16 (1894), 66.

³³ *LR* II, 290 ff.; J. von Beckerath, *Handbuch der ägyptischen Königsnamen* (Munich/Berlin, 1984), 228–9.

³⁴ *ZÄS* 21, 124.

³⁵ On the question of the harim, cf. L. Troy, *Patterns of Queenship in ancient Egyptian myth and history* (Uppsala, 1986), 76–7.

³⁶ Erman, *ZÄS* 31, 125.

³⁷ *PN* I, 278 [21].

^k An embalmer of this name is mentioned outside this group upon the unpublished hieratic wooden label Durham N.1454, to be published shortly by Dodson.

3 RMS 1956.166: 75 × 28 mm (pl. XI).³⁸

- | | |
|---|--|
| 1) The king's daughter <i>Tttrw</i> ^b | |
| 2) (of) ^c the House of the King's Children | |
| 3) The controller <i>Mt</i> [...]; ^d | |
| 4) the guardian <i>S</i> ; ^e | |
| 5) the guardian <i>Nfr</i> [<i>w-r-hst.f?</i>] ^f | |
| 6) the embalmer [...] ^g | |

a

The left half is split away and lost.

^a According to Černý, now 'slipped off', leaving no trace.

^b Perhaps a variant of 'Teti'. Whether the name was longer, and whether, as in No. 2, *n* (*Mn-hprw-Rc*) followed, is uncertain. There is room enough for the latter, but not for both.

^c No *n*, as found in No. 2. It is also omitted in No. 17, which is complete, leading one to feel it unlikely that it was once found at the end of line 1.

Erman³⁹ concluded from the *n*'s absence from No. 17 that the line there prefixed what follows. This point was correctly disputed by Wiedemann.⁴⁰

^d The name occurs nowhere else in the labels.


^e Clearly the same man as occurs in No. 2, .5.

^f Restored after No. 2, .6.

^g In No. 2, and probably also in No. 17, an embalmer named Neferrenpet is the last person listed. It is not improbable that he occurred here too, given that three men with the same names occur after each other.

4 RMS 1956.159: 69 × 48 mm (pl. X).⁴¹

- | | |
|---|--|
| 1) The king's daughter <i>Py-ihis</i> ; ^a of | |
| 2) Menkheperure | |

^a The name *Py-ih* occurs in P. Berlin 9784, 30, P. Gurob II, 1, 3 and P. Gurob II, 2, 15, dating to the Eighteenth Dynasty.⁴² The present writing is a variant. Despite *py=pr*, this is a female name. The cattle sign is not to be read *kr*, since this is always written with .⁴³

5 RMS 1956.164: 73 × 45 mm (pl. XI).⁴⁴

Identical to No. 4, with only minimal variations in the writing.

³⁸ MC 462; L.224.2210; Birch and Rhind, *ibid.* [2].

³⁹ Erman, *ibid.*

⁴⁰ Wiedemann, *RT* 17 (1895).

⁴¹ MC 455; L.224.2203; Birch and Rhind, *ibid.* [4].

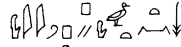
⁴² A. H. Gardiner, *ZAS* 43 (1906), 30, 35, 37, mentioning Amenophis III and IV.

⁴³ *Op. cit.* 35.

⁴⁴ MC 460; L.224.2208; Birch and Rhind, *ibid.* [5].

6 RMS 1956.162: 84 × 48 mm (pl. XI).⁴⁵




1) The king's daughter *Pypwy*^b



2) called The Little^c Daughter of 'Iwy^d



A twisted piece of linen still remains tied around its upper part.

^a The shapes of  here (✓), and also in Nos. 7 (✓) and 8 (✓), differ substantially from the normal hieratic forms,  or .⁴⁶ However, there is no doubt that this was the sign meant.

^b *Pypwy* is a common New Kingdom name.⁴⁷

^c In No. 8 she is simply called *Tj-šryt*.

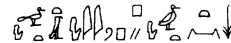
^d It is unclear whether the full *Tj-šryt-(sp-sn-)n-'Iwy* is really intended to be taken as a name. It seems too long for use in daily life,⁴⁸ and might have been abbreviated to *Tj-šryt*, as suggested by No. 8. Probably it indicates that the lady was a younger daughter of an 'Iwy (a common name in the New Kingdom)⁴⁹ and was distinguished from her namesakes by being called 'The Little Daughter of 'Iwy' or simply 'The Daughter'. *Tj-šryt* itself occurs frequently in names, but is nowhere else followed by *sp-sn*.

7 RMS 1956.157: 74 × 54 mm (pl. X).⁵⁰

The label was formerly split into two, lengthwise, but has since been repaired. Identical to No. 6, except that *nsz* is now completely rubbed away.

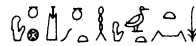
8 RMS 1956.161: 73 × 50 mm (pl. X).⁵¹

The king's daughter *Pypwy*, The Little One^a



^a No doubt the same lady as of Nos. 6 and 7. In itself, *Tj-šryt* usually means 'The Younger' (as in, to take some royal examples, Akhenaten's youngest daughter and the problematic *Mryt-'Itn-tj-šryt* and *cnḥ.s-n-pj-'Itn-tj-šryt* of the Hermopolis *talatat*), but in view of the full name in the other labels, we prefer to translate 'The Little One', although 'The Daughter' is also possible. Note the omission of *sp-sn*.

9 RMS 1956.155: 78 × 48 mm (pl. X).⁵²



The king's daughter *Hnwt-'Iwnw*

10 RMS 1956.156: 77 × 50 mm (pl. X).⁵³

Identical to No. 9.

⁴⁵ MC 458; L.224.2206; *ibid.* [8].

⁴⁶ Cf. G. Möller, *Hieratische Paläographie* (Leipzig, 1909–12), II, 197.

⁴⁷ *PNI*, 130 [9].

⁴⁸ On such names, cf. R. Engelbach, *JEA* 10 (1924), 204–6.

⁴⁹ *PNI*, 16 [5].

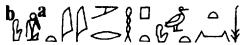
⁵⁰ MC 453; L.224.2201; Birch and Rhind, *ibid.* [6].

⁵¹ MC 457; L.224.2205; *ibid.* [7].

⁵² MC 451; L.224.2206; *ibid.* [13].

⁵³ MC 452; L.224.2200; *ibid.* [14].


11 RMS 1956.158: 76 × 55 mm (pl. X).⁵⁴

The king's daughter *Pth-mryt* 

^a A very abbreviated form, probably derived from $\bar{\text{P}}$, the simpler shape of $\bar{\text{P}}$; the more elaborate is of course $\bar{\text{P}}$.

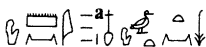
^b Perhaps some ink has disappeared on the edge. What remains is a stroke, certainly indicating $\bar{\text{P}}$.

12 RMS 1956.160: 70 × 59 mm (pl. X).⁵⁵

The king's daughter *Sit-Hri* 


^a What at first view looks like a $\bar{\text{P}}$, between the bird and the $\bar{\text{P}}$, must actually be the indication of one of the bird's feet.

13 RMS 1956.167: 65 × 50 mm (pl. XI).⁵⁶

The king's daughter *Nfrw-Imm* 

^a Written $\bar{\text{P}}$, but clearly a vertical stroke is meant. The plural strokes after it are carelessly written, but a horizontal dash at the bottom shows which sign was intended.

14 RMS 1956.165: 89 × 56 mm (pl. XI).⁵⁷

The king's daughter *Wiry*^b 

^a An unusual hieratic form of a ship, but cf. the Moscow el-Hiba letter, where one finds $\bar{\text{P}}$.⁵⁸ Since in both instances it determines *wis*, one wonders whether the scribe had $\bar{\text{P}}$ in mind.

^b *Wis(y)* is frequent as a name for both men and women, in the latter case sometimes written without a *t*.⁵⁹ It is probably an abbreviation, omitting a god's name. Here one might suggest *Mwt-m-wis*, the name of Tuthmosis IV's wife, just as *Ti- $\bar{\text{P}}$* (No. 2) may have been named after his mother (see below).

15 Present location unknown (fig. 2).

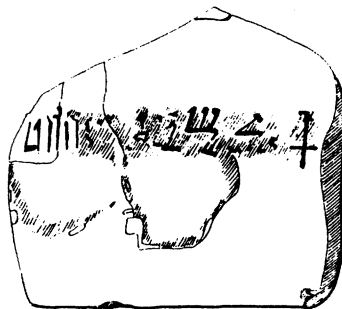


FIG. 2.

⁵⁴ MC 454; L.224.2202; *ibid.* [9].

⁵⁵ MC 456; L.224.2204; *ibid.* [10].


⁵⁶ MC 463; L.224.2211; *ibid.* [11].

⁵⁷ MC 461; L.224.2209; *ibid.* [12].


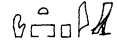
⁵⁸ G. Posener, *JEA* 68 (1982), 138, p. XIV, bottom right-hand fragment.

⁵⁹ *PN I*, 75 [24-7].

This calcarious fragment was published by Birch,⁶⁰ but was not listed by Margaret Murray when she catalogued the NMA Egyptian collection,⁶¹ subsequent enquiries have failed to locate the piece.⁶²

From the facsimile, the text is illegible, save the first words, . However, there can be little doubt that it belonged to the same group as the label-texts, the writing showing the same characteristics. The piece can hardly have been attached to a mummy: perhaps it was placed in an open box, basket or chest.

16 Present location unknown: formerly in Amherst Collection, Didlington Hall, Norfolk. Measurements unknown (fig. 3).⁶³

- 1) The king's daughter 'Imn- 
2) *m-ipt* 

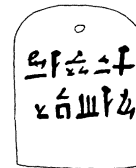


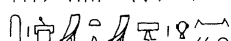
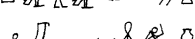
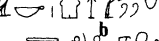
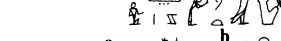
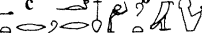






FIG. 3.

17 Present location unknown: formerly Wiedemann Collection, Bonn. Measurements unknown.⁶⁴

- 1) The king's daughter *Nsw-hrt* 
2) (of)^d the House of the Royal Children 
3) Who were going to look after her: 
4) the butler^e *Šn-kꜣ-kꜣ*^f 
5) the guardian *T*^g 
6) the guardian *Nfrw-r-hst.f* 
7) the guardian^h *Nfr-rmpt* 

^a Our No. 2 has , which seems the correct spelling.

^b Nos. 2 and 3 have throughout  .

^c In No. 2: .

^d Cf. No. 3 note c.

⁶⁰ Birch and Rhind, *ibid.* [15].

⁶¹ Murray, *Catalogue*.

⁶² Černý was unable to ascertain its whereabouts in 1954, Notebook 17.57, 7; in 1988, enquiries to the National Museums of Scotland and a search of the archives of the Society of Antiquaries of Scotland by its Secretary, Anna Ritchie, failed to trace it. Likewise, neither they, nor the British Museum, have been able to locate any MS material relevant to the excavation. Birch's copy is thus reproduced here.

⁶³ Newberry, *PSBA* 25 (1903), 360 [54], pl. II [3]; Messrs. Sotheby, Wilkinson & Hodge, *Catalogue of the Amherst Collection of Egyptian & Oriental Antiquities* (London, 1921), 80, lot 89i. From the published facsimile, it appears smaller than the Rhind labels, with the blank space below the text much narrower.

⁶⁴ It is not improbable that the piece was destroyed during the Second World War: Dr S. Seidlmayer kindly informs us that it is not in the Bonn collection, in which some of Wiedemann's *egyptiaca* are now preserved. It was published in printed transcription (no facsimile), by Wiedemann, *ZAS* 21, 125, and, with some corrections, by Erman, *ZAS* 31, 125. See also above, n. 17.

In view of the replication by Erman of what seem to be errors in Wiedemann's transcription, it seems that the former never saw the original. We can do no more than copy his renderings, with a few alterations in the order of the signs to bring them in line with those of Rhind's labels. Particular areas of doubt are highlighted in the notes.

^c *wdprw*. In Nos. 2 and 3 the person in this position is a *rwḏw*, though they have different names. The appearance of a (? royal) butler at the head of the list is not, in itself, improbable (see below), and it would seem a very odd mistake, if Wiedemann had read the wrong title; however, cf. note h, below.

^f The name is unknown from any other source, and thus one might question the transcription.

^g Very probably an error for *S*, see No. 2, note j.

^h In both Nos. 2 and 3 the last man is a *wt*, in No. 2 named *Nfr-mpt* (name lost in No. 3). This suggests an error of transcription.

The form of the hieratic script makes it clear that the labels were written during the Twentieth or early Twenty-first Dynasties: several individual signs,⁶⁵ but particularly the general style of the script, prove this date. It is particularly reminiscent of the dockets from the royal cache at Deir el-Bahari (TT 320).




On this basis, it becomes obvious that the Year 27 of No. 1 cannot refer to a king of the Eighteenth Dynasty. Since all indications are that the texts date to the earlier Twenty-first Dynasty, but one reign is possible, that of Psusennes I, the only monarch of the period to pass more than twenty-six years upon the throne.⁶⁶

This date falls after the first group of reburials of various royalities, undertaken by the High Priest, and later co-ruler, Pinudjem I, down to Year 8 of Psusennes, but before the various date-lines found on the mummies from the 'second find', of priests of Amun, from Deir el-Bahari, which start from Year 30.⁶⁷ This might suggest that, having worked upon the more prominent royal burials of the New Kingdom, attention shifted to the lesser interments in the middle years of the reign.

That the deposit found by Rhind was a counterpart of the well-known TT 320, KV 35 and Bab el-Gasus caches fits in well with the 'fragments of common coffins, and somewhat coarse linen swathings, not abundant in quantity', which caused the excavator to question the deposit's royal nature.⁶⁸

The persons who were 'looking after' (*m-s*) the princesses⁶⁹ were those men charged with their reburial. This explains the presence of an embalmer, charged with the restoration of the desecrated mummies. It would also explain the mention of a 'butler' in No. 17—if that is indeed the correct reading, and if he was a royal office holder—who supervised the activities as a representative of the Court. Unfortunately, the appearance of two *rwḏw* at the head of the lists of Nos. 2 and 3 is not particularly susceptible to interpretation, given the general nature of title. That one of them, No. 2. 4, bore a foreign name, as did the butler of 17—if correctly transcribed—helps reinforce the idea that they date to a later period than the Eighteenth Dynasty.

These officials may be seen to be of a lower rank than those responsible for the reburials in TT 320; the latter were, apart from the High Priest of Amun, mostly high

⁶⁵ Some examples are:  in No. 1, 3;  in Nos. 6, 7 and 8;  in No. 14. It is also confirmed by the determinative of *hprw* in Nos. 2, 4 and 5, and by the names of the personnel (Erman, *ZAS* 31, 125), although the latter argument is by no means conclusive (Wiedemann, *RT* 17 (1895), 7–8).

⁶⁶ K. A. Kitchen, *The Third Intermediate Period in Egypt*² (Warminster, 1986), 24–37, 533–4.

⁶⁷ Op. cit. 417–23.

⁶⁸ Rhind, op. cit. 86; the possibility of some later restoration work had been raised by Wiedemann, op. cit. 8. He failed, however, to connect the deposit with the reburial of the pharaohs during the Twenty-first Dynasty.

⁶⁹ No. 2 and No. 17; probably also in 3, despite the omission of *nty m-s*.

sacerdotal and lay authorities. The lowest-ranking persons mentioned in their texts are the Scribe of the Necropolis *Bw-ths-'Imn*⁷⁰ and the two Chief Workmen,⁷¹ whereas the guardians and embalmer of the labels were relatively humble people. The *rwḏws* and the butler(?) may have been rather more eminent, but by no means the equals of the great reburial commissioners.

While the identification of Rhind's tomb as a Twenty-first Dynasty cache is clear, certain difficulties remain: the first is the question of the blocking found across the main entrance of the tomb, allegedly bearing the seal of Amenophis III. The form and location of the tomb make it an unlikely primary place of interment of the ladies' mummies, Rhind's description pointing to it being a tomb-chapel of the type cut for a nobleman, rather than the small pit- or corridor-tomb usual for minor royalty.⁷² Additionally, tomb-chapels of this type were not normally sealed off, yet the evidence of *Ti-ḳ* and *Pyihi*'s parentage and the sealing from within the tomb point to at least some of the women having died around the time of King Amenophis. We probably have two options: one is that a number of royal women died at the same time, under Amenophis III, and that an unfinished noble's tomb was pressed into service to house their mummies;⁷³ three hundred and fifty years later, their robbed remains were restored and labelled. The other option is that Rhind was mistaken in his reading of the royal name (by his own admission 'somewhat indistinct') and that the mummies had been rescued from tombs elsewhere, placed in an unfinished/robbed out private tomb and sealed away in it under the High Priest Menkheperre.⁷⁴

Of the two options, the latter is perhaps the more attractive, for a number of reasons. Firstly, there is the very existence of the labels, probably intended to maintain the ownership of items of funerary equipment during their removal from the original sepulchre(s).⁷⁵ Secondly, there is a lack of parallels for the kind of burial postulated in the first option, both in the *primary* use of a chapel as a closed tomb and in the burial of royalties on Sheikh 'Abd el-Qurna. While certain highly-placed nobles are known to have been laid to rest in otherwise-exclusive royal necropoleis,⁷⁶ the opposite does not seem to have been the case in the New Kingdom.

The adoption of this second option has consequences for the identification of the royalties represented by Rhind's desecrated mummies. Hitherto, the whole group has generally⁷⁷ been dated by the filial references to Tuthmosis IV, along with the

⁷⁰ Maspero, *Momies royales*, 564.

⁷¹ Op. cit. 522.

⁷² Thomas, *Royal Necropoleis*, passim.

⁷³ That some communal burials of minor royalties occurred during the dynasty is illustrated by the Tomb of the Three Princesses in the Wadi Qubbanet el-Qirud, PM 1², 591-2.

⁷⁴ Pontiff for effectively the whole of Psusennes I's reign, from Year 25 of Smendes to at least Year 48 of Psusennes, with his father Pinudjem I as co-ruler until Year 8: Kitchen, op. cit. 77.

⁷⁵ The occurrence of parallel texts on some labels (Nos. 4 and 5, 6 and 7, 9 and 10), as well as one near parallel (No. 8, with the same name as Nos. 6 and 7), strongly suggests that the tags were not merely attached to mummies. Certainly, the calcareous fragment, No. 15, will have had to have been placed in a container. Hence, it appears that other objects were carried from the original tombs along with the mummies. Canopic chests come to mind; however, in that case one would have expected jar fragments to have been reported by Rhind.

⁷⁶ Cf. Dodson, *ZAS* 115 (1988), 120-1; P. Dorman, *The Monuments of Senenmut* (London, 1988), 97-9.

⁷⁷ With the partial exception of Wiedemann.

sealings attributed to Amenophis III, on the assumption that it represented a communal primary burial; however, if the group as found is the work of Twenty-first Dynasty restorers, no such chronological homogeneity necessarily follows.

Unfortunately, with only four of the ladies can any real attempt be made at placing them in time, all apparently in the later Eighteenth Dynasty: *Ti-ꜥ* and *Py-ihꜥ* (nos. 2 and 4-5) seem firmly attached to the fourth Tuthmosis; more questionable is whether either can be firmly identified with princesses known from other sources. The latter's name appears unique,⁷⁸ but the former is far from uncommon. Three other possibly distinct royal personages named *Ti-ꜥ* are known from the general period of Tuthmosis IV-Amenophis III: by far the best known is the mother of the former king, from whose reign almost all her attestations come. On none of her certain monuments does she bear the title *syt-nszw*.⁷⁹ The second bearer is known from three fragmentary canopic jars, apparently from a tomb in or near the Valley of the Queens.⁸⁰ She is named simply as the *syt-nszw Ti-ꜥ*.⁸¹ The third is depicted in TT 63, the tomb of one *Sbk-htpw*, dated to the reign of Tuthmosis IV, and is a girl seated upon the lap of her nurse.⁸² She is labelled *syt-nszw n ht.f(Ti-ꜥ)*.⁸³

While *Ti-ꜥ*, mother of Tuthmosis IV ('A'), is clearly distinguished from any of the other royal ladies of the name by her lack of the title 'royal daughter',⁸⁴ more than one scholar has been tempted to equate the females of the Rhind Tomb ('B'), the canopic jars ('P') and TT 63 ('Q').⁸⁵ While not presently susceptible of proof, the fact that 'Q's context implies that she was Tuthmosis IV's daughter would make her equation with 'B' not unlikely; on the other hand, the dating of 'P' is more fluidly 'later Eighteenth Dynasty', and so the jars may, or may not, have formed part of *Ti-ꜥ* B's original burial.

More problematic is *Nbtiꜥ* (No. 1): while bearing the title *syt-nszw*, she is explicitly stated to be the daughter of the *syt-nszw Sꜥ-ꜥ Itm*. Besides the light this circumstance sheds upon the extended use of *syt-nszw* to mean 'king's granddaughter',⁸⁶ it provides us with one of the relatively few mentions of a royal prince of the Eighteenth Dynasty. Besides this one of the name, only a single Prince *Sꜥ-ꜥ Itm* appears on a monument of the dynasty, the *syt-nszw mrr it.f* who is depicted as a child sitting upon the knee of the *iry-pꜥt*, *hꜥty-ꜥ*, *sdꜥwtꜥ-bity*, *smr-wꜥty*, *Mry-Rꜥ*, on a slab from the latter's Saqqâra tomb. This piece has been stylistically dated to the general period of

⁷⁸ In this form: Ranke, PN I, 101 [25], refers to none but our present lady. For the variant, *Py-ih*, see p. 130 above, No. 4, note a.

⁷⁹ For references, see Troy, op. cit. 165 [18.27].

⁸⁰ See below.

⁸¹ One piece is University College London 15809, V. Raisman and G. T. Martin, *Canopic Equipment in the Petrie Collection* (Warminster, 1984), 13, pl. 17, 20 [9], the other two are in Cairo, G. Legrain, *ASAE* 4 (1903), 139 [8, 9].

⁸² PM 1², 127-8. The tomb is to be published by Eberhard Dziobek.

⁸³ *Urk.* IV, 1583.

⁸⁴ However, Helck, *ibid.*, perhaps influenced by the use of a cartouche, believes that the girl in TT 63 is *Ti-ꜥ* A, thus making the latter a *syt-nszw*; in this he is followed by W. C. Hayes, *CAH*² II, ch. ix, 10. For such a conclusion there is no external support, cf. G. Robins, *GM* 57 (1982), 55.

⁸⁵ Eg. Troy, op. cit. 165 [18.30].

⁸⁶ Cf. Robins *GM* 62 (1983), 68.

Amenophis III.⁸⁷ That the two *Sj'-Itms* might be one and the same seems to have been little considered, at least partially on the basis of Petrie's speculation that *Nbti'* might be identical with Tuthmosis III's *hmt-nsww, Nbtw*.⁸⁸

This equation seems to have little merit: not only are the names different, but one who died a queen is hardly likely to have been buried with the sole title of king's (grand)daughter.⁸⁹ Thus one might turn to the possibility that *Nbti'* may have been the offspring of a *Sj'-Itm* who flourished around the time of Amenophis III. Although depicted as an infant, wearing the side-lock of youth, on *Mry-R'*'s relief, it does not necessarily follow that the prince was such during that king's reign. We have more than one example of nurses of crown-princes depicting their former wards as children in their tombs, constructed long after the lads had grown into men and kings.⁹⁰

Thus, this *Sj'-Itm* could have on this basis equally well been born to Amenophis III, Tuthmosis IV or even Amenophis II, depending on the duration of *Mry-R'*'s royal service.⁹¹ Whether he survived childhood to become the father of the '*sst-nsww*' must, perforce, remain a moot point, in the absence of further evidence. Given that he is the only known princely bearer of the name in the dynasty, the most economical assumption would be that he did. Working from that datum, *Nbti'*'s original burial would probably date to the reign of Amenophis III, or perhaps slightly later.

The only other label-owner who may be fixed in time with any confidence is '*Imn-m-ipt*' of No. 16; she has generally, and quite probably correctly, been equated with the *sst-nsww* [*I*]*mn-m-ipt* shown sitting upon the knee of *Hr-m-hb* in the latter's TT 78.⁹² Utilizing the same criteria as employed with *Sj'-Itm*, above, she could have been the child of any of the kings whom the old soldier *Hr-m-hb* served in a senior rôle, Amenophis II to Amenophis III.

In the above discussion of Princess *Ti'-cz*, we have had cause to mention items from a large group of canopic fragments, now preserved as Cairo JE 36164-79, University College London 15808-15810 and Strasbourg, Institut d'Égyptologie,

⁸⁷ Vienna AS.5814: PM III², 706; D. Berg, *JEA* 73 (1987), 213-16.

⁸⁸ Petrie, op. cit. 144; in this, he is followed by Gauthier, *LR* II, 273 [C.4] and by Berg, op. cit. 213. *Nbtw* is attested by her representation in the tomb of her husband, KV 34, PM I², 553, and in the tomb of her steward, *Nb'-Imn*, TT 24, PM I², 41-2; Troy, op. cit. 164 [18.20]. Labib Habachi, however, *Festschrift für Siegfried Schott zu seinem 70. Geburtstag*, ed. Helck (Wiesbaden, 1968), 66, accepts *Nbti'* as a princess of the reign of Tuthmosis IV.

⁸⁹ One might argue that when the burial was rescued from its original robbed tomb, its queenly titles had been destroyed and that those put on the label were all that the restorers were able to find, but such reasoning would seem rather forced.

⁹⁰ Most notably the depictions of Amenophis II in the tomb of *Qn'-Imn* (TT 93: PM I², 192) and Tuthmosis IV in those of *Hq'-nhh* (TT 64: PM I², 128-9; Habachi, op. cit. 69-70) and [...]y (TT 350: PM I², 417); cf. also TT 85 (PM I², 172-3).

⁹¹ Perhaps in favour of his being the son of Tuthmosis IV is the fact that the latter once used the Horus name *Kj-nht-sj'-Itm*, Petrie and J. H. Walker, *Memphis*, I (London, 1909), pl. vii-viii = *Urk.* IV, 1565; von Beckerath, *Königsnamen*, 85, 228.

⁹² A. and A. Brack, *Das Grab des Haremheb. Theben Nr. 78* (Mainz, 1980), 28, pl. 36 [a]; although the princess' figure is partially destroyed, she may be seen to be wearing the headdress that some have argued, probably wrongly, to denote a princess acting as *hmt-nsww* of her father: see Dodson, *JEA* 73 (1987), 227.

1395–7. They were purchased by Legrain and Newberry in the winter of 1902–3 at Thebes, and were alleged by their illicit excavators to have come from the Valley of Queens. Besides her, fragments belonged to a *sꜣ-nsꜣ Mn-hꜣpr-Rꜥ*,⁹³ a *hꜣmt-nsꜣ (Hnꜣwt)*,⁹⁴ an *irtꜣ-prꜣt, wrꜣ ḥꜣꜣwt, nbt mr[wt...] hꜣmt-nsꜣ wrꜣ (Nbt-nht)*,⁹⁵ a lady whose name had been enclosed in a cartouche,⁹⁶ the *sꜣt-nsꜣ Ti*,⁹⁷ one *Nbꜣ-Imn*,⁹⁸ and a large number of ladies entitled *ḥkrt-nsꜣ*:⁹⁹ altogether over forty fragments exist. That they derive from a single primary deposit seems unlikely in the extreme; perhaps more likely is some kind of cache in the Twenty-first Dynasty or near-simultaneous discoveries of plundered primary sepulchres by turn-of-the-century looters.¹⁰⁰ Should the equation of the *Ti*-*ꜣs* of the jars and the Rhind tomb be correct, the latter option might receive some support, since any cache of her jars would surely have been accompanied by her mummy, which appears rather to have been cached on Sheikh 'Abd el-Qurna, to be once again despoiled and then rediscovered in the nineteenth century AD.

⁹³ Legrain, op. cit. 139 [6, 7]; Strasbourg 1396: id., *ASAE* 5 (1904), 139–41, probably a son of Tuthmosis III, cf. Robins, *GM* 56 (1982), 82–3, and Dodson, forthcoming in *JEA* 76.

⁹⁴ Legrain, *ASAE* 4, 138 [1].

⁹⁵ Op. cit. 138 [2–3], UCL 15808, Raisman & Martin, op. cit. 14 [10].

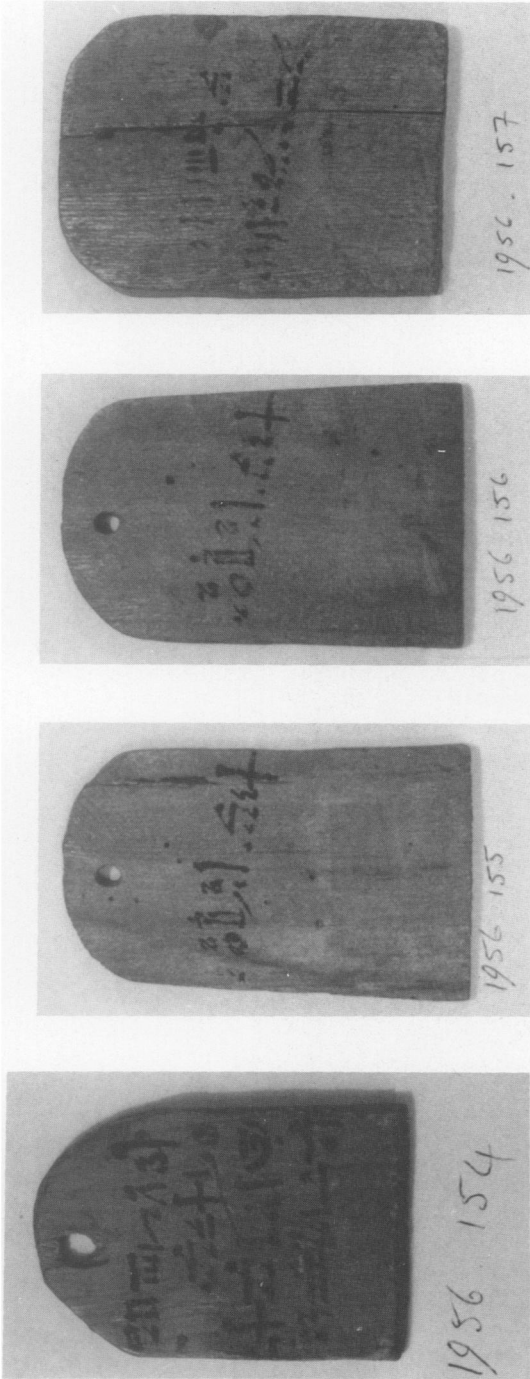
⁹⁶ Legrain op. cit. 138 [4].

⁹⁷ Op. cit. 139 [10], and possibly 141 [26]. She additionally bears the title *ḥkrt-nsꜣ* and is described as *n ꜣꜣr (hꜣmt-nsꜣ)*.

⁹⁸ Op. cit. 144 [38].

⁹⁹ Op. cit. 138–43 [1].

¹⁰⁰ Cf. Thomas, op. cit. 203.

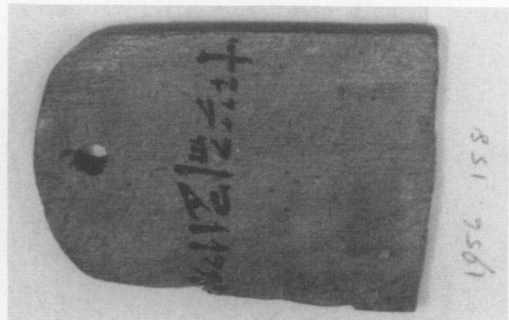


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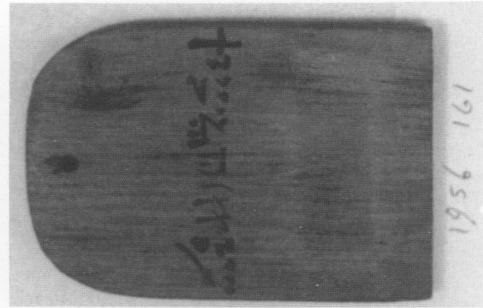
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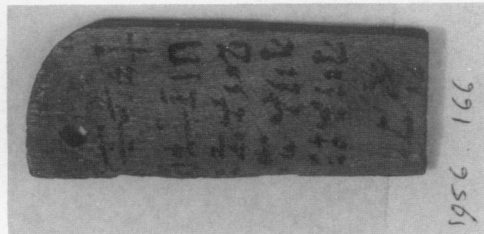
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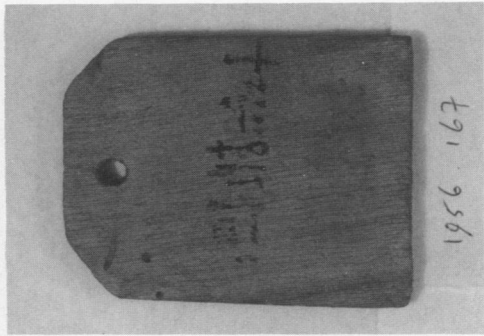
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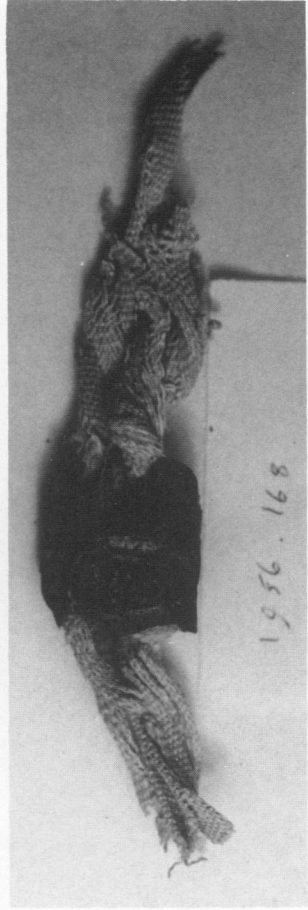
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A THEBAN TOMB AND ITS TENANTS (p. 125-34)

TAKELOTH II – A KING OF THE ‘THEBAN TWENTY-THIRD DYNASTY’?

By D. A. ASTON

The marriages of his offspring, his use of the epithet *ntr-hqꜣ-wꜣst*, and the absence of monuments attributable to him north of Thebes all imply that Takeloth II belongs to the ‘Theban Twenty-third Dynasty’ and not to the Twenty-second as usually assumed. Delta monuments with the prenomen *hd-hpr-rꜣ stꜣ-n-rꜣ* should now be assigned to Takeloth I. Genealogical evidence suggests that Takeloth II flourished c.825–800 rather than c.850–825, which makes him partly contemporary with Sheshonq III. The ‘gap’ thus created in the chronology of the Twenty-second Dynasty can be filled by allotting a longer reign, of 40–45 years, to Osorkon II. This seems required by the fact that several generations of official families, and five High Priests of Amun, are datable to his reign. The implications for the Theban civil war described in the Chronicle of Prince Osorkon are considered, and the identity of the latter with Osorkon III is asserted: if Takeloth II and Sheshonq III overlap, the lifespan required by the identification is significantly reduced.

In recent years the history and chronology of the Libyan Period has been much discussed, yet, for the composition and dating of the Twenty-second Dynasty, Kitchen’s position remains fundamental.¹ His chronology has been strongly challenged only by Barta, whose reconstruction is flawed.² Dynasty XXII K(itchen) consists of eleven kings as follows (all dates BC):³

Sheshonq I	945–924
Osorkon I	924–889
Sheshonq II	890
Takeloth I	889–874
Osorkon II	874–850
Harsiese	870–860
Takeloth II	850–825
Sheshonq III	825–773
Pamay	773–767
Sheshonq V	767–730
Osorkon IV	730–715 ² /713 ²

Harsiese should be eliminated from this list. The Twenty-second Dynasty was definitely Tanite, whereas Harsiese, known only from Theban monuments,⁴ was

¹ K. A. Kitchen, *The Third Intermediate Period in Egypt* (Warminster, 1972, reprint with *Supplement*, 1986), hereafter *TIP*.

² W. Barta, *RdE* 32 (1980), 3–14; cf. Kitchen, *RdE* 34 (1983), 59–62; *TIP* 546–50.

³ Kitchen, *TIP*, Table 3.

⁴ *TIP*, 315–16; M.-A. Bonhême, *Les Noms royaux dans l’Égypte de la Troisième Période Intermédiaire* (Cairo, 1987), 193–6.

clearly a Theban king, arrogating royal titles to himself in much the same way as the earlier High Priests of Amun, Herihor, Pinedjem I and Menkheperre A,⁵ and was buried at Thebes⁶ as was one of his daughters, Isisweret i.⁷

Osorkon IV, although of the Tanite line, probably does not belong to the Twenty-second Dynasty either. Priese was the first to suggest that he belonged with Manetho's Twenty-third Dynasty,⁸ and this idea has recently been strengthened by Leahy who demonstrated that the Pedubast and Osorkon with whom Manetho's Twenty-third Dynasty begins are probably Pedubast II and Osorkon IV.⁹ There seems to be no reason to doubt Manetho's sources which indicate that Pedubast II immediately succeeded Sheshonq V.

None of this need alter the chronology of Dynasty XXII K, as both Harsiese and Osorkon IV can be removed without affecting the underlying structure. However, recent researches into aspects of the funerary archaeology of the Third Intermediate Period,¹⁰ make it increasingly probable that the accepted position of Takeloth II as a Tanite pharaoh who succeeded Osorkon II in the middle of the ninth century is untenable. In this paper I shall attempt to show that Takeloth II has been dated too early by Kitchen, and that, far from belonging to the Tanite Twenty-second Dynasty, he belongs with that line of kings which will here be termed the 'Theban Twenty-third Dynasty'.¹¹ Outside the latter dynasty's chief towns of Heracleopolis and Thebes, Takeloth II is poorly attested. A donation stela of Year 9 known from Bubastis¹² and the burial of a King Takeloth at Tanis¹³ have both been attributed to him, but, as the prenomen of Takeloth I still remains unknown, both could be associated with the latter.

The family relationships of Takeloth II and his heirs differ markedly from all other kings of Dynasty XXII K. His parentage is unknown and one cannot simply assume that he was a son of Osorkon II. One of his three known wives, Karomama D, probably resided at Thebes where her father, Nimlot C, son of Osorkon II, exercised power as High Priest of Amun. The hypothesis that Nimlot C lived in Thebes is strengthened by the fact that another of his daughters, Shebensopdet i, married the

⁵ Throughout this paper, letters and numbers appended to non-royal persons are those of Kitchen (*TIP*) and M. L. Bierbrier, *The Late New Kingdom in Thebes* (Warminster, 1975), hereafter *LNK*.

⁶ U. Hölscher, *Excavations at Medinet Habu*, v (Chicago, 1954), 8-10.

⁷ J. E. Quibell, *The Ramesseum* (London, 1898), pl. xxii, 8.

⁸ K. H. Priese, *ZAS* 98 (1970), 23 n. 20.

⁹ A. Leahy, 'The Twenty-third Dynasty' in *Libya and Egypt, c. 1300-750 BC*, ed. A. Leahy (London, 1989), 186-90. D. B. Redford, *King Lists, Annals and Daybooks: A Contribution to the Study of the Egyptian Sense of History* (Toronto, 1986), 317 n. 126, has also recognised that Osorkon IV belongs to the Twenty-Third Dynasty, but he errs in making him part of a Theban royal family rather than the Tanite family of Manetho.

¹⁰ J. H. Taylor, 'The Stylistic Development of Theban Coffins during the Third Intermediate Period.' Ph.D. thesis, University of Birmingham, 1985; D. A. Aston, 'Tomb Groups from the end of the New Kingdom to the beginning of the Saite Period'. Ph.D. thesis, University of Birmingham, 1987.

¹¹ On this see K. Baer, *JNES* 32 (1973), 15-21; Aston and Taylor 'The Family of Takeloth III and the "Theban Twenty-Third Dynasty"' in *Libya and Egypt*, 131-54.

¹² G. Daressy, *RT* 18 (1896), 52.

¹³ P. Montet, *La Nécropole royale de Tanis*, I (Paris, 1947), 82-4.

Theban dignitary Hor vii/viii/ix/xi.¹⁴ Of Takeloth II's seven known children, six have close links with Thebes or Heracleopolis:

Osorkon B: probably the best known of Takeloth's children, owing to his 'chronicle' engraved on the Bubastite Portal at Karnak,¹⁵ Osorkon B rose to the position of High Priest of Amun at Thebes, General of the whole land, Army commander and Governor of the South.

Bakenptah: a brother of Osorkon B, he appears with him in a text dated to Year 39 of Sheshonq III where he is described as General of Heracleopolis¹⁶ a position seemingly confirmed by a stela fragment found at Heracleopolis itself.¹⁷

Nimlot: this prince is named as the son of a King Takeloth, his mother being Tashep..., the daughter of the beloved-of-the-god, Hor, on his unpublished wooden stela, Turin 1468/Vatican 329. Stylistically this stela is unquestionably Theban and probably indicates that this Nimlot was buried there. He is probably to be regarded as a son of Takeloth II.¹⁸

Isisweret ii: this daughter of a King Takeloth is known from the coffins East Berlin 20132 and Berlin 20136 of her grandson Ankhpakhdod ii and her daughter, Tabektenaskhet ii.¹⁹ The extant coffins of Ankhpakhdod ii can be dated to the period c. 750–725.²⁰ Isisweret's father must therefore be Takeloth II. The same coffins show that Isisweret ii was married to the Theban Vizier, Nakhtefmut C.

Shebensopdet ii: known from the Cairo statue CG 42211 where she appears as the wife of the Fourth Prophet of Amun, Djedthothefankh C,²¹ whose titles associate him with Thebes.

Karomama E: consecrated as a Chantress to Amun of Karnak²² before Year 25 of Takeloth II.

...efankh: known only from a fragment now in Stockholm.²³ Unfortunately no indication exists as to where this prince resided.

Kitchen has also assumed that Tentsepeh D, wife of Ptahudjankhef, son of Nimlot C, was also a daughter of Takeloth II,²⁴ though this is far from certain. She is described as *sst-nsrw* on the Pasenhor stela,²⁵ but her parentage is nowhere given. Kitchen's theory that she was a daughter of Takeloth II rests solely on the assumption that Takeloth II was of the same generation as Nimlot C and ruled between c. 850 and c. 825, which makes him the likely candidate for Ptahudjankhef's father-in-law. Bierbrier has suggested that Tentsepeh D is more likely to have been a daughter of Osorkon II.²⁶ For reasons given below, I favour Bierbrier's hypothesis.

¹⁴ Cf. statues CG 42228–9. G. Legrain, *Statues et statuettes de rois et de particuliers*, III (Cairo, 1914), 67–72 (hereafter *Statues*); K. Jansen-Winkel, *Ägyptische Biographien der 22. und 23. Dynastie* (Bamberg, 1985), I, 156–67; II, 520–26 (hereafter *AB*). R. el Sayed, *ASAE* 65 (1983), III–25.

¹⁵ *Reliefs and Inscriptions at Karnak*, III. *The Bubastite Portal* (Chicago, 1954); R. A. Caminos, *The Chronicle of Prince Osorkon* (Rome, 1958).

¹⁶ Legrain, *RT* 22 (1900), 55–6.

¹⁷ Daressy, *ASAE* 21 (1921), 139.

¹⁸ Aston and Taylor, op. cit. 138.

¹⁹ R. Anthes, *MDAIK* 12 (1943), 34, tomb nos. 28 and 29; Aston and Taylor, op. cit. 137.

²⁰ Taylor, op. cit. I, 460–4.

²¹ *Statues*, 28–32; *AB*, I, 83–99; II, 470–81.

²² *TIP*, 329.

²³ B. Peterson, *ZÄS* 94 (1967), 128–9.

²⁴ *TIP*, 330.

²⁵ M. Malinine, G. Posener, J. Vercoutter *Catalogue des stèles du Sérapeum de Memphis*, I (Paris, 1968), 30–31.

²⁶ *LNK*, 140 n. 262.

Marriage alliances are an accepted political practice and a Tanite pharaoh may well have employed such a means of assuring the support of the families into which the royal house was married. Thus we find Sheshonq I giving his daughter, Tashepenbast, in marriage to the Theban Third Prophet of Amun, Djedthothefankh i;²⁷ a daughter of Osorkon II, Tjesbastperu, was married to the High Priest of Ptah at Memphis, Takeloth B;²⁸ and Sheshonq III gave his daughter, Ankhesen-Sheshonq to one Iufu of Memphis.²⁹ It is clear, however, that no other king of Dynasty XXII K went so far as to choose Theban women for his wives and then watch all his children marry, or take up positions, in Thebes. The inescapable conclusion is that Takeloth II, like Harsiese before him, and Osorkon III, Takeloth III and Rudamun after him was a Theban king having no connection with the Tanite Twenty-second Dynasty.

Two factors support this view. Firstly, Takeloth II is the only king of the Third Intermediate Period to add the epithet *ntr-hqꜣ-Wꜣst* to his throne name.³⁰ Secondly, he is singularly ill attested north of Thebes. Monuments mentioning a *hd-hpr-rr stp-n-rr* Takeloth are few. Outside Thebes, only the Tanite burial and the donation stela from Bubastis can be unequivocally attributed to a king of this name. Two other stelae from Bubastis³¹ may also belong but this is not certain. The Apis bull which Kitchen thought died in Year 14 of Takeloth II must have been buried considerably later.³² Significantly, for a king who reigned at least twenty-five years, Takeloth II is not attested in any building works in his supposed capital at Tanis – in marked contrast to other pharaohs of Dynasty XXII K who reigned as long.

Finally, the Manethonic data, possibly based on a Memphite source,³³ but certainly on a northern one³⁴ are inadequate for reconstructions of the order of the kings involved. In the form that Manetho has come down to us, only one Takeloth is mentioned and he could equally well be Takeloth I. Kitchen's equation of him with Takeloth II is based solely on his own ideas of the composition of Dynasty XXII K.

The Theban genealogies of the second half of the Third Intermediate Period show that if Takeloth II reigned between *c.* 850 and 825, he is out of step with the generations into which he and his daughters married. Of his three known wives, Tashep... cannot be dated without reference to her husband. Karomama D, the grandchild of Osorkon II, would have flourished down to *c.* 825–800, assuming twenty-five years per generation.³⁵ The third, Tabektenaskhet i, known from the coffins of her granddaughter, Tabektenaskhet ii and her great grandson, Ankhpakhrod ii (see above under Isisweret ii) also flourished down to the period *c.* 825–800 as is clear from the date of Ankhpakhrod's coffin. The husbands of Isisweret ii and Shebensopdet ii, Nakhtefmut C and Djedkhonsefankh C respectively, both flourished down to *c.*

²⁷ *Statues*, 47–50; *AB* 1, 183–92; II, 536–40.

²⁸ Malinine, Posener and Vercoutter, *op. cit.* 19–20.

²⁹ Legrain, *RT* 29 (1907), 174–8.

³⁰ Bonhême, *op. cit.* 183.

³¹ Cf. *TIP* 327, n. 463.

³² *TIP*, 327, 489; The error in dating was pointed out by Leahy, *SAK* 7 (1979), 149.

³³ Redford, *op. cit.* 313.

³⁴ Leahy, in *Libya and Egypt*, 179–80.

³⁵ *LNK*, xii, 112.

800–775.³⁶ Finally both Osorkon B and Bakenptah were active in Year 39 of Sheshonq III – 787 on Kitchen’s chronology. Thus, on the latter’s dating, Takeloth II married two women much younger than himself and all four of his children who can be dated by external means appear to have jumped a generation. This is all possible but surely implausible.

This is emphasized by the Chronicle of Prince Osorkon. This series of texts engraved on the Bubastite Portal at Karnak records the actions of Osorkon B in the Theban area between Years 11 and 24 of his father, and between Years 22 and 29 of Sheshonq III. In these inscriptions Osorkon records how he journeyed to Thebes to quell what he saw as a rebellion, his offerings to Amun afterwards, his actions in what can only be a civil war which broke out in Year 15 of Takeloth II, and his rich oblations to Theban and other southern deities. On Kitchen’s chronology, one has to assume a gap of over twenty years between prince Osorkon’s two periods of activity. This is again possible, but we find that Osorkon is facing the same rivals as before. It is almost as if the Thebaid stood still for an entire generation. Singly, none of the above points is a serious objection to Takeloth ruling in *c.* 850–825 but cumulatively they suggest that such a theory is unlikely to be correct.

If, on the other hand, Takeloth II is assumed to belong to the generation which flourished down to *c.* 825–800, then not only are his family relationships much clearer – Takeloth and his daughters would have married spouses of their own age – but also the illusion that the Thebaid stood static for a generation is removed. Osorkon B’s attested career from Year 11 of his father in say, 814 (Takeloth occupying the throne from *c.* 825–800) down to Year 39 of Sheshonq III (787) would be a span of only 27 years which is a more likely situation than the 52 advanced by Kitchen (*i.e.* 839–787).

The theory that Takeloth II was Theban and ruled *c.* 825–800 necessarily makes him and Sheshonq III contemporaries, just like the Tanite Osorkon II and the Theban Harsiese A earlier in the ninth century. If one assumes, from the dates listed in the Chronicle of Prince Osorkon, that Year 22 of Sheshonq III closely follows that of Year 24 of Takeloth II, then Sheshonq III acceded to the throne in Tanis, at the earliest, only three years after Takeloth II became King in the south. (Year 22 of Sheshonq immediately following Takeloth’s highest known year date of 25). The consequences of this will be further discussed below.

The one serious objection to this is, of course, the burial of *hd-hpr-rc stp-n-rc* Takeloth at Tanis. If this were indeed Takeloth II, it would be hard to explain, on my reconstruction, how two contemporary kings, Takeloth II and Sheshonq III ruled simultaneously at Tanis unless there were a co-regency, for which there is no evidence. It would also deal a death blow to the hypothesis that Takeloth II was a purely Theban king. It is possible, however, that the king buried at Tanis is Takeloth I, who is certainly of the Tanite line.³⁷ The partly disturbed burial contained a small

³⁶ Bierbrier (*LNK*, 83) argues that it is physically impossible for Djedkhonsefankh C to have survived this long but, as the chart on page 145 shows, only one generation jump has to occur for this to happen.

³⁷ Malinine, Posener and Vercoutter, *op. cit.* 30–31.

number of grave goods belonging to the parents of Takeloth I, namely a gold bracelet (Cairo JE 72199) and an alabaster jar (Cairo JE 86962) of Osorkon I and an ushabti figure of Tashedkhons.³⁸ If this burial were that of Takeloth II, he was buried with objects some seventy-five years old at the time of his death in *c.* 800, and with nothing which had belonged to his immediate predecessors – in marked contrast to other Tanite kings.³⁹ If this pharaoh should prove to be Takeloth I with the prenomen *hd-hpr-rr stp-n-rr*, then the stelae from Bubastis may belong to him as well, and the minor anomaly of Takeloth I being the only Tanite king not represented on donation stelae is removed.⁴⁰

Thus, if Takeloth II is a close contemporary of Sheshonq III, a lacuna is created in Kitchen's chronology between *c.* 850 and 825. Theoretically this gap could be closed by (a) postulating the existence of a hitherto unknown king, (b) raising the accession dates of Sheshonq III and his successors, (c) increasing the length of reign of Osorkon II to cover the entire period or (d) a combination of any of the above.

Alternative (a) is patently the weakest. Montet argued for the presence of an unidentified king, between Sheshonq III and Pamay.⁴¹ This was based on a misinterpretation of Karnak Nile Level Text 24. Montet read this as Year 12 of King X, Year 6 of Pamay, but the latter part should be read as Year 5 of Pedubast, so that Year 12 is probably of Sheshonq III.⁴² Montet's suggestion was almost immediately rejected by Drioton and Vandier⁴³ and most recently by Kitchen.⁴⁴ Brissaud *et al.*, however, have reopened the debate by arguing that the pottery found in the area of the anonymous Tomb II at Tanis should be dated to the reign of Osorkon II or a little later, but in any case before that of Sheshonq III.⁴⁵ If that should prove true, this may be evidence for the reign of an unknown king (if Takeloth II is removed from contention) between Osorkon II and Sheshonq III. However, pottery of the Third Intermediate Period is exceedingly difficult to date and unless vessels are actually found within a royal tomb, its attribution to a given reign is practically impossible. In the absence of any corroborating evidence, it is probably best to associate this pottery with the neighbouring tomb of Osorkon II, especially as the anonymous Tomb II could well have belonged to Sheshonq III's successor, Pamay.⁴⁶

³⁸ Montet, *op. cit.* 82, 84.

³⁹ The burials of Psusennes I, Amenemope and Osorkon II contained grave goods mentioning their immediate predecessors. The burial of Sheshonq II included grave goods of Sheshonq I, but as there is no proof that Sheshonq II was a son of Osorkon I, this does not detract from the point made.

⁴⁰ Since the writing of this article, Jansen-Winkel, *VA* 33 (Dec., 1987), 253–8, has confirmed the throne name of Takeloth I as *hd-hpr-rr stp-n-rr* – the same as that of Takeloth II – and argued, on different grounds, that the burial at Tanis is that of Takeloth I; he also attributes the donation stela of Year 9 to Takeloth I. This makes it even more likely that Takeloth II is a Theban king as argued above.

⁴¹ Montet, *La Nécropole royale de Tanis*, III (Paris, 1960), 8–9.

⁴² Cf. J. von Beckerath, *JARCE* 5 (1966), 46–7.

⁴³ E. Drioton and J. Vandier, *L'Égypte*⁴, (Paris, 1962), 672–3.

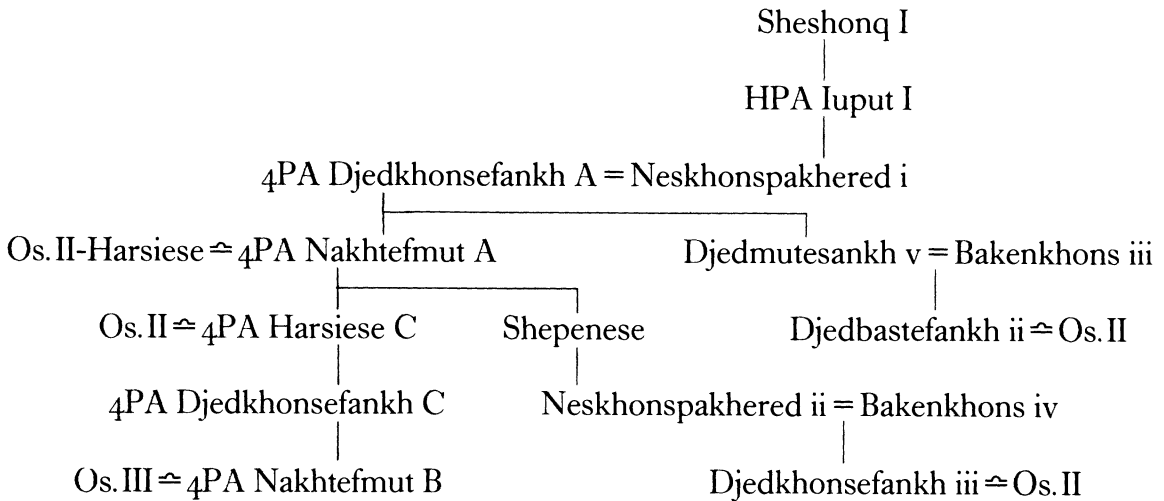
⁴⁴ *TIP*, 102–3.

⁴⁵ P. Brissaud *et al.* *Cahiers de Tanis*, I (Paris, 1987), 76.

⁴⁶ One of the canopic jars found in this tomb was inscribed for an Usermaatse Setepenamun, and thus presumably belonged to either Sheshonq III or Pamay. As Sheshonq III had his own tomb nearby, Pamay is the likely owner of Tomb II. cf. Aston, *op. cit.* 62. A. Dodson, *CdE* 63 (1988), has independently come to the same conclusion.

In respect of choice (b), Leahy has argued that Sheshonq V was succeeded by Pedubast II and thereafter by Osorkon IV. As Pedubast II is omitted from Kitchen's chronological table, then, if he is to be credited with any years of independent reign, either the years allocated to Osorkon IV must be reduced or the reign of Sheshonq V must end earlier in time. Osorkon IV, however, appears on the Piye stela, which is generally accepted as around *c.* 727,⁴⁷ thus the allowable window for lowering the accession date of Osorkon IV is a maximum of 1–2 years from the *c.* 730 date already allotted him. Conversely if the beginning of the reigns of Sheshonq III, Pamay and Sheshonq V were all lowered, let us say by ten years each, then Pedubast II would rule in the period *c.* 740–730. As I have suggested, however, that Year 22 of Sheshonq III closely followed that of Year 25 of Takeloth II, and that Takeloth II belongs to the generation which flourished down to *c.* 800, then clearly, one cannot move Sheshonq III much earlier from the position he now occupies in Kitchen's table.

If alternative (b), therefore, is impractical, what of (c)? Theban genealogies for the ninth century do suggest that Osorkon II's supposed rule of twenty-five years should be increased. This is clearly shown in the family trees of the Fourth Prophets of Amun and the Letter Writers of Pharaoh. In the former, no fewer than four successive generations are attested during the reign of Osorkon II.⁴⁸



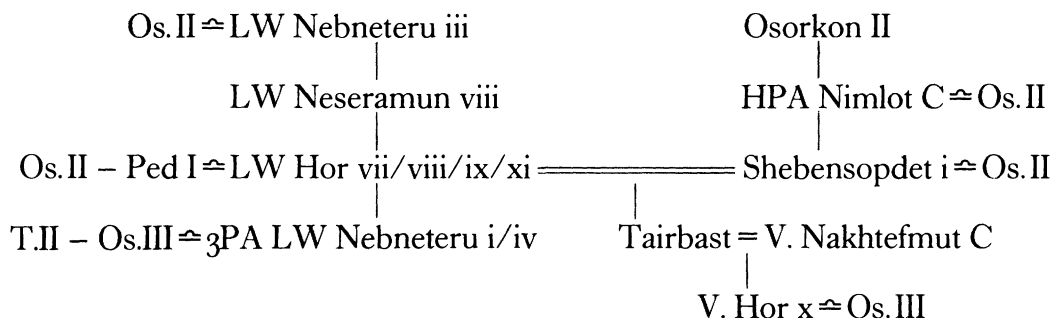
It is clear from this chart that not only are four generations known under Osorkon II, but that the second cousins, Nakhtefmut B and Djedkhonsefankh iii are attested under Osorkon III and Osorkon II respectively. In Kitchen's chronology, Osorkon III and Osorkon II are a minimum of 63 years apart.⁴⁹ Such a situation would necessitate at least two generation jumps in the family of the Fourth Prophets of Amun.

⁴⁷ *TIP*, 362–8.

⁴⁸ *LNK*, 79–85.

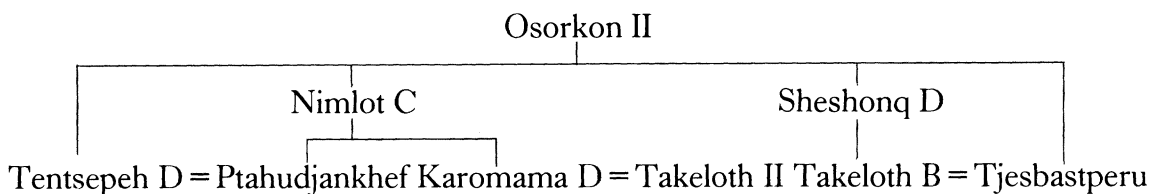
⁴⁹ *TIP*, 588.

This same tendency also appears in the Nebneteru – Hor family of Letter Writers of Pharaoh.⁵⁰



The first three Letter Writers of Pharaoh, spanning three generations, were all in office under Osorkon II. We can also see that, as Kitchen dates Pedubast I to the period *c.* 818–783, the Letter Writer Hor vii/viii/ix/xi held this same office for a minimum of 32 years (850–818), whilst his son, Nebneteru i/iv held titles of high office for a minimum of 38 years (825–787). On the Osorkon II side we again find three generations contemporary with his reign, yet by the fifth generation we have reached the reign of Osorkon III. In other words the time span covering the first three generations is a mere twenty-five years, but the next two cover sixty-three years. Unless there was an outbreak of plague or something similar during the reign of Osorkon II, something is clearly wrong!

The Theban family trees are not the only source of genealogical information to suggest that Osorkon II had a long reign. The family tree of the High Priests of Ptah at Memphis points in the same direction. There, Osorkon II's grandson, Takeloth B, married Osorkon's daughter, Tjesbastperu, and was in office in the middle years of the reign of Sheshonq III.⁵¹ As it seems unlikely that royal daughters remained unmarried much beyond puberty, it is probable that Tjesbastperu was of the same age as her husband. At this juncture we may now return to Tentsepeh D, wife of Ptahudjankhef. The following family tree shows that Ptahudjankhef, Takeloth B and Karomama D, wife of Takeloth II are all first cousins. To postulate that Tentsepeh D was a daughter of Takeloth II would necessitate not only generation jumps, but a generation difference between Tentsepeh D and her siblings. As, however, Osorkon II must have had at least one late born daughter, it is theoretically possible that he had another, namely Tentsepeh D.



⁵⁰ LNK, 73–8.

⁵¹ Cf. TIP, 101–2.

The chart also shows that Takeloth B, High Priest of Memphis during the middle years of Sheshonq III was a contemporary of Takeloth II's wife, if not of the king himself. This may well be significant in regard to the dating of Takeloth II advanced here!

The large number of High Priests of Amun attested under Osorkon II also suggests a long reign for this king. Kitchen rejects Barta's chronology partly because he believes that, in a twenty-five year reign of Osorkon II, there is not enough time for five attested High Priests of Amun, as Barta's chronology would seem to dictate. He postulates that there were only three,⁵² but it seems clear that at least five are attested, who can be tabulated as follows:

(i) The High Priest, Harnakht C: son of Osorkon II, Harnakht C is termed High Priest of Amun on grave goods recovered from his burial in the tomb of his father at Tanis.⁵³ Harnakht, however, died at the age of eight or nine years⁵⁴ and Kees⁵⁵ and Kitchen⁵⁶ are probably right in their assumption that he was only High Priest of Amun in Tanis and not at Thebes.

(ii) The High Priest, later King, Harsiese A: Harsiese was the son of the High Priest of Amun, Sheshonq, son of Osorkon I. He is clearly attested under Osorkon II on the statue Cairo CG 42208.⁵⁷

(iii) The High Priest ... *du'awti*? ... This High Priest, whose name is lost, is associated with his father, Harsiese A, on a monument from Coptos.⁵⁸ The linking of the two names suggests that Harsiese A was immediately followed in office by his son.

(iv) The High Priest Nimlot C: son of Osorkon II, Nimlot C, is attested as High Priest of Amun in a dedication by his son, Takeloth F⁵⁹ and in inscriptions left by his daughter, Shebensopdet i.⁶⁰

(v) The High Priest Takeloth F: Takeloth F was the son of Nimlot C, and, following Kees⁶¹ and Bierbrier⁶² almost certainly succeeded his father into office. Kitchen has rejected such a logical sequence,⁶³ and would have Takeloth F (metamorphosed into Takeloth E) succeed his father to the office of High Priest some forty years after the latter's death. This is definitely incorrect. The assumption that Takeloth F had to wait so long before acceding to his father's titles is contrary to the accepted practice of the times, but is also contrary to the monumental evidence. The reliefs which adorn Temple J at Karnak clearly show Osorkon II as celebrant, whilst on the facade, his grandson, Takeloth F is shown as High Priest of Amun. Therefore, as Redford points out, Takeloth F was actually Pontiff during the reign of Osorkon II and cannot have been the same as the Takeloth E of Karnak quay inscription 25 dated to year 23 of Pedubast I.⁶⁴

⁵² TIP, 480.

⁵³ Montet, *La Nécropole royale de Tanis*, I, 59-70.

⁵⁴ D. Derry, *ASAE* 41 (1942), 150.

⁵⁵ H. Kees, *Das Priestertum im ägyptischen Staat vom Neuen Reich bis zur Spätzeit* (Leiden, 1953-58), 170.

⁵⁶ TIP, 323 n. 447.

⁵⁷ *Statues*, 20; *AB*, I, 274.

⁵⁸ Legrain, *ASAE* 6 (1905), 123-4; H. Jacquet-Gordon, *JEA* 53 (1967), 67.

⁵⁹ Cf. Kees, *Die Hohenpriester des Amun von Karnak* (Leiden, 1964), 113 n. 1.

⁶⁰ H. Gauthier, *Le Livre des rois*, III (Cairo, 1914), 345-6.

⁶¹ Kees, *Das Priestertum*, 361.

⁶² Bierbrier in TIP, 200 n. 67.

⁶³ TIP, 200.

⁶⁴ Redford, *Orientalia* 55 (1986), 14 n. 89.

Takeloth F was presumably followed by Osorkon B and his rival, Harsiese B early in the reigns of Takeloth II and Sheshonq III. The above list assumes that one of the aforementioned Pontiffs was in office from Year 1 of Osorkon II. If none of them were, then Smendes III would also have to be taken into account. He is last attested as High Priest of Amun in Year 14 of (presumably) Takeloth I, only one year before Osorkon II came to the throne, and he may well have survived to serve the new king. Thus it is evident that under Osorkon II, between four and six High Priests of Amun have to be considered.

Finally one might consider Osorkon II's three known sons, Harnakht C, Sheshonq D and Nimlot C. It would appear that all three predeceased their father, as they are not known under any subsequent king and none of them succeeded to the throne. Harnakht died as a child, but his brothers both reached maturity since they fathered children.

From the foregoing discussion, it seems certain that the reign of Osorkon II must have been longer than is generally accepted. The family trees of the Theban and Memphite officials, the evidence provided by Temple J at Karnak, and the fact that Osorkon's known sons appear to have predeceased him, all point to a reign probably spanning two generations. One may therefore be justified in crediting Osorkon II with a further 15/20 years of rule, despite the absence of high regnal dates. He would then have been succeeded by Sheshonq III and the following chronology can be postulated for the Twenty-second and (Manethonic) Twenty-third Dynasties:

Osorkon II	c. 874-835/30
Sheshonq III	835/30-783/778
Pamay	783/778-777/772
Sheshonq V	777/772-740/735
Pedubast II	740/735-730/728
Osorkon IV	730/728-715/713

The implications of the ideas advanced in this paper are numerous and far reaching. Some of these will now be discussed, but before doing so, it may be useful to summarize the three main points arising from the preceding discussion. These are (i) Takeloth II was a purely Theban King; (ii) Takeloth II and Sheshonq III were contemporaries and (iii) Osorkon II reigned for *c.* 40/45 years.

If, as I have suggested, Sheshonq III acceded to the Tanite throne three years after Takeloth II assumed the kingship in the South, then Takeloth II's Year 11 is equal to Sheshonq III's Year 8. Karnak Nile Level Text 24 is double dated to 'Year 12 which is Year 5 of Pedubast I.'⁶⁵ Although the King to whom the Year 12 refers is not named, it can only be Sheshonq III.⁶⁶ It follows, that Year 1 of Pedubast I must be equal to Year 8 of Sheshonq III and Year 11 of Takeloth II. It must surely be more than

⁶⁵ von Beckerath, *op. cit.* 51.

⁶⁶ Cf. *TIP*, 134-5.

coincidence that, the very year Pedubast proclaimed himself king, Osorkon B sailed forth to deal with a Theban rebellion. The origins of Pedubast are obscure, yet he is known to have reigned for at least twenty-three years (Karnak Nile Level Text 25). All the monuments, with a secure provenance, pertaining to this king are Theban and there can be no doubt that he must be a Theban pharaoh.⁶⁷ I submit, therefore, that it is this Pedubast who, in proclaiming himself king in opposition to Takeloth II, fomented the Theban rebellion Osorkon B set out to counter.⁶⁸ At first Osorkon B appears to have been successful for we find him in Thebes that same year issuing decrees, confirming the Temple revenues and administration, hearing petitions and attending the inauguration of minor officials.⁶⁹ In Takeloth's Year 15 (= Pedubast Year 5), however, trouble broke out anew, and this time Osorkon B did not have it all his own way. Indeed, Pedubast appears to have regained his hold over Thebes, where a number of Theban officials, including the High Priest of Amun, Harsiese B, first attested in Year 6 of Sheshonq III (Karnak Nile Level Text 23), and the Letter Writer of Pharaoh, Hor vii/viii/ix/xi, moved firmly into his camp. Pedubast also acted quickly to strengthen his hand by appointing his own men, for example, his son, Padiamonet, to high office.⁷⁰ To all intents and purposes Thebes was now lost to both Takeloth II and Osorkon B, who may have retreated to their family home (?) of Heracleopolis where Osorkon's brother, Bakenptah was General.

The Civil War, however, dragged on intermittently until at least the equivalent of Sheshonq III's Year 30 with the Takelothid and Pedubastic factions each holding, and then losing, control of Thebes. Thus we find, if the Karnak Nile Level Texts are any guide, and if the Chronicle (which must have been written after the events it describes) can be relied on, Osorkon B in control in Years 24 of Takeloth II (= Pedubast Year 14), presumably Year 25 (= Year 15) when a stela granting Karomama E 35 arourae of land was set up in the time of Osorkon as High Priest, and in Years 22, 24, 25 and 28 of Sheshonq III (= Years 15, 17, 18 and 21 Pedubast I) when Osorkon was presenting offerings to Theban deities, and in Year 29 of Sheshonq III (= Year 22 Pedubast I) when he not only presented offerings but also witnessed the High Nile (Karnak Nile Level Text 22). Pedubast seems to have been in control during his Years 5 (= Year 15 Takeloth II), 7-8 (= Years 17-18 Takeloth II), 16, when he appears in association with a King Iuput,⁷¹ 18-19 (= Years 23, 25-26 Sheshonq III) and Year 23 (= Year 30 Sheshonq III). It is probable, though uncertain, that Osorkon B was eventually dealt a serious reverse sometime in Years 22/23 of Pedubast I (= Years 29/30 Sheshonq III) which could explain why he disappears from history for ten years. No more is heard of him until he reappears in Karnak Nile Text 7 dated to Year 39 of Sheshonq III. In this text Osorkon and his brother

⁶⁷ Leahy, in *Libya and Egypt*, 182-3.

⁶⁸ Jacquet-Gordon (*BiOr* 32 (1975), 360) has suggested that the troubles came about as the result of the usurpation of the throne by Sheshonq III. I find this thesis hard to accept. If Osorkon B was campaigning on behalf of Takeloth II against Sheshonq III, why did he continue to date by Sheshonq III, his supposed enemy?

⁶⁹ On this cf. *TIP*, 330-1.

⁷⁰ *Ibid.* 337-8.

⁷¹ Karnak Nile Level Text 26 is dated to Year 16 of Pedubast and Year 2 of Iuput.

Bakenptah actually claim that they 'then overthrew everyone who had fought against them'⁷² a point to which I shall return later.

Throughout the whole of this Theban civil war, Tanis probably played little part. It is true that Sheshonq III's son, the General and Army Leader, Pashedbast B appeared in Thebes where he added a vestibule door to Pylon X at Karnak, dating it to the reign of Pedubast so this may show some tacit support for the Pedubastic faction. The fact that Osorkon B dated his inscriptions by the reign of Sheshonq III should not be used to advocate that Osorkon was campaigning on behalf of the Tanite house. There appears to have been no enmity between King Harsiese A and Osorkon II, and there may well have been none (at least before the civil war) between Takeloth II and the Tanite pharaoh. Osorkon B's use of Sheshonq's year dates after the death of his father is probably nothing more than a matter of administrative convenience. With the passing of Takeloth II, the only regnal year dates he could have used, short of proclaiming himself King, were those of Sheshonq III, or those of the very man he was waging war against!

After Year 39 of Sheshonq III, Osorkon B disappears from history at, ironically, the very moment of his final victory – if Karnak Nile Level Text 7 is to be implicitly believed. In recent years, however, the old idea that Osorkon B is none other than the future Osorkon III has gained greater acceptance especially now that a monument has come to light in Middle Egypt showing that Osorkon III was also a High Priest of Amun.⁷³ The identification has been rejected by some on grounds of age. On Kitchen's chronology, for example, Osorkon B is first attested in 839, when, considering he was already campaigning on behalf of his father, he must have been at least twenty years old, and Osorkon III died in 759, making him, if he were the same man, around a hundred years old at the time of his death. The date proposed here for Takeloth II makes it possible to combine all the known events of Osorkon B's and Osorkon III's lives in the *normal* lifespan of one man. If Osorkon B was about twenty in Year 11 of his father, then on the chronology outlined in this paper, he would have been 46/51 years old in Year 39 of Sheshonq III, and, after a further 28 years of rule as Osorkon III,⁷⁴ 74/79 at his death. If Takeloth II, therefore, is the father of Osorkon III, and given Takeloth's Theban connections, Takeloth II can be seen as the earliest known king of the 'Theban Twenty-third Dynasty' – the family line Osorkon III – Takeloth III – Rudamun and Peftjauawybast.⁷⁵ The following chronology can thus be drawn up for the kings at Thebes:

Takeloth II	c. 838/33–812/807
Pedubast I	c. 827/22–802/797

⁷² Legrain, *RT* 22 (1900), 55–6; *TIP*, 340.

⁷³ Baer, *op. cit.* 18, in the mistaken belief that Osorkon III ruled for only six years; Leahy, in *Libya and Egypt*, 190–3.

⁷⁴ That Osorkon III ruled for at least 28 years is clear from Karnak Nile Level Text 13, *cf.* *TIP*, 92.

⁷⁵ *Cf.* Aston and Taylor, *op. cit.* 000. Whilst Takeloth II's parentage still remains unknown, it is theoretically possible that Harsiese A, the only other known Theban king of these times was in some way related to Takeloth II and may have been the first ruler of the 'Theban Twenty-Third Dynasty.'

Iuput I
Osorkon III

c. 812/807-?
c. 796/791-768/763

Between the death of Pedubast I and the accession of Osorkon III there may well have been a hiatus in Thebes, as postulated by Leahy,⁷⁶ yet in Year 39 of Sheshonq III, Osorkon B and Bakenptah expressly claim to have finally ‘overthrown everyone who fought against them.’ This seems to imply that, in this year, Osorkon B completely routed his opponents, but – with the passing of Pedubast I for whom no evidence suggests that he survived much past his twenty-third year – who were his rivals grouped around? One possibility is Iuput I, Pedubast’s contemporary from the latter’s fifteenth year, but there is no evidence that he outlived his senior partner. The second possibility is the king currently termed Sheshonq IV.

The evidence for the existence of this king has been collated most recently by Bonhême.⁷⁷ It consists essentially of the reference in Karnak Nile Level Text 25, dated to Year 6 of a King *Wsr-Msr-rꜥ Mry-Imn* sheshonq and the pontificate of a High Priest, Takeloth. The argument rests on whether Usermaatre Meryamun Sheshonq refers to the well known Usermaatre setepenre/amun Sheshonq III or is evidence for a separate pharaoh. The problem is exacerbated by the fact that Nile Level Text 23 is unequivocally dated to Year 6 of Sheshonq III and the pontificate of the High Priest Harsiese B. Thus, if Usermaatre Meryamun Sheshonq refers to Sheshonq III, then two Nile Level Texts are dated in the same year with different High Priests. As there is no proof that Sheshonq III ever used the epithet Meryamun, both Kitchen⁷⁸ and Bonhême⁷⁹ conclude that the use of the Meryamun indicated a separate king – Kitchen’s Sheshonq IV. Leahy, though, has argued that Sheshonq IV is a phantom, that Sheshonq Meryamun is Sheshonq III with an aberrant epithet, that the High Priest Takeloth died during the course of the Nile flood and was replaced by Harsiese B in the same year, and that two Nile Levels were recorded because there were two High Priests.⁸⁰ This, however, is not conclusive, even though, as the reliefs in Temple J at Karnak would seem to imply, a High Priest of Amun, Takeloth (F) was pontiff in the last years of Osorkon II. As it would appear that Osorkon II was directly followed by Sheshonq III, Takeloth F could easily have survived down to Year 6 of the new king. On the other hand, however, Takeloth E was clearly High Priest of Amun at the end of the reign of Pedubast I, and he could have easily survived into the sixth year of Pedubast’s successor. Indeed this is the very reasoning that Kitchen employs for placing Sheshonq Meryamun after Pedubast I as Sheshonq IV. Is there any way to choose between the two equally valid alternatives?

The writing Usermaatre Meryamun Sheshonq occurs in only three instances – on the Nile Level Text mentioned here, on a scarab now in Cairo,⁸¹ and on the funerary

⁷⁶ Leahy, in *Libya and Egypt*, 192–3.

⁷⁷ Bonhême, op. cit. 124–8.

⁷⁸ *TIP*, 87.

⁷⁹ Op. cit. 128.

⁸⁰ Leahy, in *Libya and Egypt*, 183.

⁸¹ Bonhême, op. cit. 126 (9).

cones of the Letter Writer of Pharaoh Hor vii/viii/ix/xi.⁸² This Hor was one of the most influential and important men of his day.⁸³ In addition to a varied string of titles, he appears to have built a shrine, 'The House of Isis of the Great-Mound-of-the-God of Thebes', now identified with Temple J at Karnak⁸⁴ during the reign of Osorkon II, and lived on to act as a mentor to Pedubast I.⁸⁵ At least one of Hor's statues, Cairo CG 42226⁸⁶ is dated by the cartouches of Pedubast. Thus if Hor died during the reign of Pedubast it would seem somewhat odd that he should have his funerary cones inscribed with the name of Sheshonq III and not Pedubast. These cones, therefore, probably indicate that Hor outlived Pedubast.⁸⁷ If this is true they either date from Sheshonq III's Year 31 at the earliest (Pedubast ruling for a minimum 23 years) or to a successor of Pedubast – Kitchen's Sheshonq IV. If Sheshonq III is meant, then the two datable instances of the unusual Meryamun epithet would be at least 25 years apart (Years 6–31), but if they both refer to Sheshonq IV, then they are a maximum of six years apart (Year 6 being his highest known regnal date). For this reason, I prefer, pending proof of the contrary, to accept the existence of Sheshonq IV. If this king did indeed succeed Pedubast I, he is probably the very person whom Osorkon B eventually overthrew in Year 39 of Sheshonq III, and probably the king mentioned in a graffito scratched into the roof of the Temple of Montu at Karnak, dated to Year 4 of a Sheshonq Meryamun.⁸⁸ This graffito was left by a certain Djedioh whose grandson, another Djedioh, carved another graffito in the same place, but dated to Year 5 of a king Iny⁸⁹ who is otherwise unknown.⁹⁰ Both Kitchen⁹¹ and Bonhême⁹² have equated the king Sheshonq with Sheshonq IV, though Jacquet-Gordon has identified him with Sheshonq III. The latter hypothesis, however, is unlikely, for two generations after Year 4 of Sheshonq III would place Iny somewhere around 780/775–775/770. Unfortunately, at that point, the Theban king must have been Osorkon III and a king Iny would only make sense, if, as Kitchen suggested, Iny was a 'nickname' for Osorkon III.⁹³ To my knowledge no Egyptian pharaoh was ever referred to by a 'nickname' within a cartouche. If, however, Sheshonq

⁸² N de G. Davies and M. F. L. Macadam, *A Corpus of Inscribed Egyptian Funerary Cones* (Oxford, 1957), nos. 25–6.

⁸³ Cf. *LNK*, 75; Redford, *op. cit.* 6–10.

⁸⁴ Redford, *op. cit.* 12.

⁸⁵ *Ibid.* 8–9. Significantly, in view of the dating espoused for Takeloth II in this paper, contemporary monuments of Hor are dated only to the reigns of Osorkon II, Pedubast I and Sheshonq Meryamun. None are known for the supposedly intervening twenty-five year reign of Takeloth III! That the High Priest Takeloth F is shown on one of the walls of Temple J indicates that it was built towards the end of Osorkon II's reign.

⁸⁶ *Statues*, 62–4; *AB* 1, 136–49, II, 506–14.

⁸⁷ Redford's doubts (*op. cit.* 15) on this score are based on a chronology incompatible with that outlined in this article. If the reign of Sheshonq III immediately followed that of Osorkon II, the 25 years of Takeloth II do not count and should not be taken into account when estimating Hor's age at different points in his career.

⁸⁸ Jacquet-Gordon, *Hommages à la mémoire de Serge Sauneron*, 1 (Cairo, 1979), 169–74.

⁸⁹ *Ibid.* 174–83.

⁹⁰ Iny is presumably a Theban King. This graffito refers to him as Iny Si-ese Meryamun and the first epithet strongly suggests a Theban king – cf. its addition to the throne names of Takeloth II, Pedubast I, Osorkon III and Takeloth III.

⁹¹ *TIP*, 342, n. 55f.

⁹² *Op. cit.* 125.

⁹³ *TIP*, *loc. cit.*

IV followed Pedubast I, then two generations after Year 4 of Sheshonq IV would date Iny to *c.* 752/747-746/741, and he could well have been a successor of Rudamun, the predecessor, presumably, of the Peftjauawybast, husband of Rudamun's daughter, Irbastwedjanefu B, and King at Heracleopolis on the Piye stela.

Osorkon III ruled for at least a further 28 years (n. 74 above) before being succeeded by his sons, Takeloth III and Rudamun. The lengths of reign of Osorkon's sons still remain unknown, but it has recently been argued that Takeloth III died prematurely and that Rudamun ruled at least 19 years.⁹⁴ Takeloth III's, Rudamun's, Iny's and Peftjauawybast's highest known Year dates are 7,⁹⁵ 19,⁹⁶ 5,⁹⁷ and 10⁹⁸ respectively, so on minimal dates, these kings would rule as follows:

Osorkon III	<i>c.</i> 796/791-768/763
Takeloth III	<i>c.</i> 773/768-766/761
Rudamun	<i>c.</i> 766/761-747/742
Iny	<i>c.</i> 747/742-742/737
Peftjauawybast	<i>c.</i> 742/737-732/727

As the Wadi Gasus text implies that Year 19 of Rudamun is equal to Year 12 of Piye,⁹⁹ the latter would then have begun his rule in 759/754 and his invasion of Year 20 would have taken place in 740/735. This is not too far removed from Kitchen's dating of *c.* 728, a date which could easily be accommodated within the chronology outlined in this paper since 7/12 years could be added totally, or in parts, to any of the reigns of Sheshonq I down to Osorkon II, or to those of Osorkon III or Takeloth III.

⁹⁴ Aston and Taylor, *op. cit.* 145-6.

⁹⁵ Cf. *TIP*, 357. Five years of his reign (at least) were in a co-regency with his father – cf. above n. 74.

⁹⁶ Cf. Aston and Taylor, *loc. cit.*

⁹⁷ The above mentioned graffito is the only known mention of his king.

⁹⁸ Cf. *TIP*, 357-8.

⁹⁹ Cf. Aston and Taylor, *loc. cit.*

STATIONS AND TOWERS ON THE QUSEIR-NILE ROAD

By RONALD E. ZITTERKOPF and STEVEN E. SIDEBOTHAM

During Roman times the Leukos Limen-Nile road served as a principal overland thoroughfare across the Eastern Desert of Egypt. Merchants plied this route with commodities imported from and exported to the 'East'. Products of the mines and quarries of the region also passed along this road.

Eight fortified stations (*hydreumata*), other population centres and about 65 towers delineate the route. Many of the stations contain wells or cisterns as potable water supplies were a primary requirement. The stations, constructed for security reasons, cover areas of c. 1000-3000 m² and are built almost exclusively of stacked stones.

The towers are also built of stacked stones. However, comparison of architectural details shows that they differ from other towers in the Eastern Desert. Examination of the towers' locations, construction, size, shape and intervisibility indicates that they were signal platforms.

THIS study deals with the Leukos Limen-Nile road in the Roman period (fig. 1). Earlier scholars discussed the route, but their research was descriptive with little interpretation of the evidence: slight attention was paid to planning the stations and to the location of towers. This paper relies upon earlier pioneering works, but sheds new light on the construction, location and importance of stations and towers (fig. 2) and presents measured plans.

Ancient sources mention commercial contacts between Egypt and lands to the East in the Old Kingdom,¹ Middle Kingdom,² Empire (New Kingdom)³ and late pharaonic periods.⁴ A Middle Kingdom port has been partially excavated at the terminus of the Wadi Gawasis on the Red Sea coast.⁵

Ptolemaic-Roman writers discuss the Egyptian Red Sea ports. These emporia were from north to south along a c. 800 km stretch of coast: Clysma-Qolzoum-Cleopatra (near modern Suez), Myos Hormos, Philoteras, Leukos Limen/Albus Portus (Quseir al-Qadim), Nechesia and Berenice (fig. 1).⁶

¹ B. G. Trigger, B. J. Kemp, D. O'Connor, A. B. Lloyd, *Ancient Egypt A Social History* (London-New York, 1983), 136.

² L. A. Tregenza, *Egyptian Years* (London-New York-Toronto, 1958), 181 mentions an inscription from the Eastern Desert of Egypt which records an expedition to Punt in the reign of Amenemhet II; Trigger, *op. cit.* 137; A. M. A. H. Sayed, *JEA* 64 (1978), 69-71; Sayed, *JEA* 66 (1980), 154-7; Nibbi, *JEA* 62 (1976), 45-56; Nibbi, *The Mariner's Mirror* 65 (1979), 201-8; Nibbi, *ASAE* 64 (1980), 69-74; see PM VII, 338-9.

³ Trigger, *op. cit.* 270-1 on Hatshepsut's Punt expedition.

⁴ Trigger, *op. cit.* 254; G. A. Schweinfurth, *Alte Baureste und hieroglyphische Inschriften im Uadi Gasus* (Berlin, 1885), *passim*.

⁵ See *supra* n. 2.

⁶ In general see S. E. Sidebotham, *Roman Economic Policy in the Erythra Thalassa 30 B.C.-A.D. 217 (Mnemosyne supplement no. 91)* (Leiden, 1986), 48-71; L. Casson, *The Periplus Maris Erythraei Text, Translation and Commentary* (Princeton, NJ, 1989); S. M. Burstein is working on a text, translation and commentary of Agatharchides; see Agatharchides in Diodorus Siculus (1.39.1-2) and in Photius; Artemidorus in Strabo; Strabo 2.5.12; 16.4.5; 16.4.24; 17.1.45; Pliny the Elder (*NH* 6.26.102-103; 6.33.168); *Periplus Maris Erythraei* 1, 2, 18, 19,

A strong prevailing north wind, dangerous reefs and shoals hampered sailing⁷ and ships reached the Red Sea ports only with great difficulty. Continued use of these ports for centuries suggests that the commerce passing through them was very lucrative. A Nile–Red Sea canal made Clysma an attractive port throughout the Roman period despite its northerly location.⁸

Three major overland routes connected these ports with emporia along the Nile including Apollonopolis Magna (Edfu), Coptos (Qift), Kainopolis (Qena) and Tentyris (Denderah).⁹ Here, at approximately 26° latitude, a great eastward bend of the Nile caused the Red Sea to be relatively close to the river. In the second century the more northerly Via Hadriana, connected Antinoopolis on the Nile in Middle Egypt with the Red Sea coast. However, little study has been made of this route¹⁰ and we will not consider it here.

The northern overland route left Abu Sha'ar (Myos Hormos ?), the central route Leukos Limen and the southern route Berenice. Berenice, the largest and southernmost Egyptian emporium, required less effort to reach by sea than the other Red Sea ports,¹¹ but the overland trip from there to the Nile was c. 260 km. In the Ptolemaic period overland traffic from Berenice went to Apollonopolis Magna, but in Roman times Coptos became the prominent Nile entrepôt.¹² The northern route from Abu

21 for Berenice; 1, 19 for Myos Hormos; Lucian, *Alexander or the False Prophet*, 44 for Clysma; the Nicanor ostraca dating between c. 6 BC and the 60s AD discuss trade between Coptos and Myos Hormos/Berenice: J. G. Tait, ed., *Greek Ostraca in the Bodleian Library at Oxford and Various Other Collections*, 1 (London, 1930), 106–25, nos. 195–304; for a commentary on Tait see A. Fuks, *JfJP* 5 (1951), 207–16; for a review of Tait see M. I. Rostovtzeff, *Gnomon* 7 (1931), 21–6; D. Meredith, *CdE* 31 (1956), 356–62; Sidebotham, op. cit. 50–1, 83–6, 91–2; for additional epigraphic evidence on Berenice see R. Cavenaile, *Aegyptus* 50 (1970), 220, no. 132; 227, no. 299; 236, no. 528; 239, no. 601 (?); 269, no. 1295 and no. 1307; 286, no. 1715; 296, no. 1962; 301, no. 2068.

⁷ On reefs and shoals: R. L. Burton, *Personal Narrative of a Pilgrimage to El-Medinah and Meccah*, 1 (London, 1855), 287; On winds in the Red Sea: J. Bruce, *Travels between the Years 1765 and 1773, Through Part of Africa, Syria, Egypt and Arabia, into Abyssinia, to Discover the Source of the Nile* (London, 1812), 96–7; L. Casson, *TAPA* 110 (1980), 22, n. 2 = Casson, *Ancient Trade and Society* (Detroit, 1984), 193, n. 2; Sidebotham, op. cit. 51–2 and n. 12. Recent energy studies of wind power along the Red Sea coast have illustrated the strength and prevalence of the north wind in the region. For empirical evidence see B. D. Holst and D. S. Renne, *Egyptian Wind Resource Assessment Program Interim Site Data Report April–September, 1985*, prepared for Egyptian Electricity Authority and U.S. Agency for International Development, USAID Mission, Cairo, Egypt (Contract AID 263-0123.2), submitted to Louis Berger International, Inc., Washington, D.C., submitted by Battelle, Pacific Northwest Laboratories, Richland, Washington: 8–17 and A.1–A.25; D. L. Elliot, et al., *Wind Energy Resource Analysis for Egypt*, prepared for Egyptian Electricity Authority and U.S. Agency for International Development, USAID Mission, Cairo, Egypt (Contract AID 263-0123.2), submitted to Louis Berger International, Inc., Washington, D.C., submitted by Battelle, Pacific Northwest Laboratories, Richland, Washington: 19, 24–6, 29–30, 31–3.

⁸ G. Posener, *CdE* 13 (1938), 258–73; F. Oertel, in K. Reppen and S. Skalweit, eds., *Spiegel der Geschichte. Festgabe für Max Braubach zum 10. April 1964* (Münster–Westfalen, 1964), 18–52; E. Naville, *ZAS* 40 (1902–3), 66–75 for Ptolemy II's canal; C. Bourdon, *Anciens canaux, anciens sites et ports de Suez* (Cairo, 1925), *passim*; for Trajan's canal see P. J. Sijpesteijn, *Aegyptus* 43 (1963), 70–83 and P. J. Sijpesteijn, *Papyrologica Lugduno-Batava Papyri Selectae* 13 (1965), 106–13; D. Meredith, *JEA* 38 (1952), 96–8; for a new interpretation of the use of this canal see Sidebotham, *Travaux du Centre de recherche sur le Proche-Orient et la Grèce antiques* 10 (Strasbourg, 1989), 198–201.

⁹ Sidebotham, *Roman Economic Policy*, 2–3, 58, 94–6.

¹⁰ On this route and Antinoopolis see Sidebotham, op. cit. 61–2; R. Lambert, *Beloved and God, The Story of Hadrian and Antinous* (London, 1984), 198–208; A. Bernand, *Les Portes du désert* (London and Paris, 1984), 287–8.

¹¹ See supra n. 7.

¹² Sidebotham, op. cit. 2–3, 58; R. S. Bagnall, *The Florida Ostraca, Documents from the Roman Army in Upper Egypt* (GRBS monograph 7) (Durham, North Carolina, 1976), 35; A. Bernand, *Le Paneion d'El-Kanaïs: Les Inscriptions grecques* (Leiden, 1972), *passim*.

Sha'ar included traffic from quarries at Mons Porphyrites and Mons Claudianus and was *c.* 190 km from the Nile. The shortest overland route from the three ports was the central one from Leukos Limen: *c.* 175 km. It passes through Wadi el-Hammamat which contains inscriptions and graffiti from predynastic through modern times.¹³

Increased trade via Red Sea emporia in the Roman period was due, in part, to discovery and use of monsoons in the Indian Ocean. This reduced sailing times between Egypt, India, East Africa and Sri Lanka by obviating the need to hug the coasts. It seems that the West first learned of the monsoons in the late second century BC and exploited them on a large scale only after the Roman annexation of Egypt.¹⁴

Increased trade with the East led to the development of the Egyptian Red Sea ports and stimulated activity along the overland routes to the Nile. Luxury merchandise and common trade goods of all types¹⁵ arriving at the ports were unloaded, stored and transported overland by pack animals to the Nile emporia. There imports were shipped to other Nile destinations or to Alexandria for transshipment to other Mediterranean ports. Exports via Egypt to other Red Sea-Indian Ocean destinations took the same route in reverse. Traffic along these roads between the Red Sea ports and the Nile emporia was greatest when the seasonal monsoons in the Indian Ocean allowed ships to enter and exit the mouth of the Red Sea. Nevertheless, there would have been a steady stream of traffic throughout the year to supply the inhabitants of the ports, the Eastern Desert garrisons and prisoners working the mines and quarries.

This commerce was so lucrative that both merchants and the Ptolemaic and Roman governments profited. Papyri indicate that the governments made 25–50 per cent *ad valorem* profits by taxing the merchants' wares¹⁶ and by levying tolls on travellers using the desert roads.¹⁷

The central desert route

The route between Leukos Limen and Coptos carried products of mines and quarries as well as commodities for import or export. Thus, the central route was similar to the southern and northern routes as most of the quarries and mines on all three routes were closer to the sea than to the Nile. Difficult overland transportation of bulky loads initially suggests that some traffic from the mines and quarries went to

¹³ For extensive bibliographies see PM VII: 328–38; R. Gundlach, *LA* VI, 1099–1113.

¹⁴ For a summary of earlier literature see M. G. Raschke, *ANRW* 2.9.2, 660 ff. and nn. 1271 ff.; see also J. H. Thiel, *Eudoxus of Cyzicus—A Chapter in the History of the Sea-Route to India and the Route Round the Cape in Ancient Times* (Groningen, 1967), 12, 17 ff., 44 ff.; Casson *TAPA* 1980, 21–36 = Casson, *Ancient Trade and Society*, 182–98; Sidebotham, *op. cit.* 8.

¹⁵ There are exhaustive treatments of the types of goods traded and the nature of this commerce. For a recent detailed discussion and bibliography see Sidebotham, *op. cit.* 13–47.

¹⁶ Sidebotham, *op. cit.* 105–12 and H. Harrauer and P. J. Sijpesteijn, *Anzeiger der phil.-hist. Klasse der Österreichischen Akademie der Wissenschaften* 122 (1985), 124–55.

¹⁷ On this see the famous Coptos Tariff of AD 90 (*OGIS* 674) discussed in Sidebotham, *op. cit.* 35, 67, 80–1, 102; for a recent text, translation, commentary and bibliography see Bernand, *Les portes du désert*, 199–208 no. 67.

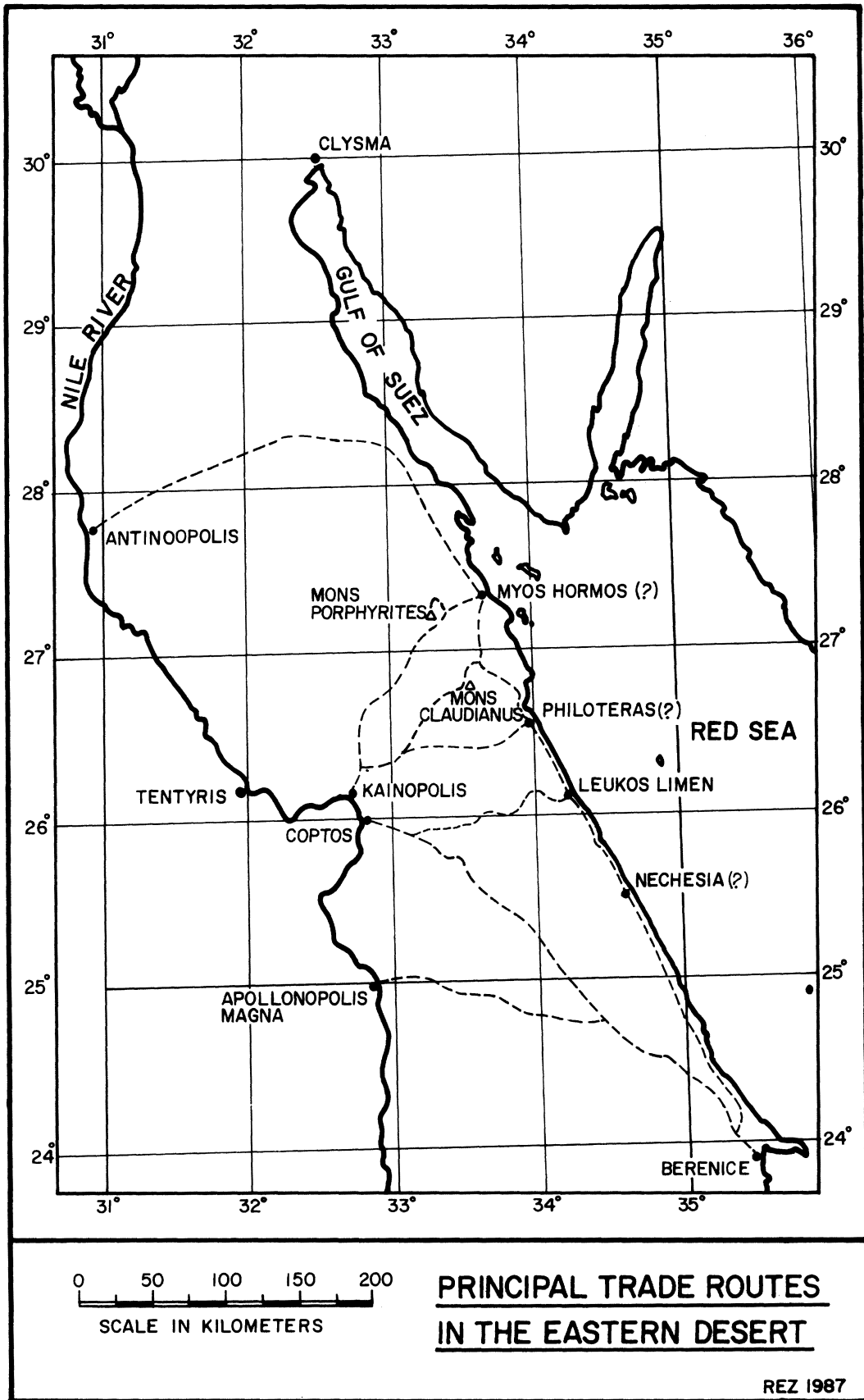


FIG. 1.

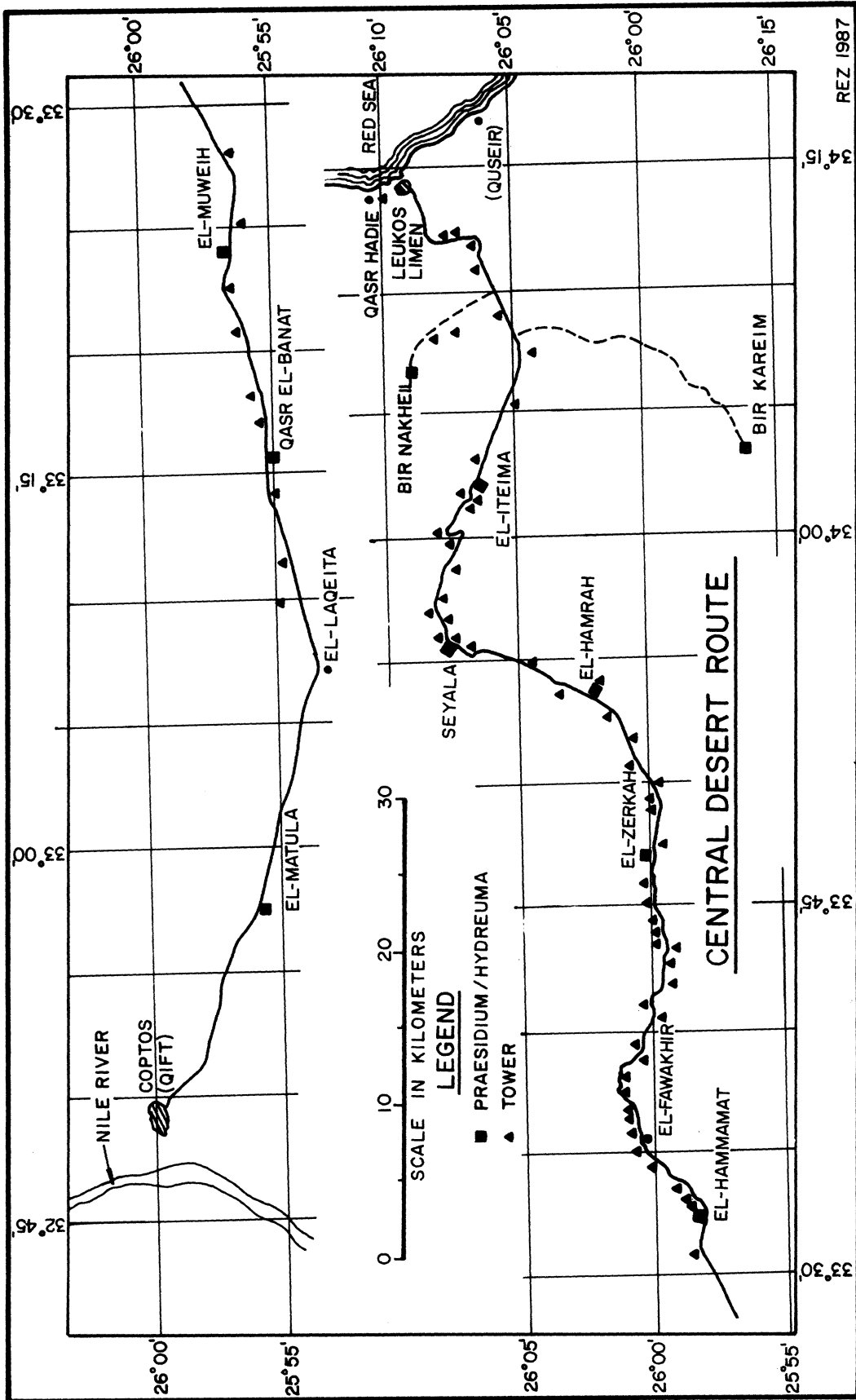


Fig. 2.

REZ 1987

the coast and then by ship up the Red Sea to Suez, by canal to the Nile and thence to other destinations. However, neither archaeological nor ancient literary evidence supports this supposition. In any case the major quarries in the Eastern Desert were not on this central desert route and most mining activity here centred upon the gold deposits in the vicinity of el-Fawakhir.¹⁸ Surely gold was shipped to the Nile rather than to the Red Sea coast especially as el-Fawakhir was as close to the Nile as it was to the coast. There were other mines and quarries near Leukos Limen at Bir Nakheil and Bir Kareim.¹⁹

Criteria used for tracing this central desert route are the existence of about 65 towers and eight praesidia/hydreumata (*ὕδροεῦμα* = fortified water point) as well as two more known population centres. In addition, there are numerous, probably Roman, stone retaining walls where the road crosses the main east-west watershed divide. They were probably intended to protect the road and travellers from falling debris. There are no traces of Roman road surface. At other places in the Eastern Desert (e.g. near the el-Heitah station on the Abu Sha'ar road, in the quarry of Mons Porphyrites and between Berenice and the Nile²⁰) cobblestones set in soft sand form a firm road surface. Wheel ruts have been reported elsewhere,²¹ but none have been discovered along the central desert route, probably because heavy wheeled transport was seldom used along this route in antiquity. The lack of animal lines on the exterior of the stations (and their presence along other routes where wheel ruts and paved surfaces have been found) also suggests the absence of heavy animal-drawn wheeled transport along this route.

Topographical features determine the alignment of the central desert route which follows a series of wadis from the Red Sea to the Nile. These are Wadi Quseir el-Qadim, Wadi Ambagi, Wadi, el-Haramiya, Wadi Abu Ziran (Wadi Russafa), Wadi el-Hammamat (Wadi el-Fawakhir), Wadi Kwei, Wadi Rod 'Ayid and Wadi el-Matula. The wadi bottoms are typical of the Eastern Desert: generally flat, well packed with sand and gravel. Transitions from one wadi to the next are smooth with

¹⁸ W. F. Hume, *Geology of Egypt*, II, 3 (Cairo, 1937), 691, 732; Sidebotham, *Roman Economic Policy* 54, 59, 66, 146-7; O. Guéraud, *BIFAO* 41 (1942), 141-96; J. Schwartz, *CdE* 31 (1956), 119-23; A. Bernand, *De Koptos à Kosseir* (Leiden, 1972), 14, 71; A. E. P. Weigall, *Travels in the Upper Egyptian Deserts* (Edinburgh-London, 1913), 42-3, 49-50. Much of Weigall's text is reproduced in his later book, *Tutankhamen and Other Essays* (London, 1923); J. G. Wilkinson, *Topography of Thebes, and General View of Egypt* (London, 1835), 421-2; A. J. Reinach, *Bulletin de la Société royale d'archéologie d'Alexandrie* 13 (1910), 130.

¹⁹ For Nakheil see M. Prickett, in *Quseir al-Qadim 1978 Preliminary Report*, eds. D. S. Whitcomb and J. H. Johnson (Princeton, 1979), 297-300; G. W. Murray, *JEA* 11 (1925), 149; on Bir Kareim see Prickett, *ibid.* 300-4 and Whitcomb, in *Quseir al-Qadim 1980 Preliminary Report (American Research Center in Egypt Reports, 7)*, eds. Whitcomb and Johnson (Malibu, CA, 1982), 391-6.

²⁰ Sidebotham, *op. cit.* 62-3, personal observations of authors near El-Heitah station on the Abu Sha'ar-Nile road and in the Mons Porphyrites region in July 1984, January 1986, June 1987 and January 1989.

²¹ L. A. Tregenza, *The Red Sea Mountains of Egypt* (London-New York, 1955), 43 between Wadi Hadrabia and Wadi Abu Zawel; 106 near loading ramp at Wadi Umm Sidri; 208 near Bab el-Mukhenig; 212-13 in the Plain of Negateir; 220 at el-Saqqia station; 237-8 where the Wadi Qreiya flows into the Wadi Qena; Murray, *JEA* 11 (1925), 140 and Meredith, *JEA* 38 (1952), 102 saw wheel/cart ruts near Bab el Mukhenig. Perhaps these were the same ones seen by Tregenza; Meredith, *JEA* 38 (1952), 102 in Wadi Negateir and Wadi Qreiya, probably the same ones seen by Tregenza.

slight watershed divides. The only location on this route where the slope is not gentle crosses the east-west watershed divide at a point about 70 km from Quseir (pl. XII, 1). This boundary marks the division of waters flowing into the Mediterranean Sea and the Red Sea. After less than a kilometre the route is, again, smooth.

The Roman route is least clear leading away from Leukos Limen. Starting from this port the route likely travelled up Wadi Quseir el-Qadim (pl. XII, 2) toward Wadi Nakheil. Before reaching the head of Wadi Quseir el-Qadim it may have veered south to join Wadi Ambagi at a point east of Bir Ambagi. Another possible route could have been up Wadi Quseir el-Qadim to the watershed with Wadi Nakheil and then west over the ridge to the mouth of Wadi Nahkeil at a point west of Bir Ambagi. At this latter watershed boundary there is a rudimentary circular stone watch post²² which may have been associated with the housing and mines near Bir Nakheil to the northwest. Possibly the ancient route led south from Leukos Limen to the area of modern Quseir and then turned west up Wadi Ambagi. However, this route added 8 km to the journey to the Nile. The route up Wadi Quseir el-Qadim and deviating past Bir Ambagi was more likely; it is flanked by towers and it has a water supply which today is the only permanently flowing spring along the route. There was no water supply at Leukos Limen itself. That at Bir Ambagi, though not fit for humans today, may have been acceptable to camels. Camels watered here did not need water again until reaching the Nile.²³ Local greenery provided animal fodder.

The topography of Leukos Limen helps little to clarify the possible avenues leading from it. The direct route to Wadi Quseir el-Qadim is to the southwest, but extensive *sabkha* flats exist west and south of town. Sea level was higher during the Roman period and these *sabkha* flats were submerged. Skirting them to the north added kilometres to the journey to the Nile. Even if the flats had not been underwater wagon traffic across would have been difficult or impossible; donkeys and camels could have crossed with minimal problems.

These *sabkha* flats obstructed any route south down the coast directly to Wadi Ambagi. With a higher water level the Roman port was closer to the sea than today. If the route led south down the coast and Leukos Limen was north of the harbour it hardly seems practical that the port buildings would have been built on the opposite side of the water from the land route to the Nile. Therefore, the route was probably up Wadi Quseir el-Qadim to Wadi Ambagi.

Alternative routes in the central desert

There were several alternative routes for crossing the central portion of the Eastern Desert. Some were branches of the central desert route; one may be an independent parallel route. Myriad sub-routes are possible as the smooth wadi bottoms allowed

²² Prickett, *op. cit.* 314–15, proposes that this is a watchtower on the primary route.

²³ Cf. G. W. Murray, *Dare Me to the Desert* (South Brunswick–New York, 1968), 71; H. Gauthier-Pilters and A. I. Dagg, *The Camel Its Evolution, Ecology, Behavior, and Relationship to Man* (Chicago–London, 1981) 50–3.

use of almost any wadi for travel at some time and for some purpose. There were two important alternative routes to the north and south of the central desert route marked by stations.

The main parallel route, the upper central desert route, led from the coast at Wadi Gawasis to Kainopolis. Murray identified ruins at Wadi Gawasis as the Ptolemaic-Roman port of Philoteras, but this has not been confirmed. Subsequent archaeological work indicates that this was also the site of a Middle Kingdom Pharaonic port.²⁴ This route, only *c.* 160 km long and dotted with stations, is 15 km shorter than the route from Leukos Limen to Coptos. The route ascends the Wadi Gawasis and crosses to the Wadi Gasus travelling to its head. From the watershed boundary it travels into Wadi Sagi and to the Semna station.²⁵ From Semna the route travels along Wadi el-Gidami into Wadi el-Qreiya to Wadi Qena and the Nile. For a short portion of the upper central desert route there is a parallel sub-route in Wadi el Hammama (next wadi south of Wadi el-Gidami) which contained the el-Hammama station.

The Nile side segment of the upper central desert route coincided with the route from Abu Sha'ar and the quarries at Mons Claudianus and Mons Porphyrites. Stations along the upper central desert route were Gasus (Aenum), Semna, el-Gidami, el-Qreiya and 'Aras. At el-Qreiya the route joined one of the routes from Mons Claudianus. The last station on the upper central desert route was at 'Aras which was also on the route from Abu Sha'ar, Mons Porphyrites and Mons Claudianus.

Other routes north of the central desert route were combinations. For example, the upper central desert route connected to the central desert route by a trail from the station at Semna via Wadi Sagi to the station at Bir Nakheil joining the central desert route at the mouth of Wadi Nakheil. Murray believed that this route joined Leukos Limen to Mons Claudianus.²⁶ Tregenza identified part of this route between Semna and Mons Claudianus.²⁷ This route holds further interest if a Roman period port (Philoteras) were, indeed, not located at the mouth of Wadi Gawasis. If so, this upper central desert route, and the stations along it, would have terminated on the Red Sea at Leukos Limen. The port would thus be servicing another route.

The other principal thoroughfare, the lower central desert route, was a long subroute of the central desert route. It departed from the central desert route just east of the mouth of Wadi Nakheil. It travelled up Wadi Kareim to the station at Bir Kareim and continued to Wadi Hammuda, Wadi el-Muweilih and Wadi el-Qash and rejoined the central desert route near el-Laqaitea. Other than the settlement at Bir Kareim, there are no other known stations on this route although the station of Didyme on the route from Berenice is in a wadi parallel to Wadi el-Qash.

²⁴ Murray, *JEA* 11 (1925), 142 and see *supra* n. 2.

²⁵ Tregenza, *Egyptian Years*, 155-74.

²⁶ Murray, *JEA* 11 (1925), 148-9.

²⁷ Tregenza, *Egyptian Years*, 153.

Water supplies

The primary requirement for travellers along the route was potable water. The stations along the route had to secure and protect a water supply either from wells—often within the walls—or cisterns to which water could be carried.

The Eastern Desert is very arid; modern records show a mean annual precipitation of 3.4 mm at Quseir, 5.3 mm and 0.9 mm respectively at Qena and Luxor. No records exist for precipitation in the mountains, but it is greater: *c.* 25 mm/year.²⁸

A typical Eastern Desert rainfall, although infrequent, can be very intense causing a powerful flash flood (*seil*). The size of waterborne stones in wadi beds attests to the tremendous energy potential of these floods. Such floods occurred in November 1979 and January 1986.²⁹ The 1979 flood damaged and destroyed houses and caused loss of life in Quseir. In 1986 sections of road to Mons Claudianus were washed out and, in other sections, covered by stones weighing about 30 kg or by sand and gravel about one metre deep. No doubt it was intense, infrequent rains such as these which supplied some of the water for the Eastern Desert stations.

Natural catchment basins (*qalts*) in the mountains retain surface water, but these are unreliable due to the infrequent rains and few are conveniently located on the central desert route. Groundwater reserves are the most dependable source even though most groundwater is either very saline or brackish.

During Roman times many water points were available. Digging through wadi sands in the Eastern Desert today one can usually find water at a relatively shallow depth.³⁰ Pharaonic inscriptions at Wadi el-Hammamat indicate that Egyptians dug numerous wells in the region.³¹ Most Roman wells are probably not evident today due to obliteration by flash floods. Each station probably had its own well and it is possible that numerous other temporary small wells existed along the route disassociated from any major population centres.

At many stations the well was large, in some cases as much as 30 m in diameter. The free water surface of the aquifer may have been at the bottom of the large diameter excavation or there could have been a smaller diameter well at the bottom of this, tapping the aquifer.

Three stations along the central desert route preserve remains of these large diameter excavations. This type of well appears also at Mons Claudianus, the stations at Deir el-Atrash and el-Saqqia on the Abu Sha'ar (Myos Hormos?)-Nile road, at the Jovis station on the Berenice-Nile, at the Semna station on the Philo-teras

²⁸ Arab Republic of Egypt Ministry of Planning United Nations Development Programme Office for Projects Execution. *Regional Development Planning for Southern Upper Egypt (Region 8)*. Volume 3: *Water Resources*. Dar Al-Handasah Consultants (Shair & Partners) (Cairo-Beirut-London, 1984) 2.1.1.2.

²⁹ Observations by the authors. On the strength of these floods see also W. F. Hume, *Geology of Egypt*, 1 (Cairo, 1925), 85-6, 313; Murray, *Dare Me...*, 46-8; Tregenza, *Red Sea Mountains...*, 6; Tregenza, *Egyptian Years* 57-8.

³⁰ For a list of modern wells see map prepared by the Survey of Egypt 1:500,000, sheet 9, Quseir, second ed., 1944.

³¹ A. Gardiner, *Egypt of the Pharaohs* (London-Oxford-New York, 1972), 124; Weigall, *op. cit.* 41, 59.

(?)-Nile road and at the mining village of Barrimiya off the road to Apollonopolis Magna.³²

The most abundant source of good water along the route is at el-Laqeita only a few metres below the surface. The Romans knew of this source and made el-Laqeita a stop on both the Berenice and Leukos Limen roads. Evidence of the quality of this source is the agricultural expansion which the authors observed at el-Laqeita today although the water now comes from very deep wells.

Annual average evaporation is 11.8 mm/day at Quseir and 8.0 mm/day at Qena; the potential evapotranspiration in the Red Sea Governorate is 2500 mm/year.³³ Compared to the scanty precipitation of 3–25 mm/year,³⁴ it is evident that water supplies had to be protected; any cisterns in the stations were surely covered.

One can approximate the amount of water required by travellers/residents in the Eastern Desert. Use by humans is the most varying factor. Drinking necessitated about 6 l/day per person.³⁵ Cooking, bathing, cleaning, etc. may have raised the daily requirement up to about 20 l/day per person for those resident at the stations.

Water at the *hydreumata* was a necessity for those stationed there. One can assume that many travellers coming from the Nile carried their own water. However, those arriving from Leukos Limen were dependent on the Eastern Desert wells. Water along the coast was not potable due to high salinity and the source must have been inland. There were several large mining communities on the route which had a constant demand for water and, *ergo*, a relatively abundant source of drinking water.

Water was probably used sparingly for small gardens near some wells. More important than agricultural use was the requirement for animals which varied with the seasons and the amount of moisture available in the food. A working pack animal-donkey in hot weather requires 10 l/day and about 20 l/day for a pack-camel.³⁶ However, the camel's better ability to go without water enabled it to journey from the Red Sea to the Nile without drinking. Furthermore, camels can also drink water too saline for human consumption³⁷ and about five times the salinity tolerated by a donkey.³⁸ Thus, the camel was probably the preferred pack animal.

Stations

Ruins on the central desert route include *hydreumata* at el-Iteima, Seyala, el-Hamrah, el-Zerkah, el-Hammamat, el-Muweih, Qasr el-Banat and el-Matula and, probably,

³² Personal observations made by the authors in June–July 1987 and January 1989; for Jovis, Semna and Barrimiya personal observations by Zitterkopf; such wells/cisterns are common: Murray, *JEA* 11 (1925), 140; Meredith, *JEA* 38 (1952), 105.

³³ *Arab Republic of Egypt... Dar Al-Handasah Report*, 2.1.1.2.

³⁴ *Ibid.* Table 2.2.

³⁵ Gauthier-Pilters, *op. cit.* 170; K. Schmidt-Nielsen, *Desert Animals, Physiological Problems of Heat and Water* (London, 1964), 9.

³⁶ For donkeys see Schmidt-Nielsen, *op. cit.* 85–92; for camels see Gauthier-Pilters, *op. cit.* 50–8 and Schmidt-Nielsen, *op. cit.* 60–9.

³⁷ See R. T. Wilson, *The Camel* (London–New York, 1984), 143–5 for saline water, 141, 148–50 for watering in general; for the camel in Roman North Africa see E. Demougeot, *AESC* 15, 2 (1960), 209–47 and in general R. W. Bulliet, *The Camel and the Wheel* (Cambridge, Mass., 1975), *passim*; Murray, *Dare Me...*, 71; cf. G. W. Murray, *GJ* 67 (1926), 480.

³⁸ M. J. Nicholson, *Outlook on Agriculture* 14, 4 (1964), 161.

major stopping places at el-Laqeita and el-Fawakhir. Most ruins along this route are either Ptolemaic or, more likely, Roman/Byzantine. There is, at present, scant evidence of later permanent Islamic occupation.

We know the ancient name of only one intermediate station along the central desert route: el-Laqeita, which was also a stop on the road from Berenice. Pliny the Elder (*NH* 6.26.102-103), the *Itinerarium Antoniniana* and the *Tabula Peutingeriana* name stations on the Berenice road and the one at el-Laqeita was Phoinikon/Phoenicon.³⁹ As more ports and stations are investigated additional evidence should provide names and further details on the garrisons, trade, supply patterns and traders. The stations have Arabic names today often referring to nearby mountains or wadis in which they are located. The colour of the stone used to construct the stations is also occasionally used to name them. Many stations on the central desert route include the Arabic designation *wekala* (caravansary) undoubtedly because Quseir, for a period, was on the pilgrimage route to Mecca and many camped at these stations during their journeys between the Nile and the Red Sea coast.

Excavations at Leukos Limen established its construction and use in the first-late second/early third century AD.⁴⁰ As the important quarry installations (Mons Claudianus and Mons Porphyrites) are predominantly Roman,⁴¹ it is reasonable to infer that there was significant construction as well as trade activity in the Eastern Desert at that time. These facts plus analysis of architectural techniques, extant inscriptions and especially the surface pottery suggest that *hydreumata* along the central desert route are first-second century Roman. An undated Latin inscription on a hill near the station at el-Muweih refers to a trooper in a Roman cavalry unit and the construction of the station.⁴² This and another inscription from Coptos, dated on paleographic grounds to c. AD 43-50, mentioning the construction and repair of Eastern desert wells and *hydreumata* by units of an unnamed legion⁴³ suggest that these stations were functioning in the early Roman period. However, some may have been built on the remains of earlier structures as there certainly was activity along this route in the Pharaonic period.⁴⁴ Pottery and coins of a later, Byzantine date, have also been found at some of the *hydreumata*.⁴⁵

³⁹ See Sidebotham, *Roman Economic Policy*, 59-61.

⁴⁰ Whitcomb and Johnson, eds., *Quseir al-Qadim 1978 Preliminary Report, passim*; Whitcomb and Johnson, *Quseir al-Qadim 1980... passim*; Whitcomb and Johnson, *American Research Center in Egypt Newsletter* 120 (winter 1982), 24-30; Sidebotham, op. cit. 53-6.

⁴¹ T. Kraus, et al., *MDAIK* 22 (1967), 108-99, 199-205 on Wadi Umm Sidri, Badia' station and Abu Sha'ar; L. A. Tregenza, *Bulletin of the Faculty of Arts Fouad I University* 11, 2 (1949), 139-50; H. Cuvigny-Wagner, *ZPE* 62 (1986), 63-73; In the winters of 1987, 1988 and 1989, an international team led by the IFAO discovered over 3000 Greek and Latin ostraca in the trash dump adjacent to the castellum at Mons Claudianus; cf. J. Bingen, *BIFAO* 87 (1987), 45-52. *P. Oxy.* XLV.3243 shows that Mons Claudianus was still quarried in AD 214/15; see also Meredith, *JEA* 38 (1952), 98-101, 107-10; for more on Mons Porphyrites see Murray, *Dare Me...*, 115-29; J. Couyat, *BIFAO* 7 (1910), 15-33; Murray, *JEA* 11 (1925), 147-8; Weigall, op. cit. 90-114; for more on Mons Claudianus see Murray, *Dare Me...* 33-6; Murray, *JEA* 11 (1925), 148; Weigall, op. cit. 115-40.

⁴² Bernard, *De Koptos à Kosseir*, 48-50 and personal observations by authors.

⁴³ *ILS* I.2483 = *CIL* III.6627 = *Eph. Epig.* V (1884), 5, no. 15; cf. Sidebotham, op. cit. 65; for a commentary on this inscription see D. Kennedy, *JEA* 71 (1985), 156-60. Kennedy gives a possible *terminus ante quem* date of AD 105 and believes that the inscription may be Augustan or Tiberian.

⁴⁴ See PM VII, 328-38.

⁴⁵ Ceramic and numismatic evidence from the University of Delaware, U.S.A. archaeological survey and excavations directed by Sidebotham in the summer of 1987 revealed that the fort at Abu Sha'ar (long

Function

The *hydreumata* served, primarily, security purposes. All are in wadi bottoms often precariously close to higher ground; none is situated on the often adjacent higher elevation which would have greatly increased defensive capabilities. They were not built to withstand long term siege or sustained assault from a powerful, sophisticated attacker. The Romans constructed what they perceived to be required to combat small groups of bandits, bedouin or marauders who preyed on the merchants, traders, their cargoes, military supply lines and those working in the mines and quarries.⁴⁶

Military force helped to sustain Roman rule in Egypt. Garrisons were stationed wherever the population was restless or where there was substantial commerce or other economic assets to protect. Upper Egypt was one such location which chafed under Roman occupation and which also had important economic functions; a visible military presence was certainly necessary.⁴⁷ Ostraca discuss the dispatch of soldiers from one station to another in the Eastern Desert and the task of supplying these stations.⁴⁸

The stations were relay points, water and rest stops for both the military and civilian caravans. They undoubtedly also had administrative functions. The garrisons may have monitored merchants, travellers and their cargoes passing through the desert to ensure that the proper customs taxes and tolls had been paid. A well-known tariff dealing with tolls paid by those traversing the Eastern Desert⁴⁹ supports the supposition that these stations also monitored compliance with Roman fiscal laws.

Walls

The rectangular *praesidia* have roughly dressed protective walls ranging from *c.* 140 m to *c.* 220 m in perimeter and *c.* 1.5 m thick, built, depending upon location, of rounded cobbles or boulders with soil as binder material or rectangular shaped quarried stone stacked without mortar. Larger blocks were used at the gates.

considered, probably incorrectly, by many to be the location of Myos Hormos) and related structures in the area were 5th–7th century AD (Sidebotham *et al.*, *JARCE* 26 (1989), forthcoming). A visit to Berenice in July 1987 revealed that much of the surface pottery there was 5th–7th century AD as was that from the gold mining settlements at el-Fawakhir. There is a 4th century Christian monastery in the Wadi Nagat (cf. Tregenza, *Red Sea Mountains* 176–7). Tregenza, *Red Sea Mountains*, 41 noted late pottery at 'Abu Zawel and 148 at Umm Balad station. Tregenza, *Red Sea Mountains*, 144 found a coin of Theodosius I (AD 379–95) at the Badia' station and Tregenza, *Red Sea Mountains*, 228–9 three 4th century coins at the el-Heitah station. Murray, *Dare Me...*, 53 = Murray, *JEA* 11 (1925), 143 found a coin of Constantius II (AD 337–61) at Berenice and C. H. O. Scaife, *Bulletin of the Faculty of Arts Fouad I University* 3, 2 (1935), 71 found a coin of Constantius (he does not specify I or II) at el-Saqqa station.

⁴⁶ See P. Garnsey and R. Saller, *The Roman Empire, Economy, Society and Culture* (Berkeley–Los Angeles, 1987), 158–9 and n. 24; Sidebotham, *Roman Economic Policy*, 64, 164 and n. 230; in general B. D. Shaw, *Past and Present* 105 (1984), 3–52; R. MacMullen, *Roman Social Relations 50 B.C. to A.D. 284* (New Haven, CT, 1974), 4 and nn. 13–15. The Blemmyes and Nobatae were threats recorded in the later Roman sources: cf. Procopius, *Bell. Pers.* I.19, 27–37 and L. P. Kirwan, *Gj* 123 (1957), 15; G. Wagner, *Les oasis d'Égypte à l'époque grecque romaine et byzantine* (Cairo, 1987), 394–400.

⁴⁷ R. S. Bagnall, *JARCE* 14 (1977), 67–86; Sidebotham, *op. cit.* 164 and n. 230.

⁴⁸ Bagnall, *JARCE* 14, 69.

⁴⁹ See n. 17 *supra*.

The stations are not oriented to any particular compass direction. Station entrances generally face north or south onto the passing east-west route. *Praesidia* on this route were always located in wadi bottoms with ample room for a caravan to travel on either side.

Stations usually have a semi-circular tower at each corner and intermediate towers along each wall. A typical tower was a bulbous thickening of the walls along the exterior line. The interiors of these towers consisted of rubble fill. Two towers flanked a single entrance. Other Eastern Desert stations have some rectangular towers,⁵⁰ but all towers along this central desert route have semi-circular bases.

Praesidia walls, which now lean, are not buttressed, but external intermediate towers and perpendicular walls of interior rooms support them. The outer walls are often better preserved where there are adjoining interior rooms.

Blocks now missing from some stations may have been robbed for reuse in later structures, but robbing is not considered the main reason for the poor state of preservation. The stations in ruinous condition have walls uniformly low whereas the theft of stone was probably not in a uniform manner, but would have been concentrated where the stone was most conveniently available.

Most stations have multiple stairways built parallel and abutting the interior face of the outer defensive walls; none is perpendicular to the walls. These stairways gave access to the walls for lookouts or sentries confirming the concern for security. Watchmen could also guard pack animals tethered outside the walls.

We can estimate original wall height of some forts. At several stations complete stairways survive ranging from *c.* 2 to over 3 m in height. These stairways terminate at the walkway on top of the wall resulting in a corresponding wall height of 2 to 3 m which appears to be average for most of the *hydreumata* along this route. Parapets top walls at some of the stations and add to wall height.

Interiors

The *hydreumata* walls surround areas averaging *c.* 1000–3000 m². Station interiors generally consist of open courtyards edged by rooms abutting the fort walls. Only two stations have free standing buildings in the courtyards. Typically there are rectangular rooms and wall lines at right angles. The rooms exist as cells within the outer walls. There are no extant architectural ornaments.

The plan of some stations changed over time. Some doorways were later blocked off; others narrowed. Some walls were flush against other walls, but not tied to them.

There are no roofs covering the rooms in these stations. Roof beams or trusses were probably of wood which has since disappeared.⁵¹ A roof would have been

⁵⁰ E.g. the station at Deir al-Atrash on the 'Abu Sha'ar-Nile road and at the castellum at Mons Claudianus.

⁵¹ Roofing techniques used elsewhere in the Eastern Desert may provide evidence for that at stations along the central desert route. The 1987 excavations at 'Abu Sha'ar carried out by the University of Delaware uncovered wooden roof beams in one room inside the fort there (Sidebotham *et al.* *JARCE* 26, forthcoming); cf. D. Meredith, 'Contributions to the Roman Archaeology of the Eastern Desert of Egypt' (unpublished PhD Dissertation, University of London, Institute of Archaeology, 1954), 481. Inside the castellum at Mons Claudianus are rooms with roofs consisting solely of parallel granite beams and of granite beams at jumbled angles and, possibly, covered by palm fronds and/or matting. Other rooms at Mons Claudianus and Mons Porphyrites have stone columns, either monolithic or of stacked stones. The stations along the central desert route do not exhibit any interior columns nor do they show any stone roof beams.

primarily for shelter from the sun. This covering was probably made of palm fronds, textiles (tents?)⁵² or woven mats. Debris at the castellum at Mons Claudianus includes palm fronds and woven mats which may have been used for roofing.

Cisterns also required roofing because of the high rate of evaporation in the Eastern Desert. At a rate of evaporation of *c.* 2500 mm/year, an uncovered cistern would have lost *c.* 0.21 m of water in one month, unacceptable given the paucity of potable water. Evaporation had to be prevented to preserve the water supply and to ensure its potability for evaporation increases water salinity eventually making it unfit for consumption.

External structures

The *praesidia* along the central desert route generally lack adjacent structures outside the perimeter walls. This is indicative of a desire for security. There are remains of a free standing building south of the *praesidium* at el-Iteima and hundreds of buildings in the el-Fawakhir area associated with the mining operations there. Otherwise there are no outlying structures evident along the Quseir-Nile road.

Along this route there was no provision for animals outside the walls of the *hydreumata*. Numerous stations on the routes from Mons Claudianus and Mons Porphyrites and the castellum at Mons Claudianus itself have outside animal lines.⁵³ However, there should have been more facilities on those routes because draught animals were essential for transporting stone from the quarries. No large scale hauling activities took place along the central desert route; thus, there was no need for great numbers of animals or a place to keep them.⁵⁴

Animal watering troughs exist on routes from Mons Claudianus and Mons Porphyrites. There are, however, none outside any stations along the central desert route except at el-Zerkah where a plastered channel extending through the fort walls implies this purpose.

The absence of facilities outside the stations along this route suggests that the animals were brought inside. Caravans probably consisted of pack animals, not wheeled carts and it would have been easy to bring the animals inside. In general station entrances are *c.* 1.6 m wide as shown by extant door jambs at el-Iteima and el-Zerkah. The gate at el-Zerkah, once 3.25 m wide, was narrowed to 1.55 m at a later date (pl. XIII, 1). Such door/gate widths admitted pack animals and, perhaps, cargoes, but not wheeled carts. This is further evidence that carts did not ply the route frequently, if at all. The *praesidia* were safe places to spend the night and, accordingly, the valuable cargoes would not have been left outside.

Existing condition

The stations exist in varying states of preservation. Walls have deteriorated where built with soft stone. Stations in protected wadis are nearly free of blown sand. Others, unprotected by surrounding mountains, are buried in sand up to the tops of their walls.

¹ On Roman tents see Garnsey and Saller, *op. cit.*, 89 and n. 8.

⁵³ Murray, *JEA* 11 (1925), 146-7; Sidebotham, *Roman Economic Policy*, 63-4; Meredith, *JEA* 38 (1952), 94, 96.

⁵⁴ Sidebotham, *op. cit.* 63-4.

Since abandonment the stations have been visited at various intervals. Gradual deterioration over time and the effects of later occupation help to explain the present condition. Those two *hydreumata* containing extant usable wells—Seyala and el-Hammamat—are the most destroyed.

Natural phenomena also took their toll. Missing towers and walls attest to the effects of flash floods. Seismic activity may also have caused damage. The Red Sea is a tectonic plate boundary between Arabia and Africa and much of the area is prone to earthquakes.⁵⁵ The stations' walls have little or no mortar binding or foundations below ground level. Thus, in the event of a tremor the underlying sandy materials were easily shaken⁵⁶ and the walls extremely vulnerable to any settlement caused by earthquakes.

Intervals

Distances, measured by odometer, between/among the stations via the Wadi Quseir al-Qadim are:

Station	Km from port	Km from previous station
Leukos Limen	0	0
El-Iteima	27	27
Seyala	41	14
El-Hamrah	52	11
El-Zerkah	64	12
El-Fawakhir	87	23
El-Hammamat	95	8
El-Muweih	111	16
Qasr el-Banat	125	14
El-Laqeita	140	15
El-Matula	157	17
Coptos	174	17

The average distance between stations is 16 km and the median is 15 km. Intervals measured by Murray on the upper central desert route from Philoteras (?) to Kainopolis are:⁵⁷

Station	Km from port	Km from previous station
Philoteras (?)	0	0
Semna	46	46
El-Gidami	78	32
El-Qreiya	107	29
'Aras	130	23
Kainopolis	151	21

⁵⁵ See T. Barron and W. F. Hume, *Topography and Geology of the Eastern Desert of Egypt Central Portion* (Cairo, 1902), 207–9; R. Said, *The Geology of Egypt* (Amsterdam–New York, 1962), 189–92; J. P. Rothé, *The Seismicity of the Earth 1953–1965* (Paris, 1969), 277, 279; B. Gutenberg and C. F. Richter, *Seismicity of the Earth and Associated Phenomena* (Princeton, NJ, 1954), 91–92, 223.

⁵⁶ N. M. Newmark and E. Rosenblueth, *Fundamentals of Earthquake Engineering* (Englewood Cliffs, NJ, 1971), 424–9.

⁵⁷ Murray, *JEA* 11 (1925), 146; his measurements may be skewed because he omits Aenum from his list.

The stations average 30 km apart, nearly twice the average interval on the central desert route.

The distance between stations on the central desert route for nine of the eleven segments does not exceed 17 km. The two exceptions are between Leukos Limen and the first station and over the main east-west watershed; these segments are about 27 km and 23 km respectively.

The distance from Leukos Limen to the *hydreuma* at el-Iteima is the longest: *c.* 27 km via Wadi Quseir el-Qadim and *c.* 8 km longer if south down the coast and then inland via Wadi Ambagi. There may have been an intermediate station at Bir Ambagi, 9 km from Leukos Limen by the shortest route or at Bir el-Beida, only 9 km from el-Iteima and 18 km from Leukos Limen by the shortest route. There is no evidence today of a *hydreuma* near the mouth of Wadi Nakheil nor near Bir Ambagi nor near Bir el-Beida. Perhaps the station at Bir Nakheil,⁵⁸ 6 km north of the route across the mouth of the Wadi Nakheil served as the first station inland from Leukos Limen. It may have supported a satellite watering point, perhaps consisting of some shaded water jars. The other long-distance segment is across the main east-west watershed between el-Zerkah and Bir Umm Fawakhir. In reality the distance is shorter as the mining activity at el-Fawakhir stretches to the east. Furthermore, there is the well at Bir el-Sid in a parallel wadi 8 km east of the well at el-Fawakhir.

Stations on the central desert route are closely spaced so each was not an overnight stop on every trip. Strabo (17.1.45) says that some Eastern Desert travel took place at night, no doubt to avoid intense heat especially in summer. It is uncertain how prevalent nocturnal travel was along this route; architectural features of the stations and the existence of towers (see *infra*) suggest concern about security which would have made night travel too risky especially for caravans carrying valuable cargoes.

A baggage camel travels about 5 km/hr,⁵⁹ about the same speed as a man walks. Donkeys travel somewhat slower.⁶⁰ As a caravan travels no faster than its slowest member, we can estimate that most caravans moved at *c.* 5 km/hr or perhaps a little slower, say 4.5 km/hr. At this pace pack animals journeying between Leukos Limen and Coptos averaged *c.* 36 km/day in an eight hour day and would complete the journey in five days.

Thus, a day's travel passed several stations. Six or 12 hours of travel would give proportionate distances, but still more than the length separating stations. Stations are closer together than need be for purely overnight stays. Stations were probably located more with a view to security than as a convenience for passing travellers. Although the primary purpose of the route was for commercial traffic, the primary purpose of the stations was for the garrisons that guarded the road and serviced the towers.

⁵⁸ This station is now largely destroyed; see Prickett, *op. cit.*, map: 298, text: 300, 305, 310; Murray, *JEA* 11 (1925), 149.

⁵⁹ Gauthier-Pilters, *op. cit.* 104-5; Weigall, *op. cit.* 25; Wilson, *op. cit.* 67, 164 reports that a baggage camel travels 2-3 km/hour and that an unloaded camel walks about 6.3 km/hour, trots at about 11.9 km/hour and gallops at about 18.7 km/hour.

⁶⁰ Schmidt-Nielsen, *op. cit.* 82.

Eight hours is a reasonable length of daily travel and the 36 km traversed would easily cover the distances on the two longest segments. A possible journey of five days at an average speed of 4.5 km/hr, with daily travel ranging from 6–10 hours, may have had stops for the night as follows:

Station	Km from port	Increment travelled	Incremental hrs travelled
Leukos Limen	0	0	0
El-Iteima	27	27	6
El-Zerkah	64	37	8
El-Hammamat	95	31	7
El-Laqeita	140	45	10
Coptos	174	34	6

Other stations were short rest stops in addition to their primary security functions.

Features along the central desert route

This section includes notes taken of specific Roman features on the central desert route. There are descriptions of some non-Roman features including wells which may post-date Roman occupation. The towers along the route appear in a separate section. Plans have been made of all stations⁶¹ using taped measurements.

Quseir al-Qadim

The Red Sea terminus for the central desert route was at Leukos Limen/Albus Portus (Quseir al-Qadim) c. 8 km north of modern Quseir. The Roman occupation lasted from the first through the late second/early third century AD.⁶² Other than the discovery of a single worn bronze coin of Ptolemy III⁶³ there was no other evidence for Ptolemaic occupation. This suggests that the initial construction and habitation took place in the Roman period, probably in the first half of the first century AD. There may have been a Ptolemaic settlement at modern Quseir; A. E. P. Weigall reported finding Ptolemaic inscriptions there⁶⁴ though these have since disappeared.

Coral reefs hugging much of the Egyptian Red Sea coast dictated the location of ancient ports. An interruption in one of these reefs resulting from sediments carried

⁶¹ Reinach, *Bulletin de la Société royale...*, 114–44 lists the stations and gives some dimensions, but concentrates on the epigraphic remains; J. Couyat, *Comptes-rendus des Séances de l'Académie des Inscriptions et Belles-Lettres* 1910, 525–42; Debono, *op. cit. passim*; Murray, *JEA* 11 (1925), 145–6 lists the stations on the Quseir-Nile road and their distances from each other; see the bibliography in PM VII, 328–38. M. Reddé and J.-C. Golvin, *Karthago* 21 (1986–7), 5–64, and J.-C. Golvin and M. Reddé, *CRAI* 1986, 172–96, also have plans of the stations, but these publications only came to the authors' attention after the ms. had been submitted to *JEA* for consideration.

⁶² See supra n. 40; for a description of modern Quseir in the late eighteenth century see Bruce, *op. cit.* 91; for a description of the town in the late nineteenth century see C. B. Klunzinger, *Upper Egypt: Its People and Products* (New York, 1878), IV, 271–92; for a description of the town in the early twentieth century see Weigall, *op. cit.* 13–14, 71–81, 87–9.

⁶³ Sidebotham in *Quseir al-Qadim Final Report* (forthcoming).

⁶⁴ Weigall, *op. cit.* 60–1, 81.

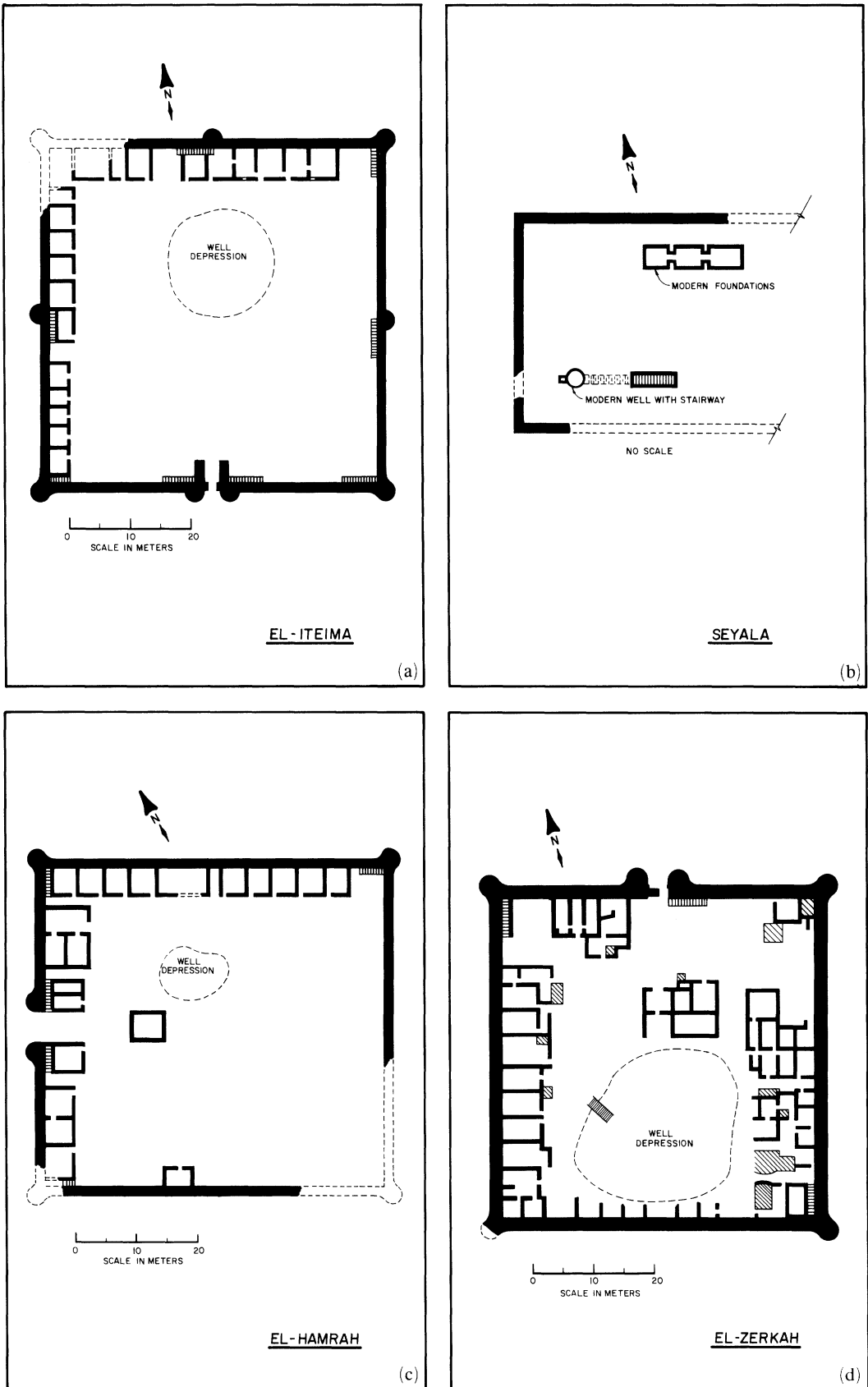


FIG. 3. Plans REZ 1987

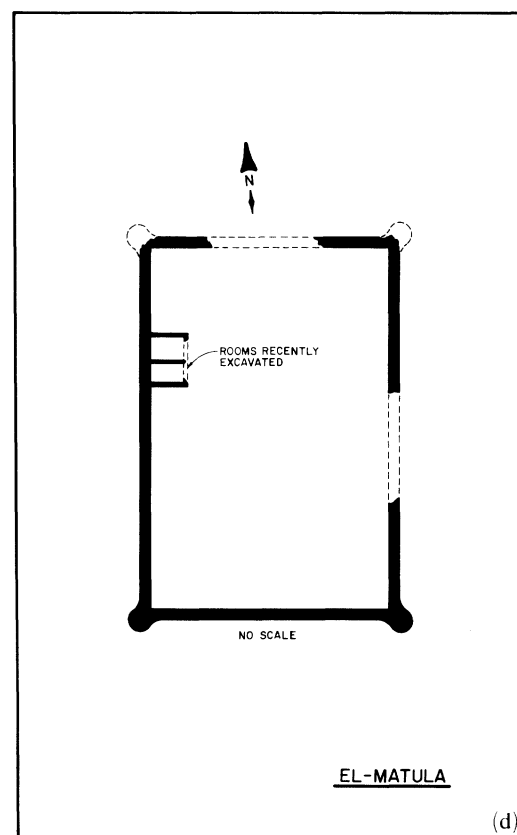
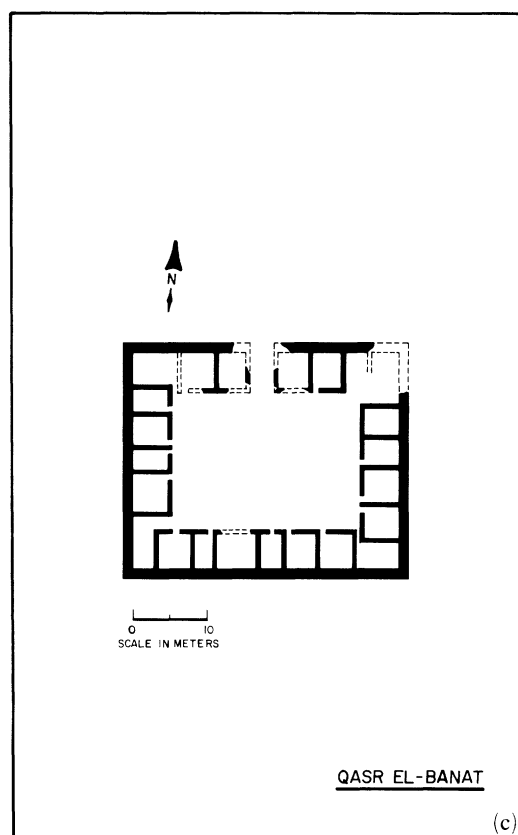
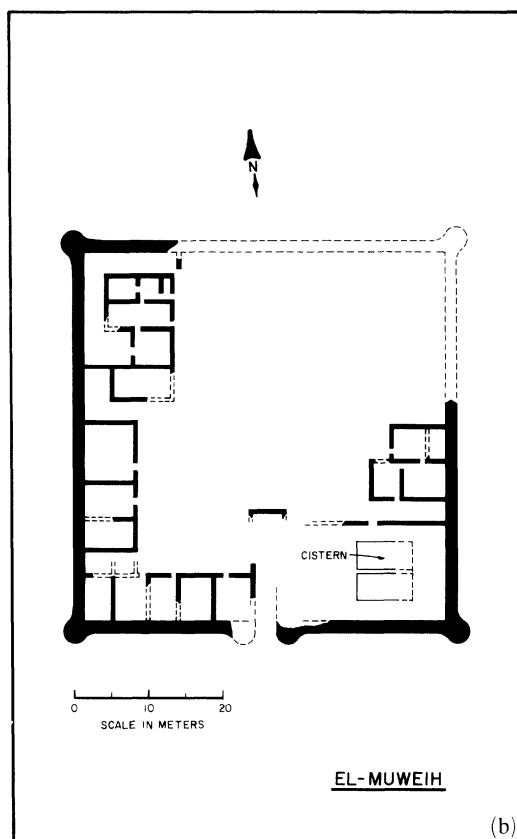
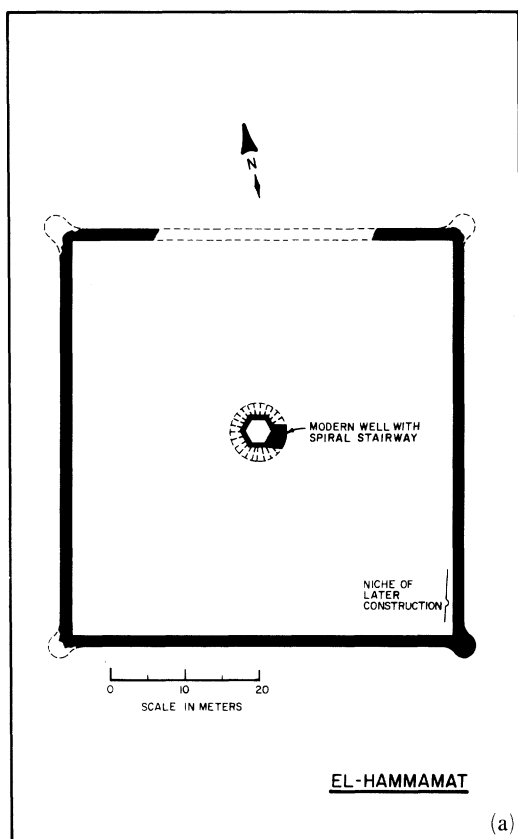


FIG. 4. Plans REZ 1987

by torrents down the Wadi Quseir al-Qadim provided the harbour of Leukos Limen which is, today, silted up. A large pile of dredged earth, no doubt part of the Roman effort to keep the harbour clear, can still be seen.⁶⁵ However, it is uncertain how far inland the harbour extended in Roman times. Extensive ruins of the city remain on raised ground north of the harbour.

Qasr Hadie

The watch post at Qasr Hadie⁶⁶ sits atop the only high ground abutting the coast 2.9 km north of the harbour of Leukos Limen. From it there is an excellent view of Leukos Limen and its land and sea approaches.

Qasr Hadie is in very ruined condition today. It has suffered from natural ravages and human depredations. The walls are oriented to the compass directions. Only the south wall is standing and it is over 2 m high. The entrance was probably in this south wall. The enceinte is rectangular in plan: *c.* 10 m × 15 m. Many sherds, cowrie and conch shells litter the area. Access to Qasr Hadie is relatively easy by means of a gully from the sea passing up on the north side of the building.

About 70 m south, across a deep gully, is a ruined tower on a hill *c.* 10 m lower in elevation than Qasr Hadie. There is no convenient direct access to this tower from Qasr Hadie. As it does not appear to serve a special purpose, it may have been an earlier construction superseded by Qasr Hadie. On surrounding ridge tops are several semi-circular structures built of boulders. Their precise functions and periods of construction remain unknown.

El-Ambagi

El Ambagi/Bir Ambagi, is—due to the presence of a constantly flowing spring—the only permanently green area along the route. Nevertheless, there are no signs of ancient buildings here. The water is too saline for human consumption. It is also probably too close to Leukos Limen (9 km) to have been an overnight stop or station. The place may have been a rest spot and location for camels to graze and water.

El Ambagi is frequented today. There are two wells with apparatus to load tank trucks. The water also comes naturally to the surface at several places. Shallow excavations have been dug both in the past and recently to collect this water.

El-Iteima (fig. 3a)

El-Iteima (Wekalat el-Iteima/Wekalat el-Duwi/el-Hammad) (pl. XIII, 2) is the first *hydreuma* on the route from Leukos Limen. The station sits in the bottom of Wadi el-Haramiya and is typical of those encountered on this route. It is approximately square in plan with perimeter walls more than 50 m long on each side, enclosing an area *c.* 2750 m². There are semi-circular towers at each corner and an intermediate

⁶⁵ Whitcomb in *Quseir al-Qadim 1978 Preliminary Report*, 37.

⁶⁶ Prickett, *op. cit.* 311 briefly describes Qasr Hadie.

tower halfway along each wall except on the south wall which has the fort's sole entrance. Two towers, each with an interior stairway, flank the *hydreuma* entrance. The southeast corner tower shows signs of a rubble fill which was probably the case for all towers. The station is constructed of pink sandstone quarried from a hillock about 100 m north or, possibly, from a bluff to the northeast.

The entrance was built of sandstone blocks larger than the blocks of the walls. East and west gate posts, 1.6 m apart, have worn Arabic inscriptions and more recent graffiti. This is the only station along the route where the gate lintel remains partially *in situ*; cracked and collapsed at one end, the total length is 2.95 m.

El-Iteima has more staircases extant than any other station along the route. Including those to the towers flanking the entrance, there are eight existing interior staircases to the top of the walls plus a ninth probably located at the northeast tower which is now washed away. All extant staircases are preserved to about full height indicating a wall height of *c.* 2.0 m. There is no evidence of a parapet. The southern wall is *c.* 1.5 m thick with definite signs of a batter.

A single row of rooms abuts the interior sides of the northern and western walls. Part of the interior northern wall is *c.* 2.3 m high. The rooms are narrower where the stairways—wedged between the rooms and the walls at the intermediate towers—give access to the northern and western *hydreuma* walls.

The interior courtyard is wide and spacious with a deep irregularly shaped depression (well) just north of the centre which is *c.* 20 m in diameter and *c.* 3 m deep. There is no stone lining on the interior sides of the well as occurs elsewhere along this route.

El-Iteima is the only station along the central desert route with a building located outside the *hydreuma* walls. To the south on a hill slope there is a small rectangular structure with dry walls of stacked stone about 1.5 m high. Walls exist on three sides of the structure with the side facing the *hydreuma* open. This edifice is composed of dark gneissic stone from the hill which it abuts.

Seyala (fig. 3b)

Seyala (Hagi Sulieman) is a ruined station in Wadi Abu Ziran. About half of the exterior walls, including all of the eastern wall, have been washed away by floods. The remaining walls are collapsed rubble except for the western which stands *c.* 2 m high at its southwestern corner. This was one of the smaller stations as the western wall has an exterior length of only *c.* 35 m.

In addition to flood damage, destruction of the station results from later construction. There is no evidence of any rooms inside the walls although there may be remains under the debris on the northwestern side. There are foundations of a later period in the courtyard perhaps for water storage.

There is a lined well containing brackish water with an adjacent basin for watering animals. The protective wall around the mouth of the well is quite low. A separate stairway descends in a straight line to the water surface beginning about 15 m from the well. The stairway is bored through the sand and has an arched roof. At the

vertical wall above the beginning of this arch is a stone plaque⁶⁷ embedded in the masonry which reads:

MR*BRIGGS
 Wil + HANCOCK
 THO + WOOD
 May*25*1832

The numeral '2' in the date '1832' is partly missing. The names of Wood and Hancock also appear on a sarcophagus fragment at Bir el-Hammamat.

The station entrance may have been on the eastern wall. A granite beam that appears to be the door lintel lies slightly downstream in the wadi where it was washed by a flood. The lintel is 0.35 × 0.25 m and is 2.45 m long.

El-Hamrah (fig. 3c)

El-Hamrah (Wekalat el-Hamrah) station, though in ruined condition, is better preserved than some others along this route. Its pink stone walls provide its Arabic name. It sits in a wide, long wadi. Flooding has destroyed the southern corner and about 20 m of wall as well as a putative tower at the western corner.

In addition to two towers flanking the entrance on the northwest side, there are towers at the northern and eastern corners; the latter is the better preserved. The eastern tower has a well preserved reverse curve in the block work like the tower in an analogous position at el-Zerkah. The stairway to the tower at the eastern corner stands to full height: *c.* 2 m. Rooms abut the northwestern and northeastern walls; a single room adjoins the southwestern wall. Some rooms are almost completely filled with sand.

A slight depression about 0.2 m deep and 15 m in diameter in the courtyard may mark the location of a well. Unlike similar depressions at el-Iteima and el-Zerkah, this one is not aligned with the centreline from the front gate.

Fine silt from flooding covers almost the entire courtyard where there are stone foundations of one detached building. It is *c.* 5 m × 6 m and may have been associated with the well.

El-Zerkah (fig. 3d)

The *hydreuma* of el-Zerkah (Abu Ziran/Abu Fannani) is the best preserved on the central desert route. Its purple stone provides its Arabic name. The station sits in Wadi 'Abu Ziran; Wadi 'Abu Fannani lies to the west.

Many sections of walls are fully preserved. The walls are built of long, thin, roughly hewn stones laid without mortar. Good examples of a parapet exist at various places along the wall. For example, at the southeast corner the parapet is 1.4 m high and 0.65 m thick leaving a clear catwalk *c.* 1.0–1.2 m wide. The exterior distance from ground level to the parapet line at this point is 3.2 m which results in a total wall height of 4.6 m.

⁶⁷ Noted by Weigall, *op. cit.* 68.

There is a large excavation inside which was the well. It is now partly collapsed, but has not filled in with debris from floods due to protection provided by the *hydreuma* walls. The well, c. 10 m deep and c. 30 m in diameter, was neatly lined with stacked stones some of which remain *in situ*; a stairway led down from the northwest.

Rooms abut the interior sides of the main fort walls on all four sides. In several cases these rooms are three or more deep. Some rooms have arched niches built into the stone walls. El-Zerkah is the only station still containing walls of free standing buildings in the courtyard although there are foundation ruins of a free standing structure at el-Hamrah mentioned above. The free standing interior buildings at el-Zerkah appear to be associated with the well.

In the east wall is a plastered rectangular channel 0.8 m above the present station floor which is 0.27 m wide \times 0.30 m high. Perhaps this channel conveyed water outside the walls for men or animals. Unfortunately, this opening is only visible on the inside of the wall; the outside has collapsed and any opening, or basin, which may have existed is now buried under rubble. There is no basin in the interior for filling this channel. A similar channel exists near the southeast tower at c. 2 m above the present ground level. These channels may also have served as permanent observation posts.

A Latin inscription, noted by Weigall,⁶⁸ on the outside of the east doorpost reads:

SER...
INV...

Lower sections of the pink sandstone door posts are still *in situ* on the east and west sides. Other doorpost fragments lay in front of the gate; one has numerous Christian graffiti.

El-Fawakhir

Ruins in the el-Fawakhir region suggest that it was the most populated point along the route in antiquity. Ostraca and pottery sherds attest to activity here in the Roman and Byzantine periods.⁶⁹ It was an area of extensive gold mining and granite quarrying. There is no evidence of a fortress/*hydreuma* here, but protection would have been provided by the sizeable population.

The hundreds of ruined huts are generally simple walls of stacked stone c. 0.50–1.0 m high and square in plan. A primary population centre is near the well, Bir Umm Fawakhir.

There was a large village east of the natural amphitheatre along the putative Roman route. The ruins of about 100 huts lay against the northern edge of the wadi and sherds litter the area. At the east end of the village is a small granite quarry with blocks scattered about.

⁶⁸ Weigall, *op. cit.* 67.

⁶⁹ Examined by authors and J. A. Riley in July 1987; for more on el-Fawakhir see *supra* n. 18.

A third population centre lay off Wadi el-Sid to the southeast. Although this is near the modern paved road, it would not have been on the Roman route. Buildings here are not as well preserved as elsewhere in the el-Fawakhir area.

Many other buildings occur all over the el-Fawakhir area, some in large clusters, some single, isolated structures. For example, there are nearby buildings located up a wadi about 0.5 km north of Bir Umm Fawakhir and in the Wadi el-Hammamat as well as some farther away in Wadi Atalla, about 15 km from Bir Umm Fawakhir.

El-Hammamat (fig. 4a)

Little of this Roman *hydreuma* remains except the line of the badly damaged perimeter walls visible on the surface. In the centre of the station is an hexagonally shaped well with descending closed spiral staircase of a later date. Windows open from the stairway onto the well at intervals.

The eastern station wall contains the remains of a niche indicating that a church or mosque subsequently had been built there. The wall containing this niche was built in front of the old station wall and at a slightly different angle. If the niche is a *mihrab*, it is slightly off the orientation to Mecca.

Several incomplete, broken sarcophagi lay in the courtyard. The names:

Tho + WOOD
WILLIAM + HANCOCK

appear on one fragment at the well entrance. These same two individuals appear on the plaque in the well at Seyala.

El-Muweih (fig. 4b)

The station of el-Muweih (Umm Muweih) is in a wide, sandy wadi of that name in an area of low hills. The soft building stone has decayed badly and wind-blown sand covers the ruins. The most visible walls lay adjacent to the entrance. The tower and walls at the northeast corner have been destroyed by floods.

There is no surface evidence of a well in the station although one could have been located in an open area on the north side which is now silted over from floods. The nearest modern well is Bir el-Muweih in Wadi el-Muweih c. 9 km to the north-northeast.

A nicely preserved cistern with plastered walls in the southeast corner appears to have been covered with sand, but reexcavated in modern times. It is filling up with sand again and neither its depth nor length can be determined without clearing. The cistern is c. 7.5 m wide and has a divider down the middle slightly off-centre. Throughout the courtyard and outside the entrance are fragments of fired brick.

About 500 m to the northwest is a small hill containing Pharaonic drawings and Latin graffiti, one of which mentions a trooper in a cavalry unit.⁷⁰

⁷⁰ See *supra* n. 42.

Qasr el-Banat (fig. 4c)

This ruined, sand covered station sits in a wide wadi in an area of low lying hills. There is a solitary outcrop covered with graffiti north of the station known as Qasr el-Banat which gives the station its name. The thread of the wadi runs across the plain near the northwest corner of the station.

This is one of the smaller stations on the central desert route with an interior size of 28.3 m × 35.7 m. This station was very carefully built. Whereas the walls of the other stations may vary from their rectangular plan by more than a metre, the sides of walls of this station were accurate to within 0.1 m. Rooms about the interior station walls on all four sides. The sole entrance to the station is on the north. The exterior walls are made of soft sandstone interspersed with a harder stone of uncertain type.

This station is less fortress-like than others along the route. There are no tell-tale mounds which indicate ruined defensive towers except, possibly, at the southeast corner. There may have been a cistern at the southern edge of the station, but there is no evidence of a well. Near the southeast corner is a limestone block barely visible and probably only recently uncovered by wind or rain. The block was covered with graffiti; some of which may be South Arabian.

El-Laqeita

The station at el-Laqeita (Phoinikon/Phoenicon) was a major stopping point on both the Berenice–Coptos and the Leukos Limen–Coptos routes and was where the two routes joined.

It is the most easily available water source short of the Nile. The water is of reasonable quality and numerous wells have been drilled in the area in recent years. The older wells are generally of a larger diameter and have water at a very shallow depth. In many places the natural water surface is only *c.* 2–3 m below ground level. The surrounding wells recently drilled for agricultural purposes are relatively deep.

There is no *hydreuma* here; if any existed its building materials may have been reused in later nearby structures which appear to be only a few centuries old. The site is now venerated as a sheikh's tomb.

El-Matula (fig. 4d)

The last station before Coptos is el-Matula (Wekalat el-Mefarik) on the northern edge of Wadi el-Matula/Wadi el-Qurn. The rolling hills to the north command the station and make its defence difficult. About 6 km to the east is Alam Mefarik (Arabic = flag of an intersection) which was probably the intersection with the camel route to Qena (Kainopolis).

The *hydreuma* is very ruined and covered over with sand. However, in February 1987 there was evidence of recent digging along the inside of the west wall which was exposed to a depth of *c.* 3 m. The outer fortification wall is of stones interspersed with sun-dried bricks. One could observe a small portion of the western wall with its bricks laid on edge in a header construction fashion.

Adjacent to the western wall are two exposed rooms which were built of sun-dried brick covered with mud plaster. A deep niche with an arched top was in one wall. In another wall were two niches with incomplete tops; the niches were very similar to those constructed in stone at el-Zerkah. Other than the room foundations, the surface of the *hydreuma* is so ruined that no other structures could be detected.

There is no evidence of sun-dried bricks in the outer walls of any of the *hydreumata* on the central desert route other than at el-Matula. Their use at el-Matula reflects its location at the bottom of a wadi composed of sand and gravel. There are no large stones conveniently near and any used in construction must have been carried from some distance. Although rare along the central desert route, the authors have observed that the use of sun-dried brick is quite extensive in stations along the route between Abu Sha'ar and the Nile especially at Deir el-Atrash and el-Heitah.

There are no patent signs of a well or cistern although one or both could be buried beneath the ruins. If there was no well, the water was either carried from the Nile or from the wells at el-Laqeita. However, due to the proximity of the underground stream in the Nile valley alluvium and considering the shallow depth of water at el-Laqeita, water could have been found at a fairly shallow depth here.

Coptos

Excavations have been conducted here over the years revealing extensive Pharaonic-Byzantine remains. Investigations carried out by Reinach early in this century shed light on the economic importance of the place in the Roman period as a terminus on the Nile for roads leading across the Eastern Desert from the Red Sea ports. The University of Michigan continues excavations at the site.⁷¹

Towers

The towers along the Leukos Limen-Coptos route are the most prevalent and enigmatic man-made features as their purposes have not been positively determined. Earlier travellers noted these structures;⁷² this paper will examine them in detail.

At least 65 towers occur at intervals of less than 1 to more than 5 km throughout almost the entire route (fig. 2). The authors examined many which are referred to by approximate distance along the assumed Roman route from Leukos Limen. The construction techniques of the towers and stations are similar suggesting that they are Roman and contemporaneous. The 1978 Quseir regional survey attributed the towers within its survey area to the Roman period based primarily upon ceramic finds.⁷³

⁷¹ For bibliography see PM VII, 123-34; Bernand, *Les Portes du désert*, 151-263; E. Bernand, *ZPE* 62 (1986), 221-36; Sidebotham, *Roman Economic Policy* 54-67, 80-3, 86-92, 94-6, 99-100, 176-7. The University of Michigan began excavations at the site in the winter of 1987/8.

⁷² Weigall, *op. cit.* 66-7; Murray, *Dare Me...*, 21-2; Murray, *JEA* 11 (1925), 145; Prickett, *op. cit.* 314-20.

⁷³ Prickett, *op. cit.* 319, 340-2, 346-7. Prickett also mentions the possibility of an earlier Ptolemaic date, but draws no conclusions.

Unlike the stations which are consistently placed in wadi bottoms, tower locations vary. Some sit atop peaks, others on mountain sides, some on low hills or ridges immediately adjacent to wadi bottoms, several rest directly on wadi bottoms ranging from close to one side to the centre.

The half-way point along the route is the well at el-Fawakhir. Approximately three-fourths of the towers adjacent to the main Leukos Limen-Coptos route are located between el-Fawakhir and Leukos Limen; only about one-fourth are to the west between el-Fawakhir and the Nile. Tower location undoubtedly results from the rugged terrain east of el-Fawakhir; to the west of Wadi el-Hammamat the route, in general, travels through broad, flat wadis bordered by low hills. Such relatively gently rolling terrain required fewer towers than the more mountainous region to the east.

Construction

Although the towers exist in varying states of preservation, many are nearly complete (pl. XIV, 1). The towers were built of stacked stones without mortar. They were solid core constructions with interiors of rubble and stones smaller than those used for the exterior surface. Occasionally, tower fill consisted of sand and silt. This fill was probably added as the outer course was erected. A recess at the top of better preserved towers was probably formed by continuing erection of the outer face of stones, but not filling the core to the top. The inner face of this recess is only roughly dressed. Many of the towers are too ruined to exhibit signs of a recess. Only the tower at 5.7 km can be definitely said to have been constructed without a recess in the top. This recess was not observed in any other towers outside the Central Desert Route.

The towers have a slight upward taper. This batter compensates for the lack of mortar. There is only very rudimentary dressing of the outer surface stones. Although the exterior surfaces are rough, the outer stones were laid to achieve an even exterior surface (pl. XIV, 2). The corners are at approximate right angles forming a nearly square plan. Thus, when outlined against the sky a well-preserved tower presents a distinct profile.

There is no uniform dimension among the towers: the sides generally vary from *c.* 3.0 m to *c.* 3.5 m in width. The height is usually slightly less than the width of a side at its base. Some towers elsewhere in the Eastern Desert are circular in plan (e.g. the station at el-Kanais and those on the heights above Mons Claudianus). There is, however, no indication that difference in plan between square and round towers reflects different periods of construction.

Towers along the central desert route are, generally, larger and much better preserved than those along other Eastern Desert routes. The good condition of the towers along this route is partly due to the durable, easily stacked stone from which they were constructed. Towers constructed of softer stone are generally more dilapidated. However, even when towers along other routes are built of durable stone, such as granite, they are usually not as well preserved as those along the central

desert route. Towers overlooking Mons Claudianus are much more ruined; few towers along the Abu Sha'ar (Myos Hormos?)-Kainopolis route approach these central desert route towers in size or quality.⁷⁴

Differences in size, shape, workmanship and preservation between towers along the Leukos Limen-Coptos route and those along other routes may indicate that the towers along this route had a purpose different from that of other Eastern Desert towers.

Purpose

These towers may have served as route markers, watchtowers or signal towers. Route-marking towers would be unoccupied and placed where convenient; signal and watch towers would be manned. Signal towers would have to be intervisible, but this is not a requirement for watchtowers.

That route-marking towers were unoccupied and sentry or signal towers were occupied assists in identification. A vertical side wall over two metres high is difficult to climb unassisted. The carefully stacked stones provide only small, inconvenient hand and footholds. Some towers have slightly wider openings which facilitated access; more of these may have existed originally and may now be obscured by the towers' ruinous condition. Only rarely, such as at the tower at 76.4 km, are deliberately constructed hand and footholds extant (pl. XV, 1). Portable wooden ladders may have provided access to the towers, but there is little likelihood of finding any remains as they would have been subsequently removed. Platforms which may have been steps are extant on two towers near the *hydreuma* at Mons Claudianus. No platforms exist on towers along the central desert route.

A clay and silt layer in the bottom of the recess at the top of some towers (e.g. clearly seen in tower at 73.6 km) suggests that they were occupied (pl. XV, 2). Clay and silt deliberately placed over sharp edged stones of the tower cores provided smooth places to sit or stand. Many towers, otherwise satisfactorily preserved, do not exhibit this clay/silt layer, but rains over the centuries may have washed it away. Other tower cores of less sharp edged stones did not require this smooth surface layer.

Entrances at the top of the towers also suggest occupation (pl. XIV, 3). The tower at 78.7 km preserves a rectangular entrance constructed through one of the side walls of the recess. At numerous other towers often one side of the recess has collapsed, perhaps the result of a weak side wall where there had once been an entrance.

One side of the tower at 76.4 km preserves the outline of a 'window' with continuous lintel beam on top (pl. XIV, 4). The window is blocked and the solid core of the tower is now above the lintel. The tower apparently had been occupied at some earlier phase in its construction.

It seems doubtful that most towers along the central desert route were continually occupied. There were considerable logistical problems of supplying food and water.

⁷⁴ Personal observation made by the authors in July 1987 and January 1989.

Furthermore, although evidence of long-term occupation (e.g. pottery sherds) can be found, it is scanty. However, many garrisons may have used lighter weight, more flexible containers such as animal skins, leather, string and palm bags and baskets which would leave little or no trace.

Ostraca suggest that units of two to four men, either Egyptians performing compulsory service or, occasionally no doubt, troops from the regular army or auxiliary forces, served in rotational duty in the towers.⁷⁵ Most towers are very exposed; the depression at the top served as a windbreak and shelter, but probably comfortably only for one person. Others in the unit stayed below and replaced one another periodically. Additional shelters may have abutted the towers. The general absence of such structures argues against continuous occupation although there are several windbreaks extant (e.g. at towers at 73.6 km and 78.7 km). The windbreak at the tower at 53.4 km, however, appears to have been built after the tower had partially collapsed.

That the towers may not have been continually manned argues against their use as part of a signal system. The occupants would have to be already present in the tower when the time for the needed signal occurred. To send a signalman out at a later time defeats the entire purpose. It is feasible that the towers may have been manned only when a caravan was about to pass or for other prearranged purposes.

Route marking

Along the route are numerous places where travellers might make incorrect turns and some towers may have been route markers. However, there are areas where the route is in a narrow wadi course yet there is still a tower (e.g. at 28.2 km). Route markers should be clearly visible, but this is not always the case where there are steep wadi sides or intervening low ridges. Furthermore, towers constructed of local materials blend into the surroundings and are not easily seen from a distance unless placed on the horizon. Many towers not located atop the highest local points may be visible when one is near, but rapidly disappear into the hillside as distance from them increases.

Moreover, for towers rarely outlined against the sky such as on hillsides or in wadi bottoms, a much more easily constructed pile of rubble could serve the same function.

The defensive features of the stations indicate a concern for security on the route. Thus, travel would usually have been made by ground using experienced guides thereby obviating the need for route markers. This central desert route, traversed since prehistoric times, would, by the Roman period, have been well marked by tracks. Areas where the specific route was unclear could have been easily marked by smaller, frequently placed cairns indicating which side of the wadi to traverse for better passage. Towers placed several kilometres apart do not enable a traveller to select such an exact path.

⁷⁵ Sidebotham, *Roman Economic Policy*, 64; Bagnall, *JARCE* 14 (1977), 69 ff.; Bagnall, *CdE* 57, (1982), 125-8; R. Coles, *ZPE* 39 (1980), 126-31.

Furthermore, it does not seem practical to expend extra effort to erect well built towers that would not always be visible. Simple cairns on the skyline are more easily constructed and more readily visible than more elaborate towers at lower elevations which blend in with the hillside.

On the other hand, the authors observed that numerous square towers serving as route markers do occur on the Abu Sha'ar (Myos Hormos?) road. The construction technique is simple and the marker is more a cairn than a tower. These markers are smaller, usually *c.* 1 m², and often occur in pairs about 50–100 m apart between which the route passes. There are no corresponding examples on the central desert route of a pair of towers intended to serve as route markers.

Security

Visibility of the towers from the road for route marking purposes permits the converse of visibility of the road from the towers for security reasons. Ships travelling to and from the 'East' had cargoes requiring security during overland transport. Some gold mining and transport operations in the region also required protection provided partially by lookouts stationed along the route.

One argument against the use of towers as watchtowers is their location in relation to the wadis. Although often located at high elevations overlooking a wadi (e.g. in Wadi el-Hammamat between Bir Umm Fawakhir and Bir el-Hammamat), towers occasionally were located for stretches along wadi bottoms even though they could have been placed at more advantageous, higher elevations (e.g. the section through el-Ambagi and the mouth of Wadi Nakheil). The tower at 53.4 km is on the wadi bottom, but moving it only *c.* 50 m would have placed it on a more advantageous hill top. Those on the wadi bottoms may have functioned as checkpoints, but this suggests a more sophisticated use which should have resulted in additional structures which are not clearly evident. Even when adjacent structures are extant, such as at 10.9 km, they do not appear substantial enough for that purpose.

Signals

Use of towers for signalling required intervisibility; *viz.*, a continuous line-of-sight between two consecutive towers. Others have commented upon intervisibility or lack of intervisibility of the towers,⁷⁶ but there is no evidence of a tower by tower check to verify this. The authors checked the intervisibility sometimes by climbing to the towers, more often by checking line-of-sight from wadi bottoms. In most cases the intervisibility can be confirmed with a reasonable degree of assurance. The following table shows a check of the intervisibility among the towers:

The 1978 Quseir al-Qadim regional survey briefly examined tower intervisibility and noted that some near Leukos Limen were intervisible while intervisibility further west was doubtful unless some towers had been destroyed.⁷⁷ The four towers near Leukos Limen set forth in the Quseir regional survey as being intervisible are not

⁷⁶ Murray, *Dare Me...*, 21–2; Murray, *JEA* 11 (1925), 139, 145; Bagnall, *CdE* 57, 125–8; Prickett, *op. cit.* 314–20.

⁷⁷ Prickett, *op. cit.* 319.

INTERVISIBILITY OF TOWERS

Location	Distance from port km	Intervisible	Approximate sight distance km
Coast	0.0		
W. Quseir el-Qadim/ W. Ambagi divide	5.7	Could not verify	5.6
Wadi Ambagi	7.2	Yes	0.7
Wadi Ambagi	9.1	Yes	1.8
Wadi Nakheil	10.9	Yes	1.8
Wadi Nakheil	14.3	Yes	3.5
Wadi Hamariya	17.4	Yes	3.4
W. el-Haramiya	21.0	Yes	3.7
W. el-Haramiya	25.3	Yes	4.2
W. el-Haramiya	27.5	Yes	2.2
W. el-Haramiya	28.2	Yes	0.5
W. el-Haramiya	29.2	Yes	0.7
W. el-Haramiya	31.4	Yes	2.7
W. el-Haramiya	32.2	Yes	1.3
Tellet el-Sheik	34.8	Could not verify	2.1
W. Abu Ziran	37.1	Yes	2.2
W. Abu Ziran	37.9	Yes	0.9
W. Abu Ziran	38.9	Yes	1.0
W. Abu Ziran	40.1	Yes	1.4
W. Abu Ziran	40.7	Yes	0.7
W. Abu Ziran	42.6	Yes	1.7
W. Abu Ziran	46.5	Did not check	3.8
W. Abu Ziran	49.2	Yes	2.7
W. Abu Ziran	51.6	Yes	2.3
W. Abu Ziran	53.4	Yes	1.7
W. Abu Ziran	55.4	Yes	2.0
W. Abu Ziran	56.9	Yes	1.5
W. Abu Ziran	58.8	Yes	1.8
W. Abu Ziran	59.7	Yes	1.0
W. Abu Ziran	60.5	Yes	0.7
W. Abu Ziran	62.8	Yes	2.2
W. Abu Ziran	65.7	Yes	2.6
W. Abu Ziran	66.7	Yes	1.0
E-W Watershed	68.3	Yes	1.7
E-W Watershed	69.1	Yes	0.6
E-W Watershed	69.6	Yes	0.4
W. Umm Seleimat	70.6	Yes	1.3
W. el-Sid	72.0	Yes	1.2
W. el-Sid	73.6	Yes	1.3
W. el-Sid	75.4	Yes	2.1
W. el-Sid	76.4	Yes	1.0
W. Abu Mreiwa	78.7	Yes	2.6
El-Fawakhir	79.7	Yes	0.8
El-Fawakhir	82.0	Yes	1.8
El-Fawakhir	83.0	Yes	0.9
El-Fawakhir	84.5	Yes	1.5
El-Fawakhir	85.4	Yes	0.7
El-Fawakhir	86.9	Yes	1.0
W. Atalla	88.3	Probable	1.3
W. Masaq el-Baqar	89.6	Yes	1.4
W. el-Hammamat	92.0	Did not check	2.4
W. el-Hammamat	93.3	Did not check	1.3
W. el-Hammamat	94.3	Probable	0.8

INTERVISIBILITY OF TOWERS *cont.*

Location	Distance from port km	Intervisible	Approximate sight distance km
W. Abu Kwei	98.1	Did not check	3.2
W. Abu Kwei	103.9	Yes	5.9
W. Abu Kwei	108.7	Yes	5.0
W. Abu Kwei	113.0	Yes	4.4
W. Abu Kwei	116.5	Yes	2.9
W. Abu Kwei	120.9	Yes	4.5
W. Abu Kwei	122.9	Yes	2.0
W. Rod 'Ayid	127.5	Yes	6.8
W. Rod 'Ayid	132.2	Yes	4.7
W. Rod 'Ayid	135.1	Yes	2.7
El-Laqeita Station	143.2	Yes	5.3

because the ridge of mountains around el-Ambagi prevents a direct line-of-sight. However, there is another badly ruined tower on the wadi floor near the springs at el-Ambagi which was not included in the Quseir survey, but whose addition does enable continuous intervisibility for all four towers mentioned.

The extensive checks performed in the current study refute any belief that the towers further west on the central desert route were not intervisible; they were. Certain segments were not confirmed by this study due to limited resources and time. For those segments in the table where intervisibility may not be proven subsequently, there may have been an intervening tower whose discovery, such as that at el-Ambagi, will permit intervisibility.⁷⁸

Examination of the intervisibility shows that a *hydreuma* was not necessary to maintain intervisibility of towers. Towers on each side of a *hydreuma* are visible from it. However, the towers themselves were visible from each other and thus maintained their intervisibility independent of a *hydreuma*.

If the towers were used for communication it seems doubtful that bonfires were employed due to lack of flammable materials in the desert. Supplying fuel to remote towers, often at high elevations, would have been difficult. There is inadequate room in the recess at the top of the towers for both a man feeding the fire and the fire itself. Furthermore, there is no evidence of ashes or burn marks. In any case the walls of the recesses would have hindered flames from being seen at night.⁷⁹

Signalmen may have used torches, but frequent strong winds in the region argue against this. Brightly coloured signal flags could have been used during the day which would have been easily seen for distances of up to 5 km. Possibly, too, signalmen used mirrors or other polished surfaces to reflect the sun. Due to their porta-

⁷⁸ Prof. W. Ferrand of the Dept. of Geology, University of Michigan confirmed in a conversation that a survey of the area between el-Laqeita and the Nile made by the University of Michigan in the winter of 1987/8 located some additional towers.

⁷⁹ F. Vegetius Renuatus, *Epitoma Rei Militaris* 3.5 discusses signal fires; for discussion see R. Rebuffat, *MEFRA* 90, 2 (1978) 829-61.

bility and small size such flags and mirrors would have been easily carried and would leave no trace today. Employing flags or mirrors for signals would, of course, have precluded night-time communication.

Some argue that these towers signalled Coptos of the arrival of merchant ships at Leukos Limen.⁸⁰ The highest ground overlooking Leukos Limen nearest the sea is the tower at Qasr Hadie c. 2.9 km north of the port. From there a lookout could see approaching ships much sooner than from the lower ground at Leukos Limen. Upon sighting a ship prior to its arrival in port a system of signals could be put into operation.

Excavations at Quseir el-Qadim provided evidence that the port's buildings were mainly constructed of poor materials and perhaps not even roofed in many cases.⁸¹ This led excavators to conclude that the port may not have been fully inhabited year round, but was only at maximum population during periods when monsoons in the Indian Ocean allowed ships to come and go. The rest of the year many people may have returned to the Nile valley.⁸² Living conditions were so harsh at Leukos Limen that most supplies other than sea food had to be brought overland from the Nile and potable water had to be carried to the port probably from Nakheil or Bir Kareim.⁸³ Thus men and transport animals would have best been maintained elsewhere. Upon notice that a ship had arrived, a caravan could be dispatched to carry back the cargo. The converse may also have been true. Merchants may not have wished to send valuable cargo to the port until they had been signalled that the ship to carry it had actually arrived.

Prearranged signals may also have been sent indicating a need for additional sailors, change of crews or repair parts such as masts. This may be posulated from the Coptos Tariff.⁸⁴

Intervisible towers marking the side route north to the *hydreuma* and housing area at Bir Nakheil⁸⁵ pose interesting questions. Why are there towers on this route when there are none on the side route to Bir Kareim which has a better water supply and leaves the main route near the same place? It remains to be determined what at Bir Nakheil led to the construction of towers along the route there other than the presence of the mines. The towers stop at Bir Nakheil; they do not continue northwards along the route. Existence of intervisible towers on this side route may hold a key to the purpose of the towers along the main route.

Archaeologists dated occupation at Bir Kareim to the first century AD⁸⁶ contemporary with Leukos Limen. However, habitation at Bir Nakheil was late Roman,⁸⁷ dating after the abandonment of the port. Thus, if the towers on the side road to Bir

⁸⁰ Murray, *Dare Me...*, 21-2; Murray, *JEA* II (1925), 139, 145; Whitcomb and Johnson in Sidebotham, op. cit. 64.

⁸¹ Sidebotham, *Roman Economic Policy*, 56-7.

⁸² Sidebotham, op. cit. 56-7.

⁸³ See supra n. 19.

⁸⁴ See supra n. 17 on the Coptos Tariff.

⁸⁵ The existing towers are intervisible. An additional tower is presumed located on a hillock adjacent to the *hydreuma*. This site is now covered by modern buildings.

⁸⁶ Whitcomb, *Quseir al-Qadim 1980 Preliminary Report*, 391-6.

⁸⁷ Prickett, op. cit. 297-300.

Nakheil were built contemporaneously with the late Roman occupation of Bir Nakheil they would have been built after the main route no longer carried trade from Leukos Limen. This leads to the conclusion that these may not have been signal towers or that the currently accepted date for abandonment of Leukos Limen in the Roman period is too early.⁸⁸

Conclusion

The route from Leukos Limen to Coptos has stations at more frequent intervals than other routes and is the only one in the Eastern Desert along which towers are so prevalent and intervisible for long stretches. Continuous stretches of towers do not exist along substantial parts of the other major routes: Berenice to Coptos and Abu Sha'ar (Myos Hormos?) to Kainopolis.

The stations have not been scientifically excavated and preliminary dating must rely on examination of surface finds, documentary and epigraphic evidence. The Wadi Hammamat inscriptions show that wells were dug along the route at least between the Nile and the mines at el-Fawakhir in the Pharaonic period although their locations have not been established. The excavation of wells suggests an evolution to station-like structures.

Most stations were probably in existence and used in the early Roman period. The stations supporting trade on the route must have been contemporary with the port at Leukos Limen which has been dated first-late second/third century AD. The frequent intervals of the stations indicate a contemporary need for their use. The station at el-Laqeita was documented in ancient sources in the first century AD. A Latin inscription near the station at el-Muweih and a second inscription mentioning military construction activities in the Eastern Desert all point to construction and, therefore, use of these stations in the early Roman period. A cursory examination of surface finds along the route by the authors in 1980 and 1987 turned up pottery similar to that found during the Leukos Limen excavations.

On the other hand, stations along the central desert route need not be contemporary with each other. Examinations of the stations themselves show later additions and reconstruction. The 1987 excavations at Abu Sha'ar recovered no evidence of activity in that area prior to the third century AD. Examination by the authors of surface pottery at a village at el-Fawakhir in 1987 revealed only fifth century AD ceramics.

Roman military fortifications (*stationes*) existed along many roads throughout much, if not all, of the empire in different periods, growing with the increased insecurity of the late second and third centuries.⁸⁹ Many comparisons could be made with fortlets elsewhere in Roman North Africa and the Near East, but dating the Eastern Desert forts solely by architectural comparison with similar structures elsewhere in the empire is hazardous. Dating these forts by a combination of analysis of

⁸⁸ cf. D. M. Bailey, *JEA* 71 (1985) *Reviews Supplement*, 54.

⁸⁹ Bagnall *JARCE* 14 (1977), 68, 70-71; Reddé and Golvin, *op. cit.* 53-8; cf. Golvin and Reddé, *op. cit.* 176-7).

surface ceramic, numismatic, epigraphic *and* architectural evidence is the only secure dating methodology short of excavation.

The chronology of the towers is even less certain than that of the stations. Construction techniques are similar to the stations and, thus, they should be contemporaneous. The proven intervisibility of the towers is a strong indication that most were constructed within the same time period for the same purpose.

Size, shape and location suggest that towers along the route from Leukos Limen to Coptos were mainly signal platforms. The central desert route towers are square in plan whereas some towers on other routes are round. It remains to be established whether these differences in shape reflect differences in period of construction or function. Towers on the Berenice and Abu Sha'ar (Myos Hormos?) roads served security purposes as did those on the hills scattered around Mons Claudianus for they generally overlooked population centres. Other towers on the Abu Sha'ar (Myos Hormos?) road are pairs of markers between which the route passes. These towers are smaller and of a different style.

Another point must be considered. The stations, even without excavation, show much evidence of occupation such as surface sherds and interior remodelling and reconstruction. On the other hand, there is little evidence of long-term occupation or regular use of the towers along the central desert route. The excellent state of preservation of the towers suggests that some may have been used minimally for their intended purpose or, in instances, some may not have been used at all.



1. The steep and narrow pass across the east-west watershed. The stone retaining walls are evident at frequent intervals (p. 161)



2. Wadi Quseir al-Qadim as seen from a tower at the divide with Wadi el-Ambagi. The Red Sea is in the background. The smooth, flat bottom of the wadi is typical of those along the route (p. 161)



1. The interior of the gate to the praesidium at el-Zerkah. Note how later construction has decreased the width of the opening (p. 168)



2. The station at el-Iteima as seen from the tower overlooking the station. The well depression inside the walls is visible. Gebel Umm Hammad is in the background to the north-east (pp. 174-5)



1. Tower overlooking the route through the Wadi el-Haramiya. Gebel Umm Hammad is in the background to the north-east (p. 181)



2. Careful stacking of the stones produced a square tower with a relatively smooth exterior (p. 181)



3. A rectangular entrance is clearly shown to the top of this tower in the el-Fawakhir district (p. 182)



4. Tower in the el-Fawakhir district showing a previously constructed 'window' that is now filled in (p. 182)



1. An opening in a tower wall for a foothold (p. 182)



2. A recess at the top of a tower showing silt added to provide a smooth, cushioned place for occupation (p. 182)

CHRISTIAN PAINTINGS FROM TEBTUNIS¹

By C. C. WALTERS

The material presented here constitutes the only record of a discovery made at the end of the last century by Bernard Grenfell and Arthur Hunt in the Fayûm, where they unearthed a building containing Christian paintings. The building itself almost certainly formed part of a monastic complex. The paintings, which *in toto* make a significant contribution to the corpus of Christian art from Egypt, gain considerably in their importance by the originality of some of their subject-matter. Evidence is put forward to support a mid-tenth century date for the majority of the paintings.

TOWARDS the end of 1899 Bernard Grenfell and Arthur Hunt began a search for papyri at Umm el-Baragât in the southern Fayûm, a site known anciently as *tp-dbn* and in Ptolemaic and Roman times as Teb- (or Tep-) tunis.² In the course of their work they uncovered a Christian building with, as they described them, 'interesting paintings and inscriptions on the walls'.³ A week was devoted to clearing it out, and then they moved on to another part of the site.

Of that week's work no detailed record appears to have been kept. A single small notebook now in the archives of the Griffith Institute in Oxford⁴ contains, among other things, copies of some (all?) of the inscriptions, while for the paintings we have a collection of fifteen photographs, twelve (as prints) kept with the notebook and eight (as glassed negatives) in the Society's headquarters in London. Of these eight, three are not represented in the Oxford set.⁵

The nature of the building remains something of a mystery. In the absence of even a rudimentary plan or any kind of description we are almost entirely dependent upon what the photographs tell us, which isn't very much. We can see (pls. XVI, XXV) that the walls were of mudbrick, and that stone columns with palm-leaf capitals supported the roof, but what kind of building was it exactly?

There *should* be no doubt. The very presence of the paintings should mean that it was a church, since only churches (or private oratories, as at Bawit) were decorated on this scale. Similarly, the columns are unlikely, from what we know of Coptic architectural practices, to have been found in any other type of building. The fact that Grenfell and Hunt, in a brief reference to the discovery, use the expression 'early

¹ The publication of this material has been made possible by a grant from the British Academy, whose generosity the author gratefully acknowledges. He would also like to thank Dr Jaromír Malek, Keeper of the Archive in the Griffith Institute, and his assistant Elizabeth Miles, for their cooperation.

² For the location of the site see B. P. Grenfell, A. S. Hunt and E. J. Goodspeed, *Tebtunis Papyri* II (London, 1907), pl. iii. For the ancient and modern names see J. Yoyotte, *BIFAO* 61 (1962), 79 ff and especially 114-15 and references given there; W. Cheshire, *Enchoria* 14 (1986), 31-42.

³ Grenfell and Hunt, *Archiv für Papyrusforschung* 1 (1901), 377.

⁴ Masquerading under the somewhat misleading heading of Crum Notebook 67.

⁵ Pls. xx, xxiv and xxv.

Coptic church⁶ should settle the matter. Unfortunately this confidence is not found in the notebook, where the heading 'Painted Coptic Church' at the top of the first page is followed by an unexpected question-mark. Doubts are increased when the notebook is examined more closely, for the terms used to locate some of the inscriptions cannot easily be related to parts of a church. What are we to understand, for example, by '2nd room'? What might 'Ind house' mean, or 'passage between the two walls'? And what about the confusing references to 'left-hand' and 'right-hand' apse?

The presence of the familiar apse composition (pl. XVII) means that the devotional character of at least part of the building (or complex of rooms?) cannot be doubted. The suspicion persists, however, that what Grenfell and Hunt found was rather more than just a simple church.

The Paintings

A *The Apsse Composition* (pl. XVII)

No clues are given as to the location of this painting, but conventionally this composition is found in the central sanctuary of a church or in a niche in the east wall of a private oratory. The painting is divided into two well-defined registers. The upper register, as usual, contains a representation of the enthroned Christ set within a mandorla, which is borne on wings studded with eyes. From the wing on the lower right-hand side protrudes the head of an ox, and to the right of this is a medallion containing a personification of the moon, its name ([CΕ]ΛΥΝΗ) written above. At the extreme right can just be made out what is probably an angel's wing.

The presence of these elements allows us, by comparison with other versions of the same composition, to reconstruct the missing portions. To the left would have been a representation of the sun and a second angel, while the other three 'corners' of the mandorla would have featured the heads of a lion (bottom left), man (top left), and eagle (top right). Christ Himself would have held in His left hand, or supported on His left knee, a copy of the Gospels, while making the sign of benediction with His right hand.

This vision of Christ is based essentially on the accounts of the Prophets Ezekiel (Chapter 1) and Isaiah (Chapter 6), and the Revelation of St. John the Divine (Chapter 4ff), though the (sun), moon and angel(s) are embellishments. The Four Creatures of Ezekiel's vision became associated in time with the Four Evangelists—lion/John, man/Matthew, ox/Luke and eagle/Mark. Sometimes, as at Deir el-Abiad,⁷ the Evangelists appear in more conventional form, and it is possible that they are represented here by the four busts which decorate the legs of the throne. In fact, only the two outermost legs have room for the complete bust, but enough traces have survived to show that this was the artist's intention, even if the space available made this difficult.

⁶ op. cit. 377.

⁷ U. Monneret de Villard, *Les couvents près de Sohag*, II (Milan, 1926), pl. 201.

The four lines of inscription beneath the moon are a quotation from Isaiah's vision (6.3):

ΑΓΙΟΣ ΑΓΙΟΣ ΑΓΙΟΣ ΚΥ̅ ΣΑΒΑΩΘ ΠΛΥΡΟΣ Ο ΟΥΡΑΝΟΥΣ ΚΑΙ Η ΓΗ ΤΗΣ
ΑΓΙΑΣ ? ? ΔΟΞΙΟΥΣ

'Holy, holy, holy is the Lord of Hosts. Heaven and earth are full of thy holy glory'.

The lower register in these compositions most commonly features the Virgin Mary, with or without the Infant Jesus and accompanied by angels (usually Gabriel and Michael), Apostles, Prophets, or local saints, the number and permutation varying from one version to another. It is unusual to find, as we do here, that she does not feature at all. Three figures are visible—three of the most important in the history of Egyptian Christianity.

Occupying the central position is a bearded figure seated on what is almost certainly intended to be an episcopal throne. The identifying inscription filling the space between himself and the figure to the (i.e. our) right, though partially obliterated, tells us that he is ΑΠΑ ΑΝΘΑΝΑ[ΣΙΟΥ]Σ,⁸ in other words Athanasius, the great Patriarch whose turbulent career spanned the years between AD 328 and 373. He is shown holding a book in his left hand and giving the blessing with his right. In view of his pre-eminent position in the Egyptian Church it is surprising how rarely he features in ecclesiastical art. The only other instance of which I am aware is in the old church of St Antony's monastery.⁹

He is flanked here by the two leading personalities of Egyptian monasticism, St. Antony (left) and St. Pakhome (right), identified respectively as [Ο Α]ΓΙΟΣ ΑΝΤΩΝΙΟΣ ΑΝΑΧΩΡΙΤΟΥ and Ο ΑΓΙ[ΟΣ] [Α]ΠΑ ΠΑΖΩΜ

The meaning and function of these apse compositions have been much debated.¹⁰ No all-embracing interpretation presents itself. Occasionally, and particularly where the Virgin and the Apostles are present in the lower register, a link with the Ascension of Christ is undoubtedly intended. Where they are not, as in this instance, the link becomes much more tenuous and almost disappears. Equally, as we have seen, the vision of Christ in Majesty derives not from one but several sources. What we seem to have, here and elsewhere, is a mixed bag of concepts and traditions, selected and arranged in an almost arbitrary fashion, with the one unifying element being the person of Christ. Whether there was ever an established canon which the Coptic artists acknowledged seems in the circumstances unlikely. The variable character of these compositions is much more indicative of confusion and uncertainty in the minds of those who commissioned and/or painted them regarding what should or should not be included.

B *St. Theodore Stratelates* (pls. XVI, XVIII)

According to the notebook this painting and its neighbour (pl. XIX) were located on the west wall of the '2nd room', whatever that might mean.

⁸ For this spelling of the name see G. Heuser, *Die Personennamen der Kopten*, I (Leipzig, 1929), 97.

⁹ J. Leroy, *BIFAO* 76 (1976), 372.

¹⁰ See especially C. Ihm, *Die Programme der christlichen Apsismalerei* (Wiesbaden, 1960); A. Grabar, *Martyrium*, II (Paris, 1946); J. Leroy, *Les peintures des couvents du désert d'Esna* (Cairo, 1975), 37 ff.

Though the mounted saint represented here is anonymous there is no doubt about his identity. He is Theodore the Stratelates, and the episode in his life which this scene records is that in which he rescues the two children of a widow-woman from a dragon.¹¹ The children are here bound beneath the horse's legs, while their mother stands in front of the animal, her right arm raised in a gesture which might betoken supplication or might be a blessing on their saviour Theodore.

The Saint's elaborate armour and his mount's caparison closely resemble other representations at Deir el-Shouhada (Esna) and St. Antony's monastery.¹² One particular feature shared by the Tebtunis and Esna paintings is the employment of Arabic characters as a decorative device. They appear here on the Saint's right thigh and both legs. This use of Arabic calligraphy was not uncommon in the Middle Ages.¹³

The popularity of Theodore in Egypt is attested not only by his appearances in mural art and illustrated mss. but also by the number of churches and chapels dedicated to his memory in different parts of the country and the Coptic edition of his life and martyrdom, a version of the Greek original doctored to suit an Egyptian audience. Whenever he appears in art it is almost invariably this episode that is featured, and the elements show little variation. The only significant difference is that the dragon, which is normally being trampled beneath the horse's feet, here rears up before Theodore, who therefore despatches it with an upward thrust of his lance rather than the customary downward thrust.

In the top left-hand corner of the photograph is part of an inscription written, it would seem, in a specially-prepared panel. The letters visible make it possible to identify the inscription in the notebook, where it is recorded as follows:

sic

ⲁ [Ⲓ[]ⲀⲘ[]Ⲑ[]ⲠⲀⲮ[ⲨⲨ]ⲠⲒⲀⲔⲀⲐⲀⲐ ⲒⲀⲘⲘ

Fragmentary though this is, it would seem that the inscription was a slightly abbreviated version of that found alongside the other saint on the same wall (see below). (It should be noted here that a number of mistakes have clearly been made in the copying of this and other inscriptions, e.g. **ⲒⲀⲘⲘ** for **ⲒⲀⲘⲘⲘ** in this inscription. Where these mistakes can be corrected from the photographs this will henceforth be done without acknowledgement of the fact. Where mistakes are suspected but cannot be proved, suggested emendations will be indicated.)

The notebook contains two other inscriptions which must have been associated with this painting even though they cannot be seen in the photograph. One reads **ⲛⲈⲨⲘⲠⲤ ⲛⲐⲤⲘⲠⲤ** 'the children of the widow', and the other **ⲠⲤⲀⲠⲀⲔⲀⲐ ⲛⲈⲨⲘⲠⲤ** (surely for **ⲛⲈⲨⲘⲠⲤ**) 'the dragon of Euchetos', Euchetos being the town outside which the incident occurred.

¹¹ E. O. Winstedt, *Coptic Texts on Saint Theodore the General* (London and Oxford, 1910), 61.8 ff and 123 ff.

¹² For the St. Antony painting see A. Piankoff, *Les Cahiers Coptes* 10 (1956), 21; for the Esna painting see Leroy, *op. cit.*, pl. 45.

¹³ K. Erdmann, *Arabische Schriftzeichen als Ornamente in der abendlichen Kunst des Mittelalters* (Wiesbaden, 1955).

C *Anonymous Saint* (pls. XVI, XIX)

In the notebook this figure is called 'St. George', but since Theodore is given the same name we can assume that this was pure guesswork.

In fact there is little in this rather poorly-preserved painting to assist identification. St. George would certainly be a candidate, perhaps even a strong one, but no more. It might not be significant, but immediately before copies of the inscriptions accompanying this pair of warrior-saints the notebook has the entry $\alpha\pi\alpha\ \varsigma\iota\varsigma\iota\ \nu\iota\omicron\varsigma\ \pi\epsilon\sigma\tau\rho\alpha\tau\eta\lambda\lambda\alpha\tau\eta\varsigma$. If the juxtaposition does mean anything then this could be Sissinios, though his *Life* contains no incident that can be easily related to this particular scene.

The 'enemy' being slain is here depicted as a serpent or dragon with the head and chest of a human being. He is identified by the name $\mu\alpha\sigma\tau\epsilon\mu\alpha$ written over his head. This is the name by which the chief of demons is known in the Jewish *Book of Jubilees*,¹⁴ where he features fairly prominently. It is 'the prince Mastema' who attempts to slay Moses on his return to Egypt from Midia and thus prevent the Exodus, and 'all the powers of Mastema' which are let loose to slay the first-born in Egypt. The name also occurs in a number of Coptic texts,¹⁵ where it is clearly being used, as in the *Book of Jubilees*, as an alternative name for the Devil.

Mastema is here tethered by a cord (?) which passes through his nostrils and is looped around whatever it is that forms the left-hand border of the painting. This cannot, one feels, simply be a border, any more than the narrow band on the right-hand side, since this would be of uniform design. The right-hand strip ends above the horse's tail for no apparent reason, and the beginnings of a band with identical decoration can be made out at right-angles to the other just opposite the second line of inscription. This is too low to form the upper edge of the painting. Just what these features are meant to represent I would not like to say.

In most respects the two paintings are very similar, and are clearly the work of the same artist. The foliate motif which fills the background is the same in both cases, as are the forms of the stirrups and boots. There are also further examples of Arabic calligraphy in this second painting, on the Saint's left boot and the horse's hind-quarters. These are strange places to find a decorative feature, yet so apparently it must be, for the letters yield no obvious meaning. The horse's knotted tail, which does not occur in the other painting, is found in the portraits of Theodore and George at St. Antony's monastery.¹⁶ (See also pl. XX.)

Alongside the painting to the right is an inscription, most of which is legible in the photograph, thus allowing it to be identified in the notebook. It reads as follows:

$\overline{\pi\omicron\varsigma}\ \overline{\iota\varsigma}\ \overline{\chi\varsigma}\ \epsilon\phi\epsilon\varsigma\mu\omicron\upsilon\ \alpha\gamma\omega\ [\zeta\alpha]\rho\epsilon\zeta\ [\epsilon\pi\omega]\nu\epsilon\zeta\ [\]\alpha\ \nu\tau\alpha\alpha\alpha\iota\ \pi\rho\alpha\gamma\omega$
 $\epsilon\pi\iota\alpha[\kappa\alpha]\theta\omicron[\nu\ \zeta\alpha\mu]\nu$

¹⁴ R. H. Charles, *The Apocrypha and Pseudepigrapha of the Old Testament*, II (Oxford, 1913), 1 ff and references to Mastema in Index to same, 858.

¹⁵ A. Alcock, *The Life of Samuel of Kalamun* (Warminster, 1983), 11.2; G. Sobhy, *Le martyre de Saint Hélias* (Cairo, 1919), 95 n. 1; H. Hyvernat, *Acta Martyrum I* (= CSCO 43, Paris, 1907), 42.22.

¹⁶ A. Piankoff, *BSAC* 14 (1958), pl. viii.

'May the Lord Jesus Christ bless and guard the life of ... who has donated this good thing. Amen'.

The possible significance of this inscription will be considered later.

D *Anonymous Warrior-Saint and Seated Figures* (pl. XX)

This is one of the poorer photographs in the collection, making identification of the figures all the more difficult, though not, as we shall see, impossible.

The warrior-saint rides a curiously dappled horse and wears an outfit similar to Theodore's, so far as one can tell. The conventional serpent/dragon is being trampled beneath the horse's feet and despatched by the Saint's lance. It has a human head, which can be seen just to the right of the lance. It wears some kind of head-dress with a central protrusion and the face is bearded.

These details are almost certainly sufficient to identify the Saint and the episode from his life (or rather after-life) depicted here. He is Mercurius, who according to legend slew the Emperor Julian the Apostate after his own martyrdom.¹⁷ This representation of the Emperor can be compared with another painting on the same theme at St. Antony's monastery¹⁸ and an illustration in a Coptic ms. in the Vatican.¹⁹ The major difference is that he is here given a serpent's body rather than appearing in wholly human form. This need not be significant, however, since almost any kind of 'enemy' could be shown in this fashion.

Below Mercurius are four seated figures and part of a fifth. Each of the four is bearded and haloed. It is noticeable that the eyes have been maliciously hacked out.

It is impossible to say for sure who they are meant to be, but the fact that they all carry scrolls suggests that they are Prophets. Generally speaking it was more common for Prophets to be depicted in this way than the Apostles, who are the other possible candidates, but who are usually shown carrying books.²⁰ Sometimes the scrolls are open, as in Chapel XII at Bawit,²¹ where they display passages from the writings of the Prophets who carry them, but there is no hard and fast rule on this. In the Orthodox Baptistery at Ravenna, for example, the scrolls are both open and unopened.²²

E *Two Monastic Figures* (pl. XXI)

According to the notebook this painting is situated on the east wall. The opening to the left appears to be a blocked-up window with a stepped sill, the blocking having perhaps been inserted as part of the constant battle against wind-blown sand.²³

The two figures represented here are almost certainly deceased monks whose memories it was wished to commemorate (cf Bawit). An accompanying inscription

¹⁷ W. Budge, *Miscellaneous Coptic Texts in the Dialect of Upper Egypt* (London, 1915), 247:26 ff and 826.

¹⁸ A. Piankoff, *Les Cahiers Coptes* 7-8 (1954), 21.

¹⁹ J. Leroy, *Les manuscrits coptes et coptes-arabes illustrés* (Paris, 1974), pl. 105.1 (wrongly captioned as Theodore).

²⁰ C. Morey, *Early Christian Art* (Princeton, 1942), 95; E. Capps Jr., *Art Bulletin*, 9 (1927), 333.

²¹ J. Clédat, *Le monastère et la nécropole de Baouît* (Cairo, 1904), 54 ff and pls. xxxi-xxxv.

²² S. Kostof, *The Orthodox Baptistery of Ravenna* (New Haven & London, 1965), figs. 83-102.

²³ cf. A. Boak and E. Peterson, *Karanis 1924-28* (Michigan, 1931), 59 and fig. 74.

identifies the right-hand figure as $\alpha\pi\alpha \alpha\pi\pi\alpha \iota\omicron\gamma\lambda\iota \eta\pi\lambda\iota \]\zeta\iota\omega$, 'Apa Appa Juli(us) of ?'. There are traces of two letters after π in the fourth line, the first of these having been copied as λ . $\alpha\pi\pi\alpha$ is probably being used here as a variant of $\alpha\beta\beta\alpha$. The combination of the two titles $\alpha\pi\alpha$ and $\alpha\beta\beta\alpha/\alpha\pi\pi\alpha$ is not uncommon.²⁴

It is hard to understand why this inscription should have survived so well when the space reserved for the name of the left-hand figure is devoid of any clear traces of an inscription. Could it perhaps be that it never contained one? Were the figures perhaps painted first and the names inserted later, when someone of sufficient status had died? The titles $\alpha\beta\beta\alpha/\alpha\pi\pi\alpha$ could very well apply to the superior of a monastery.

Beneath the figures, where the plaster has fallen away, are traces of what might be earlier paintings, though it is difficult to be sure. A large cockerel fills the space immediately beneath the window. In Christian art this bird could serve either as a reminder of the story of St. Peter or as an expression of the idea of resurrection.²⁵ Perhaps the latter is more likely here, assuming that any particular significance is to be attached to its presence.

To the left of the window is a tree, and at the extreme right-hand edge of the scene, in the narrow space between Apa Julius and the junction of the walls, can just be made out a couple more of the flowers or fruit with which it is liberally festooned. Whether the tree was part of some larger composition is impossible to say. According to the notebook another figure was portrayed to the left of this pair, which suggests that the tree was nothing more than 'filling' material, like the other foliate motifs which occupy the spaces between the figures.

F *The Resurrection of Christ* (pl. XXII)

This painting, the location of which is nowhere indicated, would appear to represent a conflation of two separate episodes from the Gospels, though there are certain features which do not seem to conform with the Gospel account or other versions of the same theme. Firstly, and most obviously, this is a rendering of the coming of the Holy Women to the tomb of Christ. The tomb is here depicted as an impressive, two-storeyed construction with a domed roof, conforming presumably with the current idea of what the Constantinian Anastasis in Jerusalem looked like.²⁶ On the dome are the words $\eta\pi\tau\alpha\phi\omicron\varsigma \ \epsilon\pi\epsilon\chi\omicron\varsigma$, 'the tomb of (belonging to ?) Christ'. An angel sits on the stone that has been rolled away from the entrance. The inscription on the stone is not wholly visible in the photograph, but was copied as $\pi\omega\nu\epsilon \ \epsilon\tau\zeta\iota\omega\omega\upsilon \ \epsilon\pi\tau\alpha\phi\omicron\varsigma$, 'the stone that was (lit. is) at the door of the tomb'.

Three figures complete the portion of the scene recorded in this photograph. None of them is named. The two to the left are, by their dress, clearly female. This cannot be said with such certainty of the figure on the extreme right, but the slenderness of the body strongly suggests that this, too, is a woman. The only other characters that occasionally appear in this scene are the sleeping guards and a

²⁴ W. Crum, *Coptic Dictionary* (Oxford, 1939), 13a and refs.

²⁵ F. Cabrol and H. Leclercq, *Dictionnaire d'archéologie chrétienne et de liturgie*, III² (Paris, 1948), 2886 ff.

²⁶ Ibid. VII² (Paris, 1927), 2317 and fig. 6178.

second angel. It cannot be the former, and the absence of any indications of wings and the form of dress argue against the latter.

Of the four Gospel accounts only Mark (16.1) specifies three women—Mary Magdalene, Mary the Mother of Jesus, and Salome. John (20.1) mentions only Mary Magdalene, while Matthew (28.1) speaks of Mary Magdalene and ‘the other Mary’. Luke (24.10), while referring to three women by name (Mary Magdalene, Mary the Mother of Jesus, and Joanna), also testifies to the presence of ‘other women’. The Tebtunis version, therefore, accords most closely with Mark’s account, though whether consciously is another matter.

If the three figures have been correctly identified it would mean that this version does not conform with normal practice, according to which East Christian art favoured two women rather than the three common in the West.²⁷ However, a painting of the same theme at St. Antony’s monastery also features three women.²⁸

East Christian art, in particular, commonly depicts the spices which, according to Mark and Luke, were brought to the tomb by the women to anoint the body of Christ.²⁹ These are sometimes carried in small boxes and sometimes in small bottles (as at St. Antony’s monastery). On other occasions censers are shown instead, and that is what we have here, with the second figure from the left swinging one with her right hand. Although we cannot know whether her companion on the left also had one we can see that the third figure did not, and it is worth noting that in the St. Antony version only two of the three women are shown carrying spices.

What makes the Tebtunis painting different from other versions of the same scene is the curious detachment of the figures one from the other. One would normally have the women confronting the angel as he imparts to them the news of Christ’s resurrection. Instead we have two of the women walking away from the angel, who faces not them but the ‘audience’.

This strange arrangement can be more easily understood if we remember that the composition as we see it is incomplete, and try to imagine what was in the missing portion to the left. It is in this direction that two of the women are moving and towards which the angel and the third woman are pointing. This, clearly, is where the centre of attraction lies, and that can only be the figure of the risen Christ.

By so arranging the figures the artist has contrived to illustrate in a single composition both the visit of the women to the tomb and the encounter with Christ in the garden. This latter episode is only mentioned by Matthew (28.9) and John (20.14ff). In John’s account Mary Magdalene encounters Him alone, but according to Matthew the two Marys meet Christ as they run from the sepulchre. Christian art traditionally depicts one or both of the women in the act of kissing His feet, as recounted by Matthew. The Tebtunis artist cannot in the circumstances conform with this tradi-

²⁷ C. H. Kraeling, *The Excavations at Dura-Europos, Final Report VIII Part II: The Christian Building* (New York, 1967), 71 ff and pls. xlv and xlv; G. Millet, *Recherches sur l’iconographie d’évangile* (Paris, 1960), 517 ff.

²⁸ Piankoff, *BSAC* 14, pl. v; Leroy, *BIFAO* 76, 369.

²⁹ Kraeling, op. cit. 80; M. Rostovtzeff (ed.), *The Excavations at Dura-Europos, 5th season, 1931–32* (Yale, 1934), 272.

tion, and so compromises by having two of the women proceed directly to meet Christ while the third, who has no part in this episode, remains standing by the tomb.

G *A Eucharistic Scene* (pls. XVI, XXIII)

This is the most difficult scene to interpret. The close-up (pl. XXIII) shows five figures standing in line, but in pl. XVI it can clearly be seen that there were two more to the right. There might have been even more originally, for pl. XVI shows us that where the seventh figure disappears there was a returning wall that has been masked by later brickwork, and that where this wall is exposed plaster is clearly visible. The scene may, therefore, have continued around the corner onto this wall. Whether there were other figures to the left cannot be determined, though the deep band of geometric decoration visible in pl. XVI would suggest not, since this intrudes into the space which such figures would have to fill.

Two of the five figures in pl. XXIII hold chalices, while two others carry long-necked vessels wrapped, it would appear, in some kind of drapery (?). The fourth figure from the left seems to be pouring the contents of his vessel into his neighbour's chalice. The chalices themselves are of normal eucharistic form with a smallish, nearly straight-sided bowl, a long stem, and an abruptly sloping base.³⁰ Their presence in the scene, together with the vessels held by two of the other participants and the ecclesiastical nature of the garments on display, make the eucharistic significance of the tableau indisputable, but just who the figures are is more problematical.

Interpretation is crucially hindered by the inability to say for sure how many figures were represented. If indeed it could be shown that there were seven and no more then a solution would present itself, for it could then be argued that these were the original seven deacons whose election is recorded in Acts (6.2-6).

One of the principal functions of deacons was (and still is in the Coptic Church) the distribution of the wine to communicants,³¹ and the fact that four of the figures here (and probably all could we but see) are carrying vessels connected in some way with this act goes some way towards confirming the identification. St. Stephen, protomartyr and most illustrious of the seven, is depicted holding an identical chalice in an illustrated Coptic ms., where he is accompanied by an angel with one of the long-necked vessels in his hands.³²

There is also the matter of the rather unusual arrangement of the figures. The one on the left is distinguished from the others both by his vestments and by his slightly more elevated position, suggesting pre-eminence of some kind. As a general rule such status would be expressed by placing the figure centrally, with any subordinates ranged on either side. That would almost certainly be the case, for

³⁰ A. Butler, *The Ancient Coptic Churches of Egypt*, II (Oxford, 1884), 37; Cabrol and Leclercq, *op. cit.* II², 1595 ff; O. H. E. KHS-Burmester, *The Egyptian or Coptic Church* (Cairo, 1967), 24.

³¹ Burmester, *op. cit.* 83.

³² Leroy, *Les manuscrits coptes*, pl. 33.

example, were Christ to be that figure. By positioning him to one side in this painting it would appear that the artist was attempting to convey the idea of 'first among equals', a status which would fit Stephen, the Archdeacon, very well indeed. The underlying equality of the figures is emphasized by the fact that four of them (and no doubt all originally) have nimbi.

Below and slightly to the left of Stephen (?) is a rather crudely-painted warrior-saint accompanied, as we can see in pl. XVI, by an angel.

By comparing pls. XVI and XXIII it can be seen that a portion of brick-work immediately above the small niche situated beneath the line of figures has disappeared. This was perhaps deliberately removed by the excavators in order to allow them to photograph the painting within the niche. This, as pl. XXIV reveals, was a bust of Christ.

H *The Punishment of Sinners* (pls. XXV–XXIX, 1)

Pl. XXV shows the setting for this composition, or rather for parts of it. It is unclear which part of the building (or complex) we are here looking at. The notebook, in locating adjacent elements of the scene, uses the expressions 'passage between the two walls' and '1st room, 2nd wall', which convey no clear picture at all. What is presumably a doorway appears just to the right of centre, and what looks like a passageway of some sort leads off from the bottom right of the photograph.

At least there is no doubt about the subject of the painting. It illustrates in dramatic form the fate awaiting sinners in the next world.

Dominating the proceedings (pl. XXVI) is a gigantic winged figure. An inscription recorded in the notebook, and partially visible in pl. XXV (to the left of and above the figure) identifies him as *κίρε αββατων παγγελος μπμοϋ νατχιζο*, 'Lord Abbatôn, the angel of death, who respects not persons'.

The name Abbatôn (sometimes Abbadôn) comes from a Hebrew word meaning 'to destroy'. In the Revelation of St. John (9.4), where he is equated with the Greek Apollyon, he is described as 'the angel of the abyss'. According to the Coptic *Discourse on Abbatôn*, by Timothy, Archbishop of Alexandria,³³ he was originally the angel Mouriël, to whom God had given the name Abbatôn after the fall of Adam, with power to control the destinies of men. After they die, 'thou shalt appear unto them and they shall behold thee. And when they behold thy countenance their souls shall not remain in them... and they will be forced to yield them up.'³⁴ It is Abbatôn who comes with his legions to collect the soul of Joseph.³⁵

The *Discourse* contains a detailed description of Abbatôn's frightening appearance, unfortunately concentrating on the head and face, precisely those parts which the Tebtunis photographs either do not show (pl. XXVI) or which are indistinct (pl. XXVII). Only the lower part of the face is visible, and what is probably an enormous tongue can be seen hanging from the mouth. The body is covered with what appears

³³ W. Budge, *Coptic Martyrdoms etc. in the Dialect of Upper Egypt* (London, 1914), 225 ff and 474 ff.

³⁴ Ibid. 241.7 ff.

³⁵ P. de Lagarde, *Aegyptiaca* (Göttingen, 1883), 2815 ff.

to be armour, with a long mantle hanging down the back. In the Coptic *Apocalypse of Paul* some of the powers of darkness are said to wear 'plates of armour',³⁶ as do the demons who approach Joseph, while the locusts which emerge from the abyss over which Abbatôn presides wear 'breastplates of iron' (*Revelation* 9.9). In the Tebtunis painting a snake is entwined around Abbatôn's waist.

The hands are human in form, but the claw-like feet could be seen as an attempt to render the 'feet like sharp reaping-knives' mentioned in the *Discourse*.³⁷

His right arm is raised. Part of the hand is perhaps just visible in pl. XXV, to the left of the inscription. He is holding a rope (?), to which are attached the heads, busts and bodies of assorted wrong-doers. The misdemeanours of some are spelt out in accompanying inscriptions. Thus one is ΠΕΤ(Ο)ΡΕΚ ΝΗΟΥΧ, 'he who swears falsely', another is ΠΕΤΚΑΤΑΛΛΙ, 'he who slanders', while a third is ΠΡΕΦΩΙ ΚΑΚΩΣ ΖΗΤΜΑΦΕ? (notebook ΕΙΣ)ΤΑΙΠΙ, 'the one who measures evilly in the balance? the *oipe*'.

To the left is the partially-preserved figure of a woman in an attitude of supplication, her breasts being attacked by two serpents. The inscription above her head can perhaps be reconstructed as, ΤΕΣ[ΖΙΜΕ]ΕΣΖΜΟ[ΟΣ ΜΗ]ΟΥΖΑΙ ΝΖ[ΕΘ]ΝΟΣ, 'the woman who lives with a heathen husband'. Above this inscription are traces of another figure, apparently male, also in a suppliant pose and suffering at the hands of a demon, whose leg and garment can be compared with those of another tormentor to the right of Abbatôn.

This demon, depicted as a creature with long ears and crocodile-like jaws, is attending to a sinner whose hands are bound behind his back and whose feet are manacled. He is described as ΠΡΩΜΕ ΕΦΒΙ ΜΠΒΥΚΗ ΝΝΕΡΚΑΤΗΣ, 'the man who takes the wage of the labourers'.

The nature of the punishment being inflicted is difficult to determine. The demon appears to be holding some sort of long, pointed instrument in its hand, with which it is drawing out (?) something from the victim's mouth. Could this perhaps be a representation of a passage from the *Apocalypse of Paul* which describes how a sinner's intestines are removed through the mouth?³⁸

These two figures reappear in the bottom left-hand corner of pl. XXVII. The central characters here are neatly framed by two large wings, one belonging to Abbatôn, the other presumably to another avenging angel. (In pl. XXV traces of a mantle decorated like Abbatôn's can be made out just to the right of this wing.)

The seated figure at the top of the photograph identifies himself by an inscription written on the open scroll that he holds in his left hand. This reads ΕΙΝΩΧ ΠΕΓΚΡΑΜΑΤΕΥΑ ΕΦΣΖΑΙ ΝΝΕΝΟΒΕ Ν ? ΝΕΡΩΜΕ 'Enoch, the scribe who records the sins of ? mankind'. A reed pen is poised in his right hand.

The scribal qualifications and duties of Enoch are well-attested. In the *Book of Jubilees* he is described as 'the first among men ... who learnt writing and knowledge

³⁶ Budge, *Miscellaneous Coptic Texts*, 556.24.

³⁷ Budge, *Coptic Martyrdoms*, 241.24.

³⁸ Budge, *Miscellaneous Coptic Texts*, 540.12; see also E. Hennecke, *New Testament Apocrypha*, II (London, 1966), 781 n. 1.

and wisdom,³⁹ while in the *First Book of Enoch* he appears as 'Enoch the scribe, the scribe of righteousness'.⁴⁰

It is scarcely surprising, therefore, that he should be called upon, like Thoth before him, to record man's final judgement. According to the *Book of Jubilees* 'he writes down the condemnation and judgement of the world, and all the wickedness of the children of men',⁴¹ while he himself records how he 'saw the prisoners ... in pain, expecting the limitless judgement. And I wrote down all those being judged by the judge, and all their judgements and all their works.'⁴² According to a much-damaged text Enoch could also take note of a man's good deeds, and could even influence the judgement in his favour by adjusting the balance.⁴³ (In the notebook is a drawing of a pair of scales and a few fragments of inscriptions which must have belonged to this scene, even though they do not appear in the photographs.)

There is no indication that Enoch is exercising his prerogative of mercy on this occasion, and certainly none is being shown to the pair of sinners below. With arms bound and collars fastened about their necks they are being led into the presence of Abbatôn by $\alpha\beta\delta\iota\mu\epsilon\lambda\omicron\upsilon[\chi\omicron\varsigma]\ \pi\alpha\rho\rho\epsilon\lambda\omicron\varsigma\ \eta\eta\epsilon\kappa\omega\lambda\alpha\varsigma\iota\varsigma$, 'Aftemeluchos, the Angel of Punishments', as a barely-legible inscription (fortunately copied by Hunt) to the left of the figure in question tells us.

This name, coming from the word *temeluchos*, 'care-taking', was originally applied to a particular type of angel, and was only later turned into a proper name and bestowed upon the avenging angel. It is sometimes equated with Tartarouchos, the guardian of Tartarus, a particularly unpleasant part of Hades.⁴⁴ He is here depicted as a heavy-jawed, horned (?) creature with exceptionally long talons and clawed feet, recalling in these last two respects the description of Abbatôn.

Two more sinners are receiving their retribution in pls. XXVIII,1 and XXVIII,2. We have here (see best in pl. XXVIII,1) a naked man and woman, the man's penis and the woman's breasts being attacked by serpents. A very similar scene occurs in the Cappadocian church of Yılanlı Kilise (ninth-tenth century) as part of a representation of the Last Judgement.⁴⁵

The inscription over the couple's heads describe the man as $\pi\epsilon\tau\pi\omega\rho\eta\epsilon\upsilon\epsilon\ \mu\epsilon\eta\epsilon\varsigma\zeta\iota\mu\epsilon\ \eta\lambda\epsilon\zeta\mu\epsilon\alpha$, 'he who fornicates with a woman?', and his companion as $\tau\epsilon\varsigma\zeta\iota\mu\epsilon\ \epsilon\eta\tau\alpha\varsigma\uparrow\ \tau\epsilon\kappa\iota\beta\iota\upsilon\epsilon\ \eta\eta\pi\lambda\epsilon\zeta\mu\epsilon\alpha$ 'the woman who has given her breasts for?'. The word $\lambda\epsilon\zeta\mu\epsilon\alpha$ is of uncertain meaning. It appears to have some connection with 'pecuniary matters' (so Crum, 150a), and probably here has the sense of 'for money' or some such phrase.

³⁹ Charles, op. cit. 18 (Chapter 4.17).

⁴⁰ Ibid. 195 (Chapter 12.4).

⁴¹ Ibid. 19 (Chapter 4.23).

⁴² Ibid. 456 (Chapter 40.12-13).

⁴³ W. Crum, *Theological Texts from Coptic Papyri* (Oxford, 1913), 9.

⁴⁴ On (Af)temeluchos see Budge, *Miscellaneous Coptic Texts*, 558.18 ff and 544.3; M. Kropp, *Ausgewählte koptische Zaubertexte*, III (Brussels, 1930), §149 ff; Hennecke, op. cit. 675 n. 1; J. Zandee, *Death as an Enemy* (Leiden, 1960), 319-20; G. Giamberardini, *La sorte dei defunti nella tradizione copta* (Cairo, 1965), 122 n. 4; M. R. James, *The Apocryphal New Testament* (Oxford, 1953), 507; M. R. James, *JTS* 12 (1911), 370-1.

⁴⁵ S. Kostof, *Caves of God* (Cambridge Mass., 1972), pl. 28.

In pl. XXVIII,2 can best be seen clearly the lance which pierces the man's skull and emerges from the throat.

The dark splashes of paint which are scattered over the background are presumably meant to be the flames of Hell.

In the upper part of pl. XXVIII,2 is an inscription referring to ΠΕΤΒΑΛ ΝΗΣΤΑ ΕΒΟΛ ΜΠΑΤΕΣΩΠΙ, 'he who breaks the fast before the appointed time (lit. before it has happened)'. The tips of the culprit's feet are probably just visible at the very top of the photograph.

One final observation on pl. XXVIII,1. On the right-hand side is what looks like a junction between two walls. Such a junction occurs in pl. XXV, also on the right-hand side, but no traces of these paintings can be seen. We must either assume that the plastering on which they were painted fell before the photograph was taken or accept that the composition was continued on an entirely different section of walling. This is perhaps the most likely, since there are other parts of the scene which cannot be identified in pl. XXV.

The final vignette from this remarkable composition can be seen in pl. XXIX,1. Here we have another sinner, probably once identified by an inscription to the left, of which only the letters ... ΙΜΕ ΕΣΜΝΠΩ ... can be made out. This should at least tell us that the poor wretch is female, since presumably the original reading would have been [ΤΕ] or [ΟΥΣΖ]ΙΜΕ ΕΣ ...

She is being forced to disgorge her soul, depicted in the form of a babe, which is promptly devoured by ΠΤΕΚΑΝΟΣ ΕΦΟΥΩΝΓ ΤΕΨΥΧΗ, 'the decan who chews (?) the soul' (for ΟΥΩΝΓ see Crum, 483b). The term decan originally had astronomical connections, but is employed quite frequently in Coptic texts to describe a species of demon which serves the Lord of Darkness, particularly with regard to the inflicting of punishments. They are always of formidable appearance and have 'changing faces'.⁴⁶

On this occasion both the appearance of the decan and the act in which it is engaged bear a strong resemblance to a passage from the *Apocalypse of Paul* relating the fate awaiting the souls of sinners.⁴⁷ These are said to be the prey of the 'Powers of Darkness', some of which 'have the faces of asses and wear a black breastplate, with knives of fire in their hands'. The head of this decan is certainly asinine in appearance, and there can be little doubt that the artist has attempted to depict armour. It holds a knife in its right hand and a pronged implement in the left. The *Apocalypse of Paul* mentions the 'fork of fire which had three prongs' used by Aftemeluchos to extract the entrails through the mouth,⁴⁸ but even more applicable is the reference in the Bohairic *Life of Pakhome* to the 'crooked instrument' with which the avenging angel draws out the soul through the mouth.⁴⁹

The figure hovering menacingly above, clawed hands outstretched, is no doubt the decan referred to in an inscription in the notebook as 'seeking this (possibly

⁴⁶ V. MacDermot, *The Cult of the Seer in the Ancient Middle East* (London, 1971), 156 and 252, nn. 22-3.

⁴⁷ Budge, *Miscellaneous Coptic Texts*, 557-5-7.

⁴⁸ *ibid.* 540.10-12.

⁴⁹ L. Th. Lefort, *S. Pachomii Vita Bohairice Scripta* (= CSCO 89, Paris, 1925), 92.6.

“her”) soul’. According to the *Apocalypse of Paul* the Powers of Darkness take their turn in chewing the soul after it has been spewed up by the first decan.⁵⁰

It is clear from the above that the inspiration for this composition almost certainly derived not from one specific source but from an accumulated hotch-potch of traditions regarding the nature of Hell and the fate awaiting sinners. In a land whose ancient mythology was so concerned with judgement, the next world and the perils awaiting the deceased it is scarcely surprising to find that Coptic literature contains a number of texts which deal with these matters.⁵¹ A common device is to allow the central figure in a particular text to experience a vision, during which he is shown what befalls the soul at the moment of death and is sometimes taken on a conducted tour of Hell and Paradise in order to see the conditions of their inhabitants.

The descriptions of Hell are usually couched in very general terms, with repeated references to fiery pits, rivers, overpowering darkness, the cries of the tormented, and the ‘pitiless angels’ who inflict awful punishments. Apocalyptic literature, however, tends to give a more detailed picture. In form, and to a certain extent in content, the Christian Apocalypses derived from Jewish antecedents, and from the middle of the second century were concerned especially with the Antichrist and the after-life (including judgement).⁵²

There can be little doubt that the earlier compositions, in particular, were influenced in their renderings of these concepts by Gnostic imagery, and this must have been especially true in Egypt, where the sect had such a strong hold. The *Apocalypse of Paul*, to which we have referred on a number of occasions and which gives us the most vivid account of Hell from Egyptian sources, no doubt reflects this syncretism.

Other Paintings

Towards the west end of the north (i.e. right-hand) wall in pl. XVI is a projecting section on which a large Latin cross has been painted. The appearance of this most Christian of symbols occasions no surprise, but in fact it normally occurs in a fairly restricted number of places, of which this is not one. Its presence here might be explained if, as seems likely, this section of walling masks an earlier entrance. The raised edge of what looks very much like a stone lintel can be seen just above the blockage. One can well imagine the problems with drifting sand that a doorway so situated would pose, and understand the eventual decision to block it off. Crosses were quite commonly inserted as a protective device at those places in a building which were considered particularly vulnerable.⁵³ A blocked-off doorway might well have been thought of in this way.

In the bottom left-hand corner of pl. XXV are two figures, one holding the other by the wrist. Between them is an inscription. What this inscription says, and what the significance of the scene might be, will be considered below.

⁵⁰ Budge, *Miscellaneous Coptic Texts*, 557.12 ff.

⁵¹ MacDermot, *op. cit.* 576 ff; Zandee, *op. cit.* 303 ff; Giamberardini, *op. cit.* esp. Chapter III.

⁵² P. Vielhauer in Hennecke, *op. cit.* 600; W. Schneemelcher in Hennecke, *op. cit.* 751.

⁵³ S. Sauneron and J. Jacquet, *Les ermitages chrétiens du désert d'Esna*, 1 (Cairo, 1972), 65.

Dating

With no secure archaeological context within which to work, or any idea of the site's history, an assessment of the date(s) of the paintings might well have relied to an unhealthy extent on the consideration of such insubstantial matters as 'style'. Fortunately, there are one or two indicators which point firmly to a particular period, though they do not remove all uncertainty.

The first of these is a dated inscription. It is the first entry in the notebook and reads as follows:

Π̄Ο̄C IC Π̄ΕΧ̄C CMOY AYΩ ZAPEZ EPΩNΩZ ΜΠΕΝCΑΝ ΠΑΠΑC Y ΜΑΡΚΟΥΡΙ
 ΧΕΝΤΑϞ ΔΑΒΙ ΠΡΑΟΥΩ ΜΠΙΑΡΧΑΓΓΕΛΟC ZHNEQZICE ΜΜΙΝ ΜΜΟϞ ΧΕΚΑC
 ΕΡΕΠΑΟC IC Π̄ΕΧ̄C † ΝΑϞ ΜΠΕϞΒΥΚΗ ΝΡΚΩΒ ΝCΟΠ ΖΗΘΙΛΗΜ Ν ΤΠΕ ΤΠΟΛΙC
 ΝΝΕΔΙΚΕΟC ΤΗΡΟΥ ΖΑΜΗΝ ΕCΕΩΩΠΙ Ϟ ΧΞΘ

'Lord Jesus Christ, bless and guard the life of our brother Papas, son of Mercuri(us), for he has donated to this Archangel through his own labours so that my Lord Jesus Christ might give him his wages 100-fold in the heavenly Jerusalem, the city of all the righteous. Amen. May it be (so). A.M. 669'. This gives a date of AD 953.

The phraseology of this prayer is the same as that in which the colophons to Coptic mss. are often couched.⁵⁴ In these the donor records that he (sometimes they) has handed over (ϞΙ ΠΡΟΟΥΩ) the *χωμαε* in question, usually to a monastery, in the hope that intercessions might be made on his behalf, his sins be forgiven, etc.

More significant still for our present purposes is a slightly abbreviated version of the same prayer found in the old church of St. Antony's monastery, where it is associated with a painting of St. Mercurius, which the artist declares that he is donating to the monastery.⁵⁵

Although there can be no absolute proof, it is almost certain, given its location, that the Tebtunis inscription must also have been left by one of the artists and that it records his donation 'to this Archangel', in other words to the monastery of which this building was a part (on this see below). Fragments of what was obviously another donatory inscription (the phrase ϞΙ ΠΡΟΟΥΩ occurs), recorded in the notebook, are rather more forthcoming, referring to ΠΑΡΧΗΑΓΓΕΛΟC ΜΙΧΑΗΛ, 'the Archangel Michael'. Clearly this was the name of the monastery.

The inscriptions accompanying the paintings of St. Theodore and his fellow warrior-saint, noted above, can now be readily understood. There can be no doubt that the 'good things' being donated are the paintings themselves, and that the inscriptions are contemporary with them. There is no other explanation for their setting, or for the fact that one of them is placed within its own panel and forms an integral part of the composition.

We can therefore say that some of the decoration, at least, belongs to the middle of the tenth century. Which part, or how much, is less easily determined, since there is nothing in the notebook to link the dated inscription with one particular painting.

⁵⁴ A. van Lantschoot, *Colophons des manuscrits chrétiens d'Égypte*, 1 (Louvain, 1929).

⁵⁵ Piankoff, *Les Cahiers coptes*, 7-8, 22.

Setting this question to one side, we turn to the second indicator, namely the Arabic script employed in the painting of Theodore and the other, anonymous warrior-saint. The forms of the letters would appear to place them securely within the period AD 950–1050, and one might be tempted, given the evidence already adduced, to assign them to the earlier date.⁵⁶

The third indicator, though less precise, nevertheless leads us in the same general direction. This is the rather incongruously placed palmette in the top left-hand corner of pl. XXIX, I. Just what it is doing there is difficult to explain, but there is no real reason to think that it does not form part of the original composition. That being so, its form strongly suggests a Fatimid date (i.e. somewhere between AD 969 and 1171), in particular the separation of the central element from the rest of the design. Good examples of this can be seen on the door presented to the mosque of al-Azhar by al-Hakim in AD 1010.⁵⁷

The composition in which the palmette features—the Punishment of Sinners—can very obviously be distinguished from the other paintings by the poor quality of its draughtsmanship and the clumsy, inexpert fashion in which the figures are depicted. In this respect they resemble very much a painting of Adam and Eve before and after the Fall discovered at the same site in the the 1930s (see below) and dated variously to the tenth or eleventh centuries.⁵⁸

On the other hand there are a number of similarities between most of the other paintings which suggest that they were produced at the same time, though probably not by the same person.

The use of foliate motifs as ‘fillers’ is particularly noticeable, especially the trilobed leaf pattern. This crops up, with or without stem, in the painting of the two monks, the Resurrection and Eucharistic scenes, and most clearly of all in the paintings of Theodore and his companion. The fruit/flower motif, already noted in the painting of the two monks, recurs in slightly different form in the apse composition, in the spaces around the moon medallion.

A comparison of the faces would probably have been a useful exercise had more survived. The pointed beards of the two monks contrast with the rounded, bushy specimens worn by Antony and Pakhome, and the ears are also different, the monks’ having an unnatural, almost rectangular outline while Pakhome’s (which can be seen most clearly) protrude at a more realistic angle. Heavy outlining of eyes and eyebrows is a common feature, but the noses of the two monks are straight, with no real delineation of the nostrils, a characteristic shared by the two children in the Theodore painting but not by any others.

In general terms this group of paintings is characterized by considerable attention to detail and no little skill in the representation of the figures. The painting of Theodore, in particular, is a fine example of the genre.

⁵⁶ E. Kuhnel, *Catalogue of Dated Tiraz Fabrics* (Washington, 1952), pl. xxii ff. I would like to thank Dr J. Allan, Assistant Keeper of Eastern Art in the Ashmolean Museum, for kindly looking at the Arabic script and for guidance on the matter of the palmette.

⁵⁷ K. A. C. Cresswell, *Muslim Architecture in Egypt*, 1 (Oxford, 1952), 33b and c.

⁵⁸ G. Bagnani, *Bolletino d’Arte del Ministero dell’Educazione Nazionale*, 27 (1933), 131, fig. 18.

The similarities and differences displayed by these paintings suggest to me that they were produced at the same time but by at least two artists. I would be inclined to date them all to the mid-tenth century and assign the painting of the Punishment of Sinners to a slightly later date, perhaps somewhere in the first half of the eleventh century.

There remains the question of the site itself. The presence of Antony and Pakhome in the apse composition and the painting of the two monks would by themselves have indicated that the building was part of a monastic complex, and work carried out at the site by the Italian Mission in the 1930s confirmed that this was so.⁵⁹

It would appear that they were working in roughly the same area as Grenfell and Hunt,⁶⁰ and although their excavations have never been properly published the preliminary report for the 1933 season contains a description of a church and part of the monastery to which it belonged.⁶¹

The monastery was clearly of some size and importance. The Italians identified three churches altogether as well as two *kasrs*, one of imposing proportions. Occupation had apparently extended over a considerable period, with several changes in the lay-out. Many of the buildings retained traces of a second storey, and stonework from Graeco-Roman monuments in the area had been used in their construction. There were signs that the final abandonment had occurred abruptly, probably as a result of an attack from some quarter.

The Italians, in their report, made the startling suggestion that this monastery was none other than that established by Apa Samuel, the famous seventh-century monk whose *Life* is one of the best-known of the early fathers.⁶²

It has long been assumed that the site of Samuel's community was in the Wadi Muelah, south of the Wadi Rayan, where today stands an inhabited monastery variously called Deir el-Kalamun, Deir es-Samuel, or Deir Muelah.⁶³ The tradition linking this monastery with Samuel is certainly very strong, but like most traditions feeds very largely upon itself with the support of very little hard evidence.

The *Life* of Samuel gives no clear indication of the community's location, speaking only of ΠΤΟΥ ΝΚΑΛΑΜΩΝ ΖΜΠΤΟΥ ΠΙΟΝ, 'the mountain of Kalamun in the province of the Fayûm'.⁶⁴ Abu Salih (c. AD 1178) speaks of it as being 'opposite to a place called Rayan',⁶⁵ while Makrizi (fifteenth century) says that it was 'in a plain under the mountain-pass of al-Kalamun ... which is called the pass of al-Gharak'.⁶⁶

Modern travellers and scholars have, very largely, accepted the Muelah location unquestioningly, though Amélineau, writing in 1894, stated '*sans doute*' that the site of

⁵⁹ Ibid. 119 ff and esp. 122 ff.

⁶⁰ C. Anti, *Architettura e Arti Decorative* 10 (1930), fig. 2, which marks the dumps from Grenfell and Hunt's work.

⁶¹ Bagnani, *op. cit.* 122 ff.

⁶² Alcock, *op. cit.*

⁶³ For the location of the monastery see H. Beadnell, *The Topography and Geology of the Fayûm Province* (Cairo, 1905), where it is called Deir el-Galamun. See also C. Whitehouse, *PRGS IX*, 10 (October 1887), map on 658.

⁶⁴ Alcock, *op. cit.* 1.3 (see also his n. 248 to the text).

⁶⁵ B. T. A. Evetts, *The Churches and Monasteries of Egypt* (Oxford, 1895), 206 ff.

⁶⁶ Ibid. 314.

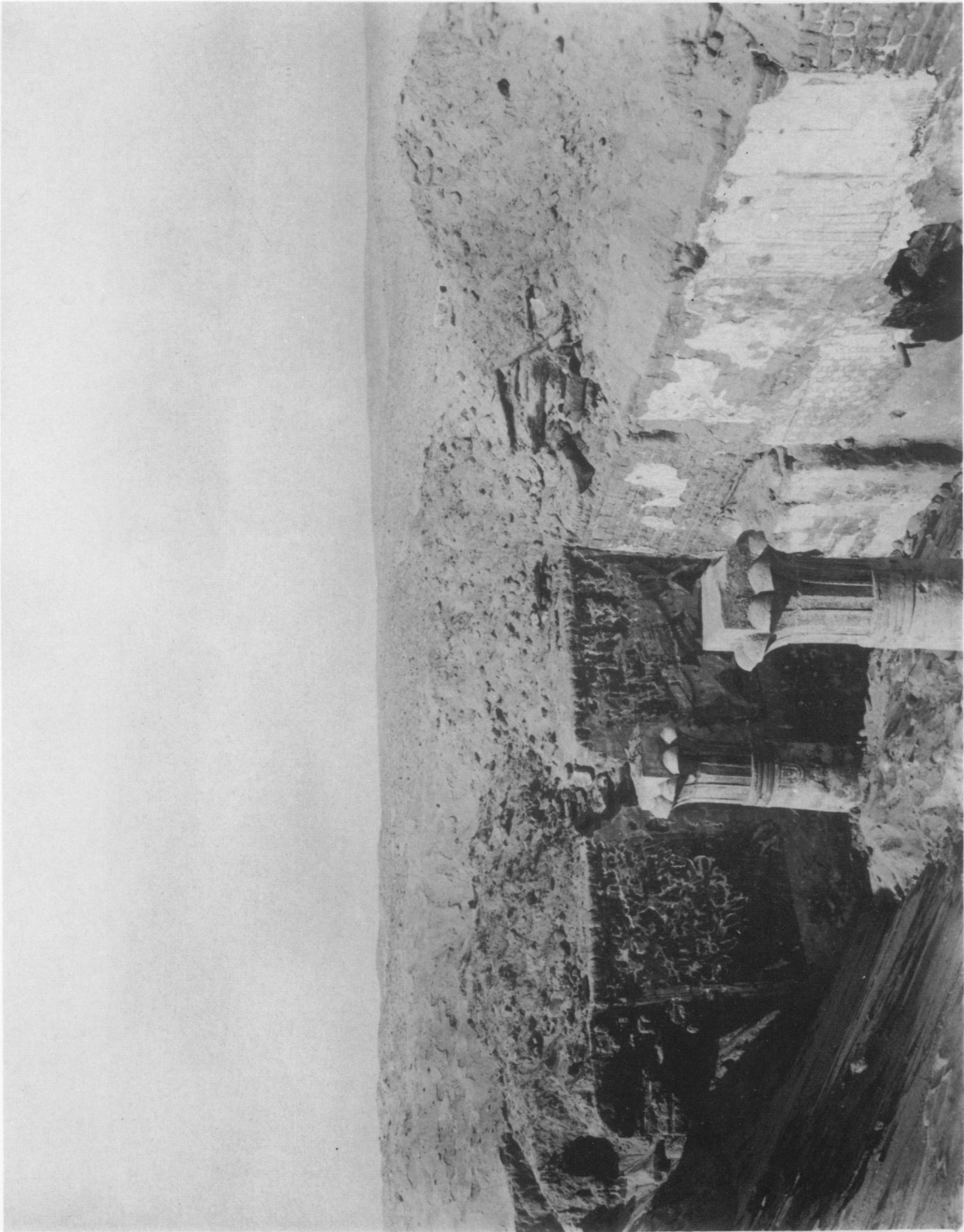
Samuel's monastery was south-east of el-Gharak, at a spot where Napoleon's expedition recorded a ruined monastery with the name Deir Zakkawa.⁶⁷

The material at present under consideration makes one contribution to the debate. The two figures already alluded to in the bottom left-hand corner of pl. XXV are, as the inscription between them tells us (via the notebook), *παγγελος εφτσαβα ναπα σαμουηλ ετεριη μπωτ εκαλαμων ζαμην*, 'the angel showing Apa Samuel the way to go to Kalamun. Amen'.

Just how much we should make of this is hard to say. Samuel was such a well-known figure, particularly in the Fayûm, that it would be rash to presume, just because he is featured in this painting, that this was his monastery. On the other hand, one could argue that such a painting would only be found in a monastery that had close links with him. It could even be that the angel is literally pointing Samuel towards Kalamun.

Only a careful examination of both sites might yield the answer, and perhaps not even that. Nevertheless, further exploration at Tebtunis would surely be worthwhile, since the Italians did not, so far as one can tell, finish the job. Sadly, the paintings which Grenfell and Hunt discovered are almost certainly no more, for they comment upon 'the cracked condition of the building' and the consequent dangers of clearing it. What is presented here, therefore, is all that we will ever have. Satisfying though it is to be able to add these paintings to our somewhat meagre collection from the Christian period, they serve in their way as a salutary reminder of the summary fashion in which, until very recently, Coptic monuments were in general treated.

⁶⁷E. Amélineau, *RHR* 30 (1894), 1 ff and esp. 28. For Deir Zakkawa see *Description de l'Égypte—Atlas Géographique* (Paris, 1826), Pl. 19.



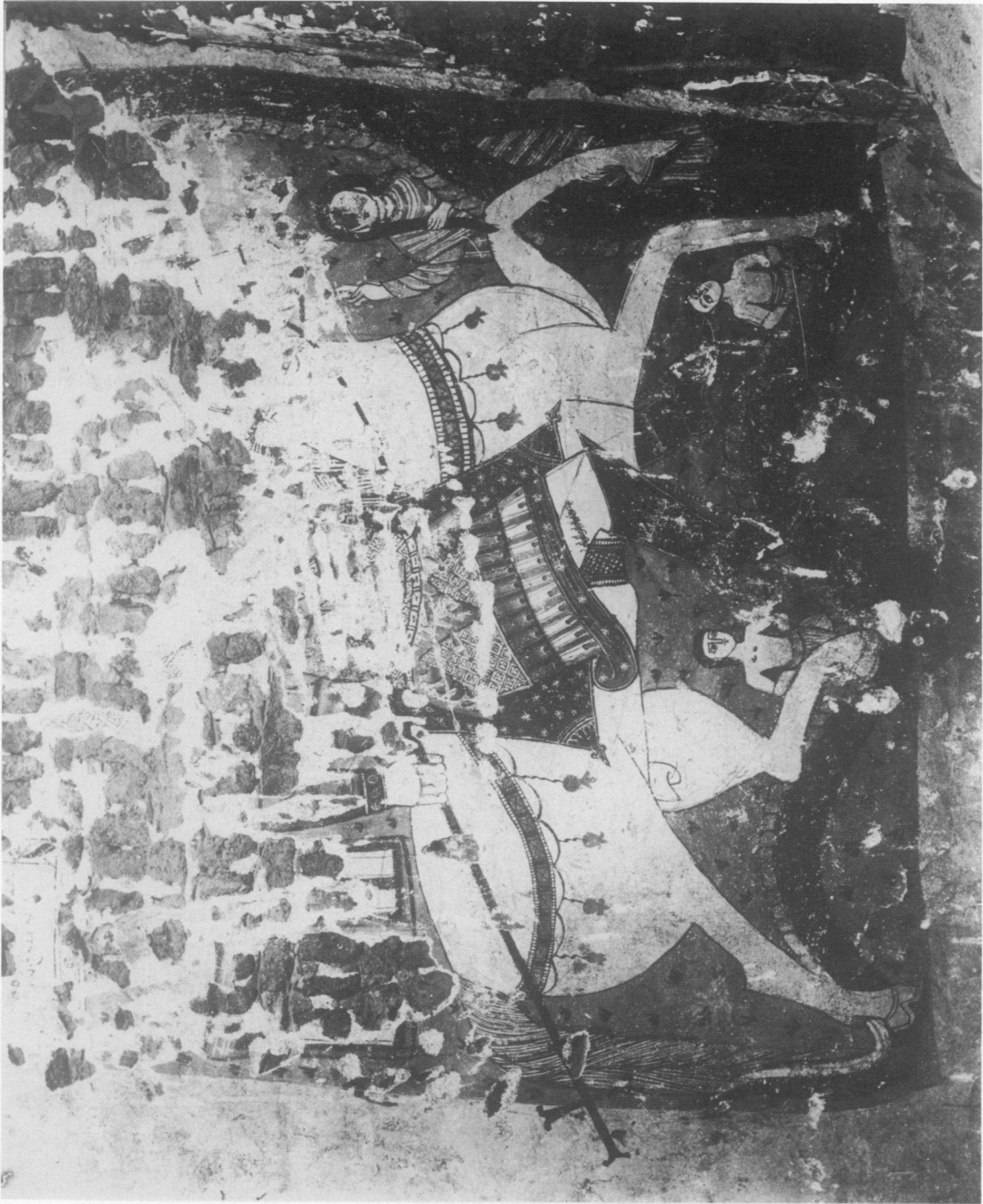
General view of building (pp. 191-208)

CHRISTIAN PAINTINGS FROM TEBTUNIS



The apse composition (pp. 192-3)

CHRISTIAN PAINTINGS FROM TEBTUNIS



St Theodore Stratelates (pp. 193-4)

CHRISTIAN PAINTINGS FROM TEBTUNIS



Anonymous saint (pp. 195-6)

CHRISTIAN PAINTINGS FROM TEBTUNIS

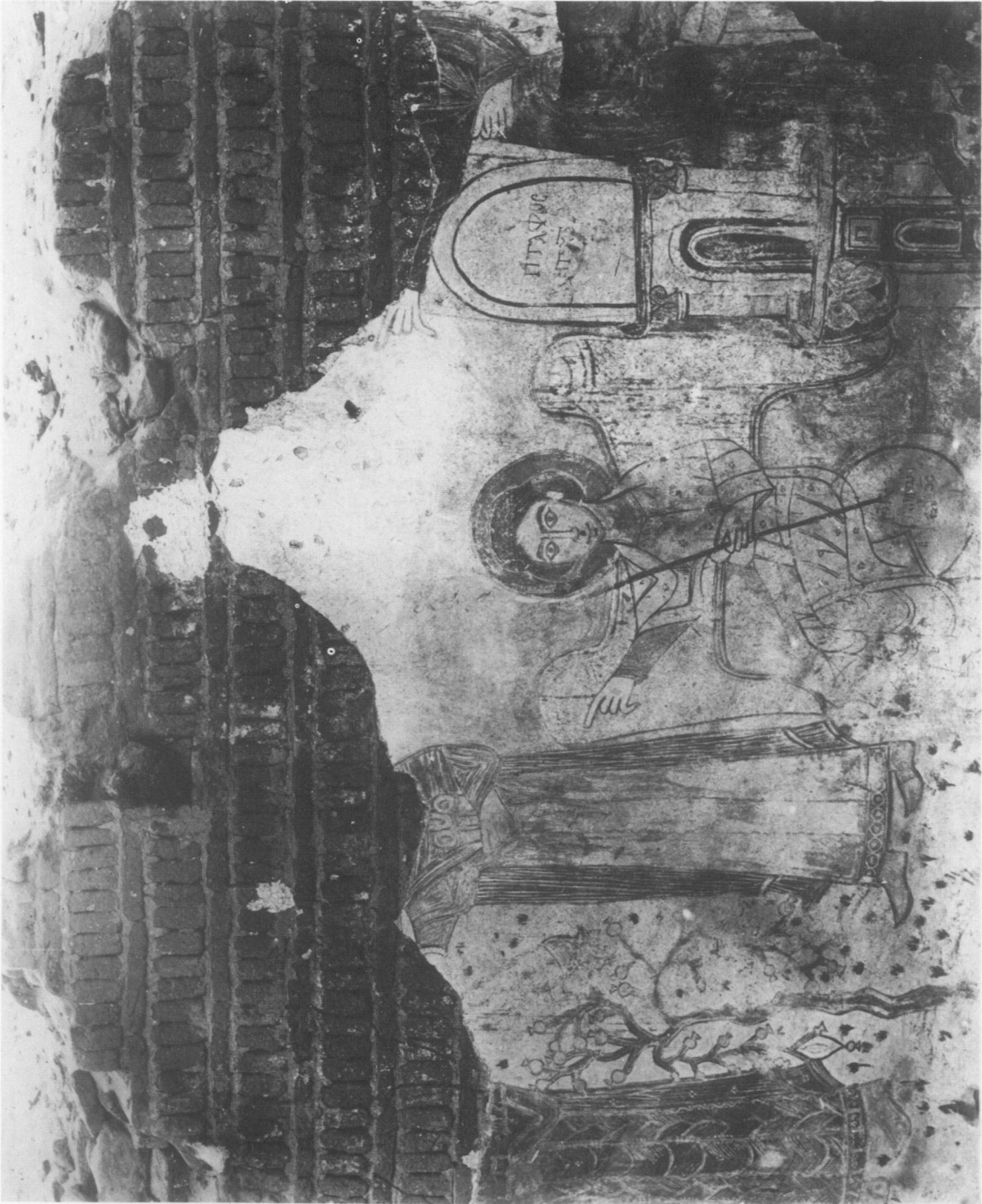


Anonymous warrior-saint and seated figures (p. 196)
CHRISTIAN PAINTINGS FROM TEBTUNIS



Two monastic figures (pp. 196-7)

CHRISTIAN PAINTINGS FROM TEBTUNIS



The resurrection of Christ (pp. 197-9)
CHRISTIAN PAINTINGS FROM TEBTUNIS



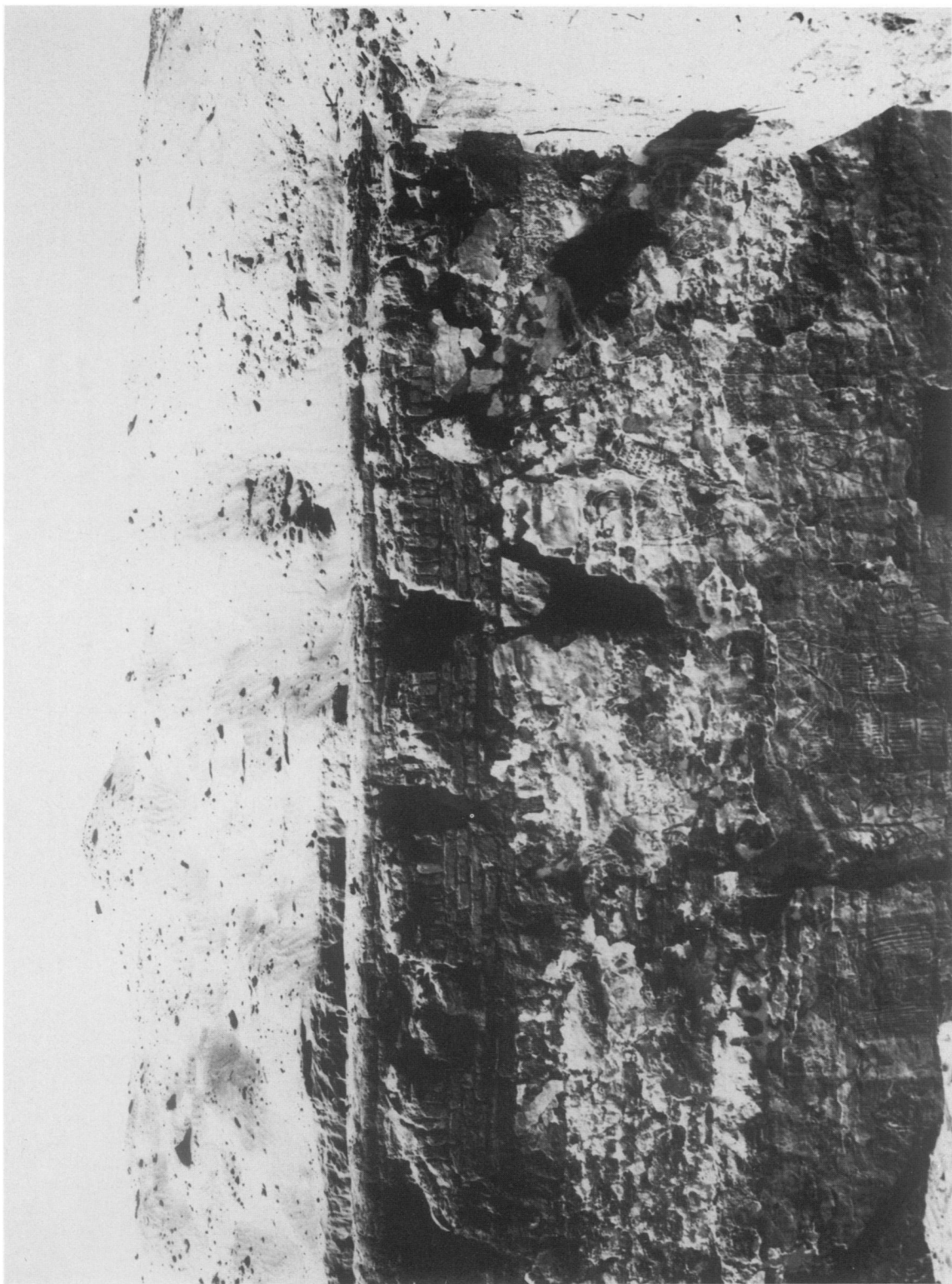
A eucharistic scene (pp. 199–200)

CHRISTIAN PAINTINGS FROM TEBTUNIS



A bust of Christ (p. 200)

CHRISTIAN PAINTINGS FROM TEBTUNIS



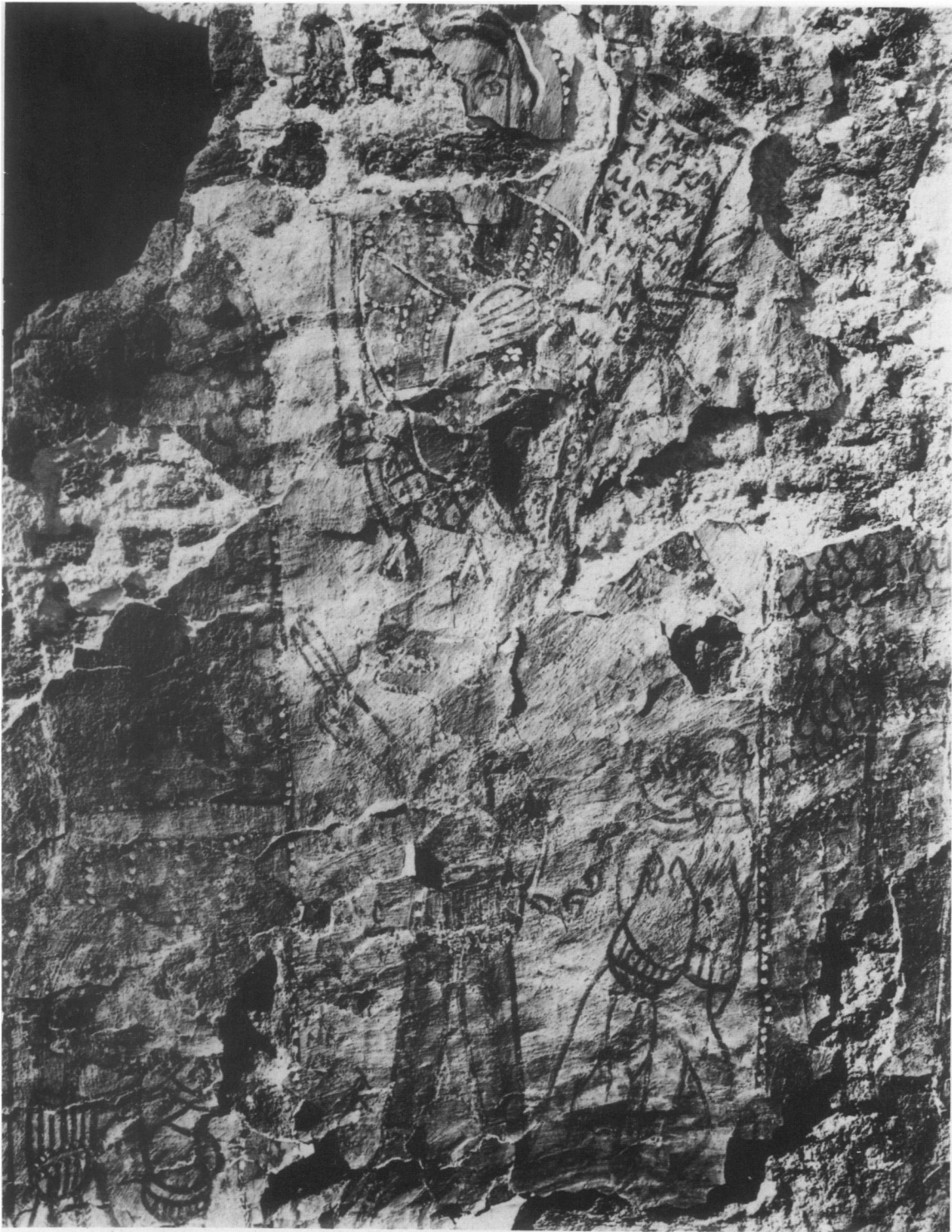
The Punishment of Sinners (pp. 200-208)

CHRISTIAN PAINTINGS FROM TEBTUNIS



The Punishment of Sinners (p. 200)

CHRISTIAN PAINTINGS FROM TEBTUNIS



The Punishment of Sinners (p. 201)

CHRISTIAN PAINTINGS FROM TEBTUNIS

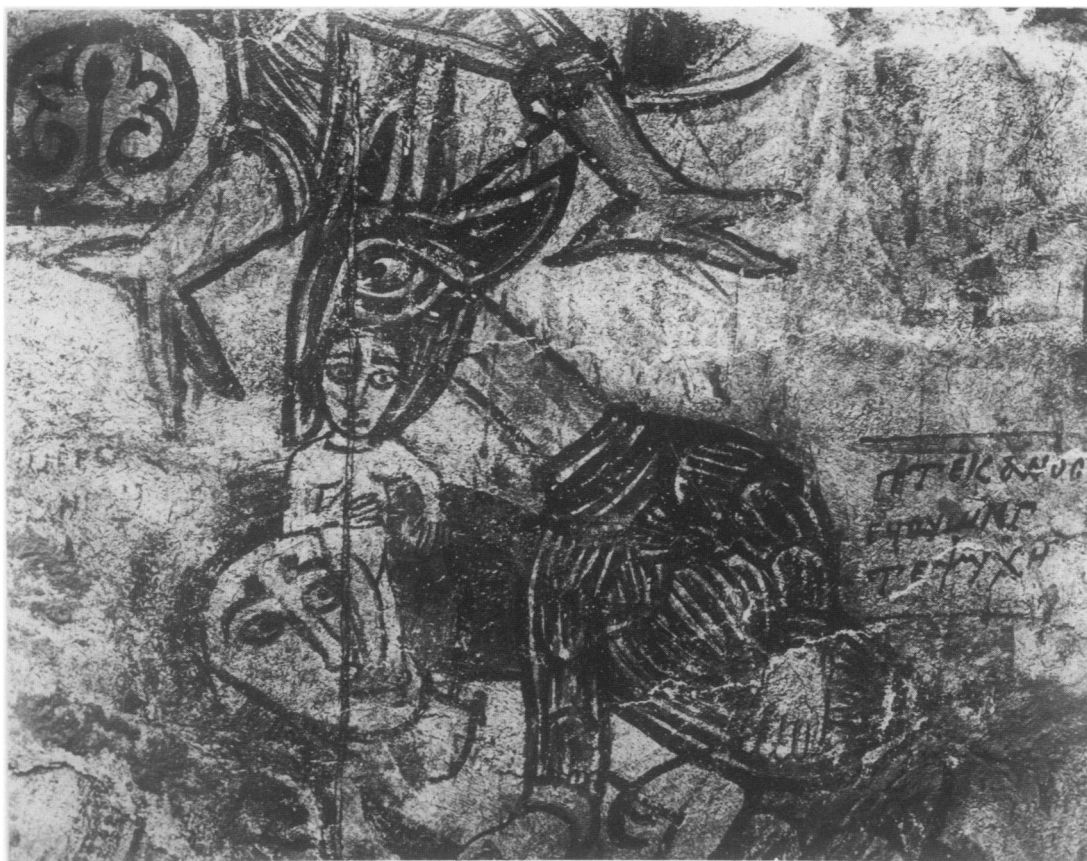


I.



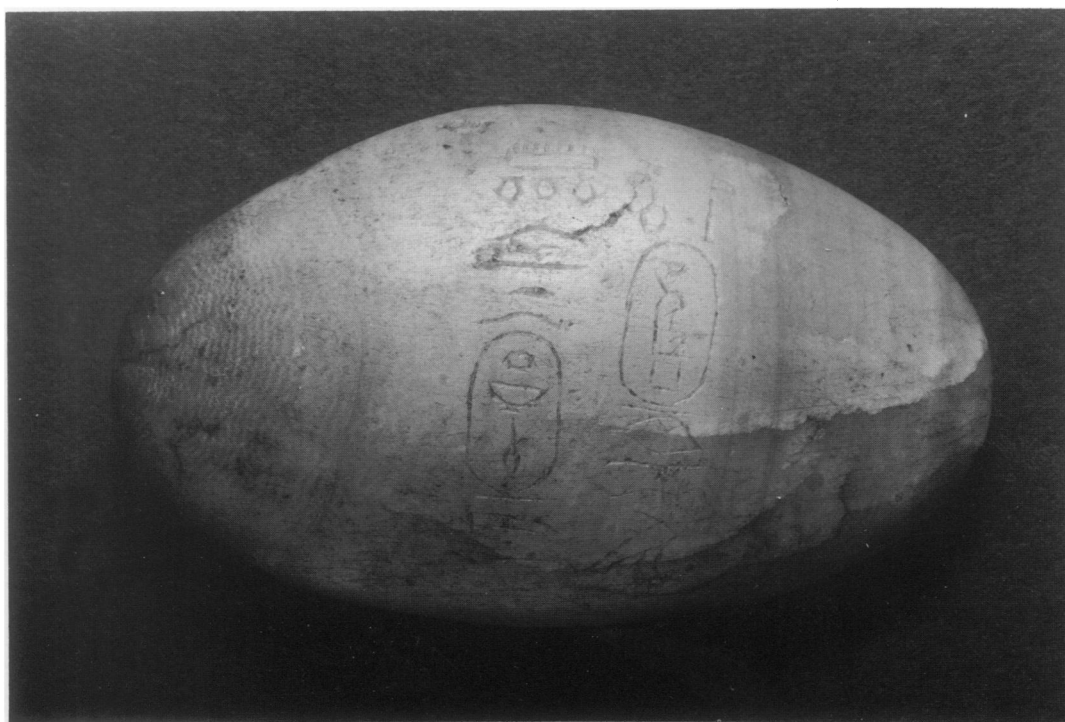
2. The Punishment of Sinners (pp. 202-3)

CHRISTIAN PAINTINGS FROM TEBTUNIS



1. The Punishment of Sinners (p. 203)

CHRISTIAN PAINTINGS FROM TEBTUNIS



2. Liverpool Museum M.11929, *courtesy Liverpool Museum* (pp. 224-6)

HATSHEPSUT AND 'HER FATHER' MENTUHOTPE II

MUSEUM ACQUISITIONS, 1987

EGYPTIAN ANTIQUITIES ACQUIRED IN 1987 BY MUSEUMS
IN THE UNITED KINGDOM

Edited by JANINE BOURRIAU

New Kingdom

1. Lower part of the black granite squatting statue of a royal scribe, *Dḥwty*, British Museum EA 69863. Eighteenth Dynasty.
2. Fragmentary papyrus Book of the Dead inscribed in hieroglyphic for *Hḥwy*, son of (?) the *nbt pr Twi*, British Museum EA 70896.
3. Pottery amphora, British Museum EA 70891. From Saqqâra, New Kingdom necropolis. Gift of E.E.S.
4. Fragment of limestone figure of a baboon, British Museum EA 70892. From Saqqâra, New Kingdom necropolis. Gift of E.E.S.
5. Fragments of rings, amulets, beads, inlays, necklace elements and scaraboid; faience, stone and glass, British Museum EA 70897-71001. From various sources, the majority probably from Amarna. Gift of E.E.S.
6. Upper part of a seated limestone statuette of a queen, possibly Queen Tiy, wearing a long wig with double uraeus and vulture. Upper part of headress missing, back pillar uninscribed, Durham Oriental Museum, 1987-1.
7. Bronze *menat* (counterpoise) in the form of the goddess Sekhmet, Liverpool Museum 1987.408 (pl. XXX, 1). Late Eighteenth Dynasty.
8. Pilgrim flask in Nile silt ware with white slip, decorated in red with four concentric circles, Birmingham City Museum 1987 A 453.

Third Intermediate Period

9. Egyptian-blue heart scarab, flat underside, uninscribed, British Museum EA 70895.
10. Wooden box-coffin of a child, British Museum EA 70893. From Saqqâra, New Kingdom necropolis. Gift of E.E.S.

Late Period

11. Pottery amphora, British Museum EA 70890. From Saqqâra, New Kingdom necropolis. Gift of E.E.S.
- 12-13. A Menkheperre scarab, and a *wedjat*-eye bead, Ashmolean Museum 1987.140, 141. New Kingdom or later.
- 14-15. Ionic cup and Cypriote Eye jug, Ashmolean Museum 1987.61-2. From Naucratis. Gift of P. M. Fraser.

Ptolemaic Period

16. Fragments of legal documents on papyrus, British Museum EA 69862. From Gebelein.

17. An inscribed slab with a Ptolemaic petition, Ashmolean Museum 1987.56 (pl. XXX, 2). Gift of P. M. Fraser. D. Crawford in *CdE* 42 (1967), 355–9; T. Reekmans in *CdE* 43 (1968), 363–4.

18–25. Sherds of a black glaze pyxis; black glaze white ground lagynoi; ‘Megarian’ bowls; and a hadra-vase, Ashmolean Museum 1987.63–5, 70–2, 75–7. From Alexandria. Gift of P. M. Fraser.

26–31. Sherds of black glaze pottery and ‘Megarian’ bowls, Ashmolean Museum 1987.95–99, 101. From Sidi Kireir (Plinthine). Gift of P. M. Fraser.

32. Sherd of black glazed pottery, Ashmolean 1987.74. From Medinet el-Faiyum. Gift of P. M. Fraser.

33. Fragments of moulded faience vase fragments, Ashmolean 1987.104. From Alexandria. Gift from P. M. Fraser.

34. Sherd of black glazed pottery, Ashmolean 1987.78. From Abu Mena. Gift of P. M. Fraser.

Roman Period

35. Roman copy of a decree of Ptolemy I Soter, Ashmolean Museum 1987.56. Gift of P. M. Fraser. P. Fraser in *Berytus* 13, 123–33.

36. Gold band glass bottle, National Museums of Scotland, 1987.355. Probably from Alexandria. First century BC – first century AD.

37–39. Sherds of red slip wares and Arretine ware, Ashmolean Museum 1987.67–9. From Alexandria. Gift of P. M. Fraser.

40. Sherd of red slip ware, Ashmolean Museum 1987.100. From Sidi Kireir. Gift of P. M. Fraser.

41–43. Fragments of faience vessels; red slip ware sherds and a fragment of a glass vessel, Ashmolean Museum 1987.88, 90, 93. From Medinet el-Faiyum. Gift of P. M. Fraser.

44–45. Sherds of pottery and faience, Ashmolean Museum 1987.82–3. From Qasr el-Banat (Euhemeria). Gift of P. M. Fraser.

46. Fragments of faience vessels, Ashmolean Museum 1987.84. From Qasr Qârûn (Dionysias). Gift of P. M. Fraser.

47–8. Sherds of red slip ware and faience vessels, Ashmolean Museum 1987.85–6. From Batn Ihrît (Theadelphia). Gift of P. M. Fraser.

49. Sherds of faience vessels, Ashmolean Museum 1987.87. From Kôm el-Asl (Bacchias). Gift of P. M. Fraser.

50. Sherds of faience vessels, Ashmolean Museum 1987.94. From Dimai. Gift of P. M. Fraser.

51. Terracotta statuette of a horseman perhaps a Tetrach, riding down an enemy, Ashmolean Museum 1987.180. Late third century AD.

52-3. Fragments of coloured stone for paving or inlays and sherds of red slip ware, Ashmolean Museum 1987.79-80. From Abu Mena. Gift of P. M. Fraser.

Coptic Period

54. Large collection of pottery fragments, the majority with Coptic, Greek and demotic inscriptions. British Museum EA 69864-70880. Fifth-sixth centuries AD. From Wadi Sarga. Gift of the Byzantine Research Account.

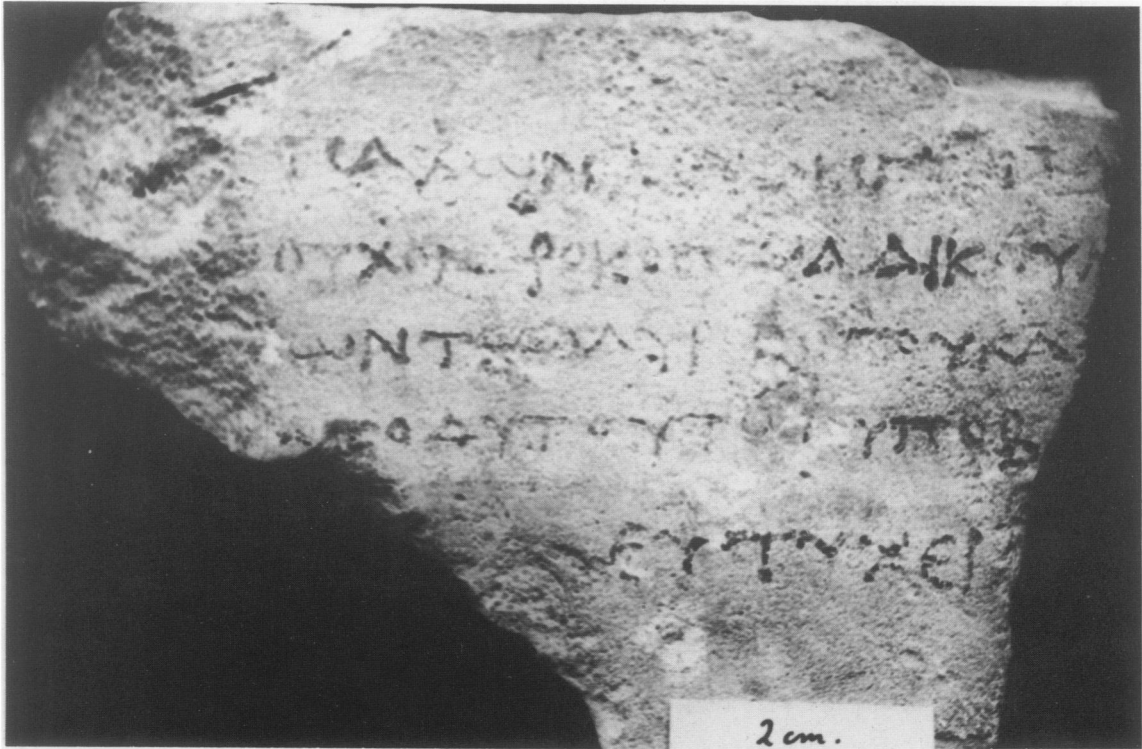
Documentation

55. Ninety glass slides taken in Egypt, c. 1910-1920, Bolton Museum.

56. Photographs, newspaper cuttings and letters belonging to Carl Pape, an architect who worked with Petrie at Gaza (Tell el-Ajjul) 1932-4, Sheikh Zowayed 1935-7 and Gaza 1937-8, Bolton Museum.



1. Bronze *Menat*, Liverpool Museum 1987. 408 (no. 7)



2. A Ptolemaic petition, Ashmolean Museum 1987. 56 (no. 17)

BRIEF COMMUNICATIONS

An Old Kingdom expedient for anchoring inlaid eyes

The traces of copper on either side of the head of Cairo CG 35 are explained as a bar to which the inlaid eyes were anchored. A similar procedure was applied to CG 34, the 'Sheikh el Beled', but here the eyes are anchored by a wooden dowel, or pair of dowels.

IN his *A History of Egyptian Sculpture and Painting in the Old Kingdom*, 48, William Stevenson Smith remarked on an unusual detail in the anepigraphic limestone statue of a seated man, Cairo CG 35. He described it as 'the occurrence of some sort of copper ornaments which were originally let into the short wig on each side of the face' and added: 'These have now disappeared leaving only rough fragments of copper adhering to the holes bored in the stone to receive them' (fig. 1B).¹ Borchardt, in the pertinent volume of the *Catalogue général*² had already described these elements more specifically as 'Ohrschmuck', and the same description has more recently been applied to them by Mohamed Saleh and Hourig Sourouzian in their *Official Catalogue: The Egyptian Museum Cairo*.³ But there is no clear evidence of earrings, or other ear ornament, before the New Kingdom nor is there evidence of any other kind of ornamentation to which the copper attachments might apply; they are too low to have served for the attachment of a fillet. The only plausible explanation of the copper-encrusted holes is not related to the ears, the position of which does not in any case correspond to their location, but rather to the inlaid eyes, behind which they are situated. A single hole was probably drilled completely through the head, from one side to the other, to receive a copper rod which anchored the copper emplacements of the eyes, which must have some sort of extension behind them through which the rod was passed. The rod may seem to be rather distant, but its location enabled the holes to be easily plastered and hidden among the locks of the wig. I attempted to have a radiograph made some years ago, when this procedure was being used to investigate the royal mummies, but my request came too late. Perhaps the present note will prompt another attempt, for it would be interesting to know precisely how the connection was made.

Although no such reinforcement was used on the companion-piece of this statue, CG 36 (perhaps because the different style of wig made it more difficult to conceal), evidence of a very similar procedure is to be found in the wooden statue of the 'Sheikh el Beled', CG 34. Here one finds a wooden dowel, or pair of dowels, on each side of the head, each in precisely the same position, midway between the inlaid eye and the hair behind it (fig. 1A).⁴

¹ Not having a profile photograph at my disposal, I have based my schematic drawing on Bodil Hornemann's sketch in *Types of Ancient Egyptian Statuary*, III (Munksgaard, 1957), pl. 692, with some adjustments made on the basis of front and three-quarter views. The emplacement and location of the inserted copper has been further adjusted on the basis of a slide that Bernard V. Bothmer has kindly made for me.

² *Statuen und Statuetten*, I (Berlin, 1911), 34: 'Die Stifte für den Ohrschmuck sind mit einem gelblichen Kitt in runde, gebohrte Löcher eingesetzt.'

³ No. 44: 'Likewise of metal, now very much corroded, were the ornaments attached to the ears.' For further bibliography see PM III², 500.

⁴ The sketch is made from the photograph of Seidel and Wildung in C. Vandersleyen, *Das Alte Ägypten* (Berlin, 1975), pl. 137a. For an excellent colour close-up of the detail in question see the chapter by C. Aldred in *Les Pharaons: Le temps des Pyramides*, ed. J. Leclant, (Paris, 1978), pl. 189 on p. 193.

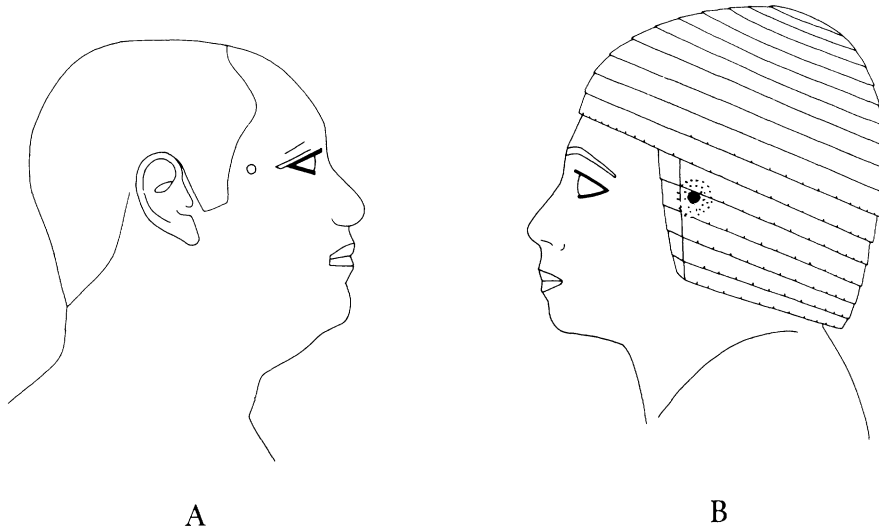


FIG. 1.

Once again the same procedure is not to be found on a companion-piece evidently representing the same individual, CG 32,¹ and I know of no other examples from the Old Kingdom. Such unusual modes of reinforcement are not entirely unexpected, however, for an even more exceptional procedure was used to secure inlaid pigment in the tomb chapels of *Nfr-mwrt* and *'Itt* at Medum.² A mortised drum lintel from Abusir provides an example of another kind.³

Further parallels for the precaution under consideration are to be found in the later use of small dowels in much closer proximity to inlaid eyes. In discussing two such cases in the British Museum, one dating to the middle of the Twelfth Dynasty, the other to King Sobekemsaf of the Seventeenth Dynasty, W. V. Davies rightly observes that this technique for the fixing of inlaid eyes was not an isolated experiment and that 'its use may have been more widespread than is indicated by the evidence now available.'⁴ The examples of CG 34 and 35 not only confirm his statement but indicate that its use was also more varied.

HENRY G. FISCHER

The transcription of the royal name Pepy

The reading *pjppj*, favoured by Ranke and Edel, might be applied to some writings of the name as readily as *ppy*, but other writings definitely confirm the second reading.



HERMANN Ranke, in his *Personennamen* I, 131, n. 1, suggests that this name is to be transliterated *pjppj*, and Elmar Edel adopts the same reading without question in his *Altägyptische*

¹ See J. Capart, *JEA* 6 (1920), 225 ff.; further bibliography in PM III², 724.

² W. M. F. Petrie, *Medum* (London, 1892), 24 ff.; further bibliography in PM IV, 93-4.

³ Kestner Museum Hannover, 1935.200.451: L. Borchardt, *Das Grabdenkmal des Königs Ne-user-rer* (Leipzig, 1907), fig. 108, 128. The hole at the back is intended for anchorage, but not the sort of anchorage that is imagined by Alessandra Nibbi, *GM* 32 (1979), 39-46.

⁴ *A Royal Statue Reattributed* (British Museum Occasional Papers no. 28, London, 1981), 8-9; the statues are BM 871 and 98.

Grammatik I, §95, where it is explained as the equivalent of a hypothetical * . The most frequent vertical writing in the Pyramid Texts (fig. 1a)¹ might, in fact, be read in this manner, and one might further argue that the arrangements in fig. 1b² and c³ were adopted as more compact and aesthetically pleasing than * . Nevertheless, in the absence of the last variation in the cartouche of either of the two Sixth Dynasty kings who have the name, the reading *ppj* remains conjectural. And this conjecture is hardly credible if one considers another variant (fig. 1d) which occurs in the Pyramid Texts of Pepy I,⁴ and fig. 1e, which is the only horizontal arrangement found in the pyramid of either Pepy I or II,⁵ and is also found in a number of non-royal theophoric names.⁶

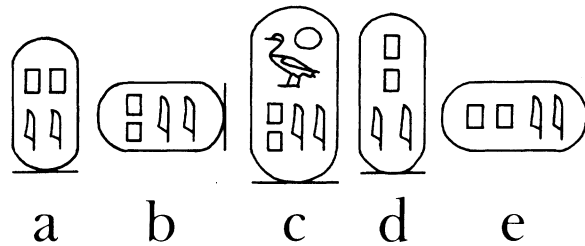
















FIG. 1.

The writing of the name *Ppy* is undeniably unusual, for Old Kingdom names of similar pattern normally have the ending , including non-royal .⁷ There are a few cases, however, where the terminal  is replaced by , as in  for ,⁸  for ,⁹  for ,¹⁰  for ¹¹ and  for .¹² Evidently Pepy I preferred this alternative, perhaps precisely because it was less usual, and having adopted it, bequeathed it to his son of the same name.

HENRY G. FISCHER

¹ Pepy I: J. Leclant, *Orientalia* 37 (1968), pls. 22-4; 38 (1969), pl. 25; 39 (1970), pl. 36; 40 (1971), pls. 30-31; 41 (1972), pls. 12-14; 54 (1985), pl. 20; *RdE* 27 (1975), 141. Pepy II: G. Jéquier, *Le Monument funéraire de Pepi II*, III (Cairo, 1940), *passim*.

² For examples in theophoric personal names, see Ranke, *PN* I, 131-2.

³ Pepy I: L. Habachi, *Tell Basta* (Cairo, 1957), 14, fig. 2 and pl. 2 (= Fischer, *Dendera* (Locust Valley, 1968), 41, fig. 8); *ibid.* 37, fig. 7; Leclant, *Orientalia* 51 (1982), pls. 46-7. Pepy II: Jéquier, *op. cit.* II, 25 and pl. 54; Cairo CG 1747.

⁴ East wall of burial chamber: Leclant, *Recherches dans la pyramide et au temple haut du Pharaon Pépi Ier à Saqqarah* (Leiden, 1979), foldout facsimile.

⁵ Pepy I: Leclant, *Orientalia* 39 (1970), pl. 35; Pepy II: Jéquier, *op. cit.* I, pls. 1, 6, 7; II, pl. 49; III, pl. 31; W. M. F. Petrie, *Abydos*, II (London, 1903), pls. 19-20.

⁶ Ranke, *loc. cit.* The most striking case is A. M. Blackman, *The Rock Tombs of Meir*, IV (London, 1924), pls. 4-7, II, 14-17.



⁷ Ranke, *PN* I, 131 (12); cf. also *Bbi* (*PN* I, 95-6), *Mmi* (*PN* I, 149 [18]), *Kki* (*PN* I, 349 [1]), *Ggi* (*PN* I, 352 [22]), *Tti* (*PN* I, 384 [4]), *Tti* (*PN* I, 395 [24]).

⁸ *PN* I, 96 (3); 95 (16).

⁹ *PN* I, 20 (17 and 10).

¹⁰ *PN* I, 420 (8); 132 (20) and Abu Bakr, *Excavations at Giza* (Cairo, 1950), 120.

¹¹ *PN* I, 149 (25 and 18).

¹² *PN* I, 395 (7 and 5); cf. *PN* II, 130. Cf. also Edel, *Altägyptische Grammatik*, I, §140, who notes that final  is sometimes written  in the Pyramid Texts.

The Chief Baker

The previously misunderstood titles of the man Pepy on stele CG 20683 = ANOC 1:5 provide the earliest attestation for the word *mr* (*Wb.* 1, 187, 2), 'bakery' (cf. demotic *mrē* and Coptic **ⲁⲙⲠⲉ**, 'baker'). The titles also yield a Middle Kingdom example of the feminine form of *šnc* (*Wb.* IV, 507, 12-508, 25), 'Workhouse'; a second Middle Kingdom survival of the Old Kingdom title *imy-r bw-rj nsw.t*, 'Overseer of the Royal Repast', is found among the titles of Iykhernofret on the stele.

WARD'S *Index* of Middle Kingdom titles¹ is as needed and useful, and its subject as difficult, as the book's several reviewers have remarked, and as their lists of addenda have shown. This is an addendum.

Ward's titles # 53 and # 54, with his transliterations and translations, are:²



53 



'*imy-r r(w) imyw-pr(sic)*³ *n imy-r rwy.t*
'Overseer of Records of Stewards of the Overseer of a Law Court'

54 

'*imy-r r(w) imyw-pr(sic) n imy-r sdrw.t*
'Overseer of Records of Stewards of the Overseer of the Treasury'

The titles are those of the man Pepy on stele CG 20683 = ANOC 1:5.⁴

As discussion, Ward adds that 'the interpretation of this and the following title revolves around the group  which can also mean "in the chapels of," though this makes little sense here'. Of the reviewers, only Fischer comments on these titles, noting that 'the reading of the second *imy-r* is suspect because, in both cases, the writing differs from that of the initial *imy-r*'.⁵ He goes on to suggest a reading 'overseer of documents of temples for the overseer...'⁶ Both Ward's and Fischer's translations require the understanding of  as a plural (though the writing gives no indication of this), and the resultant titles are the only attestations of the group **imy-r r(w)*, 'Overseer of Documents'. This is no objection in itself, so long as the titles do not correspond to any already attested. This, however, they appear to do.

The chief difficulty in understanding the titles has been caused by making a word division between  and ; that these two signs belong in fact to the same word was


¹ A version of this paper was read at the 1988 annual meeting of the American Research Center in Egypt at Chicago, Illinois. W. A. Ward, *Index of Egyptian Administrative and Religious Titles of the Middle Kingdom* (Beirut, 1982); reviewed and elaborated upon by D. Franke, *GM* 83 (1984), 103-24; H. G. Fischer, *Egyptian Titles of the Middle Kingdom: a Supplement to Ward's Index* (New York, 1985); idem *OLZ* 82 (1987), 325-30; S. Quirke, *RdE* 37 (1986), 107-30; W. K. Simpson, *JNES* 45 (1986), 70-74; O. Berlev, *CdE* 61 (1986), 238-9.



² Ward, op. cit. 12. The hieroglyphs are given here as arranged on the stele; Ward has changed this arrangement in his copies.

³ Ward appears to mean *imy.w-r pr*; see Ward, *ibid.* 21-2 (# 132) for *imy-r pr*, 'steward, administrator'. I. Matzker, *Die letzten Könige der 12. Dynastie* (Frankfurt am Main, 1986), 52, in treating the same passage, makes the same slip, reading *jmjw-pr*. Fischer, *Egyptian Titles*, 90, transliterates *imy-r cw n rw-prw n imy-r rwy.t(?)*.

⁴ H. Lange and H. Schäfer, *Grab- und Denksteine des Mittleren Reichs*, II (Berlin, 1908), 310-11; W. K. Simpson, *The Terrace of the Great God at Abydos: the Offering Chapels of Dynasties 12 and 13* (New Haven, 1974), pl. 2.

⁵ Fischer, *Egyptian Titles*, 45.

⁶ W. Helck, *Zur Verwaltung des Mittleren und Neuen Reichs* (Leiden-Köln, 1958), 86, n. 4, mentions these titles, but says they are not clear to him, suggesting that they may misrepresent .

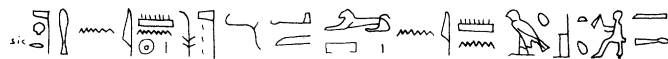
recognized in the *Register* to Helck's *Verwaltung*, in which a hybrid of both titles from CG 20683 was transliterated, without translation, as *mr cmr n mr sdxw.t n mr rry.t*.¹ The key group is not , but rather . This is the earliest attestation of the word *cmr*, given in *Wb.* 1, 187, 2 as a 'Teil der Tempelverwaltung'. More precisely, *cmr* means 'bakery', having as its descendants the nisbe-derived occupational titles of demotic *cmr(e)* (EG, 61) and Coptic **ⲁⲙⲠⲎ** (Crum *Coptic Dictionary*, 8b–9a), both meaning 'baker'. *imy-r cmr*, 'Overseer of the Bakery', with its parallel *hry cmr*, 'Chief of the Bakery', and demotic **ⲉⲛ ⲁⲙⲠ** and **ⲁⲙⲠⲉ ⲉⲛ**, 'Chief Baker', is a well attested title.²

¹ *Verwaltung: Register* (Leiden, 1975), 22.

² W. Spiegelberg, in his manuscript dictionary of demotic (presently in the Oriental Institute, Chicago), III, 83, cited the *Wb.*'s *cmr* as the predecessor of the demotic title, but apparently did not link the two with Coptic. The connection between demotic *cmr(e)* and Coptic **ⲁⲙⲠⲎ** was first proposed by Griffith, *Catalogue of the Demotic Graffiti of the Dodecaschoenus*, 1 (Oxford, 1937), 289. See also S. Wängstedt, *Septentrionalia et Orientalia* (Stockholm, 1959), 486; H. De Meulenaere, *CdE* 41 (1966), 408; J. Černý, *Coptic Etymological Dictionary* (Cambridge, 1976), 6; J. Osing, *Die Nominalbildung des Ägyptischen* (Mainz, 1976), 313, and n. 1334; W. Westendorf, *Koptisches Handwörterbuch* (Heidelberg, 1977), 486; W. Vycichl, *Dictionnaire étymologique de la langue copte* (Leuven, 1983), II. Note that A.-P. Zivie, *La tombe de Pached* (Cairo, 1979), 128, n. 1, indicates that Traunecker and Sauneron have wished to see a Semitic root behind *cmr*.

The hieroglyphic occurrences of *cmr* are, aside from those on CG 20683, those already known to the Belegstellen:

- (1) Leid D74 – statuette of *Ri*; published in P. A. A. Boeser, *Beschreibung der ägyptischen Sammlung des niederländischen Reichsmuseums der Altertümer in Leiden*, v (The Hague, 1913), 11–12 (# 26), pl. 12 (*Wb.* uses the old Leemans code D74 to refer to this piece, though Boeser's work is given for the abbreviation 'Leid.'). The owner is called:
 - (a) *imy-r cmr*, 'Overseer of the Bakery'
 - (b) *imy-r cmr n Pth*, 'Overseer of the Bakery of Ptah'
- (2) Tur 4903 – the abbreviation is said by *Wb.* to refer to A. Fabretti, F. Rossi, and R. V. Lanzone, *Regio Museo di Torino: Antichità Egizie* (Turin, 1882, 1888). Item # 4903 in this publication is, however, a scarab which does not contain the word *cmr*. According to the *Wb. Zettel*, the object is 'Turin Uschebtikasten 4903'; the relevant portion of the inscription is there given as:



(For providing me with a copy of the *Wb. Zettel*, I thank Dr. A. Burkhardt and Prof. Dr. sc. W. F. Reineke, AdW der DDR.)

- (3) Theb Grab Nr 3 – Tomb of Pashed (PM 1², 9–11); see Černý, *et al. Répertoire onomastique de Deir el-Médineh* (Cairo, 1949), 41; Zivie, *op. cit.* pls. 23–4; *KRI*, I, 376, 13–14. A man Nefersekheru is called:

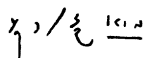
hry cmr n Imn, 'Chief of the Bakery of Amun'.
- (4) W. F. Petrie, *Hawara, Biahmu and Arsinoe* (London, 1899), pl. 6, 5 – an example of *cmr* from the Late Period:

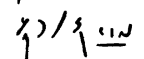
imy-r cmr, 'Overseer of the Bakery'.

Zivie, *op. cit.* 128 n. 1 mentions that the title *hry-cmr.t* has been found on an object recovered recently at Karnak; the piece is to be published by Traunecker.

The demotic occurrences of *cmr* are:

- (1) P. El. 13/2 = P. Berlin 13534 (W. Spiegelberg, *Demotische Papyrus von der Insel Elephantine*, I (Leipzig, 1908), 27, pl. 10): *cmr n Inm*, 'Baker of Khnum'
- (2) O. Berlin 12980^b (handcopies in Spiegelberg's manuscript dictionary, III, 83):

(a)  *p: ɛ n cmr*, 'the Chief Baker'

(b)  *p: ɛ n cmr*, 'the Chief Baker'

As for the adjuncts to *imy-r mr.w* on CG 20683 – in the second example, Pepy is *imy-r mr.w* for the *imy-r sdrw.t*, ‘Overseer of the Treasury’.¹ In the first example he carried out his office for the overseer of the $\frac{\text{𓆎}}{\text{𓆏}}$. Ward read *rwy.t*, ‘Law Court’.² In line 10 of the stele, a man Inpi is called *imy-r rwy* and *imy-r rwy.t*, $\frac{\text{𓆎}}{\text{𓆏}}$ being how our stele writes the word which Ward renders ‘Law Court’.³ Orthographically we are compelled to reject *rwy.t* as the reading of $\frac{\text{𓆎}}{\text{𓆏}}$; the word is rather to be read *šnc.t*, the attested feminine form of *šnc*.⁴ Pepy’s titles should be read:

53 *imy-r mr.w n imy-r šnc.t*
 ‘Overseer of the Bakeries for the Overseer of the Workhouse’⁵

(3) G. Philae (Griffith, op. cit.):

(a) 162/3-4	<i>mr̄ n s.t</i>	‘Baker of Isis’
(b) 324/1-2	<i>mr̄ n s.t</i>	‘Baker of Isis’
(c) 207/3	<i>mr̄ n s.t</i>	‘Chief Baker of Isis’
(d) 208/3-4	<i>mr̄ n s.t</i>	‘Chief Baker of Isis’
(e) 372/2-3	<i>mr̄ n s.t</i>	‘Chief Baker of Isis’
(f) 368/2-3	<i>pr̄ w̄b mr̄(n) s.t</i>	‘the <i>Wrb</i> -Priest and Baker of Isis’

(4) O. Uppsala 701 + 610 (S. Wängstedt, op. cit. 485):
n̄ mr̄(.w), ‘the Bakers’

(Wängstedt, *ibid.* 486, based on the fact that the *mr̄[.w]* are listed before *wrb*-priests, proposed that the bakers were higher in rank than the priests. G. Philae 368/2-3, by specifying a man as priest and baker, suggests that bakers were not always *wrb*-priests. Furthermore, if the more important title is given first in G. Philae 368, then the title of *mr̄e* was not as impressive as that of *wrb*-priest.)

The assumption that bare *mr̄e* means simply ‘baker’, and was not an abbreviation for ‘chief baker’ is, perhaps, risky. Thus in Coptic, where ΔMPE without elaboration is used in the Sahidic and Bohairic versions of Genesis 40 to render the Greek $\alpha\rho\chi\iota\sigma\iota\tau\omicron\pi\omicron\iota\omicron\varsigma$ (Sahidic: É. Amélineau, *RT* 7 (1886), 217; Bohairic: P. de Lagarde, *Der Pentateuch Koptisch* [Leipzig, 1867], 95-6).

¹ The reading of this much discussed word is uncertain; see Franke, op. cit. 112-14.

² The *Register* volume to Helck, op. cit. 22, transliterates *rrj.t*.

³ See G. P. F. Van den Boorn, *JNES* 44 (1985), 1-25.

⁴ The feminine form *šnc.t* of *šnc*, ‘Workhouse’ (*Wb.* iv, 507, 12-508, 25), is attested from the Old Kingdom as a geographic name (H. Jacquet-Gordon, *Les noms des domaines funéraires* (Cairo, 1962), 52; K. Zibelius, *Festschrift Elmar Edel* (Bamberg, 1979), 462 and n. 48; *idem Ägyptische Siedlungen nach Texten des Alten Reichs* (Wiesbaden, 1978), 229-30). From the New Kingdom *šnc.t* is found in *Urk.* iv, 50, 10, and *Medinet Habu* III, pl. 168, bottom. For examples from the Late Period, see conveniently D. Berg, *JARCE* 24 (1987), 49-52 and the references given there, adding stele Cairo JE 65444 (A. Hamada, *ASAE* 39 (1939), 274-5 = P. Munro, *Die spätägyptischen Totenstelen* (Glückstadt, 1973), 330). Ptolemaic attestations are several, i.e. line 20 of an inscription of Ptolemy IV from Töd (*BIFAO* 40 (1941), 39); line x + 9 of bronze tablet BM 57372 (A. F. Shore, in *Glimpses of Ancient Egypt*, ed. J. Ruffle *et al.* (Warminster, 1979), pl. 6, pp. 154 and 155); *Dendara*, iv, 85, 9 (and the references cited by Egberts, *Enchoria* 15 (1987), 31, nn. 45 and 46); and a stele from the reign of Tiberius (De Meulenaere, *OLP* 9 (1978), 72, l. 3 of the stele).

The feminine *šnc.t* is also attested in the masculine title *šnc* (*Wb.* iv, 509, 2) from the Late Period. The masculine title is likely a nisbe derivative from the masculine *šnc*, ‘Workhouse’; the titles with *.t* appear to be masculine nisbe derivatives from the feminine form of ‘Workhouse’, *šnc.t*. (see E. El-Banna, *Mélanges Gamal Eddin Mokhtar* (Cairo, 1985), 248, 251-3 (El-Banna, *ibid.* 252 n. 24, incorrectly dismisses the *.t* as ‘superfétatoire’); Hamada, *ASAE* 39, 274-5 (according to Hamada’s note, *ibid.* 274 n. 2, he did not recognize $\frac{\text{𓆎}}{\text{𓆏}}$ as a writing of the title *šnc(.t)*; he read ‘superintendent of the chamber’).

⁵ Zivie, op. cit. 128 n. 1, has written that *hry mr̄* ‘semble être une variante (sous le sens) de *šnc*’. The CG 20683 occurrences of *imy-r mr̄.w* show this to be impossible for the Middle Kingdom – Pepy is overseer of the Bakeries for the Overseer of the *šnc* – they are two men. Otherwise, Pepy would have been Overseer of the Bakeries and Overseer of the Workhouse. For the title *imy-r šnc*, see Ward, op. cit. 49 (# 381).

54 *imy-r mr.w n imy-r sdw.t*
 'Overseer of the Bakeries for the Overseer of the Treasury'

Pepy was the Overseer of Bakeries for the Overseer of the Workhouse; he also carried out his office for the Overseer of the Treasury.¹ Iykhernofret, for whom an invocation prayer occupies the greater part of Pepy's stele, and in whose chapel at Abydos the stele was placed, bears as his last title (line 8) *imy-r sdw.t*. Most probably, Iykhernofret was the Overseer of the Treasury for whom Pepy worked. Among the titles which Pepy chose to list for his superior, he placed one which links Iykhernofret to him more closely than the title 'Overseer of the Treasury' alone could. In line 7 of the stele, the Chief Baker refers to his patron as *imy-r cbw-r nsw.t*, 'Overseer of the Royal Repast'.²



This is how Pepy's titles tie together, and relate him to his superior.³

JOHN COLEMAN DARNELL.

¹ The *šnc.t* for which Pepy oversaw the bakeries was most probably a royal establishment, perhaps a *pr-nsw.t*. The *imy-r sdw.t* was at the top of the administration of the king's personal treasure, this being separate from the *pr-hd* (Helck, op. cit. 77-88, 180-91; B. Schmitz, *LÄ* v, 536-43 – note that D. Franke, *SAK* 10 (1983), does not appear to make this distinction, on p. 176 giving *mr-htm.tw* as parallel both to *mr chmwtj wr ny pr-hd* and *mr pr-wr*). Under the control of the *imy-r sdw.t* was the *pr-nsw.t*. So in the 'Duties of the Vizier' in the tomb of Rekhmire, the *imy-r sdw.t* is to approach the Vizier and report (*Urk* iv, 1105, 17-1106, 5), his closing words being: *pr-nsw.t rd wdi*, 'the royal estate is safe and sound'. Workhouses, as would be expected, were among the components of a royal estate. For *šnc* establishments attached to royal estates, see:

- (a) P. Leiden 344 recto 10/3-4 (Admonitions) – The *šnc n nsw.t* is said to be 'at the disposal of everyone, and the *pr-nsw.t* is wholly without its revenues'. The *šnc n nsw.t* is emptied by all manner of people, and has no goods remaining which it might deliver to the *pr-nsw.t* of which it was part.
- (b) P. Leningrad III6A recto – Here there are several references to a *šnc* belonging to the queen's estate (*pr-Dw.t[-ntr]* – see Helck, op. cit. 159).

Iykhernofret's concern for the king's personal property is specified in line 6 of Pepy's stele, where he is called *imy-r ht nb(t) ny.t nsw.t*, 'Overseer of all Goods of the King'.

² Ward reads  as two titles, **imy-r cbw*, 'Overseer of Horned Animals' (Ward, op. cit. 13 [# 62]), and **r nsw*, 'Spokesman of the King' (ibid. 101 [# 846]). In his division of the hieroglyphs, as well as in his translations, Ward follows H. Schäfer, *Die Mysterien des Osiris in Abydos unter König Sesostri III* (Leipzig, 1904), 35 [79]. As Schäfer remarks, **r nsw.t* is otherwise unattested. *imy-r cbw-r nsw.t*, the reading proposed here for the title, is parallel to Fischer's supplementary title 33a (op. cit. 3), both being Middle Kingdom survivals of a well attested Old Kingdom title (see conveniently Helck, *Untersuchungen zu den Beamtentiteln des ägyptischen Alten Reiches* (Glückstadt, 1954), 66; the compound *cbw-r nsw.t* survives into the New Kingdom in three examples: *Urk* iv, 59, 7 and iv, 506, 10; *Tomb of Kheruef* (Chicago, 1980), pl. 28, 17). Fischer and Helck, following the *Wörterbuch*, read  as *irw-r*; for the reading *cbw-r* for this group, which is to be preferred, see De Meulenaere, in *Bulletin du Centenaire (BIFAO* 81, Suppl., 1981), 87-9). Fischer's reading 'repast' is followed here; the translation 'breakfast' is certainly incorrect. Bidoli, in Kaiser *et al*, *MDAIK* 28 (1972), 184-5, suggested 'mid-day meal' (he also read *irw-r*).

³ On stele CG 20140, also in the ANOC group (Simpson, *Terrace*, pl. 2), there appears an *iry-ct n pr-ct Ppy*. If the *ct* in this title means 'pantry' (thus being short perhaps for *ct t*, 'bread pantry'), we may have another attestation of the Pepy of CG 20683 (for *ct* as 'pantry', see W. A. Ward, *CdE* 57 (1982), 196). A possible demotic example of unqualified *ct* meaning 'pantry' is found in P. Vienna 6319, 6/31. The editor E. A. E. Reymond, *From Ancient Egyptian Hermetic Writings* (Vienna, 1977), 62-3, 101, transliterated *cd*, though, based on a reference to Faulkner, *CDME*, 37, she clearly intended *ct*, 'room'. From the context (the mention of *nm.t*, 'slaughtering place'), Reymond suggested reading 'workshop, bakery'. According to Brunsch, *WZKM* 73 (1981), 174, reviewing Reymond's publication, 'workshop, bakery' for *ct* 'ist nicht zu belegen'. However, in the light of Ward's *CdE* 57 article, and the mention of the *iry-ct n pr-ct Ppy* on CG 20140, Reynold's translation should not be rejected summarily.

Calembour, Trommelwettstreit oder Kampf auf Leben und Tod in der autobiographischen Steleninschrift des Emhab?

In *JEA* 72 (1986), J. Baines offered a new translation and interpretation of the autobiographical inscription of Emhab (Cairo JE 49566), which is among the most problematic and controversial of ancient Egyptian texts. Against earlier interpretations, it is here suggested that Emhab describes his victorious life and death struggle against a man called *Tmjrhbt*, a follower of the Hyksos king Apophis. The crucial word *rw* is to be translated—especially on the basis of a direct parallel in the Kahun papyri—as ‘death’ or ‘dead man’. The inscription thus records military undertakings against vassals of Apophis, in which Emhab played a prominent part for three years.

NACHDEM J. Černý mit seiner Publikation der wegen ihrer inhaltlichen Problematik berühmten Stele des Emhab aus der 2. Zwischenzeit die von E. Drioton aus der Biographie des Steleninhabers erschlossene Existenz von Wanderbühnen im alten Ägypten widerlegen konnte,¹ hat nun J. Baines eine neue Übersetzung und Interpretation der sog. ‘Stèle du Théâtre’ vorgelegt.²

Diese Inschrift enthält einige sehr umstrittene Passagen (Z.3–12), die von den bisherigen Bearbeitern ganz verschieden aufgefaßt worden sind:

Černý: ‘(3) He says: I am one (4) who followed his lord in his movements and one who did not fail in (any) utterance (5) which he said. I put all strength and suppleness in (my) two hands. (6) It was said to Hetinet: “Come! He will (7) fight with you in endurance”. I beat him with fingers (8) seven thousand (times) in endurance. I spent year 3 beating (9) drum every day. I gave satisfaction to (10) my lord in all his affairs, (11) (for) he is now a god, while I am (only) a ruler. He (12) killed and I let live.’

Baines: ‘(3) He says: I was (4) one who served his lord on his journeys, who was not cowardly over any command he (= his lord) gave. (5) And then I filled (my) two hands with all agile strength. (6) And then one said “come” to *htnt*, “I (Emhab) shall (7) compete with him (*htnt*) in measures”. And then I defeated him with (my) fingers (8) 7000 measures, and spent year 3 striking (9) the drum every day. I emulated (10) my lord in every affair of his. (11) He is a god while I am a ruler; (12) when he kills I keep alive.’

Ich schlage dagegen folgende Übersetzung vor:

‘(3) Er spricht: Ich bin einer, (4) der folgte seinem Herrn auf seinen Reisen,^a der keine Schwäche zeigte gegenüber den Befehlen, (5) die er (= der Herr) gab.^b Da veranlaßte ich, daß alle Starken gebeugt in (meinen) beiden Händen waren.^c (6) Da sprach *Tmjrhbt* (= *Tmjrhnt*(?)):^d “Ich werde (7) kämpfen gegen ihn (= den Herrn)^e bis zum Tode”.^f Da bekämpfte (ich) ihn mit (8) 47.000^g Toten.^h Ich verbrachte 3 Jahreⁱ beim Schlagen (9) der Trommel jeden Tag. Ich eiferte nach (10) meinem Herrn in all seinen Angelegenheiten. (11) (Denn) während er ein Gott ist, bin ich (nur) ein Herrscher. Während er (12) tötete, belebte ich.’

^aD.h. Emhab begleitete seinen Herrn, also den König, auf den hier mit *nmtt* bezeichneten Feldzügen.

^bWörtl.: ‘der nicht schwach (oder: feige) war gegenüber der Rede (oder: den Angelegenheiten), die er (= der Herr) sagte’.


^cČerný: ‘I put all strength and suppleness in (my) two hands’, jedoch leider ohne jede Begründung. Baines übersetzt dagegen ‘And then I filled (my) two hands with all agile strength’ und bezieht dies auf die Fingerfertigkeit beim Schlagen der Trommel, faßt also *qrf* als Adjektiv auf, wobei er gegen Černý anführt, daß man bei dessen Übersetzung ein *rwḏw qrf(w) nb(w)* (**rwḏw qrf nb*’) erwarten würde. Es steht jedoch deutlich der Plural *rwḏw* da, wobei das Determinativ des stehenden Mannes

¹ *MDAIK* 24 (1969), 87–92 (mit Literatur); cf. L. Störk, *GM* 43 (1981), 63; H. W. Fairman, *The Triumph of Horus* (London, 1974), 13.

² *JEA* 72 (1986), 41–54 (mit Literatur; nachzutragen ist die Publikation des Textes in: F. T. Miosi, *A Reading Book of Second Intermediate Period Texts* (Toronto, 1981), 33–4).

mit Stock darauf hinweist, daß hier nicht 'Festigkeit; Tüchtigkeit, Leistungsfähigkeit; Gesundheit' (*Wb.* II, 412.10–12), sondern 'die Starken' in der Bedeutung 'die Beauftragten, die Vertreter o.ä.' (*Wb.* II, 413.12) zu übersetzen ist; *grf* ist somit auch kein Adjektiv, sondern kann nur Pseudopartizip sein: *chr. n rdj. n. j rwḏw nb(w) grf(w) m drtj(.j)*.¹


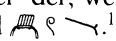

^dČerný: 'It was said to Hetinet: "Come!"' mit ausführlichem Kommentar. Dieser Übersetzung folgen auch L. Störk: 'Komm! wurde da zu Htjnt gesagt'² und Baines: 'And then one said "come" to *htnt*'.

Ich sehe dagegen in  einen Personennamen, dessen Lesung eventuell *Tmjrhnt* lautet.³

^eČerný: 'He will fight with you ...' mit Verweis auf die bekannte Stelle des Zweikampfes in Sinuhe B III: *dd. n. f chr. f hnc. j* 'Er sagte: "Er will kämpfen mit mir"'.⁴ Dieser Übersetzung folgen Störk: 'Ich werde von ihm nicht mehr ablassen'⁵ und Baines: 'I (Emhab) shall compete with him (*htnt*) ...'.

Der Mann namens *Tmjrhnt* fordert jedoch nicht Emhab selbst, sondern vielmehr den im Text als 'Herr' bezeichneten König heraus, auf den sich das Suffix = *f* in der Inschrift durchgehend bezieht.

^fČerný übersetzt 'in endurance' und schreibt als Kommentar zu *rw* 'lit. length, stretch (of time)'.⁶ Dieser Übersetzung von *rw* folgt auch Störk: 'Ich werde von ihm nicht mehr ablassen'.⁷ Baines sieht dagegen in *rw* ein Hapax legomenon für einen musikalischen terminus technicus: 'in measures'; er schreibt: 'The context suggests a technical term in music ... Here *rw* would most suitably be a drumming figure, but the general meaning is likely to be broader, a unit of "length" in music'.⁸

Die Übersetzung des sowohl in dieser als auch in der nächsten Zeile stehenden Wortes *rw* ist für das Verständnis und die Interpretation des gesamten Textes von entscheidender Bedeutung. Im Wörterbuch ist nun ein vom Mittleren Reich bis in die griechisch-römische Epoche belegtes Wort *rw* verzeichnet, das dort mit 'Todesfall o.ä.' (*Wb.* I, 5.15) übersetzt wird und in *m rw* 'tot, abgelebt' (*Wb.* I, 5.16) enthalten ist. Dieses *m rw* läßt sich mehrfach in dem sog. 'Relativsatz' *ntj m rw* bzw. *ntjt m rw* belegen, der stets nach einem männlichen oder weiblichen Personennamen steht und zu übersetzen ist: 'der, welcher tot ist' bzw. 'die, welche tot ist', also eine Person als bereits verstorben kennzeichnet.⁹ Dieses *ntj m rw* scheint dabei einem *ntj m mwt* (?) zu entsprechen.¹⁰ In diesem sog. 'Relativsatz' muß *rw* ein Substantiv sein, also entweder 'Tod' oder 'Toter' bedeuten, so daß *ntj m rw* wörtlich heißt: 'der, welcher ist im Tode' oder 'der, welcher ist wie ein Toter'. Für *rw* existieren dabei folgende Schreibweisen: ¹¹ und ¹² Ferner scheint dieses *m rw*, allerdings in verderbter Schreibung, auch in einem sog. "Make Merry"-Lied' im thebanischen Grab Nr. 364 vorzuliegen: ¹³ Auf dem Antinous-Obelisk des Monte Pincio,

¹ Cf. Gardiner, *EG*³, 240–1, § 315.

² Störk, op. cit. 64.

³ Zu  für *t* cf. Baines, op. cit. 43 n.k.

⁴ Černý, op. cit. 90 n. (G); cf. Störk, op. cit. 64. Zum Zweikampf Sinuhes mit dem Helden von *Rtnw* cf. G. Fecht, in: *Studien zu Sprache und Religion Ägyptens* (Göttingen, 1984), 465–84; zur zitierten Passage cf. ibid. 466 und 468 (Vers 17): *dd. n. f chr. f hnc. j* daß-er-sagte-er-werde-kämpfen-mit-mir'.

⁵ Störk, op. cit. 64.

⁶ Černý, op. cit. 90 n. (H).

⁷ Störk, op. cit. 64.

⁸ Baines, op. cit. 43 n.m.

⁹ W. Spiegelberg, *Rechnungen aus der Zeit Setis I.* (Strassburg, 1896), I, 62; cf. A. Erman, *Römische Obeliken* (Berlin, 1917), 34.

¹⁰ Spiegelberg, op. cit. 62.

¹¹ pKahun IV, I.1, Z. 6a: F. Ll. Griffith, *Hieratic Papyri from Kahun and Gurob* (London, 1898), I, 102; II, Taf. 10, Z. 6a: 'bore to him, who is dead' mit Verweis auf Spiegelberg ('Spiegelberg brilliantly identifies ... and translates "deceased"'); es muß jedoch, da davor ein Frauennamen steht, *ntjt m rw* 'die, welche tot ist' heißen! pKahun IV, I.2, Z. 2: Griffith, op. cit. I, 102; II, Taf. II, Z. 2.

¹² pBibliothèque Nationale 209 vso III, 12, 22: Spiegelberg, op. cit. I, 62; II, Taf. 9b; *KRI* I, 265, 4, 14. pAbbot 2, 15: Spiegelberg, op. cit. I, 62; T. E. Peet, *The Great Tomb-Robberies of the Twentieth Egyptian Dynasty* (Oxford, 1930), I, 38: 'who is dead'; L. H. Lesko (Hrsg.), *A Dictionary of Late Egyptian*, I (Berkeley, 1982), 4: *rw* 'death', *nty m rw* 'deceased'; P. Lacau, *Une stèle juridique de Karnak* (Cairo, 1949), 10 mit n. I.

¹³ E. Wente, *JNES* 21 (1962), 127 (TT 364), 124: 'My heart is moribund because of it'; wörtl.: 'Mein Herz ist im Tode deswegen'; cf. Lesko, op. cit. 4: 'moribund'.

therefore not "three years" which would be $\left\{ \overset{\Delta}{1} \right\}$.¹ Ebenso übersetzen Störk: 'Regierungsjahr 3'² und Baines: 'year 3'.

Es steht jedoch $\left\{ \overset{\Delta}{\bigcirc} \right\}$ da, eine Schreibung, die seit dem Neuen Reich für $\left\{ \overset{\Delta}{1} \right\}$ stehen kann und auch hier vorliegt. Somit ist demzufolge nicht *rnpt-hsb* 'Regierungsjahr'³ sondern nur *rnpt* 'Jahr' bzw. *rnpt(w)t* 'Jahre' zu lesen. Außerdem würde man bei der Nennung eines bestimmten Regierungsjahres dahinter den Namen des Königs erwarten, also: 'Regierungsjahr 3 des Königs NN'.

Černý hat gezeigt, daß die Stele des Emhab aus der 17. Dynastie stammt und sie auf Grund der von ihm postulierten Erwähnung eines 'Regierungsjahres 3' sowie der Nennung von *Mjw* und *Auaris* mit äußerst überzeugenden Argumenten in die Regierungszeit des Kamose datiert.⁴ Baines weist nun mit Recht darauf hin, daß die in der Steleninschrift genannten Ereignisse eventuell auch in der Regierungszeit des Te'o II. stattgefunden haben könnten.⁵

Während Černý jedoch nicht näher auf den Inhalt der Inschrift eingeht, faßt Störk ihn als eine ironisierende Verächtlichmachung des Hyksosherrschers Apophis auf, da er in *Htnt* (*Htnt*) eine 'despektierliche Bezeichnung des Hyksoskönigs' vermutet.⁶ Er zieht dabei zur Interpretation die an Apophis gerichtete Drohung des Kamose im Carnarvon Tablet heran (Z.4: *tw.j r thn hnc.f sd.j ht.f* 'Ich werde mit ihm kämpfen und seinen Bauch aufschlitzen') und schreibt: 'Im Gegensatz zu diesem brachialen Vorgehen, traktiert M-hb seinen Kontrahenten mit den "Fingern" ... M.E. schlug M-hb seinen Gegner durch den Klang seiner Trommel in die Flucht und spielt damit auf die, auch in der 2. Kamose-Stele verschiedentlich zum Ausdruck gebrachte Furchtsamkeit des Hyksosherrschers an'.⁷ Solch ein ironisierender Ton scheint mir jedoch in einem autobiographischen Text eines Privatmannes schlichtweg unmöglich zu sein. Denn dies würde ja bedeuten, daß Emhab mit seinem bloßen Trommeln den Gegner bezwungen haben würde, während immerhin kein geringerer als der König dazu Waffengewalt hat anwenden müssen. Zieht man ferner die zahlreichen uns überlieferten Kriegsberichte mit heran, so zeigt sich, daß auch dort nach dem Motto 'viel Feind, viel Ehr' verfahren worden ist und es auf die tatsächliche Vernichtung des Feindes ankam. Darüber hinaus war die historische Situation am Ende der 2. Zwischenzeit viel zu ernst für derlei "Späße" und gerade die langwierige, erst unter Ahmose endgültig abgeschlossene Vertreibung der Hyksos zeigt, daß diese bestimmt nicht schon beim Klang einer einzigen Trommel die Flucht ergriffen.

Baines dagegen sieht darin den Bericht über einen Trommelwettstreit des Emhab mit einem anderen Trommler namens *Htnt*: "The stela contains the only known account of what seems to be a drumming contest. After his success in this, Emhab goes on campaigns, presumably drumming in the army. There may have been very few drummers, who had a role in organizing the troops that went beyond their drumming; they could alternatively have had symbolic prestige ... The *htnt* whom Emhab defeated appears thus to be a contestant for the position of drummer".⁸

M.E. berichtet der Text jedoch von einer konkreten, tatsächlich geführten kriegerischen Auseinandersetzung, also von einem Kampf auf Leben und Tod, die während der sich über

¹ Černý, op. cit. 90 n. (J). Sowohl W. Helck, *Historisch-biographische Texte der 2.Zwischenzeit und neue Texte der 18.Dynastie* (Wiesbaden, 1975), 98 als auch Miosi, op. cit. 34 folgen dieser Lesung von Černý und geben $\left\{ \overset{\Delta}{\bigcirc} \right\}$ mit $\left\{ \overset{\Delta}{\bigcirc} \right\}$ wieder.

² Störk, op. cit. 64.

³ Cf. Barta, *Festschrift Elmar Edel*, ed. M. Görg und E. Pusch (Bamberg, 1979), 39 und id. *ZÄS* 113 (1986), 90 n. 5: dort *rnpt-hsb* 'das zu zählende Jahr' in *rnpt-hsb* 'das Jahr des zu Zählenden' geändert!

⁴ Černý, op. cit. 91-2.

⁵ Baines, op. cit. 41.

⁶ Störk, op. cit. 64.

⁷ Ibid. 64.

⁸ Baines, op. cit. 48.

insgesamt 3 Jahre erstreckenden militärischen Expeditionen (*nmtt*) des Kamose (?) stattgefunden hat. Dabei wird es sich bei diesen militärischen Unternehmungen, die im Süden bis *Mjw*¹ und im Norden bis Auaris führten, um Strafexpeditionen gegen Vasallen des Hyksoskönigs Apophis gehandelt haben. Während einer dieser Strafexpeditionen wurde dann der im Text als 'Herr' bezeichnete König von einem Mann namens *Tmjrhnt* zum 'Zweikampf' herausgefordert. Die Begründung dieser Kriegserklärung wird in der Inschrift durch den unmittelbar vor der Kampfansage stehenden Satz 'Da veranlaßte ich, daß alle Starken gebeugt in (meinen) beiden Händen waren' geliefert, wobei *rwḏw* 'die Starken' die Vasallen des Hyksoskönigs bezeichnet, die sich mehr oder minder kampfflos ergeben zu haben scheinen. Nicht so jedoch ein gewisser *Tmjrhnt*. Dieser muß ein treuer Parteigänger des Hyksoskönigs gewesen sein, der sich gegen die 'Beugung' d.h. die Unterwerfung zur Wehr gesetzt hat und daraufhin von Emhab, der demzufolge die Befehlsgewalt über zumindest einen Teil der thebanischen Truppen innegehabt haben muß, in einer kriegerischen Auseinandersetzung bezwungen worden ist.

Auch der Satz 'Ich eiferte nach meinem Herrn in all seinen Angelegenheiten' ist m.E. so zu verstehen, daß Emhab, wie die Kampfepisode gegen *Tmjrhnt* zeigt, unmittelbare Befehlsgewalt hatte d.h. im Rang eines Generals stand und entscheidend an den kriegerischen Unternehmungen beteiligt gewesen ist. Diese hohe Position des Emhab geht überdies, wie bereits Störk gezeigt hat,² aus seinen Titeln hervor sowie daraus, daß er sich selbst den Rang eines *hq* zuerkennt. Er war also ganz sicher nicht nur irgendeiner unter vielen Trommlern im Heer des Königs gewesen, der dann erst in einem doch mehr oder minder kuriosen Trommelwettstreit seine Fingerfertigkeit als Trommler hat beweisen müssen.

In der Schilderung, daß Emhab tagtäglich die Trommel schlug, liegt vielmehr sowohl der Hinweis auf die von ihm ausgeübte Tätigkeit im Gefolge des Königs vor, wobei eindeutig hervorgeht, daß er als Trommler eine hervorragende, da durch den Klang der Trommel 'belebende' (*srnh*) Stellung innehatte, als auch eine prägnante bildhafte Beschreibung seiner aufopfernden, nicht nachlassenden militärischen Aktivitäten.³

ALFRED GRIMM

Hatshepsut and 'her father' Mentuhotpe II⁴

Publication of an unprovenanced alabaster shell in Liverpool, which bears an inscription commemorating a work by Hatshepsut for Mentuhotpe II.

THE reign of Hatshepsut has long been recognized as a period of particularly rich and varied foundation deposits,⁵ most notably those from the Great Temple at Deir el-Bahari.⁶ Amongst their contents were a few large calcite 'clamshells', inscribed with dedications to Amun of *Dsr-dsrw*.⁷ Superficially similar to the latter is a piece in Liverpool Museum,

¹ Zu *Mjw*, unter spezieller Berücksichtigung der Emhab-Inschrift, s. D. O'Connor, *JEA* 73 (1987), 118 n. 89, 122-4, 134; cf. id. *JARCE* 23 (1986), 44 mit n. 88.

² Störk, op. cit. 65.

³ Etwa entfernt vergleichbar dem deutschen Ausdruck 'die Trommel für etwas rühren' d.h. sich für eine Sache unablässig einsetzen.

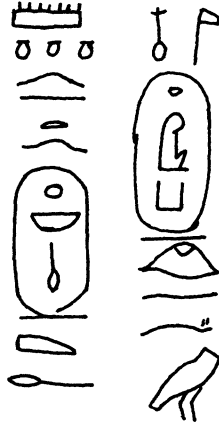
⁴ My thanks go to Piotr Bienkowski for permission to publish, together with the provision of the photograph and much useful information, and to Julie Hudson for her help with the facsimile reproduced here.

⁵ Cf. J. Romer, *JEA* 60 (1974), 125; on foundation deposits in general, see B. Letellier, *LA* 11, 906-11.

⁶ PM 11², Index, 586.

⁷ The Earl of Carnarvon and H. Carter, *Five Years' explorations at Thebes; a record of the work done 1907-1911* (London, 1912), 31, pl. xxii [2.N]; W. C. Hayes, *The Scepter of Egypt*, 11 (New York, 1959), 85-6, fig. 47.

bearing the number M 11929 (pl. XXIX, 2). 9.3 cm long by 5.5 broad, it takes the form of a closed bivalve shell and is carved from a stone provisionally identified by G. Tresise, the museum's Keeper of Geology, as aragonite.¹ Apart from a few scratches and small faults, its condition is very fair, and it carries on its surface two columns of hieroglyphs. Although rather crudely cut, the signs are quite clear and present no problems:—



It is they that provide the piece with its great interest, comprising a dedication whose formula essentially follows that found on the aforementioned pieces from Deir el-Bahari,² but, instead of Amun, the beneficiary of the queen's generosity is the Eleventh Dynasty king, Mentuhotpe II, owner of the adjacent temple.

The piece's modern history begins in 1838, when it was acquired by Joseph Sams, a bookseller and antiquities dealer in Darlington, County Durham.³ He had purchased items in various sales between 1830 and 1839,⁴ and in Egypt in 1832–3. In 1834, objects were sold to the British Museum, but others, amongst them the shell under discussion, were published by their owner five years later.⁵

Some time before 1852, much of the Sams Collection was sold to Joseph Mayer, whose Egyptian Museum was opened in Colquitt Street, Liverpool, on 1 May 1852. Our stone shell was described in the museum's catalogue as a 'Charm, of alabaster, containing two cartouches. One of Cheops'.⁶ It is unclear to me which of the royal names could have been confounded with that of the builder of the Great Pyramid; could it be that Mayer was half-following Samuel Sharpe in believing that Makare could = Menka(u)re = Mykerinus,⁷ whose father, if following Herodotus, was Cheops?⁸

The Mayer Collection was given to the City of Liverpool in February 1867, and incorporated into the city's Free Public Museums,⁹ its second curator being Charles Gatty.

¹ On the difficulty, however, of distinguishing aragonite, relatively uncommon amongst Egyptian antiquities, from the extremely common calcite, see A. Lucas, *JEA* 10 (1924), 131.

² The essential difference is that the latter employ feminine terminations and suffixes, while the Liverpool piece refers to the queen as though a man.

³ W. R. Dawson and E. Uphill, *Who Was Who in Egyptology*² (London, 1972), 259; S. Nicholson and M. Warhurst, *Joseph Mayer 1803–1886* (Liverpool, 1983), 4.

⁴ Including the Salt sale of June/July 1835, and from the collection of Charles Bogaert of Bruges, Nicholson and Warhurst, loc. cit.

⁵ J. Sams, *Objects of Antiquity* (London, 1839), 18 [2].

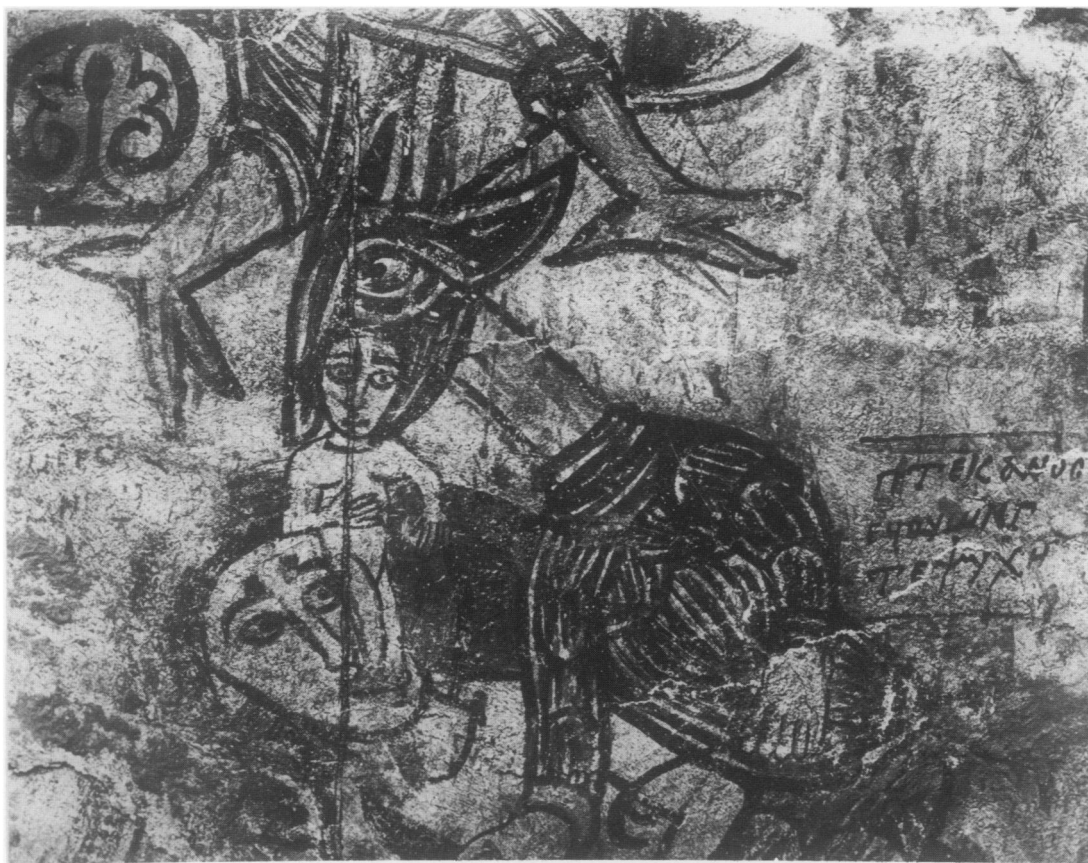
⁶ J. Mayer, *Catalogue of the Egyptian Museum, No. VIII, Colquitt Street, Liverpool* (Liverpool, 1852), 20 [218].

⁷ E.g. *The Alabaster Sarcophagus of Oimeneptah I, King of Egypt...* (London, 1864), 42–3.

⁸ *The Histories* II: 129.

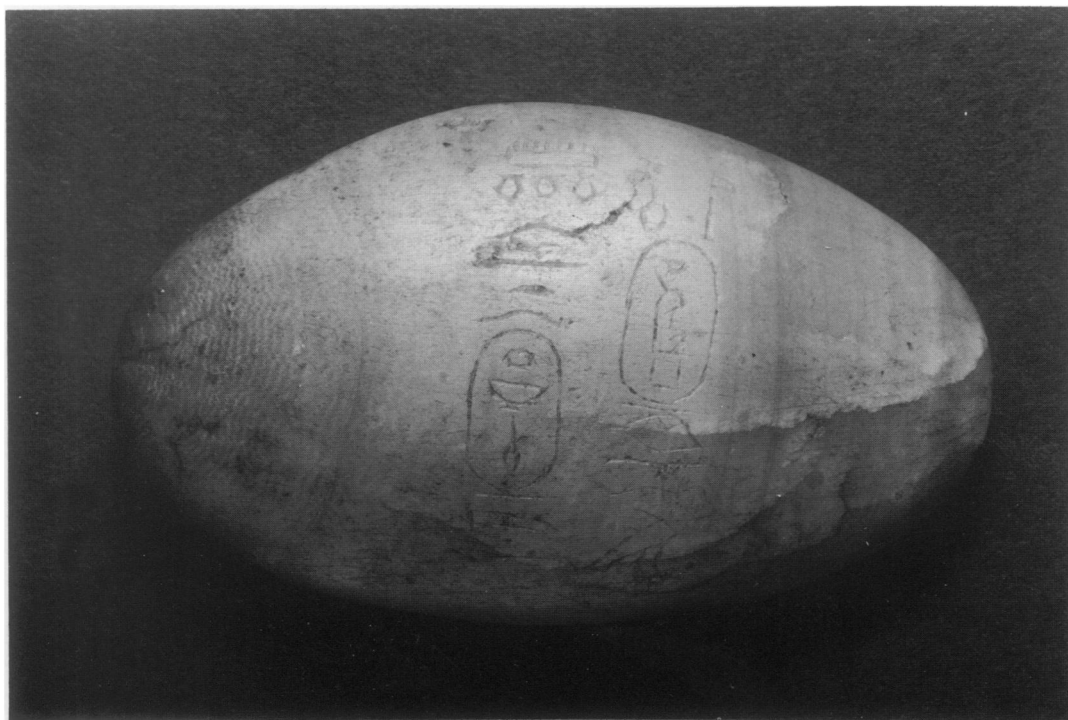
⁹ This institution, on William Brown Street, became the Merseyside County Museums in 1972, but since 1985 has simply been Liverpool Museum, part of the National Museums and Galleries on Merseyside. On Mayer's Egyptian collection, see now A. F. Shore in M. Gibson and S. M. Wright (eds.), *Joseph Mayer of Liverpool 1803–1886* (London, 1988), 45–70.

For some years, the object was mislabelled as referring to Hatshepsut and *Tuthmosis I*.



1. The Punishment of Sinners (p. 203)

CHRISTIAN PAINTINGS FROM TEBTUNIS



2. Liverpool Museum M.11929, *courtesy Liverpool Museum* (pp. 224-6)

HATSHEPSUT AND 'HER FATHER' MENTUHOTPE II

In March 1877, Samuel Birch, Keeper of Oriental Antiquities at the British Museum, visited Liverpool to examine the collection. His verdict on M 11929 is included on the museum catalogue slip drawn up by Gatty in the late 1870s:

Piece of alabaster, with hieroglyphics upon it, & 2 cartouches, looking very modern—

A forgery, but to be kept—(Dr Birch)—

Probably as a result of this condemnation, the object was excluded from the printed catalogue which was published shortly after Birch's visit.¹ However, no doubts as to the object's authenticity seem to have existed when Percy Newberry drew up his museum catalogue slip some decades later. He provides a hand-copy of the inscription and describes it as an 'inscribed pebble from a foundation deposit of the temple of Mentuhetep at Dêr el Bahari at Thebes(?)'.

Separate examinations of the inscription by Dr Bienkowski and the writer have revealed nothing to suggest that it is a forgery: it certainly stands in marked contrast to the fake texts on an unpublished group of calcite 'foundation deposit' vessels, naming Hatshepsut and Tuthmosis III, uncovered by me in the reserves of the Cambridge University Museum of Archaeology and Anthropology in 1987.

However, the most telling consideration in our piece's favour is the early date of its acquisition: it was not until twenty years after Sams had obtained it that the excavations of Cyril Graham for Lord Dufferin revealed the proximity of the two rulers' monuments at Deir el-Bahari.² One finds it difficult to believe that any early nineteenth century forger could have possessed the necessary clairvoyance to think of linking their names.

The piece is intriguing in that it is the first hint that Hatshepsut's relationship with her venerable predecessor was any more than that of neighbour and deriver of architectural inspiration. To date, I have been unable to trace any parallel piece, even through the Metropolitan Museum of Art, whose mission worked for so long in and around the temples of Deir el-Bahari.³ This site is, of course, the premier candidate for the Liverpool piece's place of origin, as Newberry suggested long ago, adding that it may have '[recorded her] restoring his temple'.⁴ However, no trace of such work seems to have been found in his Deir el-Bahari monument, and it must be remembered that both monarchs built widely, Hatshepsut boasting at Speos Artemidos of her restoration of buildings damaged during the Hyksos episode.⁵ Thus, this little stone shell remains for the time being the only evidence for an act of piety by a queen for a 'father' dead half a millennium earlier.

AIDAN DODSON

¹ C. T. Gatty, *Catalogue of the Mayer Museum 1: The Egyptian, Babylonian and Assyrian Antiquities* (London, 1877, 2nd edn, 1879).

² I. E. S. Edwards, *JEA* 51 (1965), 16–28. Indeed, it was not until the work of the E.E.F. in 1903 that the scale and true proximity of Mentuhotpe's monument to the Great Temple became apparent, cf. H. R. Hall, in E. Naville *et al.*, *The XIth Dynasty Temple at Deir el-Bahari*, 1 (London, 1907), 11–12.

³ Personal communication from Peter F. Dorman, 21 January 1988.

⁴ Liverpool Museum catalogue slip.

⁵ A. H. Gardiner, *JEA* 32 (1946), 43–56. Apart from his Deir el-Bahari edifice, buildings of Mentuhotpe are known to have existed at Elephantine, Karnak, Abydos, Gebelein and Dendera, at least, cf. J. D. Bourriau, *Pharaohs and Mortals: Egyptian art in the Middle Kingdom* (Cambridge, 1988), 13–14.

Early squeezes made in the tomb of Khaemhet (TT 57)

The Griffith Institute in Oxford has 143 squeezes made in TT 57 in 1854-5 and later, before the tomb's decoration was damaged. Discussion of a funeral scene which shows babies carried in a sling.

ONE of the Sheikh 'Abd el-Qurna tombs now open to visitors is that of *Hr-m-ht Mh*, an 'overseer of the granaries of Upper and Lower Egypt' during the reign of Amenophis III. The tomb (TT 57, PM 1², 113-19) was the home of the legendary black cat, and was accessible already in the second quarter of the nineteenth century: some of its decoration was copied by Nestor l'Hôte between 1828 and 1841, Lepsius in 1843-5, and also by Wilkinson and Prisse d'Avennes. V. Loret's account of the tomb, dated March 1883, appeared in 1889 (*Mém. Miss.*, 1, 113-32), and full recording was undertaken by Abdel-Aziz F. Sadek on behalf of the CEDAE in 1967. Publication is still awaited.

The decoration is in fairly high raised relief. This contributed to the tomb's popularity before cameras became common, and a large number of paper squeezes of the reliefs was made by nineteenth century visitors. Such records exist in Boston, MFA (D. Dunham, *JAOs* 56 (1936), 173-7), the Louvre (by T. Devéria), the Bristol City Museum (information Mr. R. D. Anderson), and the Griffith Institute in Oxford. The taking of squeezes can be a somewhat ambiguous recording method, but here it has proved an unexpected blessing. Around the turn of the century the tomb was attacked by robbers and much of its decoration badly damaged or destroyed. The squeezes, fortunately, preserve some of the lost scenes or details, and may even provide means of identifying fragments removed from the tomb.

One of the squeezes in the Griffith Institute (no. 1.12) shows a now badly damaged mourning scene, PM 1², 117-18 (18) and (19), register III. An early photograph taken before the damage occurred is reproduced by Loret (his pl. iv), but the squeeze now provides details not clear in the publication (fig. 1). In the scene, small female figures, probably older children, are carrying babies in slings, shawls, or tucked-up robes, with only their heads showing (in this country some people would describe such a use of a shawl as 'Welsh

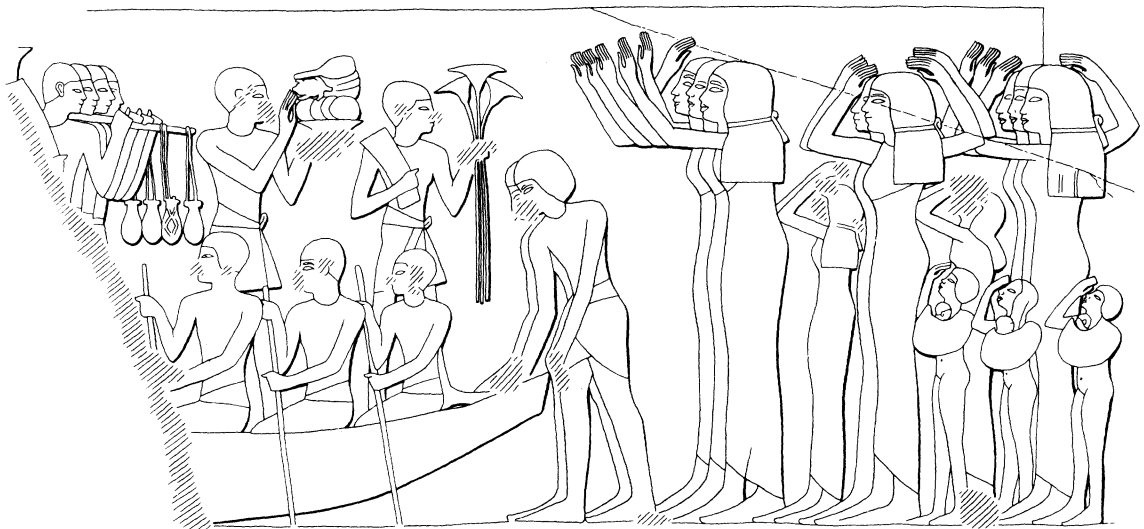
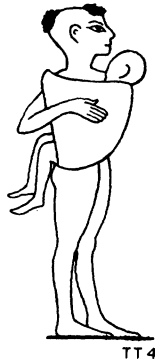


FIG. 1. Drawing by Mrs M. E. Cox, based on Gr. Inst. squeeze 1.12, partially checked against Schott photo. 1975. Reduced to 20%.



TT 4

FIG. 2. Re-drawn from B. Bruyère, *Rapport sur les fouilles de Deir el Médineh (1924-1925)* (Cairo, 1926), fig. 121.



TT 49

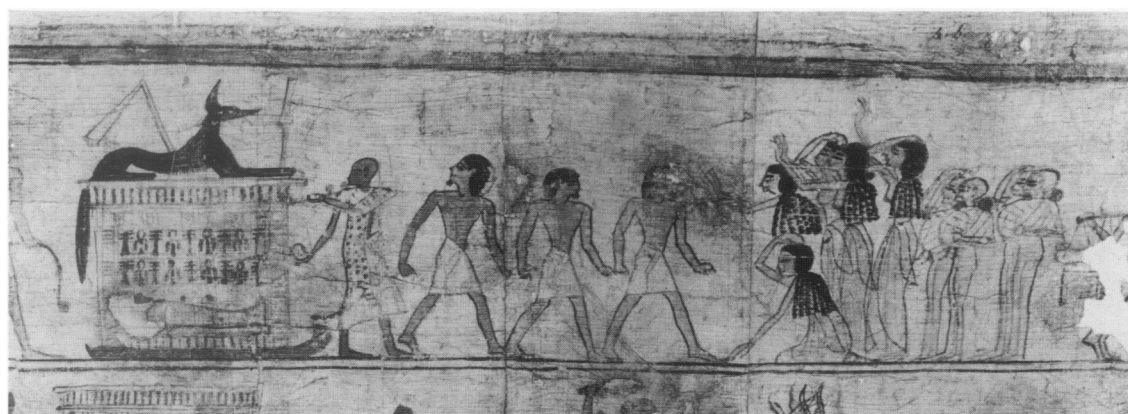
FIG. 3. Re-drawn from N. de G. Davies, *The Tomb of Nefer-hotep at Thebes* (New York, 1933), 1, pl. xxiii.

fashion') (pl. XXXI, 1). Three parallels (figs. 2, 3 and pl. XXXII) have been found by M. Werbrouck (*Les Pleureuses dans l'Égypte ancienne* (Brussels, 1938), 22, 33, 60) at Thebes: TT 4 of *Qn*, PM 1², 11 (3), TT 49 of *Nfr-htp*, PM 1², 92 (8), and TT 259, of *Hrj*, PM 1², 343 (1), all in post-Amarna tombs. A similar funeral scene forms a vignette of the Ramesside Book of the Dead of a certain Paqerer from Saqqâra, now in the Rijksmuseum van Oudheden in Leiden, T 4 (M. Heerma van Voss, *BSFE* 105 (1986), 101 pl. 2) (pl. XXXI, 2). The only New-Kingdom example of a baby carried in a sling in a Theban tomb scene other than those of funerals is of *Mn-nr*, TT 69, PM 1², 134-5 (2), perhaps of the reign of Tuthmosis IV. It is part of an agricultural tableau with a peasant woman gathering fruit. The ultimate reflection of the genre can be found in the Ramesside satirical papyrus in Cairo where a cat, parodying a nurse, is carrying a mouse (E. Brugsch, *ZÄS* 35 (1897), 140 pl. i).

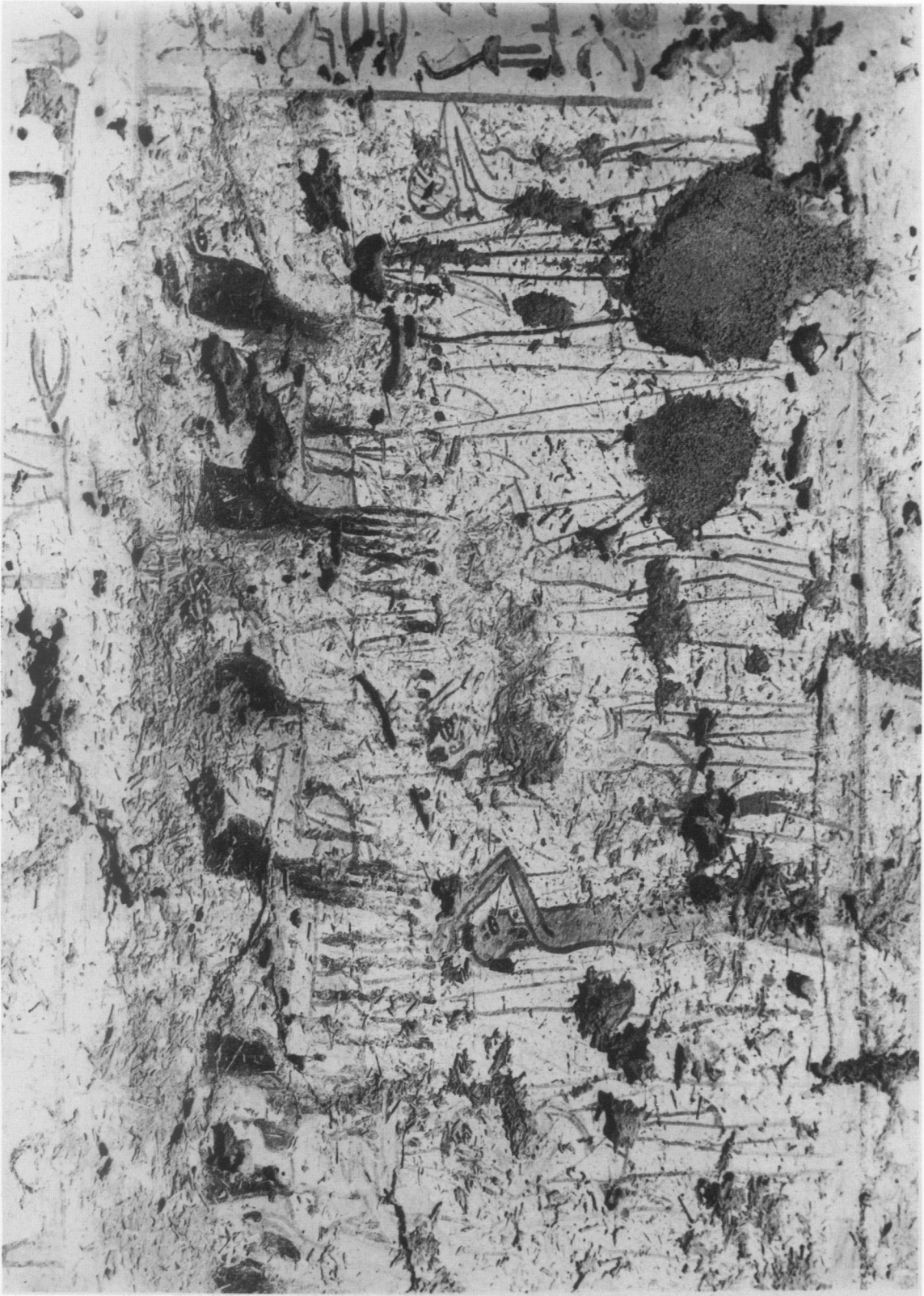
In ancient Egypt, children were usually shown held on their mother's shoulder or astride her hip. Foreign women, particularly Nubians, were however regularly represented with children in a basket (or similar) on their back in both paintings/reliefs and sculptures in the round (N. de G. Davies, *BMMA* Pt. 2, Dec. 1930, 38-41; G. Brunton, *ASAE* 39 (1939), 103; E. Lagarde and J. Leclant, in G. Clerc *et al.*, *Fouilles de Kition*, 11 (Nicosia, 1976), 239-40; A. Mekhitarian in A. Théodoridès *et al.*, *L'Enfant dans les civilisations orientales*, 66-7). New-Kingdom and earlier occurrences of babies carried in a sling or a similar fashion in sculpture in the round have been discussed by J. D. Cooney (*Journal of Glass Studies* 2 (1960), 18-19 with n. 8-9). The earliest seems to be a Twelfth Dynasty wooden statuette of a Syrian(?) woman with a child in a shawl or a fold of her garment on her back, in Edinburgh, Royal Museum of Scotland, 1911.260 (C. Aldred, *Middle Kingdom Art* (London, 1950), pl. 30). A small ivory sculpture, perhaps contemporary, is in Boston, MFA 54.994 (W. S. Smith, *BMFA* 52 (1954), 86-7 figs. 6, 7). A statuette in Munich, ÄS 2955 (S. Schoske and D. Wildung, *Ägyptische Kunst München* (Munich, n.d.), 151 [36-7] figs.), made of wood and dated to the Eighteenth Dynasty, shows a child carried by a Nubian(?) lady. A fragment of a glass sculpture vase, probably of the reign of Amenophis III, is in New York, MMA 30.8.164 (Cooney, *op. cit.* fig. 9). Approximately contemporary pottery vases of a similar type (M. A. Murray in *Historical Studies* (London, 1911), 44 [48-9] pl. xxiv) may show either Egyptian ladies or foreign nurses. The fact that three-dimensional instances of this motif during the second millennium BC depict mainly foreign women is striking, and makes one wonder whether the carrying of Egyptian babies in slings, as recorded in Theban tombs, imitated a custom usually observed with foreign nurses.



1. Female mourners in the tomb of Khaemhet (TT 57). Schott photo. 1975. *Courtesy the Griffith Institute, Ashmolean Museum, Oxford.*



2. Book of the Dead papyrus vignette of Paqerer, Leiden T4 *Courtesy of the Rijksmuseum van Oudheden, Leiden, through Dr. M. J. Raven*



Female mourners in the tomb of Hori (TT 259). Schott photo. 5988. *Courtesy the Griffith Institute, Ashmolean Museum, Oxford* (p. 228)

EARLY SQUEEZES MADE IN THE TOMB OF KHAEMHET

The Griffith Institute has 143 squeezes (on average 43 by 32 cm) made in the tomb of Khaemhet, some repeating the same detail. The majority of them were made by the English collector Revd. Henry Stobart sometime in 1854-5; the author of the others, probably dated to the 1880s or 1890s, is not known. Many preserve parts of scenes or details (marked by an asterisk*) now lost, but only a detailed comparison with the reliefs still in the tomb or the promised publication can make this statement more precise.

PM	*(6)	Gr. Inst. squeezes I.I; 4.1-2, 68
	(7)	43
	*(10)	449
	*(11)	1.2-6; 4.4-8, 56, 68A, 68B
	(12)	1.7; 4.3 ² -5
	*(13)	4.21-31
	(14)	4.20
	*(15)	1.8-9; 4.9-19, 55
	*(16)	1.10; 4.3 ⁶ -7, 50-2
	*(17)	1.11; 4.3 ⁸ -9
	*(18) and (19)	1.12; 4.40-3, 48, 60, 62-4
	*(20)	4.47, 57
	*(21) and (22)	1.15; 4.44-6, 53, 58, 61, 65, 68C
	*(23)	4.54
	*(24)	4.66-7
	(25)	1.13
	*(27)	1.14; 4.59, 68D.

J. MALEK and E. MILES

An artistic interpretation of Sety I's war reliefs

In this investigation of the war reliefs on the northern exterior wall of the Hypostyle Hall at Karnak the artistic data are used as primary sources, with consideration given to the composition of the scenes and the layout of the registers. It is concluded that the reliefs on the eastern side of the doorway record three separate campaigns and that the registers read in ascending order. On the opposite side, where again three distinct campaigns are shown, the order is also upward.

IN an article on the campaigns of Sety I published in this Journal some forty years ago, Faulkner felt a need to justify another enquiry into the wars of Imperial Egypt.¹ In its close examination of the reliefs at Karnak that article considerably increased our understanding of these wars, and there is now agreement on a number of key issues. There is still debate on others, most notably the number of campaigns recorded and their chronological order. Moreover, the nature of the problem sustains uncertainty, and despite the recent publication of a monograph² to accompany the Epigraphic Survey's documentation of the reliefs,³ the

¹ R. O. Faulkner, *JEA* 33 (1947), 34.

² W. J. Murnane, *The Road to Kadesh. A Historical Interpretation of the Battle Reliefs of King Sety I at Karnak* (Chicago, 1985).

³ *Reliefs and Inscriptions at Karnak (IV). The Battle Reliefs of King Sety I* (Chicago, 1985).

present writer feels that there is reason enough for another contribution to their interpretation.¹

The scenes occupy the northern wall of the Great Hypostyle Hall, both on the east and west sides of the doorway and extending around the east and west corners, so that the arrangement is perfectly symmetrical.² Originally each half contained four registers, but the top ones, which seem to have contained offering scenes, now exist only as scattered fragments on the ground,³ while the third register comprises a single scene and scraps of others.⁴ The scenes around the western corner are almost completely concealed behind a later wall of Sheshonk I.⁵

There is no dispute that the record begins with the middle scene of the bottom register on the east side, where the king is shown routing a horde of Shasu⁶ before moving leftward along the register past Rafa⁷ to the city of Gaza,⁸ where more Shasu are slain. At this point, scholars fail to agree on the interpretation of events on the east side, which in turn affects how the register order is to be read on the west side. Faulkner believed that the registers on the east commemorated only two campaigns, the confrontation with the Shasu being a preliminary stage of the war of Year I, which is represented in the second register directly above the one containing the Shasu scenes.⁹ The second campaign would have filled the now lost third register, and shown Sety capturing Amorite ports before moving eastwards to strike at Qadesh on his third campaign, an action leading inevitably to a clash with the Hittites, but only after Sety had defeated the Libyans in the Delta in a quite separate operation.

Subsequent opinions have varied. One view is that each register records a separate campaign (so that there are six in all) and that the order is upward on both sides of the doorway.¹⁰ Another accepts the downward sequence on the west side, but interprets the whole of the reliefs on the east side as belonging to a single campaign of Year I.¹¹ Murnane considers that the registers on the east side depict separate campaigns, with the operation against the Shasu distinct from the one which took Sety as far as the Lebanon, whilst on the west side the registers are most probably to be read from top to bottom.¹²

The data will admit each of these diverse interpretations. However, one profitable source of assistance has been largely neglected: the scenes themselves, their composition and structure have not been scrutinized. It is important to recognize the specific intentions of these reliefs. They are not only a historical record of Sety's wars, but an artistic monument where the types of scenes used, the mode of representation and the position of the components, especially the king and his chariot, really do matter. Each register is carefully designed as if after a formula, with the scenes farthest from the doorway showing the king in the most distant locations from Egypt, and those alongside the doorway depicting him back

¹ I am grateful to Professor A. B. Lloyd for his comments on the draft of this article.

² *Reliefs* IV, 1.

³ *Ibid.* 115-29.

⁴ *Ibid.* pls. 14, 22, 23 and 26.

⁵ Kent R. Weeks, *Oriental News and Notes* no. 15 (March 1975), 1-4, and A. J. Spalinger, *JARCE* 16 (1979), 33-4.

⁶ *Reliefs* IV, pl. 5.

⁷ *Ibid.* pl. 4. A. H. Gardiner, *JEA* 6 (1920), 113 suggested that the city was Rafa, although no inscriptions specifically identifying it have survived. Few doubt the identification.

⁸ *Reliefs* IV, pl. 3. The city here called Pakanaan is modern Gaza. See W. Helck, *Die Beziehungen Ägyptens zu Vorderasien im 3 und 2 Jahrtausend v. Chr.*² (Wiesbaden, 1971), 275, 276 and 304 and also H. J. Katzenstein, *JAOS* 102 (1982), 111-13.

⁹ Faulkner, *op. cit.* and *CAH* II, 2 (3rd ed.), 220.

¹⁰ G. A. Gaballa, *Narrative in Egyptian Art* (Mainz, 1976), 100-6.

¹¹ Spalinger, *op. cit.* 29-47.

¹² *The Road to Kadesh*, 70-6, 80.

in Egypt, in the presence of the gods. Furthermore, the scenes are pictographically integrated so that what occurs in the mythological world of the gods is seen to have its origins on campaign. The presentation scenes at the end of the registers are mythical in nature, while the other scenes deal with temporal and practical assertions of Pharaonic ascendancy. Here, as a whole, there is a distinction between two functional genres. Scenes which chronicle historical events tend to be farthest from the doorway, representing the king confronting foreigners, mostly in battle. Another set of scenes, primarily concerned with the register structure, contains artistic devices especially devised and positioned to ensure that the narrative is transmitted in a highly developed picture form from the foreign terrain to the very heart of Egyptian civilization in the temple at Karnak. In these, depiction of the king, alone or in his chariot, is the main method of ensuring that the narrative runs continuously from one end of the register to the other. The purpose of these scenes is well demonstrated by the representation of Sety binding captives in the middle of the upper register on the east side¹ and, in the following scene, carrying them to his chariot.² In these connecting scenes the depiction of the king often differs from the more canonical representations, purely for artistic effect, whilst the chariot several times supplements the king as the principal linking device.

The twin function of the king and chariot is well observed at Rafa, where the head is turned through a 180° angle, and in a cognate representation in the Hittite series on the west side.³ It is the direction of the chariot, however, which is of particular interest in the Rafa scene; for it faces the doorway, and thereby 'Egypt', although it is beyond dispute that the reliefs in this part of the register run leftward. The combination of the king and his chariot here and in the Lebanon scene above strongly suggest that the artist is using them to signify that the direction taken by Sety is being altered or is subject to change. In both the king faces outward, in accordance with the direction of the reliefs in this section of the register, but the chariot, faces Egypt. In both constructions Pharaoh and his vehicle are purposely closely interconnected. In the Lebanon the king holds the reins and at Rafa he is actually on the chariot platform. It is true that the chariot is acting as a throne base,⁴ but it is also evident that the artist attached significance to its placement and that it has a structural role in the register.

It is a crucial fact that the Lebanon, shown at the farthest end of the upper register, is the most distant location at which the king is shown in the register. The position of the chariot in relation to the king implies that it is not to proceed any farther northward within the framework of this register, and, by implication, is ready to carry the king back to Egypt. Visually, and as an artistic device, the chariot links with the representation in the register's penultimate scene and thus acts as the artistic, as well as the actual, mode of conveyance from foreign terrain to Egyptian temple.

The interpretation of the scene showing the king in the vicinity of Rafa is more complicated because it is part of a block of scenes where the movement is undeniably outward. The direction of the chariot (facing right) therefore runs counter to the route northwards into Canaan which the king is taking. If the scene simply portrayed a stage of the northward advance and nothing more, there would be no obstacle to placing the unit to face left. There must, therefore, be an underlying motive for the chosen direction and the most credible explanation is that the chariot is functioning exactly as it does in the Lebanon scene above. Clearly, there is an anomaly here because the chariot is in reverse position at

¹ *Reliefs* IV, pl. 12.

² *Ibid.* pl. 13.

³ *Ibid.* pl. 35.

⁴ See A. R. Schulman, *JSSSEA* 10.2 (March, 1980), 151.

Rafa yet the accompanying inscriptions state that Sety waged the war as far as Gaza.¹ The reason for this lack of historical and artistic synchronization probably lies in the nature of the Gaza scene. This shows the sovereign charging into the disordered Shasu so that the chariot cannot hold the reverse position in the scene, and the closest convenient site in this farther end of the register has been chosen as a substitute and the chariot reversed at Rafa. The chiefs and their gifts may be intended to lessen the ambiguity presented by the chariot's position, which is simply a structural device, for they symbolize Rafa's allegiance as Pharaoh passes by to chastise the recalcitrant city of Gaza.²

This interpretation of the depiction of the king and his chariot permits a reappraisal of the historical facts recorded. If the chariot in these two scenes anticipates a return to Egypt and marks the end of the advance into foreign territory, then each register commemorates a separate campaign ending at the farthest point recorded in the register.

Other factors would seem to support this conclusion. Smith observed how a horizontal borderline separates the Pakanaan scene from the Lebanon one above,³ and this firm adherence to the registerial arrangement, where elsewhere in the scenes groundlines are beginning to be discarded, tends to weaken the connection of the various layered sections in time and space, at the expense of overall integration, with the implication that they are intended to be separate from one another. Moreover, in the journey scene of the lower register,⁴ the captives are exclusively Shasu, who are also the only ones shown in the presentation scene,⁵ Above, the register contains a reference to the destruction of Beduin lands, as well as Retjenu, but the prisoners are Asiatics.⁶

Those who take the view that the two lowest registers on the east side record one campaign are obliged to regard the confrontation with the Shasu as a preliminary stage of the northward advance, and thus underestimate the real threat they posed. Spalinger, for example, sees them as nothing but an irritant to the Egyptians,⁷ whereas Giveon was of the opinion that they were a serious threat to Egyptian interests in Palestine.⁸ He drew attention to the inscription in the penultimate scene, 'the Shasu enemies are plotting sedition. Their tribal leaders are gathered in one place, standing on the foothills of Khor (Palestine), and they are engaged in turmoil and uproar; one of them is always killing his fellow. They do not consider the laws of the palace'.⁹ Here it is made plain that Sety was compelled to act against a dangerous foe bringing instability to Sinai, which tends to refute any notion that this was some insignificant prelude to a war farther north and points to its being a critical military operation in its own right. It is also interesting to note that the inscriptions record that the hills of the rebels could not be passed because of Shasu.¹⁰

Claims that the historical events in the upper register carry on from those below rely largely on speculation and assumption. The argument depends on the fact that both

¹ *KRI* 1, 8: 8-9, and *Reliefs* IV, 7.

² Murnane, *op. cit.* 57-9 notes that the inscriptions accompanying the scene display the usual mode of Egyptian triumphalism, and conjectures that the tribute displayed here may be some type of backsheesh. It is possible that the scene is an artistic interpolation to relieve monotony, as suggested by the Epigraphic Survey, *op. cit.* 3, although the present writer believes such a purpose unlikely.

³ W. Stevenson Smith, *Interconnections in the Ancient Near East* (New Haven, 1965), 170.

⁴ *Reliefs* IV, pl. 6.

⁵ *The Road to Kadesh*, 58 and *Reliefs* IV, 25.

⁶ *Reliefs* IV, 41-3.

⁷ *Op. cit.* 30.

⁸ R. Giveon, *Les Bédouins Shosou des documents égyptiens* (Leiden, 1971), 59.

⁹ *KRI* 1, 9: 3-5; *Reliefs* IV, 20-1.

¹⁰ *KRI* 1, 7: 1-2; *Reliefs* IV, 14.

Yenoam¹ and the Lebanon lie on a northward route from Gaza, and more particularly, on the fact that a disturbance at a town called Yenoam is mentioned in the First Bethshan Stela as having been quelled, along with other disorder in the region, in Year I.² However, there is no firm evidence for Sety being in the Lebanon during his first year, and one opinion, at least, is that he did not reach that far north until about the Year 3.³ Furthermore, the need for a second sortie against Yenoam has never been discounted by historians. The events depicted could equally refer to a time after Year 1.⁴

Attempts to use the artistic data to explain a single campaign spread over two registers are to be met with even greater scepticism. It has been claimed that the presence of a scene showing the king departing from Egypt in the lower register and the exclusion of such a scene above means that the events in the upper register continue those below.⁵ Although the so-called departure scene in the Shasu series is not clearly identified, it can be assumed it is represented by the middle scene, where Sety confronts the Shasu for the first time. It is wrong, however, to describe it as a departure scene and its general structure adheres to the standard model for a scene of the king engaging a foil of enemy warriors. It is quite distinct from those scenes, correctly described as representing the king's departure, which feature amongst the battle reliefs of Ramesses II⁶ and Ramesses III.⁷

Three campaigns are represented on the west side, but the order in which they are to be read is far from clear. Some commentators regard the order as being downward, with the king advancing inland towards Qadesh after taking the Amorite ports which are generally considered to have been the subjects of the missing top register on the east side. The tangle with the Hittites is thereby explained as a reaction to the taking of Qadesh. Supporters of an upward order would argue that the clash with the Hittites came because of the gains made on the northern coast of Amurru, before Sety reached Qadesh.

In both visual and practical terms, a top-to-bottom order might be thought the most logical presentation, as it would facilitate a straight transfer at one level from the east side, thus avoiding any disruption arising from a diagonal crossing of the doorway and enhancing the continuity of the narrative. Epigraphic considerations might also support this view.⁸ Yet New Kingdom narratives of Egyptian relations with foreigners had, up to this time, made use of an ascending registerial order, as the Punt Cycle of Hatshepsut,⁹ Haremhab's war scenes¹⁰ and the battle scenes on the east side all demonstrate. If the actual mode of depicting the events is considered alongside the known historical facts, the upward order seems more probable. The wars of Sety I were ended by a treaty with Khatti sometime after Year 6.¹¹ This probably agreed to a *status quo* with Qadesh and Amurru reverting to Hittite overlordship and the Egyptians retaining control over the seaports of southern Phoenicia. In spite of the brevity of Egyptian control over Qadesh, it probably

¹ For the location of Yenoam, see Helck, *Die Beziehungen*,² 133 and n. 64, and Y. Aharoni, *Land of the Bible*² (London, 1979), 53 and 177. A conflicting site has, however, been proposed by N. Na'aman, *Tel Aviv* 3-4 (1977), 168-77.

² KRI I, f2: 8: 12; *The Road to Kadesh*, 59-60.

³ K. A. Kitchen, *Pharaoh Triumphant. The Life and Times of Ramesses II* (Warminster, 1982), 22-4.

⁴ See *The Road to Kadesh*, 65-76 and Appendix 2.

⁵ Spalinger, op. cit. 31.

⁶ Wreszinski, *Atlas* II, pls. 56/56a.

⁷ Ibid. pls. 62b and 141a: *Medinet Habu*, I (Chicago, 1930), pl. 16.

⁸ *The Road to Kadesh*, 92-5.

⁹ E. Naville, *The Temple of Deir el-Bahari*, III (London, 1908), pls. lxix-lxxxvi.

¹⁰ *Atlas* II, pl. 161.

¹¹ *Pharaoh Triumphant*, 25.

marked the apogee of Sety's military operations in the Levant, despite recent evidence which suggests that he might have reached Hittite-held territory north of this city,¹ and it would not be surprising if the artists wished to conclude their record of the king's achievements on this high note. The full impact of Sety's emulation of the deeds of his great exemplar, Tuthmosis III, would also be best served by an uppermost location, especially as the finale would show the king at his greatest moment of triumph presenting captives and spoil to the Egyptian gods.

An ascending order also best suits the Hittite campaign. Here Sety is shown killing a Hittite official who is possibly Šarruma, King of Carchemish,² while many of the latter's troops are also casualties of Pharaoh or are taken captive. Within a historical narrative which has tried throughout to imbue the reliefs with a degree of actuality it would be somewhat perverse, and out of character, to show Sety inflicting the severest of beatings on the representatives of a power acknowledged to be the equal of Egypt at this time, and which was able to force the Egyptian king soon to relinquish many of his most cherished gains in the north. Every sign—both artistic and historical—suggests a meeting of these two great rivals at a place south of Qadesh and prior to the Egyptian conquest of that city. There Sety was able to enjoy a brief period of ascendancy over his adversary before the taking of Qadesh caused the Hittites to bring the full force of their military machine down on the Egyptian garrisons occupying the northern conquests.

A final problem remains on this west side, namely the Libyan adventure of the middle register. It is difficult to be sure whether it depicts actual events or not. The trouble that subsequent Pharaohs had with the Libyans supports the view that these reliefs are factual, presaging those later problems. In its own right, however, the register has an important function, for it separates the two northern campaigns, thus making it clear that they are distinct entities.

No single piece of evidence is able to determine for certain the number of campaigns on the east side of the doorway or the chronological order on the west. But, our most reliable source has to be the reliefs themselves, supplemented by the accompanying inscriptions, for they represent a near-contemporary log, especially if the representations were completed in the first half of the reign.³ It is a pertinent fact that an inscription accompanying the most esoteric part of the reliefs—namely the Shasu campaign—has the definite function of delineating the area of conflict by stating 'the devastation which the energetic forearm of Pharaoh, l.p.h. made of Shasu enemies, from the fortress of Tcharu (Sile) to the Canaan.'⁴ On the evidence presented here, it would seem that the artists, too, especially intended to implant the geographical limits of each campaign into their pictorial record. On the west side no such lavish structural arrangement was necessary, but here, as elsewhere, it was the artist's duty to maximize his lord's power and prestige. How better could these twin aims be achieved than by depicting at the highest level on the wall Pharaoh at the zenith of his achievement, recapturing Qadesh and re-establishing Egyptian control over an area which had lain outside its sphere of influence for over a hundred years? Now truly Sety was a conquering Pharaoh!

CLIVE BROADHURST

¹ *The Road to Kadesh*, 92-5.

² Spalinger, *op. cit.* 35, but note Murnane's remarks, *op. cit.* Appendix 4.

³ Kitchen, in E. Endesfelder *et al. Ägypten und Kusch* (Berlin, 1977), 215.

⁴ KRI I, 8: 8-9; *Reliefs* IV, 7.

Belzoni, the Egyptian Hall, and the date of a long-known sculpture*

The black granite head British Museum EA 956 is identified as a sculpture exhibited by Belzoni at the Egyptian Hall, Piccadilly, in 1821. The possibility of a Libyan rather than Tuthmosid date is proposed for the piece.

ON Saturday, 8 June 1822, the auctioneer 'Mr. Robins' offered for sale a miscellaneous collection of Egyptological material, the property of a 'Mr. John Belzoni'.¹ The venue of the sale, the Egyptian Hall, Piccadilly, offers a clear indication as to the nature of this collection: pieces included the previous year in his 'Egyptian Tomb' exhibition – perhaps the first exhibition ever organized around an ancient Egyptian theme – by the noted adventurer Giovanni Battista Belzoni.² Despite the great interest of this material, the fate of the majority of the antiquities auctioned by Robins remains uncertain. One of the very few pieces which might today be recognized from the Belzoni sale³ forms the subject of the present note.

The head illustrated in the accompanying photographs (pls. XXXIII–XXXIV), though fragmentary, has long ranked among the more accomplished specimens of Egyptian sculpture in the British Museum, where it bears the number EA 956.⁴ Worked in a hard, black granite, now recomposed from fragments and lacking only its nose and small sections to the right-hand side and rear of the head, the piece measures 26.5 cm high, 27 cm across and some 25.5 cm from front to back. To judge from its long, striated, tripartite wig, decorated with a double-looped uraeus, the head is that of a female deity or high-ranking member of the royal family. The face is plump, with wide, rather flattened lips and a 'sweet' expression; the eyes are relatively small, with gently arched eyebrows, upper eyelids and cosmetic lines modelled in relief. The type of figure to which the head was originally attached is not immediately apparent, though the likelihood must be that it was human in

*For their comments on an earlier draft of this note, thanks are due to Cyril Aldred, J. R. Harris and J. H. Taylor; photographs are by Peter Hayman.

¹The title page of the sale catalogue, which has escaped the major Egyptological bibliographies, reads: *A Catalogue of the Collection of Antiquities, the Fruits of the Researches of Mr. John Belzoni, in Egypt, Nubia, &c. ... which will be Sold by Auction, by Mr. Robins, (of Warwick House, Regent Street), at the Egyptian Hall, Piccadilly, on Saturday, 8th June, 1822, at Twelve o'Clock* (London, 1822) (hereinafter Robins, *Belzoni Sale*). Details of the Belzoni collection had previously been circulated in a pamphlet entitled *Catalogue of the Various Articles of Antiquity, to be Disposed of, at the Egyptian Tomb, by Auction or by Private Contract. The Casts of Bas Relief, &c.; together with All the Collection; Part of the Product of Mr. Belzoni's Researches in Egypt, Nubia, &c., Will be Sold after the 1st of April, 1822* (London, 1822) (hereinafter *Belzoni Catalogue*). Copies of both publications are preserved in the British Library.

²W. R. Dawson and E. P. Uphill, *Who Was Who in Egyptology*² (London, 1972), 23 f., with bibliography.

³A second object from the Belzoni sale is British Museum EA 8524, a polychrome shabti box of late New Kingdom date belonging to an *imy-r shyty(w) n pr Imn* by the name of Penrenu (*Pn-rmw*, var. *P3-rmw*); this piece was presented to the British Museum by the brother of George Gwilt (for whom see further below), Joseph G. Gwilt, together with a note on its origin ('A sepulchral Box Egyptian – Presented by Joseph Gwilt Esq. of Abington Street – Purchased by him at Belzoni's Sale'), some time prior to his death on 13 September, 1863. It appears to be one of the 'Two wooden Boxes, ... painted and well preserved' which formed part of lot 17 of the Belzoni sale (Robins, *Belzoni Sale*, 9), previously exhibited at the Egyptian Hall, Piccadilly, among the contents of case no. 9 (*Description of the Egyptian Tomb discovered by G. Belzoni* (London, 1821), 14; cf. *Belzoni Catalogue*, 8). A third piece from the Belzoni sale, brought to my notice by J. H. Taylor, is the anonymous coffin British Museum EA 6700 (attribution from Birch's catalogue 'slip' describing the piece; for the coffin see most recently A. Niwiński, *21st Dynasty Coffins from Thebes. Chronological and Typological Studies* (Mainz am Rhein, 1988), 150–1, no. 255). This coffin is perhaps to be recognized as *Belzoni Sale*, 8 f., lot 15; cf. *Description of the Egyptian Tomb*, 15, no. 11, and *Belzoni Catalogue*, 9, case, no. 11.

⁴Cf. T. G. H. James and W. V. Davies, *Egyptian Sculpture* (London, 1983), 65, fig. 71; Uni-Dia slide catalogue, no. 32.012.

form and was represented either standing or seated.¹ Vandier, perhaps influenced by the apparent height of the shoulders, had suggested that EA 956 was originally the head of a sphinx;² the line of the back of the head, however, would appear to rule out this possibility.

The head has usually been assigned, on the basis of style, to the mid-Eighteenth Dynasty.³ According to Budge,⁴ it had once formed part of the Belzoni collection, and was perhaps from Thebes. Although the suggested provenance seems to have been a mere guess on Budge's part, his reasons for associating the piece with Belzoni prove to be more securely based. Budge evidently gleaned his information as to its earlier history from a marginal note by Birch on his MS 'slip' describing the piece,⁵ where it is 'said to come from Belzoni's Collection'. The attribution is confirmed by reference to the Accessions Register of the Department of Egyptian Antiquities,⁶ which reveals that the head arrived at the Museum, apparently via the dealer Rollin,⁷ from the collection of the architect George Gwilt. This collection was auctioned by Sotheby's on 20 May 1875,⁸ when, it seems, EA 956 formed part of lot 55, described as the 'Stone Head of an Egyptian Mummy, *from Belzoni's Collection*'.⁹

The Belzoni association may therefore be regarded as sound, and EA 956 with some confidence identified with Robins' lot 25: 'A most beautiful Head of black Basalto, a little mutilated in the nose, a fine Specimen of the early Arts'.¹⁰ As noted above, this and the remainder of the material auctioned by Robins had previously been shown by Belzoni at the Egyptian Hall, the antiquities there displayed being briefly mentioned in the *Description of the Egyptian Tomb*.¹¹ The piece under discussion is recognizable as that exhibited with the contents of case no. 8: the publication describes it as 'a most beautiful head of black basalt', and adds the significant, if somewhat surprising, information that it had come, not from Thebes as has generally been assumed, but 'from Sais'.¹²

Although Belzoni appears to have left no record of visiting Sais,¹³ it seems incautious to dismiss such a specific attribution out of hand. A Saitic origin nevertheless raises a number of questions, not least as to the validity of the date generally put forward for the piece: if both

¹ The suggestion put forward by James and Davies, *Sculpture*, 64, caption to fig. 71, that the piece is 'perhaps part of a group statue', finds no independent support.

² J. Vandier, *Manuel d'archéologie égyptienne*, III (Paris, 1958), 370, n. 1 (numbered in error EA 64356). Vandier perhaps had in mind as a parallel the Cairo Tutu-sphinx of Amenophis III (CG 42088: PM II², 139), which is, nevertheless, bearded and in conception quite different from the head EA 956.

³ Cf. British Museum, *A Guide to the Egyptian Galleries (Sculpture)* (London, 1909), 135, no. 476 ('XVIIIth dynasty'); Betsy Bryan, *The Reign of Tuthmosis IV* (unpublished PhD thesis, Yale University, 1980), 280 with pl. 27 (temp. Tuthmosis IV); James and Davies, *Sculpture*, 64, caption to fig. 71 ('carved in the tradition of royal portraiture of the mid-Eighteenth Dynasty'); Uni-Dia 32.012 ('Hatshepsut(?'); Vandier, *Manuel*, III, 370, n. 1 (pre-Amarna).

⁴ British Museum, *Guide (Sculpture)*, 135, no. 476.

⁵ In the British Museum's Department of Egyptian Antiquities.

⁶ S.v. the registration no. 75-7-17, 2.

⁷ Cf. the priced copy of the Gwilt sale catalogue (next note) in the British Library. For Rollin, cf. Dawson and Uphill, *Who Was Who*, 252.

⁸ Sotheby, Wilkinson and Hodge, *Catalogue of the Contents of the Museum and Studios of the late George Gwilt, Esq. F.S.A. of Union Street, Borough, the well-known Architect and Antiquary; ... which will be Sold by Auction... on Thursday, the 20th day of May, 1875, at one o'clock precisely* (London, 1875).

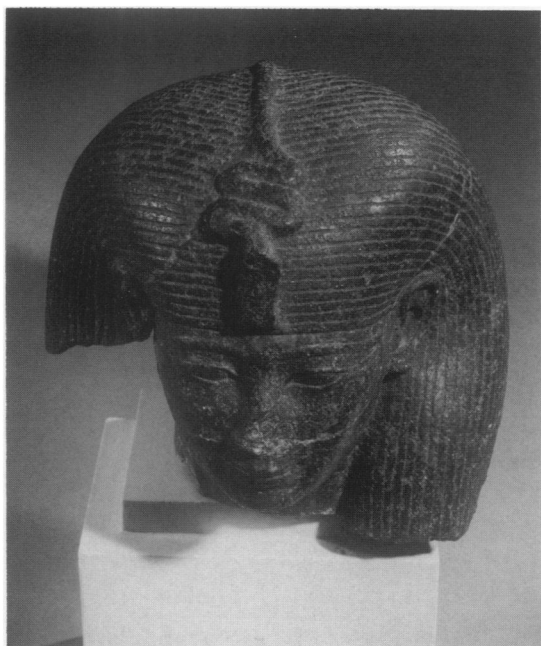
⁹ *Ibid.* 6.

¹⁰ Robins, *Belzoni Sale*, 10; cf. *Belzoni Catalogue*, 8, where the piece is described as 'A most beautiful head of black basalt, mutilated in the nose, but gives a most correct idea of the fine arts in the ancient times'.

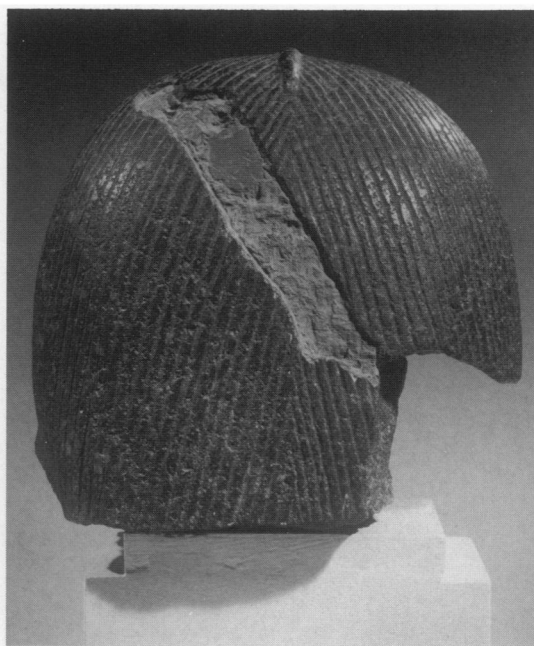
¹¹ *Description of the Egyptian Tomb*, 14 f.

¹² *Ibid.* 14.

¹³ Sais (Sa el-Hagar) is not mentioned in Belzoni's *Narrative of the Operations and Recent Discoveries within the Pyramids, Temples, Tombs, and Excavations, in Egypt and Nubia* (London, 1820), or in any of the biographies of him (for which see p. 235 n. 2), or, to my knowledge, in any of the contemporary accounts of his travels.



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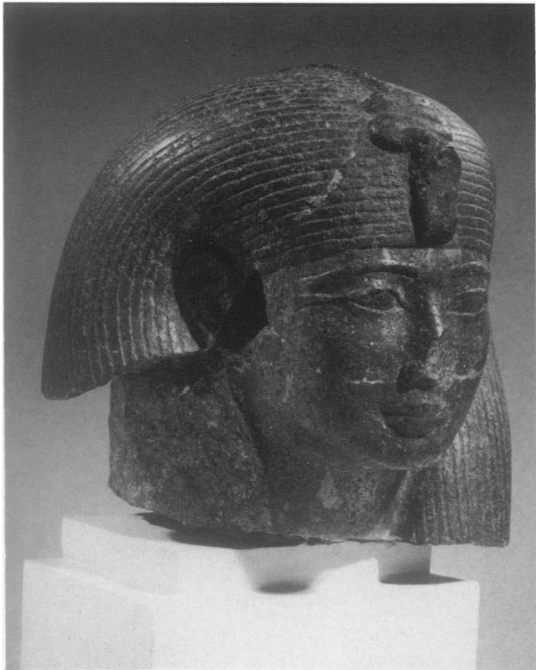
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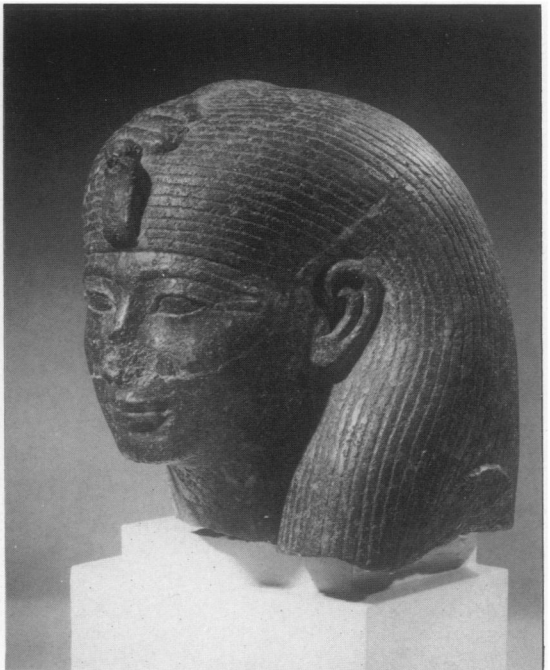
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British Museum EA 956, *courtesy of the Trustees of the British Museum* (pp. 235-7)

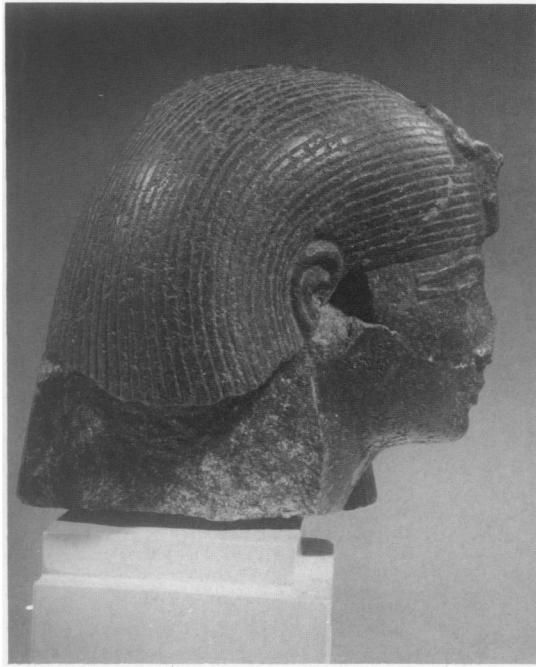
BELZONI, THE EGYPTIAN HALL, AND THE DATE OF A LONG-KNOWN SCULPTURE



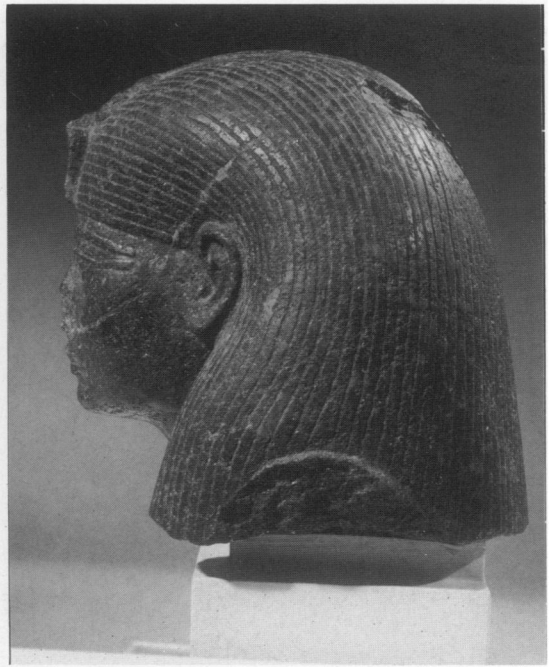
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British Museum EA 956, *courtesy of the Trustees of the British Museum* (pp. 235-7)

BELZONI, THE EGYPTIAN HALL AND THE DATE OF A LONG-KNOWN SCULPTURE

Belzoni's provenance and the current dating of the head are accepted as essentially correct, EA 956 will rank as by far the earliest sculpture known from the site.¹



One way in which this apparent conflict between provenance and supposed date might be resolved would be to see in EA 956 a sculpture in Eighteenth Dynasty style rather than of Eighteenth Dynasty workmanship. The degree to which an archaizing piece reproduces the character of the work by which it was inspired naturally varies considerably. Influences are for the most part indirect, but a number of sculptures of the Third Intermediate Period recall so faithfully their Eighteenth Dynasty models that, had the statues been uninscribed or the heads found in isolation from the whole, good stylistic reasons might have been presented for assigning to them this earlier date.² If EA 956 is indeed to be regarded as an archaizing piece, it would lie most comfortably in the Libyan period when a revival of Tuthmosid forms is clearly to be discerned³ and where in its type the sculpture finds at least one suggestive parallel.⁴

C. N. REEVES

Zwei Bemerkungen zu Gebel es-Silsila Nr. 100

The stela of Shoshenq I at Gebel es-Silsila contains a verb *mtj* that has been considered as an early example of *mtj/mtr*, 'to be pleased' (attested mainly in demotic). This paper tries to show that it belongs to the stem *mtn/mtn*, 'to reward'. A writing of the infinitive of *jrj* on this same stela as *jr.nm* is attested several times at the beginning of the Twenty-second Dynasty.

1. Ein verkannter Beleg des Verbs *mtn/mtn*, 'belohnen'

IN der zuletzt von R. A. Caminos publizierten Felsstele Schoschenks I. vom Gebel es-Silsila⁵ erscheinen in zwei parallel gebauten Passagen in Z.35 und Z.38 folgende Sätze: 'Mögest du [= Amun] veranlassen, daß die in Millionen Jahren kommenden (Generationen) sagen werden: "Nützlich ist es, Amun zu dienen"',  (Z.35) bzw.  (Z.38). Caminos übersetzt diese Sätze: 'Mayest thou be pleased to accord me a great reign' bzw. 'might and victory' (p. 50)⁶ und erläutert (p. 54) 'lit. "mayest thou agree upon making for me a great reign". The meaning of *mtj* here and below line (38) is hesitatingly suggested by Sir Alan Gardiner in the light of demotic *mti* "to be pleased"... Preposition *n* is for *m* introducing the object of *ir(t)*'.

¹ Cf. PM IV, 46; J. Málek, *LÄ* v, 355-7, n. 18; J. Baines and J. Málek, *Atlas of Ancient Egypt* (Oxford, 1980), 170.

² Notably the statuette of Osorkon III from the Karnak cachette (CG 42197: PM II², 143) which, as Cyril Aldred has noted (*Egyptian Art* (London, 1980), 210; cf. *Les Pharaons*, III, *L'Égypte du crépuscule* (Paris, 1980), 128), 'Even in such details as the design of the belt, the uraeus and ear-lobes, ... follows a mid-Eighteenth Dynasty prototype.' Cf. also J. R. Harris, *Egyptian Art* (London, 1966), 41, pl. 50.

³ Cf. H. W. Müller, *BiOr* 10 (1955), 32; B. V. Bothmer, *JEA* 46 (1960), 3 ff.

⁴ Cairo CG 42228, the seated statue of Shebensopdet, daughter of Nimlot, son of Osorkon III, from the Karnak cachette (PM II², 149; Ramadan el Sayed, *ASAE* 65 (1983), III ff.; K. Jansen-Winkel, *Die ägyptische Biographien der 22. und 23. Dynastie* (Wiesbaden, 1985), II, 520 ff., pls. 37-40).



⁵ *JEA* 38 (1952), 46-61.

⁶ Entsprechend auch U. Kaplony-Heckel in: *Texte aus der Umwelt des Alten Testaments*, I (Gütersloh, 1985), 555-6.

In der hier postulierten Bedeutung 'einverstanden, zufrieden sein' kommt das sonst in der klassischen Sprachstufe durch 'richtig sein, genau sein' wiedergegebene *mtj*¹ tatsächlich schon in der 22. Dynastie vor, s. I. E. S. Edwards, *Oracular Amuletic Decrees of the Late New Kingdom* (London, 1960), I, 48–9, n. 25 = II, pl. xvii: *jw.j (r) djt mtj hstj NN... (m) jm.w* (L7, Z.45–8); *ibid.* I, 78 = II, pl. xxx: *jw.n (r) djt mtj hstj NN... (m) jm.s* (P1, vso, Z.2–6). Ähnlich *ibid.* I, 78 = II, pl. xxix (P1, rto, Z.16–9). Allerdings ist es in dieser Bedeutung nur in der Fügung *mtj hstj* 'das Herz zufriedenstellen' belegt, und das trifft auch für das Demotische noch weitgehend zu, vgl. W. Erichsen, *Demotisches Glossar* (Kopenhagen, 1954), 190 und *id.* *Auswahl frühdemotischer Texte*, Heft 2 (Kopenhagen, 1950), 62. Es ist eine Wendung, die ganz offensichtlich der Urkundensprache angehört und die deshalb in diesem Kontext gar nicht zu erwarten ist. Außerdem wäre der Sinn der beiden Sätzchen nicht sehr überzeugend.

Es scheint mir einleuchtender, *mtj* hier als Schreibung von *mtn*, 'belohnen' (*Wb.* II, 170) aufzufassen:² 'Mögest du belohnen wegen dessen, was ich getan habe, mit einem großen Königtum' bzw., in Z. 38, '(mit) Kraft und Stärke'. Man muß allerdings in diesem Fall vor *qn nht* ein *m* ergänzen. Aber auch Caminos hatte ja ein ganz ähnliches Problem: In einem Fall (Z.35) nimmt er eine nota accusativi *m* an, im zweiten Fall (Z.38) stünde dagegen ein direktes Objekt. Zudem findet sich in Z.30 eben dieselbe Schreibung *qn nht* an einer Stelle, wo unbedingt (<*m*>) *qn nht* zu lesen ist. Es handelt sich also sowohl in Z.35 (*m njswyt*) als auch in Z.38 (<*m*>) *qn nht* um Präpositionalphrasen, die m.E. als Ergänzung zum Verb *mt(n).k* 'belohnen (mit)' gehören.

2. Eine besondere Schreibung des Infinitivs von *jrj*, 'machen'



Im Bildfeld der Stele ist ganz rechts der Hohepriester *Jwprwt* räuchernd dargestellt; diese Szene hat die Beischrift  'Räucherung machen für seinen Herrn'. Caminos (p. 53) bemerkt sehr treffend: 'The infinitive of *iri* must be meant, the two *n*'s after the eye sign being doubtless an error easier to emend than to account for'. Immerhin kann man feststellen, daß diese Schreibung (und vergleichbare wie ) mehrfach belegt ist, und zwar vor allem auf Särgen, die nach den von A. Niwiński aufgestellten Kriterien³ in die späte 21. bis frühe 22. Dynastie gehören, also in etwa dieselbe Zeit wie die Stele:

– 2 Belege (*jrj.nn qbhw/jrj.nn sntr*) stehen auf einem Sarg im Vatikan, publiziert von J. Capart in *Miscellanea Gregoriana* (Rom, 1941), 51–6 (s. Foto auf p. 53).

– 3 Belege finden sich auf einem Sarg in Krakau, publiziert von A. Niwiński in *BIFAO* 86 (1986), 257 ff.; Auf der Ausklapptafel, oben links: *jrj.nn sntr*; dto., unten rechts: *jrj.n sntr*; auf pl. xxxviii A: *jrj.nn sntr*.

– Auf dem Sarg Berlin Nr. 58 (G. Roeder, *Aegyptische Inschriften... Berlin* (Leipzig, 1924), II, 468, Z.7) ein weiteres Beispiel für *jrj.nn sntr*.

– 2 unsichere Fälle auf dem Sarg Berlin 11978 (*ZÄS* 39 (1901), Tafel iv, oben links und Tafel V, oben rechts): *jrj.n(n) mnzr* (vgl. *Wb.* II, 88, 8–10) zu lesen?

– Gleich 10 Belege hat der Sarg Nr. 621 des Náprstkovo Museum Prag (M. Verner, *Altägyptische Säрге in den Museen und Sammlungen der Tschechoslowakei* (CAA Prague, 1982), 206–80, und swar gibt es hier 7 Schreibungen mit einem *n* () und 3 merkwürdige Kompromißschreibungen mit *n* und *t* (): *jrj.n sntr*: Inschrift Nr. 100 (p. 254); *jrj.n(t) sntr*:

¹ Zum Stamm *mtj* s. J. Osing, *Die Nominalbildung des Ägyptischen* (Mainz, 1976), 643 ff.

² Zum Wegfall des *n* vgl. Caminos in diesem selben Aufsatz, p. 52 oben sowie G. Fecht, *Wortakzent und Silbenstruktur* (Glückstadt, 1960), §162 (mit weiterer Literatur).

³ *LÄ* v, 441–4; *21st Dynasty Coffins from Thebes* (= Theben 5).

Nr. 43 (p. 244); *jrj.n mdt*: Nr. 34 (p. 243), Nr. 59 (p. 246), Nr. 66 (p. 247), Nr. 78 (p. 250), Nr. 84 (p. 251), Nr. 93 (p. 253); *jrj.n(t) mdt*: Nr. 33 und 37 (p. 243).




Es ist nun bemerkenswert, daß einige der Opferdarstellungen dieses Sarges, zu denen die zitierten Infinitive als Beischriften gehören, eben diese Beischriften sogar in doppelter Ausführung tragen, und zwar in unterschiedlicher Orthographie: Parallel zu Nr. 33 (*jrj.n(t) mdt*) Inschrift Nr. 30 (p. 242 und 263: *jrj mdt*, also in der für diese Zeit üblichen Schreibung des Infinitivs ohne *t*), parallel zu Nr. 37 (*jrj.n(t) mdt*) Nr. 34 (p. 243 und 263: *jrj.n mdt*), zu Nr. 66 (*jrj.n mdt*) Nr. 62 (p. 247 und 270: *jrj mdt*), zu Nr. 84 (*jrj.n mdt*) Nr. 85 (p. 251 und 273: *jrj mdt*). Daraus geht deutlich hervor, daß all diese Varianten miteinander austauschbar sind.

Die Schreibung ist aber nicht auf die Übergangszeit 21./22. Dynastie beschränkt, obwohl sie dort auffallend häufig ist, sie kommt auch später vor:

– Statue Kairo CG 42231 (s. meine *Ägyptische Biographien der 22. und 23. Dynastie* (Wiesbaden, 1985), 546, oben, Z.4): *jrj.n qbhw*.

– Block Kopenhagen AEIN 1040 (s. L. M. und A. Leahy, *JEA* 72 (1986), 145): *jrj.n htp-dj-njswt*.¹

Die Erklärung all dieser Fälle, die sich zweifellos bei systematischer Suche noch vermehren ließen, kann nur darin liegen, daß wir es hier mit relativ frühen Belegen für den Anschluß des Objekts durch *m/n* zu tun haben:² Statt des üblichen *jrj sntr* (z.B.) (entsprechend * **ḫ CONTE**) wird *jrj (m >) n sntr* (entsprechend * **ḫIPE ḤCONTE**) geschrieben. Auffallend ist allerdings, daß diese Schreibung nur mit *jrj* vorzukommen scheint.

Zweifellos anders gelagerte Fälle sind die Schreibungen des Infinitivs von *jrj* als  in der Widmungsformel: *jrj.n.f m mnw.f...*   (*hwt-ntr* o.ä.) ..., wie sie häufig in den Inschriften des Chonstempels am Ende der 20. Dynastie vorkommen, s. *The Temple of Khonsu* (The Epigraphic Survey), I, pl. 52 (s. dazu p. 28, n.c. im Übersetzungsheft); pl. 53 oben; II, pl. 142, C; pl. 143, A; pl. 195; pl. 196; pl. 202 E. Hier folgt ja jeweils eine mit *n* beginnende Phrase auf den Infinitiv.

KARL JANSEN-WINKELN

Wahibreemakhet at Giza

The British Museum relief fragments BM 537-46, bearing Book of the Dead passages with appropriate vignettes, are discussed in the light of their past history and possible original context. Any link with 'Campbell's Tomb' (LG 84) at Giza is refuted; this probably dates to late Dynasty Twenty-six, while the British Museum blocks seem to come from the reign of Psammetichus I.

THE British Museum possesses a group of limestone blocks, BM 537-46,³ decorated in sunk relief, which come from a Late Period tomb in northern Egypt. De Meulenaere⁴ has

¹ Die Kenntnis dieses Belegs, den ich gleichfalls als Infinitiv verstehen möchte, verdanke ich einem freundlichen Hinweis von Dr. A. Leahy.

² Zu möglichen anderen Belegen für diese 'nota accusativi' aus derselben Zeit vgl. meine *Ägyptische Biographien*, 146 (35) und 265 (3).

³ I am grateful to the Trustees of the British Museum for permission to publish these pieces; to Dr Morris Bierbrier for access to them, comments and information from the museum records; and to Professor John Baines for his comments on a preliminary draft.

⁴ *Le Surnom égyptien à la Basse Époque* (Istanbul, 1966), 10 [27, 2]; *Bulletin du centenaire IFAO* (1981), 89.

assigned them to ‘Campbell’s Tomb’ at Giza (LG 84). If this were correct, the association would have broader implications both for our understanding of the enigmatic ‘Campbell’s Tomb’ and for the dating of Lower Egyptian tomb reliefs during the Late Period. However, the published accounts of the discovery of ‘Campbell’s Tomb’ do not support the identification, and I shall suggest that the blocks and the tomb belong to different phases of the Twenty-sixth Dynasty.

BM 537-46¹ form a unit from the walls of the tomb of the *sdꜣꜣwty bity* Wahibreemakhet, stated on the old mounting of BM 546 to be at Saqqâra. The British Museum has no information regarding the provenance: Saqqâra is not mentioned in their files, so is presumably a guess. All the blocks were acquired in a special purchase from Anastasi in 1839.² They fall into two groups,³ each bearing a continuous horizontal band of text with a borderline above and below, with an accompanying illustration; BM 537-44 bear only inscription, while BM 545 and 546 have additional vignettes.

BM 546, 537-40, forming a strip now *c.* 4.72 m long and read from left to right, give BD 36:



There is a damaged raised strip along the right edge of BM 539, but the text on BM 540 is a direct continuation of the spell. In addition to having the beginning to the text, BM 546 (pl. XXXV, 2) has a left-facing figure of the deceased, with head, shoulders, and raised right arm lost, spearing a large beetle. He wears a tight, mid-thigh-length, belted kilt, and the bottom of what appears to be the forward lappet of a striated tripartite wig is visible below his left shoulder.

BM 545, 541-4 form a strip *c.* 5.05 m long, reading from right to left; there is a raised vertical area along the left edge of BM 542, similar to that on BM 539, which isolates BM 541. The text is BD 33:



BM 537-46 and the ‘Campbell’s Tomb’ sarcophagus BM 1384,⁴ made no connection between spearing a serpent. His raised right arm and head are badly weathered, so that the facial features are obliterated, but he seems to have worn a shoulder-length wig and a kilt like that on BM 546. Both vignettes are appropriate to that section of the Book of the Dead particularly concerned with the repulsion of dangerous animals and insects.⁴

The owner of ‘Campbell’s Tomb’ (LG 84) is one Pakap, who bore the ‘beautiful name’ (*rn nfr*) Wahibreemakhet,⁵ to whom De Meulenaere also assigns the basalt sarcophagus

¹ See also E. A. W. Budge, *A Guide to the Egyptian Galleries (Sculpture)* (London, 1909), 237, Nos. 857-66 (= old exhibition numbers for BM 537-46), including measurements for the blocks, here converted into their metric equivalents.

² Museum records show that ‘Anastasi 1857’ painted on BM 545 is an error.






³ Not forming a single continuous line of text, as in S. Sharpe, *Egyptian Antiquities in the British Museum* (London, 1862), 99.

⁴ R. O. Faulkner, *The Ancient Egyptian Book of the Dead* (London, 1985), ills. on pp. 56-62.

⁵ For the tomb, named for the British Consul-General at the time of its discovery, see PM III², 290-1; most recently Wafaa el-Sadeek, *Twenty-Sixth Dynasty Necropolis at Gizeh* (Vienna, 1984), 126-32. For the owner, see De Meulenaere, *Surnom*, 10 [27].

BM 1384,¹ discovered in position in LG 84, and the statue ex-Liverpool M. 13901.² De Meulenaere seems either to have mistaken the BM slabs, with their single line of text, for those with a similar, more fragmentary, band of inscription, without illustrative vignettes, found on the subterranean walls of 'Campbell's Tomb', or to have assumed the same provenance.³ The two texts are, however, not the same. Budge, who earlier published both BM 537-46 and the 'Campbell's Tomb' sarcophagus BM 1384,⁴ made no connection between the two, and neither PM III², 290-1, nor Wafaa el-Sadeek⁵ associates BM 537-46 (or ex-Liverpool M. 13901) with LG 84.

The evidence which would allow the British Museum blocks to be connected with 'Campbell's Tomb' is tenuous. Analysis is not helped by the absence of a genealogy in both cases. However, there is no correspondence of titles. The owner of the Giza sepulchre bore several specific and uncommon titles concerned with royal estates and foodstuffs: *imy-r ss(w) cb nsw*,⁶ *imy-r zh(w)t Šmꜣw Mhw*, as well as *sꜣb*, *sš* and *hrp sš imy-r sš(w) cb nsw* is the only title on BM 1384. Ex-Liverpool M. 13901,⁷ which bore only the name of Wahibreemakhet, not qualified as a *rn nfr*, gave the titles: *smr wrty*, *hrp ch*, [*imy-r*] *h(w)t Šmꜣw Mhw*, *imy-r sš(w) cb nsw*, proving the donor to be the owner of LG 84. The Wahibreemakhet of BM 537-46 is styled simply *sdꜣwty bity*. As this title was probably honorific, at least in the Late Period,⁸ it may not be significant that Pakap, *rn.f nfr* Wahibreemakhet, does not mention it in his tomb or on his sarcophagus and statue, but it is the only title given to the owner of the British Museum blocks, which lack the rarer, more diagnostic titles in LG 84.

In 'Campbell's Tomb' and on BM 1384, Wahibreemakhet is specified as the owner's *rn nfr*, although it is used interchangeably with Pakap, without always being qualified as a *rn nfr*,⁹ a common practice. On the British Museum pieces Wahibreemakhet is not defined as a *rn nfr*, but this may simply be a case of alternation of names, with *rn.f nfr* omitted for one reason or another. The presence or absence of *rn.f nfr* cannot establish whether monuments belong together. However, its absence in both cases where Wahibreemakhet is *sdꜣwty bity* may favour the assumption that the groups are not associated. Additionally, the *-sh*t element in the name on BM 537 and 544 is written with , while the fully preserved examples in LG 84 and on BM 1384 and ex-Liverpool M. 13901 have the less frequent spellings , ,  or simply .

Neither Vyse's¹⁰ nor Perring's¹¹ detailed account of the clearance of the underground chambers of 'Campbell's Tomb' mentions anything resembling the figured vignettes. For Vyse, failure to record such a discovery would be surprising, as his account is largely in the

¹ El-Sadeek, *op. cit.* 131, 146 n. 86.

² *Surnom*, 10 [27.3]. See n. 9 below.

³ Cf. *LD* III, 277, d-f; *Text* 1, 101; identified as parts of PT 638a, 1607a, 580 and BD 178, and partially translated by el-Sadeek, *op. cit.* 131.

⁴ *Op. cit.* 230 [No. 827], pl. xxxi, 237.

⁵ See p. 240 n. 5 above. As she does not cite De Meulenaere's work, she may not have been aware of his theory.

⁶ For the reading of this revived Old Kingdom title, cf. De Meulenaere, *Bulletin du centenaire IFAO*, 87-9.

⁷ This was the lower part of a green basalt statuette which was destroyed in World War II. It consisted of the knees of a kneeling man clad in a short, finely-pleated kilt, holding the lower part of a shrine containing a mummiform figure identified in the Liverpool Museum records as Ptah. The back pillar and thick plinth were deeply inscribed. No photographs of the piece exist. I must thank Dr Piotr Bienkowski for providing me with copies of a drawing and handcopies of the texts, probably made by Newberry or Peet.

⁸ For reservations about the description of it as honorific in the Middle Kingdom, see S. Quirke, *RdE* 37 (1986), 123.

⁹ E.g. *LD* III, 277, e-f; on ex-Liverpool M. 13901 it is the only name.

¹⁰ *Operations Carried on at the Pyramids of Gizeh in 1837*, I, esp. 216-18; II, Appendix, 131-45 (London, 1840).

¹¹ *Pyramids of Gizeh*, III (London, 1842), 21-4.

form of a meticulous daybook. No superstructure was found. El-Sadeek¹ contends that none ever existed, but it is hard to believe that such a sizeable burial would not have had some accessible surface marker, however perfunctory, to provide a venue for offerings and prayers for the deceased.² Jaromir Malek (personal communication) has pointed out that the surface of the Giza necropolis near the pyramids had been well explored by numerous visitors before Vyse and Perring's excavations of the late 1830s, so that if BM 537-46 once formed part of a tomb superstructure, either to 'Campbell's Tomb' or to another in the vicinity, there would have been ample opportunity for the structure to have been completely dismantled and dissociated from the subterranean adjuncts, and for decorated blocks to have entered private hands, well before the discovery and clearance of LG 84. This could account for the relatively early date (1839 or earlier) when the British Museum blocks were in Anastasi's collection, but it has no bearing on the question of whether the owners of LG 84 and BM 537-46 are the same. If BM 537-46 are not connected with 'Campbell's Tomb', there is no reason to assume that they came from Giza, although a provenance in the general Saqqâra-Giza-Heliopolis region, from which relatively many Late Period tomb reliefs come, is likely. It is impossible to determine whether BM 537-46 came from the substructure or the superstructure of a tomb. 'Campbell's Tomb' provides an obvious parallel for the placement of a single line of text around the upper part of a subterranean room which had no other wall decoration.³ However, the amount of effort and manpower involved in clearing a Saite shaft⁴ favours a surface provenance for objects found by Anastasi's agents.

There are wider considerations in the linkage of LG 84 and BM 537-46, beyond the provision of an exact provenance for the British Museum blocks. Only a vague date is usually given for 'Campbell's Tomb'.⁵ If De Meulenaere is correct in contending that the Late Period basiliphorous *rn nfr*, a court name acquired during life, first appears under Psammetichus II,⁶ the Wahibre of Pakap's *rn nfr* must be Apries, and 'Campbell's Tomb' therefore dates to the later Twenty-sixth Dynasty (589-25 BC). If BM 537-46 are part of that structure, they too would date to the later Twenty-sixth Dynasty. The Wahibre in the name Wahibreemakhet without *rn nfr* qualification could, however, be Psammetichus I and the

¹ Op. cit. 126. She does not give her reasons for disagreeing with Vyse's belief (op. cit. 1, 148) that it had been plundered. The absence of ex-Liverpool M. 13901 from accounts of the tomb clearance is, of course, immaterial, as it would have been set up in a temple, perhaps at Memphis (the text invokes Ptah *hnt Tmnt*), rather than in a tomb.

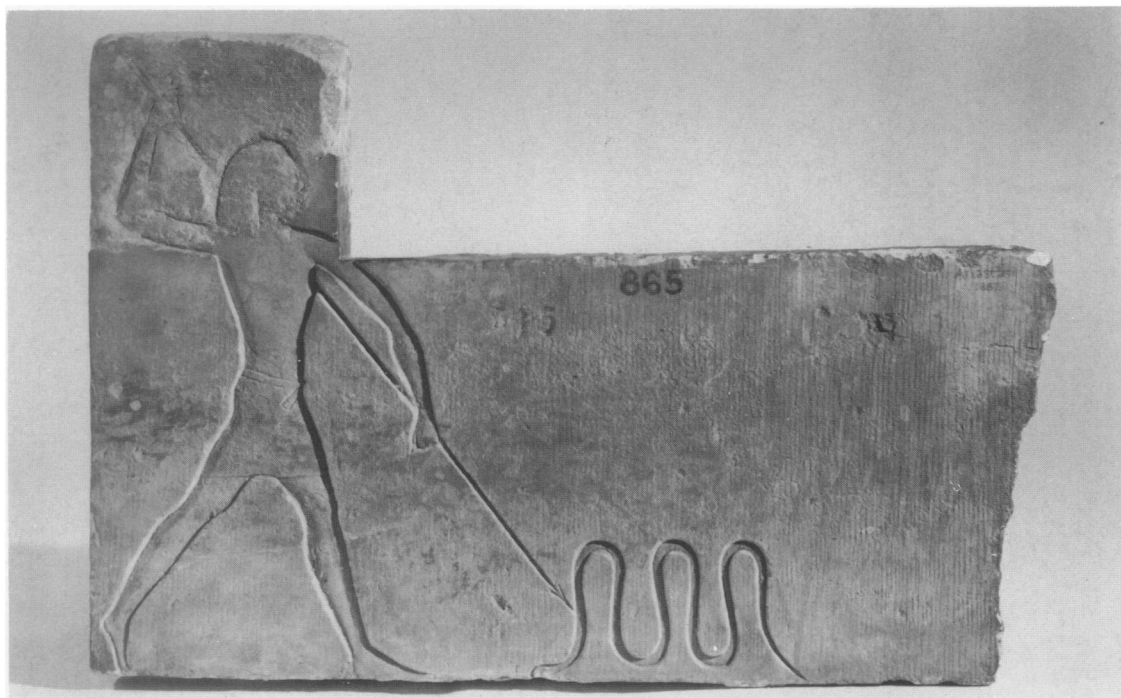
² E.g. E. Drioton and J.-P. Lauer, *ASAE* 51 (1951), 470 and pl. III, shows superstructure traces with the Saite shaft tombs at Saqqâra.

³ BM 537-46 need not have formed the sole decoration of a chamber; they could have stood at a wide interval above other texts (perhaps in vertical columns) or even vignettes. The dimensions of the room cannot be deduced from the British Museum blocks, since it is uncertain how much further the walls continued left of BM 546 and right of BM 545. They could have been arranged on three sides of a room, as in LG 84, with BM 546, 537-9 on the left and BM 545, 542-4 on the right when looking inward, with BM 540 and 541 meeting off-centre on a rear wall (c. 1.84 m long if no other elements intervened between them).

⁴ For instance, Vyse's account of the 'Campbell's Tomb' clearance shows a prolonged operation using varying numbers of men and roped tackle to clear the shaft, which was about 9.3 × 8 × 16.3 m deep. A. Barsanti's team (*ASAE* 1 (1900), 230) took ten days to remove the sand from a considerably smaller shaft (c. 7.1 × 8 × 5.5 m deep) at Saqqâra, and he mentioned the extreme difficulties of entering another caused by the constant inflow of sand. Similarly lengthy undertakings are described by G. Maspero, in *Art in Egypt* (London, 1912), 217; Barsanti in *ASAE* 3 (1902), 209, and *ASAE* 5 (1904), 69-70; see also Drioton and Lauer, op. cit. 469.

⁵ E.g. De Meulenaere, *Surnom*, 10: 'incertaine'; PM III², 290: 'Dyn. XXVI'; el-Sadeek, op. cit. 126-32, offers no suggestion beyond the Twenty-sixth Dynasty of her title. M.-L. Buhl, *The Late Egyptian Anthropoid Stone Sarcophagi* (Copenhagen, 1959), 213 (cited by De Meulenaere), places BM 1384 in the reign of Psammetichus I, without specific arguments.

⁶ *Surnom*, 27-30. In his additional study, *OLP* 12 (1981), 127-34, he affirms (p. 132) that new material corroborates his earlier work.



1. British Museum EA 545, *courtesy of the Trustees of the British Museum*



2. British Museum EA 546, *courtesy of the Trustees of the British Museum*

WAHIBREEMAKHET AT GIZA (pp. 239-43)

name could occur anytime from his reign onward. The general forms of the figures on BM 545 and 546, with their elongated limbs, long, sharply-tapering torsos with narrow waists and flat bellies, and small, high buttocks, all with little modelling of the muscles, suggest a date early in Dynasty Twenty-six. The texturing of the background with shallow, close-set, vertical striations is typical of sunk relief of the reign of Psammetichus I and not found later.¹ Representations, usually in sunk relief, resembling vignettes from funerary papyri, accompanying passages of religious text, seem to have been in vogue in the north of Egypt during the early Twenty-sixth Dynasty,² passing out of fashion thereafter.

Thus, stylistic evidence points to the reign of Psammetichus I for BM 537-46, while inscription dates 'Campbell's Tomb' to the later Twenty-sixth Dynasty. There is no compelling reason to associate the British Museum fragments with LG 84 (or with Giza), and stylistic criteria argue against the connection.

LISA MONTAGNO LEAHY

Further notes on stele Aswan 1057

Additional textual comments on the stela published by the author in *JEA* 73 (1987), 169-80, in the light of discussion at the Third International Conference of Demotic Studies (1987) and further study of the original.

THE stele of Petiesi, son of Pakhnum, with its important biographical text in demotic, was published in *JEA* 73 (1987), 169-80. In the meanwhile, it proved possible to discuss this text as part of the Third International Conference of Demotic Studies, which was held in Cambridge in September 1987, and to benefit from the opinions of colleagues. I was also able to inspect the original on a further visit to Aswan in December 1987; once again I am grateful to the staff of the Aswan Museum for their hospitality and kind assistance, and for the interest which they showed in the publication of the text. In addition I have to thank my colleague Willy Clarysse, who sent me a photograph of the stele from the archives of the *Prosopographia Ptolemaica*. The following are some small observations on various parts of the text; here again I have used the letter H to refer to lines in the hieroglyphic, and D to refer to the demotic.

Second Register. This shows the deceased before eight of the gods of Heliopolis; their names are in fact Re-Horakhty, Atum, Shu, Tefnut, Osiris, Horus, Isis and Anubis. The hieroglyphs above the figure of the deceased are, as it happens, defective, doubtless for reasons of space. They read *Wsir P-di-3st sz Hnm* (sic) *ms Ti*-(sic).

Third Register (embalming scene). The spaces for the hieroglyphs have been left blank.

Line H1. The toponym after *nsu ntrw* may be *'bt-rq*, although the *r* looks more like a *t*, or possibly *⌋*. But the final *q* is clear enough, and this excludes the reading *Kmt*, which is otherwise tempting.

¹For well-dated examples, see e.g. the chapel of Harbes and Chapel H in the Isis Temple complex at Giza (PM III², 17-18); the Saqqara tombs of the vizier Bakenrenef [LS 24] (PM III², 588-91) and of Nesdjehuty (PM III², 669-70); fragments from the tomb of Horsematawyemhat at Heliopolis (L. M. Leahy, *GM* 65 (1983), 51-6).

²E.g. the tomb of Bakenrenef, which contains similar illustrations to BD 33 (= LD III, 264 c) and 36 (= LD III, 265 d; now in Chicago, FM neg. no. 68367); the tomb of Tjery (el-Sadeek, op. cit. 13-100); Hannover KM 1970.27 (P. Munro, *Kestner-Museum, Jahresbericht 1970-3*, 318, fig. 8); the tomb of Horiraa (LD III, 280-2 a), who was tutor to Psammetichus II. and must have held office under Necho II, if not Psammetichus I.

ʿIt-rq is therefore still the likeliest reading. The bases of the other signs are visible at the end of the line, but apart from *nbw* (which is given in the publication), nothing can be identified.

D1. The words *Wsir P3-di-3st* are clear enough, in spite of the damage to the stele at this point. The following group is harder to distinguish, but it is difficult to see what it can be except [*sr*] *Pa-Hnm*.

D2. *iw Pr-c3 p3 i.ir hne-s*. There is a clear *-e* at the end of *hne*, and in general the text is very thoughtfully written and carved; this final *-e* should therefore have a purpose, and a meaning which makes sense in the later Akhmimic dialect of Coptic (cf. *JEA* 73 (1987), 175 n.(q)). The Coptic equivalent of *hn* in the sense of 'command' is **ϨΩΝ**, and the pronominal form of this verb would not normally have a second vowel. But another word, to which it is doubtless closely related, is **ϨΝΕ**, which is used in the sense of 'will, wish' (W. Vycichl, *Dictionnaire étymologique de la langue copte* (Louvain, 1983), 303, rejecting Sethe's derivation of the word from *ϩn*). In Akhmimic the pronominal form of this verb is **ϨΝΕ=**, which corresponds exactly to the writing in our text. The meanings 'willing' and 'ordaining' are of course closely related.

D3. *n3 gm(?) mdt* is clear enough. The words after *iw.w iy r* seem to be $\zeta \text{ 4 } \text{ 11 } \text{ 2 } \text{ 3 }$, which is clearly the article *ti* followed by a feminine word. In view of the following *n3 hbw n3 hsw* the word in question ought to refer to some religious institution or event. There are several possible readings, but none is convincing. Could it be *ti nht*, from the earlier *nht* 'prayer' (*Wb.* II, 289)? Or is it a simplified writing of *sisnt*, 'guild', in its original meaning of 'festival on the sixth day of a lunar month' (G. R. Hughes, *MDAIK* 16 (1958), 158)?

D3, end. There is a stroke after *mdt-ntr* which could be a plural ending (*r.i.iry mdt-ntrw* 'perform acts of piety'); but note the clearly written form *n3 mdt.w-ntr* in D5.

D4. *ir.i iwne*. The *ir.i* is reasonably clear, and the problems lie with *iwne*. At the Cambridge demotic conference it was suggested by U. Kaplony-Heckel and J. Winnicki that the final sign in this word was not the house-determinative, but the numeral 10 followed by the preposition *r*. The two are of course very similar in demotic. A close examination of the stele showed that the first element of the 'house' determinative was slightly larger and higher than the second stroke (compare for example the determinative of the word *rw* in D7). This difference is, however, a very small one, and in itself is not sufficient to decide the question. Nevertheless, the use of a numeral in the following phrase makes an extremely neat parallel: *ir.i iwne 10 r P3-t3-nhs ir.i sms Pr-c3 4*, 'I made ten voyages to Nubia; I served four Pharaohs'. This is therefore likely to be the correct reading. The word *iwne* survives in Coptic **ⲀϨⲈⲚ**, **ⲀϨⲀⲚ**, but in the sense of 'cargo' (Crum, *Coptic Dictionary*, 21a, but with no Akhmimic form recorded). However, the meaning 'voyage' seems clear enough from Rosettana, line 10, where it corresponds to *κατάπλους* in the Greek version (J. J. Hess, *Der demotische Teil der dreisprachigen Inschriften von Rosette* (Freiburg, 1902), 57; cf. W. Spiegelberg, *ZÄS* 51 (1913), 73 n. 2, as well as the passage in *Harper* 5/2: *ir.fwr iwn r imnt m snfe r Pr-sw n Hnt-Mn*, 'He made a voyage to the west last year, to Psonis of Chemmis'). The information that Petiesi made ten voyages to Nubia, during the reigns of four distinct Pharaohs, adds a useful timescale to our knowledge of his career. The passage also helps to confirm the impression that the reigns in question – or at least the middle two – were short, since it is unlikely that these voyages to Nubia were made at very wide intervals. Petiesi's active career may have spanned some thirty years, which is ample time for ten campaigns, but rather short for four Pharaohs. Compare the comments in *JEA* 73 (1987), 179–80.


D7. The feminine *wrt* is clear after *hdwe*, as in the published text.


D7, end. The *p* of *Spe* is written defectively, and the word looks more like *Sbe* or less likely *Ste* (compare the clear writing in D1). But it is difficult to see what else this could mean, and *Spe* is probably what was intended. *ny ir.i-s* at the close of the text is clear.



D8. The word read *ph-ḥr* is damaged, and the end is missing. The *ph* is clear enough, while the curving sign at the left may be *ḥr* after all.

These brief comments do not exhaust the interest of this remarkable text. Apart from the historical and religious information that it contains, the stele of Petiesi reminds us that the traditional Egyptian autobiography, which we see developed in Old Egyptian as early as the inscription of Metjen, was still alive in the latter days of Ptolemaic rule over Egypt.

The nature of the hieroglyph






It is suggested that the hieroglyph  represents a scribal kit-bag.

IN the third edition of Gardiner's *Egyptian Grammar*, 542, no. Aa 20 in the Sign List, , is given as the determinative and sign-equivalent of the word *ꜥpr*. This means 'equipment', 'to equip' or 'to provide'. *ꜥprt* means 'equipment associated with offerings'. The nature of this sign is listed as doubtful.

The shapes most similar to Aa 20 are the fringed kilt  and the counterpoise , as referred to by Jéquier.¹ Neither, however, seems appropriate to the meaning of *ꜥpr*, or to satisfy the shape of the sign completely. On a decorated block, probably from a Ramesside Memphite tomb,² below the tomb owner's chair is an object which very closely resembles the *ꜥpr* sign, a scribal 'kit-bag'; the owner holds a 'palette' and brush, poised as if to inscribe an adjacent column.

The kit-bag features in many scenes of scribal activity, including: on two fragments of wall painting in the British Museum;³ in the Theban tomb of Tjenuna;⁴ two examples carried in the tomb furniture in the Theban tomb of User;⁵ in the tomb of Rekhmire, in the scene of the inspection of brickmakers, sculptors, etc.;⁶ in the Theban tomb of Ramose, amongst the tomb furniture carried in procession;⁷ in a similar scene in the Theban Tomb of the Two Sculptors;⁸ and in the tomb of Paheri, slung over the shoulder of a servant.⁹

T. G. H. James refers to the bag as 'a basket-work cylindrical container for papyrus rolls',¹⁰ and Jéquier describes it as, 'un panier haut, d'un cylindre plus ou moins allongé, en vannerie de couleur, fermé à l'une de ses extrémités au moyen d'une sorte de poche en étoffe ou en cuir, qui garnit le bord supérieur et s'attache avec un cordon'.¹¹ The basket-work appears to be an integral part of the bag, present when the item is on the ground in use, and when it is being carried.

The *ꜥpr*-determinative shows a variety of shapes in inscriptions. In the tombs of Djehuty-hetep and Djehuty-nakht at El Bersheh,¹² the sign appears in inscriptions as  and  respectively. On a Ptolemaic stele belonging to Senamunis from Akhmim,¹³ it appears as . The most interesting use of the determinative from the point of view of its identification as a kit-bag is on the interior of the outer coffin of Djehuty-nakht from El Bersheh,¹⁴ where there are eight linen bags, each inscribed  , 'Equipment of the King'. These resemble the bag with the top tied. The split top of the Gardiner determinative and the form under the chair of

¹ G. Jéquier, *Les Frises d'objets des sarcophages du Moyen Empire* (Cairo, 1921), 65–6.

² J. Malek, *JEA* 67 (1981), fig. 4, pl. xviii.

³ T. G. H. James, *Egyptian Painting* (London, 1985), 31 nos. 29–30.

⁴ J. Baines and J. Málek, *Atlas of Ancient Egypt* (Oxford, 1980), 106.

⁵ N. de Garis Davies, *Five Theban Tombs* (London, 1913), pl. xxi.

⁶ N. de Garis Davies, *The Tomb of Rekh-mi-rèr at Thebes* (New York, 1943), pl. lvi.

⁷ C. K. Wilkinson and M. Hill, *Egyptian Wall Paintings* (New York, 1983), pl. on pp. 132–3.

⁸ N. de Garis Davies, *The Tomb of Two Sculptors at Thebes* (New York, 1925), pl. xxiv.

⁹ J. J. Tylor and F. Ll. Griffith, *The Tomb of Paheri at El Kab* (London, 1894), pls. iii, vi.

¹⁰ *Egyptian Painting*, 31 no. 30.

¹¹ *Les Frises d'objets*, 265.

¹² P. E. Newberry, *El Bersheh* (London, 1895), 1, 17–18, pl. xiv. F. L. Griffiths & P. E. Newberry, *El Bersheh*, II, pl. ix.

¹³ S. Hodjash and O. Berlev, *The Egyptian Reliefs and Stelae: Pushkin Museum of Fine Arts, Moscow* (Leningrad, 1982), 192–8.

¹⁴ E. L. B. Terrace, *Egyptian Paintings of the Middle Kingdom* (London, 1968), xix.

the unknown Ramesside man suggest that the determinative shows a stylised version of the bag, the two protruberances being the gathered top and the holding strap, shown longer on the Ramesside fragment but of equal length on the Gardiner determinative.

The use of the kit-bag for scribal equipment would indicate a connection with the words to which it becomes a determinative – equipment; to equip or provide; equipment associated with offerings.

P. M. E. JONES

On the accuracy of sexing of skeletons in archaeological reports

A series of ancient Egyptian skulls from Qau and Badari was examined to determine their sex and to compare this with the sex as recorded in the excavation reports. Considerable discrepancies were found.

In the report on his excavations at Qau and Badari, Brunton¹ says:

The sexing of skeletons is not always an easy matter. The presence of the pelvis is almost essential, and some previous experience or tuition is necessary, otherwise the record may be unreliable in this respect. We were fortunate to be visited soon after the work at Qau started by Prof. Douglas Derry. He very kindly gave detailed instruction on sexing to my assistants on the spot, and I therefore think that the determinations of sex given by them in the tomb registers are accurate in the main.

Brunton's reports were models of detailed recording and included an account of each tomb with its number, a list of its contents and, in most cases, the sex of its occupant. The remarks quoted above prompted this investigation in an attempt to check the accuracy of the sexing by, as he acknowledged, inexperienced observers.

Unfortunately, as was so often the case in earlier excavations, the post-cranial skeletons were not preserved, but large numbers of skulls were carefully packed and returned to this country.

One hundred and fifty five of Brunton's skulls from Qau, excavated between 1924 and 1926, are in the collection of the Department of Biological Anthropology of Cambridge University, and most of them are in excellent condition. It is these which form the basis of this paper.

Although for purposes of sexing it is ideal to have the whole skeleton, the skull shows sexual dimorphism in many particulars. According to an international committee report in 1980,² the order of importance of the bones is first the pelvis, followed by the skull and the long bones. Stewart says that an accuracy of 80 per cent can be achieved in the absence of the mandible, and as high as 90 per cent when the mandible is present.³ Most of the present series have their mandibles present. Keen devised a series of measurements for sexing, but recognized that topographical comparisons were valuable.⁴ He particularly emphasised the first four features given in the list below. Muscular impressions cannot be measured.

¹ G. Brunton, *Qau and Badari* (London, 1927), 5.

² *Journal of Human Evolution* 9 (1980), 517-49.

³ T. D. Stewart, *American Journal of Physical Anthropology* 6 (1948), 315-21.

⁴ J. A. Keen, *American Journal of Physical Anthropology* 8 (1950), 65-78.

According to Krogman and Iscan, the initial impression is often the deciding factor in sexing a skull – i.e. a large skull is generally male and a small one female.¹ Reference can then be made to specific features to confirm or deny the initial impression. The features which were used in this investigation are as follows:–²

	<i>Male</i>	<i>Female</i>
General size	Large, rugged and elongated	Small, smooth and rounded
Supraorbital ridge	Large	Small
Mastoid process	Large and straight	Small and curved inwards
Occipital area	Muscle lines and protuberance marked. Condyles large	Muscle lines much less marked Condyles small
Orbits	Squared with rounded margins	Rounded with sharp margins
Zygoma	Heavier and more laterally arched Root extends beyond ext. auditory meatus as a ridge	Lighter and more compressed Root stops at auditory meatus
Palate	Larger, broader and U-shaped	Smaller and tends to parabola
Teeth	Large	Small
Mandible	More robust with broader and longer ramus	Smaller and lighter

All the skulls in the series were examined and a decision made about their sex. In any series of skulls there are bound to be some where overlap of characteristics causes doubt about the sex. In this case there were 10 such, and these were not further considered. Reference was then made to the excavation reports, and any skull where the sex as recorded differed from that as determined by examination was critically re-assessed. Doubtful skulls were thus excluded, and it is believed that the sexing of the remaining ones is as accurate as possible given the absence of the rest of the skeleton.

Results

Of the 155 skulls examined there were forty-seven which either had no tomb number on them or which had no sex assigned to them in the reports, leaving a total of 108 to be considered. For ease of future reference these are listed in Table 1 with their dynasties and their serial numbers in the collection.

Of these 108, it was found that twenty-eight showed discrepancies between the present examination and the tomb register, and these are listed in Table 2. There were twenty-two in which the sex differed – that is 20.3%. There were also five in which the skeleton was recorded as a child, but in which the skull as examined was definitely a mature adult. There was no indication in the report as to the age of the skeleton. Finally there was one skull in the series which was a child of about eight years of age which in the registers was recorded as an adult. There is no way of knowing sixty years later how these discrepancies arose, but they suggest that in any investigation which may involve the use of recorded sex from archaeological reports allowance should be made for the possibility of inaccuracies in the recording.

¹ W. M. Krogman and M. Y. Iscan, *The Human Skeleton and Forensic Medicine* (Springfield, Illinois, 1986), 191–2.

² This composite list is derived from the previously quoted authorities together with D. R. Brothwell, *Digging up Bones* (Oxford, 1981).

TABLE I.

Tomb no.	Dynasty	Unit no.	Tomb no.	Dynasty	Unit no.
514	Predynastic	108	4907	VII-VIII	7
519	V	155	4920	VII-VIII	55
526	XXVI	136	4922	VI	54
534	Predynastic	153	4926	IX-X	86
539	VI	116	4928	New Kingdom	98
540	VI	144	4929	VII-VIII	44
552	Predynastic	156	4937	VI	15
563	VI	147	4941	IX-X	59
564	X-XI	140	4946	IX-X	102
568	VI	112	4953	X-XI	104
752	VI	114	4958	IX-X	67
760	VI	158	4959	VI	46
772	VII-VIII	119	4964	VII-VIII	66
806	VII-VIII	111	4970	IX-X	105
820	Predynastic	117	4972	IX-X	68
840	XXX	152	4979	IX-X	25
905	IV	141	4980	XI	82
906	VI	137	4992	IX-X	85
4805	IX-X	34	5003	2nd I.P.	80
4806	IX-X	37	5004	VII-VIII	70
4808	VII-VIII	30	5009	IX-X	69
4809	VII-VIII	73	5201	VII-VIII	72
4813	VII-VIII	31	5203	VII-VIII	36
4814	IX-X	74	5204	IX-X	77
4815	IX-X	84	5207	IX-X	17
4816	IX-X	28	5208	IX-X	2
4817	VI	79	5209	IX-X	53
4820	VI	71	5210	IX-X	33
4824	IX-X	81	5212	VII-VIII	35
4825	VI	29	5215	IX-X	20
4826	VI	87	5217	IX-X	47
4828	VI	8	5219	IX-X	42
4830	VI	100	5231	VI	41
4831	VI	97	5232	VII-VIII	26
4832	IV	94	5233	VII-VIII	61
4834	VI	89	5234	VI-VII	50
4837	VII	22	5235	VI	40
4838	VI	101	5237	VII-VIII	90
4842	VII-VIII	48	5250	2nd I.P.	18
4843	VII-VIII	19	5251	IX-X	21
4844	VII-VIII	92	5254	IX-X	23
4849	V-VI	95	5257	VII-VIII	27
4851	VI	93	5260	IX-X	6
4856 A	VI	38	5261	IX-X	1
4856 B	VI	39	5262	VII-VIII	14
4857	IX-X	24	5267	IX-X	11
4859	VI	46	5270	IX-X	5
4860	V-VI	91	5271	VII-VIII	12
4864	VII-VIII	45	5280	IX-X	13
4866	VII-VIII	3	5282	IX-X	43
4867	VII-VIII	52	5283	VII-VIII	56
4883	VI	4	5286	VII-VIII	57
4886	VI-VII	58	5299	IX-X	16
4895	IX-X	10			
4897	IX-X	49			

TABLE 2.

Tomb no.	Sex	Sex in report	Tomb no.	Sex	Sex in report
519	M	F	4830	M	F
526	M	Child	4837	M	F
534	M	Child	4844	F	?M
540	F	M	4856 B	M	F
563	M	F	4922	M	F
564	M	F	4928	M	F
568	F	M	4929	Child	M
772	F	Child	4937	M	F
806	F	?M	4972	M	F
820	M	F	5003	M	F
840	M	Child	5009	M	F
905	M	Child	5235	M	F
906	M	?F	5270	M	F
4806	F	M	5280	M	F

GEORGE E. MANN

Dqr, spinning and treatment of guinea worm in P. Ebers 875*

Discussion of evidence for the occurrence, transmission and treatment of Dracunculiasis (guinea worm disease) in ancient Egypt. The word *dqr* (P. Ebers 875) is identified as describing the gradual extraction of the worm from the body by winding on a stick.

RECENT work on palaeopathology and textile technology in pharaonic Egypt enables a fresh look to be taken at a hitherto puzzling aspect of the treatment of the swelling referred to in P. Ebers 875, the use of the word *dqr* in relation to the 'going and coming' of something 'against the flesh under it'.¹ Gardiner characterized *dqr* as 'a very rare and obscure verb, perhaps meaning in its most literal sense "to press"² and cites its use as a caption for the scenes of spinning at Beni Hasan,³ commenting that these depict 'a process of a kind not easy to define'. Gardiner appears to have derived the sense of 'to press' from a passage in P. Ebers 875 which he translates 'thou wilt find it (*scil.* "the swelling" *āwt*) going and coming, pressing(?) against the flesh that is under it', and is followed in this translation by Erman and Grapow.⁴ More recently published texts cited by Meeks⁵ appear to add nothing relevant to the usage of *dqr* in the medical papyri.

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¹ *Grundriß der Medizin der alten Ägypten* (Berlin, 1958), IV, 1, 228; IV, 2, 179 n. 5; V, 396.

² A. H. Gardiner, *Notes on the Story of Sinuhe* (Paris, 1916), 162.

³ P. E. Newberry, *Beni Hasan*, II (London, 1895), pl. iv.

⁴ *Wb.* V, 496; *Grundriß der Medizin* IV, 1, 228; IV, 2, 179 n. 5.

⁵ D. Meeks, *ALex.* I-III.

The scene from the tomb painting in Bensi Hasan which Gardiner refers to may nevertheless provide a useful clue to the interpretation of *dqr* in the Ebers Papyrus (fig. 1). This scene apparently depicts the process of making stronger thread by doubling thinly spun linen thread drawn out of two bowls and twisting it around a spindle to make stronger thread; *dqr* in the caption at Beni Hasan may even refer specifically to the technique of twirling the spindle along the upper thigh while spinning.¹



FIG. 1. Doubling thread by winding onto spindle (from *Beni Hasan*, II, pl. 4).

This is similar to the treatment of guinea worm, *Dracunculus medinensis*, where the adult female, which can be as long as 80 cm, is wound around a stick a few cm at a time as it gradually emerges from a swelling on the ankle or foot.² The extraction of the worm takes about three weeks to complete (pl. XXXVI, 3), and as long as sterile dressings are used and the worm doesn't break or the wound become infected, complete recovery follows. The process of winding the worm around a stick kept against the flesh below (pl. XXXVI, 1), is appropriately described by the same verb used for drawing out thread during a similar type of spinning, *dqr*.³

Dracunculiasis, or guinea worm disease, is a disease caused by the ingestion of drinking water contaminated with water fleas, *Cyclops*, containing the larvae of *Dracunculus medinensis* (fig. 2). Once the water flea has been digested, the larvae are liberated, penetrate the wall of the digestive tract, and migrate into the abdominal or thoracic cavity. After about three months, male and female worms mate, the males die and are calcified or absorbed, while the females grow and migrate to subcutaneous tissue, usually in the feet or legs. There they cause a painful blister or swelling, which bursts on contact with water, allowing the larvae to be expelled.⁴ Approximately one year after the contaminated water was ingested, the mature female worm 'may present clinically as a serpiginous form just beneath the skin, a painful bleb or blister, a white cord emerging from a superficial ulcer, or at the center of a painful abscess'.⁵ In passing it is interesting to note that the same visual metaphor occurred to modern clinicians who describe the worm as 'a white cord' as well as to the Egyptian authors of the medical papyri, who compared the extraction of the worm to spinning thread, *dqr*.

¹ G. M. Crowfoot, in C. Singer, E. J. Holmyard and A. R. Hall (eds), *A History of Technology*, I (1954), 425, 438; C. Strauß-Seeber, *LÄv*, 1156.

² R. Muller, 'Dracunculus and dracunculiasis', *Advances in Parasitology* 9 (1971), 132-3; idem, 'Guinea worm disease: epidemiology, control, and treatment', *Bulletin of the World Health Organisation* 57 (1979), 687.

³ If the verbal sense of *dqr* refers to activities involving cord, thread or metaphorically similar materials attached to a stick, peg or spindle, this might also relate to Sinuhe's complaint (Gardiner, loc. cit.; *Wb*. v, 496). The meaning of this passage is clear: Sinuhe has been banished to the desert. If we follow the sense of *dqr* suggested here, the exiled courtier has been tethered, like a neglected domestic animal, in the desert instead of in fields in the Nile valley where an animal would find better browse and pasture within the limited radius permitted by the cord and peg to which it was tethered.

⁴ D. R. Hopkins, 'Dracunculiasis: an eradicable scourge', *Epidemiologic Review* 5 (1983), 208-10; Muller, *Advances in Parasitology* 9, 118-22.

⁵ Hopkins, op. cit. 210.

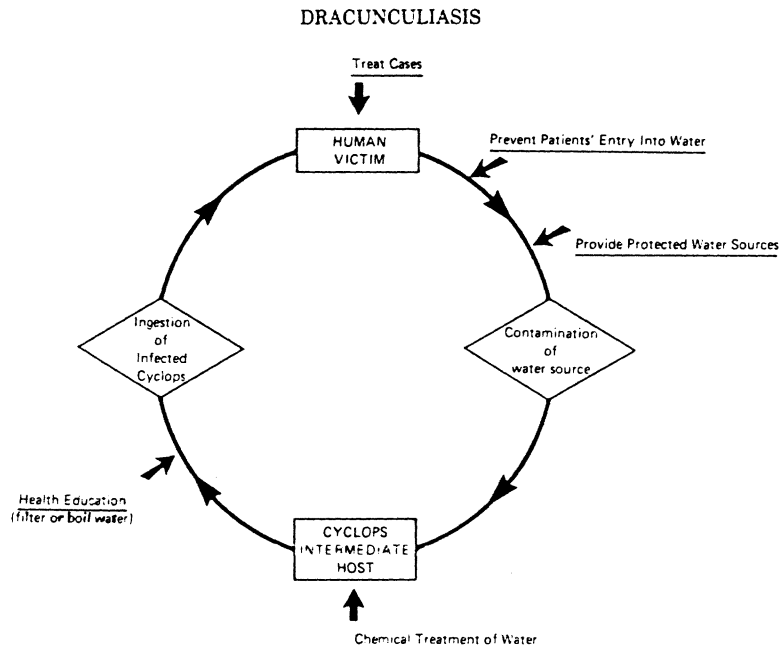


FIG. 2. Life cycle of *Dracunculus medinensis* and potential control measures (*Centers for Disease Control*).

The swelling in P. Ebers 875 was identified by Hoeppli as guinea worm,¹ an identification accepted by Ghalioungui.² The existence of guinea worm disease in New Kingdom Egypt was confirmed by the Manchester Egyptian Mummy Project, which found a calcified male guinea worm in Mummy 1770, a young woman whose feet and lower legs had been amputated near the time of her death, perhaps in connection with the guinea worm infestation.³

The swelling or blister in P. Ebers 874, the *Khonsu*-swelling, has also been linked to the following text.⁴ There may not necessarily be a connection between P. Ebers 875 and the preceding texts, given the absence of any explicit reference to the name of the god *Khonsu* in P. Ebers 875. However, if there is a link, P. Ebers 874 could perhaps describe the blister accompanying the emergence of the worm before it bursts on contact with water (pl. XXXVI, 2).⁵ Given the risk of tissue inflammation from secondary infection if the blister is broken, treatment of the swelling is best kept to a minimum. It would be difficult for a modern clinician to improve on the advice given for treatment of this stage of guinea worm disease in P. Ebers 874: "Then you say about it, "It is a *Khonsu*-swelling". Do not do anything

¹ R. Hoeppli, *Parasites and parasitic infection in early medicine and science* (Singapore, 1959), 5, 213 n.

² P. Ghalioungui, 'Parasitic disease in ancient Egypt', *BIE* 48-9 (1969), 14-17; idem, 'Acerca de algunas teorías médicas pretéritas originarias del valle del Nilo', *Pren. méd. argent.* 53 (1966), 438.

³ R. David and E. Tapp (eds.), *Evidence embalmed* (Manchester, 1984), 37-41, 82, figs. 1.10-1.11; R. David (ed.), *Mysteries of the Mummies* (London, 1977), 124. The right leg was amputated 10 cm above the knee, the left leg cut off below the knee 10 cm from the proximal end of the tibia, A. R. David (ed.), *Manchester Museum Mummy Project: Multidisciplinary research on ancient Egypt mummified remains* (Manchester, 1979), 32 and 99.

⁴ *Grundriß der Medizin* IV, 2, 178.

⁵ At this stage, as apparently noted in the text (*Grundriß der Medizin* IV, 1, 228), the blister grows within a few days from a minute bleb to a swelling of several cm diameter and the moving worm inside is sometimes palpable (Muller, *Advances in Parasitology* 9, 120). If this interpretation of P. Ebers 874 is correct, this passage would not refer to the bubbles of gas suggested by the interpretation in *Grundriß der Medizin* IV, 1, 228, but to the growth of the blister as it fills with fluid and the emerging worm.

about it.¹ In most cases, once the guinea worm has begun protruding from the broken blister, the best treatment is still that followed in P. Ebers 875, keeping the area of the eruption clean and bandaged² while slowly rolling out the worm as it emerges: 'Provided that bacterial infection or other complications have not occurred, then regular winding out of the worm on a small stick, combined with sterile dressings ... usually results in its complete expulsion in about 3 weeks with little pain or inconvenience.'³

However, in some cases complications can ensue. The amputation of Mummy 1770's lower legs suggests that she may have suffered from a lethal complication of dracunculiasis, secondary infection of the lesion caused by the worm, which can result in tetanus, septicaemia or gangrene.⁴ Secondary infection along the track of the parts of the worm still embedded in the connective tissue is very common, and can be serious if the worm dies or breaks off and provides a habitat for the microbiological scavengers of dead tissue, particularly the *Clostridium* genus which includes the pathogens responsible for both tetanus and gangrene. Inflammation of the joints can occur where worms damage the tissues, leading to chronic ulcerations which can persist for months, or resulting in damage to the tendons or ankylosis of the joints.⁵ This might be related to the inflammations of the tibia noted by Wells in 15.2 per cent of 92 ancient Egyptian examples dating from the fourth millennium BC to the first millennium AD,⁶ as guinea worm disease does not confer immunity after infection and repeated and multiple infections are possible.

In some cases surgical intervention may be undertaken, which can be complicated when the worm is wound around tendons or emerges only partially before adhesion to the tissues of the host occurs.⁷ The final section of P. Ebers 875 deals with the treatment of cases where surgery is required. The use of a flint knife (*ds*) to remove the worm⁸ makes sense, as a freshly struck flint flake or blade such as we still being produced in the New Kingdom,⁹ would have been a sterile tool with a sharp edge suitable for making a preliminary surgical incision.¹⁰ As the external surface of the skin is most exposed to the environmental microbiota which only become pathogenic when they are introduced into the tissue and circulation below the epidermis, it would have been handy to have a disposable surgical instrument such as flint. After being used to cut open the surface of the blister and allow access to the worm inside, the flint could have been discarded, avoiding the difficulty of washing and disinfecting a metal scalpel which could carry infection on from a previous use.¹¹

¹ *Grundriß der Medizin* v, 396. I am indebted to B. J. Kemp for the reading of this passage.

² *Ibid.* iv, 1, 228; iv, 2, 178-9 n. 4.

³ Muller, *Advances in Parasitology* 9, 132-3.

⁴ *Ibid.* 122-5; Hopkins, *op. cit.* 210; David, *Manchester Museum Mummy Project*, 99.

⁵ Muller, *Bulletin of the World Health Organisation* 57, 684.

⁶ Cited in A. T. Sandison, 'Evidence of infective disease', *Journal of Human Evolution* 1 (1972), 219.

⁷ Muller, *Advances in Parasitology* 9, 122, fig. 28, 133.

⁸ *Grundriß der Medizin* iv, 1, 228; v, 396.

⁹ R. L. Miller, 'Flaked stone from the Workmen's Village', in B. J. Kemp (ed.), *Amarna Reports* iv (1987), 144-53.

¹⁰ Obsidian blades made by Don Crabtree were used by an Idaho surgeon to cut through skin and subcutaneous fat during some of his operations; there were no foreign body reactions and skin incisions healed without complications: B. A. Buck, 'Ancient technology in contemporary surgery', *Western Journal of Medicine* 136 (1982), 265-9.

¹¹ As Ghalioungui commented on this passage, 'Did the surgeon, like his modern abdominal colleague, discard the first knife after the incision, and use a second one that had not been infected by contact with the skin?' *Magic and Medical Science in Ancient Egypt* (London, 1963), 98-9. Disposable surgical tools are still widely used: cf. J. R. Kirkup, 'The history and evolution of surgical instruments. II Origins: function: carriage: manufacture', *Annals of the Royal College of Surgeons* 64 (1982), 130.

The *hnwh*-instrument of P. Ebers 875 which holds the worm while it is excised with the flint has been plausibly identified as a forceps.¹ In difficult cases, where the worm broke off or was embedded in the tendons, another cutting tool, either a needle, hook or scoop with a knife edge would be needed, and this may be the *sās*-knife referred to in the same text.² Rather than avoiding cutting 'the fibrous capsule' next to the worm and the flesh, as Ghalioungui suggested,³ there may be simply a reference to the need to avoid hamstringing the patient by cutting into the packets of sinew enclosing the attachments of the flesh of the muscles to the joints in the feet or legs where the guinea worm usually emerges.⁴

Step wells, drinking water and the epidemiology of guinea worm disease during the New Kingdom

Open step wells of the kind used to provide drinking water to New Kingdom communities at Deir el-Medina and Amarna⁵ provide ideal living conditions for the microcrustacean *Cyclops* which are the intermediate host of guinea worm larvae. Step wells are frequently implicated in the transmission of the disease⁶ because the female guinea worm usually migrates to the lowest part of the body where it can have the best opportunity of expelling its larvae into a water source for the cycle of transmission to continue.

As the use of open wells in Egypt goes back to the early Middle Paleolithic,⁷ and open wells of a design similar to those associated with low levels of guinea worm transmission in Sudan⁸ were widespread in the Egyptian desert by the early Neolithic c. 10,000 years ago,⁹

¹ Hoeppli, op. cit. 213; Ghalioungui *BIE* 48-9, 14; A. T. Sandison, *LA* III, 165.

² *Grundriß der Medizin* III, 105, IV, 1, 228. The *sās*-knife could perhaps be a curette, as suggested by Ghalioungui, *Magic and Medical Science*, 99. This would suit its use with leather and animal skins noted by Grapow (*Grundriß der Medizin* III, 105), where scrapers are needed to remove subcutaneous fat.

³ Ghalioungui, *Magic and Medical Science*, 99, and *BIE* 48-9, 14.

⁴ Muller, *Bulletin of the World Health Organisation* 57, 683.

⁵ R. Ventura, *JEA* 73 (1987), 149-60; T. E. Peet and C. L. Woolley, *The City of Akhenaten*, I (London, 1923), II-12, pl. vii. 5; J. D. S. Pendlebury, *The City of Akhenaten*, III (London, 1951), 133, pl. lii; B. J. Kemp, *Amarna Reports* v (in press).

⁶ Muller, *Bulletin of the World Health Organisation* 57, 684; In 1969 in one village in Andhra Pradesh studied in the early stages of India's campaign to identify and eliminate foci of dracunculiasis, 35 per cent of the population was infected by drinking water from a steep well. This was the only well in the village; low caste villagers were forbidden the use of the well and remained free from guinea worm infection as they used water from the river: Hopkins, op. cit. 213-14. The use of well water in New Kingdom towns, especially at Amarna where the Nile ran by the city, remains puzzling, as noted by Kemp, *Amarna Reports* I (London, 1984), 95. The distance from the river at which the communities of tomb workmen at Deir el-Medina (Ventura, op. cit.) or Amarna (Kemp, *Amarna Reports* IV) lived was a factor in some cases. Turbidity of river water during the flood season could also have been unpalatable (comment by S. Cairncross).

Most of the wells at Amarna are in the southern city, near el-Hagg Qandil, where the villagers still prefer well water and traditionally did not drink river water, perhaps because the islands and backwaters nearby adversely affected water quality. Wells were much rarer in the northern suburbs of Akhetaten (observation of B. J. Kemp, August, 1988), and until the recent installation of piped water supply in el-Till, drinking water here was sometimes obtained from the main channel of the Nile, which at most seasons would have been only mildly polluted (F. A. Saleh, 'Bacteriological quality of Nile water before and after impoundment (1963-1973): a review', *Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene* IIa 135 (1980), 125).

⁷ Letter from F. Wendorf, July 12, 1988.

⁸ S. Cairncross and A. Tayeh, 'Guinea worm and water supply in Kordofan, Sudan', *Journal of the Institute of Water & Environmental Management* 2 (1988), 268-74.

⁹ F. Wendorf and R. Schild, *Prehistory of the Eastern Sahara* (New York, 1980), 85-92 and 131-48; F. Wendorf, R. Schild and A. Close, *Cattle-Keepers of the Eastern Sahara* (Dallas, 1984), 220 and 325-7. The records of natural infections in *Bos taurus* from Arabia, West Africa and India (Muller, *Advances in Parasitology* 9, 117) are especially interesting, as both human and cattle populations were using the Saharan Neolithic wells according to Wendorf (n. 7, this page).

the conditions for contact between human populations, *Dracunculus medinensis* and the intermediate water flea host have been of long standing in Egypt. While dracunculiasis has now been eliminated in Egypt thanks to improvements in water supply and hygiene, this parasite would have had a considerable impact on the population of the Nile valley during times when open pools of water or step wells were important elements of water supply technology.

An appropriate project for study during the decade which has seen the WHO, for only the second time in its history, target a disease for eradication, might be the interaction between these three species in Egypt. Would it be possible to identify the desiccated remains of *Cyclops* in well sediments? Many museums and collections contain skeletal material which might allow the testing of the hypothesis based on earlier work by Wells and the Manchester Egyptian Mummy Project suggesting the existence of a relatively severe incidence of tibial infection that might perhaps be related to guinea worm disease. Where it is possible to take x-rays of mummies, further examples of calcified guinea worms might be identified. There is also dried tissue which might respond positively to tests with antibody-antigen complexes related to infection with guinea worm. Although such antibodies appear to be relatively short-lived even *in vivo*,¹ and drying and ageing would also tend to break down the complex organic molecules involved, it might at least be possible to identify populations with high numbers of individuals suffering from dracunculiasis at the time of death.

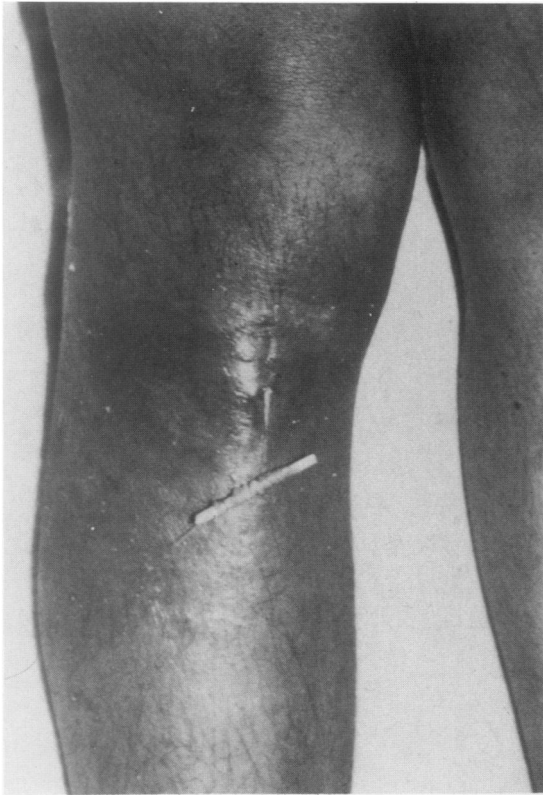
By a combination of methods, it should be possible to construct an epidemiological profile of the incidence of guinea worm disease in ancient Egypt over several thousand, and perhaps even tens of thousands of years. Was the same proportion of the population affected at all times? If the incidence of dracunculiasis has fluctuated in the past, this might raise the unpleasant possibility that the eradication of human cases which might be achieved within this decade,² could be dependent on the use of particular types of water supply, and that, in the long term, populations dependent on open sources of drinking water could remain at risk of a crossover from zoonotic infections³ when longer periods of time are considered.

R. L. MILLER

¹ Muller, *Advances in Parasitology* 9, fig. 36.

² D. R. Hopkins, 'Dracunculiasis eradication: the tide has turned', *Lancet* ii (1988), 148-50.

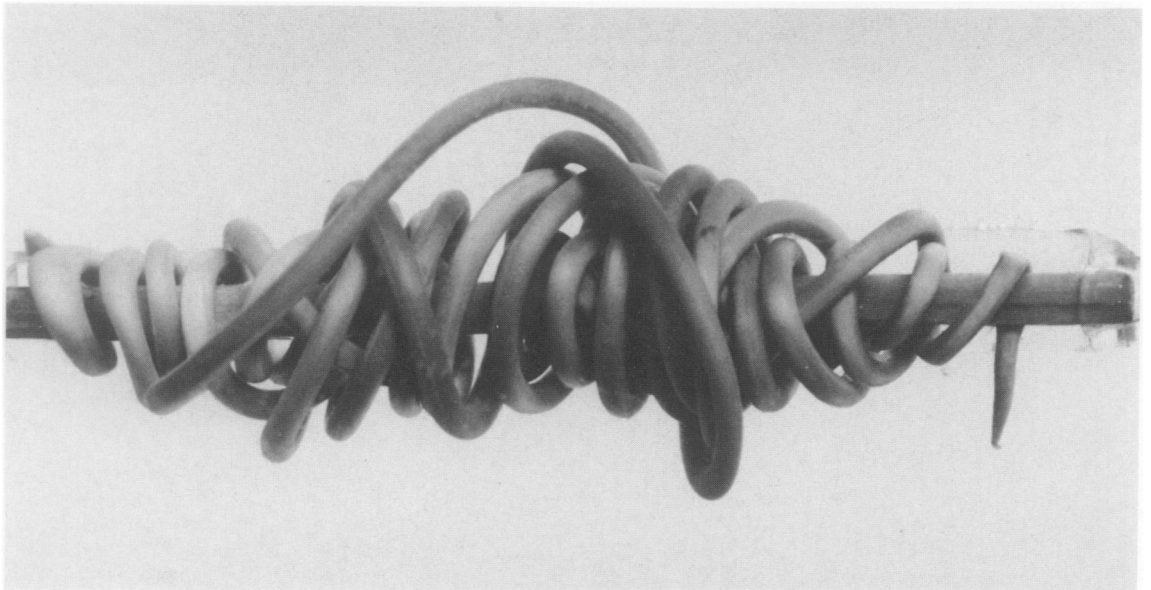
³ R. E. Spiers and A. H. Baum, 'Dracunculosis', *Journal of the Kansas Medical Society* 54 (1953), 553. Cf. Muller, *Advances in Parasitology* 9, 117-18.



1. Extracting guinea worm by winding it out on to stick. *Photo courtesy of Prof. P. Marsden*



2. Guinea worm blister on foot before emergence of worm. *Photo courtesy of Dr. P. E. C. Manson-Bahr*



3. Guinea worm wound around a matchstick. *Copyright Wellcome Trust*

REVIEWS

Fecundity Figures: Egyptian Personification and the Iconology of a Genre. BY JOHN BAINES. 238 × 160 mm. Pp. 446, figs. 199. Warminster, 1985, Aris & Phillips Ltd. ISBN 0 85668 0877. Price £34.

Egyptologists have long been intrigued by the bizarre, obese fertility or fecundity figures that appear on Egyptian temples, statues and offering tables. One might think, due to the ubiquity of these representations and the fact that they span from the Fourth Dynasty down to the Roman era, that these fertility figures have been studied in some detail. Indeed, there has been some discussion of this genre of scene, but there has been no thorough, systematic, diachronic analysis. It is therefore to John Baines' credit that he has undertaken this monumental task. This volume, a revised and expanded version of B's doctoral dissertation presented at Oxford University, is copiously illustrated with 199 figures; most of these are line-drawings, but there are also photographs and charts.

This study is not just a review of the iconography. B. begins by placing his investigation in the wider content of personification in ancient Egypt. His review of the literature reveals that personification in literature and art has not been thoroughly treated and 'No author has concentrated on the iconography of personifications' (p. 15). B. is interested in apprehending the function and meaning of personification through the medium of iconography, while giving careful attention to the accompanying inscriptions.

Two types of personification are distinguished in this study: (1) those which are defined by 'the names of the figures', and (2) those defined by 'roles and epithets' (p. 17); these are labelled 'formal' (pp. 19–25) and 'analytic' (pp. 26–29). When classifying personification, B. is quick to point out that there is no Egyptian term for 'personification' known to him. This makes the task of taxonomy difficult and perhaps subjective, a point acknowledged by the author. Indeed, B. is cautious in his classifications and supports his observations by grammatical, semantic, and pictorial evidence, and then concludes 'that personification is a genuine Egyptian category, not merely a modern analytic device, and that the category operates in both iconography and in the language. In other words, the pattern of usage of some ordinary words in the language implies the existence of conceptual categories for which there are no separate terms' (p. 36).

Before studying the iconographic evidence itself, B. outlines three types of 'iconographic personifications': (1) General personification, (2) Offering bearers, and (3) Emblematic personifications (p. 37). Usually found in temples, General personifications are, by and large, depicted anthropomorphically and their role is the very presence of the deity portrayed. 'Offering bearers' make up the second group and the title is self explanatory. Fecundity figures are a subgroup of this genre and the focus of the study.

The third class, Emblematic personifications, is characterized by giving human qualities to hieroglyphs and other symbols (e.g. *ꜥḥ*, *wꜥs*, *ḏḏ*, *wḏꜥt*). This category is a most ancient one that can be traced back to the pre-dynastic period where nome standards are shown with hands that grasp a rope on the 'bull palette' or seize prisoners in the 'battle field palette'. In the iconographic record, the above mentioned signs sprout arms and legs and perform various functions. B. gives a fairly detailed review of this material (pp. 41–67) even though it is secondary to his primary interests.

Before embarking on a detailed examination of fecundity figures, B. offers some comments on the 'limits of personification' (pp. 76–81). Among other points raised in this section are the relationships between personification and 'major deities' (i.e. those with their own cult) and 'minor deities' (i.e. those which have no individual cult). Some of the deities which are most frequently personified, such as *mꜣrt*, *mꜣnwꜣtt*, and *ḥꜣpy*, 'scarcely receive a cult'. None of these can be localized to a particular cult centre in Egypt and their status is clearly below the major deities in the pantheon. Nevertheless, their role in ancient Egyptian religion was most vital. While the author does seek to explain this curious problem, it would have gone beyond the scope of his voluminous work to have pursued fully the relationship between these particular personifications and major deities in an effort to answer why it

is that these deities are so important, their occurrence in literature and art so widespread and yet they are not 'major deities'. The Egyptians certainly recognized the major role that the Nile played in their daily lives and that the inundation was the guarantee of the fertility of the land. But *hpy* does not have his own cult centre and has no universal characteristics. By contrast, Khnum is both creator of mankind and associated with the inundation (as the 'Tradition of the Seven Lean Years' suggests), and has a cult centre at Aswan. Perhaps the questions raised by B. will encourage further study of this matter. Such a study would undoubtedly shed more light on the role of personification in Egyptian religious thought.

The first 81 pages serve as the background for the study of fecundity figures. The value of this section is the effort to organize the material into categories that can in turn be analysed to determine function. For the Old Kingdom male and occasionally female figures are shown in processions bearing various offerings and symbols (e.g. *wss* and *nh*). The male offering bearers are indeed corpulent from the earliest reliefs, having the enlarged belly and breasts (sometimes pendulous), and they wear various wigs (B. isolates six types, p. 87) and the divine false beard. The female counterparts, which are shown alternating between the male bearers in Fifth Dynasty scenes, are portrayed as being larger and fatter than the normal Egyptian woman, but not nearly with the same exaggeration as the male figures. Their breasts are neither large nor pendulous. These early representations are important for dealing with the belief of some that the male figures (especially in subsequent times when they are shown alone) are androgynous. The early evidence seems to militate against this notion and, B. points out, the protruding belly and pendulous breasts are not elsewhere associated with pregnancy in the artistic canon. The enlarged breasts and belly (sometimes with fat ripples) might signify prosperity and even old age.

The fecundity figures appear in three different poses: (1) standing or walking, (2) kneeling, and (3) squatting. While it has been suggested that the walking and kneeling figures might represent progressive stages in ritual presentations, B. suggests that the difference was due to economy of space on the wall on which the scene was to be drawn. Thus the basis for the selection of one pose over the other 'seems to be compositional rather than iconographic' (p. 102).

Discussion of the different types of fecundity figures follows. In this section the 'Nile' gods' or *hpy* figures are studied. B. observes that since *hpy* is a personification of the inundation and not the Nile itself, the term 'Nile gods' is incorrect. The use of this expression is traced back to Champollion and Rosellini, which may explain the difficulty of shaking the erroneous epithet. Another personification that fits under this heading is the *zm trwj*, or 'uniting of the two lands' figure. This motif occurs as early as the Archaic period, and the reigning king or his cartouche usually figures in the scene. This seems to imply that the king plays a vital and continuing role in maintaining the union of Egypt. Bes, Tawert and Sobk (possibly) are considered, as well as geographical personifications such as Upper and Lower Egypt, *wid wrj* (probably the Fayum), and various nomes (pp. 112-305).

We are indebted to Professor Baines for his painstaking work, which entailed careful study of hundreds of scenes and their texts, and then bringing some sense of order out of this huge corpus. This point alone would make this study valuable. But placing the study of the fecundity figures in the framework of personifications not only enables the reader to study the development of this iconographic genre in its proper context, it sheds light on the nature of personification itself.

JAMES K. HOFFMEIER

The Survey of Memphis. Part I, The archaeological report. By D. G. JEFFREYS. Egypt Exploration Society Occasional Publications; 3. Pp. xi + 127, figs. 63. Egypt Exploration Society, London, 1985. ISBN 0 85698 099 4. Price £16.00.

The Survey of Memphis was initiated by the Egypt Exploration Society as an intensive examination of the entire surviving remains of the ancient capital of Egypt. This volume begins a series of monographs dealing with the results of the first four seasons and is a major contribution to the particular study of Memphis itself, as well as to the field of urban archaeology in Egypt generally. The remains of Memphis now no longer appear to be hopelessly fragmented and disassociated from one

another, as all the known archaeological discoveries made in the area are here plotted on the survey drawings, and summarized and reassessed in the text on the basis of the author's own fieldwork, to form a single study of the history and archaeology of the site.

The *Preface* by Professor H. S. Smith gives a brief background to previous operations at Memphis, beginning with the survey of Joseph Hekekyan in 1852, and explains how the idea for the Survey grew from the Egypt Exploration Society's long standing association with the Memphite region through its work at Saqqâra. During over a century of investigation most archaeologists have concentrated their efforts in the Saqqâra necropolis, and by comparison the valley sites have been relatively neglected; only sporadic attempts have been made at coordinated, long-term excavation in Memphis itself. The Survey of Memphis was inaugurated by the EES in commemoration of its centenary in 1982. Its purpose is to record the remaining vestiges of the ancient city as they survive both *in situ* and dispersed throughout private and museum collections. This enterprise involves epigraphic work, under the direction of Jaromir Malek, survey and excavation, including environmental research, under the direction of David Jeffreys, and the study of ancient and mediaeval literature containing records of Memphis and its surroundings, by specialists in the various languages. The results will be stored at University College, London, in a computerized archive readily accessible to scholars.

Chapter 1, *Survey practice*, gives an outline of the three major survey grids applicable to the Memphis area, the method employed to obtain levels and spot heights, and the system of references used to identify individual sites throughout the ruin field. The EES survey has established its own grid based on magnetic north for 1982 because no reliable ground markers were found which coincided with previous surveys. To maintain continuity with predecessors at Memphis, the EES has used spot heights on standing monuments fixed in 1955 by the University of Pennsylvania Expedition, to work out its own site datum. Sites throughout the ruin field which have been excavated or surveyed, either in the past or by the Survey of Memphis itself, have been allotted three letter code names of the kind in general use in British archaeology. Each begins with the initial letter of the Arabic name for the area where the site is located, as for example, F for Kom Fakhry, except in the case of Tell el-'Aziz, where the *rain* is omitted, giving the initial Z for that part of the ruin field. A list of site codes is given on pages 79–84 and the locations of *kôms* and sites are shown in figs. 4 and 8.

Chapter 2, *General description of the site*, describes the present extent and state of the ruin field. The site is now surrounded by canals, all of which are modern except for a natural stream, the *Bahr el-Libeini* (formerly known as *Bahr Yusuf* as shown in fig. 4) which flows past the western edge of the ruin field, and forms the traditional boundary between the modern settlements of Mît Rahîna and Saqqâra. The maps of the Napoleonic expedition provide an indication of the alarming rate at which *sebbakh* digging since 1800 has eradicated standing stratigraphy. This point emphasizes the urgent need for survey and excavation of this kind. This chapter also points out that descriptions of ancient writers, who used units of measurement which were not standardised, and landmarks which have since vanished, are of little help in estimating the size of Memphis in antiquity. Byzantine and Medieval Arab writers are more helpful, and in assessing their testimony it becomes apparent that the northern limit of the metropolis of Memphis was near Tamuh, in an area where nothing now survives above the modern ground level, some twelve kilometres north of the present concentration of visible remains around Mît Rahîna.

Chapter 3, *Previous exploration of Memphis*, is a summary of the principal descriptions of the city from ancient to modern times, dealt with in chronological order, beginning with Herodotus. A future volume is planned to contain more detail on this subject. The first authoritative maps were made in 1798–9, by the surveyors of the French Expedition, who were also the first to undertake scientific recording of monuments in the field. From that time, serious interest grew in Memphis and its remains and in 1820 the famous colossal statue of Ramesses II, now enclosed by the site museum, was discovered by Caviglia; all subsequent cartographers refer to it as the most conspicuous local landmark. The nineteenth century saw the agents of antiquities dealers delving amongst the mounds, but also the more scientifically motivated work of Lepsius, Hekekyan, Mariette, Maspero, Brugsch, Daressy and others. In this century Petrie and Clarence Fisher undertook the most sustained campaigns in the years leading up to and following the First World War. Fisher's discoveries were concentrated at Kôm el-Qala'a, where he uncovered a Nineteenth Dynasty palace complex. Following this the most distinguished finds were the tombs of the High Priests of Ptah in the Third Intermediate Period; the Ramesside chapels and the 'Embalming House of Apis Bulls' found by Ahmed Badawy

and Mustafa el-Amir in 1941-2; Labib Habachi's discovery of a well preserved chapel of Seti I; the accidental discovery during road building of the Middle Kingdom tombs in 1954; the findings of the University of Pennsylvania Expedition of 1955-6, and the discovery of a temple of Hathor in 1970.

Chapter 4 is a description of the individual *kôms* and known sites within the area of the ruin field, based on observations at the sites themselves, and the records of excavators where these are available. It also includes an assessment of the modern toponyms as local usage is reflected in the names used by successive explorers and archaeologists. The chapter is divided into three parts dealing with the main zones under the headings *Memphis South*, *Memphis North*, and *Beyond the ruin field*. The information in Chapter 4 is augmented considerably by Chapter 6, *Notes to survey drawings*. This provides detailed descriptions of the sixty three figures which follow the main text of the book, in the form of a detailed analysis of the remains at each site surveyed and in many cases an evaluation of the original excavators' own interpretations.

Chapter 5, *Topographical Discussion*, deals with the importance of Memphis as a riverine trading and administrative city in ancient times, the course of the river in antiquity, the harbour installations and the waterfront of the city, and the references to the 'Islands of Memphis' and 'Menes' Dyke' which occur in literature of the Pharaonic and Classical Periods. The effect of the gradual eastward movement of the Nile on the development of the city is assessed together with evidence for major land reclamation in the early Ramesside period. The chapter ends with a discussion of the intriguing concentration in the Memphis area of toponyms recalling figures in the Old Testament and Quranic stories of Joseph.

Chapter 7 contains a list of the three letter site codes used to identify each site described in the text and figures, the site grid references and known excavators' names with the dates of their work. The book ends with 585 bibliographical notes, an alphabetical index and a numerical list of the survey drawings which comprise the sixty-three figures.

The Survey Drawings which follow the text are clear, black and white plans, sections, elevations and isometric drawings of the sites and standing monuments now visible. Their descriptions in Chapter 6 are an analysis of data from archaeological and literary sources, and together they form the main focus of the book. The figures begin with a map of the entire region from Cairo to Barnasht, south of Dahshur, showing the general location of Memphis in relation to modern towns and the ancient sites of Heliopolis, Babylon and the Pyramids of Gîza, Abusir, Saqqâra and Dahshur. More detailed plans follow showing the extent of the ruins today within the natural topography of the immediate surroundings, the way in which modern land use has developed since the mid-nineteenth century and an isometric relief drawing with the standing ancient mounds overlain by the EES survey grid. Some of the drawings, such as fig. 19, which shows a plan of the Middle Kingdom tombs at Kom Fakhry, combine the condition of the site today with details of its appearance when found as gleaned from the excavator's records. The distinction between the two sources is clear from the descriptions of the figures given in Chapter 6. In the more intensively excavated sites, such as the area around the south-west corner of the Ptah Temple Enclosure (fig. 25) the results of different archaeologists' work have been amalgamated to demonstrate how our awareness of the relationships between particular groups of monuments has grown. Figs. 57-62 show the distribution throughout the ruin field of different types of finds from Old Kingdom to Islamic times. Finally, fig. 63 is a reconstruction of the alignments of roadways and enclosures around the Ptah Temple during the Ramesside Period.

The way in which the information is organized in Chapters 4 and 6, the *Bibliographical notes* and the figures, without cross-references, means that the figures and their descriptions serve as an alternative index for the book itself and for the sites covered by the survey. As an example, the location of the enormous mudbrick building on Kôm Qala'a, named the 'Central Fort', removed during Fisher's excavations in the 1920s and therefore no longer in existence apart from its foundations, is shown in fig. 13 as a shaded square next to the south end of the Palace of Merneptah. But to find its position and description it is necessary to know either the name of the excavator or where in the ruin field the site is located. Therefore, for sites which have produced monumental or inscribed material it is sometimes necessary to use the book in conjunction with the bibliography in PM III². However, the 'Central Fort' contained nothing of this sort, apart from a scarab of Necho II, which is not listed in Porter and Moss. This example emphasizes the nature of the book; it is the initial report of the survey, as the *Preface* points out, and the index does not cover all the material included. As every area

of the ruin field requires urgent attention, it is to be hoped that detailed indices will be included with the thorough coverage promised in the forthcoming volumes of the series.

The only major deficiency to this excellent book is the lack of photographs. The verbal descriptions of conditions at Memphis, concerning especially the state of preservation of the standing remains, would have been greatly enhanced, particularly for readers unfamiliar with the area, by the inclusion of photographs. Similarly, in this changing landscape of agricultural and urban expansion, a good pictorial coverage of the area at the time of the survey would provide a valuable and forceful complement to the figures and to the narrative of the text. So much informative stratigraphy is visible, exposed, for example, in the sections beside isolated excavations such as the Temple of Hathor or the exterior of the 'Hellenistic' Ptah Enclosure Wall at Tell el-Rabî'a, that one might even suggest a separate volume devoted completely to an album of photographs illustrating the data published here.

Two minor mistakes are worth pointing out. On p. 74 'Figs. 40-44' should read '40-43' since fig. 44 is not described in the text. (Most of fig. 44 is occupied by Kôm el-Arba'in, which has not been surveyed as it is presently the site of a military camp.) On p. 38 'Sheshonq II' should be 'Sheshonq I'.

The format of the book in 'camera-ready' typescript is more than justified by the urgent need for accurate recording and immediate documentation of the disappearing ruins at Memphis. The amount of information it contains, particularly in the Survey Drawings and the Bibliographical Notes, will make this into an important reference book both for use in the field and for scholars working away from the original source material. It is more than just a collection of dispersed facts, since through an ordering and an assessment of the physical remains we can now begin to understand the development and layout of ancient Memphis. Such a study is also precisely what is required for any archaeologist planning to work in the same area, as it provides the vital framework within which to direct the future exploration of the site. It is to be hoped that further volumes will appear with equal rapidity.

MICHAEL JONES

Aspects of the Military Documents of the Ancient Egyptians. By ANTHONY JOHN SPALINGER. Yale Near Eastern Researches, 9. Pp. xv + 258. New Haven and London: Yale University Press, 1982. ISBN 0-300-02381-2. Price \$33.50.

One of the truisms of ancient history is that the documents do not speak for themselves. Great care must be exercised in evaluating not only the information they convey, but also the linguistic and literary terms with which this is done. Egyptologists are particularly well aware of such problems, given the highly stylized manner in which official documents were written under the Pharaohs; and every scholar's experience can supply favourite examples of substance erroneously inferred from conventional verbiage. Our need for historiographic research grounded in the generic features of these compositions is well met in this book, which addresses itself to war, one of the more frequent themes in the texts which have come down to us from ancient Egypt, and to the ways in which it was presented in official records.

Spalinger's examination of the Egyptian military documents is conducted on two fronts. One approach is to isolate their basic structural components, which are treated in his chapters on the *iw.tw* formula (pp. 1-33) and on the lexical repertoire shared in common by standard military texts (pp. 48-100). The bulk of his study, however, is spent in extending these criteria to analysing the literary origins of the texts themselves, the better to define how form and meaning are balanced in these compositions. Since earlier parallels are scarce or fragmentary, the main focus is, necessarily, on the New Kingdom, but later compositions of the Twenty-fifth and Twenty-sixth Dynasties are included. The survey begins with the stelae of Kamose and Thutmose I's boundary stela from Tombos, both of which the author regards as representing stylistic dead-ends which gave way to forms more appropriate to the activities of an imperial state. At one end of this new spectrum are the concise message-reports of the *iw.tw* type (used mostly for campaigns which the king did not lead in person). The more elaborate compositions which occupy the other end and portray the king's heroic

actions at the head of his army are themselves assembled from a variety of sources (e.g., the campaign daybooks) and literary models (for example, the *Königsnovelle*, royal oaths and speeches). Although the more conventionally 'literary' *topoi* may be factual within the limits of their stylized forms, it is the daybook accounts which most reliably reflect the facts as they appear in contemporary records. Spalinger's work in isolating all these strains is thus of no small usefulness. His investigation into the sources and composition of these major works of Egyptian historical writing, as well as his discussions of individual passages, make this book indispensable reading for anyone involved in studying Egyptian history.

Identifying the various genres of military documents is easier, however, than defining their purpose. For example, Spalinger argues (pp. 20–1) that the primary use of the *iw.tw* report was to describe summarily campaigns in which the king took no part. This is undoubtedly true in a good number of cases; but while the author scrupulously enumerates the exceptions to his rule, he sees them as 'extensions in usage of the basic employment of this genre'. Given the number of these exceptions, I wonder if this might not be a misleading categorization when applied to ambiguous cases. The presumed origin of the form in an earlier epistolary device, suggested by Spalinger and others (pp. 1–2, 30–1), is less pertinent to its later use than the fact that it is also found embedded in more elaborate compositions of New Kingdom and later date, where it describes the king's receipt of an important message (pp. 4–5, 14–16). The examples Spalinger has adduced on this issue lend themselves better, in my opinion, to a less restrictive characterization of the *iw.tw* formula: growing out of the message *topos* which was incorporated into lengthier narratives, it serves in short compositions as a springboard from which a summary of events can proceed. The message itself states the provocation, and the king's reaction which follows is formulated in a number of different ways, governed by diverse considerations of the events themselves, rhetorical purpose, and the space available for the text. The king's presence or absence on the campaign is irrelevant, and the amount of detail included even in short compositions is highly variable: for example, Sety I's Nubian war stelae (p. 10) actually include a considerable amount of information, not only on the progress of the campaign itself, but about its antecedents and aftermath. The uses of the genre, it seems, were governed more by the requirements of form than by content.

The distinction I have suggested is less *picayune* than it seems, for Spalinger has argued that 'what made the difference to the Egyptian mind was whether the king led the army in person or not'. Since the *iw.tw* genre did not convey this difference adequately, Spalinger maintains that a different type of military text had to be created, and 'the basis for this new form was ... the scribal war diary' (p. 120). While I do not disagree with this view, I believe the author has placed undue emphasis on the king's central role in the daybook genre. Saying that the scribes found it an adequate medium from which to draw, sometimes verbatim, a full record of the king's actions on campaign is one thing; but, perhaps without meaning to do so, the author seems to imply that the daybook style is an artificial creation of the royal chancery, perhaps designed to take down enough information to provide grist for the mills of royal propaganda in Egypt (pp. 120–1). We are told that 'we must ... continually remind ourselves that the ephemerides reflect what the scribes or the king thought was important' and that significant details might not be recorded because they did not fit these criteria (p. 124). While this is very likely, Spalinger seems also to be implying that the daybooks kept when the Pharaoh went to war were functionally different and perhaps separate from those which pertained to the ordinary business of the army. That such daily records were kept even when the king was absent is clear, as the author well knows (pp. 121–2, 140 bottom), and there are examples from the field of domestic administration as well (pp. 123–6), although I miss any mention of the accounts from Sety I's palace at Memphis (*KRI* I, 243–81), where local business is notably the focus of attention even when it is explicitly stated that the king had gone somewhere else. The husbanding of men and material in a society as bureaucratic as Egypt's would certainly mandate some sort of record-keeping whether the ruler was leading the army or not. *Pace* Spalinger (p. 126), I would say that the notion that the daybook style 'invaded' Egyptian military writing is more accurate than not. As he himself says (p. 126), 'royal military records ... had as their warp the ephemerides. The woof to be added later was more varied'. What is not shown, in sum, is that the royal ephemerides were substantially different from those kept by any expedition that was accountable to the government. Much the same type of information is found, for instance, in the short *iw.tw* accounts of Akhenaten's and Sety I's Nubian wars, which could only have the daybook reports as their source. While the king's participation in a campaign was

undoubtedly reflected in the daybook entries, his involvement was not their entire *raison d'être*. I would prefer to say that the ideology of kingship required that the Pharaoh's personal leadership be glorified in a fitting manner, and that, while short compositions of the *iw.tw* form were not excluded, the preferred medium was a lengthier effusion which would, of course, draw on the daybooks for information: what else, after all, was available? The inscriptions which Spalinger characterizes (pp. 126-7) as having the daybook as their core are simply those in which this source is most obvious. Even those described as 'without daybook as core', however, must have depended on such a record for the nuggets of hard information they contain (e.g. dates). I am not assuming that Spalinger overlooks or denies this, but there is an essential distinction between form and purpose which must be kept in mind. To be sure, elaborate compositions in the 'King as Hero' vein generally describe campaigns which the Pharaoh led, just as sorties led by others are often relegated to shorter reports (e.g. the *iw.tw* form). This, however, is not a fixed rule. As we have seen, the *iw.tw* formula also applies to summaries of wars directed by the king in person; and there is at least one example of an extended 'literary report' on a campaign which the king did *not* lead, i.e. the Karnak war inscription of Merneptah (*KRI* IV, 2-12). To see these cases as exceptions to a general rule or as reflecting the 'eclecticism' of later scribes (p. 211) unnecessarily implies that these forms were originally tied to a specific environment (the king's presence or absence) which was eroded over time (cf. p. 193). Spalinger's literary analysis, which demonstrates eloquently how eclectic these compositions could be, even in the Eighteenth Dynasty (pp. 193-206), does not require this assumption. Let us hope that these results, which the author has modestly described as preliminary (pp. 237-8), will be a foundation for further contributions from his pen.

WILLIAM J. MURNANE

The Pyramid Tomb of Hetep-heres and the Satellite Pyramid of Khufu. By MARK LEHNER. Deutsches Archäologisches Institut, Abteilung Kairo, Sonderschrift 19. 330 × 210 mm. Pp. x + 85, figs. 27. Mainz am Rhein, Verlag Philipp von Zabern, 1985. ISBN 3 8053 0814 0. Price DM 88.

In Egyptological circles, at least, Professor G. A. Reisner was known not only for his outstanding work as an archaeologist, but also as a keen student of detective fiction. When, in 1925, the Boston-Harvard expedition, under his direction, found the shaft- and stairway-tomb of Hetepheres at Giza (G7000x), it gave him an opportunity to try his hand at practical detective work. The tomb appeared to be intact and yet the sarcophagus was empty. Reisner conjectured that the queen had been buried near her husband, Snofru, at Dahshur and that robbers had entered the tomb soon after her burial and had stolen her body for its rich equipment. He also conjectured that, although Cheops was told that the tomb had been violated, he was not informed that the thieves had taken his mother's body. In the hope of achieving greater security, he ordered a secret tomb to be prepared for her at Giza, near his pyramid, and all the contents of her original tomb were transferred to the new tomb, where they remained undisturbed for more than four thousand years.

The views of Reisner and those of the writer of this book (who is directing a project sponsored by the American Research Center in Egypt and Yale University for mapping the Giza plateau) have little in common, except that they both believe that Hetepheres had two tombs and that a cutting in the rock immediately to the south of G7000x was part of the entrance-corridor of a pyramid which was never built. Reisner thought G7000x was the queen's second tomb, but Lehner maintains it was her first. The abandonment of work on the pyramid (GI-x) was, according to Reisner, a consequence of the decision to place the 'secret tomb' in front of it, while Lehner believes that the cutting was made *after* G7000x had been prepared; in his opinion GI-x, if it had been completed, would have formed the superstructure of G7000x, but there would have been no connecting passage between the two substructures.

An examination of the site of GI-x revealed that the surface of the rock had been 'regularized, although not levelled, to a point 3.9 m. south of the shaft' (of G7000x, p. 7), where there was a shallow cutting which probably marked the intended northern limit of the pyramid. Lehner freely concedes that such a layout has no real parallel in the Fourth Dynasty, but it has some affinities with the Step

Pyramid of Zoser and the Layer Pyramid of Zawiyet el-Aryan. G7000x is, however, situated 'almost exactly in the place occupied by a north entrance chapel such as has been found attached to other royal pyramids dating from the 4th to the 13th Dynasties' (p. 6). In conclusion, he makes two suggestions: (1) 'G7000x may have been hastily prepared before a clear idea was formed of what type of superstructure the tomb should possess' and (2) 'GI-x would have been the first subsidiary pyramid intended for a queen, those at Meidum and Dahshur being ritual pyramids of the king. Therefore the pyramid substructure reflected a vacillation between 3rd and early 4th Dynasty precedents and the innovation of the rock-cut sloping passage being developed in the king's pyramid (GI) then under construction' (p. 10).

Whether GI-x was cut before or after the construction of G7000x, it may have been intended to be the initial element of the first of three pyramids for queens set in line from north to south. No preparations for the two other pyramids had been made. Lehner writes: 'At the time Hetep-heres I died the Eastern Cemetery with its blocks of mastaba cores organized by streets and avenues had not been laid out on the site. The area that would later be covered by this cemetery was characterized by the natural crusty bedrock surface dipping gently from NW to SE' (p. 35). Bearing in mind that so little work was done on GI-x (Lehner estimates no more than 'several days') and that G7000x was never finished, it is conceivable that the king had second thoughts about the whole project, but not before the burial had taken place. At any rate, three queens' pyramids were built 28.0 m to the west, nearer to the Great Pyramid. According to Lehner, 'the reason for the change concerned calculations and measurements for the unified plan of the Eastern Cemetery which was still being formulated' (p. 38). Later in the book he ascribes it to 'the establishment of a new long, north-south axis to which all the subsidiary pyramids would be aligned' (p. 65). As soon as the substructure of the northernmost queen's pyramid (GI-a) had been completed, he maintains, the blocking of the shaft of G7000x was extracted, some of the furniture in the chamber was removed in order to make it possible to reach the Canopic chest and the sarcophagus. Having cleared a way to the end of the chamber, the workmen were able to lift the lid of the sarcophagus by breaking its south-west corner and levering it up. The queen's body was then taken for burial in GI-a and the furniture in G7000x, which had been shifted, was put back in place. Finally, the shaft was re-filled and its mouth was overlaid 'with irregular local limestone paving so as to camouflage it with the surrounding natural rock surface ... Later, it became covered with the limestone gravel and packed mud of the 4th Dynasty street' (p. 40).

With disarming modesty, Lehner tells the reader: 'The truth may lie somewhere between the two explanations (i.e. Reisner's and his own). It might, for example, be argued that Reisner is correct about the earlier plundered tomb and the transfer of the burial. Even if the body had been lost, it could still be argued that the unfinished tomb GI-x had been intended as a superstructure for the burial of Hetep-heres' (p. 41).

In both Reisner's and Lehner's theories, two tombs are postulated, one of which was G7000x. But is it really necessary to suppose that Hetepheres had a second tomb, unless and until some positive evidence comes to light to provide proof of it? Reisner's conjecture that the queen's body was stolen at Dahshur and that the king was kept in ignorance of the theft seems rather fanciful. Cheops must have seen the damaged sarcophagus either at Dahshur or while it was being taken to the Giza tomb and he could hardly have failed to inquire whether the body was safe or not. Lehner's reasoning that the damage to the lid of the sarcophagus was done in the Giza tomb and was done with the tools which were left in the tomb (and which were a puzzle to Reisner) seems much more probable. Is he right, though, in thinking that it was done by necropolis workmen in order to remove the body and transfer it to GI-a? It seems more likely that such rough treatment could only have been inflicted by robbers working in a hurry. Lehner points out that, if the openers 'had used levers and supports under the projecting lugs of the lid, it might have been possible to open it without damage' (p. 30). But that method would have required more room to manoeuvre than was available without removing very much of the furniture in the vicinity of the sarcophagus. Again, it can be argued that it would only be robbers who would have been short of time. They would have had to act quickly not only before work on blocking the shaft had begun but under cover of darkness when the hundreds of builders and labourers were not working on the Great Pyramid.

If it be assumed that G7000x was the queen's only tomb and that her body was stolen soon after her funeral, many difficulties which are inherent in both Reisner's and Lehner's theories disappear. It

would explain why the Canopic chest was not removed from G7000x. If the body had been transferred to GI-a, the chest would surely have been taken with it. Is it conceivable that the Egyptians of the Old Kingdom would have been so profligate as to leave such a wealth of furniture in what would have been an abandoned tomb? On the other hand, it is easy to imagine why it should have been left there after the body had been stolen and why the shaft should have been blocked and its mouth concealed, both by camouflage and by the construction of a road over it. A superstructure would, in the circumstances, have been inappropriate, since there would have been no reason for presenting offerings to the dead owner. Moreover, it would have served as a marker betraying the exact position of the tomb to later robbers. It may have been for these same reasons that work on the pyramidal superstructure was abandoned so soon after it was begun. However, it must be recognized that the evidence is insufficient for a positive conclusion to be formed and Lehner's theory cannot be lightly discarded, nor can Reisner's, even though some of his individual observations and conclusions have been shown by Lehner to be invalid.

A century and a half ago, H. Vyse and J. S. Perring excavated what they termed the 'inclined passages' north-east of the Great Pyramid. The results, together with a plan and detailed measurements, were published in *The Pyramids of Gizeh*, I, 189-90 and II, 130. Perring, in a note at the latter reference, remarked: 'As the flaws in the sides of them (i.e. the passages) have been made good, and as the rock has been levelled for the foundation of a building, it was probably intended to erect a pyramid over them.' Petrie, in *The Pyramids and Temples of Gizeh* (1883), 50, calls these rock cuttings trial passages and describes them as 'a model of the Great Pyramid passages, shortened in length, but of full size in width and height'. He adds that the only respect in which they differ is in the vertical shaft which is placed at the junction of the ascending and the descending passages and not like 'the well in the pyramid gallery'. Most writers in recent years have followed Borchardt in regarding the three chambers (the lowest unfinished) as indicating changes in the architectural plan adopted as the building rose. Such an interpretation of the pyramid's evolution is, however, not easily reconcilable with a model carved in the rock for 'trial' purposes and the weight of evidence seems to be clearly against Petrie's assumption that the passages were a model.

Now we have from Lehner a new and attractive explanation of the 'trial' passages. In his opinion, they were cut in the rock to form the substructure of a satellite pyramid which was never built. At Meidum and in the enclosure of the Bent Pyramid at Dahshur, the satellite pyramids, like the mastabas in the enclosures of the step pyramids of Zoser and Sekhemkhet, were situated on the south sides of the main pyramid, and the same applied to the subsidiary pyramid of Chephren at Giza. A north-eastern orientation for the satellite pyramid of Cheops would be without parallel, but its position might have been dictated by practical considerations. The principal quarry from which stone was obtained for the inner core of the Great Pyramid lay immediately south of it and consequently it was most probably the side on which the chief supply ramp was erected. If so, there would have been no free space on that side for building a satellite pyramid until a very late stage in the construction of the main pyramid and its complex, when the ramp would have been dismantled. Nevertheless, there is, cut in the rock on the south side of the Great Pyramid, a short sloping passage leading to a small chamber which Junker, who found it, suggested was intended to be the substructure for the pyramid of a queen, but it seems an unlikely explanation, especially in view of the fact that a comparable construction was found at the pyramid of Chephren, where there was a subsidiary pyramid.

Since the superstructure of the satellite pyramid was not built, calculating its intended dimensions is rather an academic exercise, but it leads to some interesting conjectures regarding the development of the Great Pyramid complex. First, however, it is necessary to note that Lehner does not seem to have paid much attention to Perring's assertion that the rock had been levelled in the vicinity of the passages, perhaps because he did not regard the extent of the ground so treated as being likely to be indicative in determining the area covered by the base. One important factor which he had to bear in mind was that the buildings near the satellite pyramid had undergone major changes in the course of time, with the result that the space which had at first been available for its layout was diminished. The mortuary temple, he believes, was initially designed as a small edifice comparable with the mortuary temple of the Bent Pyramid. Some evidence of it may still lie in a roughly rectangular cutting in the rock behind the sanctuary of the subsequent mortuary temple. Another possibility is that the causeway was originally planned differently at its upper end so that it would join the Great Pyramid

enclosure wall at its north-eastern corner, like the causeway of the Bent Pyramid. The boat-pits north of the temple and parallel to the causeway would not have been constructed. With such a configuration it would have been possible to build a satellite pyramid based on a layout square of 200 cubits to a side but reduced on each side by 3.0 m. The north-south axis of that pyramid would have been positioned over a long and shallow trench cut in the rock parallel to the trial passages and about 7.0 m to the west. The east-west axis would have been over the vertical shaft in the passages. The north-south axis of the trench would have been in line with the west side of the entrance corridor of the first queen's pyramid (GI-a).

When it was decided to build a much larger mortuary temple and to have a straighter causeway, there was no room for a satellite pyramid laid out from a square of 200 cubits. In its stead, Lehner believes, a pyramid with sides of about 88-9 cubits (46.5 m) was planned. It would have been about the same size as the pyramids of the queens. By the foreshortening of the passages at a scale of 1 to 5.5 in relation to those in the Great Pyramid (as determined by the length of the ascending passage), both the passages and the chambers would fit into the superstructure and occupy appropriate places. However, it remained unbuilt and Lehner, as a 'final possibility', asks whether 'GI-a could have been taken over as the satellite pyramid' when the original project was abandoned 'in favour of the expanded mortuary temple and final route of the causeway' even though it had been built for the queen-mother. In that case, he suggests, Hetepheres would have been buried in one of the two other queens' pyramids, GI-b or GI-c. In support of that surmise, he points out that, although the surface of the rock at the eastern centre of GI-a has been regularized, no trace of a chapel, not even of its ground-plan, remains, despite the survival of such relics at GI-b and GI-c. The absence of a chapel would certainly be anomalous in a queen's pyramid.

How are Lehner's two proposals to be assessed? In the reviewer's opinion, neither is capable of proof, but his arguments for the satellite pyramid are considerably more persuasive than those for a transfer of the body of Hetepheres from G7000x to GI-a or GI-b. The evidence for the shaft of G7000x having been reopened and refilled after the removal of the body is slender and would appear to lend itself to more than one interpretation. His claim that it was the intention to build a pyramid over G7000x, on the other hand, would be hard to dispute, and that alone constitutes a valuable addition to knowledge. With regard to the substructure of the satellite pyramid, which was never built, the term 'trial passages' adopted by Petrie has proved to be mistaken, because it indicates a purpose which Lehner has shown they were not intended to fulfil. His definition 'replica passages' is anodyne and indeed more accurate. It was always difficult to believe in Petrie's interpretation, which seemed to imply that chambers and corridors of the Great Pyramid were designed in their final layout from the beginning, not in three phases, which seemed probable from structural evidence. In other pyramids there is a resemblance in design between the interior plans of the satellite and the main pyramid, so that there would be nothing exceptional in having approximate conformity in the case of the Great Pyramid. The most exceptional feature would be the location of the satellite pyramid north-east of the main pyramid.

It will already have become evident to readers of this review that Lehner has produced a work which is indeed valuable and important for pyramid studies. In every probability it will be reprinted and the opportunity should be taken to put right the numerous graphic errors, which are in striking contrast with the level of scientific accuracy visible throughout the book. It would serve no useful purpose to catalogue these faults here, save in one case, namely his references to Petrie's *Pyramids and Temples of Gizeh*. In every instance the page and plate numbers quoted are those of the 1885 abridged edition, but the reference is stated to be to the 1883 edition. Since the discrepancies between the two editions are considerable, and since few readers are likely to possess both editions, the following correspondence of the citations as given by Lehner and the passages in the 1883 edition may be helpful:

1885 edition reference

p. 25, n. 9 Petrie, 1883, 51-2
 p. 45 Petrie, 1883, 15-16, pl. II
 p. 48 Petrie, 1883, 15-16, pl. II
 p. 50 Petrie, 1883, pl. II

1883 edition reference

135-6
 50-1, pl. III
 50-1, pl. III
 pl. III

1885

p. 52	Petrie, 1883, 17
p. 60, n. 25	Petrie, 1883, 85
p. 61	Petrie, 1883, 87
p. 62	Petrie, 1883, pl. v
p. 63	Petrie, 1883, 21-2
p. 65, n. 31	Petrie, 1883, 34
p. 66, n. 32	Petrie, 1883, 83
p. 59	Petrie, 1983 (sic) 93

1883

55
213
214-15
pl. IX
64-5
104
213
1883, 220

I. E. S. EDWARDS

Die ägyptischen Pyramiden. By RAINER STADELMANN. Vom Ziegelbau zum Weltwunder (Kulturgeschichte der Antiken Welt Bd. 30) 255 × 180 mm. Pp. 296, figs. 92, colour pls. 23, pls. 54. Verlag Ph. v. Zabern, Mainz 1985. ISBN 3 8053 0855 8. Price DM 78.

Anders als manche früheren Bücher über die ägyptischen Pyramiden ist dieses von vornherein in normalem Buchformat und mit hervorragender Ausstattung an Zeichnungen und Photos herausgebracht worden; sicherlich ein Zeichen dafür, daß man mit weiter Verbreitung auch außerhalb des Kreises der Fachgelehrten rechnet. Der Autor widmete das Werk Jean Philippe Lauer (dessen eigenes ähnlich konzipiertes Buch von 1952 zuletzt in der Version von 1974 auch 1980 in Deutsch in ähnlicher Aufmachung herauskam¹), sowie dem Andenken von Ludwig Borchardt und Herbert Ricke.

Die ägyptischen Pyramiden gehören zu denjenigen Denkmälern, die immer wieder das besondere Interesse der Archäologen auf sich ziehen und so ist in den letzten zwanzig Jahren derart viel neues Material hinzugekommen, daß man eine neue zusammenfassende Darstellung aus der Feder eines der Pyramiden-‘Ausgräber’ nur begrüßen kann.

In sechs Kapiteln werden zunächst die Entwicklung der Königsgräber (‘Abydenisches Grubengrab’ und ‘Butische Mastaba’), hin zu Stufenpyramide und echter Pyramide dargestellt; danach die Gestalt und Veränderung der Kultanlagen einschließlich der sogenannten ‘Sonnenheiligtümer’ und unsere heutigen Vorstellungen über die technische Seite des Pyramidenbaus des Alten Reiches. Das siebte Kapitel ist den Pyramidenbauten des Mittleren Reiches gewidmet und das letzte zur Abrundung den Pyramiden von der 3. ZwZt. and bis zu den späten nubischen Pyramiden.

Anmerkungen sind en bloc am Ende angefügt, es folgen ein Abkürzungsverzeichnis, eine Bibliographie, Zeittafel und Fotonachweis. Bedauerlicherweise fehlt ein Index.

Es sei mir gestattet, mein Gesamturteil über dieses Buch schon dieser Inhaltsübersicht anzufügen: Es ist eine sehr gute und verständliche Darstellung des aktuellen Forschungsstandes, wobei ich besonders hervorheben möchte, daß die zahlreichen Lücken in unserer Kenntnis bzw. die unterschiedlich deutbaren Fakten dort, wo es notwendig ist, vom Autor angemerkt werden (was für ein Buch, das auf einen größeren Leserkreis zielt, leider nicht immer selbstverständlich ist). Das heißt aber auch, daß der Verfasser bei manchen Problemen, die kontrovers beurteilt werden, Stellung beziehen muß. Auf einige möchte ich (in meiner willkürlichen Auswahl) hinweisen:

- (1) Der Königsfriedhof der Frühzeit war der von Saqqara, nicht der abydenische (S. 10 ff, bes. S. 33/34).
- (2) König Huni hat nicht die Meidumpyramide begonnen, auch sie ist ein Projekt des Snofru (S. 79 mit Anm. 262).
- (3) In der Frage der Deutung des Djoserbezirks (S. 60ff) folgt Stadelmann Kaiser (keine Jenseitsresidenz, sondern Kultbühne für Bestattungsfeierlichkeiten) gegen Brinks (vgl. S. 40, Anm. 100, 128).

¹ *Le problème des pyramides d’Égypte* (Paris, 1952) bzw. *Le mystère des pyramides* (Paris, 1974), deutsch *Das Geheimnis der Pyramiden. Baukunst und Technik* (München/Berlin, 1980).

- (4) Die nördliche unvollendete Pyramide von Zawijet el-Aryan kann möglicherweise dem vielleicht kurz regiert habenden Sohn des Djedefre, Baka, zugeschrieben werden (hier folgt der Verfasser Reisner und Helck, S. 77, Anm. 247).
- (5) S. 224. Snofru hat nach Ausweis der drei von ihm erbauten Pyramiden (Meidumpyramide, nördliche und Knickpyramide von Dahschur) wesentlich länger regiert, als das bisher angenommen wurde. Seine Grabpyramide, die 'Rote' oder nördliche, besitzt einen Fundamentstein mit Aufschrift des 29./30. Regierungsjahres (Abb. S. 100). Stadelmann rechnet daher jetzt mit über 40 Jahren statt den 24 bei Manethos Exzerpisten.
- (6) S. 229 wird eine Variante zu Arnolds Rekonstruktion des Totentempels des Monthuhotep von Deir el-Bahri angeboten: Statt des 'Urhügel-Würfels' ein Urhügel in Gestalt eines baumbestandenen Tumulus innerhalb von Einfassungsmauern.
- (7) Die reichen Schmuckfunde in den Prinzessinnengräbern des Mittleren Reiches in den Pyramidenbezirken von Lischt, Illahun, Dahschur machen es wahrscheinlich, daß die Pyramiden des MR durchaus nicht schon in pharaonischer Zeit, sondern erst im arabischen Mittelalter geplündert worden sind (nach dem Abbau ihrer Verkleidung). Vielleicht liegt hier der Ausgangspunkt der Schatzsucherei der Mamelukenzeit und der entsprechenden märchenhaften Erzählungen über die Gizehpyramiden, in denen man ebensolche Schätze vermutete.

Zum Abschluß auch einige weitere Bemerkungen. Während der Drucklegungszeit sind Arbeiten von Cannuyer und Graefe über die Pyramidenbesucher des Mittelalters erschienen; dadurch sind einige Detailaussagen zur Geschichte der Pyramiden (S. 7) zu ändern.¹ S. 217 ff.: Im Kapitel 'Pyramidenbau' hält Stadelmann eine parallel zu einer Pyramidenseite geführte und an sie angelehnte Rampe nach einem unpublizierten Vortrag von Lauer für die beste Lösung des so oft diskutierten Steintransportproblems. Der neuere Vorschlag von Riedl,² der jetzt in einem in Selbstverlag erschienenen Buch vorliegt (leider in einer Mischung von 'Roman' und Argumentation, die den Anspruch erhebt, ernstgenommen zu werden; voll von ungenauen Zitaten), wird nicht erwähnt. Indessen rühmt sich deren Autor damit, Stadelmann habe geäußert, er könne seinen Vorschlag akzeptieren (Briefzitat S. 8) ... Riedl sieht hölzerne Hebebühnen vor (Kippbühnen), die an Seilwinden gehängt hätten³ und mit deren Hilfe Steine emporgehoben worden sein könnten. Dieser Vorschlag ist möglicherweise besser als die unwissenschaftliche Art der Präsentation es zunächst vermuten läßt. Die diversen Rampensysteme haben allemal den Nachteil eines bedeutenden zusätzlichen Materialaufwandes bei schwierig abzuschätzender Standfestigkeit. Ihre Existenz läßt sich genau so wenig beweisen wie die der hölzernen Kippbühnen an Winden von Riedl.

ERHART GRAEFE

Elephantine IV. The Sanctuary of Heqaib. By LABIB HABACHI. 2 vols, 355 × 255 mm. Vol. 1, pp. 212, 156 figs., 10 plans. Vol. 2, pp. 8, 211 pls. Deutsches Archäologisches Institut. Abteilung Kairo. Archäologische Veröffentlichungen 33. Mainz am Rhein, Verlag Philipp von Zabern, 1985. ISBN 3 8053 0496 X. Price DM 450.

Labib Habachi concludes this volume with the observation, 'the sanctuary has yielded much valuable information about important people, ... and [has] provided us with the largest collection of private statues of the Middle Kingdom ever found in one place' (p. 165). This statement is a modest assessment of the sanctuary's significance, and its publication has been long awaited. The first volume of this two-volume set is written primarily by Labib Habachi, with important contributions

¹ Chr. Cannuyer, *GM* 70 (1984), 13-18; ders., 'Les pyramides d'Égypte dans la littérature médo-latine', *Revue Belge de Philologie et d'Histoire* 62 (1984), 673-81; E. Graefe, *SAK* 11 (1984), 569-84.

² Oskar M. Riedl, *Die Maschinen des Herodot. Der Pyramidenbau and seine Transportprobleme. Die Lösung des Jahrtausendrätselfs ohne Wunder und Zauberei* (Wien, ca. 1986).

³ *GM* 52 (1981), 67-73.

by Gerhard Haeny and Friedrich Junge. The second consists of photographs of the excavation site and its superb sculpture.

The history of the discovery, excavation, and publication of the Middle Kingdom sanctuary of Heqaib, a deified nobleman of the Sixth Dynasty,¹ is itself fascinating, and one shares Habachi's excitement. Elements of the sanctuary first came to light in 1932 when *sebakh* diggers uncovered fragments of sculpture on Elephantine Island west of the Satis temple and north of the temple of Khnum. The Aswan Inspectorate of the Antiquities Department under Ed. Ghazouli immediately began excavation, and within a month they had discovered four shrines and numerous objects from an area they interpreted as a cult repository. Unconvinced, Habachi, newly appointed Chief Inspector of southern Upper Egypt, obtained funds to re-examine the site. In 1946 he cleared a much larger area, uncovering an approximately twelve-meter square mudbrick structure which contained eight major shrines and chapels, approximately 50 sculptures (including ten lifesize examples), and about the same number of stelae and offering tables. Most bear dedicatory inscriptions to the deified Heqaib, and most are datable to the Middle Kingdom.

The scholarly world received its first official notice of this exciting find in the form of a one-page summary published almost immediately after Habachi's work ended.² In subsequent years various authors have studied individual pieces or groups,³ but it was not until the publication of the present volumes, some 39 years after the first report, that the full significance of the discovery of the Heqaib sanctuary could be appreciated.

Habachi credits many for assistance in various aspects of the manuscript's preparation—Gardiner, Faulkner, Drioton and Grdseloff, among others—and the publication itself is a monument to international cooperation. It is a tragedy that the primary author died shortly before these volumes appeared. The sanctuary's excavation, research, and the preparation of this material for publication spanned Habachi's entire career. Moreover, the excellent state of preservation of the sanctuary is largely due to his personal concern and care.

The text volume takes the following format: After two chapters on the history of the excavation and a survey of related finds, the next six chapters are devoted to detailed descriptions and translations of the shrines and chapels (the latter so designated on the basis of their larger size), as well as the stelae, offering tables, and statues found in conjunction with them. All but one chapel is dated or datable to the Twelfth Dynasty.⁴ Nomarchs erected the shrines during the first half of the Twelfth Dynasty, and the nome's chief priests built the chapels after the governmental reforms of Sesostriis III abolished the office of nomarch. Despite these reforms, the size of monuments in the sanctuary increased.

The majority of objects found within the sanctuary walls lacked any association with chapels or shrines. Most of this group is attributable to the Thirteenth Dynasty, and most belong to persons of lesser rank than those of the earlier dynasty, although a number of royal structures and inscriptions are included. These works are treated in the next four chapters (IX–XII).

In Chapter XIII, Friedrich Junge offers a detailed art-historical analysis of the sculpture. First, he discusses each dated piece in detail and then considers the undated works within a framework of the dated material. He then isolates each aspect of the face, body and base, and traces its development from the beginning of the Twelfth Dynasty through the end of the Thirteenth. This methodology has not been employed in such detail since H. G. Evers in 1929, and it is the first attempt to establish a chronology for an undifferentiated mass of material grouped generally under the heading 'Thirteenth Dynasty' or 'Late Middle Kingdom'.

In Chapter XIV, Gerhard Haeny presents a fascinating picture of the architectural history of the sanctuary. Since restoration and conservation made first-hand observation impossible in many cases, Haeny was forced, in large measure, to work from photographs. Accordingly, through insightful interpretation of precious little evidence, he argues that a series of mudbrick corridors at the south-east corner, originally vaulted, led to a now-destroyed cult chamber at their northern end. This

¹ Also called Pepinakht-Heqaib and owner of Qubbet el-Hawa tomb No. 35 (p. 21). For bibliography on the deification of other private individuals, see J. Baines, *JEA* 73 (1987), 87–8.

² Habachi, *CdE* 42 (1942), 200–1.

³ Most are cited in Habachi, *Heqaib*, 16–18.

⁴ Habachi dates the last chapel and its associated statue (no. 39) to the beginning of the Thirteenth Dynasty (p. 66), although Junge places the statue at the end of that dynasty (p. 138).

represents the earliest extant building phase, which may have been the work of Intef III of the Eleventh Dynasty, who, in a four-line inscription found in the sanctuary, claims to have restored a ruined structure. Haeny further speculates that the sanctuary was originally entered from the east through a narrow corridor.

The beginning of the Twelfth Dynasty saw a major structural change in the sanctuary. Sarenput I, who lived during the reign of Sesostri I, erected a sandstone shrine for Heqaib and a larger contiguous one for himself, both situated to the north-east of the earlier mudbrick corridors. Other shrines and chapels were built to the north, west and east, mostly in counter-clockwise order, until all available space within the sacred precinct was used, probably by the early Thirteenth Dynasty. Later devotees of Heqaib left only statues, stelae and other cult objects. The sanctuary fell out of use probably prior to the beginning of the New Kingdom. No explanation for the abandonment and destruction of the sanctuary is forthcoming from the archaeological evidence.

In the final chapters, Habachi summarizes the history and significance of the Heqaib sanctuary and the deified nomarch himself. He speculates that it was Heqaib's military prowess and administrative abilities, repeatedly demonstrated through a long public career, which led to deification shortly after his death. Although his godly status apparently never extended beyond the cataract area, the enduring nature of his reputation and the quality of the monuments dedicated to him bear testimony to the reverence of his countrymen.

In short, these volumes present not only the fascinating material from an important find, but they also offer an excellent in-depth, multi-disciplinary and multi-faceted analysis. Since the publication includes contributions from three authors, it is understandable that different points of view are presented. The authors occasionally disagree about the dating of a piece, as for example, the statue of Heqaibankh (no. 25) which is assigned to the reign of Sesostri III by Habachi (p. 53) and the reign of Amenemhet III (p. 123-5, 138) by Junge. In this instance, and at other times as well, there is limited justification offered for a given date,¹ and one might wish for more elaboration.

Junge's conclusions on dating are reached primarily through analysis of style. Most statues are assigned to a specific reign despite the fact that few are dated to a given king by cartouche or by association to other known, dated monuments. In view of the variety of size, material, and quality, of the statues, as well as their fragmentary nature, Junge's conclusions might be better regarded, at least in some instances, as a developmental sequence rather than an absolute chronology. If Junge's results are valid as an absolute chronology, it would appear that Heqaib's followers deposited statuary in his sanctuary with approximately the same frequency throughout the Twelfth and Thirteenth Dynasties (p. 138).

No statue is assigned a pre-Twelfth Dynasty date by Junge. Habachi, however, concluded that the statues inscribed for the god's father Mentuhotep-aa (no. 97) and Wahankh Intef (no. 98), as well as one in jubilee dress assigned to the latter king on the basis of style and material (no. 99), were all made by Wahankh Intef (p. 160). Since their canonical proportions and relatively sophisticated modelling are unparalleled in the Eleventh Dynasty, a date in the Twelfth seems far more likely to this writer, especially since there is a Twelfth Dynasty precedent for inscribing statues to earlier kings.² Junge includes these three statues, as well as two other fragmentary ones attributed by Habachi to the First Intermediate Period (nos. 58 and 59), in his list of undated works (p. 138).

In contrast to the sculpture, some of the architectural remains, especially the mudbrick walls in the south-east quadrant, do appear to pre-date the Twelfth Dynasty according to Haeny's persuasive arguments (pp. 154-7). Had Habachi lived to see his colleague's final manuscript, he undoubtedly

¹ See for example the text and plates for no. 103. The photo caption reads 'Statue of king Amenemhet III'. The only justification offered for the attribution to Amenemhet III is a lintel found in the sanctuary debris bearing that king's cartouche (p. 113), an association which seems at best tenuous. In addition, elsewhere on p. 113, Habachi writes about the statue, 'It may represent either Sesostri III or Amenemhet III', and he compares its costume, pose, measurements and workmanship to those of a dated statue of Sesostri III (no. 102).

² Sesostri I dedicated a statue to 'his father Sahure' (Cairo CG 42004, published in G. Legrain, *Statues et statuettes de rois et de particuliers*, 1 [Cairo, 1906], 3-4 and pl. II), an another to Ny-userre (BM 870, illustrated in H. Evers, *Staat aus dem Stein*, 1 [Munich, 1925], 36, fig. 7). This is not surprising in view of the dynasts' desire to establish their legitimacy. The style, modelling and attitude of these statues are not unlike those of nos. 97 and 98. Although the material of no. 99, the statue of a king in ceremonial dress, is the same as that of nos. 97 and 98, this alone seems insufficient to connect it with the others, especially since it is far more naturalistically rendered.

would have retracted his statement on p. 158, 'Sarenput I was responsible for the whole building'. Also, it is clear from Haeny's work that the precinct was substantially modified and enlarged during subsequent years of the Twelfth and early Thirteenth Dynasty (pp. 151–2), and that the last chapel added was that of Imen-aa. Therefore, Habachi's statement on p. 55, 'The ... last chapel ... is that of Khakaure-seneb' (Amenemhet III), also bears amending, as does a similar statement on p. 159. Haeny's chapter on architecture might advantageously have been placed after Habachi's introductory statements and excavation history, rather than at the end of the book, since understanding the sanctuary's architectural development is critical to the interpretation of its function and significance.

For some of the statues, there is additional material, such as a stela or rock inscription, which supports or refines the date suggested. For example, as Habachi notes, the overseer of the judgement hall, Ip, born of Tjeti, who left a stela at Abydos (Cairo CG 20288) is most likely the same man represented in statue no. 61 (pp. 88–9). Both Habachi and Junge date the statue to the period Amenemhet II–Sesostris II. This stela is similar to a group of over forty stelae attributable to a single Abydene *atelier* on the basis of their content, organization and style.¹ A number are dated by cartouche to the reign of Amenemhet II, and if it is assumed that statue and stela are contemporary, then the statue likewise may be assigned to this reign.

Although the Heqaib sculptures display considerable variety in size, material and attitude, their similarities testify to the existence of the Elephantine style, and this seems worthy of further exploration. For example, a strong tendency exists throughout both the Twelfth and Thirteenth Dynasties at Elephantine to emphasize facial over body modelling. When the face is preserved, it is almost invariably infused with a sensitivity and inventiveness elsewhere unsurpassed (for example, the evocative caricatures of Imenj-jatu, no. 37, and Imenj-seneb, no. 21). In contrast, often the bodies become an abstract combination of intersecting geometric shapes, lacking in naturalism, as seen in the pieces mentioned above. Modelling and incised detail tend to be shallowly incised and superficially rendered (for example, the torsos of Heqaib, no. 27, and Imenj, no. 60; the hands and feet of Khema, no. 15; or the wig of Imenj-seneb, no. 21). Proportions often deviate from the traditional canon, as shown by the high, pinched waist and long legs of another Heqaib (no. 30), the small head of Khakaure-seneb (no. 28), and the overly large head of Tjenj-aa (no. 45).

The relief style in the Heqaib sanctuary also deserves discussion. Despite the fact that Sarenput I lived during the reign of Sesostris I, all the reliefs he commissioned, namely his shrine and stelae, and the shrine of Heqaib, feature the elongated torsos, high pinched waists, tubular arms and too-small heads which typify the provincialism of Eleventh Dynasty reliefs made prior to the reunification of Egypt under Mentuhotep II.² Reliefs on the façade of his tomb at Qubbet el-Hawa display the same delayed development. In other areas of the country, however, the reliefs of the early Twelfth Dynasty recreate the canon of the Old Kingdom.³ It is not until the end of the dynasty and later that the format, content, and style of the reliefs and stelae from the Heqaib sanctuary are comparable to those found elsewhere.

¹ Specifically, Cairo CG 20288 shares the following features with other members of this Abydene stela *atelier*:
 – Sunk relief decoration and figures showing little or no incised detail or modelling except for 'spaghetti-like' strands of hair on shoulder-length wigs.
 – Only bread loaves on the offering table, the leg of which has a concave profile.
 – Basin and pitcher beneath the offering table on one side, on their own short, splayed-leg, rectangular table.
 – *Dbht-htp* written beneath the offering table on the side opposite the basin and pitcher.
 – Above the offering table individual offerings enumerated above *h*: signs.
 – Parentage designated by *ir. n*.
 – *Nb imh* written after names.

Dated examples in this group include Louvre C 172 (Year 3, Amenemhet II), Berlin 1183 (Year 3, Amenemhet II), British Museum 828 (Year 3, Amenemhet III) and Cairo CG 20531 (cartouche of Amenemhet II, no year date).

² For the early Eleventh Dynasty canon, see especially W. Barta, *Das Selbstzeugnis eines altägyptischen Künstler* (Berlin, 1970), 68.

³ As, for example, in the tomb of Sobek-nakht at Lisht (W. Hayes, *The Scepter of Egypt*, 1 (New York, 1953), 178, fig. 109) or the tomb of Senbi at Meir (A. M. Blackman, *The Rock Tombs of Meir*, 1 (London, 1914)), both from the reign of Amenemhet I.

Finally, since the various pieces are discussed in different contexts by three authors (as well as in different contexts by the same author), it would have been helpful to have an object index, in addition to the very useful series of indices included on pp. 171–211. These additions and suggestions are minor, and Habachi is indeed to be praised for his work. The depth of his knowledge of the cataract region and its monuments contributes greatly to the reader's understanding of this unique Middle Kingdom sanctuary. The material sheds new light on the importance of Elephantine as well as the art, religion and politics of the Middle Kingdom.

The following citations require correction:

- p. 63, note 7: For *RdE* 28 (1919), read *RdE* 28 (1976).
- p. 116, first column, final paragraph, first line: 'As usual, the king has his right leg advanced', read 'left leg'.
- p. 122, second column, final paragraph, third line: for (Taf. 100–2), read (Taf. 149–50).
- p. 125, second column, second line: for (no. 21) (Taf. 61–7), read (no. 28) (Taf. 81–6).
- p. 128, first column, last line and second column, first line: for (no. 101) (Taf. 193–4), read (no. 106) (Taf. 201–2a–b).
- p. 129, first column, second paragraph, middle: for (no. 101) (Taf. 193–4), read (no. 106) (Taf. 201–2a–b).
- p. 132, section 8.1.1.6, middle: delete (no. 18) (Taf. 58a), which is an offering table, not a statue.
- p. 134, section 8.2.1, first paragraph, last line: delete (no. 92) (Taf. 182a) which is a stela, most likely of Thirteenth Dynasty date, not a statue from the reign of Sesostri I.
- p. 134, section 8.2.2, middle: delete (no. 100) (Taf. 190c), which is a lintel, not a statue.
- p. 135, section 8.2.7, middle: for (nos. 71), read (nos. 69, 71).
- p. 136, section 8.3.5, first paragraph, third line: for (no. 51) (Taf. 131a), read (no. 104) (Taf. 198c, d–200).
- p. 136, section 8.3.5, second paragraph, first line: for (no. 51), read (no. 104).
- p. 136, section 8.3.6, middle: (no. 36) (Taf. 100–2) is a shrine. Perhaps (no. 54) (Taf. 136) is meant here?
- p. 137, first full paragraph, middle: for (no. 101) (Taf. 193–4), read (no. 106) (Taf. 201–2a, b).
- p. 138 (chronological List of Sculpture):
 No. 49 is listed as both from the time of Sesostri I and Amenemhet II–Sesostri II. (In the text on pp. 118, 134 and 135 it is cited in the context of works attributed to the reign of Sesostri I.)
 Under 'Sesostri III', omit no. 76 and add it to '2 Viertel der 13. Dynastie', as per discussion on p. 135.
 Under 'Sebekhotep III – Neferhotep I', no. 101 should read 106.
 Under 'Nicht Eingordnet', no. 96 is a shrine, not a statue.

RITA E. FREED

The Amethyst Mining Inscriptions of Wadi el-Hudi. Part II: Additional Text, Plates. By ASHRAF I. SADEK. 300 × 210 mm. Pp. viii + 63, pls. XXVI. Warminster, Aris and Phillips, 1985. ISBN 0 85668 264 0. Price £20.

With the appearance of this second volume, Dr Sadek's publication of the Wadi el-Hudi corpus is now as complete as currently feasible. The plates, which make up the bulk of the volume, are superior to any available heretofore; they are the work of the German Archaeological Institute in Cairo, with the exception of WH 148 (pl. xxvi, top), which was provided by the Staatliche Museen

zu Berlin, Ägyptische Abteilung, and Dr Steffen Wenig. It is an added bonus that this volume also contains three additional texts, presented in the same format as those in Volume 1, along with 'General Conclusions' drawn from the raw texts, indices to them (mainly a brief glossary/concordance), a few addenda to Volume 1, and a 'Counter-Index' to the plates. Two of the new texts are dated to Senwosret I, the third (by far the longest and most difficult) to Khaneferre Sebekhotpe. The present whereabouts of these texts are unknown and no photographs are available. The reviewer hopes that these inscriptions will surface, and that photographs as well as the texts themselves will be available to the scholarly community. In the meantime, we must be grateful to Dr Sadek for his persistence in tracking down texts belonging to the Wadi el-Hudi corpus, and for his conscientiousness in making them available in a form which, while it cannot be regarded as definitive, obviously reflects the same careful and painstaking work as his treatment of the remaining texts.

The plates demonstrate most graphically the difficulties involved in reading the Wadi el-Hudi texts, in terms of the palaeography, cutting and condition of the inscriptions. The quality of the photographs themselves is generally excellent; the photograph of WH 18 (pl. viii, top) is blurred and seems not to be uniform with the majority, while that of WH 147 (pl. xxvi, bottom) is virtually a solid dull grey. In a couple of cases, the scale approaches the lower limit of viability for the resolution of the smaller signs; thus, WH 6, 14 and 23 would have fared better as full-page rather than half-page figures. Perhaps cost of production was a factor here. A number of the photographs illustrate a frequent disadvantage of the photographic medium for the recording of inscriptions (especially pitted, shallowly incised or pecked ones): normally, only one view is presented (two in the case of WH 20, pl. ix), which, no matter how carefully chosen or skilfully photographed, does not permit one to utilize different lighting, angles, distances, etc. as one would try to do if examining the inscription at first hand. It can also be observed, however, that conditions for direct examination of many texts are extremely unfavorable, and that sophisticated photographic techniques often add materially to what the eye can discern. There are no photographs of a substantial number of texts: WH 1-5, 15, 26, 40-99, 101-2, 104-8, 110-11, 113, 115-32, 135-9, 141-2, 149-52 (as well as 153-5, the new texts mentioned above). In addition to the photographs of the inscriptions, Dr Sadek provides two views of the site (pls. i-ii), showing an amethyst mine and workmen's quarters respectively.

The reviewer hopes that those gaps which remain in the photographic documentation of the Wadi el-Hudi corpus will be filled; meanwhile, all Egyptologists are indebted to Dr Sadek for his diligence and dedication in producing the much-improved record which is now available. As a closing reflection, the reader who is spending hours squinting at crabbed, scratchy texts can rest the eyes by turning periodically to the beautifully-executed stela WH 143; apparently not all of the scribes of Wadi el-Hudi were banished there for poor penmanship.

EDMUND S. MELTZER

The Small Golden Shrine from the Tomb of Tutankhamun. By M. EATON-KRAUSS and E. GRAEFE. 290 × 215 mm. Pp. xii + 43, pls 29. Oxford, The Griffith Institute, 1985. ISBN 0 900416 48 3. Price £18.00.

At the *Deutscher Orientalistentag* in Berlin in March 1984, Erhart Graefe read a paper entitled 'Zur Deutung der Bilder auf dem vergoldeten Schrein des Königs Tutanchamun'. This shrine (Find no. 108) is famous for its scenes in raised relief which depict Tutankhamun and his Queen Ankhesenamun. It was one of the chief objects in the exhibition of the Treasures of Tutankhamun at the British Museum in 1972, and at the Metropolitan Museum of Art in 1976, for which a general description of it was written by I. E. S. Edwards. M. Eaton-Krauss and E. Graefe decided to collaborate in the publication of this book. There is no indication of how much each contributed.

The four chapters of the book deal respectively with 'The Shrine and its Contents' (1); 'The Relief Decoration of the Shrine: Description' (2); 'The Relief Decoration of the Shrine: Interpretation' (3); 'Style and Dating of the Shrine' (4). Photographs of all the objects described are given and the original photographs by Harry Burton are supplemented by new ones. There are diagrams which show the

exact position of the original hieroglyphic text. The hieroglyphs were written by Marion Cox after the authors' collated hand-copies.

The actual description of the scenes, the inscriptions and the costumes is exemplary. The treatment of the extant literature is conscientious and thorough, with 262 footnotes for forty-three pages of text.

Their main contribution to present-day research is a proposed solution and explanation of the intended purpose of the shrine. Against previous discussion by W. Westendorf, K. Bosse-Griffiths and R. Hari (p. 25), they reject the shrine's specific function in the funerary cult as well as a direct link with Tutankhamun's coronation. Instead they propose (p. 29) that

the decoration of the small golden shrine is intended to document Ankhesenamun's ideological role as Tutankhamun's queen, this being in turn the transposition of the wife's traditional role in ancient Egypt into the royal sphere.

The weak link in the chain of arguments for the interpretation of the scenes lies in their unequal treatment of the contents of the shrine. While much attention is given to 'The Pedestal' (pp. 3-6) and the 'Necklace and Pendant' (pp. 6-7), the authors refuse to treat 'Parts of a Corselet and Collar' (p. 6), also found inside the shrine, on the ground that 'the corselet cannot be demonstrated to belong to the original contents of the shrine and thus will not be considered here'. They do not discuss whether the corselet might possibly have belonged to the original contents. All the same the most significant part of the corselet was found inside the shrine as shown on pl. III; it is nothing less than a pectoral with a coronation scene where Atum and Nut of Heliopolis lead Tutankhamun 'Lord of the Two Lands, Lord of Appearances' (*nb trwy Nb-hprw-R' nb h'w Twt-'nh-'Imn*) in front of 'Amen-Re, Lord of the Thrones of the Two Lands in Thebes, Lord of Heaven who reigns eternally' (*'Imn-Rc nb nswt trwy hnty 'Ipt, nb pt hq' dt*). Both Nut and Amen-Re carry palm ribs with symbols of one-hundred-thousand jubilee festivals.

This pectoral is also of prime importance in connection with an argument presented by the authors elsewhere, in Chapter 3, concerning the interpretation of the relief decoration (p. 26). Here it is maintained that the shrine could not possibly depict the actual coronation of Tutankhaten, 'for all the texts of the shrine in their original form name Tutankhamun', and also because of 'the naming of the traditional gods Amun, Mut, Ptah, Sakhmet, Atum and Re in the shrine's text'. But they also reject the postulation of a second coronation of the King as 'something which is supported neither by texts nor by archaeological evidence'.

If they are right in this rejection, then the one and only conclusion to be drawn from the evidence of the pectoral is that the actual coronation took place in Thebes. The coronation theme of the pectoral links up directly with the figure of 'The Great of Magic' inside the shrine and the coronation scene at the back of the shrine (pl. xii, Back D, DR 2). Yet the authors claim that this scene at the back of the shrine does not commemorate a specific event but rather alludes to 'the aspiration of every Egyptian ruler to perpetuate his kingship. Ankhesenamun's presence asserts her role in guaranteeing the fulfilment of the king's aspiration while simultaneously ensuring her participation in Tutankhamun's destiny' (p. 40). Other explanations of the scenes are of the same nature. Concerning panel AR 3 and BR 1 it is said: 'We would interpret all these scenes quite literally to express the royal lady's affectionate sustaining role in her marriage' (p. 36). Concerning pl. xi, CR 4, the tying of a neck ornament: the Queen 'embodies her desire to provide for her husband's welfare' (p. 35).

Compared with the tangible facts of the coronation scene on the pectoral of the corselet which must have been worn by the king during his life-time, these statements of female affection (which may have existed) and female overpowering ambition seem rather doubtful as the *raison d'être* for the creation of the small golden shrine in the first place. Yet what was the function of the shrine? The authors rightly claim (p. 28) that 'any plausible interpretation of the small golden shrine's decorative programme must (1) be applicable to all scenes, (2) account for the prominence given Weret-hekau in the texts and (3) be consistent with a function of the shrine in this life'. This can be countered by the facts that (1) all the scenes have been claimed (by different authors) to be applicable to a coronation; (2) by now, nobody can doubt the importance of Weret-hekau as coronation goddess; (3) it can thus be argued that the making of the little golden shrine was commissioned in order to convey tangibly the message that an Amarna prince had married an Amarna princess and was the new rightful King of Egypt. Just as Haremheb travelled up and down the river for a similar purpose, this shrine could

have been sent to Memphis and Heliopolis (and possibly other places) to prove that Egypt had once more a king who was 'beloved of Amun' (see pl. xi Side C, CR1 and p. 18). The corselet worn during the coronation ceremony could then be kept inside the shrine at a sacred and safe place (perhaps in Heliopolis) until the day when they were returned to be buried with the King. In order that the shrine could fulfil this task, its dating must be set early in the reign of Tutankhamun, in fact at a time of transition when the soft style of the late Amarna art was still acceptable even in the presence of the old gods who had been persecuted by Akhenaten.

In the chapter on 'Style and Dating' (Chapter 4, pp. 41-3), the authors find it difficult to explain why 'the technical proficiency of the goldsmith was not equal to the task posed by the designer', if designer and artisan were one and the same person. But they could have solved this problem if they had followed Cyril Aldred, whom they quote, in his suggestion (*Akhenaten and Nefertiti*) that one could differentiate between an Early Period of the Amarna Style (pp. 38 ff) and a Late Phase (pp. 58 ff) which were initiated by master artists who were followed by lesser craftsmen (the first of the master artists, Bek, even claimed that he was a pupil of nobody less than Akhenaten himself). This could also explain the discrepancy between the two anointing scenes, one on the shrine (pl. xviii, Back D DR 1) and the other on the golden throne, although they are almost identical in other aspects (p. 38).

Although characteristics of the style are carefully differentiated in the last chapter, the conclusions drawn from special peculiarities – like the big head – do not lead anywhere in particular. It seems to me that the idiosyncrasies of the late Amarna style would no longer be accepted, once the city of Amarna had been deserted.

Summing up, it is good to see such detailed care being expended on the publication of the puzzling 'small golden shrine'. In presenting the facts the authors have given a solid foundation for further discussions, although their proposed solution seems to be wholly unacceptable to me. However, we may look forward to a study by M. Eaton-Krauss which was still in preparation at the time of the publication of this book: *Tutanchamun: Eine Bestandsaufnahme*, with its special section devoted to the queen (see n. 145).

KATE BOSSE-GRIFFITHS

La tombe thébaine du père divin Neferhotep (TT 50). By R. HARI. 214 × 297 mm. Pp. [2 +] 159 incl. pls. 79. Editions de Belles-Lettres, Geneva 1985. Price FS80.

The tomb of Neferhotep, divine father of Amun, at Sheikh 'Abd el-Qurna (TT 50) dates from the reign of Haremhab. The scarcity of Theban tombs from this period between dynasties makes a careful publication of the utmost importance, particularly of a monument as interesting as this one. The tomb is perhaps best known for its three 'harpers' songs' decorating large portions of the walls. Of historical relevance is the scene showing Haremhab rewarding three of his officials in year 3; and the wall with a list of feasts to be observed in the necropolis emphasizes the significance of this tomb from a religious point of view. During the previous century a number of scholars described and drew the reliefs on the walls. The task of an up-to-date publication has now been undertaken by a scholar well versed in post-Amarna affairs.

The hope of finding a fresh new approach to tomb publication, as suggested by the unpretentious paperback cover of the book, is, alas, soon thwarted. From a purely technical point of view the book is a disaster. A number of persons have been involved in the work, both in the field and in the production, and from such a team one would have expected more satisfactory results.

The beginning of the text is marred by typing errors, and the bibliographical references throughout likewise by inconsistencies. The photographs are unprofessionally shot, unartistically cut and do not survive the printing process to a minimum of satisfaction. The colour plates remain unnumbered, and the line-drawings have been misplaced in the binding to the extent that it requires major detective work to trace them. The quality of these drawings will be discussed below. To add to the confusion, references in the text to many plates are erroneous: in the heading to the paragraph on p. 11 the relevant plates are not vii, viii and lv, but iv, xlixb, l, liib and liii; on p. 15 not vii, viii and lv, but v, l and livb; on p. 36 not xxvi, xxvii and lviii–lix, but xxvi, lxxviii–lxix; and the

plates with frieze inscriptions (pls. xxii–xxv) have letters which bear little relation to the letters given to the walls on p. 34. The list could be continued.

There is no general index. The index of titles is typed with hopeless inconsistency. The bibliographical index is totally inadequate and has little to do with the works abbreviated in the footnotes. The typing is again erratic. A student with little experience in the field will be utterly lost by being presented for example with the abbreviation KRI (also written K, *RI*), not to mention abbreviated periodical titles to which no clue is given, or works quoted by author only, with no titles.

The information provided by the photographic illustrations is of limited use. The only justification for publishing such photographs would be if they were accompanied by good line-drawings in facsimile, the photographs enabling us to judge the quality and present state of the reliefs. During the present century a number of works have set the standard for this method of publication, in particular the team work provided by the Oriental Institute of Chicago, and the individual efforts of Nina and Norman de Garis Davies and R. Caminos. Anyone who has attempted to make a facsimile copy of a painting or especially of a relief will appreciate the difficulties involved. It may remain a matter of taste whether one prefers drawings to be done by tracing the outer edge of the relief only, or by indicating the height/depth by additional shading. But the method chosen should be consistent and accurate, and the result neat. The drawings in the present publication do not appear to achieve this aim, and the thick lines in respect of details do not reduce at all well, leaving too many black, blotchy patches. A simple affair like the drawing of the plan of the tomb is carelessly done with gaps left where lines should meet, and one is left with a nagging doubt as to the accuracy of the tracings of the reliefs, which cannot be double-checked in detail against suitable photographs.

The author claims to have benefited from a study of the records of the early travellers. The Hoskins MSS have obviously been of use, but in spite of the fact that the Hay MSS are referred to in the text, the author has not exhausted the information presented in them. A reproduction in the book of Hay Add. MSS 29844 A, 194 would not only have given a good overall picture of Wall B as it looked some 150 years ago; it would also have supplied some missing hieroglyphs and details of the representation. Compared with the photograph, as far as this is possible, Hay's drawing, carried out by *camera lucida*, seems more accurate than the one presented by the author, cf. for example the angle of the arm of the tomb owner in the lower register! Hay's drawing would also have supplied useful information as to the colours on the wall, and a study of his drawing would have revealed the intriguing fact that in the rewarding scene Neferhotep has not only been presented with golden necklaces, but also with a pair of bright yellow gloves, which he is actually wearing in the picture. That this is not a figment of Hay's (or our) imagination is suggested by the fact that the two other persons in the scene, who are also recipients of royal favour, show exactly the same characteristics. One instantly recalls the similar scene in the tomb of Ay at el-Amarna, where Ay is being presented with a pair of red gloves, an item hitherto unparalleled, with the exception of the gloves found in the tomb of Tutankhamun.

Is there help, then, to be found in the accompanying text? The scenes are summarily described, not without discrepancies. Are we to trust text or pictures when the text (pp. 21–2) says that the three women in pl. IX all have a band round their wigs, when the plate shows only one woman with such a band? Or when the text (p. 9) says that four women in pl. iii have the band, and the plate again shows only one? Or when the text (p. 26) says that only the figure to the right in the top register of the stela is named, when pls. xiii and lxiii give the name of the person to the left as well? Or when the text (p. 21) says that the head of the girl is destroyed, when it is visible in pl. lviii? Or when the text (p. 15) says that the decoration is sketched only, when pls. I and liv show that it was cut in relief? The descriptions of offerings are particularly frustrating. The author usually dismisses them as being 'fruit and vegetables' only (p. 16 to pl. v; p. 21 to pl. ix; pp. 36–7 to pl. xxvi) when the illustrations seem to show loaves or cakes, and sometimes meat, fowl and fish as well.

The author gives scant credit to the restoration work carried out in the tomb in 1925–6 by Mond and Emery. The procedure of replacing fragments on the walls and filling the gaps with restorations drawn in black ink is unique in the Theban necropolis, and, however attractive the result, this method is rightly criticized in the present case. The interpretations of Mond and Emery working in the field have not always produced results as accurate as those based on research of the documents of the early travellers, who saw the tomb in a less disintegrated state. With all this documentation to hand, it

is now possible to emend the restoration, in theory at least, for it is hard to imagine how the fragments could be taken out of their present concrete setting in the foreseeable future.

Hari has attempted to put things right in his plates. With the above mentioned reservations in mind, this is where the present publication finds its chief justification, especially with regard to Wall D. Hieroglyphs copied by earlier travellers and now lost are indicated in outline, the extant signs being filled in with black. The present state of the figures to which the texts pertain is less straightforward to distinguish from the drawings alone. The texts are sometimes said to be erroneous on the part of the ancient scribe and/or sculptor. But it is puzzling to find, in an enumeration of offerings, the word *šrt* 'roast meat' not only miscopied in the plate (and on the wall?), but also uncritically read as 'Horus Merty', causing a footnote (n. 94 on p. 27) to the effect that this god was otherwise not known until Saite times!

It soon becomes evident that the drawings are not at all the facsimile copies they purport to be (cf. the remarks in the preface). In col. 15 on pl. vi some hieroglyphs have been omitted. The signs in cols. 18–23 of the same plate have been placed with the beginning of the columns at a lower level for no reason at all (the relief is still extant, cf. pl. lv). On pl. vii the hieroglyphs are placed above the head of the person offering, whereas pl. lvii reveals that in actual fact they go down to eye level. A similar error has been committed in p. viii: pl. lvii shows that the signs are not all level, as in the drawing. The photograph on pl. lxxviii indicates that there is no blank space between the offering table and the text, contrary to the drawing on pl. xxvi. It is most unfortunate that the author has left us no opportunity of checking any details of representation whatsoever.

Transliterations of Egyptian words throughout the text are inaccurate, partly due perhaps to the typing, diacritical marks being often erroneous or omitted. The translations of some of the simpler accompanying texts leave something to be desired (e.g. on p. 10), though where help was to hand (harpers' songs and festival calendar) the translations are more lucid.

Following the descriptions of the walls, concluding chapters deal with the family of Neferhotep, and the historical and religious context of the tomb. Hari has not discovered any trace elsewhere of monuments belonging to the relatives of Neferhotep or his wife. It should perhaps be considered whether a tomb identified by Lepsius (his No. 5) as belonging to a First Prophet of Amun called Parennufer could be the tomb of the Parennufer with a related title shown in the tomb under discussion.

Among the numerous fragments of the walls found in the tomb and still kept there with fragments from other tombs, few are included in the present publication. Facsimile copies of those likely to belong might have encouraged other scholars to attempt to assemble the pieces. One large fragment, now in the Bankes Collection at Kingston Lacy, showing the beginning of the festival calendar, has recently been published in *Mélanges Gamal Eddin Mokhtar* by the present reviewer.

A fragment of a statue group from the tomb, correctly identified in *GM* 27 (1978) by the late Labib Habachi, at some stage found its way to the Roemer-Pelizaeus Museum in Hildesheim. Habachi suggested that the group, showing the wife of Neferhotep and two daughters, came from the niche at the north end of the hall, where the stela was later erected. Traces on the wall seem to suggest the former presence of such a rock-cut group in this place. Hari does not discuss this possibility at all and claims that the Hildesheim group was once part of the rock-cut group at the rear end of the tomb, restored by Mond and Emery. The photograph on pl. lxxviii a does not reveal how much of the group was actually restored and whether the Hildesheim group could conceivably have come from this part of the tomb.

On the first page of the book, after reprimanding earlier copyists for their hasty work in the field and subsequent inadequate desk work, the author admits that his own publication is far from perfect. The present reviewer is not inclined to disagree with this statement.

[Postscript. The scene suggested by Hari for 'Wall D', based on drawings by Hoskins, has now been shown to belong in the Ptolemaic temple at Deir el-Medineh: C. Beinlich-Seeber, *GM* 92 (1986), 11–15. Hay Add. MSS 29844 A, 194 ('Wall B') has been published in L. Manniche, *City of the Dead* (London and Chicago, 1987), fig. 50.]

The Road to Kadesh. By WILLIAM J. MURNANE. Studies in Ancient Oriental Civilization, No. 42. 280 × 215 mm. Pp. xix + 252, 3 maps. The Oriental Institute of the University of Chicago, Chicago, Illinois, 1985. ISBN 0 918986 43 5; ISSN 0081 7554. Price \$20.00.

The present book began as a chapter of historical commentary, to accompany the imminent publication of the war-reliefs of Sethos I at Karnak by the Chicago Epigraphic Survey (p. ix), but outgrew its original purpose, becoming a full monograph. The book falls into two halves: three chapters on Egyptian and Hittite relations prior to Sethos I, on the earlier wars of Sethos I, and on his later wars, ending with a ten-page summary; the second (and slightly longer) half comprises six Appendices and an Index.

The first chapter gives a lively and useful personal outline of the possible course of international conflicts and relations between the Syrian kingdoms and great powers in the Amarna age and after, with details worked out in Appendix 6. Little need be said here, except on two points. First, the author presents an excellent case of identifying the Egyptian queen who wrote to Suppiluliuma as having been Tutankhamun's widow (Ankhesenamun), not Akhenaten's (Nefertiti or other). With the two princes Smenkhkare and Tutankhaten available for the throne, no widow of Akhenaten could possibly need to marry either a commoner or a foreigner, and there exists not one single decisive scrap of evidence to favour any such dating. This is well put by Murnane. A further point (which he does not deal with) is that *Nib/Nip* in *Nibhururiya* can only stand for Egyptian *neb*, not *nefer* (always *nap-*), despite spurious claims to the contrary; *Nibhururiya* can only be Nebkheprure, Tutankhamun, in agreement with the other data. The other issue of interest here in Murnane's study concerns Egypto-Hittite treaties earlier than the famous treaty between Ramesses II and Hattusil III. The oft-discussed Kurustama treaty Murnane takes as having been in force up to the time of Suppiluliuma (whether it originated in his reign or earlier); and a further treaty broken when Muwatallis warred with Egypt, but in force until that event. Such a treaty could have been agreed by him or by Mursil II with Sethos I or (better) Haremhab, lasting into Muwatallis's reign.

The second chapter deals with the war-reliefs of Sethos I engraved on the east half of the north exterior walls of the Great hypostyle hall at Karnak. The bottom register is dated thrice over to Year 1, and commemorates the defeat of unruly Shasu semi-nomads along the Sinai littoral route to Gaza and Canaan. All the other registers needfully date later than this one, unless (as is often assumed) the next above register is also of Year 1. Here, the First Beth Shan Stela (also Year 1) is deemed to provide the necessary link. However, there arise problems as to the overall course of events in the first year of Sethos I, covered in Appendix 1 (as well as in Chapter 2), and linked in topic with Appendix 2 (travel-times in Egypt and the Levant). The picture is complicated by the datelines on the stelae from the Temple of Ptah and (in alabaster) from the *cachette* at Karnak. The accession of Sethos I evidently took place within the period 1st Peret 21 (date of Buhen stela of Ramesses I) and 4th Shomu 30 (date of Buhen stelae of Sethos I), and most probably to within 3rd Shomu 18 to 4th Shomu 23 (Murnane, *Serapis* 3 (1975/6), 23 ff; cf. W. Helck, *CdE* 41 (1966), 233-4). In ostraca from Deir el-Medina, a holiday is known with a procession for a king Sethos; this cannot well be Sethos II (accession, [1 or 2] Peret 25), hence it could relate to Sethos I, fixing his accession at 3rd Shomu 24. On this basis, the First Beth Shan stela dating to 3rd Shomu 10 comes barely a fortnight before the start of Year 2; yet, the Ptah-temple stela has Sethos I back in Egypt from his '1st victorious campaign' and honouring Amun of Thebes still in Year 1. There may, however, be a fairly simple answer to the overall problem, which may be tabulated thus:

- Year 1: 3rd Shomu 24, death of Ramesses I and accession of Sethos I. 70 days' embalming of Ramesses I, through to 1st Akhet 29; during this time, Sethos I conducts his 1st campaign simply against the Shasu, up to Gaza; bottom E. register, Karnak. At 15 miles a day there and back (cf. App. 2), Memphis-Gaza-Memphis, the whole affray could be over in less than 40 days.
- Year 1: 2nd Akhet 1, already back in Memphis, Sethos I orders an alabaster stela for Amun of Karnak (date of that stela), and perhaps the stela of the Ptah temple. He sets out for Thebes with the burial of Ramesses I.
- Year 1: mid-2nd Akhet, in Thebes, Sethos I buries Ramesses I and celebrates the Opet-Festival. During this time, Alabaster and Ptah stelae delivered and installed at Karnak.

- Year 1: 3rd Akhet to 4th Peret inclusive—no record; Sethos I attending to Egypt's domestic affairs in Thebes and Memphis.
- Year 1: 1st–3rd Shomu, Sethos I resumes his campaign in Canaan and up to Lebanon (Karnak, E. middle register); on return journey, deals with Jordan valley troubles (1st Beth-Shan Stela, 3rd Shomu 10). Some 20 days later (at 15 miles a day), back in Memphis.
- Year 2: 4th Shomu 23, king actually attested in Memphis (*Rechnungen*), *KRI* I, 244. Hence, Year 1 campaign(s) over by then.

This outline accounts for all the data; a two-part campaign might well explain how it is that two separate registers at Karnak would be devoted to the campaigning of Year 1, with time on his hands during his late father's embalming period, the impatient Sethos seized the first possible opportunity to get to grips with the Shasu nuisances interfering with communications through to Canaan—the remarkably vengeful tone of the texts in the Shasu reliefs shows how keen he was to thrash troublemakers (cf. Kitchen, *Pharaoh Triumphant* (Warminster, 1982), 20–1). At Gaza, he would doubtless receive tribute and gifts from the city-state rulers of Canaan. Hence, on the subsequently-written Ptah stela, the phraseology used would be entirely in order. After all the rites at Thebes for his father's burial (in the essential role of Horus burying Osiris, as true heir) and the important Opet-Festival, Sethos then had several months to attend to home affairs and organize his swift return to the Levant in Shomu, up to Lebanon/Phoenicia and back. Contrary to the prevailing view hitherto, the late date in the regnal year of the First Beth Shan stela would best place his suppression of the Jordan valley disturbance during the king's return journey to Egypt, as he was definitely in Memphis within 33 days of the date on this stela.

As for the lost E. top register, Murnane (like most commentators) turns to the topographical lists to help fill the gap; used critically (as he does), this longstanding practice still seems the only valid (and available) path to take in the matter.

Chapter 3, on later wars of Sethos I, deals with the top and bottom registers (Amurru/Qadesh and Hittites, respectively) on the West half of the north walls at Karnak, relegating the middle (Libyan) register to Appendix 3. Here we have the old chestnut, as to whether the registers should be read from bottom to top (as general New-Kingdom practice would normally require) or top to bottom (as can occur) as favoured by (i) the geographical/military sequence capture of Amurru and Qadesh, then conflict with Hatti proper, and by (ii) phrases in the Libyan reliefs appearing to reflect Syrian victory, and in the Hittite war reliefs appearing in turn to reflect a triumph in Libya. It begins to seem that the top to bottom solution may be the better, without certainty being as yet attainable. Contrary to my own earlier view, Murnane suggests (p. 91) that Qadesh may have stayed Egyptian for much of Sethos I's reign, and Amurru down to Year 3 of Ramesses II—which is possible. That the King of Carchemish was explicitly featured (and killed) in the Hittite war-reliefs is a suggestion treated with great circumspection by Murnane—and rightly so; too much should not be read into these reliefs, lacking an explicit text (App. 4). Appendix 5 deals with the officer Mehy whose figure and name was added to the reliefs under Sethos I, only to be deleted and replaced by that of prince Ramesses (II) later. Murnane finds him a total enigma. I would suggest that he was a personal military aide to Sethos I, who had rendered him signal services on campaign, hence his reward of an official (if short-lived) immortality in that context; cf. Menna, charioteer of Ramesses II in the Qadesh texts of that king; and Thuty of Joppa's fame under Tuthmosis III. Prince Ramesses was undoubtedly a mere youth when he went on his father's campaigns, and was there to learn 'how it was done', as part of his royal apprenticeship. Hence, for his own purposes he had no compunction later in replacing Mehy's name and figure by his own. As for the Libyan campaign, its inclusion with a full set of reliefs at Karnak suggests strongly that it was no mere skirmish, but an important conflict—under changing conditions—in a quarter long dormant and newly affected by population-movements in and from the East Mediterranean area; the Nubian campaign perhaps indeed occurred too late to feature in the Karnak series and was of less importance.

The book is well-produced (from a clear typescript), and a pleasure to read—it will be a valuable contribution to study of the Amarna and early Ramesside periods, regarding international relations in the Ancient Near East.

The Tomb-Chapels of Paser and Raia at Saqqâra. By GEOFFREY THORNDIKE MARTIN, with the collaboration of HANS D. SCHNEIDER, MAARTEN J. RAVEN, JANINE BOURIAU, JACOBUS VAN DIJK, DAVID A. ASTON: with plans by KENNETH J. FRAZER and photographs by MARTINUS VINKESTEIJN. Egypt Exploration Society Fifty-Second Excavation Memoir edited by A. J. SPENCER. Egypt Exploration Society, London, 1985. Pp. xv + 63, pls. 37. 325 × 255 mm. Price £57.60. ISBN 0 85698 095 1.

Depuis que l'expédition conjointe de l'Egypt Exploration Society et du Musée National des Antiquités de Leyde oeuvre à Saqqarah sous la direction de Geoffrey T. Martin, les découvertes ne cessent de s'accumuler. Trois grands moments ponctuent ces treize dernières années: Horemheb, Tia et Maya (dont la fouille vient de se terminer). Mais ces monuments considérables de personnages majeurs, qui sont encore en cours d'étude et de publication, ne doivent pas faire oublier les autres tombes qui se trouvent dans leur voisinage immédiat. En quelque sorte les stars ne doivent pas rejeter dans l'ombre les seconds rôles, car il s'agit là d'un ensemble exceptionnel, celui de la principale nécropole memphite du Nouvel Empire connue à ce jour et qu'il faut naturellement mettre en relation avec le cimetière voisin fouillé quant à lui par l'Université du Caire sous la direction du Professeur Sayed Tawfik.

On commence à s'apercevoir enfin de l'intérêt considérable de ce nouveau champ d'investigation de l'égyptologie (un colloque a du reste eu lieu à Paris en octobre 1986 sur ce sujet et son texte a paru en 1988 aux éditions du CNRS: *Memphis et ses nécropoles au Nouvel Empire. Nouvelles données, nouvelles questions*) et on n'oubliera pas le rôle à la fois de pionnier et de moteur joué à cet égard par l'expédition EES-Leiden Museum.

Menées avec ardeur et régularité par une équipe de haut niveau, les fouilles anglo-hollandaises de Saqqarah seront aussi publiées avec célérité, autant que faire se peut: l'ouvrage consacré à la tombe d'Horemheb ne devrait plus tarder à paraître; quant au volume qui fait l'objet du présent compte rendu, il est le premier de ce qui sera certainement une longue série et il n'est pas indifférent qu'il porte sur deux tombes qui n'ont pas l'importance de celles qui constituent les découvertes majeures de l'expédition, mais qui sont, pour cette raison peut-être, bien représentatives du niveau moyen de ce cimetière. On notera cependant que depuis lors, G. T. Martin vient de faire paraître son *Corpus of Reliefs of the New Kingdom from the Memphite Necropolis and Lower Egypt*, qui n'est naturellement pas sans rapport avec les recherches entreprises sur le plateau au sud de la chaussée d'Ounas.

La publication des tombes de Paser et de Raia est relativement brève, mais fort dense. Elle comprend cinq sections. La première est consacrée à la tombe ('tomb-chapel' selon la terminologie tout à fait légitime de l'expédition) de Paser, scribe royal et chef des bâtisseurs (*imy-r qdw*) du maître du Double Pays, et la seconde à la tombe de Raia, supérieur des chanteurs de Ptah maître de Maât (descriptions architecturales des divers éléments de sépultures et surtout des chapelles, traductions des inscriptions, généalogies, commentaires divers). Les sections suivantes constituent des catalogues raisonnés du matériel très riche découvert au cours des fouilles: tout d'abord un ensemble de dix-sept blocs et fragments appartenant à des tombes qui ont dû se trouver dans le voisinage, mais qui ont sans doute été démantelées et détruites après le Nouvel Empire (ils font connaître un certain nombre de personnages avec leurs titres ou comportent des décors intéressants comme le port du pilier-*djed* par le défunt); vient ensuite le catalogue des objets dû à M. J. Raven (108 pièces, toutes accompagnées de photos ou de dessins), très détaillé et précédé d'une mise en perspective et d'un commentaire éclairants; enfin la dernière section, qui couvre plus du tiers du texte, est l'oeuvre de J. Bourriau et D. Aston, et traite de la céramique. Il s'agit d'une étude très complète et non pas d'une simple liste de formes; on y trouve successivement une description des types de pâtes, puis des formes réparties en trois groupes majeurs et enfin l'étude des divers dépôts et caches trouvés sur le site, le même plan étant suivi respectivement pour la poterie du Nouvel Empire et pour la poterie tardive.

Tables de concordances et indices très détaillés complètent heureusement la publication qui est par ailleurs accompagnée d'un jeu de planches-plans, photos et fac-similés—de très grande qualité. Tout l'ouvrage est d'ailleurs un nouvel exemple du très haut niveau des séries de l'E.E.S. qui allient l'élégance de la présentation et l'intérêt d'une double approche, archéologique et épigraphique. Tout au plus pourrait-on exprimer un léger regret. La concision extrême de la présentation est peut-être un peu excessive, en particulier dans les descriptions architecturales. Toutes les données soigneusement enregistrées durant la fouille, tous les relevés ne peuvent évidemment pas figurer,

mais on aimerait parfois en savoir plus. Je pense spécialement à la description des parties souterraines qui, même si elles sont dénuées de tout décor, n'en mériteraient pas moins des considérations plus détaillées, voire quelques photos et des coupes ou des axonométries (c'est du reste une tendance générale dans les études et publications de tombes que cette attention trop rapide accordée aux 'substructures'; elle est due naturellement à l'aspect souvent austère, voire grossier de celles-ci; mais le lecteur perd ainsi des éléments appréciables et par nature inaccessibles, qui pourraient, une fois réunis, être examinés du point de vue des datations, des typologies, des techniques, voire des conceptions funéraires). De la même manière, même si une publication de ce genre doit essentiellement traiter des tombes et non pas de leurs propriétaires, le lecteur aimerait avoir quelques éléments synthétiques de plus—si cela est possible—sur la carrière et l'époque du *floruit* des défunts, à la manière des excellents bilans généalogiques qui sont donnés pour chaque tombe.

Depuis cette publication, les activités de l'expédition EES-Leiden Museum à Saqqarah se sont poursuivies sans interruption, avec la détermination et la méthode que l'on connaît à G. T. Martin et son équipe. À côté de la découverte de monuments majeurs continuent à prendre place la mise au jour et l'étude de tombes moins considérables, mais qui—toutes ensemble—apporteront beaucoup à l'étude de Memphis au Nouvel Empire (ainsi avec les chapelles de Khay, de son fils Pabes et de Ramose: Martin, in *JEA* 73 (1987), 1 sq.).

ALAIN-PIERRE ZIVIE

"Les Ouvriers de la Tombe" Deir el-Médineh à l'époque ramesside. By DOMINIQUE VALBELLE. Bibliothèque d'Étude XCVI. 275 × 200 mm. Pp. xviii + 414, pls 10, figs 3. Institut français d'archéologie orientale du Caire, 1985. ISBN 2 7247 0018 X. Price not stated.

Professor Jaroslav Černý did not live to complete the detailed study which he planned to undertake on the community of Deir el-Medina, but with this volume Miss Valbelle has now filled this gap with a general survey of the lives of the workmen in the Ramesside period. As an introduction, the author reviews the state of knowledge of the community in the Eighteenth Dynasty (pp. 1–26). She suggests that the site may have already been utilized under Amenophis I and examines in detail the burials which have been excavated and dated to the Eighteenth Dynasty and the grave goods recovered from the unlooted tombs. She surveys the building of chapels and cult centres in the community although she cannot prove with certainty the date of any of these buildings. In fact, there is clear proof of the building activities of Tuthmosis III in the form of foundation deposits which were discovered by Baraize in his clearance near the Ptolemaic temple (*ASAE* 13 (1914), 39 Nos. 43508–47). My colleague W. V. Davies informs me that on examination some of these objects were found to be inscribed with the cartouches of Tuthmosis III. Unfortunately, Baraize is not precise as to the find-spot of these deposits although they were apparently found near the chapel dedicated to Tuthmosis III and may date its original construction. As the author points out, there is plenty of material for a more detailed study of the community in this period.

In the first part of the volume proper, the author reviews the papyrological sources available on the village and its inhabitants (pp. 27–85). She divides the papyri into six classes: tomb journals including some ostraca, the 'état-civil' of the reign of Ramesses IX, the registers of supplies, the tomb-robbery papyri, and private correspondence. She estimates that only one-third of all source material has been published properly, another third is available in transcriptions in Professor Černý's notebooks (much of this now published by K. A. Kitchen in his *Ramesside Inscriptions*), and a final third remains totally unpublished. The author is certainly correct to emphasize the work that remains to be done on unpublished documents from Deir el-Medina, and it is hoped that her injunctions will be heeded. The British Museum papyri and ostraca are at present being transcribed and hopefully will be published in the near future. It is interesting to note that the author has herself worked on the restoration of the famous 'état-civil' in Turin, and one hopes for the eventual publication of this important document. The work journals are examined in detail in attempt to establish a chronological reconstruction of all surviving examples. One may quibble at the dating of various documents, but the end result is most

useful. The concentration on papyri tends to obscure the fact that there are plenty of supply registers, judicial reports, and private letters on ostraca which are not taken into account here. On p. 29 Harshire is the grandfather and not uncle of Butehamun.

The second part of the book consists of a general survey on how the community of Deir el-Medina functioned (pp. 87–157). The author examines the nature of their work, the work routine, and the composition of the gang. Ostraca of varying periods are studied to determine the numbers of the gang at intervals in its history showing the wide variation from reign to reign and indeed within some reigns such as Ramesses II or Ramesses III when the length of reign led invariably to the diminution of work and hence numbers of workmen. A series of lists in an annex to the volume tries to establish the names and careers of workmen from Sethos I until the end of the community. The dating of some of the documents used in this study is again open to question. The first O. Stockholm MM 14126 has in fact already been published in *Medelhavsmuseets Bulletin* 14 (1979), 9–15 by J. Janssen who dates it not to Sethos I but to early Ramesses II. The dating of the ostraca of Dynasty 20 has recently been examined in detail by M. Gutgesell, *Die Datierung der Ostraka und Papyri aus Deir el-Medineh und ihre ökonomische Interpretation* (Hildesheim, 1983) and a further study of those in the Nineteenth Dynasty is promised. The various posts in and outside the village and the relationship between the village and the authorities are discussed. This section concludes with an examination of the salary structure.

The third part of the volume consists of a general history of the community of Deir el-Medina from the end of the Eighteenth Dynasty until the end of the Twentieth Dynasty (pp. 159–226). This thorough survey can now serve as the standard statement on the development of the community unless major new evidence should be forthcoming. On p. 173 Any and Nakhtamun were the brothers and not the sons of the sculptor Ipy. On p. 180 the author's version of the supposed feelings of Paneb towards the family of Neferhotep the foreman is perhaps influenced by the tenor of Papyrus Salt 124. A balanced reading of that text could imply that Paneb was the legitimate heir and successor of Neferhotep as his adopted son whatever his later faults. On p. 184 the ultimate fate of Paneb and his son Aapahte is not clear. The Kasa, son of Aapahte, who appears in the records about this time need not be his son, while the Greg papyrus in which Aapahte appears could well date to Siptah and not Ramesses III so Aapahte might have disappeared at the same time as his father. The reign of Amenmesse has received more recent study by R. Krauss in *SAK* 4 (1976), 161–99 and *SAK* 5 (1977), 131–74 although his role as a rival to Sethos II remains to be confirmed.

The fourth part of this volume deals with the daily life of the community (pp. 227–304). The author examines the social aspects of marriage, divorce, and family life. The small number of children mentioned in the census of Ramesses IX's time might be indicative of that period when the community was in decline but may also be distorted by the absence of adult married children. Certainly the evidence from the tombs and stelae of the Nineteenth Dynasty and even the Twentieth Dynasty suggests much larger families. The author then reviews the local economy and the objects used and produced in the village. She gives the names of the various types of bread, fish and other foodstuffs consumed. Finally, the author covers that one important aspect of any ancient Egyptian community: the disposal of the dead. The type and decoration of the local tombs are discussed, and the extent of their original contents is estimated. A very valuable attempt is made to reconstruct the original burial equipment from the tomb of Sennedjem.

The final section of this exhaustive study deals with the legal and moral restraints under which the community operated (pp. 305–42). The various crimes attested in the village are enumerated, and the working of the local village tribunal is examined. The author then turns to the religious side of village life. The local pantheon is reviewed, and a detailed list of the various local religious festivals given. The section ends with a chapter on the literary tastes of the community as evidenced by the surviving fragments on papyri and ostraca. The volume concludes with a chronological list of workmen based on a selected list of ostraca and papyri and detailed indices of names, titles, Egyptian words, and source citations. While the inclusion of the various disparate sections in one volume may appear at first puzzling and the arrangement open to question, this volume has gathered together a wealth of material on Deir el-Medina which serves to illustrate not only life in this special community but in many of its aspects life in ancient Egyptian communities as a whole.

Les Dieux-Gardiens et la genèse des temples. Les soixante d'Edfou et les soixante-dix-sept dieux de Pharbaethos. By JEAN-CLAUDE GOYON. Bibliothèque d'Étude, 93. 2 Vols. 274 × 200 mm. Pp. 507 with frontispiece; pp. 224, pls. 44. Cairo, Institut Français d'Archéologie Orientale, 1985. ISBN 2 7247 0015 5. No price stated.

Presented as a doctoral thesis, this work is a study of the protective deities who are often mentioned in the texts of the Ptolemaic temples and to whose importance Sauneron called attention in *Esna* V, 181. One might have thought that the principal deity of a temple, such as Hathor at Dendera and Horus at Edfu, would be deemed to be sufficiently powerful protectors of their own sacred domain. In fact the particular task of protection was assigned to the deities called *srw-n.sn* or *hw-n.sn*, who were regarded as defenders of cosmic equilibrium against the forces of chaos. When Goyon (p. x) describes the tension as concerned also with Good and Evil, he is perhaps borrowing an emphasis from Iranian ideology; but he rightly gives more attention to equilibrium and chaos. Two groups of divine defenders are studied in this work: the sixty guardian gods of Edfu and the seventy-seven tutelary spirits of Horbeit-Pharbaithos. The Edfu group has been discussed to some extent by E. A. E. Reymond in her book *The Mythical Origin of the Egyptian Temple* (Manchester, 1969). A text which tells of the creation of the guardian gods of Edfu (*E. VI*, 328, 7 ff.) is translated in full by Goyon (*I*, 7 ff.) with copious notes. It is the first translation that has hitherto been published, although Dr Reymond gives a valuable synopsis in *op. cit.* 33-6.

The plan of the work involves devoting the first volume, in the main, to the translated and annotated texts. In the first part come the texts relating to the sixty divine guardians at Edfu, with discussions afterwards of the four companies which comprise them and remarks on the nature and function of these divine defenders. The second part does the same for the seventy-seven protectors of Pharbaithos, but with a preliminary section on relevant cults and myths of the Delta; the god of Pharbaithos and his emanations are dealt with, as well as matters of iconography and onomastics. In the third and final section we are given a full-dress essay of interpretation. The main item in the second volume is the collection of texts which have been treated, all in the author's neat hieroglyphic script. These are preceded by a bibliography and by admirably full Indices. The volume closes with the plates, which are, for the most part, impressive in their clarity.

A good deal of attention is rightly given to the nomenclature, a tabulation of the various writings being provided. The two principal forms are not attested before the Ptolemaic era and may be the product, therefore, of the 'new theology' sensed by Erich Winter and others. In addition to *srw-n.sn* and *hw-n.sn* there appears occasionally a form *srw-n.sn-srw*. Some variety is shown in the divine determinatives, but more problematic is the grammatical explanation. Previous proposals are reviewed. Sethe saw a verbal adjective as the basic form, with the sense of 'they who ought to protect'. Goyon then discusses the possibility of a verbal form of the type *sdm.n.f* with the meaning 'they have protected', a meaning which agrees well with the minority of forms that insert a pronominal *sw* after the verb: 'they who have protected him (from the beginning)', with a durative added sense 'and continue to protect him', the pronoun referring to the creator-god. It is stressed that only a small minority of readings present the form with the pronoun and that these may well represent a re-interpretation of the more common form. Goyon's own view is that the names are nominal rather than verbal, *srw* and *hw* being substantival infinitives, and that the grammatical element *n* + suffix which follows is probably an elliptical form of the emphatic phrase denoting possession in Middle Egyptian, *n.sn imy*; cf. Gardiner, *EG*³ §114 (4). The resulting sense will now be, 'they whose proper task is protection', lit. 'protection belongs to them'. For the ellipse of *imy* we are referred to p. 313 n. 7, but the example there cited appears to include *m* doing duty for *imy*. H. Junker, *Grammatik der Denderatexte* (Leipzig, 1906), §249, is cited; he gives examples of *n*- in predicative prepositional phrases, with no suggestion, however, of an elliptical usage. In fact, the construction implying possession is rendered better by Goyon's previous suggestion that the *n.sn* is a simple Dative denoting possession. Yet the *sdmn.n.f* construction which appears in *srw-n.sn-srw* may be argued to be applicable in the majority of cases, for the dependent pronoun as object rules out any other construction. A re-interpretation, admittedly, may have switched to another syntactical mode; but the argument about not basing the interpretation on a small minority of instances is not really convincing. The opposite case may be true, just as the rare and difficult reading often points to the original form;

the reservation here is that the rare form is easier. After showing that Daumas had advocated a similar solution ('ceux auxquels est dévolue la protection'), Goyon mentions still another possibility: the verb may be an imperative followed by an ethic Dative ('guard for them'), representing the creative utterance of the demiurge in invoking protection. The several suggestions put forward might argue indecision on the part of the author. There is cause rather for admiration. His refreshing lack of dogmatism and patient exploration of all avenues is apparent throughout.

The cosmogonic myth of Edfu, which is now clearer through Goyon's translations, is concerned with the emergence of a threatening serpent almost coevally with the act of creation. Defeated and even annihilated as the serpent may be from time to time, he reappears with renewed threats. The struggle of the sun-god against Apopis is the basic theme; and the translations here offered are themselves the fruit of an enlightened struggle with a phase of Egyptian which has been increasingly reduced to order through recent researches, particularly by French scholars, but which is still, at times, far from easy to handle. In this book one is confronted by numerous lacunae, by doubtful readings of the original text, by contested transliterations, and by errors embedded in the text due to the wrong transcription of hieratic—and the last category is one which Goyon treats with enviable skill. Even in passages where these difficulties do not occur, one is sometimes impeded by the possibility of new and unfamiliar meanings. A simple example of the difficulties can be seen in a phrase used in a list of the sacred names of the Edfu temple. After the designation *Throne of the Gods of Re and Horus* comes the phrase *Temple of the God of Gods* (I, 40 and II, 103 ad fin.), where *God of Gods* renders four falcon-signs; then in a passage describing the company of falcon-defenders it is said (I, 49 and II, 107, line 4) that they are watchful to protect the *God of Gods*, a phrase written in the same way. In a note on the latter occurrence (p. 49 n. 5) Goyon says '*ntr* (ou *bik*) *ntrw*' and compares the former instance, adding that it points to the Solar Falcon. As always, his alternative suggestion is worth pondering. Whereas *ntr ntrw* is a locution used since the Eighteenth Dynasty (see *Wb.* I, 360, 1), *bik ntrw* does not seem to occur, although *bik ntry*, 'divine falcon', does (*Wb.* I, 445, 2-4). A further possibility is *bik bikw*, 'falcon of falcons', i.e. the Supreme Falcon, Horus of Behdet. In favour of this reading is the fact that in I, 103 the phrase is preceded, in the same line, by the words *nst ntrw, throne of the gods*, where 'gods' are denoted by the falcon with flagellum on a standard, quite unlike the simple falcon used in the phrase in question; and a similar distinction is made in the following line. Elsewhere, however, *bik* itself is sometimes written with the falcon and flagellum: see Fairman, *BIFAO* 43 (1945), 122, on *bik n nb*, 'falcon of gold'. Yet many writings show the simple falcon, e.g. *E.* VI, 184, 17-18; cf. Goyon, *Confirmation du pouvoir royal au nouvel an* (1972), XX, 3-4 and p. 78 ('falcon of gold' and 'living falcon'), and in this work, II, 273-4.

The protective gods of Edfu were created, according to the myth, by the principal deities at an early stage of creation. They are children of the sun in the form of Horus or of the Theban Amen-Re, and obedience to their progenitor is naturally their basic task. Since their function is ancillary, they occupy a third position after gods and goddesses; yet their destructive and warlike powers are stressed. Nor is their protective activity an exclusive right of particular gods; it is extended to any deity who is sovereign of a sanctuary. Their assimilation to the divine standards carried in procession is another of their characteristics. Two other groups are shown to be closely associated: the local Ennead of gods and the ancestors; and the lunar cycle is seen to play a part in certain rites.

The Delta too knew ancient myths concerned with the struggle of the solar falcon against the serpent, although the enemy may bear various names. At Pharbaithos (Shedenu), near the modern Horbeit in the Eastern Delta, the falcon-god was Horus Merty, 'Horus of the Two Eyes'. If information deriving directly from the area is rather *miskîn*, Goyon gives us a richly fruitful surprise by his success in assembling a veritable wealth of data from the Ptolemaic temples of Upper Egypt as well as from other varied sources including funerary inscriptions, stelae, amulets and papyri such as the Book of Overthrowing Apopis which Faulkner edited. Among Horus Merty's activities is his prowess as a charmer of serpents and in this connection he sometimes bears the title of Horus the Triumphant (*ms-hrw*). This appears to be a title especially assigned to the falcon-god of Pharbaithos, as Goyon shows, and it is a title which is first used of Horus, as early as the Pyramid Texts, with a more general application. (Gardiner was in error when he stated of the title in *EG*³, § 55, 'originally applied to Osiris...'; cf. my *Conflict of Horus and Seth*, 17 and 57, as cited by Goyon, p. 169.) It is reasonably suggested (p. 173) that at Pharbaithos the ancient form Horus the Triumphant, who was the vanquisher not only of Apopis but of serpents generally, was eventually fused with Horus Merty.

But when the latter is described at Edfu (here I, 178) as the *Falcon of gold, who presides at Edfu*, it must be admitted, as Goyon remarks, that he has for the moment become a mere hypostasis of Horus of Edfu; he is more distinctive when accompanied by *Hathor, mistress of Shedenu* (p. 179). His forms are various: he can be a falcon, a lion, and a bull, and the plurality leads to the formation of a *deus pantheus* whose powers (*brw*) are embodied in seven or nine theriomorphic beings. It is the number seven that is potent with Horus Merty, seven or its multiples being invested with magical force. Hence the evolution of seventy-seven living *brw* at Pharaithos to rebut an equal number of threatening beings; and the beneficent powers are also called gods. An ensuing process is the deflection of their activities from Re to Osiris, although these gods are now often fused.

In a section dealing with the 'equilibrium of forces' there is a valuable discussion (pp. 204-5) of a passage in *Mutter und Kind* (P. Berlin 3027, V, Recto 1-6) which concerns a *red (dšrt) woman who has given birth to hprw*; she is clearly prone to miscarriages, and I question whether *dšrt* here must have a Sethian sense as Goyon thinks, positing a woman with red hair and complexion. It is true that the incantation refers to the *seventy-seven asses who were in the Isle of the Two Knives* and that the asses may well be Sethian. But *dšr* has plenty of associations with blood and the medical meaning seems to suffice (a 'bloody' woman in the sense of 'addicted to bleeding'). An analysis of data from Edfu, Dendera, and Athribis shows that the protecting deities are now defenders, in particular, of Sokar or Sokar-Osiris.

Various uncertainties arise with regard to both the names and the iconography of the minor divinities. The problems are freely acknowledged, especially when name and icon seem to be at variance; and Goyon never treads confidently when this is not warranted. In the imposing analysis which concludes the work there are acute remarks on the problems relating to arithmology and the monumental lay-out of the material. The protecting powers are shown to have occupied strategic points on temple walls from which they were deemed to have the faculty of descending from their images in order to meet any particular menace. Further, their constant vigilant defence, although exercised initially in one sacred precinct, extends to the whole orbit of cosmic equilibrium. This study, in short, is a fine achievement which illuminates not only its central theme but a host of related matters.

J. GWYN GRIFFITHS

Mythische Motive and Mythenbildung in den ägyptischen Tempeln und Papyri der Griechisch-Römischen Zeit. By HEIKE STERNBERG. Göttinger Orientforschungen. IV. Reihe: Ägypten, 14. 240 × 170 mm. Pp. xvii + 338. Wiesbaden, Harrassowitz, 1985. ISBN 3 447 02497 6. Price DM 54.

This study is a slightly expanded form of a doctoral dissertation accepted in 1983 at the University of Tübingen; but much of the work was carried out at Göttingen, and the book is dedicated to Jürgen Horn and Friedrich Junge, two Göttingen scholars, in recognition of their help. At Tübingen it was the Faculty for Cultural Sciences ('Kulturwissenschaften') that accepted the work. In 1977 the present reviewer spent a stimulating semester at Tübingen without noticing the existence of such a Faculty, much less comprehending its exact field. Its emergence should not, however, disturb any reader, for it is clear that the dissertation was written by a person competently trained in Egyptology.

After an Introduction which outlines the scope and aims of the study, some twenty pages are devoted to the general concept of myth. Here the first question to be tackled is whether the Egyptian myth-making phase implied a pre-logical mentality and whether the arrival of a full-blown and consistent rationalism should be regarded as a Greek achievement which western civilization inherited. Lévy-Bruhl, Henri Frankfort, and W. F. Albright are cited as protagonists of this all-too-tidily evolutionism which is here roundly rejected. Lévy-Bruhl later modified his views and his modifications were developed by Anthes and Junker in their recognition that the two mentalities, logical and alogical, can be seen in the mind of the Ancient Egyptian just as they are abundantly present in the mind of modern man for all his devotion to science and technology. Indeed, the devotion to technology has itself bred a whole brood of superstitions. Later approaches are then discussed,

including Hornung's assumption of a 'polyvalent logic' as characteristic of Egyptian thought. Dr Sternberg is herself attracted to the interpretations of U. Berner on the lines of an 'ontological thought-model' which is based on logical processes. The initial discussion of this theory is somewhat sketchy.

There follows an exposition of the form and content of myths, with a clear distinction of myth, saga, fairy-tale, fable and legend; one only misses a cautionary note on the possibility that the types can easily merge. The point is well made, apropos of the frequent cursory snatches in which Egyptian myths are conveyed, that it is precisely in the Late Period that a big change is wrought: now the coherent and comprehensive narrative powerfully presents itself. For this development, realized on temple walls and papyri, a double motivation is suggested: first, a desire to make the national Egyptian religion completely valid as opposed to other religions by giving it a systematic framework; secondly, in the process of ensuring its being handed on in a permanent written form, an urge to protect Egyptian religious thought against foreign influences or superimpositions. The selected texts are then provided, in a sequence of translation and commentary: (1) the Horus-Myth of Edfu (The Winged Disk); (2) Mythological texts from the temple of Esna; (3) similar texts from the temple of Kom Ombo; (4) Papyrus Boulaq No. 2 (a localized form of the 'Celestial Cow'); (5) P. Jumilhac (up to IV, 15). The translations of Esna texts are especially welcome, as most of them are the first to be published, and here they are preceded by the texts themselves in transliterated form. If the commentary following the translations seems rather tenuous, the elaborate analyses in later sections make full amends. First comes a 'Mytheme Catalogue' arranged alphabetically under headings such as 'Appeasement', 'Dialogue' and 'Rebellion'; then a section on the structure and formation of the myths, with the definition of three 'Theologemes' in which the god Thoth plays a prominent role. All this is fortified with a number of appendices, charts, and diagrams.

In spite of the plethora of themes and sub-themes listed and analysed, the multiplicity is more apparent than real. It emerges that certain divine powers are ever at war with each other—Re with Apopis and Osiris or Horus with Seth. Various other deities are shown to play a part in accord with the local traditions of temples. Thus at Kom Ombo Haroeris and Sobek gain some prominence, while at Esna Khnum and Neith form a triad with Re as their offspring, though there are subsidiary triads too. Both Kom Ombo and Esna, however, are much concerned with the fortunes of Re: he must resort, through weakness, to flight and concealment, but is protected by supporting gods and achieves rejuvenation in the form of a younger god such as Horus. It is of interest that the hostile roles of Apopis and Seth consistently confront Re and Osiris respectively (p. 213). In P. Jumilhac Anubis appears as a supportive son of Osiris (p. 217, where in n. 1 the naming of Seth as a son of Osiris and Nephthys is doubtless a slip of the pen). There is a perceptive discussion (p. 224) of the Re-Osiris fusion, which goes so much beyond a syncretistic link. At Esna and Kom Ombo we find a narrative version about the raging goddess, Tefnut, who strayed afar and was eventually placated and induced to return; this motif is often linked with that of the eyes of Re, but is firmly distinguished (p. 226) from the myth of Re's raging eye, the lioness Hathor-Tefnut.

Concern with solar phenomena must lie behind such myths, as is rightly pointed out, and there is a hint of mythological fusion in the very name Hathor-Tefnut. At times the discussion of conceptual discussions tends to suffer from an over-schematic trend. On pp. 221–3, for instance, a distinction is made between the 'cosmic' and 'earthly' levels of the cosmological model, the former level being attached to Re, Apopis and others, while a group centred on Osiris is attached to the 'earthly' level. The state and sovereignty are properly assigned to the second level; yet nature is also included, and this idea has clearly a cosmic import, particularly in the case of Osiris. At an early stage he was closely linked with the constellation Orion, thereby achieving a potent force in fertility. This book, incidentally, is littered with terms like 'Götterkonstellation', denoting a group of deities related by genealogy or by other affinities. It has nothing at all to do with constellations, and is a quite unscientific usage since it elevates a mere metaphor to the status of a theological defining term. It can be, further, a befogging business in that several of the deities implicated are actually related to constellations or have astral connections. In this the author is following the lead of Jan Assmann, a scholar who in other ways has much enriched religious studies. Perhaps the most skimpy of the book's sections is that on the Horus-myth of Edfu. Whereas it was wise to ignore the numerous aetiological allusions to cult-topography (p. 211), one would expect consideration of the wide sweep of the historical and political facets, especially of the role of Seth as representative of a foreign country

who must be driven to the sea; cf. my remarks in *JEA* 44 (1958), 75–85; in *Glimpses of Ancient Egypt* ed. J. Ruffle *et al.* (Warminster, 1979), 174–9; and in *LÄ* III, 54–60, s.v. 'Horusmythe'.

Perhaps it is unfair to expect a book of substantial scope to show equal competence in all its parts. Here the studies of texts from Esna and Kom Ombo are impressive in their detail and grasp, and the whole work adds up to a notable contribution.

J. GWYN GRIFFITHS

Inventaire bibliographique des Isiaques, L-Q. (IBIS). Répertoire analytique des travaux relatifs à la diffusion des cultes Isiaques, 1940–1969. By JEAN LECLANT and G. CLERC. *Études Préliminaires aux Religions Orientales dans l'Empire Romain*, 18. 245 × 160 mm. Pp. ix + 370. Leiden, Brill, 1985. ISBN 90 04 07061 3. Price Gld. 176.

Misconceptions about the scope and method of this volume and of its predecessors may easily arise from a too cursory consideration of its title and subtitle. The first is to assume that it deals only with the cults of Isis and her fellow-deities; in fact, the whole of Egyptian religion and a good deal of Egypt's art and archaeology are dealt with, the basic limitation being that pre-Hellenistic matters are not usually covered. If diffusion is the main emphasis, yet Egypt itself in the Graeco-Roman era is given much assiduous attention. When aspects of influence are pursued, on the other hand, the coverage extends into mediaeval and Renaissance times and even later, as when modern German literature is reported on, as well as reminiscences of Egypt in the art of Gauguin, Chagall or Klee (p. 143, with a misprint of Gauguin's name). Such allusions are naturally only sporadic. Another facile misconception would be the expectation in this book of a bibliography after the manner of a detailed book-list in the alphabetic order of the authors' names. Such a list is indeed offered, but the compilers have been far from content with the bare bones; they have fleshed out each item with analytic notes, varying their length with the importance of the work; and they have included articles and monographs. Then comes a massive Index of 119 pages which is itself a guide to a multitude of varied themes. The book closes with a select group of fourteen plates which are preceded by informative notes and references.

Among the authors who figure in the L-Q orbit are a number of outstanding scholars, including Jean Leclant himself, a redoubtable researcher in this field who has also systematically monitored the researches of others, as through his invaluable surveys in *Orientalia* and in the year-book of the Fifth Section of the École Pratique des Hautes Études. His output between 1940 and 1969 was consistently impressive and it has, of course, been much augmented since then, witness his masterly contributions on 'Ammon' (with Gisèle Clerc) and 'Anubis' to Vol. I (1981) of the *Lexicon Iconographicum Mythologiae Classicae* and his detailed conspectus ('Aegyptiaca et milieux isiaques') in the seventeenth volume of *ANRW* (1984). Madame Gisèle Clerc has ably and actively shared the work of the present volume and is named as the co-author. Other authors who figure prominently are Doro Levi, Michel Malaise, G. Manganaro, R. Merkelbach, Siegfried Morenz, Dieter Müller, H. W. Müller, M. P. Nilsson, A. D. Nock, K. Parlasca, Charles Picard, and Claire Préaux. In the case of Dieter Müller, one could well have included his study of 'Die Zeugung durch das Herz usw.' in *Orientalia* 35 (1966), 247–74; also the work in which he collaborated with Morenz, *Untersuchungen zur Rolle des Schicksals usw.* (Berlin, 1960), which ends with a discussion of the sway over Fate ascribed to Isis in the Graeco-Roman era. Here one recalls too the important book by J. Quaegebeur (Leuven, 1975), but it falls outside the time-span of this volume. Jan Bergman's related study was rightly dealt with in Vol. I, p. 37, No. 95. A special welcome is due to the word 'égyptophilie' in the Preface (p. vii); in the body of the book 'égyptomanie' is also used, merely perhaps to serve elegant variation.

Fervent plaudits are undoubtedly in order. A general reflection may be offered at the same time. Looking back at the short list of major authors which I have compiled above, one is prompted to ask whether scholars who are Egyptologists are not inherently better equipped to interpret material which is bound up, however loosely, with the culture of Egypt. Other elements, of course, can enter into the picture at this time—not only Greek and Roman, but also Jewish, Iranian, Levantine, Anatolian, and Mesopotamian—and a warning emerges here to any Egyptological *Fach-chauvinismus*.

But there is usually a clear need to define the Egyptian antecedents, whatever the ensuing amalgam, and this task is best essayed by Egyptologists; which is why, in the present volume, one has special confidence in the work assigned to Jean Leclant, Michel Malaise, Siegfried Morenz, Dieter Müller, and Hans Wolfgang Müller. There is no room, however, for a 'vicious antithesis' of Egyptian and non-Egyptian evidence. Indeed, it is significant that it is a classical philologist, R. Merkelbach, who has made the perceptive and revealing discovery that a Greek papyrus of the second century AD from Oxyrhynchus records an oath enjoined on a newly installed priest in which he makes a series of denials and that these denials are very similar to some of those in the 'Declarations of Innocence' in *BD* 125. See Merkelbach in *ZPE* 2 (1968), 7-30 and cf. his study *ibid.* 1 (1967), 55-73 (= our volume, p. 110, No. 896) on the oath of the Isiac initiand. Such has been the impact of this discovery that R. Grieshammer has suggested, with a measure of support, that the priestly examination is the original *Sitz im Leben* of the posthumous 'Declarations'—to my mind too narrow a basis for the concept.

J. GWYN GRIFFITHS

Corpus of Mosaics from Egypt I, Hellenistic and Early Roman Period (Aegyptiaca Treverensia 3). By WIKTOR ANDRZEJ DASZEWSKI. 310 × 225 mm. Pp. viii + 211, pls. 46 + 4 in colour, figs. 12. Mainz, Philipp von Zabern, 1985. ISBN 3 8053 0482 X. Price DM 198.

W. A. Daszewski's *Corpus of Mosaics from Egypt* is the first of such volumes and deals with the Hellenistic and Early Roman Period: most of the mosaics are given a Ptolemaic date and the latest (Nos 24-5) are of the second century AD. The majority were found in and around Alexandria and very few are from elsewhere in Egypt, particularly Upper Egypt. Most of the examples included were casual discoveries and only a few were found during excavation; some have no find-spot or no details about the conditions under which they came to light. No pre-Ptolemaic mosaic pavements are known, and this type of flooring was never particularly common in Egypt, possibly because suitable stone for cutting into tesserae was not easily obtainable; no true pebble-mosaics (the earliest technique) have been found there. Dating evidence is slight, and the author has been forced to use stylistic aspects as his main chronological tool, together with his great knowledge of the archaeology of Alexandria and the building techniques and materials used there at different times. He suggests possible dates for each of the mosaics discussed and his arguments are put forward with clarity and with a wide understanding of comparative material elsewhere and a detailed grasp of many aspects of Hellenistic art and archaeology. But his chronological statements cannot be conclusive, from lack of hard evidence, and in Appendix I he has to argue against different stylistic dating put forward by D. Salzmann for some of the mosaics included in this volume, asserting that material from Egypt did not necessarily follow the same line of evolution as did that from the wider Hellenistic world. In his Introduction, Daszewski points out that the great arguments for and against the primacy and influence of so-called Alexandrian Art have died over the last three-quarters of a century, and that although the evidence is still fragmentary, and recent discoveries might well be brought into the argument, he does not, in this volume, intend to discuss the wider aspects of the controversy. The catalogue commentaries and explanatory chapters do, however, show that he tends towards the pro-Alexandria position, although his statement on p. 20 that, 'if one looks on Alexandria as upon a great, often ingenious intermediary rather than exclusively as upon a creative centre, then the influence of this town acquires new dimensions and allows reconciliation of certain seemingly controversial aspects' chimes in better with the present reviewer's views that Alexandria was primarily a trading centre and had no more or less creative talent available to it than any other great city of the Hellenistic world, or indeed to some Greek cities in Magna Graecia.

The discussion chapters before the catalogue are full, and replete with interesting information. Chapter I describes three written sources which appear to have relevance to mosaic floors in Egypt. One is a passage of Moschion's, preserved by the third-century writer Athenaeus, describing the great ship *Syracusia*, made by Hiero II and given to Ptolemy III. This ship had mosaic flooring and the argument that the Alexandrians learned to make coloured tessellated floors after seeing these is regarded as simplistic by Daszewski. Certainly it is about this time that sophisticated polychrome

mosaics came into being in Egypt, but the *Syracusia* floors may have been only one of many influences. An inscription found near Ephesus appears to mention Alexandrian emblemata and this encourages Daszewski to see such objects as being made in and exported from Alexandria. Circular and rectangular panels in very fine tesserae, opus vermiculatum, often separately composed on a terracotta or stone tray, are known, a few in Egypt, many elsewhere. The most important of the three written sources is from the Zeno Archive, a papyrus of about 256–46 BC, which gives specifications for the mosaic floors of tholoi in a bath building at Philadelphia. This guide to the layout of mosaic floors could stem from Alexandria, possibly from a workshop with royal connections (this is discussed in Chapter V, on workshops and style, where the possibility of several Alexandrian ateliers is put forward, sending out emblemata and artisans to the rest of Egypt). Mosaics from round rooms, in a bath at Diospolis Parva (Cat. 46) and perhaps so at Canopus (Cat. 26–7) and a site near Arsinoe (Cat. 45), conform to the layout described in the papyrus. Daszewski mentions also in this respect the bath-tholos, now destroyed, found by the Hildesheim Expedition to Hermopolis Magna (*MDAIK* 3 (1932), pl. xviii; G. Roeder, *Hermopolis 1929–1939* (Hildesheim, 1959), pl. 16a), but accepts the excavator's second century AD dating; there is no basis for this date, and the Hermopolis example could well go with the other three, within the Ptolemaic period.

In succeeding chapters, Daszewski discusses the composition of the Egyptian mosaics: their patterns and designs and general layout; the decorative motifs employed in the borders, the field and the central panels, patterned, floral and figurative; and the technique used in their construction. The earliest floors are of the 'transitional' type (using both pebbles and tesserae: there are as yet no true pebble-mosaics known from Egypt); at the end of the third century BC, a 'baroque' form appears, perhaps reflecting official court art and possibly based upon paintings; in the late second century BC popular 'bourgeois', patterns appear, with local designs. Greek, not Egyptian, motifs are the norm, particularly at the early periods: Nilotic scenes appear late and are much more common outside Egypt than in; the reviewer is not convinced that Nilotic emblemata, or artisans, or even Alexandrian influence were exported from Egypt to produce these scenes outside Egypt: a generalized idea of Nilotica was devised and employed by Italian-based mosaicists and other craftsmen elsewhere, repeated over and over again as new apprentices learned their trade. Unpatterned mosaic floors are included in the catalogue (Nos 8–12, 17 and 53) and one opus sectile emblemata (No. 48). The unpatterned floors are given a generally early Ptolemaic date, and this is no doubt so, but the argument that the altar inscribed to Ptolemy II Philadelphus indicates that Floor No. 8 is earlier than the altar because the altar is resting on the pavement and is not built into it does not stand up, as the altar could have been placed on the floor at any time subsequent to its dedication—but this is a quibble. The author discusses the tesserae used in Egyptian pavements (of limestone of a variety of colours, of glass, faience, terracotta and pebbles) and points to a gradual progression towards regularity. He describes the use of opus vermiculatum, mostly reserved for emblemata, and the use of lead strips to improve pictorial qualities, to outline areas of tesserae, and to demarcate patterns and straight lines. This technique is mainly an eastern one, found at several places in addition to Egypt (to Daszewski's lists we can add a small fragment from the Temple of the Muses at Cnidus, British Museum Reg. No. 1859.12–26.580, published obscurely in the Command Paper, C. T. Newton, *Further Papers Respecting the Excavations at Budrum and Cnidus* (London, 1859), 78, where it is mentioned that examples of this technique were also found at Halicarnassus). The use of lead strips in mosaics in Egypt died out at the end of the second century or the beginning of the first century BC.

The final chapter deals with the architectural contexts of the mosaics from Egypt, much hampered by the fact that many of them have no known provenience, and the few that have come from buildings almost totally destroyed. What evidence there is shows that some were laid in temples and bath-buildings, and in the private houses of the rich: Greek clients served by Greek artisans.

The catalogue entries are very full, giving where possible the find-spot and the date when found, the present location, extensive descriptions and a suggested date. This is followed by a bibliography and a comprehensive commentary, discussing iconography, comparative material and chronology. Although the Warrior Mosaic (No. 1) and the Stag Hunt Mosaic (No. 2), both from Alexandria and both examples of the 'transitional' style, are very fine, probably the most interesting pavement is that from Thmuis, with two emblemata, one square, one round, showing the bust of a woman crowned with the prow of a ship (Nos 38–9). Both probably derive from the same (painted?) model and the finest one is signed by the mosaicist Sophilos. Previous publications have suggested that these busts

are the personification of Alexandria, a maritime Tyche, but Daszewski makes an excellent case for them being portraits of Berenike II, Queen of Ptolemy III Euergetes. Mosaic No. 50 is, as the author remarks, a puzzle iconographically. He is doubtful about it showing, as has been put forward, Ganymede on Mount Ida, and although I am no more able than he to make an alternative suggestion, I do wonder whether the central figure is not female rather than male?

The volume concludes with a concordance of catalogue and museum numbers, and several useful indices. The black and white plates are well-produced although from a great variety of photographic sources; there are some excellent coloured plates in the text. The author has been well served by his publishers and it is a pleasure to recommend a fine piece of book-production to match the expertise and wide knowledge evinced by the text.

DONALD M. BAILEY

Le Papyrus Thmouis I, colonnes 68-160. Edited by SOPHIE KAMBITISIS. Université de Paris IV-Paris-Sorbonne; Série 'Papyrologie' 3. Pp. x + 196, pls. 16. Paris, 1985. ISBN 2859441018. Price not stated.

During the years 1892-1906 a number of carbonized papyri were discovered in the Mendesian nome in the Delta and found their way to different collections in Western Europe. In the present volume we are concerned with only one of these papyri, a long roll which in total consisted of 177 columns. When this was unrolled it was of necessity broken up into many fragments and Mrs Kambitsis, the editor of the present volume, began her work on eighty-three of these fragments which were conserved in three different collections in Paris. It soon became obvious to her that a few papyri forming part of the same roll had already been published (BGU 902-3, SB 8, PSI 101-2, 104-5 and 107-8) and she learnt further that many more fragments existed among the unpublished papyri in Florence (in the PSI collection). Collaboration between Paris and Florence enabled her to consult the unedited fragments, and thus to form a picture of the roll as a whole (of which columns 10-177 survive at least in part) and it became apparent that the papyri in the two places were so intimately connected that here and there parts of a single column were divided between them. It was clear, therefore, that publication of the French pieces by themselves was impossible and an agreement was reached that Mrs Kambitsis should be given permission to edit the unpublished PSI papyri which formed part of columns 68-160, since the bulk of the Paris material came from these columns, while papyri in the French collections which belonged to the other columns, most of which are conserved in Florence, should be passed to the Italian scholars for editing. Hence the publication in the present volume of a part only of P. Thmouis 1 (of papyri already published only PSI 104-5 and 107 belong to the columns here edited). While one must welcome the degree of cooperation shown in the above arrangement and be grateful for at any rate half a loaf, it is nonetheless regrettable that some way was not found of publishing at one and the same time the whole of this long and fascinating roll.

This should not be understood as in any way criticizing Mrs Kambitsis' work, which is of a very high quality. She has produced a thoroughly reliable text of the columns on which she has worked, together with a translation, and notes arranged, helpfully for the reader, at the foot of each page. Although the reading does not appear to have been too difficult (though one can well believe Mrs Kambitsis' comment that the photographs proved more legible than the originals), fitting together the many fragments must have been a daunting task; and the text, once established, proved to be written in Greek which is often obscure or to use words in unusual senses and so is very hard to understand. It is greatly to Mrs Kambitsis' credit that she has enabled us to comprehend so much of the information which the text conveys.

The roll consists of a report submitted by the *basilikos grammateus* of taxes suspended for the year AD 170/1, with reference also to their suspension in previous years; these years are recorded in reverse chronological order and go back as far as AD 128/9. The columns here published begin in the middle (!) of AD 169/70 and go back to AD 158/9. The roll thus appears to date from the year AD 170/1; but there are occasional references to the year AD 172/3, and a note in the last column (not published here) apparently mentions a date in the reign of Commodus. Presumably, as Mrs Kambitsis argues, this means that what we have is a copy made at a later date.

Apart from the usual indexes and 16 plates, there is a 53-page introduction covering the physical condition of the pieces of papyrus (all of which are separately mounted), their palaeography (they are all in the same hand) and their content. This last section, which draws on the editor's knowledge of the whole papyrus and is not confined to the columns published, is often hard-going and the reader would be well-advised to tackle it after first reading the text, which is relatively easy to follow thanks to Mrs Kambitsis' translation and summaries of the various 'chapters'. Each 'chapter' (there are 48 in all) begins with an introductory report stating what taxes had been suspended and why, and is then followed by a detailed breakdown of the taxes in question. There are three main types of entry: (a) taxes remitted on land recognized as *χέροσος* after inspection; (b) taxes remitted on slaves (e.g. those sold to owners exempt from poll-tax); and (c) taxes remitted for villages which had suffered depopulation. These last entries are the most interesting, indicating a very serious problem—depopulation in places reached over 90 per cent in the mid-second century; the causes included robber attacks by men called the Nikochites, killings by soldiers, and the plague, but the principal reason was no doubt *ἀναχώρησις*. The picture one derives from the whole document is not flattering to the Roman administration: the prefect's orders were simply without effect since it was quite impossible to collect the taxes due (some arrears stretch back over 43 years!), and this at a time when the Roman Empire generally has been thought to have been at its most prosperous.

Further sections of the introduction deal with the taxes occurring in the document, the administrative procedures employed, the date, the officials mentioned (note the appearance of the *dioiketes*, the *iuridicus* as acting-*dioiketes*, and the procurator in charge of the *idios logos*), and the geographical information on the Mendesian nome (note especially here that while Thmuis is confirmed as the metropolis of the nome, Mendes is also called *μητρόπολις* and its inhabitants pay poll-tax at the reduced rate).

The above summary will, I hope, have made it clear that this is no ordinary, rather dull tax document, but one that is full of interesting information, especially for economic and social historians of the Roman world. It is greatly to be hoped that publication of the PSI section of the roll will follow speedily so that we may appreciate the value of the papyrus as a whole.

J. DAVID THOMAS

Papyrology. *Yale Classical Studies* vol. xxviii. Edited by NAPHTALI LEWIS. 235 × 160 mm. Pp. x + 293, pls. 8. Cambridge, Cambridge University Press, 1985. ISBN 0 521 30015 0. Price £25.00.

Volume 28 of this established series has been set aside for a collection of papyrological studies, in all twenty-six papers by various authors. The overall editing has been specially taken on by Naphtali Lewis. A rich harvest for papyrologists the volume provides, with worthwhile fruits for philologists, historians and specialists in other disciplines as well.

The book subdivides into three sections, literary (and subliterary) papyri, documentary papyri (these sections containing editions or re-editions of texts), and 'papyrological studies'—this last section also contains some re-editions which blur the distinctions between it and what precedes.

The literary section contains six papers. Günter Poethke (pp. 1–4) edits a substantial Iliad text from Berlin. Cited elsewhere and thus already entered in the catalogue of R. A. Pack (= 'Pack² 864'), it receives here its first full publication. Susan Stephens (pp. 5–8) gives us two small scraps, *inedita* from the Egyptian Exploration Society's Oxyrhynchus collection, with roll-titles—one a colophon, the other a sillybos—to works of Isocrates. William Brashear (pp. 9–12) offers us another Berlin text, a badly-damaged gnomology with Menandrian *monostichoï* and other unrecognized material; there may be links with P.land.V 77. The next paper (pp. 13–24) is the work of a consortium (the late Sir Eric Turner, David Fowler, Ludwig Koenen and Louise Youtie), re-editing the Euclid papyrus P.Mich.III 143 (= Pack² 366). The last two papers in this section relate to medical papyrology. Ann Hanson (pp. 25–47) publishes another Berlin piece with Hippocratic *epistulae*, and yet another Berlin piece from a MS. of Galen, which directly joins a recently published piece in the Munich collection; the combination, from a codex assigned to the early third century AD, is by far the earliest papyrus

evidence for this author. Isabella Andorlini (pp. 49–56) re-edits P.Lit.Lond.170, a medical treatise from a roll to which a recently published Michigan papyrus also belongs.

Jean Scherer (pp. 57–66) opens the documentary section with six incomplete Ptolemaic *ἐντεύξεις* or petitions, extracted from cartonnage. An origin shared by many of the petitioners or others in the texts is the village of Mouchis in the Arsinoite nome. The date is the late third century BC. The strategus Diophanes and the epistates Demetrius are regularly mentioned. More third-century cartonnage, once more connected with Mouchis, is offered by Piet Sijpesteijn (pp. 67–71), this time three receipts (two of them for quantities of wool) from the Vienna collection. Gabriella Messeri (pp. 73–83) edits three London *descripta*, late Ptolemaic agoranomic texts from Upper Egypt. The other four papers in this section focus on later topics, from Augustus into the fourth century. Roger Bagnall (pp. 85–93) uses a scrap in Washington, DC to establish the *praenomen* of Petronius, the third-known prefect of Egypt, and sets out a stemma for and discusses the careers of various Petronii. Manfredo Manfredi (pp. 95–9) publishes an Arsinoite lease of an olive-garden from the Antonine period, a recent accession to the PSI collection. John Rea, Rob Salomons and Klaas Worp (pp. 101–13) collaborate to present the most interesting document in this volume, a Latin papyrus in the Bodleian Library. In AD 293 an *adiutor* in the imperial department of the *magister memoriae*, ill in Caesarea (almost certainly Caesarea in Palestine), received this ration-warrant to aid his rejoining the retinue of the emperor Galerius. The text is important for the chronology of the movements of Galerius. With David Thomas' paper (pp. 115–25) we move into the fourth century. A Giessen papyrus of 309, mentioned in print over seventy years ago but unpublished till now, provides the earliest evidence for the strategus/exactor. Thomas' two earlier papers on this topic in *Chronique d'Égypte* (1959 and 1960) should be used in conjunction with this latest offering; a further paper, read at the Naples papyrological congress in 1983, remains unpublished. Useful by-products of the commentary are discussions of the *opinitor* and of the administrative position of the Great Oasis.

That concludes the 'editions of texts'. The 'studies' open with Guido Bastianini (pp. 127–9), who revises and re-dates P. Wash.Univ.4 so as to delete a supposed *praefectus Aegypti κα.* [from our lists (assigned to 227/8 AD) and uncover another reference to the well-known epistrategus Calpurnius Concessus, possibly but not certainly a new latest date for him (198/9 AD). Danielle Bonneau (pp. 131–43) offers a survey of the technical term *αιγιαλός*, 'shore land'. Gerardo Casanova (pp. 145–54) discusses various grave stelae from Kôm Abou Billou (Terenouthis, on the western edge of the Delta) and the incidence of plague in Egypt. Francis Gignac (pp. 155–65) surveys aspects of the evolution of the Greek language from classical through koine to modern, and seeks to explain various anomalies in terms of bilingual (Coptic) interference. Dieter Hagedorn (pp. 167–210) gives us a substantial study of the important official the *διοικητής* in the Roman period, differentiating him from his Ptolemaic namesake and establishing his correct relationship to the various possible manifestations of the office early in the Roman period. Sub-sections treat his sphere of authority, his position in the government hierarchy and the institution of the office and its disappearance and replacement by that of the *καθολικός* under Diocletian. A dozen pages with a meticulous prosopographical list conclude this major contribution which must now be the *locus classicus* to use for any further research on the *διοικητής* and which (for this reviewer) forms the most important part of the volume. Deborah Hobson (pp. 211–29) discusses multiple occupancy of houses in Egyptian villages (with special reference to Socnopaei Nesus) and the links with the legal terms *communio pro diviso* and *indiviso*. Ranon Katzoff (pp. 231–44) examines the possibility of an exchange of influence between Jewish practice and the Roman institution of *donatio ante (propter) nuptias*. James Keenan (pp. 245–59) begins from a re-edition of P.Cairo Masp.I 67087 to study the question of an ancient right-of-way in sixth-century Aphrodito and proceeds to the wider issue of tension between landlords and shepherds. Giovanna Menci (pp. 261–6) discusses the length of ancient manufacturers' papyrus rolls and the possibility of infinite variation by cutting or by glueing on extra lengths at the hand of the scribe. Since it has now been established (see most recently P.Harr.II 212 introd.) that we may expect the manufacturers' joins to have three layers while the scribes' would have four, this topic is open to physical verification, desirable especially in the roll cited by L. Borchardt, *ZAS* 27 (1889), 120. Orsolina Montevicchi (pp. 267–72) discusses the chronology of the accession of Tiberius in the light of dates furnished by papyri. George Parássoglou (pp. 273–5) considers the writing posture of ancient Greek and Roman scribes. Paola Pruneti (pp. 277–81) surveys the documentation for the career of Aurelius Apollonius *alias* Dionysius, hypomnematographus and Oxyrhynchite gymnasiarch in the later third

century AD. Finally, Michael Speidel (pp. 283–93) considers the system of *commeatus*, army leave, in the light of papyrus evidence.

If one were to criticize, an obvious target would be the less-than-generous allocation of plates: not even all the *inedita* now published here receive an illustration. Some of the contributions are lightweight or inconsequential; but their lack is more than made up for by the more substantial offerings the volume provides us.

REVEL COLES

American Studies in Papyrology XXIV. By SUSAN A. STEPHENS. Yale Papyri in the Beinecke Rare Book and Manuscript Library, II. Pp. xxxvii + 167, pls 15. Chico, Scholars Press, 1985. Price \$67.

Mit den Publikationsnummern 86–136 schließt sich der neue Band unmittelbar an P.Yale I an. Neben der Neupublikation von 35 Texten sind auch 16 früher verstreut veröffentlichte Yale-Papyri jetzt zusammengefaßt greifbar.¹ Unter den 51 Texten ist keine einzige Urkunde. Auf 4 christliche Texte folgen 9 Homerpapyri, 1 Xenophon-, 1 Isokrates- und 2 Demosthenestexte. Die übrigen Fragmente sind neu und konnten nur zum Teil identifiziert werden.

Ein großes Verdienst der Bearbeiterin liegt in den Konkordanzen am Anfang des Bandes. Der Leser findet dort eine Liste aller bisher publizierten Yale-Papyri mit den notwendigen bibliographischen Angaben, außerdem Addenda et Corrigenda zu P.Yale I sowie Konkordanzen der Inventar- und Publikationsnummern von P.Yale I und II. Abgeschlossen wird der Band durch die Wortindizes, gesondert für die christlichen und die literarischen Texte, die Homerscholien und den Kurzschriftkommentar, und schließlich durch den Tafelteil.

Die Texte selbst sind nach einem einführenden Vorspann teils gleich als Lesetexte, teils mit vorausgehender diplomatischer Abschrift gedruckt; es folgt ein meist sehr gründlicher Einzelkommentar und, was besonders lobend hervorgehoben zu werden verdient, bei vielen Texten eine Übersetzung.

86–9. CHRISTLICHE TEXTE. **86.** Eph. IV 17–19; IV 32–V 3 (3.Jhdt.), eine Kombination aus P.Yale I 2 (= van Haelst 522) und einem neuen Fragment. *S.1, Z.9: L. 'griechischen'. S.2, Recto Z.6: L. οὐσαν.* **87.** Fr. der Paulusakten ? (4./5.Jhdt.) Die angeführten Parallelen machen es wahrscheinlich, daß der Ausschnitt das Bekehrungserlebnis des Paulus zum Inhalt gehabt hat. *Z.4, Z.10: L. τὸν παῦλον.* *S.5, Text Z.5: L. ὁδεν.* **88.** Theologisches Fr. (3./4.Jhdt.): Kommentar oder Predigt mit Zitat von Is.61, 10–11, das oft auf die Taufe bezogen wird. *S.9, zu 4, Z.4: L. 'Basil'.* **89*.** Homilie über die Fleischwerdung? (= van Haelst 1190; 5./6.Jhdt.). Reste von 9 Zeilen mit Zitat von Rom 8, 32 und 1 Pe 4, 1. *ἐνωθεῖς* deutet auf die Lehre der Nestorianer oder Monophysiten; die Haltung des Autors dazu ist verloren.

90–8. HOMERPAPYRI. Mit diesen 9 Homertexten ist die Publikation des gesamten Homerbestandes der Beinecke Rare Book and Manuscript Library abgeschlossen. Alle stammen aus römischer Zeit. **90***, **91***, **92**, **93***, **94**, **95**, **96*** gehören der Ilias, **97**, **98** der Odyssee an. **90*** ist ein beidseitig beschriebenes Kodexblatt, die anderen Texte stammen aus Rollen. **90***. Ilias A 1–94, durch E. G. Turner inzwischen ins 3.Jhdt.datiert. Der Text folgt der Vulgata. *S.14, V.8: Zwischen σφ]ωε ε[ροιδι ist θεων ausgelassen, allerdings bereits in der ed.pr., wo der gesamte Vers ergänzt ist; leider gibt es weder eine Tafel noch einen Kommentar. Druckfehler?* **91***. Ilias E 625–36. **92**. Ilias K 33–42. **93***. Ilias K 439–61. In V.441 findet sich eine nicht ergänzte Variante. **94**. Ilias II 97–113. Der Papyrus trägt Akzente. Die von Aristarch athetierten Verse 97–100 sind im Papyrus überliefert. **95**. Ilias P 575–90. V.585 ist wie auch in P.Ross. Georg.I 4 = Pack² 941 und vielen Codd. ausgelassen. **96***. Ilias Ω 318–84. Der Papyrus scheint Akzente getragen zu haben. **97**. Odyssee ζ 214–40 (sp.1.Jhdt.v.Chr.). **98**. Odyssee η 176–85.

¹ Die wiederabgedruckten Nummern werden mit einem Sternchen (*) gekennzeichnet.

99-103. BEKANNTE KLASSISCHE PROSAAUTOREN. **99.** Thukydides IV 38, 5-40,2 (sp.2.Jhdt.). Das Fragment gehört zu derselben Rolle wie P.Oxy.Ashm.13/3 mit IV 73-5, dessen Publikation von M. W. Haslam für einen Band Oxyrhynchus-Papyri angekündigt ist. In 40,2 hat P.Yale zusammen mit P.Oxy.I 16 eine Sonderlesung gegenüber den Codd. Sehr nützlich ist die Liste der nach Pack² publizierten Thukydidespapyri. **100.** Xenophon, Hellenika V 4, 13-16 (sp.2.Jhdt.). Der Papyrus geht dreimal mit B gegen die anderen Codd. Die Einleitung informiert über Bestand und Literatur zu den Hellenika-Papyri. **101***. Demosthenes, De falsa legatione §101-3, 109-11, 113-14 (2.Jhdt.). Auch hier hat die Editorin eine schöne Liste der Demosthenespapyri nach Pack² zusammengestellt. Der Text des Papyrus ist keinem der Überlieferungsstränge eindeutig zuzuweisen. **102***. Demosthenes, Epist.II 20-2, 25-6 (2.Jhdt.). Der Text folgt einer eigenwilligen Rezension; in 9-12 geht er mit Fγρ und Qγρ gegen die Masse der übrigen Codd.; kleinere Varianten und Umstellungen gegenüber der mittelalterlichen Überlieferung kommen hinzu. Am Ende des Briefes folgt auf *εὐτυχεῖτε* die sonst nirgendwo Überlieferte Adresse *βουλῆ καὶ δήμῳ*. Zu derselben Rolle gehört P.Oslo inv.1471 (*Eranos* 54 (1956), 101-8, nicht bei Pack²). **103***. Isokrates, Helena §43-50; Plataikos §20-26 (2.Jhdt.v.Chr.). Der Papyrus verdient aus verschiedenen Gründen besondere Aufmerksamkeit. Er ist der erste Isokrates-Papyrus aus ptolemäischer Zeit, und er hat eine seltene Form: Die beiden Reden sind jeweils auf die Vorder- und Rückseite einer und derselben Rolle geschrieben. Da die beiden Werke in der sonstigen Überlieferung niemals aufeinander folgen, dürfte der Grund für die Zusammenstellung auf einem Papyrus ihre annähernd gleiche Länge sein. Der Plataikos erscheint hier zum ersten Mal auf einem Papyrus; die Helena ist bereits zweimal vertreten (1 Pap., 1 Perg.). Gegenüber der mittelalterlichen Überlieferung weist der Papyrustext auch eigene, allerdings unbedeutende Varianten auf. S.49. *Zwischen Z.26 und 27 hat der Papyrus am Zeilenanfang eine Paragraphos. S.48, Kol.II, Z.3 und S.49, Z.26 sind zwei Spatien im Papyrus im Druck nicht wiedergegeben; das wäre nicht weiter erwähnenswert, doch ist m.E. in Nr. 105* übertrieben viel Wert auf die Kenntlichmachung von Spatien gelegt worden, wo vom Schreiber gar keine beabsichtigt waren.*

104*-11. ADESPOTA. **104***. Äsopische Fabel, lateinisch und griechisch, Prosa (3.Jhdt.), von G.M.Parásoglou mit P.Mich.VII 457 zusammengesetzt. Es handelt sich um die Fabel von der klugen Schwalbe (Hausrath I 39 a/b); im Unterschied zur bekannten Äsopversion ist hier nicht von Misteln, sondern von Flachs die Rede. Da nicht sehr viele Fabeln auf Papyrus erhalten sind, könnte man noch P.Köln II 64 und P.Haun.III 46 erwähnen; vgl.jetzt auch MPER NC XV 117-32. **105***. Rhetorische Übung über das 'Arginusen-Thema' (= Pack² 2495; 1.Jhdt.). Der Übungsrede liegen die Ereignisse während und nach der Schlacht bei den Arginusen zugrunde; Vorbild ist die Gerichtsverhandlung gegen die sechs Generäle (vgl.Xen.Hell.I 7, 1-35; Diod.XIII 101-2; Platon, Apologie 34 B-C). Die Verhältnisse sind leicht variiert: Hier ist nur ein General angeklagt, die im Meer treibenden Toten und Überlebenden der Seeschlacht während eines aufkommenden Sturmes nicht geborgen zu haben, so daß die einen kein angemessenes Begräbnis erhalten konnten, die anderen dem sicheren Tod überantwortet wurden; ein Teil von ihnen wurde sogar durch ein feindliches Schiff gerettet. Einer der Überlebenden ist der Ankläger; der Prozeß tagt im Dikasterion. Eine besondere Pointe bildet die als Schlußsatz zitierte Ankündigung des Generals vor der Schlacht, vor dem Sieg werde keiner bestattet werden. Das Arginusen-Thema war für Redeübungen, die auf historischen Ereignissen beruhten, sehr beliebt; Beispiele für seine Verwendung finden sich in der Einleitung. Stil und Sprache sind gehoben. Für die Abfassungszeit der Rede führt die Editorin verschiedene Theorien an, nach denen das 4., das späte 2. und das 1.Jhdt.v.Chr. in Frage kommen könnten. Paläographisch reizvoll sind an der wohl für private Zwecke hergestellten Abschrift die zahlreichen Abkürzungen und Kompendien, die in dieser Weise in für den Buchhandel bestimmten literarischen Papyri nicht gebräuchlich waren. S.57, Z.1: L. 'ephemeral'. Text: die stark kursive Schrift wird bei bestimmten Buchstabenkombinationen, beispielsweise bei ο, ι, η, ξ, die niemals nach rechts angebunden werden, unterbrochen. Die so entstandenen minimalen Abstände sind in der diplomatischen Abschrift jedesmal als Spatium gedruckt worden, was zu einer unnötigen Fülle von Freiräumen geführt hat, die die echten Spatien, die vom Schreiber bewußt freigelassen worden sind, in den Hintergrund treten lassen. S.60, Text Z.3: L. αληθωσυβρι (im Lesetext korrekt). Z.22: L. ημειθανησ. Z.24: L. αυτωι (im Lesetext korrekt). S.65, Text Z.36 (35): L. πομπη. S.71, Z.14: L. οὐτ]οι. S.72, Z.2 v.u.: L. πόλεμον. **106***. Rhetorische Abhandlung (3.Jhdt.), Kodexblatt. In einer Erörterung über Stilebenen wird Euripides schlechter Stil bescheinigt (Beisp.Phoen.543-4). Weitere Stilbetrachtungen erfolgen am Proömium einer Rede gegen Aristokrates, wobei der Autor des Papyrustextes einen Verfasser von *σύμμικτα θεωρήματα* zitiert, der dieses lobt, er jedoch seinerseits stilistische

Mängel rügt. Die Rede des Demosthenes *κατ' Ἀριστοκράτους* kann hier, wie die Editorin mit guten Gründen darlegt, nicht gemeint sein, sie vermutet eher eine nach dem Vorbild des Demosthenes gestaltete Rede des Aelius Aristides, da dieser bei den Rhetoren beliebter und umstrittener Gegenstand der Betrachtung war. Der Text des Verso steht in keinem erkennbaren Verhältnis zu dem des Recto. Es scheint sich um eine Übungsrede über die Gefahren des Fehlens einer Volksversammlung zu handeln; Anklänge an die Demosthenesreden *In Leptinem* und *In Aristocratem* sind zu spüren. *S.80, Z.8: L. 'Chalcenterus'. Ein Vergleich der diplomatischen Abschrift mit den Tafeln, vor allem des Verso, läßt vermuten, daß die Editorin mit einem Photo gearbeitet hat, das ein früheres Erhaltungsstadium des Papyrus aufwies, oder daß der Papyrus nach der Herstellung der verwendeten Tafeln durch erneutes Restaurieren noch einmal gewachsen ist; nach Tafel VI setzt der Papyrus in den Zeilen Verso 3-8 fast jeweils mit dem ersten gedruckten Buchstaben ein, in Z.9 bricht der Text bereits nach πολλακιοε[, in Z.11 nach λειμματ[und in Z.12 nach μελεικα[ab. In Z.2 τηστριακοντα hat der Papyrus τηστωντριακοντα (im Lesetext korrekt); in Z.7 lese ich αποστειρεισθαι anstelle von ητοστειρεισθαι. 107**. *Acta Alexandrinorum* (2./3.Jhdt.), von H. Musurillo und G. M. Parássoglou mit P.Bibl.Univ.Giss.46 zusammengesetzt. Es handelt sich um einen Ausschnitt aus den sogenannten 'Gerusia-Akten', in denen 173 Vertreter der alexandrinischen Gerusia in Rom eine Verhandlung vor dem Kaiser Gaius (Caligula) führen. Die im Papyrus geschilderten Ereignisse fallen in die Zeit zwischen dem Staatsbegräbnis des Tiberius (34/37) und der Inhaftierung des Praefectus Aegypti Aulus Avillius Flaccus (Okt.38). *S.90, Kol.III Z.5: L.κατηγόρων. Z.14: L. ἐξει[ς. Z.16:L.ῖσως. S.93, zu 13, Z.2: L. Ἀυτοκράτωρ. S.96, zu 3-6, Z.4: L. κατήγορος. 108*. Liste von athletischen Wettkämpfen (2./3.Jhdt), angeordnet nach Ordnungszahl, Ort der Gründung, Zeit und Patron, ganz entsprechend dem Vorbild aus dem Peplos des Aristoteles (Fr.637 Rose = Schol.zu Ael.Aristides, Panathen.189,4). *S.100, zu 11, Z.1: L. 'Hypsipyle'. 109*. Historische Prosa (2.Jhdt.). Das Fragment handelt von der Herrschaft einer Person über den Hellespont mit den dortigen Festungen, der (mit guten Gründen ergänzten) Stadt Lysimachis und den Festungen in Thrakien. Der Herrscher könnte Philipp V. von Makedonien sein (dann erg.in Z.3 τὸς περὶ Φίλ[ιππον]) oder einer der Ptolemäer (dann erg.in Z.4-5 Πτολεμαῖον) beide Erwähnungen gleichzeitig schließen einander aus, weil die Ptolemäerherrschaft in dieser Gegend bereits vor der Philipps V. geendet hat. Die Herausgeberin zieht Polybios als möglichen Autor in Betracht. *S.102, Text Z.9: L.ἔτι. Z.10-11: e.g. ἐν τῇ[ι παρα/λ]ίαι? S. 103, zu 5: L.Φίλιππος. Zu 9-10: L.Θράϊκης. Zu 12: L.λέλυσται. 110*. Mythologisches Fragment (1.Jhdt.). Der Papyrus gehört zu derselben Rolle wie P.Ryl.I 22 (= Pack² 1457 = FG⁺Hist 18), die eine Epitome der Ereignisse um den trojanischen Krieg enthalten hat. Während P.Ryl.I 22 erst nach dem Tod des Achill einsetzt, erwähnt das Yale-Fragment die Hochzeit des Peleus und der Thetis, die Geburt des Achill, die Versuche der Thetis, diesen unsterblich zu machen, die Erziehung Achills bei Chiron, ein Ereignis aus dem 10.[Buch/Jahr?] und das Parisurteil. Die Herausgeberin vermutet, daß das Fragment aus einer Epitome der Kyprien stammt. *S.107, zu 3-7: L.μυελοῖς. Zu 3, Z.8: L. ιατρικῆν. S.108, zu 8-10, Z.4: L.Θέτις. Zu 11, Z.1: L. Πηλέως (im Text korrekt). Zu 14-15, Z.3: L. νεῖκος 111*. Fragment eines Mimus? (2.Jhdt.) Auf dem Papyrus ist Sprecherwechsel angezeigt. Inhaltlich und stilistisch erinnert das Stückchen an Neue Komödie. In Kol.II scheinen die Verse über die Zeilen hinwegzugehen. Allerdings ist weder dies noch der Wechsel von Trochäen (bis V.11) zu Jamben (ab V.12) ein Argument gegen Komödie; die Vermutung, bei anderer Lesung könnte in V.10 ein Creticus verwendet sein, läßt sich mangels Tafel nicht nachvollziehen; sie scheint eher dem Bemühen zu entspringen, ein Kriterium für die Zuweisung des Fragmentchens zum Mimus zu gewinnen.

112-24. VERMISCHTES, vorwiegend Fragmente, die vielleicht zum Teil einmal mit Hilfe des Computers identifiziert werden können. Außer **122** und **124** handelt es sich um Prosa. Gerade bei so nichtssagenden Stücken wäre die Beigabe einer Tafel zu jedem einzelnen nützlich!

124-8. HOMERICA, 124. Homerische Hexameterenden in willkürlicher Zusammenstellung (3.Jhdt.v.Chr.); homeromanteion? **125**, Glossar zu *Ilias* A 66-76 (3./4.Jhdt.). Schülerübung; Kol.I mit den Lemmata ist komplett aufgeschrieben worden, Kol.II mit den Erklärungen ist angefangen. In der Einleitung könnten noch P.Hamb.III 199 und 200 hinzugefügt werden. **126**. Scholia Minora zu *Ilias* A 189-223 (1.Jhdt.). *S.125, Einl.Z.7: L. 'Palau'. 127*. Scholia Minora zu *Ilias* E 726-78 (2./3.Jhdt.). Der Papyrus bildet den unteren Teil der durch P.Oxy.XLIV 2158 repräsentierten Kolumne. *S.128, Einl.Z.10: L.726-78. S.129, Text Z.24: ισμαθ, aber S.130, zu 24-5 ἰθμαθ. Ohne Tafel erfährt der Leser nicht, was im Papyrus steht! 128**. Kommentar zur *Odyssee* mit Lemmata von δ 336 und 343 (2.Jhdt.). In dem Scholion zu δ 336 ist das auch sonst in Homererklärungen beliebte Aristoteleszitat Hist.An.VI 29 (578

b) angeführt. S.132, zu 10–16, Z.4: *Λκρατερώς*. Eine weitere Parallele bieten die *Scholia in Homeri Odysseam*, her.v.W.Dindorf, Bd.I, Oxford 1855; da diese Ausgabe selten zur Hand ist, seien die Erklärungen zu δ 343 hier ausgeschrieben:

343. Φιλομηλείδῃ] τινὲς τὸν Πάτροκλον ἤκουσαν· Φιλομήλας γὰρ ἦν υἱός. οὔτε δὲ ἀπὸ μητρὸς τὸ γένος Ὀμηρος σχηματίζει οὔτε οἱ Ἕλληνες ἤσθησαν ἀν Πατρόκλου ἠττηθέντος· “πᾶσιν γὰρ ἐπίστατο μείλιχος εἶναι” (Il. ρ, 671.). ἀλλ’ οὗτος βασιλεὺς ὦν Λέσβου τοὺς παριόντας εἰς πάλην ἐκάλει, καὶ τοὺς Ἕλληνας δὲ προσορμισθέντας, ὃν Ὀδυσσεὺς καὶ Διομῆδης δολοφονήσαντες τὸν τάφον αὐτοῦ καταγῶγιον ξένων ἐποίησαν, ὡς Ἑλλάνικός φησιν. M.

Φιλομηλείδῃ] τῷ Πατρόκλῳ. Φιλομήλας γὰρ ἦν υἱός. V. γρ. Φιλομηλείδῃ, κατ’ Ἀττικὸν χωρὶς τοῦ ν. E.

ἐν Ἀρίσβῃ] ἐν Λέσβῳ. P. βασιλεὺς γὰρ ἦν Λέσβου ὁ Φιλομηλείδης. P. ab alia manu.

129–36. SUBLITERARISCHE TEXTE. 129. Kurzschriftkommentar (sp.2.Jhdt.), angeordnet in Tetraden unter ausgerücktem Lemma. In der Einleitung sind die seit Pack² erschienenen Kurzschriftkommentare zusammengestellt. S.134, Kopf: L. ‘Plate XIV’. S.135, Z.5: L. ‘P.Colon.’ (= Köln) im Unterschied zu P.Col. (= Columbia) in Z.3 und 8. Es ist sehr bedauerlich, daß die Kurzschriftzeichen, die das Wichtigste an dem ganzen Text sind, nicht abgemalt bzw. klischiert sind; denn auf der Tafel ist kaum etwas zu erkennen. 130*. Phylakterion (3.Jhdt.). Gebet um Schutz für eine Frau vor jeder Art von Belästigung durch Geister und Gespenster. S.138 und 139, Text, Z.8: L. ἐπιλήμψεως, vgl. das Photo in SP 13, 1974, 85. 131. Orakelantwort (3.Jhdt.), Ermunterung zu reisen, erteilt von Demeter-Isis als Schutzgöttin der Reisenden. 3 jambische Trimeter. S.141, Einl. Z.7–8: L. ‘P.Vindob.Salomons’. Text, Z.1–2: Die Bearbeiterin hat richtig erkannt, daß ὅπου am Ende von Z.2 den dritten Trimeter einleitet, d.h. verstechtisch an den Anfang von Z.3 gehört. Bei dieser Operation ergibt sich, daß das von ihr in Z.2 athetierte σου dringend benötigt wird, damit der Trimeter komplett ist. V.2 muß lauten: τὸν τῆς ἀληθείας σου χρησµόν· ἐγµαδὼν. Inhaltlich läßt sich σου zu φίλον oder ἀληθείας ziehen: ‘diesen dir willkommen/deiner Aufklärung dienenden Orakelspruch’. 132. Grammatikerfragment (2./3.Jhdt.). Zwei Abschnitte über das κτητικὸν und das συγκριτικὸν, welche in der Grammatik des Dionysios Thrax im Kapitel εἶδη παραγωγῶν behandelt werden. S.143, Kopf: L. ‘Plate XV’. 133. Medizinische Rezepte (3.Jhdt.). Der Zwecke ist nicht ersichtlich. Es handelt sich um die Rückseite von 132, S.147, Kopf: L. ‘Plate XV’. Zwischen Z.3 und 4 ist ein größerer Abstand als zwischen den übrigen Zeilen; in 4 beginnt ein neues Rezept. Text, Z.5: β? Auch die Alphas sehen sonst in dieser Hand anders aus. 134*. Paignia (4.Jhdt.). Der Anfang des Papyrus enthält Zaubersprüche; wegen des schlechten Erhaltungszustandes ist er nicht mitpubliziert. Der abgedruckte Teil besteht in zweizeiligen Rezepten, einer Mischung aus Medizinischem und Magischem, in willkürlicher, nicht alphabetischer Reihenfolge. Verwandt ist P.Lond.I 121 (= PGM VIII) 168–92, p. 89 ff.; zwölf der dortigen Rezepte tragen die Überschrift Δημοκρίτου παίγνια (abgedr. unter Pseudodemokrit, Vorsokratiker⁶ II 121–2 Diels-Kranz). In Z.7–10 wird eine Methode beschrieben, mit der man bei einem Gastmahl Streit auslösen kann: Man werfe einen Stein, in den ein Hund gebissen hat, unter die Anwesenden (εἰς τὸ μέσον). Zu diesem in der Antike geradezu sprichwörtlich gewordenen Rat sind inzwischen mehrere Beiträge erschienen; erwähnenswert sind F.Maltomini, ZPE 68 (1987), 105 und id., Materiali e discussioni per l’analisi dei testi classici 16 (1986), 153–4. 135*. Schreibübung eines Fortgeschrittenen mit Proben aus verschiedenen Autoren und Texten, darunter das beliebte AP IX 538 (ἀβροχίτων), aber auch Demosth., Olynth.1.1, Homer, Odyssee θ 1–2 und höchstwahrscheinlich Xenophon, Symp.1.9. Als Parallele kann hier noch P.Köln IV 175 (ed. C. Römer) angeführt werden. 136. Fragment eines Lexikons (2.Jhdt.) mit Teilen einer Kolumne von mit ν beginnenden Wörtern; von der zweiten Kolumne ist nicht sicher, ob sie griechisch oder lateinisch war; eine Tafel hätte dem Leser vielleicht ein Urteil ermöglicht.

Der Band bietet eine Fülle von interessanten Texten, die zu einem großen Teil schwer zu entziffern und zu verstehen waren. Susan Stephens hat diese Aufgabe gut und erfolgreich gemeistert; besonders die reichhaltigen Kommentare haben viel zum Verständnis der Texte beigetragen. Die

oben angeführte Kritik, die sich ohnehin in den meisten Fällen auf Druckfehlerchen bezieht, soll auf keinen Fall die schöne Leistung, die in diesem Buch zum Ausdruck kommt, schmälern. Zu bemängeln ist jedoch—und das ist nicht die Schuld der Editorin!—die geringe Anzahl an Tafeln sowie deren schlechte Qualität. Der Benutzer sollte jeden Text anhand eines Photos kontrollieren können; dies ist aber natürlich nur sinnvoll, wenn die Photos brauchbar sind. Daß nicht die Papyri in schlechtem Erhaltungszustand sind, zeigen die Tafeln in den Erstpublikationen, auf die die Herausgeberin dankenswerterweise hingewiesen hat. An diesem Problem kranken alle Publikationen von Scholars Press. S. Stephens hätte ihr Buch sicherlich lieber mit mehr und besseren Tafeln ausgestattet!

BÄRBEL KRAMER

Restaurierung von Papyrus und anderen Schriftträgern aus Ägypten. By MICHAEL FACKELMANN. (Studia Amstelodamensia ad Epigraphicam, Ius Antiquum et Papyrologicam Pertinentia, XXIV.) 285 × 210 mm. Pp. 120, pl. figs. 63. Zutphen, Holland, 1985. Price DF 70.

In his 'Einleitung' F. points out that there are very few professional papyrus-restorers—he says about five, and that may well be a good estimate, though I do not know who the other four are. That F. himself is one of them is clear, and nobody, I believe, would disagree with that.

F.'s point of departure is the typical papyrus-collection which also contains vellum, ostraka, and perhaps even paper from Egypt. The book thus takes us around to widely different types of conservation. Only one problem that I have come across in my own work is neither mentioned nor discussed.

It seems pointless for an amateur-restorer like myself to go into details with a professional who so clearly knows his chemistry and has such vast experience of handling papyri in all their different forms of decay. Many of the methods advocated are clearly too complicated to be tried by the papyrologist who has to do his own restoration at his desk as he reads, but having read the book, the papyrologist will at least be aware that a solution to a specific problem may exist and he may proceed to discuss the possibilities with a paper-restorer who has the required knowledge of chemistry and access to the necessary gas- and steam-chambers, pH-meters &c. And here, perhaps, lies the real value of the book. Reading it at first, I found myself wondering for whom it was written. As F. knows better than anyone and underlines in many places throughout the book, the experience and the delicate touch, which is perhaps 90 per cent of all papyrus-restoration, cannot be learnt from reading a book. But the book may provide the common ground where the papyrologist/amateur-restorer can meet the professional paper-restorer who is not used to handling papyri.

The basis of all restoration-procedures discussed in the book is *reversibility*, i.e. nothing must be done which cannot be undone without harming the papyrus. Equally important, and reassuring for the papyrologist, is that the first priority in every case is given to the *legibility* of the papyrus, rather than to its preservation as an object. Hence all thoughts of using synthetic foils to support even the most fragile papyri, tempting as this may be, are dismissed (p. 32).

The first eight chapters are mostly theoretical, but will be of interest to restorers who enter this subject for the first time. The chapter on papyrus-making in antiquity seems a little superficial, but perhaps adequate for the purpose of this book.

The most useful chapter for the amateur-restorer, I find, is Chapter IX 'Entrollen, Glatten, Pressen', which are operations that most papyrologists will be familiar with from personal experience. The use of methylcellulose to revive the fibres and bind the surface is advocated here as in many other connections and it seems that those of us who have hitherto been unfamiliar with this substance will have to learn to use it. Also in Chapter IX there are two sections (10 and 11) on the joining of fragments. The use of sellotape is naturally treated with the contempt it deserves, but even paper-strips with neutral glue are rejected, if for no other reason, because they do not do the job well. In cases where fragments with frayed edges join directly, it is recommended that the fibres be put back in places across the break and fixed there with methylcellulose. This, I know from experience, although I used a neutral paste to bind the fibres, is a very good, although time-consuming, method. If

there are no overlapping fibres, it is recommended (p. 50) to insert a new papyrus-fibre between the two layers of fibres on either side of the break. After pressing and drying this is said to hold the fragments together in the desired position without the use of glue or paste. This method must be immensely time-consuming (admittedly a secondary consideration in this connection) and I do not like the idea of splitting the layers of papyrus at the edges. Finally, there are fragments which can be positioned more or less exactly, but which do not join directly. Here F. has no solution, except to let them lie on blotting-paper and hope they will stay under glass—at least until a photograph has been taken. I have no better solution, but had hoped that one would be offered here. The chapter ends with a description of the work done on the Vienna Hilarius-codex (cf. *ZPE* 16, 187–94) which was reconstituted as a book, and similar work done on the roll P.Vindob.Aeg. 12126 (Book of the Dead). These two are examples of doubtful value to ordinary papyrus-restoration and strike me as a lot of good work for a doubtful purpose. But perhaps the procedure is justifiable very occasionally for show-pieces.

Chapter X deals with the various methods of bleaching the papyrus to improve legibility. Some may be harmless, but on the whole I feel that this kind of thing is better left alone. The possibility of regenerating metallic inks sounds very interesting and should have been illustrated with a 'before and after', preferably in colour.

Chapter XI is a catalogue of the horrors to which papyri have, in earlier times, been subjected. It is a sad story and even sadder because most of the damage from such restoration-errors is irreversible. Here again sellotape is dealt with according to its merits. There is apparently no hope of repairing the damage done by sellotape, but a number of solvents are indicated which will sometimes prevent further aggravation of the damage. In this chapter it may come as a surprise to some that the air-tight sealing of papyri, as it was done by H. Ibscher and other respectable restorers, is as harmful as F. says. But having read about it on pp. 60–1, many papyrologists will set about cutting air-vents in the tape around the edges and will remember to leave the corners open when they mount papyri in glass. The only type of disastrous conservation I have had to deal with which is not mentioned here, is papyrus glued directly to the glass with animal-glue.

The chapter on carbonized papyri (XII) is interesting but, I feel, strictly for professionals and the same may be said about XIII and XIV, which deal with mummy-cartonnage. I would have liked an objective discussion of the respective merits of the two methods of separating the decoration from the cartonnage. But since F. is himself the inventor of one of the methods, this is clearly asking too much. For my personal satisfaction I should also have liked a discussion of my own attempts with freeze-drying (*Acti XVII Cong. pap.* p. 45–9), but this was published too late to be taken into account.

The rest of the book has chapters on the treatment of vellum, paper, ostraka and wooden tablets (with or without wax). Chapter XIX on storage is extremely important. How sadly conditions in most collections differ from the ideal! With some relief I see that the time-honoured storage between two sheets of glass is still acceptable, if the frame is not sealed air-tight. Backing-paper which is so strongly advocated by F. is indeed preferable for a number of reasons, but gives serious difficulties when there is writing on both sides.

The last chapter is concerned with photography and is written by G. A. Schwartz, who has also taken most of the photographs that illustrate the book. This chapter is best left unread. It is a condensed accumulation of general photographic theory, comprehensible only for those who already know. In contrast to the rest of the book, this chapter will not provide the papyrologist with the means to explain to a library-photographer what is wanted from a photograph of a papyrus. Nor will the photographer, if he is given the chapter to read, be much wiser. Some examples of what may be achieved by the various methods would have been useful. It is a great pity that this chapter is not better, for Schwarz is clearly able to take good photographs of papyri.

The quality of the plates is generally very good, although a few of the 'before and after' illustrations must be meant as a joke. See Abb. 23 and 24 where the 'before' is so out of focus that no comparison is possible, or Abb. 49 and 50 where the same sheet of vellum is illustrated, but not the same side of it, so that direct comparison is again impossible.

The book is well indexed, easy to use and Fackelmann has put us all in his debt for sharing with us his vast experience and knowledge of this important and complicated subject.

Les Papyrus en caractères hébraïques trouvés en Égypte par COLETTE SIRAT avec la contribution de MALACHI BEIT-ARIÉ, MICHÈLE DUKAN, FÉLIX KLEIN-FANKE, HERMAN HARRAUER. Calligraphie et illustration par Ada Yardeni. Pp. 126, pls. XX and 90. Éditions du Centre national de la Recherche scientifique, 1985. Price F 280.

In this age of increasing specialization scholars are under an obligation to share their knowledge with experts in other fields. This is one of the objectives of this volume, and Dr Sirat fulfils it with great success. All editors of papyri, and particularly of Semitic papyri, will benefit from a careful study of Sirat's work—as the present reviewer must reflect somewhat ruefully; he would have been happy to learn from this book seven years ago!

The Hebrew texts dealt with by Sirat total no more than 154—an infinitesimally small quantity compared with the Greek papyri that now number probably over 100,000. The Hebrew papyri are today widely scattered, the largest collections being found at Vienna, Berlin, London and Oxford. They are very fragmentary. They are to be assigned to the third to tenth centuries. Only one document can be definitely dated from internal evidence—to 15 November 417 at Antinopolis. For the others dating is hypothetical. But the external indications are relatively certain. Greek papyri commence from the third century, the Byzantine period extends, of course, to the eighth century, and among the Jewish community of Egypt papyrus had given way to paper by the eleventh century.

In her very helpful Introduction Sirat examines the significance of the quality of papyrus, ink and calamus for arriving at an approximate dating of the texts. There are wide variations in the style of writing; while these texts were discovered in Egypt, they may not have been written there. In some the writing may reflect local non-Jewish practice, in others the shape of letters remains remarkably conservative. There is, as Sirat points out, striking similarity between the script of the document found by Pelliot in China and that of Bar Kokhba in Palestine some seven centuries earlier. In the later texts Arabic influence is shown by the ligature between aleph and lamed.

Sirat discusses briefly other Hebrew documents contemporary with her papyri from Egypt, whether monumental inscriptions or graffiti or texts inscribed on various artefacts. Eight documents receive special attention, notably the 'Nash papyrus', two fragments from Dura-Europus and one from Oxyrhynchus, one from Chinese Turkestan and Pelliot's find from China. A chapter on rolls of parchment analyses both contents and writing. Of considerable importance too is a chapter on the size and shape of rolls of papyrus and the methods of folding, admirably illustrated by drawings. Epistolary texts are treated in a further chapter. We then have a detailed account of the only papyrus codex written in Hebrew characters in the Cairo Geniza (Cambridge TS 6 H9-H21). This contains liturgical poems by a little-known payyetan, possibly living at the time of Eliezer ben Qallir in the fifth or sixth century; the document is of Palestinian origin according to Dr Birnbaum.

The plates attached to the Introduction are excellent. There follows the main body of the work, a description of each fragment of papyrus, with full bibliographical data. This is admirably illustrated by a complete coverage of ninety pages of plates and drawings.

The documentation is most helpful. But at two points the footnote references are inadequate. P. 25 n. 6 on incantation texts mentions only Montgomery's magisterial volume on the subject and one article by Gordon. The literature on this field is now very wide, and the inquiring reader will not be mollified by the author's admission that her bibliography here is 'incomplete'. (Sirat's book seems to have appeared—narrowly—before Naveh and Shaked's *Amulets and Magic Bowls* which has a full bibliography.) So also the footnote on inscriptions in Hebrew script found outside Egypt (p. 26 n. 8) could have been greatly extended.

This is a very minor shortcoming in this most useful and admirable volume. Dr Sirat's work is not likely to be superseded as the definitive book on this group of papyri. It is dedicated to the doyen of papyrologists, the late Sir Eric Turner.

Archaeoastronomy and the Roots of Science. Edited by E. C. KRUPP. AAAS Selected Symposium 71. 235 × 155 mm. Pp. xii + 336, illus. Epping, Bowker Publishing Co., 1984. ISBN 0 86531 406 3. No price stated.

This publication comprises seven papers read at a symposium on archaeoastronomy held by the American Association for the Advancement of Science in 1980. Only E. C. Krupp's contribution, pp. 289–320, concerns Egyptology. The remaining papers deal with archaeoastronomy as it relates to Western European megalithic culture and the indigenous Indian cultures of the Americas. Initially Krupp considers the following topics: the Egyptian calendar system, star clocks, hour system and Northern stars. Parker's concise treatment of these themes in *Ancient Egyptian Astronomy* (Phil. Trans. R. Soc. London A. 276, 1974) provides the basis for this section. Krupp presents without critical discussion both controversial and incorrect theses advanced by Parker (e.g. the method of intercalation in the original lunar calendar or *Dhwtyt* as name of the intercalary month).

More specifically archaeoastronomical themes dealt with in the following pages include the 'air shafts' in the pyramid of Cheops and the solar orientation of Karnak and Abu Simbel temples. Krupp discusses the more recent literature on these subjects (V. Trimble and A. Badawy in *MIO* 10 (1964) on the former and G. S. Hawkins in *Beyond Stonehenge* (1973) on the latter) which has for the most part remained of only peripheral interest for Egyptologists.

The illustrations that Krupp has chosen to accompany his essay are standard and well known to Egyptologists. The author reveals himself to be a layman when his caption to the photograph of a pylon (*bhn*) claims that such a gateway was called 'akhet' in ancient Egyptian since it depicts architecturally the hills at the horizon where the sun rises.

The bibliography accompanying Krupp's article lists twenty-one titles. Twelve of these were written by non-Egyptologists (six by Krupp himself). The reviewer doubts that this selection will prove useful for an interested archaeoastronomer not trained in Egyptology. On the other hand, if the purpose of Krupp's paper was to inform archaeoastronomers lacking knowledge of Egyptology about the current state of our knowledge of ancient Egyptian astronomy, then this public has been well served.

ROLF KRAUSS

Other books received

1. *The Physicians of Pharaonic Egypt*. By PAUL GHALIOUNGUI. 300 × 210 mm. Pp. xi + 115, figs. 33, 28 tables. Deutsches Archäologisches Institut, Abteilung Kairo, Sonderschrift 10. Mainz am Rhein, Verlag Philipp von Zabern, 1983. ISBN 3 8053 0600 8. Price DM 98.
2. *Egyptian Titles of the Middle Kingdom. A Supplement to Wm. Ward's Index*. By HENRY GEORGE FISCHER. 277 × 212 mm. Pp. x + 101. New York, The Metropolitan Museum of Art, 1985. ISBN 0 87099 441. No price stated.
3. *Der Meroitische Staat I*. By LÁSZLÓ TÖRÖK. 240 × 170 mm. Pp. xx + 391, 4 maps. Meroitica 9. Humboldt-Universität zu Berlin Bereich Ägyptologie und Sudanarchäologie. Berlin, Akademie Verlag, 1986. ISBN 3 05 000132 1. No price stated.
4. *Oikumene 5*. 245 × 170 mm. Pp. 391. Budapest, Akademiai Kaido, 1986. ISBN 96305 3871 7. Price £24.50.
5. *Kerma Territoire et Métropole*. By CHARLES BONNET. 274 × 202 mm. Pp. 51, pls. 16. Bibliothèque Générale IX. Cairo, Institut français d'archéologie orientale, 1986. ISBN 2 7247 0041 4. No price stated.
6. *Papyrus Reisner IV*. By WILLIAM KELLY SIMPSON. 403 × 295 mm. Pp. 47, pls. 33. Boston, Museum of Fine Arts, 1986. ISBN 0 87846 261 9. Price £72.
7. *Catalogue des Ostraca Figurés de Deir el-Médineh. Nos. 3100-3372 (5e fascicule)*. By ANNIE GASSE. 320 × 246 mm. Pp. 55, pls. 40, 2 colour pls. Documents de Fouilles 23. Cairo, Institut français d'archéologie orientale, 1986. ISBN 2 7247 0032 5. No price stated.
8. *Tabo I*. By CHARLES MAYSTRE. 330 × 260 mm. Pp. 78, pls. 4 (2 in colour), figs. 45. Geneva, Georg Éditeur, 1986. ISBN 2 8257 0134 3. No price stated.
9. *Politische Gegensätze im alten Ägypten*. By WOLFGANG HELCK. 236 × 168 mm. Pp. 98. Hildesheimer Ägyptologische Beiträge 23. Hildesheim, Gerstenberg Verlag, 1986. ISBN 3 8067 8099 4. Price DM 28.
10. *Archaeological Reconnaissance in Upper Nubia*. By KRZYSZTAŁ GRZYMSKI. 273 × 211 mm. Pp. 58, figs. 6, pls. 10, 3 maps, 2 tables. The SSEA Publications Vol. XIV. Toronto, Benben Publications, 1987. ISBN 0 920168 09 4. No price stated.
11. *Sexual Life in Ancient Egypt*. By LISE MANNICHE. 240 × 160 mm. Pp. 127, illus. London, Routledge and Kegan Paul, 1987. ISBN 0 7103 0202 9. Price £15.
12. *The Rhind Mathematical Papyrus*. By GAY ROBINS and CHARLES SHUTE. 246 × 189 mm. Pp. 88, colour pls. 24, figs. 23. London, British Museum Publications, 1987. ISBN 0 7141 0944 4. Price £7.50.
13. *Griechische und Demotische Papyri der Universitätsbibliothek Freiburg*. By R. W. DANIEL, M. GRONWALD and H. J. THISEN. 275 × 195 mm. Pp. 115, pls. 16. Papyrologische Texte und Abhandlungen 38. Bonn, Dr. Rudolf Habelt GMBH, 1986. ISBN 37749 2275 6. Price DM 124.
14. *Tuna el-Gebel I. Die Tiergalerien*. Edited by JOACHIM BOESSNECK. 235 × 170 mm. Pp. ix + 221, pls. 27, 1 plan. Hildesheimer Ägyptologische Beiträge 24. Hildesheim, Gerstenberg Verlag, 1987. ISBN 3 8067 8102 8. No price stated.
15. *Die Münchner Ochsenmumie*. Edited by JOACHIM BOESSNECK. 235 × 170 mm. Pp. viii + 96, pls. 28. Hildesheimer Ägyptologische Beiträge 25. Hildesheim, Gerstenberg Verlag, 1987. ISBN 3 8067 8103 6. No price stated.
16. *City of the Dead. Thebes in Egypt*. By LISE MANNICHE. 245 × 174 mm. Pp. 150, figs. 102. London, British Museum Publications, 1987. ISBN 0 7141 1288 7. Price £15.00.
17. *Akhenaton e Nefertiti*. By FRANCO CIMMINO. 210 × 137 mm. Pp. 443. Milan, Rusoni, 1987. ISBN 88 18 18010 X. Price L. 35,000.
18. *Nubian Culture Past and Present*. Edited by TOMAS HAGG. 220 × 150 mm. Pp. 438. Stockholm, Almqvist and Wiksell International, 1987. ISBN 91 7402 188 5. Price SEK 195.
19. *Les Bâtitseurs de Karnak*. By JEAN-CLAUDE GOLVIN and JEAN-CLAUDE GOYON. 300 × 240 mm. Pp. 141, illus. in black and white and colour. Paris, Presses de CNRS, 1987. ISBN 2 87682 000 5. Price FF 150.
20. *Stranger in the Valley of the Kings*. By AHMED OSMAN. 240 × 160 mm. Pp. 171, illus. London, Souvenir Press, 1987. ISBN 0 285 62816 X. Price £15.95

21. *Egyptian Hieroglyphs*. By W. V. DAVIES. 241 × 171 mm. Pp. 64, figs. 37, 11 line drawings. London, British Museum Publications/Berkeley, The University of California Press, 1987/1988. ISBN 0 7141 8063 7. Price £4.95/7.95.
22. *Greek Inscriptions*. By B. F. COOK. 241 × 171 mm. Pp. 64, figs. 54, 3 line drawings. London, British Museum Publications/Berkeley, The University of California Press, 1987/1988. ISBN 0 7141 8064 5. Price £4.95/7.95.
23. *Cuneiform*. By C. B. F. WALKER. 241 × 171 mm. Pp. 64, figs. 30, 12 line drawings. London, British Museum Publications/Berkeley, The University of California Press, 1987/1988. ISBN 0 7141 8059 9. Price £4.95/7.95.
24. *Greek Bookhands of the Early Byzantine Period A.D. 300-800*. By G. CAVALLO and H. MAEHLER. Institute of Classical Studies Bulletin Supplement 47. 275 × 215 mm. Pp. xli + 153, pls. 56. London, Institute of Classical Studies, 1987. ISBN 90058751 2. Price £30.00.
25. *Nag' el-Scheima, Teil I*. By MANFRED BIETAK and MARIO SCHWARZ. 300 × 215 mm. Pp. 216, figs. 65, pls. 56 plus 4 colour pls. Vienna, Verlag der Österreichischen Akademie der Wissenschaften, 1987. ISBN 3 700 1 09237. Price ÖS 560.
26. *Le Cimetière Kermaïque d'Ukma Ouest*. By A. VILA. 270 × 219 mm. Pp. 279, figs. 261, pls. 8. Paris, Editions du Centre National de la Recherche Scientifique, 1987. ISBN 2 222 03922 3. No price stated.
27. *The Life of Wallis Budge*. By DENROKU SAKAI (in Japanese). 195 × 135 mm. Pp. 421, illus. Tokyo, 1987. ISBN 4 8457 0225 8. No price stated.
28. *Les Pharaons*. By PASCAL VERNUS and JEAN YOYOTTE. 237 × 160 mm. Pp. 225. Paris, MA Editions, 1988. ISBN 286 676 2568. Price FF 145.
29. *Pharaon. Les Secrets du Pouvoir*. By MARIE-ANGE BONHÊME and ANNIE FORGEAU. 240 × 155 mm. Pp. 349. Paris, Armand Colin, 1988. ISBN 2 200 37120 9. No price stated.
30. *Vreemdelingen en Egyptenaren in Ptolemaïsch Egypte*. By W. PEREMANS. 260 × 180 mm. Pp. 27. Offprint from *Academie Analecta*, 49. Brussels, Koninklijke Academie voor Wetenschappen, Letteren en Schone Kunsten van België, 1987. Price BF 700.
31. *Papyri Helsingiensis I*. Edited by J. FROSEN. 250 × 175 mm. Pp. 165, pls. 41. Commentationes Humanarum Litterarum 80, 1986. Helsinki, Societas Scientiarum Fennica, 1986. ISBN 951 653 145 8. No price stated.

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