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Sir John Gardner Wilkinson. MANUSCRIPTS AT THE GRIFFITH INSTITUTE. Pt. 1. Edited by H. Murray and J. Málek. The papers of Sir John Gardner Wilkinson (1797-1875), now in the archives of the Griffith Institute at Oxford, are an important record of monuments to be seen in Egypt in the first half of the last century. Wilkinson's copies of scenes and texts are remarkably accurate and often show details which are now damaged, or even whole monuments which have been lost. For this reason the Wilkinson MSS are of great value to Egyptologists.
The first part of this systematic text and microfiche publication contains copies of various Egyptian sites, notably of Theban tombs. The copies are mostly published in colour and the accompanying text provides identification, description and concordance with the Topographical Bibliography. c.100pp. $14 \mathrm{~B} \& \mathrm{~W}$ microfiches, 5 colour microfiches; end 1980.

## TOPOGRAPHICAL BIBLIOGRAPHY OF ANCIENT EGYPTIAN HIEROGLYPHIC

TEXTS, RELIEFS, AND PAINTINGS by the late Bertha Porter and Rosalind L.B. Moss.
Assisted by Ethel W. Burney Edited by Jaromír Málek.
III (ii) MEMPHIS Saqqara to Dahshur. 2nd ed. rev. and aug. 1st fascicle. $17+182 p p$; $18 p p$ maps and plans; 0900416130 (1978) £20.
2nd fascicle. 200pp; 10pp maps and plans; 0900416149 (1979) $£ 25$.
3rd fascicle. c.230pp; 8pp maps and plans; 0900416246 (February 1981).
Complete cloth edition. c.590pp; 26pp maps and plans; 0900416238 (February 1981).

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W.K. Simpson MASTABAS OF THE WESTERN CEMETERY Part I Sekhema (G1029), Tjetu I (G2001), Penmeru (G2197), Hagy, Nefertjentet, and Herunefer (G2352/53), Djaty, Tjetu II and Mimesti (G2337X, 2343, 2366). This is the latest volume in the series of reports of excavations of the mastabas at Giza. Each mastaba is fully described and illustrated with photographs and drawings. $34 \times 27 \mathrm{~cm}$; illus; $0878461566 \quad £ 33.25$


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## NEW EGYPTOLOGY - AUTUMN 1980

Aris \& Phillips

ANNUAL EGYPTOLOGICAL BIBLIOGRAPHY/ BIBLIOGRAPHIE EGYPTOLOGIQUE ANNUELLE J.J. Janssen (Ed.). This bibliography is a definitive work, started by J.M.A. Janssen in 1946 under the auspices of the International Association of Egyptologists. It lists, with an abstract, all the academic publications on Egyptology for a given year, making it an invaluable and indispensible tool for all scholars and students of Egyptology. As from the 1977 volume, this bibliography will be published in Warminster by Aris \& Phillips. Orders and renewals should now be addressed to our distributors, La Haule Books Ltd., who will supply standing orders, i.e. orders for 1977 and future volumes, at a special price, currently estimated at $£ 15$.
A. Rosalie David A GUIDE TO RELIGIOUS RITUAL AT ABYDOS. The home of the god Osiris at Abydos in Upper Egypt, the splendid temple completed by the great Pharaoh, Ramesses II, in memory of his father Sethos I, is richly adorned with carved reliefs and spells relating to the rituals performed there. The numerous studies on Egyptian religion have tended to concentrate on the large number of surviving texts. This work, which is a completely new version of the author's Religious Ritual at Abydos has reduced the sch larly argument and concentrated on explaining how this temple was used. In order to present a clear picture of Egyptian temple ritual a sequence of drawings has been taken from Calverley \& Broom. By following the scenes from room to room the visitor, with the aid of this book, can see the pomp and ceremony of ancient Egyptian ritual unfold. 224pp. 4to; illus; $0856680605 ; 1980 £ 15$.

Naguib Kanawati GOVERNMENTAL REFORMS IN OLD KINGDOM EGYPT. The present work demonstrates that Egyptian administration was not subject to a process of gradual development, but rather that changes occured through a succession of government reforms, introduced by almost every king in the Old Kingdom; thus showing that the central government was, until nearly the end of this period, in full administrative control. The conclusions are based on a reconsideration of the assumption that the changes happened at different places, a re-evaluation of the idea that some functional titles were merely honorific for certain individuals and a careful dating of the title holders. 176pp. A5; 085668 1677; 1980 £8.

Ashraf I Sadek THE AMETHYST MINING INSCRIPTIONS OF WADI EL-HUDI. Part I - Text. This book presents the first full and authoritative edition of the important inscriptions and graffiti from the ancient Egyptian Amethyst mines at Wadi el-Hudi. It combines in one work all the texts first edited in pioneer fashion by the late Prof. Fakhry in 1952, with those studied earlier by Alan Rowe, and several more identified recently. In this first volume, all the texts are given in clear, normal hieroglyphs, with full apparatus of textual notes, translations, and line by line commentaries, making the material available in reliable form to all who are interested in ancient mining and exploration in the Red Sea area, in Egyptian history and language in the Middle Kingdom, and in the scope and organisation of ancient expeditions. Furnished with a brief but inclusive synthesis of Middle Kingdom mining enterprises, and nine detailed indexes, this work will be an indispensable handbook of its kind. 128pp. A4; $0856681628 ; 1980$ £15.

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## CONTENTS



Brief Communications: A sacrificial bull's head from Illahun, by Richard Burleigh and Juliet Clutton-Brock, p. 151; 'Liaison' $n$ reconsidered, by M. A. Nur-el-Din, p. 153; Observations on recent discoveries at Wâdî Gawâsîs, by Abdel Monem A. H. Sayed, p. 154; An important lacuna in Ranke's Personennamen: the Tomb of Rnni, by H. G. Fischer, p. 157; Lexikalisches zum Papyrus Berlin 10463, by M. Görg, p. 160; Sbht as a term for a wooden screen, by Patricia Spencer, p. 161; Amenophis III and Akhenaten: co-regency proved? by Juliette Bentley, p. 164; Reconstruction of a shoulder harp in the British Museum, by Bo Lawergren, p. 165; Chicago, Or. Inst. 8798, 3-4 and Cairo CG 34057, 12-13 ( $\mathcal{F E A} 62$, 59, 61-2, pls. XI, XIA), by Jaromír Málek, p. 168; The reign-length of Ramesses VII, by C. J. Eyre, p. 168; Harmachis the High Priest of Memphis: Wilkinson's copy of BM 391, by J. D. Ray, p. 170; An illustration of the Coffin Texts on a Roman cartonnage, by K. Mysliwiec, p. 171; A Second Dynasty king in a Demotic Papyrus of the Roman Period, by M. Smith, p. 173; Current research for higher degrees in Egyptology, Coptic, and related studies in the United Kingdom, No. 4, by G. T. Martin, p. 174 .

## Reviews

PAGE
Janet H. Johnson and Edward F. Wente, Eds., Studies in Honor of George R. Hughes
Jan Assmann, Erika Feucht, and Reinhard Grieshammer, Eds., Fragen an die altägyptische Literatur. Studien zum Gedenken an Eberhard Otto. . . J. Gwyn Griffiths . . . 178

## CONTENTS

Bertha Porter and Rosalind L. B. Moss, assisted by ..... PAGEEthel W. Burney, Topographical Bibliography ofAncient Egyptian Hieroglyphic Texts, Reliefs andPaintings. II. Theban Temples. Second Edition,revised and augmented. III. Memphis. Part 2.Saqqâra to Dahshûr. Second Edition, revised andaugmented by Jaromír Málek
T. G. H. James . . . I79
Jürgen Osing, Der spätägyptische Papyrus BM Io8o8
M. A. A. Nur-el-Din, The Demotic Ostraca in the
National Museum of Antiquities at Leiden
A. Shisha-Halevy . . . 18 I
W. J. Tait . . . . 186
Pierre du Bourguet, Grammaire fonctionelle et progressive de l'égyptien démotique
Carol A. R. Andrews . . 188
Herwig Maehler, Papyri aus Hermupolis. Ägyptische Urk̄unden aus den Staatlichen Museen Berlin, Griechische Urkunden, XII
J. David Thomas . . . 189
W. M. Brashear, Greek Papyri from Roman Egypt. Ägyptische Urkunden aus den Staatlichen Museen Berlin, Griechische Urkunden, XIII

## LIST OF PLATES

> (at end)

Plates I-II
Plate III
Plates IV-V
Plate VI
Plate VII
Plates VIII-IX
Plates X-XI
Plates XII-XIII
Plate XIV
Plates XV-XVI
Plates XVII-XVIII
Plates XIX-XX
Plate XXI
Plates XXI-XXII
Plate XXIII
Plate XXIV

El-'Amarna Survey, 1979
The 'Anubieion', North Saqqâra, 1978-9
Crania from the Mastabas of the Reign of Cheops at Gîza
Excavations at the Pyramid of Userkaf
A Memphite Triad
The Upper Court Colonnade of Hatshepsut's Temple at Deir el-Baḥri
Two Lute-Players of the Amarna Age
An Accounts Papyrus from Thebes
A Sale of Inherited Property from the Reign of Darius I
Adaptation of Ancient Egyptian Texts to the Temple Ritual at Philae
Museum Acquisitions, 1978
Resheph in Egypt
A Sacrificial Bull's Head from Illahun
Discoveries at Wâdî Gawâsîs
Reconstruction of a Shoulder Harp in the British Museum
An Illustration to the Coffin Texts

## EDITORIAL FOREWORD

The Second International Congress of Egyptology took place at Grenoble from io to ${ }_{15}$ September 1979. Undoubtedly its most important result was its declaration of support for the Egyptian Antiquities Organization and the Directorate-General of Antiquities and National Museums of the Sudan in their appeal for an immediate programme of recording threatened archaeological sites in their respective countries. The congress recommended, in particular, that priority should be given to surveys of regions under immediate threat of destruction, that encouragement should be offered to fund-raising operations intended for this purpose, and that Egyptologists should follow the recommendations of the units which will be set up in Cairo and Khartûm for the co-ordination of field-work. At a time when the destruction of invaluable material is proceeding at an alarming rate within the Nile Valley it is fitting that the EES, with its long and distinguished tradition of scientific research in Egypt, should express its whole-hearted commitment to these policies and should do its utmost to implement them and to encourage their implementation.

In the light of these developments it is gratifying to record that the Society was particularly active in the field during the 1979-80 season. Mr B. J. Kemp has completed another successful season at El-'Amarna, where work was resumed on 23 February until io April, whilst Professor H. S. Smith has concluded his excavation of the Anubieion complex at North Saqqâra. His progress may be summarized as follows:

Site work began on 7 October and continued until 25 November. The excavation of the settlement behind the central temple of the Anubieion enclosure was completed down to the base of the Late Period levels, work being concentrated on the northern portion of Area 5. The principal results were as follows:
I. The plan of the settlement is now much more clearly intelligible. Two original rectangular blocks of dry-stone buildings either side of an east-west street, with open areas used for cookery and other domestic functions, are now known to have been adapted in the time of Ptolemy V for use as a communal settlement.
II. A postern gate was located in the West Enclosure Wall on the line of the east-west street.
III. The building sequence and stratification of the northern area were ascertained, and modifications deduced which are of importance for the history of the site as a whole.
IV. Dr Price's work on the coin hoard discovered in 1978-9 enabled the foundation of the Ptolemaic settlement to be dated to $250 \pm \mathrm{BC}$ (phase iv a), while its expansion (phase iv b) may now be dated to the time of Ptolemy V (204-180 BC).
V. A much fuller and more detailed type corpus of Egyptian-made wares of the Ptolemaic Period has been built up, and progress has also been made with some later material.
VI. A sondage established the location of the south-west corner of the Anubieion enclosure, and showed that the temple-town of the Bubastieion to the south was on a different alignment and did not share the same west enclosure wall.
VII. The excavation of a shaft in the temple area, left incomplete in 1977-8, proved that it did not lead to Anubis catacombs. Two other shafts in Area I, originally opened by the French Saqqâra Mission in 1966-7, were briefly investigated to establish the ownership of the decorated Middle Kingdom tomb chambers ( $S k-W_{s h t}$ and $S_{3}-H t h r-I p i$ ). They were reported to the Antiquities Service and the French Mission, on whom responsibility for their publication falls.

In the final period of the season good progress was made with the publication of the Anubieion. While much remains to be done, the first of the two projected volumes could be ready for press in 1981.

The Society has also continued its research at Qaṣr Ibrîm where work opened on I5 January and lasted until 22 April under the direction of Professor W. Y. Adams. Some of the excavations (at the South Bastion and South Gate and behind and inside the North-west Bastion) consisted of rescue operations to counteract the threat of wave action and percolation from the lake, but elsewhere substantial progress was made in the archaeological elucidation of the site. Much inscribed material was found as well as many pieces of textiles and basketry and a mass of small objects.

The Society's epigraphists have been particularly active with expeditions to Saqqâra, El-‘Amarna, Gebel es-Silsilah, and Abydos. Dr A. J. Spencer describes recent work in the Teti Pyramid cemetery in the following terms:

The third season of epigraphic work at Saqqâra lasted from io September to 18 October 1979. The team was the same as in previous years, with the addition of Mr . Strudwick, a postgraduate student at Liverpool University. All the work planned for the season was successfully completed; a few details of the small tombs copied in 1976-7 received final checking, and the major task of recording the mastaba of Nefer-seshem-Ptah was carried out. The latter project included the clearance of those parts of the superstructure which had been allowed to fill with sand since their original discovery, and it was here that some surprising features emerged. Earlier publications describe the four chambers in the western part of the superstructure as being devoid of inscriptions, but one of these proved in fact to be decorated on all four walls, the west wall consisting of a large inscribed false door of limestone. In these 'new' inscriptions, Nefer-seshem-Ptah is stated to have been a priest of the pyramid of Pepi I, whereas the texts in the accessible part of the tomb list him only as priest of Teti. The other rooms recleared by the expedition were uninscribed, and the masonry of their walls was unfinished. Facsimile copies were made of all the newly exposed texts, in addition to those in the accessible chambers, and a new plan of the entire superstructure has been prepared. The clearance of the mastaba provided evidence to show that it had been built at the same time as the neighbouring tomb of 'Ankh-ma'-Hor in a single building project.

Dr G. T. Martin has continued his study of the Royal Tomb at El-'Amarna. He summarizes progress as follows:

Between 16 January and 20 March 1980, I worked at the tomb, making a complete facsimile record of all surviving scenes and texts. The previous publication in Bouriant, Legrain and Jéquier, Monuments pour servir à l'étude du culte d'Atonou en Egypte (Cairo, 1903), was incomplete and inaccurate in detail. The walls of the tomb have sustained much damage since this publication, but the surviving traces can be supplemented, thanks to a set of photographs, unfortunately not complete, taken by the Society before the major destruction in the early thirties. Mr Mark Lehner (American Research Center in Cairo) joined me from $13-27$ February and 9-20 March, and prepared a detailed plan and sections of the tomb. During the epigraphic work it was noticed that
a certain amount of pottery, mostly small fragments, was still lying in the various rooms and passages of the tomb, as well as in the Royal Wâdî, despite the activities of the previous archaeological expeditions. Aside from its intrinsic interest as part of the funerary equipment of Akhenaten and his family all this neglected material is closely dated, and should be retrieved, studied, and published. One of the sherds noted this season (from Room F) bears a hieratic docket. Other fragments, organic and inorganic, are probably the remains of funerary equipment.

A particularly welcome event of the last year has been the resumption of the Society's long-interrupted publication of Sethos I's mortuary temple at Abydos. The expedition lasted from 27 September until ir October and consisted of Professor J. R. Baines and Mr C. J. Eyre who received most valuable and generous assistance from Dr David O'Connor, Director of the Pennsylvania-Yale expedition. The expedition's aim was to record in photograph and line-drawing those parts of the temple which were inadequately treated in the material already assembled for Vol. V of the publication or whose originals were damaged beyond repair. Substantial progress was made in achieving these objectives, but further recording work remains to be done which would make it advisable to mount at least one more expedition.
Finally, we can congratulate Professor Caminos on yet another profitable season at Gebel es-Silsilah. The staff of the expedition consisted of Professor R. A. Caminos (field director and epigraphist), Professor J. Osing (epigraphist), and Mr P. Lacovara (surveyor, University of Chicago). The programme was to investigate, survey, and record the pharaonic remains at Gebel es-Silsilah Sharqi. Most of the ancient records to be found there emanate from people who, in one way or another, were engaged in the business of hewing out sandstone blocks; they left to posterity literally hundreds of graffiti, and quarry marks, cut either on the cliff face or on the quarry walls. There are, moreover, sandstone shrines and stelae made at the behest of kings and high officials, and also rock drawings of many kinds. Working from 9 February to 15 April 1980, the expedition made 1580 life-size facsimile copies of epigraphic records of all sorts, as well as 53 architectural drawings of uninscribed monuments. In addition, the team completed a topographic survey of the site, the outcome of which will be a detailed contour map of Silsilah East on which the quarries will be shown in outline and the location of the ancient remains indicated.

Regrettably the Society's year has not been without its sadder moments. One of our oldest and most distinguished members, the Revd Dr A. J. Arkell, died on 26 February at the age of 8 r . From an early stage in his career he became a devoted student of Sudanese history and prehistory, and subsequently acquired an immense reputation for his work in this field. In 1948 he was appointed lecturer in Egyptology at University College London, being promoted Reader in 1953, and until 1963 acted as Honorary Curator of the Petrie collection whose material he arranged, identified, catalogued, labelled, and studied. Dr Arkell was for many years a member of the Society's committee, and it is hoped that we shall be able to publish a fitting tribute to him in the next volume of the $\mathfrak{f o u r n a l}$.

The editor has been asked to bring two notices to the attention of readers. First, Dr E. A. E. Reymond is engaged in writing a biography of F. Ll. Griffith and is
anxious to receive personal reminiscences, information of any kind, letters or the like which might be relevant. If anyone has such material she would be grateful if this could be forwarded to her at the Department of Egyptology, Mansfield Cooper Building, the University of Manchester, Manchester 13, MI3 9PL. Any contribution will be given due acknowledgement in the book. Secondly, members will recall the excellent lectures given by Dr Manfred Bietak in 1979 to the Society and to the British Academy (the Ninth Mortimer Wheeler Archaeological Lecture). The Academy Lecture, Avaris and Piramesse: Archaeological Exploration in the Eastern Nile Delta, will be published in December 1980, illustrated by 36 plates and 19 text figures. It can be obtained from The British Academy, Burlington House, Picadilly, London, WiV oNS, at $£_{2}^{2} \cdot 60$. Its ISBN will be or 7340457 .

Finally, this foreword cannot conclude without some recognition of the retirement of our secretary Miss Mary Crawford in December 1979. During her sixteen years' tenure of this office she proved a staunch, if unsung, support of the Society's work and many of its members have good reason to recall with gratitude her expert and unstinting assistance. On behalf of all members of the society we should like to express to her our thanks and offer our best wishes for a long and happy retirement.

# PRELIMINARY REPORT ON THE EL-'AMARNA EXPEDITION, 1979 

By BARRY J. KEMP

The expedition, working from 24 January to 30 March, comprised Barry J. Kemp as director, and Mark Lehner and Michael Jones as site supervisors and planners. A considerable debt is owed to the Inspector for the season, Ismail Mohammed Aly, who not only facilitated the work generally, but also took charge of conservation, and participated fully as a member of staff. An expression of gratitude is due to the Higher Committee of the Antiquities Department for granting an excavation permit, and in particular to Dr Shehata Adam, Dr Victor Girgis, Dr 'Abd el-Kader Selim, Dr 'Ali el-Khouli, and Mr Mutawwar Balbush.

Excavation was begun in the Workmen's Village, or Eastern Village, which lies separately from the main city in a shallow secluded valley in the side of a low and narrow terrace which runs out from the desert cliffs (see pl. I, i). The society had worked here in 1921 and 1922, publishing the results in The City of Akhenaten, I, but the survey carried out two years ago suggested that there was further potential for fieldwork here, despite the considerable damage which all parts of this site seem to have sustained. ${ }^{\text {I }}$ Amongst the considerations which led to the choice of this site are its compactness and the variety of its remains, which must represent much of the physical requirements of one community, an evident counterpart to the Deir el-Medina community at western Thebes. Furthermore, in recent times its isolation has made it more vulnerable to attack than most other parts of El-'Amarna, and this introduced an element of obligation into the decision to begin work here. The excavations of this season were deliberately spread out in order that the extent and condition of different parts of the site might be better judged. The areas worked are marked on fig. I which, as a general map, is still only provisional. In the matter of terminology, the numbering-system of houses within the walled village created in 1922 has been retained, as well as the general system for numbering the chapels on the slopes of the adjacent hills. For the main part of the site lying outside the walled village, a 5 m grid of squares has been established both for reference and to provide excavation units. Its alignment follows the eastern inner face of the enclosure wall of the walled village, and the squares so far worked originate from the inner south-eastern corner of the village. This part of the excavation is termed the 'Main Grid'. Isolated parts of the site inconveniently situated to it are excluded, and instead are numbered sequentially with the prefix ' X ', and possess their own grids.

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Fig. I. General site map of the Workmen's Village showing areas of fieldwork in 1979


Fig. 2. Site XI: specimen of planning sequence in one square. Originals by M. Lehner

## Site XI

One team concentrated for the whole season on this part, under the supervision of Mark Lehner, who also did the detailed planning at successive stages of excavation, which has been adopted as standard procedure, viz. the surface of the desert before excavation, the top of building rubble when exposed, and floor plans. In fig. 2 a specimen square is presented at the three major planning stages. Certain very specific advantages arise from working in this way. In the first place, parts of the site are constructed from irregular stones, many of which show through the covering of loose sand. A surface plan before excavation ensures that a record exists if it should subsequently be found that in the course of excavation too many stones have been dislodged or removed. Again with reference to the surface plan, many parts of the site have been disturbed, site XI being no exception. A surface plan helps one to understand better the condition of the site when fully cleared. Thus in fig. 2 there is a small area of disturbance running down the left side of the square, including a small spoil heap at the top from a pit in an adjacent square. Part of the disturbance clearly relates to the hole which has destroyed part of the floor of the building. In the squares of the Main Grid where there is both ancient and modern pitting this kind of evidence can be important at a basic level of interpretation. Thirdly, attention to the collapsed rubble is a help when trying to reconstruct the original appearance of the building. In terms of fig. 2 (and amply confirmed in adjacent squares), it is abundantly clear that the mud-paved portion on the east side was an open court, and that probably the south side of it was protected by no more than a low wall at the most.

A total of fourteen 5 m squares was excavated and planned in this way at site XI, a process which revealed a small building complex of brick chambers behind rough stone terraces (see fig. 3). Within some of the rooms sections of the original roof were found lying on the floor in a state of preservation which allowed detailed drawings to be made of the various fibrous materials used in the roof construction, and some portions to be consolidated and lifted for permanent preservation. The most important part of the building looks as though it was the group of rooms at the western end, with 30 cm thick walls, the south-east part of which occurs in part of the square appearing in fig. 2. The finds included a small number of mud sealings, and a small collection of models in mud of what appear to be joints of meat. Two wooden spoons were also amongst the finds, one of them illustrated in plate $\mathrm{I}, 3$.

The location of the building in relation to the site as a whole would be very suitable for controlling access to the site, and these finds in mud perhaps relate to administrative activity carried on here. It is noticeable that no part of the building as a whole resembles a house, and no trace of a kitchen was found, although a stone quern was amongst finds from a disturbed area. However, the mixed nature of human activity was illustrated by a floor deposit in the front part of the western group of rooms, consisting of pieces of ostrich-egg shell, some unworked and some partially formed into beads, and deriving perhaps from spare-time craft production. The people who used this building also kept animals there. Beyond the courtyard which adjoins to the
east was a group of tiny and irregularly built rooms. Within the floor deposits were numerous droppings from sheep or goats, samples of which were kept for later analysis. The final unit at the eastern end was constructed separately, and again from 30 cm thick walls. Its most conspicuous feature is a stone slab carefully set in gypsum in the south-eastern corner of the outer room.

Although the whole building seems to have been contained within the squares excavated, work at site XI is not finished. At the end of the season it was found that the courtyard had earlier deposits beneath it which will necessitate further study of this part. But, more importantly, the building as a whole is only one unit in a spread of archaeological features lying to the south, consisting of stone alignments, some quite faint (see pl. I, 2), and patches and larger areas of surface sherds. In order to make a record of the full context of the building, detailed surface-mapping and some shallow clearance will need to be done.

## Work within the walled village

In 1921 and 1922 the Society's expedition, directed first by Peet and then by Woolley, excavated thirty-seven of the houses, almost exactly half of the probable total number, situated within the square walled village. The principal value of this part of the site lies in the height to which some of the houses are preserved, important for the study of domestic architectural detail at a known socio-economic level in Egyptian society, and the favourable conditions for the preservation of organic material, in the form of animal bones, coprolites, grains, and so on. This year, the team under Michael Jones's supervision cleared a specimen house near the centre of the village. In the terminology of the Peet and Woolley report this house was no. 6 in Long Wall Street. It was very quickly established that the western part of the village had been as thoroughly turned over in the years since 1922 as the eastern part. The fact that this part was still buried to its full height was a reflection of the way in which the robbers had methodically back-filled as they went. This operation had left numerous hoe-marks on the walls and had led to the loss of much of the floor. But, none the less, the systematic excavation of this house proved to be a worthwhile task, to the extent that it would still be profitable to clear further houses in the future. The contents were carefully sieved, and produced a mass of pottery, including a Mycenaean sherd, basketry, some in a surprisingly good condition, material from the roof, and animal bones and other organic material.
Particular attention was paid to the way in which this house had been constructed, and a series of detailed architectural drawings was made, to which was added a drawing of the rear outer wall of house no. 5, specially cleared for this purpose. Fig. 4 contains half of this last drawing and a part of the adjacent wall of house no. 6. As is general at the Workmen's Village, two distinct materials were used for making the bricks: standard Nile alluvial mud mixed with gravel, and a pebbly desert marl quarried from the hills around the village and producing crumbly bricks of varying shades of brown and reddish-brown. This distinction lies behind the remark in The City of Akhenaten, I, 53 , that the thick enclosure walls are 'of a distinct make from those in the houses,
House no. 5

being of a greyer colour and full of lime chips'. The rear wall of house no. 5 , in common with some of the internal walls of house no. 6, shows a bottom foundation-course or -courses of Nile alluvial bricks. Above this, however, desert-marl bricks progressively replace them. As fig. 4 shows (the other half of the wall drawn but not included here is a mirror image), the ends of the wall were built up first, and the change in material thus occurs increasingly towards the middle in the lower courses. In house no. 6, whilst most of the walls are of brick too, the rear was constructed from stones set in marl mortar and then plastered over, a method apparently continued along the rear wall of house no. 7 .
A possible explanation of these anomalies in construction would be that, at the outset of the Amarna Period, an agency of Akhenaten's government supplied the proper mud bricks and perhaps architects for the building of the village enclosure walls and for the laying out of the foundation-courses of the houses, but, thereafter, each family was left to finish off its own house with whatever materials could be procured. Mud bricks were in limited supply, and were eked out on quite a scale by the use of locally produced bricks from the hillside quarries which are still visible. Here and there bricks were dispensed with altogether and rough stones used. In laying these most of the foundationcourses of mud bricks were taken up. As a working hypothesis it clearly requires to be tested by further work inside the village but, if substantiated, it would provide an unusually precise archaeological record of the limits within which the Egyptian state made itself responsible for its workers. It would also explain the considerable minor variations of internal design in the houses: each was built by the occupying family to suit personal preferences.

## Work within the Main Grid

Around the southern and eastern sides of the walled village there extends an area of disturbed archaeological deposit. At the crucial point where this meets the southeastern corner of the village, below the row of chapels dug in 1921, excavation was begun by the team under Michael Jones's supervision in a series of 5 m squares, six in all (see fig. 5 and pl. II, 2). In one square, nig, it was found that the southern enclosure wall of the village had collapsed outwards in antiquity in more or less one piece, and still lies on the ground. The previous excavators had used the inner face of the enclosure wall as their boundary, and had dumped their spoil over most of the length of this collapsed section without first examining the ground. This spoil was removed along three squares, but the complete clearance and recording of the wall has been left for the future, and no attempt was made in square nig to lift the brickwork to examine the undisturbed ground beneath. Two other squares in the excavated group were found to contain the lower part of a chapel belonging to a second row lower down the hillside than those dug in 1921. In an attempt to continue the numerical sequence of the earlier work it was given the number 450 . It was built from a mixture of desertmarl bricks and stones. White plaster was found adhering to some of the fallen brickwork around the front. The part of the chapel so far cleared is a courtyard, but the building was evidently not a simple progression of rooms on one axis; for the north


Fig. 5
wall is broken by a doorway, leading to another room which may have contained a bench since a small area of white-plastered surface raised above the level of the floor of chapel 450 was cleared along the northern edge of the excavated squares.

Immediately in front of the main entrance to the chapel lay a short path of stones. This terminated in a miniature T-shaped basin cut into the ground. Where the path joined it, a stone and a brick had been laid on top of each other as if to simulate a temple quay, with tiny flights of steps moulded in white plaster on each side (see pl. II, I). A thin layer of clean sand was found to cover the bottom, beneath the filling of earth which had probably been deliberately laid and which had protected the basin. The attempt to imitate a temple quay with flanking steps is obvious enough, and some temples do seem to have faced an axially aligned canal with a broadening at the nearer end which would produce a T -shape. ${ }^{2}$ But T -shaped basins possessed their own cultic significance. A pair of them flanked the central avenue at the bottom of the lower stairway at Hatshepsut's temple at Deir el-Bahari, ${ }^{3}$ and in some Theban tombs they appear in paintings of the Hereafter. ${ }^{4}$ In one group of tombs at Deir el-Medîna fragments of possibly two pottery offering-trays were recovered, and have been tentatively restored as T-shaped, recalling the T-shaped vessels in Tuthmosis III's donation scene at Karnak. ${ }^{5}$ The occurrence of such basins as an architectural feature at Deir el-Baḥari might give rise to the expectation that smaller examples would occur in the forecourts of Theban tombs, but, where basins and miniature gardens have been found, they appear to have had simple rectangular or circular plans. ${ }^{6}$ The little basin in front of our chapel 450 thus supplies a link between several facets of Egyptian cult and symbolism.

The importance which the basin gives to chapel 450 recalls a statement in The City of Akhenaten, I , 99 : 'On the last day of the 1921 excavation, moreover, while clearing the slope in front and to the south of 524 , we came upon the shrine end of a chapel of more imposing dimensions than any yet excavated.' The location in question must be close to the eastward continuation of the axis of chapel 450 . The reason why the excavation here was not continued after 1921 probably has a lot to do with the fact that the 192 I dumps were located over this very part of the site. As an intermittent task, the removal of this dump was begun this year. It was found to contain pieces of painted

[^1]plaster, one of the pieces bearing the name Amen-Rē ${ }^{〔}$, and quite clearly not the same as any of the previously published inscribed pieces from the site (see fig. 6). This part of the dump lies closest to the sites of chapels 523 and 524 .
The ground beneath chapel $45^{\circ}$ and its basin is not the natural desert surface. It is a layer of compacted earth, sand and ash containing sherds, and is about 50 cm thick in the one place where it can be measured. In several places small pits have been dug into it, as the plan in fig. 5 shows, but some of these are probably the result of modern digging. On the south side of squares or 7 and part of $\mathrm{ni}_{17}$, however, a careful study of the stratigraphy indicates that the larger clearance of this material down to a flat surface is ancient and associated with a short alignment of bricks still incompletely exposed. This is one of several ancient features of this layer, another being a shallow escarpment running at an angle across square or8, which call for further examination.

The last square of the season to be started was niz. The earthy layer was here found to dip downwards towards the west. As its sloping surface was gradually uncovered by the removal of compacted sand undisturbed in modern times, the edges of cuttings in the bedrock became visible. There was no time to dig into the earthy material itself to expose the base of these cuttings, but some notion of what is present came from a feature in the middle of the south side of the square. In some past age, certainly long before the digging of modern times, a pit had been dug through the earthy fill. When the sand fill of this pit was removed, it was revealed that one of the rock cuttings was in fact a wall bearing a layer of gypsum plaster, and showing at the edge of the pit the remains of


Fig. 6. Two fragments of painted mud plaster from old excavation dump in square r 19. The background is yellow, the vertical stripe maroon, and the designs black one side of a doorway. Where the rock surface slopes down immediately to the north of the pit, the level for the top of the wall has been made up with a line of stones set in mortar. The base of the pit is about 1.50 m below the present ground level, but does not represent the floor of the rock-cut room. How much deeper this is and how far these cuttings extend it is at this stage impossible to judge. The surface of the ground in this area is no guide; for it shows no signs of any ancient features at all.

At present it looks as though this lower level of chambers belongs to an earlier phase of use of the site (though one contained within the Amarna Period), and that the filling is part of the layer on which chapel 450 stands. There does seem, therefore, to be a micro-stratigraphy present covering changes of use, and it should eventually be possible to relate chapels and the walled village to this. Again a statement in The City of Akhenaten, $\mathrm{I}, 99$ is called to mind: 'Between this (the end of the unexcavated chapel referred to above) and the wall which bounds to the west the irregular complex of rooms south of 522 there came to light at a low level a piece of walling differently orientated both from those of the new chapel just referred to and from those of the complex. This
may be merely part of the terracing works, but on the other hand it may be a portion of an earlier building on this site which further investigation would enable us to date.' The various stratigraphic units contain large numbers of potsherds, amongst them occasional Hieratic jar labels of which a few bear dates. From the work at all parts of the Workmen's Village this season, a total of ten was found, of which a preliminary study was made by M. A. Leahy, three of them being found to bear dates. There is thus some hope of being able eventually to assign absolute dates to the sequence.

Despite the excavations already carried out here in the 1920 and the depredations which the site has subsequently suffered, I feel that the decision to begin work here has been fully justified by the results of this season. There is clearly a good deal more to the site than the first excavators revealed, and although the present work was begun very much as a study of built environment and domestic economy, a possible contribution to the history and religious practices of the period comes as a welcome bonus.

I. El-'Amarna: the workmen's village looking north. Site XI, at an early stage of excavation, is at the left

2. El-'Amarna: site XI at an early stage of excavation, looking south with the eastern half of the site still untouched. Note the lines of stones in the background

3. El-‘Amarna: object no. 44, a wooden spoon, from site XI

I. El-'Amarna: basin in front of chapel 450 . The scale is 30 cm long

2. El-'Amarna: excavated squares in the main grid at the end of the season, looking east

# THE 'ANUBIEION', NORTH SAQQÂRA PRELIMINARY REPORT, 1978-9 

By H. S. SMITH. and D. G. JEFFREYS

The Society's expedition worked at North Saqqâra from 12 September to 14 December 1978. The staff members were H. S. Smith, Mrs H. F. Smith, D. G. Jeffreys, K. J. Frazer, P. G. French, A. Walmsley, Miss L. L. Giddy, Miss P. Rose, and Miss J. S. H. Williams. Mrs D. J. Crawford and Mr A. Marks worked with the expedition for short periods. The Society had the signal honour of a visit from HRH Princess Alexandra and Mr Angus Ogilvie on 2 November, attended by Dr Shehata Adam, the head of the Antiquities Organization of Egypt, and Mrs Shehata Adam, Dr Mahmud Abu-Raziq, Dr Ahmed Moussa, and a large and distinguished party.

The Society is indebted for courteous co-operation and assistance to Dr Shehata Adam, Dr Victor Girgis, Director General, Dr 'Ali el-Khouli, Dr Mahmud AbuRaziq, and Mr Mutawwar Balbush at the Antiquities Service. Dr Ahmed Moussa, Director for Saqqâra and Memphis, Mr Said el-Fikey, Chief Inspector for Saqqâra, and Mr Holeil Ghali all helped facilitate the excavations at Saqqâra, while Dr Husseini, the inspector seconded to the Society's work, lent his valuable co-operation. The Society is deeply grateful for their generous services which make the work possible.

Excavation of the settlement west of the central temple of 'Anubieion', begun in 1977 (see $\mathscr{F} E A 65$ (1979), 17 ff .), and of the underlying cemetery was brought near to completion. The outstanding results were that the history of the settlement can now be closely charted from the third century bс to the early Christian Period by a long series of coins from stratified contexts, studied by Dr Martin Price of the Coins and Medals Department of the British Museum, and that the development of the Saqqâra necropolis may now be followed from the break-up of the Mortuary Temple of the Teti Pyramid to the Roman Period. The site is described below phase by phase. New discoveries have altered somewhat the tentative phase pattern offered in the previous report.

## Phase $i$

## The site

The site overlies the unexcavated north-east corner of the Mortuary Temple of the Teti Pyramid, which comprised, on the analogy of the south-east corner, magazines. ${ }^{1}$ These are now represented by a mass of broken stone. This is terraced by a rough eastwest wall, perhaps following the original line of the south wall of the central corridor of Teti's magazines and representing part of its structure; the ground level to the north

[^2]was higher than that to the south. On this base was founded a series of tomb-chapels with paved limestone floors and walls constructed of two ashlar faces of limestone orthostats filled with rubble, preserved in general only one course high. Though no reliefs are preserved, their similarity to the tomb-chapel of Akhpet ${ }^{2}$ and other fragmentary tomb-chapels of New Kingdom (probably Ramesside) date, preserved above and around the Teti Pyramid Mortuary Temple, suggests that they are of that era. Of the associated shafts, cut through the stone debris and underlying rock, one was excavated (see fig. I , bottom left). It descended 9 m , and had a chamber on the west; the original burial or burials had been completely removed by plunderers. In the Late Period a tunnel had been cut westwards to the chamber of a second tomb, and the whole used as a charnel-house for many poor burials, very summarily mummified and wrapped, which had in turn been robbed in ancient and modern times. Some miniature shabtis and amulets from a collar were found on the floor at the base of the shaft in sand underlying these burials; they are of dark and light blue faience (see pl. III, r), probably of Twentieth to Twenty-second Dynasty date, and may have belonged to the original burial or an early intruder.

## Phase ii

After the destruction of these chapels, spreads of sandy gravel were deposited across the site. Burials were made in these which fall into two categories:
(a) a lower stratum of burials in painted wooden inner anthropoid coffins within wooden outer rectangular or anthropoid coffins with painted inscriptions, showing traces of linen wrappings and some signs of mummification, with necklaces or wristlets of beads and amulets, mostly in faience, robbed but incompletely so;
(b) an upper stratum of burials in anthropoid coffins. Most had been laid out on a board of wood, a painted mud funerary mask placed over the face, and the coffin then built up in mud round the corpse, and gessoed or gypsum-washed and painted with funerary designs of normal Late Period types and with inscriptions, often incomplete, and occasionally apparently illiterate, in hieroglyphs in black ink (see pl. III, 2). Most burials had been wrapped, but showed little trace of mummification, and were in some cases without coffins. They had been robbed, and only a scatter of poor beads, amulets, and shells (see pl. III, 3 ), and some shabti fragments were recovered, though in one burial there was evidence of a bead net.

The cemetery levels were examined in full only in the south-central area of the site, where burials of type $(b)$ were much more numerous than type ( $a$ ), and had been piled in on top of one another (see fig. 1). These burials evidently belong to the great cemetery of the Late Period which extends to the south and north of the Serapeum Way. Their date-range is difficult to delimit precisely, though it may well extend from the sixth to the fourth century BC on the basis of the material. The type-( $a$ ) burials might belong in the Third Intermediate Period, if a few broken shabtis of that date are any guide.

[^3]NORTH SAQQARA
ANUBIEION Area 5
stone wall: brickwork of Enclosure wall
mud dust, stone flecking; sand, potsherds;crushed stone chips;
large-stone rubble
earth floor: gypsum plaster:
0
0
0
0
0
$\vdots$
0
0
0
5
0
0
$\vdots$
$\vdots$

orin




## Phase iii

A section (see fig. 2) shows that the foundation trench for the western limb of the great brick enclosure wall of 'Anubieion' cuts through the gravel deposits in which these burials were made. The burials thus antedate the foundation of the temple-town, contrary to what we stated in $\mathcal{Y} E A 65$ (1979), i9. Certain small structures are associated with the foundation of the great enclosure wall, and lie directly upon the upper gravel and the burials it contains. They comprise: (a) an east-to-west freestone wall, with an adjacent working surface of pitched cobbles, in which storage jars had been set, bounded by a limestone kerb (see pl. III, 4); (b) similar structures north of the east-towest wall were apparently associated with the same kerb, under the later rooms $9-$ - 0 (see fig. 3); (c) a sunken bin or storage-cellar, partially re-using a phase-i tomb-shaft (see fig. I , bottom centre), sunk through the cemetery gravels; ( $d$ ) a low-level chamber or storage cellar sunk through the destroyed floor of another phase-i chapel under the floor of the later room 14 (see fig. 3). These structures did not extend right across the site, though some may have been lost through the later pitting of the central area. They give the impression of providing temporary storage, working and camping facilities, perhaps during the construction of the great enclosure wall and original temple sanctuaries. To level up for the next building phase, cemetery gravels were raked back over structure (c); this was responsible for our error in sequencing in $\mathcal{Y} E A 65$ (1979), 19.

Dating evidence for this phase depends upon numismatic material, so far only provisionally identified by Dr Martin Price. A coin found in the original floor of (d) probably dates to Ptolemy I. The lower fill of (d) contained a coin of Ptolemy I or II, the upper fill a fourth century bc 'Macedonian' coin minted in Caria or Cyprus, and a number of illegible or unidentified Ptolemaic coins. Thus the low-level structure (d) was probably occupied in the early Ptolemaic era. The level in which the fragmentary structures (b) were identified yielded coins of Ptolemy III.

## Phase iv

The phase-iv settlement, of which a general description was given in $\mathfrak{Y E A} 65$ (1979), 19-21, was constructed directly upon whatever surface pre-existed, with the consequence that the levels from which it was founded differed in various parts of the site. Rooms $2-8$ on the south (see fig. 3) were founded at a lower level than rooms $5,16,18,20$, where the cemetery gravels were laid at a higher level because of pre-existing terracing of the Old Kingdom rubble in phase i; filling of disused phase-iii structures also contributed to the higher level. On the other hand, room ir was founded at a considerably lower level not only than the block of rooms 2-8, but also than a NewKingdom tomb-chapel of phase $i$, the floor of which had been cut through at this point. In rooms 3 and 14, however, the phase-iii storage cellars had been filled to the level of the surrounding area. Only careful stratigraphy and observation of building history served to sort out the true sequence.

It was demonstrated that the east and west walls of room 8 were not only cut through the pitched cobble surface of phase iii (see pl. III, 4), but were also butted up against a phase-iva wall, itself constructed over an original east-west wall of phase iii. It results


Fig. 3
that the whole block of rooms $2-8$ on the south was constructed later than the range $9,16,18,20$ (notwithstanding the higher floor level in the latter). This is confirmed by the coin evidence. No coin later than Ptolemy III has yet been found underlying the floors of rooms $9,16,18,20$, while in 1977/8 a deposit of one coin of Ptolemy II and six of Ptolemy IV was found under a secondary wall of phase ivc. On the other hand, the raked-over gravels which formed the underlay of the pavements of rooms 2-7 contained coins of Ptolemy II, III, IV, and V; two coins of Ptolemy V were found in the walls of room 2 , while a succession of mud-floors in room 2 provided a long series of coins of Ptolemy II, III, IV, and V. The basic floor of the low-level room II also produced three coins of Ptolemy V.

Thus the building of the phase-iv settlement as shown in the plan (see fig. 3) was certainly not completed until the time of Ptolemy V. That it was begun considerably earlier appears to be confirmed by the most arresting find of the season. This area was enclosed by a surrounding wall of which only the south-east corner has survived, the southern member containing a fill upon which the eastern member was constructed. In the internal corner a globular pottery storage jar with amphora-type handles was standing against the foundations of the south wall but with its mouth below pavement level and below the foundation of the east wall. Though the floor had been removed in later destruction, the way in which the jar was banked round with stones (see pl. III, 5, taken from the west) left no doubt that it had not been disturbed and must have been placed in position during the construction of the surrounding wall before the floor was laid. The jar proved to contain 456 bronze coins, mostly of large size and in good preservation when cleaned (see pl. III, 6-7). The coins so far examined by Dr Price all belong to Ptolemy II and III; tentatively, he inclines to date the hoard to about 250 BC . So probably the construction of the surrounding wall and of rooms $9,16,18$, 20 was begun in the time of Ptolemy II-III, rooms $2-8$ being added in that of Ptolemy V. As rooms 2 and 3 are clearly the two main communal rooms of the settlement, it seems to have been re-established as a community from the time of Ptolemy V.

In these circumstances, it may be that the secondary constructions in the area of rooms $9,16,18,20$, and in the area between them and the great west enclosure wall (originally left vacant), which were labelled phase ivb in $\mathcal{Y E A} 65$ (1979), 21, were in fact approximately contemporary with the extension comprising rooms $2-8$. As the earliest and the upper mud-floors of room 2 alike yielded coins of Ptolemy V, the heaviest utilization of the settlement may have been in his reign, but a succession of structural changes in rooms 2-8 and elsewhere amply demonstrates that the settlement continued in occupation until the first century AD, of which coins have been recovered from upper levels.

The excavation was extended to the north (see fig. 3), where physical continuity has been broken by a stone robbers' trench along the line of the temenos wall of the Teti Pyramid Mortuary Temple. Three successive building phases were noted in this area; their correlation with the main area is not yet assured, though the alignments clearly suggest that the earliest belongs to phase iva. A cistern, ovens, and pottery evidence show that the occupation was of domestic character.

## Phase v

A coin found under an occupation surface of phase v has proved to be a fourthfifth century imitation of an earlier imperial coin. This shows that the phase-v settlement (contrary to $\mathscr{F E A} 65$ (1979), 22) was contemporary with the Christian occupation on the ruins of the central temple. This explains the considerable quantities of fourthfifth century ad coins and pottery found on the settlement site.

## Areas 1 and 2

Work undertaken in 1976/7 in Areas 1 and 2 in the south-west corner of the 'Anubieion' enclosure ( $\mathcal{F} E A$ 64(1978), 12-19) was extended northwards to connect with Area 5. Unfortunately, most of this section was too destroyed to yield a coherent ground plan or stratification. Only under the great south enclosure wall (Area 2) were substantial walls encountered, dividing the site into blocks. The north-south walls were on alignment with phase-iva walls in Area 5, a fact which demonstrates that there was an original unified plan. Coins of Ptolemy II, IV, and V were found at floor level. Later these walls were cut down to form an alley inside the great south enclosure wall. Other structures were later added. These three building periods may correspond with phases iv $a$, iv $b$, and v , and with the three construction phases in the postern gate through the great south enclosure wall ( $\mathscr{f E A} 64$ (1978), 13 f.).

## Valley buildings in 'Bubastieion'

A test trench started in 1976/77 ( $\mathcal{F} E A 64$ (1978), 21) at the bottom of the escarpment on the line of the great north enclosure wall of the south temple-town ('Bubastieion') was extended. The fill of drifted sand was deep, and the buildings denuded to the east. However, one remarkable chamber with stone-flag floor and ashlar-lined internal walls was cleared (see fig. 4). Its function was not clear. If it was a sanctuary, its position seems very unusual. A coin of the fourth century bc minted in Rhodes was found adhering to a removed flooring slab; its presence suggests a fourth century BC building level somewhere on the site, though it does not necessarily date this structure. It was confirmed that the north enclosure wall of 'Bubastieion' turns south at the top of the escarpment.

## The objects and inscriptions

Apart from the fine bronze coin hoard, stratified coins, and scattered burial groups of beads, amulets and shabtis, there were few objects of note. Portions of moulded pottery figurines of $\operatorname{Bes}(18,142,224)$ and faience Bes-amulets are doubtless significant in view of the painted mud figures of Bes found by Quibell adorning the walls of chambers within the north enclosure wall of 'Anubieion'3. A small headless hollowcast terracotta figurine of a female apparently dressed in chlamys and peplos (37), perhaps originally kantharid in type, was without stratigraphic context. Crudely cut

[^4]
examples (e.g. 213, 244) of phallic figurines were found as in 1977/78. An unusual copper signet-ring (302) shows a crocodile seated upon a pillar or shrine guarded by an erect uraeus. The painted coffins and masks from the cemetery were in very poor condition, but by evolving new techniques for their consolidation Miss Williams succeeded in rescuing type series of masks and decorative elements. She also most successfully cleaned over 600 coins, mainly by mechanical methods. Of these coins Mr Walmsley produced an excellent photographic record, while Mrs Crawford was of signal help in making casts.

Greek papyrus fragments recovered were too small to be useful except for one fragment of accounts (3II). The ostraca were also very fragmentary, the most valuable being a buff-ware storage jar bearing in Demotic the legend hry pr-Inpw p; ntr ${ }^{3}$, 'the overseer(?) of the temple of Anubis, the great god'. This inscription, a broken limestone figure of Anubis as a recumbent jackel (226), and a few faience Anubis amulets joined the accumulating evidence that the identification of the northern enclosure with Anubieion may prove correct. A stone libation bowl (149) bore the Greek dedication: YПЄP IPOYTOC One fragment of temple cornice bore part of the hieroglyphic prenomen of Ptolemy V (234); otherwise the hieroglyphic inscriptions were all broken fragments from tombs of earlier Dynastic dates.

## The pottery

Large quantities of sherds were recovered from the cemetery levels. These lay under, alongside, and over the burials themselves. However, in only one instance was a vessel clearly associated with an individual burial, the remaining sherds having presumably been already present in the gravel strata in which the burials were made. Late Dynastic and New Kingdom forms predominate.

Well-stratified sherd-groups of Ptolemaic date were recovered from within and beneath the streets, floors and walls of the settlement buildings of Area 5. As in 1977/78, these derive from a fairly wide range of vessels of domestic use, made in most cases of Nile silt. Excavation in the northern extension of Area 5 produced evidence of a later occupation, probably of Roman date. Study of this material by Mr French and Miss Bourriau, with the aid of a stratified sequence approximately dated by coin evidence, should yield an improved typology of the Ptolemaic pottery of the Memphite region.

## Conclusion

The dating of phase v in Area 5 to the fourth-fifth centuries AD means that it formed part of the Christian settlement located above the central temple ( $\mathcal{F E A} 65$ (1979), 24). The dating of the completion of the phase-iv settlement in Area 5 to Ptolemy V should indicate that its construction was contemporary with the last great temple building phase under that king, for which the evidence is the decorated gate between the south and central temples found by Quibell, 4 a block showing Ptolemy V worshipping Anubis found on the central temple site ( $f E A 64$ (1978), 19, pl. V, 3), and fragments of temple

[^5]cornice of Ptolemy V. This approximation leaves it an open question whether settlement phase iii, contemporary with the construction of the great enclosure wall, belongs with the earlier temple building phase iii and, if so, what the precise date of their construction was.

The evidence continues to suggest that the northern enclosure is the site of Anubieion, the embalmers' quarter and an important centre in the Late Period and in Ptolemaic times of the Egyptian life of Memphis. It is satisfactory to find that, despite the destruction wrought in ancient and modern times, it is possible by careful stratigraphic excavation to recover valuable portions of the history of the central city of Memphis, a task which we should pursue before it is too late.

I. Miniature shabtis and amulets from a collar (phase i)

2. Late Period coffin (phase ii)

3. Beads, amulets and shells

4. Working surface of pitched cobbles (phase iii)

5. Pottery storage jar (phase iv)

6. Ptolemaic coin (obverse) (phase iv)

7. Ptolemaic coin (reverse)

THE ‘ANUBIEION’, NORTH SAQQÂRA, 1978-9

# NORTH SAQQÂRA 1978-9: THE COPTIC CEMETERY SITE AT THE SAGRED ANIMAL NEGROPOLIS PRELIMINARY REPORT 

By D. G. JEFFREYS and E. STROUHAL
During January 1979 the Society undertook the excavation of the Coptic cemetery in Sector 7 of the Sacred Animal Necropolis. Some graves had already been cleared (by G. T. Martin in $1972-3^{1}$ and by H. S. Smith in $1975^{2}$ ). The chief aim of this short season was to collect and analyse the skeletal remains of this Early Byzantine community whose settlement on the ruins of the Temple Enclosure, 30 m to the north-east, was excavated by W. B. Emery in 1967-8.

The writers wish to acknowledge the kind assistance of Dr Victor Girgis, Head of the Antiquities Organization, for initial permission to proceed with the work; of Dr M. Balbush and Dr 'Ali el-Khouli; and of the Chief Inspectors of Saqqâra, Dr Ahmed Moussa and Dr Husseini.

In the site report grid references are by the co-ordinates of the north-east corner of each 10 m square. Numbers in brackets refer to the outline section $\mathrm{AA}^{\prime}$ (see fig. 3).

## Site report

Preliminary gridding began on I January, and excavation, with ten men, a week later. A total of 127 burials were removed, bringing the amount to 160 for that part of the cemetery within Sector 7 . Five graves excavated by Emery at the south-west corner of the Temple Enclosure suggest that the cemetery stretched from immediately outside the enclosure-walls to Sector 7 , but the area in between is now covered by a spoil dump of epic proportions. The eastern and southern limits of the cemetery seem, however, well enough defined, and it is unlikely that the western edge lay far beyond the excavated area. We estimate that at least 60 per cent and possibly as much as 80 per cent, of the entire cemetery has now been recovered.

The distribution chart of the burial pits (see fig. 2) shows two main concentrations: in Grid Squares 40.00-30.00 to $50.00-30.00$, and in GS 40.00-20.00. In both groups grave 'clusters' were much denser than elsewhere, and several pits contained corpses 'stacked' up to three deep. The cemetery lay across, and to the west of, the line of the roadway leading into the village from the south, and a comparison of figs. I and 2 shows that the grave-diggers also respected Blocks I and 7 and the small stone building in between. These buildings must, therefore, have been standing partly above ground

[^6]level at the time, although the stone building at least was in a ruined state, since some graves (2) were cut through the destruction rubble (3) of its west wall.


Fig. I. Phase-ii buildings

The general pattern of burial has been described elsewhere ${ }^{3}$ and needs little elaboration here. The red cord binding the shroud was tied either in criss-cross fashion or laterally, but the distinction apparently denotes neither sex nor status. In one grave a lowering-handle was found beneath the corpse. In three instances traces of resinous material had been packed in or around the crania, and may show deliberate, if rudimentary, attempts at mummification. Infant and female burials (of which there was a high proportion for a purely monastic community) were all in later strata of the cemetery (a group vault at $28.00-24.00$ had disturbed earlier graves and contained three females laid side by side).

During excavation of the western part of the cemetery it was noticed that several grave pits had been cut through and into underlying brickwork. GS 30.00-30.00 was therefore stripped to examine the pre-Christian sequence, which is best given in order of deposition, as follows.

[^7]NORTH SAQQARA
S A N: Coptic cemetery
GRAVE DISTRIBUTION CHART
SCALE

Fig. 2. Cemetery phase
(ia) A stone-rubble wall (25) running north-south had been built on the post-Old Kingdom accumulations. This wall resembled in all respects those revealed to the north beneath the brick walls of Block I . They are all part of the scattered artisans' village built prior to or during the construction of the temple terraces. Floors on the west side of this wall (24) were of a desert marl trampled or beaten to a firm consistency.
(ib) The wall had been filled over on its east side with stone chippings (21) to provide a level surface for a narrow brick wall (18). Two consecutive floors associated with this wall were found: a thin surface of grit-tempered marl (20), containing sunken storage jars and a rectangular feature lined with gypsum plaster (perhaps a mixingtrough), and a secondary stone pavement (19). Working areas must have remained in use until a late stage in temple construction, and modifications of this sort are to be expected.
(ii) A rectangular brick building, Block 8 ( 13 ; fig. r), had been raised over the levelled-down remains of $i b$. Spreads of gravelly sand ( 16,17 ) had accumulated meanwhile, and some minor trenching (15) had been required for the east and south walls. A corridor on the east side of the building contained the only surviving floor ( I 2 ), a mud surface with stone-chip temper.

The building clearly belongs in the sequence with Blocks I and 7 , but does not seem simply to have served as a foundation podium as did the others: there is no sign of either ramp or stair, and the one internal surface, though cleared of occupation debris, at least shows that the building was intended to be occupied.

It was also found that Block I had originally extended further to the west than shown on the 1971-2 plans: the south wall of the podium, preserved to only two courses but with an unbroken limewashed south face, was traced eastwards as far as GR E35.50 (see fig. r). No northward return was located, and the eastern frontage of this block may well have been on or near the South Sacred Way to the Temple Enclosure.
(iii) The small stone building (4) at the south-east corner of Block I (GR 32.0032.00 ) is a later insertion, the south wall of the block having been partly dismantled to make way for it. The building had every appearance of a small lodge of the sort found in the South Ibis Courtyard ${ }^{4}$ and beside the South Sacred Way. ${ }^{5}$ This impression was strenghened when traces of a north-south road, apparently leading towards the South Ibis compound, were revealed on its east side

## Date

Datable finds from the site were few, and were without exception from poor contexts associated with the ruin of phase iii and the cutting of the Christian graves. This lack of internal dating criteria, due to the thorough clearance of household and other artefacts from the two early phases, means that any attempted chronology must rest on the relationships with structures elsewhere on the site.

[^8]$\therefore \therefore$ sand with grit $\&$ stone flecks $\because \because \quad$ vegetable matter
む

brick wall
stone-paved floor
charcoal

mud-bonded stone wall




Phase i clearly belongs to the workmen's village built prior to or during the first work on the Temple Enclosure. Cow burials are recorded from the reign of Amasis in 533 BC, ${ }^{6}$ and even the outlying parts of the workmen's settlement, such as in Sector 7, are unlikely to be much later than this in construction. Occupation continued until the reign of Nectanebo II within the Temple Enclosure, and probably longer outside it.

The brick building (Block 8) is evidently laid out on the pattern of the large brick-built platforms (Blocks $\mathrm{I}, 4$, and 7). The orientation of these Blocks (101 ${ }^{\circ}$ E. of Magnetic North) differs from that of Blocks 3 and 5 ( $12 \mathrm{I}^{\circ} \mathrm{E}$.), a fact which suggests a separate and later planning programme. On this basis the podia should also post-date the South Sacred Way, and a date not earlier than the end of the Thirtieth Dynasty should therefore be sought. The early Ptolemaic Period would be preferable to the Second Persian Period, for which no cow burials are recorded, and a hiatus of ten years or more might explain the necessity for major re-planning in phase ii.

It is tempting to associate the phase-iii building and its adjacent road with the inauguration of the South Ibis Courtyard and Chapel. The Courtyard was certainly in use by the first half of the second century bc, and the modified plan in Sector 7 may have been introduced at or before this time. A break in the records of cow burials after 205-180 may be consistent with this.

For the cemetery itself there is no realistic dating evidence since the Christians were, with one doubtful exception, buried without grave-goods. Even the base planks on which the corpses were laid are highly suspect as dating evidence since many of them were taken from older coffins. The occupation of the village to which the cemetery is attached cannot be dated more closely than some time between the beginning of the fifth and the middle of the sixth century. ${ }^{7}$

## The skeletal material

The anthropological material recovered from the graves was mostly in an excellent state of preservation. Out of a total of 166 graves investigated since work on the Sacred Animal Necropolis began, 138 graves have yielded remains of 159 individuals. The remaining tombs were either empty or (in early seasons) the anthropological material was not saved. Owing to this, and to the fact that other burials remain, the total number of people buried in the cemetery may be estimated at 200-300.

The usual type of grave contained a single burial. In five graves, however, more individuals were found, viz. two (no. 7); four (nos. 20, 29); seven (no. 31); nine (no. 178, the group vault).

The demographical composition of the sample investigated was quite anomalous, consisting almost entirely of adults and older juveniles, starting at $17-18$ years ( 98 . I per cent). Only three children were found, aged 8-10 months, $1-2$ years and $7-8$ years ( 1.9 per cent). This finding agrees with the supposition of a primarily monastic community where novices were accepted only in later adolescence, the three infants being exceptional. Among the adults and juveniles, males ( $128: 82.1$ per cent) predominated

[^9]over females (28: 17.9 per cent). At the same time the mean age at death of adults and juveniles showed a strikingly higher value in females ( 36.4 years) than in males ( 33.7 years). While males died mostly within the age-range $20-30$ years ( 34.4 per cent) and $30-40$ years ( 30.5 per cent), the peak of female mortality was in the range $40-50$ years (39.3 per cent). In both prehistoric and historic populations the mean age at death and its distribution are commonly reversed, the females showing highest peaks at a lower age due to child-bearing activity, which was connected with a high death risk. One explanation of this finding would be either that the females did not bear children, or that they entered the community at a higher age. Nevertheless the presence of females dispersed in small groups across the predominantly male cemetery presents a problem of interpretation. One clue may be that in four cases where male and female burials were found in superposition, the female always lay above the male (groups 9/102/107; $125 / 124 / 134 / 135 ; 147 / 153 / 154 ; 145 / 140 / 143$.) Also, in three graves with multiple burials, female skeletons were found above male ones (nos. 20, 29, and 31). In the brick-built group vault (no. 178) the three original burials, lying side by side, were all female, but in the sand filling disturbed remains of four males and two females were found. This evidence points to the possibility that the female graves belong to a separate and later stage of the life of the community.

The analysis of the deviations from the east-west azimuthal orientation of the bodies showed that the 'winter' type of burial predominated ( 50.9 per cent) over the 'spring' and 'autumn' types (each 23.6 per cent) and the 'summer' type ( I .9 per cent).

The morphological type of the population is definitely Egyptian with a wide variation, especially in stature. Some epigenetic features, however, showed a remarkably high frequency, e.g. the six-piece sacrum with fused first coccygeal vertebra ( 25.5 per cent in males, 15.8 per cent in females). Morphological and epigenetical features will be analysed in detail, together with comparison to other series, in our final publication.

Among the variegated palette of the found pathological changes the traumatism played an important role. Moreover, twelve males ( 9.4 per cent of the male total) showed traces of wounds (cuts and stabs) on frontal and parietal bones, or typical parry fractures of ulnae, humeri, and claviculae. Only one of these wounds was unhealed; here death occurred within a few days. The very bad state of dentition, together with precocious and severe paradontosis, possibly reflects the severe food restrictions of the desert-edge monastic community.
Most unexpectedly, large pieces of resin were found inside the cranial cavities of of three individuals, two males (nos. 40 , 175) and one female (no. 69). Because no perforation between the nasal and the cerebral cavity was present, the resin could only have been introduced after the removal of the brain through the foramen magnum. In one case (no. 69), the rear left margin showed an old break, probably evidence of its enlargement. No trace of cutting was found, however, in the cervical vertebrae. These are curious survivals of ancient Egyptian mummification practice among the members of Christian monastic communities. Attempts at mummification have, however, been recorded in the cemetery of the Nahiya monastery at Abu Roash. ${ }^{8}$ Efforts to preserve the

[^10]bodies of the deceased in Sector 7 are further evidenced by the fact that almost all bodies were covered with handfuls of coarse common salt. This habit is well known from other Coptic cemeteries. ${ }^{9}$ That the Christians of Egypt did not disapprove of the preservation of the body after death can be seen in the attitude of St. Anthony, Father of the Monks of the Nitrian Desert (third-fourth century AD), who instructed his followers not to allow his body to be taken to Egypt after his death except to be embalmed, adding that 'at the resurrection I shall receive it from the Saviour incorruptible'.

9 C. C. Walters, Monastic Archaeology in Egypt (Warminster, 1974), 231.

# OBSERVATIONS ON A COLLECTION OF CRANIA FROM THE MASTABAS OF THE REIGN OF CHEOPS AT GÎZA 

By F. FILCE LEEK

Systematic excavation of the Western Cemetery of Cheops' pyramid was begun in 1902 by three expeditions, one of which was fielded by the University of Leipzig, represented by Professor Georg Steindorff (Sieglin Expedition), and later transferred to the Akademie der Wissenschaften of Vienna and the Roemer-Pelizaeus Museum, Hildesheim, Germany, represented by Professor Hermann Junker. The area was divided into three east-west strips and the middle one was allotted to the Sieglin Expedition. Below are listed those excavated by Junker in 1911/12 and 1912/13 together with the corresponding numbers of Reisner:

| funker ${ }^{1}$ |  |  |  | Reisner ${ }^{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VIIISS | VIIIS | VIIIN | VIIINN | 4840 | 4850 | 4860 | 2155 |
|  | VIIS | VIIN | VIINN |  | 4750 | 4760 | 3135 |
|  | VIS | VIN |  |  | 4650 | 4660 |  |
|  | VS | VN |  |  | 4550 | 4560 |  |
|  | IVS | IVN |  |  | 4450 | 4460 |  |
|  | IIIS | IIIN |  |  | 4350 | 4360 |  |
|  | IIS | IIN |  |  | 4250 | 4260 |  |
|  | IS | IN |  |  | 4150 | 4160 |  |

During his first two seasons, Junker recovered many human remains and of these 177 dry skulls are held in the Naturhistorisches Museum, Vienna. It is this collection that forms the basis of the present study. That there are more skulls in the collection than there were mastabas excavated is due to the fact that, in many, there were several shafts or pits with a burial in each. When it was found that a number had been given to each skull, it was hoped to be able to equate each with its mastaba. This unfortunately proved impossible because the numeral given to an individual skull in no way complied with that of the mastaba. Every help was give by Dr H. Satzinger, AegyptischOrientalische Sammlung, Kunsthistorisches Museum, Vienna, to work out a correlation, but the efforts were successful in such a limited number that the idea was abandoned.

I should like to thank Dr Johann Szilvássy, Anthropologische Abteilung, Naturhistorisches Museum, and Dr Helmut G. Satzinger, Aegyptisch-Orientalische Sammlung, Kunsthistorisches Museum, Vienna, for their active and constant co-operation, which was greater than could be expected by a visiting colleague. My wife afforded considerable help during the investigation and I am indeed grateful. I wish also to thank Dr D. M. Dixon who read the MS and made interesting suggestions which have been incorporated into the text.
${ }^{1}$ See H. Junker, Giza, r (Vienna, 1913), 2, 8r.
${ }^{2}$ See G. A. Reisner, History of the Giza Necropolis, I (Cambridge, 1942), maps no. 2.

The condition of the skulls varied greatly; some were in fragments, others were amazingly well preserved. The remains of one resembled pieces of Roman tesserae before being made into a mosaic, whilst another was without a bone fractured, even retaining its very vulnerable styloid processes. Valuable information, however, could be gained even from the most fragmented skull. For example, amongst a collection of apparently useless pieces was the head of a mandible, which showed marked arthritic changes, whilst another was a part of an orbit which exhibited cribra orbitalia. One of the best-preserved skulls revealed what was probably the most significant fact to emerge from the investigation, namely, that an entrance had been made into the cranial vault via the cribriform plate of the ethmoid bone. This confirms the view that the removal of the brain by this method was practised by some embalmers as early as the Fourth Dynasty (c. 2650 вc).

It is unfortunate that, in a proportion of the specimens, the skulls were so fragmented that accurate determination of age and sex was impossible. This is also true in a number of instances where the morphological details were insufficient to give a clear indication of sex. However, it was possible to make interesting comparisons and deductions when the ages were expressed in decades and when the divisions of the sexes were increased to three, the third designated 'Ambiguous'.

Table showing age and sex of the I77 skulls $^{3}$

| Age | Male | Female | Ambiguous |
| :--- | :---: | :---: | :---: |
| $0-9$ |  |  | 6 |
| $10-19$ |  |  | 3 |
| $20-29$ | 10 | 22 | 1 |
| $30-39$ | 37 | 18 | 2 |
| $40+$ | 17 | 10 | 1 |
| Ambiguous | 15 | 8 | 27 |
| Total | 79 | 58 | 40 |

List of abnormalities
Genetically determined: metopic suture, mid-line depression of the skull, supraorbital notches and foramina, Wormian bones.
Unknown aetiology: parietal thinning.
Pathological defects: circumscribed osteoporosis on outer table of cranium, cribra orbitalia, osteoarthrosis of mandibular condyle.
Dental defects: caries, attrition, alveolar abscesses and cysts, antral fistula, impacted lower third molars, congenital absence of wisdom teeth, alveolar bone disease.
Post-mortem interference: entrance into cranial vault.

## Genetically determined abnormalities

Metopic suture. This condition arises from the persistence of the medial-frontal suture, which usually unites by the age of two years. It was observed onsix occasions (see pl.IV, r).

[^11]
## F. FILCE LEEK

| Age | Male | Female | Ambiguous |
| :--- | :---: | :---: | :---: |
| $20-29$ | I | I | I |
| $30-39$ | 3 |  |  |
| Total | 4 | I | I |

Mid-line depression of the skull. The sagittal suture usually runs along the vortex of the skull but in a number of instances this suture ran along a shallow saucer-shaped depression. This is almost certainly a variation of the shape of the vault. As it was well represented in the lower age-groups, it cannot be regarded as part of the ageing process.

| Age | Male | Female | fuvenile | Ambiguous |
| :--- | :---: | :---: | :---: | :---: |
| IO-19 |  |  | I |  |
| $20-29$ |  | I |  | 2 |
| $30-39$ |  | 3 |  |  |
| $40+$ | 5 |  |  |  |
| Total | 5 | 4 | I | 2 |

Supraorbital notches and foramina. The supraorbital vessels pass through a notch or a foramen in the superior orbital margin at the junction of its middle and inner third (see pl. IV, 2). This varies from a scarcely perceptible break in the line of the margin to a deep invagination on one or more foramina. The following are the pathways observed: right and left notches, 53 ; right and left foramen, 17 ; right notch and left foramen, io; right foramen and left notch, 13 .

Wormian bones. These are extra-sutural bones, varying in size and complexity, occurring along the lamdoid suture.

|  | Male | Female | fuvenile |
| :--- | :---: | :---: | :---: |
| Bilateral |  | 6 |  |
| Unilateral | 5 | 4 | I |

There is every reason to believe that all the above variations are inherited as dominant traits. Had more been known about the relationship of the individuals in each tomb, any of these characteristics could have been used as supporting evidence of family relationships.

## Abnormality of unknown aetiology

Parietal thinning. This is an oblong depressed thinning of the outer plate of the posterior part of the parietal bone and usually appears on both sides of the head (see pl. IV, 3). Elliot Smith's anatomical investigations of Ancient Egyptian human remains led him to the conclusion that the condition was confined to the upper classes and was seen amongst those living between the Second and Twentieth Dynasties. Because it is
a non-inflammatory condition, he postulated that it was the result of wearing heavy wigs, ${ }^{4}$ a fashion known to be common during certain periods because of their representation on tomb paintings and other art forms. This hypothesis is no longer accepted because the condition has been found amongst other populations who, as far as is known, did not wear wigs, and also amongst age-groups other than those postulated by Elliot Smith. The author thinks that the wearing of wigs could not possibly produce such localized anomalies because their weight would be borne by the whole of the dome of the head, and so could not be responsible for such limited areas of pressure, although the condition is so frequently found in a symmetrical pattern. He thinks that, whilst the condition is sometimes the result of an ageing process, it could also have been genetically controlled, because observation of the shapes of the heads of different age groups of bald men reveals varying patterns, some of which could be the result of an underlying parietal thinning.

| Age | Male | Female | Ambiguous |
| :--- | :--- | :--- | :--- |
| $30-39$ |  | 2 |  |
| $40+$ | 6+1 unilateral | I + 1 slight | 2+1 slight |
| Ambiguous |  | I |  |

## Pathological abnormalities

Osteoporosis of the outer table of the cranium. Almost all examples of this condition consisted of circumscribed areas of loss of the cortical layer of bone exposing the diploe or cancellous bone beneath, but there were other examples showing a more diffuse area. The parietal bones were most commonly affected (see pl. IV, 4). The cause of this condition has been variously described in palaeopathological writings, and in one of these it is suggested that it is the result of carrying heavy burdens on the head, while yet another has blamed an iron-deficiency anaemia. ${ }^{5}$ To add to the number of hypotheses as to the cause of this abnormality, I would suggest that it is due, in the first instance, to a primary infection of the scalp, followed by a secondary infection of the bone. Lucas ${ }^{6}$ reports that locks of artificial hair were worn as early as the First Dynasty and indeed many wigs have been recovered from tombs of later periods. The need for this fashion could well have arisen not only from loss of hair due to ageing, but from localized loss of hair due to the infection of the scalp by bacteria or fungi. Life on the desert and at some distance from available water must at times have made attention to hygiene difficult and surely this could be a contributing factor to any disease of the scalp.

Cribra orbitalia. This condition is similar in appearance to the effect of osteoporosis of the cranium in that there is an exposure of the trabeculae of the cancellous bone, giving a sieve-like appearance to the upper part of the orbit. One suggestion is that it

[^12]arises from pressures resulting from an enlarged lacrimal gland and yet another explanation is that it is caused by thalassanaemia or sickle-cell anaemia. ${ }^{7}$ Many modern workers consider that cribra orbitalia and osteoporosis of the cranium both arise from the same cause. My own view is different, and is based on the fact that there were seven instances of osteoporosis of the cranium and ten instances of cribra orbitalia to be seen in the 177 skulls and yet in no one instance did both conditions occur in the same individual, which might well have been expected if both originated from the same cause. Anyone walking in the streets of small towns and villages in Egypt will observe the complete indifference shown by young children and adults to clusters of flies in and around their eyes and that many of them suffer from inflammation of the eyes and associated structures. This could have been the same in ancient times when inflammation of the eyes could have been the cause of cribra orbitalia. An even more probable initiating factor may have been the inflammation set up by irritation of wind-blown desert sand. There is no reason to believe that sand storms were less frequent in ancient times than now, and the damaging effects of these are difficult to avoid.

Osteoarthrosis of the mandibular condyle. Because of post-mortem damage to many mandibles a complete record of the pathological changes was impossible, but the following were observed: erosion of the superior surface; progressive and regressive remodelling of the superior surface; an anterior ridge; saucer-shaped depression on the posterior surface; saucer-shaped depression on the posterior surface and erosion; massive bony additions including mushroom-shaped condyle; osteophytes. Abnormalities were frequently seen on both condyles but rarely of a similar nature. The number of individuals affected must have been considerably greater than is indicated in the following list because the head of the mandibular condyle is particularly prone to post-mortem damage.

| Age | Males | Females | Ambiguous |
| :--- | :---: | :---: | :---: |
| 10-19 |  |  | I |
| $20-29$ | 9 | 9 |  |
| $30-39$ | 23 | 6 |  |
| $40+$ | 16 | 7 | 11 |
| Ambiguous |  |  | 12 |
| Total | 48 | 22 | 12 |

Changes in the head of the mandibular condyle are brought about under modern conditions by (a) abnormalities in the articular cartilage and the synovial membrane; (b) ageing; (c) overload of the functional capacity of the joint. Present-day surveys

[^13]show that disturbances are seen more frequently in women than in men. This is because women appear to be more susceptible to both rheumatoid and osteoarthritis. ${ }^{8}$

By this survey the author had hoped to discover, on the one hand, what proportion of changes seen on the head of the condyle were the result of these two diseases, and, on the other, how many cases were the result of an overload of the functional capacity of the temporo-mandibular joint. This latter condition would be brought about by the abnormal muscular movements induced by the changes in the cuspal design of the teeth caused by attrition. Because all the changes in the mandibular condyle were associated with marked changes in the cuspal design due to attrition, the conclusion reached was that rheumatoid arthritis played no part but that all the changes in the joint were due to an overload of its functional capacity.

## Dental defects

Caries. The exact number of carious cavities in the teeth of these nobles will never be known because many have fallen from their sockets post mortem, but thirty-three cavities were found in twenty-two dentitions (see pl. V, 4). These cavities appear in all age-groups, and yet only one had progressed to the pulp chamber and had caused an apical abscess. All the other cavities were small and contained. The conclusion reached was that these people had caries-resistant teeth and, although the disease was found in some 12 per cent, as there were so many incomplete dentitions it is possible that the true proportion was around 15 per cent. The following list of dentitions revealing dental caries shows that male and female were equally affected:

| Age | Male | Female | Ambiguous |
| :--- | :---: | :---: | :---: |
| 10-19 |  |  | I |
| $20-29$ | 5 | 3 |  |
| $30-39$ | 2 | 5 |  |
| $40+$ |  | 1 |  |
| Ambiguous | 2 | 2 | 1 |
| Total | 9 | 11 | 2 |

Attrition. The degree of attrition seen on the occlusal surfaces of individual teeth in a dentition varies considerably and there is usually greater evidence to be found on the buccal teeth than on the incisors. In examples of dentitions with a normal occlusal pattern the greatest wear is on the first permanent molar and it decreases on the other molar teeth in a direct proportion to the length of time of their eruption. So marked and constant is this difference that it can be used as an indication of age well into the adult period. It might be thought that the wear would reduce the occlusal surface in a regular and horizontal plane, but this is rarely so. In some few instances, the wear results in a saucer-shaped depression on the occlusal surface but is mostly in the nature

[^14]of an inclined plane in which the mandibular molars show the plane descending more deeply to the cheek side, whilst, in the maxillary molars, the plane descends to the palatal side. Attrition on the teeth begins at an early age and in this, and every other collection the author has examined, the condition is to be seen on all juvenile dentitions (i.e. $6+$ years). Examinations of dentitions in collections of medieval and earlier populations always reveal attrition, but it is never so widespread or as severe as to be seen on those from Ancient Egypt. The reason for this is fully discussed in $\mathfrak{F E} A 58,126-32$.

In this survey the following attrition-index was employed using the first permanent molar as the guide: flattening of enamel cusps, I ; exposure of dentine, 2; exposure of secondary dentine, 3 ; exposure of pulp chamber, 4; progressive destruction of crown, 5. Every dentition with retained molar teeth showed attrition and as the age progressed so did the degree of attrition. By using the results as a basis for further calculation it was found that males showed an approximately 37 per cent greater degree of attrition than females. This is a reflection of the difference in power of the muscles of mastication.

Dental abscesses and cysts. All the sixty-four apical abscesses were, with one solitary exception, the result of necrosis of the dental pulp caused by attrition (see pl. V, 2). As might be expected, the number of males so affected was more than twice that of females, since their muscles of mastication were so much stronger. As it was not possible to X-ray the dentitions, only those abscesses that had destroyed the outer or inner alveolar plate were recognized. There would also be an unknown number of chronic abscesses and abscesses that had escaped into the maxillary antrum that passed undetected. Dental cysts were recognized by their smooth walls and were seen in three instances.

| Age | Male | Female | Ambiguous |
| :--- | ---: | ---: | ---: |
| $20-29$ | $3(5)$ | $3(3)$ |  |
| $30-39$ | $14(22)$ | $4(3)$ | $2(2)$ |
| $40+$ | $10(19)$ | $5(6)$ | $3(3)$ |

Note. The figure in brackets ( ) denotes the total number of abscesses.
Antral fistula. A small number of crania was fragmented in such a manner that the inner part of the maxillary antrum was revealed. The size, shape, and convolutions of each base varied. In three cases there was a fistula opening into the base arising from an apical infection of the first permanent molar (see pl. V, 3). In two instances the orifice was a clean-cut circle 3 mm in diameter, whilst in the third example a considerable osseous reaction to the infection had taken place, and around the still clean-cut orifice was a mass of bony tissue 3 mm high. It is idle to speculate on the number of infected antra in the collection because there is no non-destructive examination that could possibly give the true answer, but, as an apical infection of the upper molar teeth was a common affliction, an infected maxillary sinus must have been suffered by a number of individuals. In instances of upper molar teeth where there is an obvious
exposure of the pulp chamber, and no destruction of the surrounding alveolar bone, it is almost certain that the pus escaped into the antrum.

Impacted lower third molars. Two mandibles showed mesially impacted lower third molar teeth, one in a juvenile skull and the other in an adult male (see pl. V, r). Since the surrounding bone displayed no signs of an inflammatory reaction, neither would have given rise to any symptoms. In another mandible, however, the bone around a fully erupted wisdom tooth showed the effects of a severe infection of the surrounding soft tissues, so much so, that during life these tissues would have been so badly inflamed and swollen that at times the lower jaw must have been immobilized.

Congenital absence of wisdom teeth. In modern times there are frequent examples of impacted, buried wisdom teeth and wisdom teeth that have failed to develop. It has always been assumed that these conditions arise from the lack of stimulation to the developing jaws by the muscles of mastication as the result of the habit of eating soft and non-fibrous foods. Except in three instances, where there was a crowding of the anterior teeth, all the jaws were well developed, so this explanation cannot apply in the case of the Ancient Egyptians. Unfortunately no explanation for this anomaly can be offered.

| Age | Male | Female | Ambiguous |
| :--- | :--- | :--- | :---: |
| $20-29$ | I (1) | 2 (2 and 4) |  |
| $30-39$ | $1(4)$ |  |  |
| $40+$ | 2 (1 and 4) | I (1) | I (2) |
| Ambiguous | 1 (1) | I (1) |  |

Note. The figures within the brackets ( ) denote the number of missing third molar teeth in each individual.

Alveolar bone disease. In modern times alveolar bone disease is preceded by an inflammation of the overlying soft tissues. The dental papillae become swollen and inflamed and finally they split, thus allowing a bacterial invasion of the alveolar bone beneath, and this is followed by the formation of bony craters. Thus the disease progresses from without inwards. This was also the pattern followed by the disease in ancient times, but there are to be seen many examples in this and other collections where the breakdown of the tooth's supporting structures cannot be explained by this pattern.

Normally the stresses and strains applied to the occlusal surface of a tooth by mastication are transferred vertically down the body of the tooth and are borne by the surrounding elastic fibres of the periodontal membrane and the alveolar bone. When the cuspal design is changed to an inclined plane by attrition, these stresses are transferred down the root in an oblique direction and the alveolar bone in the region of the tooth's apex is subject to very abnormal pressures, and after a time begins to break down. Examples are seen where the apex of a tooth has even been forced through its bony socket. Without doubt in some instances the two conditions prevailed at the same time. In this collection only one advanced case of alveolar bone disease was seen and that
in a male. In this instance the aetiology was different from the foregoing description. The alignment of the molar teeth encouraged retention of fibrous foods and, coupled with the lack of oral hygiene, would have aggravated the condition, causing advanced destruction of the alveolar bone, particularly of the interdental septum.

The following classification was used: $+=$ pitting of the alveolar bone $;++=$ absorption of the alveolar ridge; $+++=$ bifurcation of root exposed; $++++=$ extensive destruction. The findings were as follows:

| Age | Male | Female | Ambiguous |
| :--- | :--- | :--- | :--- |
| $20-29$ | $4+$ | $4+$ |  |
| $30-39$ | $3+1++$ | $4+$ |  |
| $40+$ | $4+7++1+++$ | $1++$ |  |
| Ambiguous | $1+$ | $1+$ | $1++$ |

## Post-mortem operative interference

When the brain was removed during the process of embalming, access was usually made into the base of the skull via the nose. This was a relatively easy operation and if skilfully performed left little or no external signs of mutilation. Entrance into the cranial vault was made by means of a long, thin, pointed instrument passed up one side of the nostril to pierce the cribriform plate of the ethmoid bone. From examination of numerous dry skulls the author has come to the conclusion that the more skilful embalmer made just one small hole through the base of the skull, while the less competent made a large cavity by forcing an entrance up both sides of the nostril, at the same time destroying the nasal septum. Many skulls in this collection, however, showed no evidence of such interference. In a collection of undamaged skulls it is easy to classify those in which the brain had been removed by this method, but one often hesitates to make a decision when other bones have also suffered damage. Unfortunately many skulls in this collection had suffered post-mortem damage, but there was one which was completely intact with even the presence of its styloid processes, and quite obviously an entrance into the base of the skull had been made through the cribriform plate of the ethmoid bone. In at least three other examples it was possible to be assured that this operative procedure had also been followed. It can therefore be stated that, whilst the brain was not invariably removed during the process of embalming at this early period, such removal was certainly practised during the Fourth Dynasty, if only occasionally.

## Conclusions

The human remains in this collection are of individuals who lived at a precise period in history, namely $c .2650 \mathrm{BC}$, and whose status in life was that of the highest in the land. It is regrettable that it is a small collection and, whilst it has certain uses for comparative purposes, its limitations in size must be recognized. It is possible that
a number of other anomalies could have been present in these skulls, but escaped detection because of post-mortem damage.

The genetically controlled abnormalities encountered cannot be used to prove relationships, but could be an aid when such are suspected. That bilateral parietal thinning was observed amongst these relatives and courtiers of the Pharaoh would contradict the belief that this was the result of carrying heavy weights on the head.
It is hoped that one day an acceptable explanation of osteoporosis of the skull and of cribra orbitalia will be forthcoming. Meanwhile there is confirmation that these conditions existed at this period, and that they do not have a common aetiology.

The pathological changes seen on the head of the mandibular condyle and the attrition on the cusps of the teeth do suggest that those of the highest social standing were accustomed to a diet no more free from contamination by mineral fragments than that of their less fortunate brethren.

There was a relative freedom from dental caries among these people, especially when their dental conditions are compared with those of individuals living towards the end of the dynastic period, but the destruction of the bone around the tooth's apex when necrosis of the dental pulp occurred was identical with that of other periods. We now know that impacted wisdom teeth occurred at this early period and, whilst in these particular instances they did not give rise to painful symptoms, this was only because an early death intervened.

It is regrettable that so many skulls had suffered post-mortem damage, but several fragmented ones gave the opportunity to observe that 'sinus trouble' was a burden added to the daily life of some individuals.

No lack of continuity was to be seen in the base of many skulls but in one positively, and in three others almost certainly, an entrance had been forced through the cribriform plate of the ethmoid bone for the purposes of brain-removal during mummification, thus confirming that the practice existed during the Old Kingdom. No ante-mortem injuries were recognized nor were any benign or malignant neoplasms seen.

## Plate IV


I. Metopic suture, a non-pathological abnormality, usually unites by two years of age. The right side of the orbital margin shows mutiple foramina, through which blood vessels and nerves emerge. Damage above left orbit is post-mortem

2. Right supraorbital foramen and left supraorbital notch, a varia symmetrical notches, foramina, or multiple foramina-most prob hereditary pattern

3. Bilateral parietal thinning. The fractured bones are due to postmortem damage

4. Osteoporosis of the parietal bone. The foramina suggest that it is of inflammatory

2. Salivary calculus (tartar) is seen on the canine and two molar teeth. Destruction of the alveolar bone above the two premolar teeth is due to necrosis of the dental pulp, the result of exposure of the pulp-chamber by attrition. Roots of the two molar teeth are seen emerging through the alveolar plate, a state resulting from
abnormal stresses due to the altered cuspal design caused by attrition

I. Mesially impacted lower wisdom tooth. Foramen, marked by arrow, is the mandibular
foramen through which emerge blood vessels and nerves

# EXGAVATIONS AT THE PYRAMID OF USERKAF 1979: PRELIMINARY REPORT 

By 'ALI EL-KHOULI

The excavations were reopened for the third ${ }^{1}$ season on 2 June 1979, and were continued for almost two months. More clearance was undertaken in the area immediately to the north of the entrance to the pyramid, mainly to trace the few courses of mud-brick walls which were located during the first two campaigns. Several more burials, apparently of Ptolemaic date, were found; three were cut in the thickness of the mud-brick walls of the enclosure, others were in the loose sand and rubble inside the enclosure. They were all wrapped in linen. All except one were empty. Only a few faience beads were found in it. This tomb is 3.00 m deep; the enclosure is rectangular: 22.17 m east-west, and 15.70 m north-south. The present maximum height of the walls is 3.00 m ; the thickness is 1.40 m . The foundation of the enclosure consists of one course of rough limestone blocks built immediately on the bedrock.

Before the end of the season it was decided to clear the inside of the enclosure. The work started in the north-east corner in a large square pit. A rough limestone wall was built parallel to the east side-wall of the enclosure (about I .82 m thick); it runs northsouth for about 3.60 m , then turns west for 3.90 m and west again under the sand and rubble. It is I .62 m in height and 0.55 m in thickness. This enclosure may prove in future work to be a Saïte tomb. In clearing the debris inside the enclosure a few objects were found:
I. A wooden label of a mummy with a hole. The inscription is lost.
2. A fragment of limestone which bears the name of the god Sokaris in incised hieroglyphs.
3. A fragment of limestone representing the middle part of a human figure, probably female, in incised relief.
4. A fragment of a terracotta figure.
5. Two pottery jars.
6. Two pottery torches (see pl. VI, i).
7. A large bead of pottery.
8. A badly corroded copper or bronze coin.
9. A small copper or bronze bell with suspension ring; the clapper is missing.
io. A bronze or copper ring, badly corroded.
ir. A group of faience amulets and beads.
12. A group of glass beads.
13. A garnet bead.
14. A shell bead.
15. A fragment of an Arabic papyrus with part of a religious text on both sides in black ink dated to the Arab ruler Abd el-Malek Ibn Marwan and his son Omar (AD 685-705). It is signed by a scribe called Beikheit ( $19.00 \times$ 13.00 cm ) (see pl. VI, $2-3$ ), Saqqâra Reg. No. 17488.

[^15]16. A Demotic papyrus $(27.5 \times 26.5 \mathrm{~cm})$ (see pl. VI, 4), Saqqâra Reg. No. 17489 , which Professor H. S. Smith has kindly studied and reported upon as follows:

The papyrus is inscribed on the true recto with a text in Demotic script of which portions of two columns are preserved. A vertical join appears between the columns. It is possible that originally each column filled one sheet of papyrus. The text of each column is divided into sections by blank areas of varying widths. Column 1 comprises fifteen lines of writing in four sections, column 2 sixteen lines of writing in three sections.

Two sections of text are headed by date formulae: col. 2/1 h3.t-sp 20 tpy pr.t sw 28; col. 2/29 $h 3 . t-s p 20$ tpy pr.t sw 29, that is the 28th and 29th days of the first month of 'Winter' of Year 20 of an unknown Pharaoh. The hand is presumably Memphite, and is Ptolemaic rather than Roman, but cannot at present be ascribed to a particular Ptolemy. The successive day-dates suggest that the contents may be part of a journal or day-book containing legal or administrative records of some sort. Col. 2 gives more clues to the nature of the contents than col. I:

2/1 'Year 20, first month of "Winter", day 28:
2/2 They . . . according to the evil manner of the troubles which have happened to . . .
2/3 (they) seize the men, (but) they do not bring them to him; the man who is brought through (,) them . . .
2/4 (if?) they do not wish to leave him, they do not leave him; they do not enter (?) so as to pass by (?); . . . does not . . .
2/5 a stater (?) which disappeared in his possession remains over; . . . bring them . . .
2/6 punish a man by the service of a lector-priest (?). The . . . has produced/procreated . . .
$2 / 7$ and he will leave him. The one against (lit. after) whom there is not yet (?) any word, let them seize him
2/8 she listens (?) to your (m.) heart. Do you (m.) cause them to be done, and write about them. . . . does not yet (?)
2/9 and it will happen that you (pl.) do not send saying: "There is no man of the manner of . . . Let . . .
2/10 in their presence. And the lector-priest (?) shall cause them to be judged (?) . . . day so as to cause to happen . . .
2/II when the matter of this service occurs, you (m.) shall not send concerning . . .
2/12 Harempe, I have spoken it concerning it.'
This very tentative translation, based on extremely uncertain preliminary readings, is simply offered here to illustrate the interest of the text without any claim to scientific accuracy. We appear to have reproduced in the text correspondence about certain troubles that have occurred, with instructions for the future. Phrases such as $1 / 15$ 'do you write about it daily' and $1 / 12$ 'from the hand of the men who send concerning the writings' similarly indicate quoted correspondence. Do we perhaps have here a file of correspondence copied out for the purpose of some legal or administrative process? The papyrus is certainly worthy of fuller attention than time or space has allowed me in this preliminary report.

I. Two pottery torches

2. Fragment of an Arabic papyrus (recto)

3. Fragment of an Arabic papyrus (verso)


## 4. Demotic papyrus

# A MEMPHITE TRIAD 

By L. KÁKOSY

Throughout its history triads played a prominent part in Egyptian religion. Along with the enneads and other companies of gods they constituted a systematizing element in the multitude of divine beings, and stood as formative agents for a rudimentary mythology. ${ }^{1}$ In the past years several studies ${ }^{2}$ have been devoted to the problems of triads which have resulted in distinguishing two types, in Egypt as elsewhere: triads of a modalistic conception and those of a tritheistic structure. ${ }^{3}$ The first type implies a sort of triune conception of deities where the god appears under three aspects or modes without becoming, in fact, three gods. The members reflect three aspects of one reality. The three forms of the sun associated with the parts of the day, Khopri, Rē, and Atūm, may be interpreted in this way. ${ }^{4}$ Similarly, the famous passage of the Leiden Hymn to Amūn, 'three are all gods: Amūn, Rē', Ptah', seems to reflect a modalistio conception of Amūn as supreme god, since Rēr is understood here as his countenance and Ptah as his body. ${ }^{5}$ The second type can best be illustrated by the family triads, such as Osiris, Isis, and Horus or Amūn, Mut, and Khonsu, which are made up of three members linked by domestic relations. As personalities they remain independent of each other.

A tritheistic triad in Memphis had Ptah, Sekhmet, and Nefertum as members. According to our present knowledge its history can be traced back to the New Kingdom. ${ }^{6}$ Its formation was a natural sequel to the general trend of religious development of the period which was characterized by the growing importance of popular elements. The association of a goddess and a son with the great creator god tended to bring the highly abstract personality of the latter closer to the popular mind.

In addition to this well-known divine family another Memphite triad can be discerned from some representations. The most instructive of these pictures is located on the south reveal of the doorway of the entrance to the sanctuary of the temple of Hibis (see fig. I). The register starts with the figure of Ptah in a strange attitude: the god is sitting on the ground with legs wide apart, and his outstretched arms support the sky decorated with a row of stars. He is flanked by two human-headed $b a$-birds, each standing on a djed-pillar. They are specified by the inscriptions above them as

[^16]

Fig. I


Fig. 2

Shu and Tefnut respectively. The line of figures ends with Amūn and Thoth. ${ }^{7}$ From the evidence which we shall presently discuss, it will become clear that three members within this group of gods are closely connected with each other: they are Ptah and the two $b a$-birds, that is Ptah, Shu, and Tefnut. While this late relief is the only representation of this triad known to me where the names of the bas are given, there is evidence for its existence at least as early as the second half of the New Kingdom. In the Ptah


Fig. 3
chapel of the temple of Sethos I at Abydos two representations allude to this triad. One of them depicts the bark of Ptah with two djed-pillars and two $b a$-birds on its prow (see fig. 2). ${ }^{8}$ On another relief the statue of Sethos I is represented ${ }^{9}$ holding a sceptre which displays--here doubled-the characteristic attribute of the sceptres usually held by Ptah, the djed-pillar (see fig. 3). This sceptre stands here for the god himself, as is clearly proved by the picture on the left where the king holds a sceptre with the head of Sekhmet upon it. The identification of the sceptre and the goddess is shown by the fact that the vertical line of inscription contains the words of Sekhmet. The inscription has the same structure as the text of the neighbouring picture. On this relief it is Ptah who promises valour to Sethos I. The god and his wife are, then, represented by the sceptres on both pictures. Since the Ptah-sceptre is surmounted by the twin bas on djed-pillars, here again the Ptah-Shu-Tefnut triad is rendered in a symbolic form.
Further evidence for the triad is furnished by reliefs on a pillar from the tomb of

[^17]Neferḥotep (see pl. VII, i-3), found at Saqqâra. ${ }^{10}$ Its front is shaped in the form of a djed crowned by a head of Hathor. On the top of the latter there is a chapel with the seated figures of Isis and Nephthys. The bent lines ending in a spiral on both sides of the chapel indicate that the whole composition was intended to represent a sistrum. It is not our aim to give a detailed description of this monument, since in this paper we are only concerned with the two sides of the pillar. The right one bears a djed in raised relief with a few surviving signs on its shaft: $P t[h] \ldots$ The sign after Ptah is uncertain. The djed wears an usekht-collar, and has a feather-crown as head-dress. Above this, two $b a$-birds are shown with a sun-disc on their heads. There is a line of hieroglyphs in front of them: Pth $\underline{d} d$ špsy, 'Ptah, the august djed'.

The beard of the bas does not contradict their interpretation as Shu and Tefnut, since artificial beards were also worn by queens, e.g. Hatshepsut. The djed appears in the same form on the other side which has suffered more damage than its counterpart. On the upper part of the surviving portion remnants of the two bas are preserved as well as the inscription which reads: Pth $N w w r$, 'Ptah, the great Nun'. On the lower part of this side, next to the shaft of the djed, only the first word Wir of an inscription is discernible.

According to the inscriptions carved on the face, the monument belonged to the tomb of Neferhotep who was the 'overseer of the craftsmen of Ptah', the 'scribe of the god's offerings of Ptah', 'scribe of the silver and gold of Ptah', and 'deputy in the house of Ptah'. The monument was dated by Maspero (see n. io) to the Nineteenth Dynasty. The name $H z y$ (that of the father ?), which also appears in the texts, may support this suggestion and points to the first decades of this dynasty.

A scarab set in a ring (British Museum) ${ }^{11}$ shows another representation of the Memphite triad. Ptah is placed in a shrine, and the bas are standing again on djedpillars (see pl. VII, 4). Two sun-discs are incised above them. An analogous piece was published recently in the admirable catalogue of the scarabs in Basel. The oval plate is decorated with the same scene as the scarab in the British Museum. On its reverse one can read the following sentence: 'Every good deed is richly rewarded by Ptah.'.12 A stela found by Petrie in Memphis which again bears the two bas on djed-pillars comes chronologically near to the picture in the temple of Hibis. ${ }^{13}$

Though one could certainly find a substantial number of similar representations, the evidence adduced so far, ranging from the New Kingdom to the Persian Period, is sufficient to demonstrate that Ptah and the two ba-birds formed a unity in Memphis
${ }^{10}$ Cairo, Journal d'Entrée 18928. According to the Journal d'Entrée, it was found in Saqqâra, February 1862. Limestone; h: 1.52 m . Temporary Register $\left.\frac{26}{24} \right\rvert\, \frac{11}{7}$. G. Maspero, Guide (Le Caire, 1914), 170 f. (676); G. Perrot-Ch. Chipiez, Geschichte der Kunst im Altertum, I (Leipzig, 1884), fig. 343; PM $\mathrm{III}^{2}$, 755. (Dr J. Málek most kindly sent to me the proof of the $P M$ reference; Dr ${ }^{\prime}$ Abd el-Kader Selim, former Director-General of the Egyptian Museum, provided me with photographs of the piece. My sincere thanks are due to both of them.)
${ }^{11}$ British Museum, no. 64697, green glazed steatite, $\mathrm{I} .5 \times \mathrm{r} .3 \mathrm{~cm}$. I should like to express my sincere thanks for the photograph and information on the piece to Mr T. G. H. James and Mr W. V. Davies.
${ }^{12}$ E. Hornung-E. Staehelin, $A D S$ I (Mainz, 1976), 332 f. (no. 716). A number of parallels is mentioned here. On some scarabs only one $d j e d$ with $b a$ is represented, e. g. M.M.A. 26.7.458, where the djed is standing before Ptah and Sekhmet (op. cit. 104 n. 116).
${ }^{13}$ W. M. F. Petrie, The Palace of Apries (London, 1909), pls. xviii, xxv.
for a considerable space of time and that their association was more than occasional. The nature of the trinity is a more difficult question. It looks as if this ensemble of divine beings underwent some minor changes during its history. The temple of Sethos I seems to suggest that the two $b a$-birds on the sceptre which, as we have seen, represents Ptah himself are aspects or manifestations of the god. The bas are not fully independent divine entities, and their intimate connection with Ptah is expressed by their position on the sceptre and on the god's bark. In other cases, however, their relation to the god is looser; they appear, separately, next to his statue, but even in these cases they are supported by a djed, again a symbol of Ptah. ${ }^{14}$ Also on the pillar from the tomb of Neferḥotep Ptah is characterized as 'the august djed'. Moreover, it is remarkable that, with the exception of the Hibis temple, the bas are anonymous. One would be tempted, therefore, to take their identification with Shu and Tefnut as a later development and understand them as souls of Ptah. However, the early association of the $b a$-concept with Shu and Tefnut contradicts such an interpretation. The bas of Heliopolis bear the names Rē ${ }^{\text {c }}$, Shu, and Tefnut as early as in the Coffin Texts. ${ }^{15}$ Later on, in Chapter 17 of the Book of the Dead the bas of Shu and Tefnut are mentioned. ${ }^{16}$ This is, at any rate, a later interpretation since in $C T$ spell 335 the names of Shu and Tefnut do not figure yet in this passage. In P. Leiden I, 350 an obscure passage speaks of Shu and Tefnut 'who are united with the bsw', probably the bsw of Amūn. ${ }^{17}$ Although the orthography of the word is indicative of the meaning 'might', and a translation 'souls' is unlikely, the passage is worth mentioning since the two conceptions are rooted in the same idea, the $b a$-soul being in itself a manifestation of the power of the personality. ${ }^{18}$ In Hibis there is another picture which may be connected with our subject-matter: the two fledgelings of Atüm ( $t ;$ [ $w y]$ ), represented as two falcons, are most probably Shu and Tefnut. ${ }^{19}$ It should be added that on several occasions Ptah himself is addressed as $b a,{ }^{20}$ but his double soul does not play a part in the theology.

The appearance of the bas beside Ptah resulted in all probability from a gradual fusion of the cosmogonical concepts of Heliopolis and Memphis. Recent research has shaken the long-established dating of the Memphite Theology to the Old Kingdom. ${ }^{21}$ The highly developed Ptah-cosmogony preserved on the Shabaka-stone is obviously a late redaction, and cannot be claimed to be an exact copy of an Old Kingdom text, though some of its elements may have originated in the third millennium ${ }^{22}$. It falls outside the scope of this paper to deal with this intricate problem. What is

[^18]relevant here is the fact that the Heliopolitan creation myth anticipated an important element of the later Memphite Theology as early as about 2000 bc. Shu was created, according to a passage in the Coffin Texts, ${ }^{23}$ by the heart of the Supreme God or by his $3 h w$-power. ${ }^{24}$ While the primitive form of the myth of engendering by onanism never disappeared, the concept of creation in Heliopolis tended to develop along more subtle lines. Since there is no proof that this process was induced by Memphite influence, one would rather think that the transmission of ideas took place in a Heliopolis-toMemphis direction. That would entail that the Memphite creation myth was formed of, or enriched by, elements adopted from abstract Heliopolitan doctrines. These doctrines were gradually turned into an impressive intellectual cosmogony. As seen from the Memphite Theology, the propagators of these doctrines considered the physical creation-act of Atūm as unworthy of a Supreme Being. According to the Memphite Theology, Shu and Tefnut came actually into being from the mouth of Ptah which proclaimed the name of everything. ${ }^{25}$ However, the polemics against the original creation-concept connected with Atūm start as early as in the Coffin Texts. ${ }^{26}$

The Ptah-Shu-Tefnut group of gods displays traits of both the modalistic and tritheistic triads and, in fact, it seems to represent an intermediary form of the two. Shu and Tefnut as bas of Ptah illustrate also the amalgamation of two theological concepts. While stressing the primacy of Ptah in the cosmogonical process, this doctrine accepts, at the same time, the second generation of the Heliopolitan Ennead as aspects, or consorts, of the Memphite creator god.

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2


3


# THE UPPER COURT COLONNADE OF HATSHEPSUT'S TEMPLE AT DEIR EL-BAḤRI 

By Z. WYSOCKI

One of the basic questions concerning the restoration work carried out in Hatshepsut's temple at Deir el-Bahri by the Polish-Egyptian Mission is the arrangement of the Upper Court colonnade. The original opinion of Naville, who, on the basis of his excavations, proposed two rows of polygonal columns on each side of the court, ${ }^{1}$ has been put into doubt by Dąbrowski. Dąbrowski's studies lead to the hypothesis which has been published in an earlier volume of this Journal. ${ }^{2}$ According to this hypothesis the colonnades of the court consisted of four rows of columns on the south, west and north sides and two rows on the east side. The innermost row of columns, adjacent to the open space in the centre, was, according to Dąbrowski, higher than the remaining rows. This gave the court an untypical arrangement unknown from other Ancient Egyptian temples.

Since 1968 I have continued the research on the preserved fragments of columns which could have belonged to the court as well as re-examining column bases identified by Dąbrowski. These researches revealed some inaccuracies in the basic conclusions of Dąbrowski and necessitated the reconsideration of the arrangement of the Upper Court colonnades proposed by him. ${ }^{3}$

As both Naville and Dąbrowski made inventories of the column bases in the Upper Court the first thing I had to do was to verify these inventories. In my re-examination I accepted as unquestionable bases only those which revealed the indisputable architectural form of column bases and/or bore the characteristic tracing taking the form of a circle inscribed in a square on the upper surface of the base (see pl. VIII, r). The remaining blocks marked by Naville or Dąbrowski, even if their arrangement in the court could have suggested alignment in rows, could not be treated as unquestionable bases because there were identical blocks among them, which were certainly no more than remnants of the court pavement. My observations, which were based on the above criteria, lead to the following results:
r. Virtually all the unquestionable fragments of the bases are in the two rows closest to the court walls. Only two fragments are placed in the fourth rows from the walls, one having a dimension $\frac{1}{4}$ of the base at the point $7 / \mathrm{D}$ and the other having $\frac{1}{2}$ of the base size at the point $4 / \mathrm{L}$ (see fig. I ).

[^20]

## Z. WYSOCKI

2. Quite a number of unquestionable base fragments which I found in several places in the court are shown neither in Naville's nor in Dąbrowski's records. These are the fragments placed at the points $8 / \mathrm{F}, 8 / \mathrm{G}, 8 / \mathrm{H}, 8 / \mathrm{K}, 9 / \mathrm{A}$, and $9 / \mathrm{H}$, as well as both fragments from the fourth rows: 7/D and $4 / \mathrm{L}$.

Of the above bases only two, $9 / \mathrm{A}$ and $8 / \mathrm{K}$, are complete. The rest of them form only fragments, from $\frac{1}{4}$ to $\frac{1}{2}$ of the complete base. Since both Naville and Dąbrowski did not register the existence of the base fragments in these places, which could not have been overlooked because of the clearly preserved design or profile, we may suppose that these fragments were put in their present places after Dąbrowski had made his inventory, that is after 1964. These fragments were put in their present places quite by chance since their presence has not been confirmed earlier. This situation is less important in the case of the east colonnade bases, where the placing of the new fragments, which excavators apparently found reused at other parts of the site, does not change the older conceptions of the arrangement of the colonnade. However, setting such fragments in the fourth rows on the remaining sides of the court cannot be accepted without reserve. Establishing this fact is of great importance because it disqualifies both fragments in the fourth rows in places $4 / \mathrm{L}$ and $7 / \mathrm{D}$ as the undisputable evidence for the existence of a four-rowed colonnade on the south and west sides of the court. Uncovering the foundations of the bases could not give us the decisive answer because at some time in the past they had been uncovered and bricklaid with cement mortar and that made any verification of the original state impossible.

The next problem that had to be dealt with was Dąbrowski's opinion that there existed in the court colonnade columns of two different dimensions, all decorated with the broad panel on one side. The higher of these were to surround the open court and the lower ones belonged to the remaining rows. The fact is that among the 159 preserved fragments belonging to the columns of this type only three fragments derive from the smaller columns.

First of all I was concerned with the bigger column as I aimed at establishing both its height and the diameter of the shaft at its base. According to Dąbrowski's conclusions its height was about 567 cm and the diameter about 80 cm . I noticed, however, a certain regularity while examining the preserved fragments of the column shafts that bore a relief on the broad panels of about 38 cm . The lowest element of the relief, the sign for 'gold' or the hieroglyph $n$, was placed at the distance of $20.2-26 \mathrm{~cm}$ from the lower joint of the block on which they occurred. This regularity appeared in the case of the six examined fragments and could mean that these blocks were the lowest drums of the column shafts, under which there was only the base (see fig. 2). The diameter measured on the joint below the sign for 'gold' or the hieroglyph $n$ corresponded with the diameter of a circle inscribed in a square drawn on the upper surfaces of the bases and was of about 80 cm . This again indicated that, contrary to the opinion of Dąbrowski, the undecorated surface on the lower parts of the panels was not about 100 cm long, but measured $20.2-26 \mathrm{~cm}$ only. This seems to be definitely proved by a discovery that the column shafts distinctly broaden near the joint mentioned above.


The block no. 391 belongs to one of the bigger columns on which the 'rekhit' is facing left. The distance of the lower edge of the hieroglyph $n$ to the joint ' A ' is 26 cm .

The block no. 565 belongs to one of the bigger columns on which the 'rekhit' is facing left. The distance of the lower edge of the hieroglyph $n$ to the joint ' B ' is 22 cm .

The block no. 378 belongs to bigger columns which represent the fecundity deity Hapy wearing the symbol of Upper Egypt upon his head and facing left. The distance of the lower edge of the sign for 'gold' to the joint ' $C$ ' is 22.5 cm .


The block no. 366 belongs to one of the bigger columns which represent the fecundity deity wearing the symbol of Lower Egypt and facing left. The distance of the lower edge of the sign for 'gold' to the joint ' $D$ ' is 20.5 cm .

The block no. 304 belongs to one of the bigger columns which represent the fecundity deity facing left. The kind of symbol is unknown. The distance of the lower edge of the sign for 'gold' to the joint ' $E$ ' is 20.5 cm .

The block no. 268 belongs to one of the bigger columns which represent the fecundity deity facing left. Either of the two symbols would be possible. The distance of the lower edge of the sign for 'gold' to the joint ' $F$ ' is 22.5 cm .

Fig. 2. The analysis of the distance from the lowest joint to the relief


Fig. 3. The analysis of the cross sections of the lower parts of the column shafts. Detail I: cross-section of block no. 278. Detail II: cross-section of block no. 304

Measured shafts, nos. 278 and 304, showed broadening that reached I cm and started 7 cm above the joint (see fig. 3). So all the edges and planes of these fragments show outward broadening which is easily seen when we place a lath along the edge or along the plane of the column shaft (see pl. VIII, 2). This broadening is the result of the working technology used by ancient builders who reduced the roughly prepared blocks to
the form of a column after having placed them on the formerly prepared bases. Somers Clarke mentions this in his description. ${ }^{4}$ When using this sort of technology the abutment of the column shaft with the base had to be worked with extreme caution in order not to cut the already finished base, and this made the stone-cutter spurt the tool towards him. The result of this was the outward turning of the planes and edges of the shaft.

After this estimation the reconstruction of the full height of the column belonging to the row that surrounded the open court could be done without further difficulty because the reconstruction could be based on the significant number of preserved fragments bearing parts of the relief which decorated the column panel, the falcon of Horus that crowned this panel, or fragments that formed the column capitals. The result of this reconstruction was the discovery that the column was originally 494.5 cm high (see fig. 4). The dimension that was calculated in this way was then checked at the granite portal leading to the sanctuary where the original seatings of the architraves remained. The dimension between the top of the base $1 / G$ and the bottom of the architrave seating is 494.5 cm , so it is identical with the dimension achieved while reconstructing the column (see fig. 5). It is obvious that the bigger column belonging to the row that surrounded the open court was of the height corresponding to the height of the bottom of the architrave placed on the wall, so the columns of the remaining rows had to be of the same height.

The reconstruction of the smaller column, which was carried out later and according to the same principles as in the case of the bigger column, that is the arrangement of the relief on the board, allowed us to establish its approximate dimensions which were 418.5 cm in height and about 70 cm in diameter. Consequently such a column could not be placed in the court colonnade because its capital could not have reached the bottom of the architrave. In such a situation Dąbrowski's hypothesis on the existence of higher and bigger columns in the row surrounding the open court and lower and smaller columns in the remaining rows could not be right. An additional proof is the diameter of a circle inscribed in a square on the bases $8 / \mathrm{P}, 9 / \mathrm{O}, 9 / \mathrm{A}$ (see fig. 1 ) on which, according to his theory, smaller columns having the diameter of about 70 cm were to stand. The dimensions of these circles are 84,83 , and 82 cm respectively, so they are the same as the diameters of the bigger columns. From all this we can easily draw the conclusion that the bases of the secondary rows must have supported columns of the same height and diameter as these in the row adjacent on the four sides of the open court (see fig. 6).

If the smaller columns came from the Upper Court they could only stand in some characteristic places where there existed a base. It seems, however, that they

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Fig. 4. Reconstruction of the column height according to the measurements taken from the preserved fragments


Fig. 5. Reconstruction of the column height according to the measurements taken from the preserved seating of the architrave and the base in situ $1 / G$ (cf. fig. 6): (a) relieving construction, (b) preserved seatings of the architraves, (c) granite portal of the main sanctuary, (d) Ptolemaic portico, (e) column base $\mathrm{I} / \mathrm{G}$ in situ
could come from some other place in the temple, but this problem has not been solved yet.

We may suppose, again contrary to Dąbrowski, that the columns decorated with the broad panels were placed only in the row that directly surrounded the open court. In the remaining rows there could stand columns of identical dimensions but without these panels. That would correspond with the order appearing in the Upper Portico where the front pillars were decorated with relief on all sides, and the polygonal columns, standing in the second row, lacked this decoration. Research in the temple lapidaria enabled us to select a number of column blocks which, by elimination, could be


Fig. 6. Reconstruction of the courtyard colonnade and the horizontal arrangement of architraves: (a) inner architrave of the courtyard colonnade, (b) outer architrave of the courtyard colonnade, (c) balustrade, (d) cornice, (e) intermediate architrave grounded in the seating preserved in the wall with niches, (f) level of the architrave seating of the wall with niches, south wing, at the entrance to the sanctuary, (g) roofing slab, (h) decorated column panel from the open courtyard, (i) a column in the row surrounding the open courtyard with a decorated panel facing the interior of the courtyard, ( k ) a column in the next row, situated near the courtyard row, without a decorated panel, (l) open courtyard
ascribed to the Upper Court rows, closer to the walls. Among them there occurred two blocks belonging to one column which bore a dedicatory text to Amen-Rē ${ }^{\text {and }}$ mentioned the wsht-hbyt, the term used to designate both hypostyles and temple courts in which the main offering ceremonies were performed during major religious festivals. ${ }^{5}$

Having established these facts I searched for criteria which might reveal the number of colonnade rows. I examined those fragments of the columns with decorative panels that bore the kneeling figure of 'rekhit' cut out in sunk relief and belonging to the lower part of columns. Two varieties of 'rekhit'-representation were attested on the preserved fragments: one represented the figure turned to the right and this belongs to the south row, the other one depicted the figure facing left-this belongs to the row of columns on the north side of the open court. ${ }^{6}$ When analysing fragments of the columns with the 'rekhit' facing left, nos. 394, 480, 434 and 391 , and using the method of mutual comparison of the elements of the decoration as well as comparing the form of the sections, I came to the conclusion that these four fragments belong to four different column shafts (see fig. 7).

Next I examined in the same way the fragments belonging to the columns with 'rekhit' facing right, nos. 108/67, 49/67, $1769,565,469$ and $10 / 71$ and I concluded that the blocks $108 / 67,49 / 67$ and 1769 could be the elements of one column shaft, but that the remaining fragments belong to different columns (see fig. 8). Checking the north and south rows with 'rekhits' in this way gave the same result. This established the presence of at least four columns of this type on each of the two sides and not three only as Dąbrowski proposed. Accordingly, Dąbrowski's conception of the arrangement of the column rows in the Upper Court had to undergo certain changes. When we introduced four shafts with 'rekhits' to the north and south part of the colonnade we had to take away one row of columns from the west side of the court. In such a situation the colonnade would have an improbable composition because it would have two rows on the east side, four rows on the north and south and three rows on the west. In such a case, a more logical order would be a colonnade with two rows on the east side and three rows of columns on each of the remaining sides.

The additional evidence comes from the inscriptions on the upper parts of the panels. Karkowski, after examining the preserved fragments, identified the following royal names on the column panels: 1 . the Horus-name and alternately prenomen and nomen of king Tuthmosis II engraved on the original names of Queen Hatshepsut; 2. the prenomen of king Tuthmosis III; 3. the Horus-name of king Tuthmosis I. Probably all the listed kings were originally represented in the same way as Hatshepsut-Tuthmosis II, i.e. by their Horus-name on each column and by prenomen and nomen on the two neighbouring ones. There must also have existed a certain order in arrangement and sequence of the names of particular rulers. An attempt was made to reconstruct the logical arrangement of the names in relation to their presence on the other elements

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Check on blocks no. 391 and 480: (a) the distance of the joint, marked ' A ', of the block no. 480 from the joint marked 'C' of the block no. 391 is only 13.9 cm . It is improbable that such a thin separator was placed between two blocks; (b) the analysis of the sections II and III proves that the profile is totally different. Conclusion: blocks no. 391 and 480 belong to two different column shafts. The block No. 1750 is neutral.

Check on blocks no. 391 and 434: (a) the joint of block no. 391 , marked ' C ', cuts the block no. 434 at the distance of 3.3 cm from the lower part; (b) the analysis of the sections I and II proves that there is a certain divergence of the profile; (c) attempts to match both blocks proved to be unsuccesful. Conclusion: blocks no. 391 and 434 belong to two different column shafts. Block no. 1750 is neutral.

Check on blocks no. 480 and 434: the joint of the block 480 , marked ' cuts block no. 434 in half; (b) the joi of the block 434, marked 'D', cuts blo no. 480 in half; (c) the analysis of $t$ sections I and III proves that $t$ profile is totally different. Conclusio blocks no. 434 and 480 belong to tv different column shafts. Block no. 37/ is neutral.
of the court and in relation to the assumption that each ruler was represented by a number of pairs of columns, each bearing one of the two cartouches. This resulted in a binate column arrangement of columns with decorative panels on each of the four sides of the open court. That was achieved after putting a double-rowed colonnade on the east, south and north side and a three-rowed colonnade on the west side. ${ }^{7}$ This solution is also highly probable because of some analogies appearing in other parts of the temple, viz., all the porticos preceding the sanctuaries, that is both Hathor porticos and the Anubis colonnade, have three rows in contrast with the remaining doublerowed colonnades of the temple. Therefore the existence of a three-rowed colonnade in front of the main sanctuary and two rows on all other sides of the court seems to be justified by this order (see fig. 9). Probably also the Ptolemaic portico, with three rows of two columns, was placed on the plan of the former colonnade which existed on the west side of the court.

Summing up the results of my explorations and studies concerning the Upper Court colonnade I can draw the following conclusions, some of which are fully proved, the others highly probable, because they are based on the analogies appearing in the temple:

1. All the columns of the court had the same diameter at the base, about 80 cm , and the same height, about 495 cm . This is proved by: (a) broadening of the preserved column drums below the sign for 'gold' and the hieroglyph $n$ as well as the almost identical distance between these reliefs and the block joint which is placed below. The above factors allow us to fix the lower base of the shaft and to trace the real height of the column on the basis of the preserved fragments of the inscribed panel, the falcon of Horus that crowns it, and the column capital; (b) agreement of the achieved dimension with the distance between the base $\mathrm{I} / \mathrm{G}$ and the preserved bottom of the architrave seating on the wall with niches; (c) identical diameters of the lower part of columns with the diameters of the circles inscribed in a square drawn on the upper surfaces of the preserved bases in the first and second rows counting from the walls.
2. Only columns surrounding the open court were decorated with panels covered with figurative and hieroglyph relief. On the other hand, the remaining columns were standard polygonal columns with sixteen sides having the same proportions but without panels. This conclusion is based on the following evidence: (a) the scanty treatment of the second row of the colonnade in the Upper Portico as well as in the Lower Porticos; (b) the limited number of preserved fragments of column panels, which should be more numerous if all the columns in the court were decorated with them; (c) the estimation

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of the identical smallest possible number of column shafts with figures of kneeling 'rekhit' in the south and in the north row, which might indicate that there were no more shafts of this type in the court; (d) distinguishing the column shafts without the decorative panel belonging to the Upper Court. ${ }^{8}$
3. The court colonnade probably had two rows of columns on the south, east and north side and three rows on the west side. The factors suggesting this conclusion are: (a) the number of discovered columns with 'rekhit' surrounding the open court on the north and south requires limiting to three the number of rows from at least the west side; (b) the appearance of the names of three rulers: Tuthmosis I, Tuthmosis III and Hatshepsut, replaced by the names of Tuthmosis II, most probably on pairs of columns, one with the prenomen and the second one with the nomen of each ruler; (c) the necessity of introducing the binate number of columns in the rows surrounding the open court in order to place such pairs of columns determines the spatial arrangement of the colonnade; (d) the appearance of two three-rowed porticos in front of the Hathor Shrine and one in front of the Anubis Shrine; (e) the three-rowed Ptolemaic portico which probably follows the arrangement of this part of the former colonnade; $(f)$ the lack of preserved bases or their fragments beside two rows which run near the court walls.
4. The columns with smaller dimensions, which are preserved in a few fragments, could not have belonged to the court colonnade and if they belonged to it they must have been put in characteristic places and on a socle. This is based on the following evidence: (a) the reconstructed height of the smaller column, which is 418.5 cm , and which does not correspond with the dimension between the base $1 / \mathrm{G}$ and the bottom of the architrave seating preserved in the wall with niches; (b) the reconstructed lower diameter of the column shaft, 70 cm , does not correspond with the drawing of a circle inscribed in a square on the bases preserved in situ in the two rows closest to the court walls and having the diameter of $82-4 \mathrm{~cm}$.

The search for unquestionable proofs confirming the above highly probable conclusions is still in progress, for example, finding the wall blocks which form the seating of architraves in the south and north walls of the court could give absolute cestainty as to the number of rows in the west colonnade. However, even at the present time it is possible, by the use of the preserved fragments, to achieve partial reintegration of the column shafts up to the height to which original elements are obtainable (see pl. IX). The number of column-rows in this reintegrated colonnade could not exceed the number of rows on each side of the court that were established on the basis of the preceding architectural analysis and Egyptological studies. ${ }^{9}$

There still remains the possibility that we shall need to correct the arrangement of the columns in the light of new facts. At the same time the restoration which is being planned will secure the column fragments which are at the present moment exposed to destruction. These are the original fragments of the unique type of polygonal columns which appeared in Egypt only in the Upper Court of the mortuary temple of Queen Hatshepsut.

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## Plate VIII




The Queen Hatshepsut Temple. The reintegrated column shafts of the upper courtyard
THE UPPER COURT COLONNADE OF HATSHEPSUT'S TEMPLE AT DEIR EL-BAḤARI

# TWO LUTE-PLAYERS OF THE AMARNA ERA 

By KATE BOSSE-GRIFFITHS

## I. A lute-player on a ring-bezel

Early in 1978 a small box full of fragmented ring-bezels from El-'Amarna was given to the Swansea Wellcome Museum by the Department of Egyptian Antiquities in the British Museum together with other disposable antiquities. When I examined the bezels under a magnifying glass, I noticed on one of them ${ }^{1}$ a female figure similar to the luteplayer of the famous group of female musicians from the tomb of Nakht: ${ }^{2}$ a nude girl with festive wig-including a perfume cone and a lotus-blossom-holding a longnecked lute diagonally across her breast. The sound-box of the lute lies in the bend of her right arm, while her left arm is bent to a sharp angle. Under her left hand, which holds the distal end of the lute, hangs a cord with two tassels: it is a rather exaggerated representation of the common device for fastening the strings on to the neck of the lute. Unlike the lute-player of the tomb of Nakht she is shown standing, not dancing, while her head is turned to her left, not to her right. A little monkey stands in front of her with a belt tied around his waist. All this is harmoniously arranged in an oval which was originally just over 2 cm high and I cm broad, hardly as long as a finger-nail. The two ends of the oval which connected the bezel to the ring-hoop are now broken away without much harm to the figure itself. The material of the bezel is Egyptian faience of a dull-purple colour. The picture is executed in raised relief (see pl. X, r).

## Provenance

Luckily, the exact provenance of this bezel is recorded. It appears in outline drawing on pl. 49 of the second volume of The City of Akhenaten which contains a report on the excavation of El-'Amarna during the seasons 1926-32. The number IDi6 which is given to it refers to Pendlebury's 'Corpus of beads, amulets, ring-bezels, etc.'. ${ }^{3}$ Here I stands for ring-bezels, D for figures on ring-bezels and I 6 is the serial number; to this special number IDi6 Pendlebury added the comment 'a new type'. In the outline drawing of the lute-player on this bezel, the lotus-blossom in front of the nose is omitted, but the foot-end of the bezel is still extant; one can also discern it on an otherwise very indistinct photograph ${ }^{4}$ which shows the bezel, half-size, together with thirty-nine other objects on one and the same plate. In the chapter which combines an index of the 298 houses excavated in the North Suburb with a catalogue of contents, IDi6 appears only once, ${ }^{5}$ among the finds from the house U.36.28. This is described

[^25]as one of two slightly better houses in a 'complex of hovels' and as 'a very neat dwelling'. ${ }^{6}$ It was excavated in 1929. Among other things found there was a scarab of Amenophis III.

To judge by Pendlebury's corpus list, the bezel IDi6 is exceptional. Although in El-'Amarna almost every house possessed its own supply of ring-bezels7-many of which show a royal name, while others have figures of plants, animals, and amuletsthis could be the only bezel with the figure of an ordinary human being (not a princess), a female entertainer with a lute and a monkey. When one tries to appreciate the significance of this ring-bezel at this particular time and place a number of questions arise. They are concerned with (1) the nature and material of the original from which the impression for the faience ring was taken; (2) the provenance and history of the long-necked lute, the musical instrument played by the girl on the bezel; (3) the possible meaning of the monkey in the company of the lute-player.

## The Prototype

Pendlebury described the method of manufacturing ring-bezels as simple: ${ }^{8} \mathrm{~A}$ popular amulet, ring or bead was borrowed from a friend and pressed into a lump of clay . . . The mould thus obtained was baked and sent off to a glazier.' The oval shape of most bezels derived from the shape of the mobile scarabs which originally served as signet rings. Later the bezel was fixed, but the shape remained. W. C. Hayes, describing this development, states that 'the molds used for the faience ring bezels appear to have been taken directly from actual signet rings, a fact which adds immeasurably to their interest and value'. ${ }^{\text {T }}$ This mode of manufacture obviously applies also to our ringbezel, but, as the figure on it appears in raised relief and not in sunk relief (which would be natural for a signet ring), the original could not have served as a signet ring; more likely it resembled the priestly gold rings of Tutcankhamūn ${ }^{10}$ on which the figure of a deity is executed in raised relief and which were obviously not used for the purpose of sealing. However, gold was not necessarily the material of the prototype for IDI6; more probably the original representation was carved in carnelian like the bracelet plaque of Amenophis $\mathrm{III}^{1 \mathrm{I}}$ which displays in raised relief a whole scene of the SedFestival with two princesses standing in front of the enthroned king and queen on a stone which is only 5 cm long. The princesses, who offer emblems of millions of years while simultaneously shaking a sistrum, are actually of about the same height as our lute-player. Whatever the material of the original object, in view of the delicate nature of its design, it could only have been destined for a person of high standing with a fastidious taste. If Aldred's suggestion be accepted that high officials gave to the king and the royal family such valuable gifts on important events like coronations and

[^26]jubilees, ${ }^{12}$ the original ring may have been a present of the Director-of-Court-Music offered to Amenophis III on the occasion of his first jubilee. This would explain why such a tiny representation, which is hardly recognizable without effort, should have been created for such an unsuitable medium as a finger-ring whilst keeping all the essential features of the painted pictures of lute-players. To my knowledge, this is the smallest extant representation of a lute-player. One could easily imagine a person being sufficiently favoured by the king to be allowed to take an impression of the original ring, but perhaps it is better to keep to the known facts.

## History of the Lute

Why should lute-players receive such exceptional attention as soloists? The lute was not known in Egypt during the Old and Middle Kingdoms. With its completely new technique of playing a string-instrument, it must have come from outside the country, although string instruments had been well known in Egypt at least since the Old Kingdom. The history of the lute has been convincingly traced by W. Stauder. ${ }^{13}$ He came to the conclusion that its original home was with the settlers in the Caucasus, and that it was brought from there to Syria, Northern Mesopotamia and the Near East in general with the invasion of the 'Mountain People' in the second millennium. The Hyksos, probably under Hurrian leaders, brought the lute to Egypt, where it was possibly first used for the benefit of marching soldiers. ${ }^{14}$ Some Egyptian sources suggest connections between the Syrian god of war, Reshep, and the lute. On an Egyptian stela dedicated to Reshep, which is now in Hildesheim, a lute appears as a 'symbol' at the back of the god who is shown as usual with a shield and a spear. ${ }^{15}$

Stauder recognized that the great popularity of the lute arose from the fact that the technique of playing it is fundamentally different from the technique of playing other string instruments which were known so far, like the harp and the lyre. The freemoving strings of the other instruments could produce only one individual note and, in order to increase the number of notes, more and more strings had to be added until the instruments could become very cumbrous indeed. With the lute, on the other hand, notes are produced by pressing the string down on the board of the long neck, and a great variety of notes can be produced by one or two strings simply by shortening the strings with the fingers of one hand while the other hand plucks a string with the help of a plectrum which is fastened to the body of the lute. In consequence, because of its lightness, the lute became the ideal instrument for soloists, who could dance,

[^27]play and sing at one and the same time. This, no doubt, led to the cult of the soloists, and E. Brunner-Traut ${ }^{16}$ has pointed out that the lute-player as a soloist was known as early as the time of Tuthmosis IV, although, as a rule, lute-players performed as members of a small group which usually consisted of three to five musicians who played the harp, lyre, and oboe as well as the lute.

A well-preserved lute from the time of Tuthmosis II or Hatshepsut has been found at Deir el-Bahri in the tomb of Harmose and is now in the Cairo Museum. ${ }^{17}$ Nora E. Scott wrote a thorough description of it at a time when it was temporarily exhibited in the Metropolitan Museum in New York. ${ }^{18}$ A more summary description of the long-necked lute has been given by Lise Manniche in her recent book Ancient Egyptian Musical Instruments:

The sound-box of the long-necked lute is more or less elongated, carved in one piece or made of tortoise-shell. It is covered with a membrane pierced by the neck and sometimes provided with sound-holes. The neck is straight, and enters the sound-box between the box and the membrane, continuing to the lower end of the sound-box. The top part of the neck may be decorated with the head of a goose or duck . . . The strings, two or three of gut, are attached separately . . . Usually the colour of the lute is red. It is played with a plectrum, suspended from the instrument. ${ }^{19}$

Manniche also gives a detailed and useful list of Egyptian representations of lutes. It should be noted, however, that Stauder ${ }^{20}$ disagrees with her statement ${ }^{21}$ (where she is following Sachs) that the type of lute found in Egypt was known already by Babylonians a thousand years before its appearance in Egypt: the terracotta from Nippur, which had been used as evidence (depicting a lute-playing shepherd and his animals), is of much later date than was originally assumed.

## The Monkey and the Lute-player

The little monkey which stands in front of the lute-player on the bezel deserves some comment. It was first mentioned by E. Brunner-Traut. ${ }^{22}$ In our much enlarged photograph the monkey, standing on his hind-legs while his body is slightly bent forward, fits conveniently under the outstretched arm of the girl and under the tassels of the lute. In fact it seems surprising that there existed room for two well-defined figures in such a minute space. The theme of the lute-player and the monkey has a parallel on a blue faience bowl in Leiden ${ }^{23}$ (see pl. X, 2) which is decorated with a black outline drawing of a nude young woman with festive wig who is squatting on a cushion in a kind of bower and strumming the lute. A little monkey stands behind her and takes hold of her bead-girdle. One might be tempted to connect this with the little

[^28]monkey on the ring-bezel, and with the numerous figures of playful monkeys which have been discovered in private houses at El-'Amarna. These have been interpreted either as caricatures of human behaviour or as mere toys. Brunner-Traut ${ }^{24}$ has pointed out that as early as the Old Kingdom dancers and musicians were shown in the company of monkeys who played the part of comic entertainers. It seems, therefore, that there is no need to look for a deeper meaning. While that may be true in Egypt, however, it does not necessarily apply to a ceramic plate from the Near East, probably from Syria, ${ }^{25}$ which has been dated to the first half of the second millennium вс (see $\mathrm{pl} . \mathrm{X}, 3$ ). This shows in raised relief two nude dancers or singers, two bow-legged dwarfs, playing the lute, and three rather sedate monkeys surrounding them. All the elements of the Egyptian lute-player plus monkey-entertainer are present-the nude women, the lutes, and the monkeys-but the mixture, and probably the meaning, are different. The long-legged nude women resemble the nude Syrian goddess who appears on Syrian cylinder seals of that period; ${ }^{26}$ at least two of the monkeys sit and listen attentively, and, most amazingly of all, the bow-legged dwarfs who are playing the lute look like brothers of the dancing toy-dwarfs of ivory found at Lisht ${ }^{27}$ near the pyramid of Sesostris II. In fact, this makes it likely that the ivory dwarfs were not Egyptian at all, but an import from Syria.

## The Lotus-blossom

Even the big lotus-blossom in front of the lute-player's nose (omitted in the outline drawing of Pendlebury's Corpus) has its own association and meaning. Its disproportionate size suggests that it is important, almost a symbol. It is reminiscent of the song played for the young Amenophis II by a lute-player in the Theban tomb of Kenamūn: ${ }^{8}$

> Anoint thyself with oil. Spend a merry day Binding garlands in the garden of trees, A lotus-blossom at thy nostril, O King Amenophis!

The ring-bezel IDI6 is not mentioned by Lise Manniche ${ }^{29}$ in her list of representations of lute-players under the reign of Amenophis IV nor can one find there another, possibly royal, lute-player of an Amarna-relief from Hermopolis which is now in the Brooklyn Museum, New York. This is the second of the two lute-players of the Amarna Era who form the theme of this article.

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## II. A lute-player on a relief-block from Hermopolis

During the reign of Akhenaten the lute was at the height of its popularity. The different uses to which it could be put are illustrated on the walls of contemporary tombs, temples, and palaces, and even on a modest tombstone. There were male and female lutanists, Egyptian and Syrian. Lute-players can be found on pictures of the royal harîm, and among the court bands of Egyptian and Syrian musicians. They could play for light entertainment, at official receptions, or even during a religious service at the temple of the Aten. They occur already on the talatât from Karnak which were made during a pre-Amarna period and also on Amarna relief-blocks from Hermopolis which belong to the late period of Amarna art.

As a rule, lute-players were members of the lower class of society. In the royal harîm girls practising on the lute (and on other musical instruments) were guarded by watchmen sitting at the gate. It is not unusual for lute-players to perform in the nude, made up like serving girls in some of the Eighteenth Dynasty tombs, in a festive wig and with a bead girdle around their hips. There exists, however, one representation in raised relief of a lute-player who, to judge from its size and wig, is a member of the higher class. The relief-block is now in the Brooklyn Museum, New York, and I am most grateful to the Curator of Egyptian and Classical Art of this Museum, Professor B. V. Bothmer, for giving me every facility to study the original during my visit to the Museum in September 1978, and for allowing me to use a photograph made by the Museum for publication in this article (see pl. XI, r). ${ }^{30}$

The theme of this scene had been wrongly interpreted as trapping fowl in the marshes. I came across it first in books of John D. Cooney ${ }^{31}$ and Cyril Aldred ${ }^{32}$ at a time when I was looking for representations of lute-players from Amarna which could be compared with the figure of a lute-player on the ring-bezel. I was struck by the fact that the position of the hands and arms of the chief person represented was characteristic of players on the long-necked lute: the thumb and index finger of the right hand hold the plectrum ready to strike the cords, while the long neck extends diagonally, across the body and the left shoulder, over the sharply bent left arm to the left hand whose delicate fingers are pressing the cords down on the neck.
This relief-block is recorded by Roeder ${ }^{33}$ in his posthumously published book Amarna-Reliefs aus Hermopolis as P.C. 3 ( (P.C. stands for 'Private Collection'). In this he deals with all the relief-blocks which the German Expedition to Hermopolis discovered between 1929 and 1939 in the foundation and in the filling of a pylon of Ramesses II. Originally the blocks had belonged to buildings in the city of El-‘Amarna. This is a very thorough work with details which might have been prepared for a computer to work on. There exists, however, a special reason why the description of P.C.3I is nevertheless rather unsatisfactory. In the introduction of the book it is said that Roeder had to leave his work in 1939 with the intention of returning the following

[^30]year to do the recording. But the war intervened and it was almost twenty years later, in 1957, that Roeder was able to prepare the finds for publication with the help of several collaborators, and to take photographs and make records of 1,500 reliefs on 1,250 blocks. While he was still busy with the preparation of the manuscript, an American connoisseur and collector brought to him photographs of 346 more reliefblocks in the Amarna style which could have come originally only from Hermopolis, although possibly they had been excavated after Roeder had left, P.C.3r being one of them. A little later, Roeder received permission to incorporate these reliefs in his publication. The inevitable haste with which the objects, then in private collections, had to be included in the general work explains certain omissions and misinterpretations which could have been avoided if there had been enough time left for collation. As it happened, the incorporation of over 300 new blocks at the last moment had been possible only because of Roeder's system of recording which elaborates on certain aspects of the reliefs rather than treating each relief on its own merit. Accordingly P.C.3I is mentioned twelve times in the text and is shown once on pl. 175. The references to it occur in chapters V and VI.
Chapter V: H ra refers to the aspect of the chief person as king or co-regent.
O 6 i refers to the men at the bird-trap $[s i c]$.
U 5 refers to the papyrus.
U 14 refers to wild animals. The animal over the hand of the king is called a weasel [sic].
U 15b refers to the bird-trap [sic].
Chapter VI: G 2 The principal person may be Smenkhkarē at the bird-trap [sic].
H 6b It is suggested that the facial expression is that of Smenkhkarē.
H 6d mentions the Zipfel-Stufen-Perïcke, the peculiar wig on the head of the chief person represented.
H 7 a notices that the shoulders of the chief person are of uneven height and explains it through the effort needed to pull the net of the trap together [sic].
H 8a claims that the movement of arms and hands are more fitting for a labourer than for a king.
O 6 p speaks of men at a bird-trap [sic].
U 19 identifies the animal already mentioned in Chapter V, U 14, as a 'wild ass' $=$ Wildesel [sic]; this is obviously a misreading of the word Wiesel.
No mention is made of the boat, the steering oars of which are clearly visible. The initial misinterpretation of the theme of the scene as 'trapping fowl' makes many of the references irrelevant. Significant and valuable, however, are the identification of the chief person as a member of the royal family, and the importance given to the Zipfel-StufenPerücke; notice must also be taken of the observation that the left shoulder is bent forward, although the explanation for this cannot be accepted.

Cooney ${ }^{34}$ followed Roeder's suggestion, stating that the scene represents 'the ancient subject of trapping wild fowl in a marsh'. He noticed that the scene is 'entirely in raised relief and so probably from the interior of a building'. He mentions the boat and steering-poles and remarks casually that the hands of the chief person do not clasp
the rope [sic] as 'their position is more suggestive of playing an instrument'. 'The scene', he says, 'is too incomplete to allow a firm interpretation.' In 1975 Aldred ${ }^{35}$ was still searching for a better solution to the problem. He calls the scene 'Fishing in the Marshes' and states, with several question-marks, that the scene is dominated 'by the upper part of the large figure of a woman (?) facing right, who wears a Nubian wig and holds in her two hands the shaft of a fishing spear (?)'. He adds: 'To the right against a background of papyrus stalks, are the rudder posts and steering oars of a state barge, the tillers of which are held by two steersmen who face forward.' Here everything, with the exception of the description of the chief person, is acceptable. Of importance is also the fact that Aldred was able to identify the boat as a state barge by the 'panther skin attached to the rudder post'. Since then I have corresponded with Aldred, and he now agrees that the dominating figure is a lute-player, and points out that, in fact, a tell-tale tassel is hanging from the neck of the lute. ${ }^{36}$

After taking into account what had already been discovered about special aspects of the relief it can be summarily stated that we see here the upper part of the dominating figure of a male or female lute-player against a background of papyrus stalks. The lute-player looks in the direction of the steering-oars of a state barge, the tillers of which are held by two steersmen in the usual male Amarna dress (a tunic and kilt with full front-panel). The steersmen look forward while their right hands stretch out backward for the slightly curved wooden tillers. Just over the ropes of the pivot on which the rudders move appears the head of a panther skin, the feet of which give the appearance of standing on the neck of the lute just in front of the delicate fingers of the player's left hand. An artistically pleasing touch is the appearance of some buds behind the head of the lute-player which run parallel to the slanting back of the wig. There remains the puzzling question of the position of the lute-player in relation to the barge.

## Playing the Lute in front of Papyrus Reeds

Before determining whether the lute-player is standing or squatting, male or female, royal or otherwise, it will be useful to seek for parallels.

One's first impression is that playing the lute and singing, and possibly dancing, in the marshes do not go well together. The amusements of the marshes are more likely to belong to the traditional practices of hunting and trapping fowl or fishing. The pastoral romance of instrumental music in combination with a picnic seems more akin to the spirit of the Wandervögel before the Second World War, who took their beribboned guitars out with them during their excursions into open spaces; and yet playing the lute in front of papyrus reeds is an artistic motif which was well known already at the time of Amenophis III, if not earlier. This is amply proved by scenes on unguent spoons carved in wood which show lute-playing soloists in front of papyrus reeds. On

[^31]one example in Berlin ${ }^{37}$ a nude young girl with straight hair plays the lute while kneeling on a reed mat in front of what seems to be another reed mat whose stalks are indicated by stylized straight lines crossed by one horizontal line. Her drawn-up left knee just fills the space between her left elbow and the ground. There are examples of 'Water Music' executed in delicate open work, as on an unguent spoon from Heracleopolis in the Petrie Collection of University College, London ${ }^{38}$ (see pl. XI, 2). This shows a naked lutanist (wearing only a long festive wig, ear-rings, and a hip-girdle) balancing herself in a papyrus skiff which is floating on the water. She is surrounded by stalks of papyrus, the highest of which reaches her head. The stem and stern of the boat, as well as the terminal of the lute, end in duck's heads. Another similar luteplayer in a boat, on an unguent spoon in Paris, ${ }^{39}$ shows the girl wearing a loin-cloth.

Lute-players in a skiff are paralleled, during this period, by pictures of nude or slightly dressed girls who are punting their skiffs through the marshes, as shown on a blue faience plate from Gurob. ${ }^{40}$ Here a nude girl with festive wig is transporting a calf through the papyrus thicket. Similarly, on a blue-painted buff pot, possibly from the palace of Amenophis III at Malkata, ${ }^{4 \mathrm{I}}$ a nude girl is punting a papyrus skiff through a marsh-scene surrounded by rising birds and leaping bull-calves.

Ultimately, the theme of all these pictures can be related to the theme of the king taking his harîm for an outing to a lake or riverside, as described in Papyrus Westcar (v, I ff.). Recently H. G. Fischer ${ }^{42}$ was able to connect the tale of Papyrus Westcar with customs of the nomarchs of the Middle Kingdom as represented in the tomb-chapel of Ukhḥotpe. Here half-naked women gather lotus-blossoms and catch fish from papyrus boats while on another picture 'overdressed and elaborately coiffured women' are enjoying the marshes by exercising the masculine activity of seining. Fischer comments that in this instance the nomarchs were emulating the extravagances of Pharaohs of the Old Kingdom. The custom was continued in the Amarna Era. In the case of Akhenaten himself the nearest parallel can be found in a representation in the rock-tomb of Meryrēc II. ${ }^{43}$ Here the king is shown sitting relaxed in a kiosk while the queen is filling his cup through a strainer. Three children are near. 'Ankhesenpaaten brings an untidy bunch of flowers, freshly gathered, while a band of female court musicians, including two lute-players, provides the entertainment. Carved ducks hang from the pillars, a motif taken 'from the sportman's shelters, hastily constructed in the marshes . . . to the pillars of which birds which had been secured were naturally hung'. All this goes far to prove that music and open-air entertainment went well together. There remains, however, the problem that the lute-player on P.C.3I does not appear to be an ordinary member of the harîm. This is suggested by the dominating size of the figure and also by the peculiar kind of wig.

[^32]
## A Royal Wig?

The wig worn by the lute-player on the Hermopolis relief represents a new fashion. Roeder ${ }^{44}$ speaks about a Zipfel-Stufen-Perücke; Aldred ${ }^{45}$ calls it a 'Nubian wig'. Julia Samson, ${ }^{46}$ while writing about a similar wig, claims that the term 'Nubian wig' is inexact when used of a 'wig with flat, straight, parallel strips of hair falling from the top of the head to the overlapping layers'. She would like to confine the term 'Nubian wig' to the cap-like wigs covered in ringlets as worn by Nubians. The wig of the luteplayer of P.C. 3 I is just such a wig with almost parallel strips of hair falling from the top of the head to the overlapping layers; there are four of these layers ending in a sharp point (or Zipfel). The upper part of the head, from the eyebrows upwards, is admittedly missing, but this part could be completed from a head on a sandstone relief block from Karnak (see pl. XI, 3) which appeared in the Munich exhibition catalogue ${ }^{47}$ under the title of Der König unter der Strahlensonne. It has since, however, been proved to represent Queen Nefertiti who (as an additional fitting block shows) is followed by her first-born daughter Meritaten. ${ }^{48}$ Here Nefertiti is wearing the same kind of wig with four overlapping layers. Over her forehead these layers continue in four parallel rows of curls until they meet the straight parallel strips of hair which descend from the top of the head. From the brow of the queen rises a uraeus which is crowned by a radiating disc. This is dated to the early, probably still pre-Amarna period. From the excavations at El-'Amarna itself comes a similar representation in relief on the drum of a sandstone column ${ }^{49}$ which was found in the Broad Hall of the Great Palace and must be dated before Year 9 of Akhenaten. Here a short fifth layer is added to form the actual point (Zipfel), and there is no sun-disc on the head of the uraeus, but otherwise the faces are identical. Nefertiti's daughter, 'Ankhesenamūn, wears the same kind of wig with four overlapping layers, coloured blue, in the relief on the back-panel of Tutcankhamūn's throne, while she is anointing her husband under the life-giving rays of the sun-disc. ${ }^{50}$ Last, but not least, Queen Tiy herself wears a wig with four overlapping layers on the stela from El-'Amarna which shows her together with her aged husband, ${ }^{51}$ and also, it seems, on the coffin of Tomb 55 in the Valley of the Kings which was taken over by Smenkhkarēe. 52 Of the same kind are the identical calcite stoppers of the four canopic jars from the same tomb. ${ }^{53}$ It is tempting, therefore, to call this type a 'queen's wig'. I certainly do not know of any example of Akhenaten appearing in it. ${ }^{54}$ But it seems that towards the end of the Amarna

[^33]Era, at least, a young king, too, could wear this wig; for Tutcankhamūn wears it occasionally. ${ }^{55}$ There exists also a number of variations. Wigs of princesses could look similar as far as the Zipfel is concerned, but would be different in other respects. Wigs with no more than three layers could be worn by officials of the court, and there are wigs of similar general shape but without any overlapping layers. But the fact that this new kind of wig with four or more overlapping layers crowned by a uraeus was so consistently worn by queens of the Amarna Era suggests an underlying significance of deliberate intent. If one compares it with the vulture headdress sometimes worn by Queen Tiy, ${ }^{56}$ it appears that there is a definite similarity between the pointed wing of the bird and the feather-like layers of the wig which also end in a sharp point (or Zipfel). It could well be that this wig was especially created for the queen early in the Amarna Era when it was no longer permissible for queens to wear the traditional vulture-headdress. The wig worn by the lute-player of P.C.3r is certainly a royal wig, possibly that of a queen.

## Identification of the Lute-player on P.C. 3 I

That the dominating figure on the Brooklyn relief-block was a member of the royal house seems to be accepted by all, but according to Roeder ${ }^{57}$ it was the co-regent Smenkhkarē'; Cooney ${ }^{58}$ suggests a girl from the royal family, and Aldred ${ }^{59}$ wants to identify her with 'Ankhesenpaaten. There are special reasons why I should like to see in this lute-player a woman rather than a man. The task of the lute-player, as depicted in a great variety of examples, is to entertain by playing the instrument, singing and possibly dancing, mostly accompanied by other musicians. The king, even in Amarna art, is not shown as serving other people, but being served, or he serves god by fulfilling religious ceremonies. On the other hand, there seems to be a tradition during the Amarna Era that male members of the royal family were not shown in portraits until they had become co-regents or kings, and once they were entitled to wear the crown, of course, they could no longer be shown providing entertainment for other people. The logical conclusion is that the lute-player here must be a queen or princess. Princesses are often shown shaking the sistrum in religious services. There may have been princesses of royal blood among the lute-players of the harîm. A precedent for a king's daughter making music in a family circle can be found in the case of Sesheshet, daughter of King Teti and wife of the Vizier Mereruka, who is shown playing the harp for her husband. ${ }^{60}$

It would be pleasant to associate the known agility of Tutcankhamūn's queen ‘Ankhesenpaaten (or 'Ankhesenamūn) ${ }^{61}$ with the bravado of showing a princess as a

[^34]lute-player (not only as helpmate of her husband, as Aldred suggested), but I found obstacles to this assumption when I attempted to find an approximate date for this fine piece of sculpture in raised relief. Roeder, ${ }^{62}$ while discussing the different kinds of relief found on the Hermopolis blocks, states that very few of the scenes are executed in raised relief. Aldred ${ }^{63}$ dates the relief to the late period of the Amarna style. He very convincingly suggests that this later softer style, especially in limestone, owes its character to the appointment of a new master sculptor who was conversant with the artistic tradition of Memphis (a style in fact, which is amply evident in the Saqqâra tomb of Horemheb).
cAnkhesenpaaten, as the third daughter, could hardly have been born before the regnal year 3 of Akhenaten. When Akhenaten died in his seventeenth regnal year, she would have been about fifteen years old. The relief of the lute-player, which comes from a building in El-'Amarna, must have been made some time earlier than that. Although it seems to be humanly possible that this portrait shows a young princess of about thirteen years, the question arises from what kind of building this relief could have come. As there is a choice between decorations in tombs, temples and palaces, the most suitable place seemed to me the southern palace of Maruaten, ${ }^{64}$ a royal country-house built for Queen Nefertiti, and taken over about the regnal year 13 by her daughter Meritaten: a pleasure resort with lakes, gardens, temples, and pavilions. Roeder ${ }^{65}$ discusses carefully the reliefs from Hermopolis which might have belonged to some of the buildings in Maruaten. Among these, the building-complex called II by the excavators ${ }^{66}$ seems to be the most likely to have contained a relief of this kind. It lies to the east of the great lake and consists of a temple and a group of three buildings on an island: a stone-built kiosk and two pavilions. The whole group of buildings had been of solid masonry and a great variety of stones. Roeder 67 notices that columns from this building-complex show motifs in the naturalistic manner, including hanging ducks, papyrus reeds, and lotus-blossoms. Although very little of the actual masonry was left at the place, it seems quite possible that the relief with the royal lute-player could have fitted into this setting, especially as the building complex II was built most probably after regnal year $9,{ }^{68}$ and there would have been sufficient opportunities for a sculptor to practise the softer late-Amarna style. But after regnal year 13 Meritaten had become queen, and had received Maruaten as her own 'sunshade'. It seems to me, therefore, that the young woman playing the lute near a royal barge and in front of papyrus reeds is Queen Meritaten rather than her younger sister. If a king is near, the most likely candidate would be Smenkhkarēc.

[^35]
## KATE BOSSE-GRIFFITHS

There remains the vexing question of how to complete the scene. The player and the steersmen are looking to the right. Perhaps we should expect to see the king there. There is no room for the lute-player on the boat itself. Possibly she was kneeling or squatting. This seems to be the most likely alternative as the long neck of the lute is running almost parallel to the ground. Only a few fitting relief-blocks could help to solve the question.

I. Lute-player with monkey on ring-bezel from 'El-Amarna, now in the Wellcome Museum at University College, Swansea

2. Lute-player with monkey on blue bowl of Egyptian faience, nov Rijksmuseum van Oudheden, Leiden

3. Nude women, dwarf lutanists, and monkeys on terracotta disc (from Syria?), now in the Iraq Museum, Baghdad

I. Lute-player near a royal barge on a relief-block from Hermopolis, now in the Brooklyn Museum, New York Courtesy of the Brooklyn Museum

2. Lute-player in a boat on an unguent spoon from Herakleopolis, now in the Petrie Collection of University College, London

3. Queen Nefertiti wearing an Amarna-style wig on a relief-block from Karnak, now in the Luxor Museum

# HISTORICAL OBSERVATIONS ON THE MILITARY RELIEFS OF ABU SIMBEL AND OTHER RAMESSIDE TEMPLES IN NUBIA 

By ANTHONY J. SPALINGER

In 1957, Louis A.-Christophe presented a paper at the Institut d'Egypte in Cairo in which he first put forth his arguments regarding the date of the construction and decoration of the Abu Simbel Temple. ${ }^{1}$ He maintained that the relief-work was certainly finished before Year 34 of the reign of Ramesses II, since the Pharaoh caused his famous Marriage Stela to be carved to the south of the façade of the temple in that year. In addition, the stela of Year 35, which alludes to this event, was set up in the chamber with Osirid columns. Christophe attempted to buttress his discussion by noting that the prince $R^{c-m s-s(w) \text {, who is represented at Abu Simbel three times as alive, was probably }}$ dead by Year 26 of Ramesses II, in so far as a shabty of this prince was found in the Serapeum connected with the presumed death of an Apis in that year (cf. $K R I$ ir, 369, 2). ${ }^{2}$ This scholar also remarked that the scene in the main temple at Abu Simbel was sculpted in several stages and that 'all the decoration was terminated before Year 34 '. ${ }^{3}$ As a result, Christophe finally concluded that 'owing to the imprecise data at hand, all that one can say is that the main temple of Abu Simbel was cut and to a large extent decorated before Year 26'. 4 He did remark on the similarity between the number of crown-princes depicted at Abu Simbel and at Derr, but merely stated that the latter temple, too, must have been completed before this date.

Christophe's arguments were soon accepted in the Egyptological literature, and he himself added to his original remarks. In 1961 and 1965 he reiterated his position,

[^36]pointing out that the new temple was consecrated to the divine Ramesses II, and not to Ramesses II as Pharaoh. ${ }^{5}$ He also made the interesting comment that the main temple was at some time connected with Ramesses' Heb-Sed Festival in his thirtieth year. Moreover, according to Christophe, attributes of the god Horus of Meha, the main deity at Abu Simbel before Ramesses II, were transferred to the Pharaoh. In his book, Abou-Simbel et l'épopée de sa découverte, Christophe stressed this Sed Festival theory, endorsing Amelia Edwards's comment that the temple was positioned so that the sun would shine down its full length on a certain date, the date being, of course, that of the Sed Festival of Ramesses II (ı260 bc, according to Christophe). ${ }^{6}$

The position outlined above received little opposition from other scholars. Kitchen, for example, in his review of Christophe's Abou-Simbel, mainly summarized the arguments, leaving any criticism aside. Thus Christophe's erroneous position, derived from a false understanding of the Apis burials, was never refuted, as one can also see in Janssen's or Edel's discussions of this period. ${ }^{7}$ The latter scholar, in fact, still argues that the death of the third son of Ramesses II, $R \mathrm{r}-\mathrm{ms}-s(w)$, is important for the dating of the temple; a second position may be found in the note of Habachi on the deification of Ramesses II. Edel added that the queen, Tūja, who probably died soon after Year 22 of Ramesses II but appears alive on two colossi at Abu Simbel, helps us to hone down the date of the construction by a few years; however, he, too, failed to take into consideration any data regarding the war-scenes in the great columned court (first hall) at Abu Simbel or the number of princes (eight in all) represented in those scenes. ${ }^{8}$

Despite the fact that additional information regarding the date of the construction of the main temple at Abu Simbel has not been forthcoming, there are many reasons for advocating a very early date. Indeed, a case can be made for a date within the first decade of Ramesses' reign for the excavation of the great columned hall, as well as its carving and decoration, solely from these scenes and inscriptions. ${ }^{9}$ In particular, one can connect some of these war-scenes (excluding the Kadesh war-relief on the north wall) with a series of earlier wars in which Ramesses II fought while still crown prince (but not yet coregent) under his father Sethos I. Hence, a look at these scenes and decorations is in order (see fig. r).

In the first chamber that one enters at Abu Simbel after mounting the terrace to the east, a large columned hall surrounds the visitor. The walls of this hall are decorated with numerous war-scenes of Ramesses II. Nowhere here does he appear as a god. Indeed, as Habachi has indicated, the king had not yet been deified when the façade of the temple was being completed, ${ }^{10}$ and although one might note the fact that the king's

[^37]epithet appears as 'Ruler of the Two Lands' rather than 'Beloved of the Ruler of the Two Lands', inscribed on a certain statue within the first hall, the idea of deification can only be seen definitely for the first time on the wall dividing the first hall from the second,


Fig. r. Sketch of the temple of Abu Simbel; note that the reliefs are contained on the inner walls of the great columned hall
and in these cases the depiction of Ramesses as a god is secondary. Basically, on the doorway to the temple, on the façade, and on the war-scenes, Ramesses II is associated with Amen-Rē or with Réc-Harakhty. Only in the second hall, the vestibule, and the sanctuary does the king appear before his deified self. ${ }^{11}$ Habachi's conclusion that a change in the aspect of the Pharaoh had taken place during the decoration of the temple holds true. During the first part of his sole reign no depiction of the deified king was established. Only when the scene above the main doorway on the façade was to be

[^38]carved, as well as the scenes in the second hall, south, and the additional carving of the deified king on the west of the great columned hall (north and south of the doorway leading into the second hall), was the change effected.
Turning to the scenes themselves, we may make the following comments. On the east wall of the first hall two scenes of the king smiting the enemy can be seen. ${ }^{12}$ To the north of the doorway appears a traditional scene of the Pharaoh, followed by his $k a$, offering the defeated Libyan enemies to Rēc-Harakhty and Amen-Rēc. (The association of the northern half of the great columned hall with Réc-Harakhty and the southern half with Amen-Rē C has been already pointed out by Habachi. $)^{13}$ In addition, a row of nine of Ramesses' princesses is carved before the northern smiting scene: Bnt-rnt, B;kt-Mwt, Nfrt-iry, Mryt-Imn, Nbt-tizwy, 'Ist-nfrt, Hent-tizy, Wr $\overparen{n r}$, and Ndm-mwt. The southern scene has only eight princes: 'Imn-hr-hpřf, Rr-ms-s(w), P3-Rr-hr-wnm•f,
 return to the significance of the number and names of these princes later, it is important to note here that, outside of the Asian scene on the southern wall where only the first three princes are carved, nowhere else in the great columned hall do any other sons or daughters of Ramesses appear. Unfortunately, the scenes on the eastern wall, flanking the entrance to the temple, are unspecific, and probably for this reason scholars have generally been unwilling to connect the Libyan or Nubian reliefs with any preserved wars of Ramesses.

To the west-this time flanking the entrance corridor to the second hall-are two further traditional scenes. ${ }^{15}$ At the north the king is shown leading defeated Hittites to Rēc-Harakhty and 'Iw•s-rs•s (the figure of the deified Ramesses was clearly added to the scene subsequently). Unlike the texts on the eastern wall, the inscriptions accompanying this ritual act are more precise-Hatti is specifically mentioned twice and the captives are defeated Hittites. The inscription on the southern half of the west wall mentions Kush. The bound captives that are led to Amen-Rē ${ }^{\text {r and Mut (again, the }}$ figure of the deified Ramesses is a later addition) are southerners. The entire north wall is devoted to the battle of Kadesh and is connected, of course, with the scene on the northern half of the west wall. ${ }^{16}$ This scene presents a terminus a quo of Year 5 for the carving of these reliefs, whereas the others so far covered cannot be dated simply on the basis of Ramesses II's career as sole Pharaoh. Finally, to the south are three scenes of warfare in which Ramesses appears. On the south wall, on the extreme east side, there is a rather well-carved scene of the Pharaoh fighting somewhere in Asia. ${ }^{17}$ Ramesses is

[^39]shown advancing upon a typical Syrian or Palestinian city with its high walls, battlements, and inner citadel all depicted. In addition, the king is followed by three sons${ }^{\prime} m n-h h r-h p \check{s} \cdot f, R c-m s-s(w)$, and $P 3-R c-h r-w n m \cdot f$. The inscription does not mention the ethnic identity of his opponent although there is an interesting epithet of the king'Who tramples the enemies upon their mountains; who enters into their valleys like locusts'. The artist has also depicted the chief of the city, one hand palm forward and the other hand grasping an unlit brazier ready for a common Canaanite ritual. ${ }^{18}$ Additional elements in this war-scene that should be stressed are the soldiers on the battlefield being transfixed by arrows, killed, or else suing the Pharaoh for peace. An Asiatic enemy outside of the city flees to the left from the charging Ramesses II, and his cattle run before him. In all, even though it is impossible to specify exactly where this city was located (inasmuch as no designation of either the town or the territory is written), there is little doubt that this war-scene should be connected with a campaign in Asia, possibly Syria itself.

To the west of the Asiatic scene is another smiting-relief. This time it is the Libyans who are the enemy. ${ }^{19}$ Ramesses II is carved trampling upon one Libyan, ready for the coup de grâce against a second. The texts surrounding the scene refer to Asiatics as well as Libyan enemies ( $h_{3} s w t n w m h t y, H_{3} r w,{ }_{\varsigma} m w$, and Rt $n w$ ), Nubians, and the Shasu. The text states that Ramesses transported the Nubians to the north and the Asiatics to the south, as well as the Shasu to the west and the Libyans to the hilltops $(\underline{t s t})$, probably indicating the common practice of the New Kingdom Pharaohs of moving captives to various sites for corvée labour or for military service. ${ }^{20}$

Finally, the third and last scene on the south wall depicts a Nubian campaign. ${ }^{21}$ In particular, Ramesses is sculpted riding back to Egypt with captive Nubians before him. The enemy are excellently drawn with their large ear-rings and kinky hair. Below the monarch's horse, $N h t-m-W / s t$, is his pet lion which advances parallel to the chariot of the king with its mouth open and front legs stretching upwards. The accompanying inscriptions once again do not reveal a great deal: Nhsyw-Nubians are mentioned, but so is $R \underline{t} n w$.

These are the only war-reliefs of Ramesses II at Abu Simbel, and, it should be stressed, they occur in the earlier carved portion of the temple, the great columned hall. The following separate wars have been noted: (1) Asiatic, (2) Libyan, (3) Nubian, and (4) Hittite. I see no reason automatically to consider the first three to be universalistic scenes, or reliefs of an unhistorical nature (i.e. 'generalized' depictions of the Pharaoh's

[^40]eternal victory over his foes). ${ }^{22}$ In the same manner, I cannot connect the Asiatic scene on the south wall with the Hittite warfare depicted on the north wall, as Wreszinski has done. ${ }^{23}$ In essence, the former war is in no way linked with Hittites, and the known facts concerning Ramesses' Kadesh campaign would predicate that the Egyptian king met with resistance at Kadesh and nowhere else in his fifth regnal year. In addition, the


Fig. 2
mention of the three princes of Ramesses in the Asia scene does not reflect the number of sons who are known to have been alive-thirteen, in particular. ${ }^{24}$ (And by his eighth regnal year the number of his sons had risen to eighteen.) ${ }^{25}$ Finally, the Asiatic scene is clearly out of place if it is linked with the Kadesh reliefs at Abu Simbel. In all, the temple of Abu Simbel preserves a series of wars in which the king Ramesses is claimed to have participated. Additional data regarding those wars will have to be found n another temple.
At Beit el-Wali, a temple begun by Ramesses close to the end of the reign of his father, and certainly sculpted during the brief coregency of Sethos and himself, at

[^41]least three, if not four, separate wars are recorded. ${ }^{26}$ In particular, the young Ramesses had commissioned on the walls of that temple war-scenes depicting himself in Nubia, Asia, against a Libyan, and against the Shasu, all of which link up rather well with the corresponding scenes on the south wall at Abu Simbel (see fig. 2). Scenes 8 and 9 on fig. 2 refer to a southern conflict which must have taken place during the reign of Sethos, but one wherein the aged king did not personally participate. Sethos' Nubian war occurred in his eighth regnal year and was specifically directed against the kingdom of Irem. ${ }^{27}$ After reaching the area south of the Third Cataract, the Egyptian army (with Ramesses at its head) went inland to the western desert in order to destroy a series of the enemy's wells. The two main stelae which narrate this war do not state that Sethos went with his army. Instead, the Pharaoh appears to have stayed at home. Ramesses recorded this campaign on his temple at Beit el-Wali, wherein the young man is depicted marching against the Nubians, in one case accompanied by his fourth son, $H \mathrm{r}-m-W_{3} s t$, as well as his first son and heir, 'Imn-her-wnm•f ( $\left.={ }^{\prime} I m n-h h r-h p \check{c} \cdot f\right) .{ }^{28}$ The relief of this fighting is very well carved-the enemy are shown in full confusion, and many are about to be crushed by the Pharaoh's chariot. Others to the left of the king flee to their settlements, and at the extreme left weeping Nubians can be seen at home. Scene 9 shows a reception of the Nubian tribute from this war. The crown prince and heir, 'Imn-hr-wnm•f, again appears, as does the viceroy of Kush, ${ }^{1} m n-m-i p t$ (who died not long after this war). ${ }^{29}$ Again, I will quickly pass over this interesting scene, save to remark that the Egyptian artists have performed an excellent job of detail and execution with the various animals and products from Nubia. Monkeys, leopards, gazelles, cattle, lions, and racehounds are shown being led into the presence of the viceroy and the crown prince, who in turn present necklaces and animal skins to Ramesses. Three additional sons of Ramesses II are carved in the bottom of this scene, thereby making a grand total of four, undoubtedly the first four sons of Ramesses.

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## ANTHONY J. SPALINGER

Scenes II and i2 at Beit el-Wali are a bit more general, yet they, too, can be equated with Ramesses' war-reliefs on the southern wall at Abu Simbel. Scene 12 depicts a superhuman Ramesses with one of his sons attacking a Syrian fortress. The locality is not named (as at Abu Simbel) but many of the poses of the enemy are identical to the Asiatic scene at Abu Simbel. Scene II, now fragmentary, appears to be connected with the same Asiatic campaign. There, bound Semites are carried back to Ramesses and the king himself holds three of them ready for slaughter.

Scene 13 at Beit el-Wali records a Shasu-campaign of Ramesses. Although it does not appear at Abu Simbel, it is important to note that it can be connected to Sethos I's first campaign of victory in the latter's opening year as Pharaoh. At Karnak, on the outer wall of the hypostyle court, Sethos recorded this campaign in the first register on the east side, and Ramesses later had himself inserted into the warfare. ${ }^{30}$ Hence, the Beit el-Wali relief is to be associated with a campaign of Sethos I.

Scene 14 at Beit el-Wali records a Libyan war in which Ramesses places himself as the main participant. Again, at Karnak Sethos records a Libyan war (the middle register of the outer wall of the hypostyle court) in which Ramesses later had himself (plus name and titles) inserted. ${ }^{31}$ Therefore, the same reasoning employed with respect to the Shasu-warfare can be employed for the Libyan campaign, namely, the Karnak warscenes of Sethos can be associated with war-reliefs of Ramesses. Of course, the crown prince (and soon-to-be coregent) places himself as the protagonist in these battles, thereby ignoring his father. In scene 15, the final reliefs at Beit el-Wali, Ramesses and his oldest son 'Imn-hr-wnm•f are carved in a reception scene. The enemy is Asiatic, and it may be possible to connect this scene with the other Asiatic reliefs in Beit el-Wali. (However, in so far as some of the reliefs at Karnak are missing, one can also maintain that scene 15 refers to Ramesses' participation in an Asiatic war other than the first campaign of Sethos; the missing reliefs in register III and those around the cornice on the west side of Karnak (see fig. 3) may very well have recorded a war into which Ramesses later had himself inserted. ${ }^{32}$ The king is seated and underfoot is his pet lion. To the right are the Asiatics, bound and being led by the crown prince.

On another occasion I have dealt with the historical evidence from Beit el-Wali and its connection with the Karnak war-scenes of Sethos I. ${ }^{33}$ The following brief comments are necessary here. At Beit el-Wali Ramesses is connected with three and possibly four separate wars, all of which can be connected with the military campaigns of his father at Karnak. Hence, the reliefs at Beit el-Wali must not be viewed as ahistorical but rather as witnesses for the early participation of Ramesses in the victories of his father. When the temple was being carved, Ramesses was already coregent with Sethos-hence, his role in those reliefs is one of Pharaoh. However, in so far as Sethos ceased his campaign-

[^43]ing by the close of his eighth regnal year (the Nubian Campaign against Irem), the Beit el-Wali scenes refer to events which took place at the latest in Year 8 of Sethos I. ${ }^{34}$ Sethos' campaign against the Shasu in his first regnal year is to be linked with a similar scene at Beit el-Wali. Similarly, those reliefs of Asiatic warfare must be connected either to that campaign (wherein Sethos reached the Lebanon), or else a later Asiatic


Fig. 3. Plan of Karnak war-monument of Sethos I
war. The Libyan relief at Beit el-Wali is, as I have mentioned previously, definitely to be seen as Ramesses' own role in that campaign, which was organized by Sethos. Finally, the reliefs of Nubian warfare at Beit el-Wali must be connected with the inscriptions of Sethos that describe this war. (The Nubian war of Sethos was not recorded at Karnak inasmuch as these reliefs were completed prior to that campaign.) In sum, the Beit el-Wali temple, which was begun close to the end of Sethos I's lifetime but during his coregency with Ramesses, only records the latter's participation. Abu Simbel, which I would view as a temple begun at the opening of Ramesses' reign as sole Pharaoh, must be placed chronologically very soon after Beit el-Wali.

Additional data from the Beit el-Wali temple of Ramesses can now be marshalled. The participation of Ramesses' four sons has already been noted, although only two are named-Imn-hr-wnm•f and $H \mathrm{H}-m$-Wist. Significantly, as Gomàa, among others, has seen, it is only at Beit el-Wali that the former prince is called by this name: he is usually referred to as $\operatorname{Imn}$ - $h r$ - $h p r\left\ulcorner\cdot f .{ }^{35}\right.$ At Abu Simbel, the Asiatic scene on the south wall depicts three princes: ' $1 m n-h r-h p r \cdot f, R_{r-m s-s}(w)$, and $P j-R r-h r-w n m \cdot f$, the three eldest sons of Ramesses II. Finally, the viceroy of Kush 'Imn-m-ipt is named (and carved) at Beit el-Wali. He was soon replaced by 'Izny, probably in Sethos' tenth regnal year. ${ }^{36}$ The latter individual is connected with Abu Simbel on a rock stela north of the smaller

[^44]temple. Significantly, 'Iwny's stela contains the writing of the prenomen of Ramesses that was common from the end of his first regnal year on, as well as the early spelling of his nomen: $R(-m s-s(w)$ (see p. 96 below). 'Iwny himself probably died soon after the first year of Ramesses as sole ruler, being replaced by the vizier $H k j$-nht, the latter being also connected with the early reign of Ramesses and also known from Abu Simbel. ${ }^{37}$

At any rate, if it is clear that the war-scenes at Beit el-Wali do reflect on the military career of Ramesses as crown prince under his father Sethos I, then the question arises as to the war-scenes at Abu Simbel. It has been tacitly assumed at the outset of this discussion that those reliefs are not to be considered as either ahistorical representations of the defeat of Egypt's eternal enemies or idealized tableaux of military warfare. This position can now be specifically justified. The Libyan-war scene on the south wall of the columned hall at Abu Simbel corresponds to the same event recorded in scene 14 at Beit el-Wali and the Libyan-war register of Sethos I at Karnak. The young Ramesses, still crown prince, was involved in that campaign-but whether as leader of the Egyptian army or general with his father, it is impossible to tell. In a similar fashion, the Asiatic-war relief on the same southern wall at Abu Simbel is paralleled by the similar reliefs at Beit el-Wali (scenes 15 and 12). Indeed, the mention of the Shasu in the Libyan relief at Abu Simbel might very well be connected with Sethos' early campaign against them in which Ramesses was also present. On that occasion, the Egyptians reached well beyond the territory of Palestine, and eventually received the submission of the chiefs of Lebanon. Hence, the Asiatic-war scenes at Abu Simbel and at Beit el-Wali may refer to that additional warfare in Sethos' opening regnal year (with the young Ramesses present) rather than additional campaigning at a later date. Finally, the Nubian scenes at Beit el-Wali and Abu Simbel link up with Sethos' campaign there in his eighth regnal year. This war did not witness his active participation and undoubtedly the ageing Pharaoh had left the strenuous activity of the conduct of military operations solely in the hands of his quickly maturing eldest son, Ramesses.

Given the above data for the war-scenes in the columned hall at Abu Simbel, we can now turn to other data of a more prosopographic sort. In the procession of the king's sons at this temple only the first eight of Ramesses' sons are present. Except for the Beit el-Wali temple, which was begun during the brief coregency of Ramesses and his father Sethos I, no other edifice presents so small a number. (The temple of Derr also lists eight, but this problem will be discussed below. ${ }^{38}$ There is no reason to take the number of princes carved and named as fictitious, as Gomàa does, for, in fact, Ramesses was at least in his late teens when he was forced to defend himself at Kadesh, having been general of the army under Sethos I in his tenth year of age. ${ }^{39}$ It should be stressed

[^45]that this procession-scene at Abu Simbel is below the Libyan smiting-relief but not connected to it, unlike the Asiatic-war scene in which the first three princes of Ramesses appear involved in the fighting. Given the fact that in his fifth regnal year the seventh, ninth, and twelfth princes appear in the battle ( $K R I$ II, 141, $9-1 \mathrm{I}$ ) and that on another occasion the first eleven as well as the thirteenth princes appear ( $K R I$ II, 144-5: the presentation of the captives after the Kadesh campaign-probably in Year 5 or 6), the Abu Simbel procession would appear to reflect a time prior to the Kadesh campaign. One may argue that the list at Abu Simbel (and at Derr) is 'short merely because they are in each case restricted to the end wall of the hall in which they appear'. ${ }^{40}$ However, this argument must take into account the increasing number of king's sons who appear in later lists and the concomitant higher dating of the accompanying reliefs. Thus in Year 8, as was mentioned previously, eighteen sons of Ramesses are known to have participated in his military activity in the north (the Ramesseum scenes). Finally, in the undated war-scenes of Ramesses fighting in Transjordan, probably to be dated to his eleventh regnal year at the earliest, only his first, third, fifth, and thirteenth sons appear. ${ }^{41}$ Hence, the procession-list at Abu Simbel does seem to indicate a date within Ramesses' first five years as sole Pharaoh for some of the carving of the first columned hall. Naturally, the Kadesh reliefs on the northern wall and the presentation of Hittite captives to Rē $\overline{-}$-Harakhty and I $I w \cdot s-c ̧ \cdot s$ indicate a clear terminus a quo of Year 5. Note, however, that no additional princes of Ramesses were added to the original list.

If we now turn from the temple of Abu Simbel for a moment, some remarks regarding the temple of Derr are in order. In this temple only eight princes are named ${ }^{42}$-the first eight sons of Ramesses. Unfortunately, the war-scenes themselves are in a very fragmentary state. As in Abu Simbel, these reliefs are located in the first hall of the temple, specifically, on the southern and northern walls of that chamber. The inner chambers again parallel Abu Simbel by presenting only scenes of a religious nature. The north wall of the first hall is in an extremely battered condition, although it appears that a victory over a northern enemy is recorded. ${ }^{43}$ Although the precise ethnic identity of the foe is very difficult to determine, they are definitely not Nubian (as on the south wall of Derr), nor are they Hittite. A son or more than one son of Ramesses might be represented in this relief, although the texts accompanying the reliefs are not detailed enough to make such an identification secure. ${ }^{44}$ It should be stressed that these

[^46]reliefs in the first court also parallel those at Abu Simbel with respect to the deities involved themselves. As Habachi has indicated, the northern wall shows the king before Rēc-Harakhty in the act of smiting the enemy; the southern wall depicts a similar scene of the Pharaoh smiting his foes before Amen-Rēc. ${ }^{45}$ Again, in the inner chambers the deified Ramesses II is depicted being worshipped by the Pharaoh.

The east wall of the first columned court at Derr shows two reliefs of the ritual slaying of the enemy. ${ }^{46}$ In both cases four enemies are presented-at least one Asiatic is carved and two Nubians also appear. It is possible that a Hittite was present, although this is not clear. Finally, there is a representation of an unknown people, whom Blackman was at pains to identify. (The two smiting-scenes are almost identical but the four bound enemies in each case do not appear to match up precisely.)

The south wall of the temple of Derr depicts a battle of Ramesses against the Nubians. ${ }^{47}$ The detail and accuracy of these scenes is quite high, despite the sorry state of preservation. The king is shown in his chariot twice galloping into the fray while the Nubians flee home to their families. The lower register shows the crown princes (three of them) leading the defeated enemy into the presence of the conquering Pharaoh. The Negroes are clad in their typical leopard skins and many of them are drawn with a distinct air of realism. Noteworthy is the fact that the entire south wall is covered by scenes of Nubian warfare (unlike those at Abu Simbel, but parallel to those at Beit el-Wali). Moreover, there appears no evidence of the Kadesh campaign either on the north wall or the east walls flanking the doorway into the inner chamber.

The reliefs at Derr are definitely to be dated after those at Abu Simbel. As at the west gate of Amarah West (see below), the nomen of Ramesses is written in its later form of $R c-m s-s w$ and not $R c-m s-s(w)$, as at Beit el-Wali or Abu Simbel. Following Kitchen, ${ }^{48}$ I should like to link the Nubian reliefs at Derr with those at Amarah West, and consider Ramesses II's campaigns to the south to reflect a later war of his against Irem and not his earlier one while still crown prince under Sethos I. Then, too, the lack of any interest shown in the famous Kadesh campaign of Ramesses' fifth year (as well as the later warfare to the north) should predicate a date somewhat removed from that time. In all, unless one wishes to consider these scenes to be of a universalistic genre (a position which always requires proof), I believe that the temple of Derr was inscribed after Ramesses' Irem war, and after he had finished his campaigns in Syria and Transjordan.

The temple of Aksha, however, presents a different situation. ${ }^{49}$ Again it is in the pillared forecourt that the military reliefs were carved. The nomen is almost always in its earlier form, $R \subset-m s-s(w)$. As in the temple of Derr (and Abu Simbel as well as Beit

45 Op. cit. above, n. 42.
${ }^{46}$ Blackman, The Temple of Derr, 8-14 and pls. vi-xii; note his comments on p. 12.
47 Ibid. 17-22 and pls. xiii-xxi; the scene is also reproduced in Wreszinski, Atlas, II, pl. 186 a.
48 'Historical observations on Ramesside Nubia', 220-1.
${ }^{49}$ Kitchen, ibid., and the preliminary reports of Rosenvasser, Kush 12 (1964), 96-101, with Vercoutter, 'Preliminary report of the excavations at Aksha by the Franco-Argentine Archaeological Expedition, 196r', Kush 10 (1962), rior-16. Rosenvasser has also published a few of the objects found there in 'The stela Aksha 505 and the cult of Ramesses II as a god in the army', Revista del Instituto de Historia Antigua Oriental 1 (1972), 99-113. The one later writing in Sayce, Rec. Trav. 17 (1895), $163=K R I$ II, 210, 15), may be inaccurate.
el-Wali), the south wall of this hall preserves a record of a Nubian campaign. ${ }^{50}$ At the south-west corner of the forecourt the king is depicted slaying two Nubians before his patron deity Amūn. The northern wall is unfortunately totally lost and the expected scenes of Ramesses fighting Asiatic foes must be left to speculation. The geographical lists at Aksha seem to be paralleled by those at Amarah West, a situation possibly indicating a date for the Aksha temple close to that of the former building. ${ }^{51}$ Nevertheless, an early date for the temple is supported by the following criteria: ${ }^{52}$ ( I ) the nomen of Ramesses is $R r-m s-s(w) ;(2)$ on the gate to the temple is preserved part of the text of the Kubban Stela which is itself dated to Regnal Year 3 of Ramesses II; (3) the viceroy $H \neq 3-n h t$ had erected for himself a stela at Aksha and he is associated with the first decade of Ramesses-indeed, Reisner was probably correct to view him as the viceroy whose title appears in the Kubban Stela; ${ }^{53}$ and (4) it is clear that Sethos I had begun work at Aksha, as the recent Franco-Argentine expedition to the site proved. Therefore, following the conclusions of Vercoutter and Rosenvasser, one can maintain that $H k j$-nht was associated with Ramesses at Aksha as at Abu Simbel and at Kubban, i.e., during the first fifteen years of the Pharaoh. Unfortunately, the precise span of time wherein $H k_{3}-n h t$ exercised his office of viceroy of Kush is not at all clear. Leaving a discussion of this problem to a later section of this paper, the best that one can maintain is that he was followed by a certain $P 3$-sr, who in turn was succeeded by the viceroy $H w y$, for the last of whom a date around Year 34 of Ramesses is secure. ${ }^{54}$

Thus, even though the temple of Aksha does not present to the Egyptologist any clear time of construction, a date subsequent to that of the temple of Abu Simbel is in order. I would maintain that the lost scenes on the south wall as well as those on the north wall were probably similar to the reliefs at Abu Simbel. Ramesses' Nubian campaign recorded at Aksha would therefore have to reflect his earlier Irem war (while Sethos was still alive) and not that undertaken in his second decade as sole Pharaoh. The deification of Ramesses in the second hall at Aksha also parallels a similar development at Abu Simbel, but again no precise time for this change can be determined.

The criterion of the spelling of Ramesses II's nomen has been referred to above. Its use as a means of determining the date of an inscription (or relief) can now be argued in detail. ${ }^{55}$ Pending Kitchen's definitive discussion on the subject, the following dated inscriptions can be marshalled as evidence:

[^47]
## ANTHONY J. SPALINGER

Year Text
I Gîza: KRI ir, 337
I Abydos Dedicatory Inscription: op. cit. 323-36
2 Aswan Stela: op. cit. 334-5
3 Kubban Stela and parallel from Aksha: op. cit. 353-60
4 Nahr el-Kelb Stela: op. cit. I
5 Kadesh War-reliefs and inscriptions: op. cit. 3-124
8 Manshiyet es-Sadr Stela: op. cit. 360-2
9 Deir el-Medîna Stela: op. cit. 362-3
18 Beth Shan Stela: op. cit. 150-1
Hittite Treaty: op. cit. 225-32
Mnevis Bull Burial: op. cit. 363-5
30
Serapeum Apis Bull Burial: op. cit. 369-7I
30 First Jubilee: op. cit. 377-8 $R r-m s-s w$
33/34 Second Jubilee: op. cit. 384-5
34 First Hittite Marriage: op. cit. 233-55 . 233

Spelling of name
$R c-m s-s(w)$
$R c-m s-s(w)$
$R c-m s-s(w)$
$R r-m s-s(w)$
$R c-m s-s(w)$
$R c-m s-s(w)$
$R r-m s-s w$

Probably to be read as
$R c-m s-s(w)^{*}$
$R r-m s-s(w)$ and $R c-m s-s w$
$R \mathrm{r}-\mathrm{ms}$-sw
Re-ms-sw
$R c-m s-s w$

R $c-m s-s w$
$R r-m s$-sw

* See also L. Habachi, 'Khatâ'na-Qantir: Importance', $A S A E 52$ (1954) 481 : on a well of Ramesses II.

The following two references to Ramesses' wars in Asia also contain the earlier nomen: ${ }^{56}$

| Year | Text | Spelling of name |
| :---: | :---: | :---: |
| Probably between Years 6 and ro | Undated war-scenes of Ramesses II: $K R I$ II, $152-9$ and 170-6; they include the Tunip battle and the Dapur campaign | $R \mathrm{r}-\mathrm{ms}-s(w)$ |
| 11-15(?) | Transjordan campaign: op. cit. r79-83 | $R r-m s-s(w)$ |

to that of Sethos I. For the career of this vizier, who is known to have lived at least up to Ramesses' twentyfirst regnal year (Edel, $S A K$ I (1974), 131-5 and now 'Der Brief des ägyptischen Wesirs Pašijara an den Hethiterkönig Hattušili und verwandte Keilschriftbriefe', $N A W G 1978$ no. 4), see W. Helck, Zur Verwaltung des Mittleren und Neuen Reiches (Leiden-Köhn, 1958), 3 11-15. Texts now in KRI iII, 1-36.
${ }^{56}$ For these wars see Kitchen, $\mathfrak{f E A} 59$ (1964), 47-70, and now the comments of Schulman, fournal of the Society for the Study of Egyptian Antiquities 8(1978), 116 with full references. Schulman would place these wars after Year io of Ramesses. In the light of Kitchen's data concerning Ramesses' Irem war-to be put between Years 15 and 20-I would put a terminus of Year 15 (or earlier) for the Asiatic campaigning of the Pharaoh. Note that the writing of the nomen of Ramesses as $R r-m s-s(w)$ on these reliefs tends also to lower the date.

It is clear from the data listed above that by Ramesses II's twenty-first regnal year the change from the spelling $R c-m s-s(w)$ to $R c-m s-s w$ was complete. In fact, such a switch was going on in his eighteenth year, as is witnessed by the two spellings on the Beth Shan Stela. Except for the Manshiyet es-Sadr Stela (dated to Year 8) the change occurred during the second half of Ramesses' second decade as sole Pharaoh. Hence, this dating criterion is useful for a relative approximation of the reliefs and inscriptions which we have encountered. The temples of Beit el-Wali, Abu Simbel (the first hall under consideration), and Aksha refer to the time when the first spelling was in vogue. The temple of Derr, however, was carved at a time when the later spelling was employed. The temple of Amarah West, which will be discussed in more detail below, has both spellings.

A final means of dating the various temples under consideration, especially that of Abu Simbel, can be drawn from the references to the viceroys of Kush who were associated with them. In chronological order, the following five viceroys are known from Ramesses II's reign: ${ }^{57}$
(1) Iwny. He lived at the end of the lifetime of Sethos I, having replaced Imn-m-ipt during the brief coregency of Sethos I and Ramesses II. He is associated with Ramesses II at Abu Simbel. Spelling of Ramesses' nomen is $R r-m s-s(w)$. The longer prenomen of Ramesses is used and a date close to the end of Year 1 of Ramesses II or the opening of Year 2 is in order.
(2) Hk3-nht. His floruit was in the opening years of Ramesses II. He is always associated with Ramesses II's early spelling of the nomen, $R^{〔}-m s-s(w)$. He is known from Amada, Kubban (but not the Kubban Stela), Abu Simbel (rock stela south of the great temple), Abri, Amarah East, and Amarah West. He was probably the viceroy under whom Ramesses commissioned the wellexcavation as recounted on the Kubban Stela and its duplicate from Aksha. A date for his term of office within the first decade of Ramesses' reign seems certain.
(3) $P_{3}$-sr II. He is also known from Abu Simbel on two rock stelae. In addition, a statue found at Abu Simbel and other material testify to his term of office. The nomen of Ramesses II is always written as $R r-m s-s(w)$ when associated with his name. In P. Koller he is connected with Nubian tribute from the land of Irem, a fact that makes his connection with Ramesses' Irem war, which occurred in his second decade, relatively certain. A time of office in the second decade, if not the early third, of Ramesses II also appears certain.
${ }^{57}$ For ${ }^{T} w n y$ and $H k s-n h t$ see above, $n \mathrm{n} .36$ and 37 respectively. Add to the bibliography of $H k 3-n h t \mathrm{M}$. Valloggia, Recherche sur les 'messagers' (wpwtyw) dans les sources égyptiennes profanes (Geneva-Paris, 1976), 127-8 (nos. 72 and 73). P3-sr II : Reisner, FEA 6 (1920), 41, and Helck, $S A K 3$ (1975), 102-5 and n. 49, p. 105, in particular. The texts are now in $K R I$ III, 74-77, 12. Hwy: Habachi, 'The graffiti and work of the viceroys of Kush in the region of Aswan', Kush 5 (1957), 27-30, and 'Four objects belonging to viceroys of Kush', Kush 9 (1961), 216-25. For the reference to the Hittite princess see Berlin 17332: fig. 5 on p. 220 in the last article. Note also Valloggia, Recherche sur les 'messagers', 128-9 (nos. 74 and 75). On pp. 129-30 (no. 76) he argues strongly for Louvre E ${ }_{\text {I }} 770$ [bis] being an additional object of the viceroy $H w y$. The texts are now in $K R I$ iII, 77, 13-80, 1. Stizw: Helck, $\operatorname{SAK}_{3}$ (1975), $85-112$, is the best detailed study of this official: see pp. 103-12 in particular, with a list of his objects on pp. 111 1-12. Additional studies of import are Reisner, $\mathcal{F E A}$ 6(1920), 41-5; Kitchen, 'The great biographical stela of Setau, viceroy of Nubia', Orientalia Lovaniensia Periodica $6 / 7$ (1975/ 1976), 295-302; Habachi, 'Setau, the famous viceroy of Ramesses II and his career', Cahiers d'histoire égyptienne $10(1967), 51-68$; Schulman, 'Setau at Memphis', Ұournal of the Society for the Study of Egyptian Antiquities 8 (1978), 42-5, with a complete bibliography. This individual is also discussed by Valloggia, Recherche sur les 'messagers', 130-1 (no. 77). The texts are now in $K R I$ iII, 80, 2-III, plus Wahbah, 'Two Ramesside blocks discovered on Philae Island', MDAIK 34 (1978), 181-2 and pl. 25 b, and Davies, ${ }^{\prime} E A 65$ (1979), 188.
(4) Hwy. He is connected with Ramesses II's spelling of his nomen as $R r-m s-s w . \mathrm{He}^{\text {is associated }}$ with the first Hittite marriage of Ramesses and a date for his floruit around Year 34 is clear. The beginning of his term of office cannot be determined with precision, yet a time from the middle of the third decade to one or two years after Year 34 is reasonable.
(5) Stiw. He is definitely dated to Year 38 of Ramesses II. The spelling of the nomen is the later one, and the additional epithets associated with his king's name place a floruit for Stsw after Year 34 . The end of his life cannot be determined with any precision.

Although the spelling of Ramesses II's nomen is not a sharp means of establishing relative chronology for undated reliefs and inscriptions from his reign, Kitchen's conclusion that by Year $21 R c-m s-s w$ was standard, is correct; ${ }^{58} \mathrm{so}$, too, is our original hypothesis regarding the early carving for the first hall at Abu Simbel, and, indeed, the date of the temple of Aksha. Moreover, the careers of the viceroys of Kush during the first four decades of Ramesses' reign fit well into Kitchen's arguments. It is thus clear that the temple of Derr must have been carved late in the second decade at the earliest and therefore the Nubian scenes on the southern wall may be connected to a second southern war lead by Ramesses. In view of Kitchen's recent discussion of this campaign those reliefs at Derr may correspond to a series of Nubian scenes at Amarah West, which were on a section of the buildings definitely sculpted in the second decade of Ramesses II. ${ }^{59}$ It must be noted that an inscription north of the temple of Derr, recently recopied by Habachi, shows the early spelling $R r-m s-s(w) .{ }^{60}$ This text seems to refer to a viceroy of Kush whose name is not preserved. Following Habachi, if the author of the inscription was in some way connected with the temple of Derr, then one may conclude that the cutting of the temple of Derr out of the rock was begun in the second decade of Ramesses, but slightly before the change from $R c-m s-s(w)$ to $R c-m s-s w$ was effected. ${ }^{61}$

Kitchen, who has placed Ramesses' second Irem war to Years ${ }_{5} 5^{-20}$ of his reign, is definitely correct. His position agrees with Fairman's earlier argument that Level Three at Amarah West, which is contemporary with Ramesses II, is to be dated to the first half of his reign. ${ }^{62}$ In particular, Fairman noted that the reliefs of Ramesses' Irem war at Amarah West were located in the passageway of the west gate of the town and not in the temple proper. (Note that the spelling of Ramesses II's nomen in the temple varies.) Hence, a date for those reliefs and, therefore, for the war itself is later than the construction and decoration of the temple of Amarah West. Now, in so far as the spelling of Ramesses' nomen in this inscription of the Irem war is $R \subset-m s-s w$, a date for the war in the second half of Ramesses' second decade is quite reasonable. Therefore,

[^48]the reliefs at Derr and the west gate at Amarah West referring to a Nubian war are to be connected, but not with the Nubian scenes at Abu Simbel, Aksha, or Beit el-Wali.

If we have travelled a great deal in connection with the dating of the reliefs in the columned hall at Abu Simbel, this has been a result of the intricate problems associated with that edifice. In so far as none of those scenes are dated, it was necessary to deal with other war-reliefs of Ramesses II in Nubia. Whereas Beit el-Wali and, later, Abu Simbel were carved in the opening years of Ramesses II's reign (as regent and subsequently as Pharaoh in his own right), those of Amarah West and Derr were not. First Iwny and then $H \underset{i}{ } 3-n h t$ were associated with Abu Simbel, undoubtedly while the carving was still continuing. The latter viceroy is also connected with the temple of Amarah West. $P_{3}$-sr II, also known from Abu Simbel, probably replaced the latter individual at the latest in the middle of Ramesses' second decade. In so far as he is connected with a list of Nubian tribute in P. Koller, the products of which are said to have come from Irem, I see no reason not to link him with Ramesses' campaign there in the second half of his second decade. ${ }^{63}$ During this time the temple of Derr was completed and carved, and scenes of the Irem warfare may be found on the southern wall of the first hall. The Aksha Temple, despite the miserable condition of its walls, must be dated to the first ten or fifteen years of Ramesses' reign owing to the earlier spelling of the nomen, the carving of the Kubban parallel, and the presence of the viceroy $H k ;-n h t$. Ramesses was deified at Aksha, but such references do not appear in the first hall. At any rate, a date after the carving of the first hall at Abu Simbel must hold for this building.

With respect to Ramesses' deification, given the above data, I would place it early in his reign. Following the evidence from the temple of Aksha, a rough date of Year 15 or slightly earlier seems reasonable. A terminus a quo of Year 5 (the date of the Kadesh campaign and reliefs at Abu Simbel) is definite. None the less, any further limitation of the time that this event took place (e.g. after the Asiatic campaigning) must be determined from other data. ${ }^{64}$

[^49]
## Postscript

The texts of the Nubian temples have been recently published by Kitchen in $K R I$ 1I, 195-222 (war scenes), and 716-77 (scenes of a non-military nature). Note that except for Sayce's reading (see n. 49), which cannot be verified, the Aksha temple preserves the earlier spelling of Ramesses II's nomen.

# TERMS OF RELATIONSHIP AT DEIR EL-MEDÎNA 

By M. L. BIERBRIER

It is well known that the Ancient Egyptians had few words to express family relationships. The basic vocabulary consisted of father ( $i t$ ), mother ( $m w t$ ), son/daughter $(s 3 / s s t)$, brother/sister (sn/snt), husband (hsy), and wife ( $h m t$ ), although the term for sister was more often used to denote this last relationship. ${ }^{\text {I }}$ An expression for father-in-law/mother-in-law ( $s m / s m t$ ) is attested at infrequent intervals from the Old Kingdom down to the Late Period and Coptic times when it is more widely used, but it does not appear to have been employed at Deir el-Medîna. ${ }^{2}$ There, as elsewhere, extended relationships were usually expressed by compounds of the simpler elements such as it $n h m t \cdot f$ for father-in-law and $s n n m w t \cdot f$ for maternal uncle. However, it is probable that in some cases simple terms of relationship such as $i t$ or $s$ may mask a more complex relationship which is not expressed fully for reasons of space or custom. It is proposed in the following paragraphs to identify certain examples at Deir el-Medîna where these terms definitely cannot be taken at their literal meaning.

The word father ( $i t$ ) is elsewhere attested with the meaning of ancestor, and this interpretation may be present in Ostracon Geneva 12550 in which the workman Anherkhacu claims property which belonged to his it Anḥerkhacu, and which has already passed through the hands of three sons and one grandson of Anherkhacu the elder. ${ }^{\text {' The }}$ The text is dated to Year in (of Ramesses III), and the younger Anherkhacu can without doubt be identified with the future chief workman Anherkhacu son of the chief workman Hay, who is named in the Geneva text as one of the sons of Anherkhacu the elder. ${ }^{4}$ It is possible that $i t$ is here used merely as a short form of $i t n i t \cdot f$ or grandfather. A second instance of this use of $i t$ can be found on O. DeM. 317 verso where the scribe Nebnetjeru writes to his $i t$ the scribe Pay. The scribe or draughtsman Pay is well known and had three attested sons, Nebréc, (Pa)Rachotpe, and Pararemheb, but no Nebnetjeru. ${ }^{5}$ Cerný speculated that the term it was used as a token of affection rather than to indicate a blood relationship. ${ }^{6}$ In fact, Nebnetjeru is attested on O. DeM. 1204 line $\mathrm{x}+6$ where his name follows that of the scribe Pay and is in turn followed by the phrase $i t \cdot f s s{ }_{s} k d P 3-r c-[h t p(w)]$. It thus appears that Nebnetjeru was a son of Parachotpe and a grandson of the draughtsman Pay. The Pay named first in O. DeM.

[^50]5 For this family see $K R I$ I, 390-1, and L. Habachi, Tavole d'offerta are e bacili da libagione (Turin, 1977), 32-7.
${ }^{6}$ Cerny, op. cit. 211 .

1204 could be Nebnetjeru's grandfather or just possibly Pay the younger who was also a son of Parachotpe and thus a brother of Nebnetjeru. ${ }^{7}$

There is a clear case in Deir el-Medîna where $i t$ is used with the meaning of father-in-law. In Tomb 5 the magician Amenmose is described as the $i t$ of the workman Nefercabet, but other evidence from this tomb and from stelae clearly indicates that Nefercabet was the son of the workman Neferrenpet. ${ }^{8}$ Vandier tried to explain this anomaly by supposing that Amenmose was Nefercabet's paternal grandfather. ${ }^{9}$ However, in Tomb 5 Nefer Cabet's wife is named as Taese and her mother is given as Tenthanu. Now, in Tomb 9 of the magician Amenmose, his wife is named as Tenthanu and one of his daughters is Ese. ${ }^{10}$ There seems little reason to doubt that the Amenmoses are one and the same man and that he is the father-in-law or it $n h m t \cdot f$ of Nefercabet.

The meaning of $s 3$ or son can likewise be ambiguous as it is likely that it was used with the meaning of son-in-law in some cases. In Tomb io of Kasa the couple Ptaḥmose and Sheritrē ${ }^{\prime}$ are depicted next to Kasa and his wife, and Ptaḥmose is termed $s 3 \cdot f$, but elsewhere in the tomb Sheritrē (the same or another) appears as a daughter of Kasa. ${ }^{11}$ Ptahmose also appears on a stela in a list of sons of Kasa. ${ }^{12}$ However, a Ptaḥmose with wife Sheritrē is attested on a lintel and on a stela in Avignon as a son of the workman Hay and his wife Tatemhyt, who, as contemporaries of Kasa, are depicted in his tomb. ${ }^{13}$ It is unlikely that there were two contemporary Ptahmoses (the name is rare at Deir el-Medîna) both with wives named Sheritrēc. Ptaḥmose must be considered the son of Hay and the son-in-law of Kasa who is attested with a daughter Sheritrēc.

The use of sst as daughter-in-law is attested in several cases. On Turin stela 50076 Henutwedjbu is described as a daughter of the workman Pashed, but it is clear from the inscriptions in Tomb 250 that she was the wife of Pashed's eldest son Amenmose. ${ }^{14}$ The name is sufficiently rare for her to be identified with considerable probability as Henutwedjbu daughter of the workman Ra (weben, a contemporary of Pashed and Amenmose. ${ }^{15}$ Similarly, in Tomb 359 of Anherkhacu the names of two of his daughters Nebuemheb and Meritseger are the same as those of the wives of his sons Harmose and Kenna, and thus his daughters are in fact his daughters-in-law. ${ }^{16}$

The term $s 3$ could be used to express a quasi-parental relationship with no blood ties, such as that between pupil and teacher. The best example of this situation at Deir

[^51]el-Medîna is the scribe Kenherkhepeshef son of Panakht who described himself as a son of the scribe Ra (mose who was doubtless his teacher. ${ }^{17}$ A more intriguing relationship is that of the deputy Hay son of Amennakhte who also describes himself as a $S_{3}$ of the chief workman Hay. ${ }^{18}$ Cerný speculated that he was an adopted son of the chief workman Hay although the latter had sons of his own and no apparent reason to adopt another one. Perhaps he might have been a favoured son-in-law as the origin of the deputy's wife is unknown. However, the coincidence of names is not without interest as the younger Hay may have been named after the elder, more influential man. More would have to be known of the genealogical ramifications before it could be decided whether or not the concept of godparent flourished in Ancient Egypt.

There are certain cases at Deir el-Medîna where the term $s 3$ definitely does not mean son, but the true blood-relationship, if any, remains obscure. The most obvious example is the tomb of Anḥerkhacu (no. 359) in which he names as his sons the draughtsman Harmin, Seti, Nebamūn, Amenemḥeb, Amenpaḥa‘pi, and Pashed apart from his undoubted sons Harmose and Kenna. ${ }^{19}$ The draughtsman Harmin (who is once termed $s n$ in the tomb) is well known from graffiti as the son of Hori, and it is unlikely that there were two men of that name and status. ${ }^{20}$ It has recently been suggested that he was the son-in-law of Anherkhacu, but Harmin's wife Meramendua was the daughter of Bakenwerner and Meritseger, and thus cannot be identified with the Meramendua who appears in Tomb 359 in some relation to Anherkhacu. ${ }^{21}$ Similarly, the workman Seti, who is attested in the middle of the Twentieth Dynasty, is the son of the workman Amenemone, and actually appears with his father and Anherkhacu on Turin stela $50032 .{ }^{22}$ On that same stela appears Seti's son Kaempehtifmontu who is also described as a son of Anherkhacu in Tomb 359. If that is to be interpreted as grandson, then Seti at least could be a son-in-law of Anherkhacu, and this possibility is strengthened as Seti had another son named Anherkhacu. ${ }^{23}$ Two Nebamūns are attested in the mid-Twentieth Dynasty, one of whom was the son of Amenemone and brother of Seti, and the other a son of Weskhet. ${ }^{24}$ It is likely that one or the other is the Nebamūn of Tomb 359 and not an otherwise unattested son of Anherkhacu.

The 'son' Amenemheb is attested in Tomb 359 with his wife and his son Telmont. ${ }^{25}$ He is possibly identical with the workman Amenemheb attested in the mid-Twentieth Dynasty and certainly with the Amenemheb, son of Telmont, of a Year $2 .{ }^{26} \mathrm{He}$ may

[^52]also be identical with a fish-carrier Amenemheb, son of Tel, who is attested in Year 26 (of Ramesses III) and without filiation in Year 29 of the same reign. ${ }^{27}$ If so, he would probably have been promoted to workman when the gang was enlarged under Ramesses IV. His father Telmont can be identified with the workman of that name who flourished from Year 5 of Sethos II until at least Year 30 (of Ramesses III). ${ }^{28}$ Three Amenpahápis seem to be attested in the Twentieth Dynasty. The sons of 'Anakht and Reshpeteref are named on ostraca and a son of the workman Kenna appears on a relief in Zagreb. ${ }^{29}$ This last has been identified as a grandson of Anherkhacu and hence the 'son' in his tomb, but the date of the relief is not certain and there were several Kennas in the Twentieth Dynasty who could have fathered Amenpahacpi. ${ }^{30}$ Moreover, the attested wife of Kenna, son of Anherkharu, was Meritseger and not Tatiheru of the Zagreb relief. ${ }^{31}$ Still, Amenpaḥápi and Kenna both appear as sons of Anherkhacu on a doorjamb, and thus it is conceivable that Amenpaha'pi was indeed a genuine son or grandson of Anherkhacu. ${ }^{32}$ The name of the last doubtful son Pashed is too common to make a certain judgement, but no such son of Anherkhacu is elsewhere attested and the most prominent Pashed in the Twentieth Dynasty is the son of Hori. ${ }^{33}$ Thus, of the six sons discussed, four at least are not actual sons of Anherkhacu, and, of these, one (Seti) may be a son-in-law, and another (Harmin) is definitely not a son or son-in-law.

A similar problem of identification exists in the bandeau text in Tomb 2B in which there appears a list of what may be the sons of the chief workman Nekhemmut. ${ }^{34}$ Three of those named-Khons, Neferher, and Neferrenpet-are elsewhere attested as sons of Nekhemmut, but the other three-Hay, Amenwas, and Pamedunakht-are not. In view of the rarity of the name, it seems likely that Pamedunakht must be identified with Pamedunakht, son of Hay, who is attested as a contemporary of the chief workman Nekhemmut. ${ }^{35}$ The name of Hay is too common to make any other certain identification, but Amenwar is without doubt to be considered the same man as Amenwar, son of Hori, who is known from other documents of the period, and not, as in my earlier study, as a like-named grandson. ${ }^{36}$ It would appear none the less that there was some close connection between Amenwar and Nekhemmut since one of the sons of

[^53]the former was named Nekhemmut. ${ }^{37}$ It is tempting to suppose that Amenwar and possibly Pamedunakht were sons-in-law of Nekhemmut, but there exists another candidate for the dubious honour of being the father-in-law of the later tomb-robber Amenwac. In Tomb 267 of the deputy Hay one scene depicts his 'son' the draughtsman Amenwar with his wife Nebuiy and children Hay and Taynedjem. ${ }^{38}$ In view of the similarity in name and titles, Amenwar is probably the same man as the draughtsman Amenwaৎ, son of Hori, and might be considered a son-in-law of Hay the deputy. It should be noted that one of Amenwar's sons Pa canken later became deputy, but was disgraced with his father in the tomb-robbery scandal. ${ }^{39}$ It is of course possible that Amenwar had two wives, daughters of the chief workman Nekhemmut and the deputy Hay respectively, but there is no evidence for this at present.

The word $s n$ or brother can likewise have several meanings. It may sometimes simply denote members of the same generation without implying blood-ties, but lack of detailed genealogical knowledge may hide a situation in which an actual relationship does exist. In another study it has been shown that $s n$ can be used at this period to denote a brother-in-law. ${ }^{40}$ An example of this usage at Deir el-Medîna is the already cited Turin stela 50076 of the family of Pashed, son of Heḥnekhu, in the lower register of which appear the scribe of the Place of Truth Minmose, the workman Amenmose, his brother Heḥnekhu, his brother Khacemtri, and his brother Nakhtamūn. ${ }^{41}$ Amenmose and Hehnekhu are well attested sons of Pashed and appear in a draft of his will, but the parentage of Kha cemtri, son of Amennakhte, and Nakhtamūn, son of Piay, can be easily ascertained in their tombs. ${ }^{42}$ However, it is known that Nakhtamūn married Nebuemshaset, a daughter of Pashed and hence sister of Amenmose, and Kha'emtri's wife Nefersatet can be identified with Nefersatet, daughter of Pashed, who appears on the above-mentioned Turin stela (where her name is wrongly read as Henutsatet) and on B.M. stela ${ }^{1} 388 .{ }^{43}$ Thus Nakhtamūn and Kha'emtri are both brothers-in-law of Amenmose. The scribe Minmose who appears with them can be identified as yet another brother-in-law since his wife Ese was doubtless the Ese, daughter of Pashed, who appears in her father's will and on the Turin and British Museum stelae of the family. ${ }^{44}$

A similar usage can be seen in Tomb 5 of Nefercabet where the draughtsman Maanakhtef, son of Pashed, and the draughtsman Rachotpe, son of Pay, are termed $s n$ of the owner. ${ }^{45}$ Now the name of Maanakhtef's wife Tentamentet is the same as

[^54]a sister of Nefer Cabet in Tomb 5, and both appear without indication of relationship on stelae of Nefercabet. ${ }^{46}$ The name of the wife of Rachotpe is given as Ta... in Tomb 335, and she can thus be identified with the hmt n ss•f Taisennefret who appears on an offering-table of her father-in-law Pay in Turin. ${ }^{47}$ A lady of that name duly appears as a mourner of Nefercabet in Tomb 5, where she is once described as his sister, and on his stelae. ${ }^{48}$ Thus both Maanakhtef and Rachotpe are brothers-in-law of Nefercabet, but that is not the case for all the $s n(w)$ who appear on Nefercabet's monuments.

The use of $s n$ was not confined to the same generation but the term was employed to express relationships between different generations. On the fourth register of B.M. stela 150 there appear four brothers of Nefercabet named Huy, Merysekhmet, Pay, and Nebnetjeru. ${ }^{49}$ The first may indeed be a genuine brother as he is attested on B.M. 305 as a son of Nefercabet's father Neferrenpet, but the others are not in any other family grouping. ${ }^{50}$ The name Merysekhmet is relatively rare at Deir el-Medîna, and it should be noted that a Merysekhmet son of [Maana]khtef is elsewhere attested on a stela. ${ }^{51} \mathrm{He}$ thus could be a $s 3 n s n \cdot f$, or nephew, of Nefercabet whose sister was Maanakhtef's wife. Pay is the name of one of the sons of the draughtsman ( Pa ) Rachotpe who was married to another sister of Nefercabet, and it has earlier been speculated that Nebnetjeru was another son of (Pa)Rachotpe. ${ }^{22}$ Thus both Pay and Nebnetjeru would also be nephews of Nefercabet. A draughtsman Pay who also appears in the same register of B.M. I 50 would be the well-known Pay, grandfather of Pay the younger. Other nephews of Nefercabet can be found in the third register of this same stela without any indications of relationship. The draughtsmen Pashed and Pabaki are doubtless Maanakhtef's sons of those names and Ipu is probably to be identified with Ipu son of ( Pa )Rachotpe. ${ }^{53}$ The $s n \mathrm{Ipu}$ who is attested twice in Tomb 5 is undoubtedly this same nephew as he is once preceded by his father and uncle and followed by his cousin Pashed. ${ }^{4}$

Another example of this usage can be seen in Tomb 335 of Nakhtamūn, son of Piay, who names his brothers the scribe Usersatet, Khons, Khacemwese, Tjauenany, Pendua, and Wadjshemsu. ${ }^{55}$ The first is, in fact, his brother-in-law Usersatet, son of Pashed, and brother of Nakhtamūn's wife Nebuemshaset, while the second is indeed his own brother Khons, son of Piay. ${ }^{56}$ The next three bear the same names as three

[^55]sons of the sculptor Ken whose wife Henutmeḥyt was a sister of Nakhtamūn, and hence they must be his nephews. ${ }^{57}$ The relationship of the last is more problematic. He is presumably the Wadjshemsu son of Amenhotpe alias Huy who is attested in the early Nineteenth Dynasty and must be identical with the Wadjshemsu who appears in Tomb 2 of Khacbekhnet as some relation, probably the husband, of his daughter Henutweret. ${ }^{58}$ Since her mother Sahte was another sister of Nakhtamūn, he would then have been Nakhtamūn's nephew by marriage. The extension of this term to cover relatives by marriage also appears in Tomb 219 of Nebenmacet and his wife Meritseger where his brothers Menna and possibly Kaner, and Kaḥa, and his sisters Rēc, Wernuro, Takhac, and Nedjembehdet can be identified with the like-named children of the workman Pendua and his wife Nefertari, a daughter of the workman Kar and a sister of Nebenma'et's wife Meritseger. ${ }^{59}$ The brother Paherpedjet is probably the same man who appears elsewhere in the tomb as a son of Nebrē厄 and Pashed, another sister of Meritseger, while the brothers Hay and Huy and possibly Kaner and Kaḥa could be the sons of the workman Anherkhacu and his wife Henutdjuu, yet another daughter of Kar and sister of Meritseger. ${ }^{60}$ Thus the use of $s n / s n t$ to express nephew/niece by blood or marriage appears to have been widespread at Deir el-Medîna at this period.

There are at least two examples of the use of $s n$ with the opposite meaning of $s n n$ $i t \cdot f$ or uncle. On a papyrus from Deir el-Medîna the draughtsman Kha'y writes to his $s n$ the draughtsman Paracemheb. ${ }^{61}$ The latter is the son of the draughtsman Pay whose family included two other sons ( Pa )Rachotpe and Nebrēc. ${ }^{62}$ Nebrēe was the father of the draughtsman Khacy. ${ }^{63}$ The second example of this usage also concerns Paracemheb who is addressed as $s n$ by the draughtsman Ipu who can be identified with his nephew Ipu son of (Pa)Rachotpe. ${ }^{64}$ The fact that this usage appears only in the family of Pay may be coincidental. As Paracemheb was his youngest son, uncle and nephews may not have been distant in age and hence the use of this term may be understandable.

The result of this brief survey tends to demonstrate that terms of relationship in tomb-reliefs and stelae usually do indicate an actual relationship rather than a vague

[^56]affinity, but the terms themselves may have a wider meaning than has hitherto been supposed. Unless we have other documents to elucidate relationships, they must sometimes remain an enigma. The basis for determining a true relationship must lie with those official documents such as muster-rolls, census-lists, and court-cases which are recorded on papyri and ostraca. The evidence from tombs, stelae, and graffiti must always be treated with care and is not necessarily to be taken at its literal meaning.

## AN ACCOUNTS PAPYRUS FROM THEBES

By C. J. EYRE

Among the material donated by Sir Alan Gardiner to the Ashmolean Museum is the small piece of papyrus presented here. Originally known as Papyrus Gardiner 8, it is now registered as Papyrus Ashmolean 1960. 1283. ${ }^{\text {I }}$ A note on the frame indicates that it was 'Received from N. de G. Davies together with papyrus fragments from the 'Theban tomb of Sunero'. ${ }^{2}$ The note does not necessarily imply that the papyrus was found during work on that tomb, and the contents of the text indicate that the village of Deir el-Medîna was the true provenance.

The papyrus itself has suffered severe damage (see pls. XII-XIII). As preserved it measures 20 cm by 9.4 cm . The texts of both the recto and the verso have suffered loss at both the beginnings and the ends of the lines. No lines are lost from the top of the papyrus. The bottom is broken, but the amount of loss uncertain. A height of slightly more than 20 cm is common for papyri of this date, ${ }^{3}$ and the loss is perhaps minimal. Numerous breaks and holes add severely to the difficulties of reading the text. In several cases the resolution of small traces has proved beyond my capacities, and they must remain in doubt. In the process of transcription I have been greatly assisted by the availability of preliminary transcriptions by Sir Alan Gardiner, now deposited in the archives of the Griffith Institute in Oxford. ${ }^{4}$ Deficiencies in the transcription presented here are naturally the responsibility of the present author.

## Textual notes

## Recto:

Line 1: (a) a tiny trace, in red, of a short tail.
Line 2: (a) space only for a number of hundreds; (b) the traces suit best two or three thousand.
Line 3: (a) a long tail, in red.
Line 4: (a) an inexplicably long tail; (b) although not impossible, the group does not well suit /., $m s$. The correct reading is perhaps rather ${ }_{\rho \Delta}\left\langle\hat{A}^{\prime}\right\rangle$; (c) a short line.

Line 5: (a) the traces do not suit determinatives for one of the expected verbs of motion. Gardiner


[^57]Line 6: (a) a tiny trace; (b) sufficient room for a preposition and the name Smentawey.
Line 7: (a) possibly \& $\rho P$, the end of a name. The following traces seem hopeless. There would seem to be room for two or three groups before the name Smentawey; (b) neither the small traces preserved, nor the space available seems really to suit a reading $\mathrm{n}_{\mathrm{n}}^{\boldsymbol{n}}$; (c) small, indecipherable traces, low down.

Line 8: (a) the readings at the beginning of the line are little better than plausible guesses. Might the traces in the gap suit $\quad \mathbb{J} \rho$ ? ? (b) There can be little doubt of the reading, although the form closely resemblest in 1.5. The hawk may, however, appear in a wide variety of disintegrated cursive forms: cf. Gardiner and Černý, Hierat. Ostr. xxı, 2, 8;3,3; O. Cairo 25779, vs. II ; O. Cairo 25575, 6, 9, 10, 22, 28.

Line 9: (a) possibly read 2 for the traces.
Line Io: (a) tail, in red; (b) see also vs. 6, II. The sign appears in a great variety of forms in texts from Deir el-Medîna. For comparable examples see O. Cairo 25575, 22; O. Turin 57001, vs. 2.

Line II: (a) apparently a very short line. Only the end of a black tail preserved, very low down.
 is perhaps just room; (b) the traces are so small that the restorations are no more than guesses. The final trace is presumably the beginning of a number.

Line 13: (a) a tiny trace, high up-presumably the end of a number. The fibres are slightly displaced here; (b) a small trace, to be read as $0-10$, or the beginning of the snake.

## Verso:

Line 2: (a) traces. By comparison with vs. 4 a reading $f$ in the middle seems unlikely.
Line 3 : (a) the expected reading. The traces do not obviously suit it, but are perhaps acceptable as a careless writing: cf. Gardiner and Černý, Hierat. Ostr. xix, 1, 9; Lxvi, I, 4; Lxxi, 2, I.

Line 5: (a) I can make no suggestion as to the reading. It seems impossible to read the signs as determinatives of $s b n w$, and they do not seem to suit numbers or units of account.

Line 6: (a) a ligatured and very abbreviated form; (b) or perhaps the beginning of a number of thousands.

Line 7: (a) probably just enough room for the name and title of the fisherman Sethi.
Line 8: (a) tail, low down to the left; (b) doubtful. The tail low down to the left indicates that at least one of the traces belongs to a sign for hundreds; (c) added thus, above the line; (d) the signs here defeat me completely. ill might just be possible if the sense seemed possible. 党 seems impossible, and the unlikely positioning of the signs rules out ${ }_{10}$ 总; (e) a tail, low and to the left.

Line 9: (a) the possible readings are the numbers $1,4,7$, and 8 ; (b) misplaced fibres, reading quite certain; (c) illegible traces.

Line 10: (a) small illegible traces; (b) or perhaps just 9 .

Line 15: (a) fibres broken away. There is room for an $m$, but it is not necessary.
Line 16: (a) a tiny trace, that probably belongs to a sixteenth line.

## C. J. EYRE

## Translation

## Recto:

ı ... [day] 10 [ +x ; giv]en to the revenues of the crew, being work of the woodcarriers . . .

2 . . . [and Mery]maat, ${ }^{a}$ a total of three (men), each [x] hundred (units of) wood. Amenemopet, ${ }^{b}$ eight hundred (units of) wood. Total: two thousand [ +x ] (units of wood). ${ }^{c}$
$3 \ldots$ [day] io [ +x ; rec]eived from the coppersmith Smentawey, ${ }^{d}$ (and) given ${ }^{e}$ to the crew on this day . . .

4 . . [sc]ulptor Amen〈nakh〉te (?), ${ }^{f}$ one chisel of six deben. ${ }^{g}$ Complete $^{h}$ for the crew.
$5 \ldots$. (?) up ${ }^{i}$ by the scribe Anp[uemh]eb, ${ }^{j}$ the scribe Pentaweret, ${ }^{k}$ and the police$\operatorname{man}(?)^{l} \ldots$
$6 \ldots$. . [Neferem]sesnet, ${ }^{m}$ [in the hand of (?) Smen]tawey, thirteen deben of copper. Total, twenty-five (deben), given to smelt ${ }^{n}$. . .
$7 \ldots$. .y, [in the hand of (?) Smen]tawey, twelve deben of copper . . . ${ }^{\circ}$
8 . . . copper- . . (?), ${ }^{\text {b }}$ of deben (?) one [ +x$]$, a tjeb-vessel (? ?) of four (deben) (?), ${ }^{\text {q }}$ (and) a razor of one (deben) (?), ${ }^{r}$ for Horemwia. ${ }^{s}$. . .
$9 \ldots[f]$ aggots $^{t}$ for $\mathrm{Pa}[\ldots]^{u}$ by the hand of the scribe Anpuemheb, [x number of] fag[gots] . . .v
ıо ... [day] io [ +x ; giv]en to the revenues of the crew, being work ${ }^{w}$ of the fisherman $\operatorname{Set}[h i]^{x} .$.

II . . . $[x+]$ one hundred.
12 . . [received from (?) S]mentawey [as work (?)] ${ }^{y}$ for the foreman Neferhotep, ${ }^{z}$ copper, $[\operatorname{ten}(?)+\mathrm{x}$ deben (?)] . . .
$13 \ldots[\mathrm{x}+]$ one (?), which makes fifteen deben for the scribe Qeniherkhepesh $[\mathrm{ef}]]^{a a}$

## Verso:

I . . . grain [rations] ${ }^{b b}$ for month IV of peret. Bringing (a) balance, one oipe. Found in it, being variou[s (grains?)], ${ }^{c c}$. .
2 . . . various (grains?), two hin, which makes a total of . . eight, which makes a total of seventy-three $k h a{ }^{\text {dd }}$. . .
$3 .$. grain [rations] ${ }^{b b}$ for month IV of peret. Bringing (a) balance, one oipe. Found in it, being emmer wheat . . .

4 . . . three quarters of a khar, which makes seven and a quarter khar of emmer wheat.








5 . . . grain [rations (?)] (being?) emmer wheat. Bringing one oipe. Found in it, being various (grains?) ? ? . . .

6 ... [month III (?)] of peret, day 2I; received as work of the fisherman Sethi, fish, $[\mathrm{x}$ number of $] d[$ eben $] \ldots$

7 . . . [month III (?)] of peret, day 24; received as work of the fisherman [Sethi (?)], $t p y$-fish,ff. . .

8 . . . ? three hundred (?). Total, two thousand, five hundred and forty, ? ? . . . $[x+]$ hundred and sixty . . ${ }^{g g}$
$9 \ldots\left[\right.$ month IV (?)] of peret, day I [ $+\mathrm{x}($ ? $)$ ]; [gi] ven to (the) coppersmith ... ${ }^{h k}$ ? ?...
10 . . . ?, which makes sixty-three deben. Delivered, on (?)ii month IV of peret, day 2I; bronze...

II . . . month I[V] of peret, day II; received as work of the fisherman Sethi . . .
12 . . seventeen thousand, one hundred and twenty [debe]n (?). Total, seventeen thousand, nine hundred and fifty.

13 . . . month IV of peret, day 15 ; received, being (?) the work (?) of King (?) ${ }^{j j} \ldots$
14 ... scribe Pentaweret, carrying grain rations ${ }^{k k} \ldots$
$15 \ldots$ [month IV of peret, day] 28 ; the crew (were?) [in (?)] the work . . .
16...

## Commentary

$a$ The name (Ranke, Personennamen, I, 160, no. 19) is a very plausible conjecture by Gardiner. No attestation of a woodcutter by this name is known to me.
$b$ A scribe Amenemopet is attested delivering wood to the crew of the Tomb (DM 45, 18), but is too late for this text. No woodcutter of that name is known to me from elsewhere, but the names of woodcutters, as of other members of the service staff, are rather poorly known for the end of the Nineteenth Dynasty (cf. Helck, Materialien, 870-3).
c For the preserved accounts of wood deliveries to Deir el-Medîna see Helck, Materialien, 849-73; Janssen, Commodity Prices, 48r-5. The quantities required from individual woodcutters vary considerably, from 380 to 750 units per ten days (see Helck, Materialien, 858). Although the figures are severely damaged here, they presumably represent the deliveries for such a period. The unusually high figure of 800 units for Amenemopet perhaps includes an additional payment to make up a deficit. The units used for measuring the wood remain obscure.
$d$ Not to my knowledge otherwise attested.
$e$ The same phrase occurs in a receipt of copper in the broken context of O. Cairo 2581I, in a fish account in O . Berlin 11272,2 , and in relation to vegetables, $\mathrm{DM}_{37}, 9$.
$f$ Of the plausible readings, a sculptor Amenmose is otherwise unknown to me, but a sculptor Amennakhte is quite well attested: cf. O. Cairo 25612, I; Spiegelberg, Graffiti, 280, 285, 307, 350, 817 c; Černý, Graffiti, 1217, 1297.
$g$ The weight seems about standard for the type of tool: see Janssen, Commodity Prices, 312-17; Valbelle, Catalogue des Poids, 14; O. Forrer (see Spiegelberg, OLZ 5 (1902), 327).
$h$ The standard term to indicate that the quota due has been delivered complete. The phraseology here is unusual. In DM 163 the phrase $m h n$ is used with reference to the potter completing his work, not, as here, with reference to the people for whom the work was completed.
$i$ One expects a phrase such as 'coming up by' (tsi or ii r hry inn).
$j$ Doubtless the 'scribe of the Place of Truth', owner of Tomb no. 206 at Thebes. He is attested in the documents of the Tomb from Year 66 of Ramesses II until Year 8 of Merenptah (see Cerný, Community, 198-9). For his activities see below.
$k$ At least two, and possibly more, scribes of the name Pentaweret are attested in the documents of the Tomb, with dated attestations from Year 6 of Sethos II into the middle of the Twentieth Dynasty (see Černý, Community, 207-9; Bierbrier, Late New Kingdom, 40-1). See also below.
$l$ The use of the definite article indicates that no name was given. The reading $m d_{3} y$, 'policeman', seems more likely than imy-r [ $X$ ], 'overseer of [something]'. It is then rather difficult to understand why the definite article should have been used. There were several $m d z y$, and thus there was the possibility of confusion. One would expect some further qualification, perhaps a place-name or the name of an institution, or even the number two.
$m$ For the name see Ranke, Personennamen, 1, 196, no. 16. It occurs occasionally among the workmen of the Tomb in documents of the Nineteenth Dynasty, and is perhaps always identifiable as that of the father of the future foreman Paneb: see Cerný, $\mathscr{f E A}$ 1 $_{5}$ (1929), 254; Community, 302. A writing with $m$ included is exceptional (DM 108, 6).
$n$ The text here seems to deal with copper, or copper objects, given by the individual workmen to the coppersmiths for smelting: cf. O. Cairo 25581, vs. 3, hmty wdh ns hnr nts ist Pr-r 3, s2, 'Coppersmith(s) who smelt tools for the crew of Pharaoh, 2 men'; O. Cairo 25519, 1-2, Date: hrw $n$ dit $p_{3}$ ha $_{3} n$ $X($ ? )-ms $n$ p; hmty $r$ wdh.f, 'Day of giving the tool of Xmose to the coppersmith to smelt it'. Cf. also Poids DM 5130, $5132,5133,5136,5138$-weights of copper handed over for making into various objects. Pace Cerný, $C A H$ II, 2 (third edn.), 621 and Valbelle, Catalogue des Poids, 5-6, it seems more likely that the so-called 'weights' from Deir el-Medîna that record the weight of individual workmen's tools are normally receipts for the quantities given to the smiths for smelting, and not receipts for the administration to check on tools issued to the workmen. In O. Florence 2625 (see Allam, Hierat. Ostr. und Pap. pl. 35 and no. 145) a workman handed his tools over to the foreman before the other two officials of the crew. The tools were underweight. It seems to me natural to read the complaint as coming from the mouth of the workman, but Allam takes it as coming from the mouth of the foreman. The text is therefore unsafe to use in the argument.
o Presumably a parallel entry to that of the previous line, but the preserved traces at the beginning are too meagre for certainty.
$p$ Presumably a copper object.
$q$ A copper object of some sort must be restored here. The reading $t j e b$-vessel is no more than a guess, but the figure 4 suits well the weight of such a vessel: see Wenamūn, I, II; Valbelle, Catalogue des Poids, 19; Janssen, Commodity Prices, 433-4.
$r$ This suits well the 'price' of a razor, see Janssen, Commodity Prices, 299-301. The numbers I have taken here to refer to the weights or values rather than the numbers of goods, as these would be more significant information when metal was handed over for working.
$s$ Perhaps nothing more lost at the end of the line.
$t$ See Janssen, Commodity Prices, 483; Helck, Materialien, 849-69. For the present writing cf. O. Cairo 25804, II, 5 and 7. Sauneron, $R d E 7$ (1950), 182-4, takes the word as a reduplicated form of
 312). Perhaps one should also note a word $\underline{d} n \underline{d} n t, W b$. v, 580 , 'Feuer o. a.', and a Coptic $\sigma \lambda \omega$, 'twig', 'firewood', Crum, 8ro a.
$u$ I take this to be a delivery of fuel due from a woodcutter, but actually delivered by his supervising scribe. Of the numerous known woodcutters with names beginning with $p_{3}$ only those of Patutu ( $R A D 47,8$ ) and Pashed (DM 147) could be thought reasonably to fit the traces here. Both appear in texts from the end of the reign of Ramesses III, and should probably be excluded here for that reason. The names of woodcutters at the end of the Nineteenth Dynasty are poorly attested, and the man may be otherwise unknown. For cases of deliveries being made by one man for another cf. DM 18, 4: wood delivered by Patul 'as work of Amenmose', and DM 147, vs. 9: wood come by the hand of Tjaca, 'against the deficit of Pashed'. The relatively frequent references to deliveries of fish and wood 'by the hand of scribe so-and-so' are to be taken as references to commodities due from the fishermen and woodcutters under their control. In the unpublished P. Turin 2075+2056 (55-6)+2096 (268) (see Černý Mss, 17.15.23-30), the recto records deliveries of three fishermen of the right side, $m$ - $d r t$, 'under the charge of' the scribe Wenennefer, and the verso deliveries of three fishermen of the left side, $m$ - $\underline{d} r t$ the scribe Iuefenamūn, son of Hori.
$v$ Perhaps nothing more lost at the end of the line.
$w$ The work due from the service staff of the crew, in quotas from the individual men: cf. DM 18, 14. For the phrase šsp $m b_{3 k} n$ used below vs. 6,7 and 11 , compare DM 88, 1; 192, 1 ; Gardiner and Cerný, Hierat. Ostr. lxi, 4; O. Cairo 2559I; 25633. The deliveries from the potters are specifically described as a $b 3 k$, 'work(-quota)' or 'work(-unit)': see, for instance, DM 35, 7: wr bsk, 'one work(-quota)'; DM 38, 7: b3k 2, 'two work(-quotas)'.
$x$ For fishermen see Helck, Materialien, 816-32. A fisherman Sethi, entitled 'chief fisherman' in the Turin Strike Papyrus ( $R A D 47,2$ ), is well attested working for the left side of the crew in the latter part of the reign of Ramesses III: see Christophe, BIFAO 65 (1967), 180 and 185 ; DM 394; O. Mich. 33, 14. He seems to be distinct from the fisherman Sethi, son of Khaemmut, attested from probably early in the reign of Ramesses IV: see Christophe, BIFAO 65 (1967), 189; DM 397; Gardiner and Černý, Hierat. Ostr. xxiv, 3, 1-2 and in. Information about fishermen from earlier dates is patchy, but the name Sethi occurs in texts that seem to date to the Nineteenth Dynasty (DM 274 and O. Cairo 25593, 4), where he is working for the right side of the crew. In the present state of the evidence no firm identifications or distinctions can be made among these fishermen. It is not impossible that various members of the same family are involved: cf. Christophe, BIFAO 65 (1967), 189-90.
$y$ For the suggested reading '[as work] for' I can quote no exact parallel, but compare above note w. Examples of men working for the foreman such as O. Cairo 25517, d, 8, 9, 10, 11, and O. Cairo $\mathbf{2 5 5 2 1}$, vs. 5, are probably not relevant here. The entry apparently records normal copperwork, returned from the smith, as for any ordinary member of the crew (cf. 1. 8).
$z$ Of the two known foremen of this name the first, who held office from the reign of Horemheb until at least Year 5 of Ramesses II (Černý, Community, 285-6; Bierbrier, Late New Kingdom, 21), may be excluded here. The second took office late in the reign of Ramesses II, and died during the reign of Sethos II (Černý, Community, 288-90; Bierbrier, Late New Kingdom, 21).
aa Attested as scribe of the Tomb from Year 40 of Ramesses II until late in the Nineteenth Dynasty, probably until the reign of Siptah (Černý, Community, 329-3 I; Bierbrier, Late New Kingdom, 26-7; Gardiner, Hieratic Papyri in the British Museum, Third Series, 1, 24, n. 3).
$b b$ There seems little alternative to the reading diw, 'grain rations', or perhaps $i d n w$ diw, 'supplementary grain rations'. See the textual note to vs. 3, and compare DM 288 and DM 312.
$c c$ For the phraseology as a whole cf. DM 288, DM 312 and the unpublished ostracon Berlin P. 11235, 3-4 (taken from Černý Mss, 17.32.85):

'Balance, I oipe. Found, as various (grain) $4 \frac{2}{3}$ hin. Taken 2. Balance, $2 \frac{2}{3}$. Which makes ? ? 1 khar $30 \frac{2}{3}$ hin.' (The total is $26 \frac{1}{2}$ times the balance not taken.) For $m n t$, 'balance', see Gardiner, ffEA 27 (1941), 49-50; Megally, Notions de comptabilité, 78-82; Recherches sur l'économie, 249. Gmyt is the standard term used for things 'found' in a check, or when measuring for an issue of grain: cf. DM 149, 1; 178, 1, and $R A D 56,6$.

In DM 288 the commodity mentioned as 'found' in the oipe is swt, 'wheat'. This, and the fact that in the Berlin ostracon the determinative used for $s b n$ is the grain sign, make it very probable that here 'various (grains)', or even 'mixed (grains)', is the meaning intended (cf. Wb. Iv, 440). Perhaps there is some connection with the rare Coptic word whm, 'grain', already attested as sbbn in Demotic (see Hughes, $\mathcal{F} N E S$ ıо (1951), 262). The form and purpose of the account here are obscure. Probably the scribe does not give all the relevant information, parts of it being obvious to him. The oipe mentioned here apparently refers not to the precise quantity of a quadruple heqat, but either to a rough quantity (cf. Wb. $1,67,8$ ) or to a container. In Gardiner and Černý, Hierat. Ostr. xxxiv, 4, an 'oipe' was used for measuring the grain rations for the crew, in this case being undersized, containing only 38 , instead of the required 40 hin . In the present example, as in the similar examples quoted, the small quantities 'found' in the oipe are presumably to be regarded as those issued to the individual members of the crew, and the totals as representing the total issue. The payments would seem to be overdue supplements to originally deficient payments of the grain rations: cf. $L R L$ 10, $1-3$.
$d d$ Perhaps nothing lost.
ee Presumably a heading similar to that of vs. I and 3, with the month name omitted. The $n$ under the grain-determinative should probably be disregarded. The barley should be taken as referring to the part of the rations due, to which those now delivered should count. For the construction compare DM 179, $1 ; 34,4 ; 156,6$.
ff Cf. Caminos, Late Egyptian Miscellanies, 21 I Gamer-Wallert, Fische und Fischkulte, 21.
gg Probably a fish account continuing the previous line: cf. below, 1. 12.
$h h$ One expects the name of the coppersmith, and a quantity of metal, whether expressed as a weight of copper or bronze, or by specific metal objects.
$i i$ The reading is not quite certain. Perhaps the $m$ should be omitted, and the $i w$, 'delivered', taken to refer to the previous entry. The date is later than that in the following line. Perhaps emend
to 'day II', but it is possible that the entry has been added later for convenience at the end of a short line.
$j j$ Or 'in the work of King (?) . . ${ }^{\prime}$ DM 389, rt. 13-vs. 3, tells of people absent $m b_{3 k} n \operatorname{Pr}$-r 3, 'in (or 'on') (the) work of Pharaoh', carrying stones. B3k was here determined with the bookroll. For the tomb currently under construction there was the expression $p ; r-c b ; k$, 'the work in progress', where the word $b_{3 k}$ may be determined by the house-determinative: cf. Gardiner and Cerný, Hierat. Ostr. xix, 2, vs. 2; xLviII, 1, 2-3; DM 40I, 5. This may be abbreviated to simply $p ; b_{3} k$ (see Cerný, Community, 83-4). However, it is not unlikely that the 'work' here referred to might be that of a 'King's Wife' or a 'King's Child' rather than that of a deceased king. In all likelihood the text refers to the 'receipt' of the work done there, an inspection of the crew's progress there (cf. O. Cairo 25536, 25537), rather than a receipt by them of some commodity.

If the suggestion of Gardiner be here adopted, mdw n nsw . . . , 'staff of King . . .', it would presumably refer to material for the royal burial: cf. Giornale, 60, 5; 60, 7; O. Cairo 25648. Note also Helck, Materialien, 72, no. 32; Wirtschaftsgeschichte, 254, and Robichon and Varille, Le Temple du scribe royal Amenhotep, 1, 12-13 on this royal staff.
$k k$ Although no example of this particular phrase is known to me, $f_{3} i$, 'carry', is regularly used of the bringing of various commodities to Deir el-Medîna (see Cerný, Community, 185-7). Note particularly O. Toronto A Ir, 15, where it refers to carrying the 'revenues' (htr). For the delivery of grain rations by the scribe Pentaweret see below.

A broken fragment of papyrus such as this, with no continuous text, no single entry complete, and many doubtful readings, in itself provides little of value. Any interest it may have lies in the small contribution it can make to the necessarily slow and painstaking process of documenting life in the village of Deir el-Medîna during the Ramesside Period. It may at least be dated within quite narrow bounds. The death of the foreman Neferhotep at the hands of 'the enemy' during the reign of Sethos II provides a terminus ante quem. His accession to the post at the end of the reign of Ramesses II provides a terminus post quem. No greater precision within this period can be provided by an examination of the careers of his contemporaries, the scribes Qeniherkhepeshef, Anpuemheb and Pentaweret. With a small margin of error either way the text may be attributed to the reign of Merenptah.

Much remains obscure of the documentary procedures of the administration of works at the Royal Tomb. Numerous though the preserved texts are, the preservation is partial and unbalanced. Administrative papyri of so early a date as this are extremely rare from there. Yet even among the extremely large numbers of surviving ostraca the preservation is uneven. Certain types of text are preserved in quantity from one reign, and not at all from another. Doubtless recording procedures varied from reign to reign and scribe to scribe. As a result, the purpose of an individual text must frequently be assessed on internal evidence, since it cannot easily be attributed to a standard and well-recognized function in the administrative process.

The fact that the present text is written on papyrus may be of no real significance for the interpretation of its purpose. The rarity of papyrus as a writing material for such documents of 'the Tomb' before the late Twentieth Dynasty may depend on the fragility of the material and the vagaries of preservation. It does not necessarily imply that the use of papyrus for such records at Deir el-Medîna was very restricted. As
preserved the present text gives no clear indication, either palaeographically or from its internal structure, of how it was composed; whether it is a running account written up as the events occurred or whether it was copied up at one time from other registers on ostraca, to be used for some special purpose, perhaps as an archive document. It is noteworthy, however, that the formulae used in the entries: 'Given to the revenues of the crew as the work of X', or 'Received as work of X', are rather fuller than those normally expected on ostraca. The state of preservation of the dates in the text is particularly poor, but it seems fairly clear from those few preserved on the verso, that the entries were for dates at irregular intervals, and that they covered a period of at least two months. This fits well with the normal pattern of deliveries made to the crew by their staff. The quotas due were calculated for each ten-day period, but the deliveries were made irregularly as convenient.

Apart perhaps from the obscure last three lines of the verso, the text does not concern itself with the work of the crew proper, but with work done for them, and deliveries made, mostly by their service staff ( $t 3 s m d t$ ). The records here do not include the work of the whole of this staff, only that most commonly represented in the documents of the Tomb, the deliveries of wood and fish. Notes are also added of the receipt of copperwork. Strictly speaking the coppersmiths do not seem to be members of the service staff proper. ${ }^{5}$ Certainly it is unexpected to find the detailed records of copperwork mixed in with receipts for wood and fish. These entries concerning copper seem to vary between 'official' work on the workmen's tools and 'private' work on metal objects for individual people. They probably record the work of a single man, the smith Smentawey. The various fish accounts seem likewise to be restricted to the work of a single individual, the fisherman Sethi. Such restrictions in a text covering some length of time seem to imply a deliberate selection, a deliberate omission of the work of other smiths and other fishermen. The obvious solution would be to presume that the text records only deliveries for one of the two sides into which the crew was divided. This would presumably be the 'right' side of which Neferḥotep was foreman. ${ }^{6}$ However, this theory is impossible to substantiate. ${ }^{7}$

The precise manner in which the work and deliveries of the service staff were supervised is not fully clear. They seem generally to have fallen under the charge of their own scribe or scribes. ${ }^{8}$ The current administrative scribe, Qeniherkhepeshef,

[^58]appears in the present text only as the recipient of some copperwork. The other two scribes mentioned, Anpuemheb and Pentaweret, may be identified as the current scribes in charge of the staff. Here Anpuemheb seems on one occasion to be bringing firewood due from one of the woodcutters, and Pentaweret supervising the fetching of grain rations. Elsewhere the two of them appear, not uncommonly together, as the people responsible for the main needs of the crew: grain rations, ${ }^{9}$ fish, ${ }^{10}$ and wood. ${ }^{11}$ Pentaweret seems to have been responsible for the left side, and Anpuemheb for the right. ${ }^{12}$

Apart from the deliveries of produce supplied by the service staff, produce that went towards the 'revenues' ( $h \mathrm{hrr}$ ) of the crew, revenues from which they received part of their 'wages', there is also here notice of the other main foodstuff that went towards their payments, the 'grain rations' (diw). There can be little doubt, in view of the roughly contemporary texts it has been possible to adduce as parallels, that the obscure first five lines of the verso deal with small deliveries of grain towards these rations. It has been possible here to present some sort of translation that replaces the Egyptian words by English equivalents. Yet the formulae are so reduced, so lacking in explanation, that interpretation is a matter of conjecture. A common theme, however, underlies the inclusion of these accounts in the same text as accounts of deliveries from the service staff, in that the supervision of all such deliveries to the Tomb seems to have fallen, at this date, under the control of the two scribes Anpuemheb and Pentaweret.

[^59]



Papyrus Ashmolean 1960.1283, recto


Papyrus Ashmolean 1960.1283, verso

# A SALE OF INHERITED PROPERTY FROM THE REIGN OF DARIUS I 

By EUGENE CRUZ-URIBE

With the conquest of Egypt by Cambyses in 525 bc a new period in Late Egyptian history begins. While the historical aspects of this period have been discussed by both Posener (La Première Domination perse en Egypte, 1936) and Kienitz (Die politische Geschichte Ägyptens vom 7. bis zum 4. Fahrhundert vor der Zeitwende, 1953), only Seidl (Ägyptische Rechtsgeschichte der Saiten- und Perserzeit, 1968) and Malinine and Pirenne ('Documents juridiques égyptiens', AHDO 5 (1950-1), 11-91) discuss in detail the legal aspects of this period, and they work for the most part from the viewpoint of using both the Saïte and Persian Periods as a single entity in the development of the Egyptian legal system. In many aspects this is plausible, but it would be more accurate to describe these periods as independent stages, each being 'Egyptian' in nature, but each being the result of its own social, economic, and political stimuli. This I feel to be especially true for the early Persian Period. Following the Saite Renaissance Egypt found itself under the domination of foreign kings who ruled Egypt from a great distance leaving their surrogate, the satrap, in Egypt. (For a discussion of Egypt as a satrapy see Bresciani, 'La satrapia d'Egitto', Studi Classici e Orientali 7 (1958), 153 ff.) This alone marks a significant change in the economic and political structure. What exact influences this had upon the legal and economic spheres has not been completely determined. It is this author's hope that the discussion below will allow us to understand better more of the Egypt of the late sixth and early fifth centuries вс.

The two documents examined below, P.Louvre E. 9204 and P.British Museum 10450, are early Demotic documents dated to Regnal Year 3 I of Darius I (49I bc), and come from Thebes. The documents attest the sale of some inherited property by the woman $T$-nt-Imn-hnm-wsst to the choachyte $P_{3}$ - hr-bs. The Louvre document has been previously studied (see Malinine, Choix de textes juridiques, in 3, and Malinine and Pirenne, AHDO 5, 46, for a complete bibliography), and an excellent facsimile can be found in Revillout, Corpus Papyrorum Aegypti, pl. 22, no. 22. P.BM 10450 is reproduced below for the first time (see pl. XIV) and has rarely been mentioned in the literature (see Revillout, Notice, 433; Griffith, Rylands, iII, 30 no. 58; Malinine and Pirenne, AHDO 5, 47 no. I). I wish to thank Mr T. G. H. James of the British Museum for the excellent photograph and permission to use it in this study. Mr James also noted for me that there are no witness-signatures on the verso (personal communication). Below I will discuss the reasons for believing that the British Museum papyrus is a copy of the original Louvre document. Here let it be noted that since this document survives I would suggest that it was recognized as a legal copy signed by the scribe who wrote it. This would tend to agree with the opinion of Pestman (Marriage and Matrimonial Property in Ancient

## SALE OF PROPERTY FROM REIGN OF DARIUS I

Egypt, 176) that witnesses were not an absolute necessity, and would disagree with Seidl ( $\ddot{\text { Ag. Rechts. 14) who argues that they were needed. Lacking a photograph, I feel it }}$ improper at the present time to discuss the witness-list on the verso of P.Louvre E.9204.

## Transliteration

A. P.Louvre E. 9204
B. P.BM 10450
A. (1) hut-sp $3 x$ sbd 2 šmw $n$ Pr-rs r.w.s. $T 3-r-y-w-s ̌$
B. (1) hit-sp $3 I$ sbd 2 šmw $n$ Pr-rs r$\cdot w \cdot s . T 3-r-y-w-s$
A. r.w.s. $\underline{d} d$ shmt $T$-nt-Imn-hnm-wsstir sst $n s b t^{2} n p r$
B. r.w.s. $\underline{d} d$ shmt $\underset{N}{T-n t-I m n-\underline{h} n m-w z s t ~ s s t ~} n$ sbt



B. $n$ ws $\frac{h}{-m w} n$ ts iny $n t s$ imnt (2) wist $P 3-h \underline{h}-b s s_{3}$
A. $N s-I m n-h t p m w t \cdot f$ ' $I r t \cdot w-r-r \cdot w^{6} d i \cdot k m t y ~ h s t y(\cdot i) n$
B. $N s$-Imn- $h t p$
di $\cdot k$ mty $h 3 t y(\cdot i) n$

B. $p 3$ hd $n s y(\cdot i) \quad d n i t \cdot w(n)$ sht $n$ hwt-ntr $p ; d m y$


A. nty $n b n k t n b n p ; t ; n t y p h(\cdot i) \quad n d n i t(n) r n$
B. nty nb nkt nb $n$ ps ts nty ph( $\cdot \boldsymbol{i}$ ) (3) $n$ dnit ( $n$ ) $r n$
A. (n) shmt Rwrw sit $n$ ws $h$-mw $n$ ts iny $n$ ts imnt wost
B. ( $n$ ) shmt Rwow sit $n$ wsh $h-m w n$ ts iny $t s$ imnt wist
A. $H_{j}\left(\cdot w-s-n-M w t t 3 y(\cdot i) m w t^{9} d i(\cdot i) s t n \cdot k^{10} m t w \cdot k\right.$
B. $H_{3} \cdot \cdot w-s-n-M w t t 3 y(\cdot i) m w t(!) \quad m t w \cdot k$
A. $s$ (4) $n s y \cdot k d n i t \cdot w m n m t w(\cdot i) m d t n b n p ; t ; r-ז w y \cdot w$
B. $s \quad n s y \cdot k d n i t \cdot w m n m t w(\cdot i) m d t n b n p ; t\} r$-rwy $n \cdot w$

B. bn iw rhrmt nb $n p ; t 3$ ink mitt ir shy (4) $n$-im•w

B. bnr-n $\cdot k n-t \leq y p 3$ hrw $r-h r y$ šr $d t r \quad p ; n t y ~ i w \cdot f$
A. ii $r-r \cdot k r-d b s t \cdot w(5) r n(\cdot i) r n r m t n b n p s t s$
B. ii $r-r \cdot k r-d b s t \cdot w \quad r n(i) r n r m t n b n p s t s$
A. $i w(\cdot i) r d i w y \cdot f r-r \cdot k i w(\cdot i) t m d i w y \cdot f$
B. $i w(\cdot i) r d i w y \cdot f r-r \cdot k i w(\cdot i) t m d i w y \cdot f$
A. $i w(\cdot i) r d i w y \cdot f^{12} m$-sh wn $n$ pr ${ }^{\prime} I m n P 3$-di-Wsir-wn-nfr ${ }^{13}$
B. $i w(-i) r d i w y \cdot f \quad m-s h w_{n} n$ pr ${ }^{\prime} I m n P_{3}-d i-W \operatorname{sir}-w[n-n f r$
A. $s 3 \quad \mathrm{Irt}-\mathrm{H} r-r \cdot w^{14}$
B. $s$ ] (5) ${ }^{~} \mathrm{Ir} t-\mathrm{H} r-r \cdot w$

## Translation

## (both texts combined)

Regnal Year 3I, 2nd month of $\check{s} m w$ of Pharaoh (1.p.h.) Darius (l.p.h.).
The woman $T$-nt-Imn-hnm-wust, daughter of the Provisioner (?) of the temple of Amūn of Djeme $H_{3} \cdot \cdot w-s-n-M n$, son of $\operatorname{Irt} \cdot w-r d$, whose mother is $R w r w$, said to the Choachyte of the Valley on the West of Thebes $P 3-h r-b s$, son of $N s-I m n-h t p$, whose mother is 'Irt $\cdot w-r-r \cdot w$ : 'You have satisfied my heart with the silver (for) my shares in the field, in the temple domain and in the town: (a) rations of Osiris, place in the mountain, houses, building lots, servant(s), sycamore (?), field(s); (b) houses, field(s), servants, place in the mountain, rations of Osiris; and everything in the world which accrues to me as a share in the name of the woman Rworv, daughter of the Choachyte of the Valley on the West of Thebes $H_{3 r} \cdot w-s-n-M w t$, my mother. I gave them to you. They belong to you, (they are) your shares. I have no claim in the land due from them. ${ }^{15}$ No man of the land, including myself, will be able to have control of them except you from this day forward, for ever. As for the one who will come to you concerning them in my name or in the name of any man in the world, I will cause him to be far from you. If I do not cause him to be far, I will cause him to be far.'

Written by the Shrine-opener of the temple of Amūn $P_{3}-d i-W s i r-w n-n f r$, son of 'Irt-Hrr-r $\mathbf{w}$.

## Commentary

1. T-nt-Imn-hnm-wist. 'She of Amūn of "United of Thebes"', or 'She of Amūn of the Ramesseum'. Revillout (Notice, 43r ; Corpus, 35; Revue Egypt. 12, 88; Contrats égyptiens, 362), Malinine (Choix, 114 no. 1; AHDO 5, 47), and Seidl (Äg.Rechts. 5-6) read the name as $T$-nt-Imn-hr-wzst which is incorrect. The sign which they read $\underline{h} r$ is similar to the examples found in Demotisches Glossar, 385 ; however, the sign is actually a variation of the writing of the $h n m$-jar which can be seen in the god Khnum's name (Erichsen, AFT iII, 102 a, 7, and Demotisches Glossar, 384). The same reading would apply to the name $T_{3}$-di-Imn-hnm-w $w_{3} s t$ found in P.Berlin $3078 / 2$ and mentioned in the note by Malinine. No other examples of this name are found, but hnm-wist 'United of Thebes' is a standard epithet of the Ramesseum ( $W b$. III, 379, 5). Griffith (Rylands, III, 30 no. 58) disputed the reading $\underline{h} r$, but could not offer any suggestions on a possible reading. Notice also Zauzich, Enchoria 5 (1975), 125-6, for further discussion of $\underline{h} n m-w_{3} s t$, 'Ramesseum'. This last reference courtesy of George Hughes.
2. sbtt. 'provisioner(?)'. The reading of this word is not entirely clear. The $b$ is not normal, but can be seen in the word $\mathrm{cr} b$ in P.Rylands $\mathrm{Ix}, \mathrm{r} 6 / \mathrm{IO}$, and in $b s$ in 1.2 of our document. The reading of as $t$ is also uncertain. The meaning of the word is doubtful. Malinine (Choix, 115 no. 2) compares it to the New Kingdom title imy-r sbs $n$ pr 'Imn, 'Overseer of the instructors of the temple of Amūn',
but the determinatives of the word as written here do not coincide with any of the determinatives normally found with the word sb3.t (Demotisches Glossar, 421). The last sign is a man with his hand to his mouth ( $A F T$ III, $48 \mathrm{a}:$ Ai2). The other determinative may be a man with his arms raised ( $A F T$ III, $44 \mathrm{a}: \mathrm{A} 3$ ). These two determinatives are often found in connection with each other, but the orthography of the last is significantly different. One should keep in mind that a participle of $s b ;$ would not have a radical $t$ at any period. One word in which both determinatives are found is sbt, 'outfit, equip' (Demotisches Glossar, 424). I have thus suggested that we translate the title as 'provisioner'. This may relate to the Coptic cohte (Crum, Coptic Dictionary, 324 a) and to the old spd:spdd: cf. Gardiner, Grammar, § 274; Sethe, Bürgschaftsurk. 426, and Cerný, Coptic Etymological Dictionary, 148. Following sbtt, pr ${ }^{\prime} \mathrm{Im} n$ is omitted from B.
3. $s 3^{\text {' }}$ rrt $\cdot w-r$. Found only in B. this extends the family tree and may be related to the man of the same name mentioned in P.Louvre E.9293/2. That this name is included in our document suggests that the scribe was very familiar with the family of Party A.
4. mwi•s. Malinine (Choix, II4) mistakenly reads mwt $\cdot f$.
5. $P_{3}$-hr-bs. Attested only here. Hr -bs is well attested: see Ranke (Personennamen $1,253,27$ ) and Malinine (Choix, 143). The $b$ of $b s$ is written the same as in the name $P_{3} y$ - $b s$ of P.Rylands II/2 ( $A F T \mathrm{I}, 4 / 5$ ). In A. the scribe has written an extra $r$ which is also seen in Griffith, Rylands, iII, 456, and in $A F T$ I, $53 / 6$.
6. $m w t \cdot f$ ' $1 r t \cdot w-r-r \cdot v$. Malinine (Choix, II4) reads here only $m w t$, possibly a typographic error since the $\cdot f$ is clearly written. B. omits this name in its copy.
7. A. $n_{3 y} \cdot n \operatorname{sic} d n i t \cdot w ;$ B. $n s y(\cdot i) d n i t \cdot w$. The first person plural pronoun is clearly a mistake in A. and is correctly given in B., since Party A consists of only one person. Malinine (Choix, 115) does not mention this, but in $A H D O$ 5, 47 he emends it correctly. In B. the determinative and plural strokes appear to have been added as an afterthought.
8. rk $n W s i r$. This is the beginning of the list of those items of property included in the sale. I have discussed elsewhere in detail the items found in these lists: see my 'A Transfer of Property During the Reign of Darius I' (forthcoming). Therein I deferred until now a discussion of our two lists. Seidl (Ag.Rechts. 60) mentions this list, and Malinine (AHDO 5, 46) goes so far as to state that P.BM 10450 simply has the list of property in a different order. This is incorrect, and also does not take into consideration the items found in A. and B. and items found in the other lists.

We should note several points. First, Malinine (Choix, ir4) reads pr in A. However, the book-roll determinative and plural strokes are clearly written in both A. and B. Second, wrh is found only in A. and in no other lists from this period. I am unsure of the reason why the scribe did not include this in B. Third, the writing of the word $b_{3} k$, 'servant', in A. is not normal and if the correct form was not found in B., I would seriously question the reading. A similar form can be seen in P.Berlin $13571 / \mathrm{r}$ ( $A F T \mathrm{I}, \mathrm{II} / 2$ ) from the reign of Psammetichus II. Fourth, I have given the reading of the next word in A. as nhy following Malinine. As an explanation for the determinative which looks more like an $\cdot f$, one may suggest that it is a unique variant of $\boldsymbol{L}^{l}(A F T$ inI, 73 b ), though one must be sceptical of that interpretation. Perhaps it is simply the tree $\langle$ written too low. Nhy, 'sycamore', is not found elsewhere in any of the lists and, on the basis of my discussions of the contents of the lists in the article mentioned above, is unique in respect to the categories I set out. Malinine's note that the sycamore is compatible with the expenses of the office of choachyte is not necessarily true and irrelevant, as I will discuss below. Fifth, the order of the property-list in B. closely follows the other property-lists found in other documents. I may thus suggest that, when the scribe wrote B. copying it from A., he placed the property-list in a standardized order, but made several mistakes of omission. The order

## EUGENE CRUZ-URIBE

of A. possibly reflects a dictation by someone not familiar with the order of the lists. Lastly, the lists given above do not include such items as movable property, livestock, grain or any previous legal documents referring to the above-mentioned property. By the nature of the lists one does not know specific quantities of goods, just as in this case the amount of silver used in payment above is not given. This lack of specifics does not allow us to determine how much actual property is being dealt with in our documents.
9. $t_{3} y(\cdot i) m w t$. The scribe in B . seems to have forgotten the upper half of the $m w t$-sign which he correctly wrote immediately preceding.
10. di $(\cdot \boldsymbol{i})$ st $n \cdot k$. We must understand this phrase as simply stating that since Party B has given him the money, Party A now formalizes the exchange of the property. This phrase was omitted from B.
11. $r$. This construction is a rare example of the anticipatory particle found in Late Egyptian as ir: see Erman, Neuägyptische Grammatik, $§ ~ 455$ and 705. One can also see this construction elsewhere in demotic, e.g. P.Louvre E.7833A/13-14 (Corpus, pl. 15) and HLC 2/ı (Mattha, The Demotic Legal Code of Hermopolis West, 70).
12. iww(•i) di wy.f. Seidl (Ag.Rechts. 51) notices that this phrase makes little sense and one must conclude, then, that something is to be understood such as 'by forceful means' as Malinine (Choix, ${ }^{1} 15$ and $A H D O 5,47$ ) suggested. The earlier clause would suggest that some polite manner was used to protect Party B from an unauthorized claim.
13. P3-di-Wsir-wn-nfr. Malinine (ibid.) offered the reading $P_{3}$-di-Wsir-m3r, but this is unattested elsewhere and unlikely when one compares the clear writing of m3r in $\underline{T}_{3 i} \mathrm{~m}_{3} \mathrm{r}$ (Djeme) in 1 . . . Revillout (Notice, 431) suggested reading the last part as m-hit. That reading is better, but it also presents its own problems. The writing of the name in B. is damaged. One should observe, of course, the similar writing for the name Wn-nfr which Wångstedt reports (Die dem. Ostraka Univ. Zürich, 52, pl. 8, O.Zürich 46/5). The name P3-di-Wsir-wn-nfr is found as the scribe's name in P.Turin 2122/5 (Malinine, AHDO 5, 68). The traces found in B. correspond very well with that reading when one compares it with the photograph at present in the Oriental Institute archives (photo no. 2004).
14. ' $\mathrm{Irt}-\mathrm{H} r-r \cdot w$. Note that B. gives an expanded writing of ${ }^{\top} r r$, while A. gives the short form.
15. $r$-「wy.w must refer to the shares, but Erichsen, Demotisches Glossar, 52, Spiegelberg, Dem. Gram., § 320 f., and Sethe, Bürgschaftsurk., 23 f., showed that this phrase normally applies only to persons. I thank George Hughes for these references. One would expect in this situation to find something like: ${ }^{*} m n m t w(\cdot i) m d t n b n p_{3} t ; i \cdot i \cdot n \cdot k(n) r n \cdot w$, 'I do not have anything in the world against you on their account'.

The two papyri above provide an interesting focal point for a discussion of private property during the early Persian Period and the connections, if any, between property associated with a funerary cult and the jurisdiction or control which a temple had in relation to that property. Since the earliest periods it was a common practice in Ancient Egypt to endow a temple or an individual with land etc., to start and to ensure proper care of a funerary cult. During the Persian Period this practice still existed, and various classes of funerary priests are well attested. The majority of documents mentioning these priests are concerned with the office of $w_{3} h-m w$, 'choachyte', and P.Turin 2127 even relates to us that a portion of the income of a choachyte was specifically given to the woman $T_{3}-s n t-n-H r$ in return for her performing a portion of the funerary services. It is interesting to note that, while we have examples of individuals giving a share of an
office to another person for a specific period of time (e.g. P.Vienna D.ior 50 , ror 51 and Cairo 50058 and 50059 ), no examples of permanent sales or gifts of offices survive from the Persian Period. This, of course, does not preclude that possibility. Selling of one's office would appear to be consistent with other affairs and sales found in the papyri.

The sale of various pieces of private property appears frequently (e.g. cattle, P.Michigan 3525 b (unpublished), a slave, P.Bibl.Nat. 223, a house, P.Louvre E.7128), and the apparent stability of the reign of Darius I allowed many documents of a personal business nature to survive in contrast to the reigns of the other Persian kings. Another class of property which can be exchanged is that property which you inherit from one or both of your parents.

The property which is the subject of our two papyri belongs to the woman T-nt-Imn-hnm-wsst. She inherited it from her own mother, the woman Rwrw. She sells it to the choachyte $P_{3}-h r$-bs for an unspecified amount of money. Seidl ( $\ddot{A} g$. Rechts. 22 and 60 ), Malinine (Choix, $\mathrm{II}_{3}$ ), and Pirenne ( $A H D \mathrm{~S}_{5}, 47^{-8}$ ) all feel that the property as a whole represents property and income solely involved with the office of choachyte. This view I feel to be incorrect.

The first argument against this view is that neither T-nt-Imn-hnm-wist nor her mother Rwrw held the title of choachyte. Nor do any other records survive which would indicate that these two women held the office of choachyte at any time, even though other examples (e.g. Rwrw in P.Bibl.Nat. 216 and 217) of women holding this office exist. Second, this document does not mention that the function of choachyte is involved, unlike P.Turin 2127 where the income of the office is specifically noted. If this property concerns itself with the function or income from the office of choachyte, that connection would be mentioned. Malinine (Choix, 102 ff .) discusses other documents concerning the funerary cult, but, I believe incorrectly, includes our document in that group. Third, the property as a group details only one item that may refer to funerary cults. The rest of the property are items which private persons may possess. Malinine's assertion that the 'sycamore' is compatible with the function of the choachyte (Choix, in6 no. 7) is not pertinent since sycamore trees may just as likely be possessed by private individuals. The sycamore would have been considered of value for its shade, figs, and wood. The one item which does pertain to the funerary cults and is mentioned in the lists is $\tau k n W$ sir, 'rations of Osiris'. Malinine (Choix, 107 no. 7) notes that, while it is clear that this item pertains to the function of the choachyte (or at least to a funerary cult), a precise definition yet remains to be given. Perhaps it is best to define the ${ }^{〔} k n W$ sir as those offerings, such as bread, beer, oxen, fowl, etc., which occur in the invocation formula ( $h t p-d i-n s w t$ ), and which are dedicated to the Osiris N. Fourth, the major difference in my interpretation of this document derives from what Pirenne defines as the meaning of the phrase sht hwot-ntr p; dmy, 'in the field, in the temple domain, and in the town', and what follows: the list of property. Pirenne (AHDO 5, 47 ff .) defines this as 'champs du temple, c.à.d. une tenure, des biens situés en ville'. He earlier defined 'tenure' as 'une terre qui appartient à un domaine sacerdotal mais dont la jouissance perpétuelle a été concédée au tenancier en l'usage' ( $\operatorname{AHDO} 5,38$ ). It is thus his contention that the property listed following this phrase is the enumeration
of the income of the office of choachyte. The concept of 'tenure' as presented by Pirenne is not questionable, and numerous examples exist of its presence as a significant aspect of the Egyptian mortuary industry. In theory the temples held permanent control of the property, but in fact the temples' prosperity remained at the whim of political and economic stability. Thus a king may revoke or renew a grant to a temple depending upon the circumstances of the times (e.g. the reinstitution of a temple grant mentioned in the Satrap Stela). However, the phrase sht hwt-ntr p; dmy does not, by itself, indicate that the property in question is a 'tenure'. The use of this phrase is found in several documents such as P.Rylands I (Griffith, Rylands, iII, 45 n. io) and in P.Berlin 5507 (ibid. 320). In both these examples the function of a funerary priesthood is specifically stated, but the phrase is simply used to indicate the source of future property. Likewise P.Vienna 1015 1/3 (Lüddeckens, $N A W G$, 1965, 5 ) shows the same usage of the phrase when referring to secular offices. They do not say whether the property listed therein is funerary in nature or not. In the early Persian Period there are six examples of this phrase (P.BM 10120B, P.Turin 2126, P.Bibl.Nat. 216 and 217 and our two documents above) in which the phrase is connected with the transfer of inherited property, either the original gift by the parent to a child or a later transfer of the inherited property by sale (as above). In all six cases following the phrase the list of property involved is given, and in the two examples of the property list (P.Berlin 3110 and P.Louvre 9293) from the early Persian Period which are not involved with inherited property our phrase sht $h$ wwt-ntr p ${ }^{3} d m y$ is not found. We should also keep in mind several examples of our phrase from the Ptolemaic Period which Pestman (Marriage and Matrimonial Property in Ancient Egypt, 119 f.) notes are involved with the inheritance of matrimonial property. The evidence suggests that our phrase is normally associated with matters involving inherited property during the early Persian Period. However, since other uses are mentioned in several other texts, I will suggest that its use with inherited property is only one of its functions, but is the only one so far attested for the reign of Darius I. We must, therefore, classify our two documents not as examples of 'tenure', but as examples of the sale of inherited private property between two individuals, this property having no connection, as previously thought, with the function of the office of choachyte.

In each of the six cases above the property is mentioned as a group with few specifics of quantity. Likewise, we are given no specifics as to the amount of money used in the sale of the property given in our two papyri. We must presume that the parties involved knew the quantities and that the document functioned as the legal vehicle recording the act of the sale. We are further not given any information to explain why $T$-nt-Imn-hnmwist decided to dispose of this property and why she disposed of it as a single block of property and did not divide it into smaller parcels. Was there some custom of not dividing inherited property when one sold it? There is no direct evidence, but it would appear that this was not the case when one considers P.Bibl.Nat. 216 and 217 where the woman $T_{3}$-snt-n- Hr divides her inheritance in half in order to give it to her children. Property would thus have been considered as unique unto itself and might be bought and sold individually or in any convenient grouping that the owner desired.

# ADAPTATION OF ANCIENT EGYPTIAN TEXTS TO THE TEMPLE RITUAL AT PHILAE 

By L. V. ŽABKAR

The transmission and reinterpretation of ancient texts by the priestly scribes at Philae, as well as other Egyptian temples, was of a complex and highly diversified nature. In dealing with the texts, the temple scribes used several different approaches. Here I will discuss two of them.

From a monument, which could be a New Kingdom temple, or from a document, such as were deposited in the temple archives, the scribes selected a basic text which was to accompany a relief representing one of the episodes of the temple ritual. In some cases large portions of that text were copied with some modifications which included the names and epithets of the new deities to whom the text was to be addressed, the name of the king on whose behalf the text was to be recited, some longer or shorter hymnal introductory phrases, or some lines from another source added at the end. To this group belong, for an example, the long offering-texts addressed to Isis and Osiris in Room V of the Temple of Philadelphus at Philae, texts which, in different versions and arrangements, are known from the New Kingdom as well as other PtolemaicRoman temples; they are also found written on papyri, and were used either in the funerary ritual of the king, ${ }^{1}$ or in the temple-ritual of various gods. ${ }^{2}$

In some other cases, however, the limited amount of inscriptional space required that the model text be shortened. The priestly scribes at Philae appear to have accomplished this task, in most cases, satisfactorily: they were able to organize the text logically, and to preserve its original meaning while adapting it to new spatial and ritual requirements, or to reinterpret it and give it a new ritual function. Two hymns from Room X of the Temple of Philadelphus will be used to illustrate these points.

## First hymn

This hymn accompanies a scene showing Ptolemy II Philadelphus offering a sphinxshaped ointment-jar to Isis (see pl. XV). ${ }^{3}$ The hymn first introduces the officiant: 'The King of Upper and Lower Egypt Wsr-kz-rc-mry-imn has come to you, O Isis, bringing to

[^60]you the myrrh which comes forth from Punt and which makes pleasant your fragrance for ever'; 4 then it continues:

> O Isis, giver of life, who dwells in the Pure Island, take to yourself the myrrh which comes from Punt, the lotus (-fragrance) which issues from your body, that your heart may be glad through it, and that your heart may rejoice every day. Osiris is in joy. His heart takes pleasure ${ }^{6}$ when son of the Sun Ptolemy covers ${ }^{7}$ for you your head with the unguent which issues from the Eye of Horus in that its name of 'Unguent'. The Eye of Horus is the fire which burns for you the followers of Seth; Geb gives ${ }^{8}$ you his inheritance.

Scenes representing the king offering myrrh to various deities, though occurring frequently in Ptolemaic-Roman temples, ${ }^{9}$ are rare in New Kingdom temples. ${ }^{10}$ However, in the scenes in which the presentation of myrrh does occur, the text accompanying the scene, with the exception of a few phrases, is different from this one at Philae. This suggests that the Philae editor selected his basic text, verses 7 -10 of the above translation, not from a monument, but from a model text on a papyrus, which he then adapted to the space available in the relief and which he addressed to Isis. Such a basic text is found, for example, in Berlin Papyrus 3055, the Ritual for the Cult of Amūn of Karnak. ${ }^{11}$ Having substituted the name and epithets of Isis for those of Amūn, and having inserted the name of Ptolemy II as the officiant, the scribe introduced some other changes. Thus, instead of 'I fill for you the Eye of Horus with the unguent which issues from the Eye of Horus'- where the writer of the Berlin Ritual probably misinterpreted Pyramid Text §50 ('I have filled for you your eye 〈with〉 the unguent')-the Philae scribe wrote: 'Ptolemy covers (lit. fills) your head with the unguent which issues from

[^61]the Eye of Horus.' But the Philae scribe was not the first to have made this change; a version of this text in the temple of Sethos I at Abydos, though otherwise different from the text at Philae, contains a similar reading: 'I have filled for you your head with the unguent which is in front of Horus. . . '12 After these changes, the phrase of the Berlin Ritual, 'that you may place it (i.e. the Eye of Horus) in front of you' ( $d i \cdot k s w r h 3 t \cdot k$ ), appeared to the Philae scribe superfluous, since it could hardly be reconciled with the tenor of his text. He did make a final change and substituted for the goddess Sekhmet of the Berlin Ritual ('the Eye of Horus is Sekhmet who burns ${ }^{13}$ for you the gods who are the followers of Seth') a very appropriate synonym, the 'Fire' ( $n n h t$ ), ${ }^{14}$ and thus produced a different reading: 'The Eye of Horus is Fire which burns ${ }^{15}$ for you the followers of Seth.' With the last phrase, 'Geb gives you his inheritance', the Philae text comes to an end; that of the Berlin Ritual, as well as the 'Opening of the Mouth' ceremony, continues with the assurances given to the god (Amūn Ritual), and to the dead ('Opening of the Mouth' ceremony): a victory over all their potential enemies, and a glorification before gods and men. The ritual of anointing with the sacred oils conferred upon the recipient, represented either by the cultic statue of a god or by the mummified statue of the deceased, ${ }^{16}$ a divine status with all its prerogatives. The Philae scribe selected the text which was part of the anointing ceremonies for his scene of offering the myrrh to Isis; however, he re-edited it and organized it as a coherent unit to fit the amount of available space. Isis, represented in the relief before the offering king, is the recipient of the benefits of this offering, and, in return, she gives the king 'all the things which come forth from the earth, and all the lands in peace'. A vertical inscription behind the enthroned Isis completes this offering scene. Ptolemy II, who built this temple and decorated most of its interior walls, needed a further assurance that his monument would last for ever, and the priestly scribe dutifully expressed this wish in the inscription: 'So long as the horizon shall be firmly established under He-of-the-twohorizons (i.e. the sun-god), Isis, giver of life, mistress of Philae, shall be firmly established in her sanctuary ${ }^{17}$ which the lord of the Two Lands $W_{s r-k s-r}$-mry-imn has made for her, for ever and ever. ${ }^{18}$ But, there is yet another reason why this vertical inscription

[^62]as well as the adjacent one was so prominently placed in the centre of the two scenes. While separating them, they nevertheless link them in a meaningful way: they associate the performance of the ritual described in the two scenes (the offering of the myrrh and of the ornamental collar) with the idea of the eternally enduring existence of the temple itself, as will be further seen from the discussion of the second hymn.

## Second hymn

The second hymn, accompanying the relief in the upper right register of the north wall of Room X of the Temple of Philadelphus (see pl. XVI), ${ }^{19}$ exemplifies an approach to the interpretation of the ancient texts different from the one which I have just discussed. The officiant is introduced with the words engraved in a vertical column in the right corner of the relief: 'It is to fasten for you the wosh-collar to your neck that the Son of Rē C Ptolemy has come to you, O Hathor, mistress of Biggeh.' This is indeed what the relief, which, in spite of some serious damage, is one of the finest and most significant at Philae, represents: Ptolemy presents to Hathor, who is here, as in some other temples at Philae, identified with Isis, ${ }^{20}$ a large ornamental collar. Hathor is called 'the Great, mistress of Biggeh, Eye of Rē', lady of heaven, mistress of all the gods'. The king, while offering her the wsh-collar, recites the hymn:

> O Atūm-Khepri, you are exalted as Height.
> You shine forth as ${ }^{21}$ the 'benben'-stone in the House-of-the-Phoenix in Heliopolis.
> You spat out Shu, you expectorated Tefnut.
> You placed your arms about them as the arms of a ' ka ',
> that the ' ka ' might be in them;
> O Atūm, may you place your arms about Isis, ${ }^{22}$ for ever.

The text of this hymn is the beginning of the Pyramid Text Utterance 600 ( $\$ \S$ 1652-3) copied by the scribe, probably from a papyrus in the temple library, and engraved by the sculptor between the figures of the king and Isis. With the exception of two phrases which the scribe changed, the text of the hymn follows closely the original Pyramid Text. With the change of the first phrase the scribe introduced a new orthographic variant at the beginning of the hymn. The Pyramid Text § 1652 a, which was his model, reads: $k \cdot \cdot n \cdot k m$ $k ; 3$, 'you were exalted as Height', and most of the texts of the New Kingdom temples as well as the Funerary Liturgy in which this text also occurs, with

[^63]some variation (cf. already Pyramid Text § $1587 \mathrm{c}: k 3 \cdot k m r n \cdot k p w n k 3$ ), follow this reading: e.g. A. M. Calverley et al., The Temple of Sethos I at Abydos, I, pl. 13; i1, pl. 19; iv, pl. 51 ( $k 3 \cdot n \cdot k m{ }_{k 33}$ ); iv, pl. 32 ( $k 3 \cdot k m{ }_{k 33}$ ); H. H. Nelson, $7 N E S 8$ (1949), 324 f. ( $h p r \cdot n \cdot k m k_{3} w$ ); A. H. Gardiner, Hieratic Papyri in the British Museum, 3rd series, pl. 53, p. 9I: $k_{3} \cdot k m k_{3} y w$ (Ritual of Amenophis I); E. Otto, Das ägyptische Mundöffnungsritual, I, 131; II, I19: $k 3 \cdot k m k 3 y t$. The Philae scribe, by changing the sign $k$, the first consonant of the second word of the phrase, into $g$, ${ }^{23}$ equated $k$ syt: $k y t$ with $g y t$ and obtained the reading $k_{3} k m g y t$; to this gyt he then added the 'upright mummy'determinative (Gardiner, Sign-list, A 53), suggesting, as it were, that he was thinking of $k ; i, k i$ 'form, nature' (a word written with such a determinative) rather than of $k 33$, $k s y t, k y t, k_{3} w$, 'height'. However, it is very probable that all he wanted to indicate by the 'upright mummy'-determinative was a personified idea of 'height', or 'elevation', aptly described by a determinative usually added to the words indicating 'statue, form', etc. and referring in the Philae text to Atūm-Khepri, a personified elevation himself. To my knowledge, there is no other example of such an interpretation in the long history of the transmission of this Pyramid Text. This is not the only occurrence of this Pyramid Text in the Temple of Philadelphus. As will be seen from the following pages, the same text in a longer form has been recorded in the upper right register of the north wall of the 'Court' of the temple. ${ }^{24} \mathrm{In}$ it, the above-discussed phrase occurs as $k 3 \cdot k m g 3 y w$, 'you are exalted as Height', again with the change of $k$ into $g$ but without any determinative. This word $g_{3} y w$ is to be considered as another of several variants of the word $k ; w$, 'height', $k ; w, k 3 y, k z y w, g 3 y w$.

The second change introduced by the Philae scribe was less felicitous. Instead of the reading of Pyr. § 1652 c: $i s s_{s} \cdot n \cdot k m S z w$, 'you spat out Shu', he wrote $i v s s ̌ n \cdot n \cdot k m S w$. The Berlin Philae Ph. 103I which shows the second $n$-sign slightly better preserved than the one on my pl. XVI makes it evident that it is indeed an $n$-sign, and certainly not a determinative following the words $i \not \approx s$ and $t f$ (i.e. Gardiner, Sign-list, D 26). Thus the verb appears clearly in the $s \underline{d} m \cdot n \cdot f$ form just as the following $t f \cdot n \cdot k$. There is no difficulty with $i w$ in $i z \sin ^{5} n \cdot n \cdot k$ since in Ptolemaic times $i z w$, as well as $i$, occurs as a prothetic vowel before some nouns and verbs, e.g. isš̌ $p^{25}$ and iws ${ }^{2} p .{ }^{26}$ But, even if it is assumed that $s$ represents an unassimilated $\check{s}(s \check{s}$ for $\check{s} \check{s}),{ }^{27}$ it is still difficult to explain the first $n$ in $i$ izvšn $n \cdot n \cdot k$. Is it possible that the scribe thought of the word $\operatorname{šn} n$, listed in $W b$. Iv, 294, 4, 'Gestalt, o.a.'., as a verb with the meaning 'to form'? If this radical departure from all other versions is assumed here, the Philae scribe would have interpreted the phrase as 'you formed Shu (and you spat out Tefnut)'. This may indeed appear to be a very hypothetical explanation of this phrase of the text, but, on the other hand, it is equally

[^64]difficult to assume that the scribe who gave proof of his ability in dealing with ancient texts in this as well as other inscriptions of the temple made such an awkward mistake. The text on the north wall of the 'Court' mentioned above reads correctly $i s \check{s} \cdot n \cdot k m$ Sw $\mathrm{tf} \cdot \mathrm{n} \cdot \mathrm{k} m T f n w t$, 'you spat out Shu, you expectorated Tefnut'.

With the exception of these two changes, the Philae scribe, as already stated, followed the original Pyramid Text, probably available to him in the temple archives, or, less likely, known from the inspection of some of the New Kingdom temples, such as that of Sethos I at Abydos where this text occurs in several instances. As a matter of fact the Philae scribe followed his model to the point of faithfully copying even some minute but significant details: e.g. he preserved the $m$-sign before $\zeta w$ and $T f n w t$, the function of which as an early instance of Coptic a before the object of a transitive verb has only recently been properly explained by Faulkner, ${ }^{28}$ who thus improved upon all previous translations of this passage. This $m$ occurs not only in this instance at Philae but also in three occurrences of this text in the Temple of Sethos I at Abydos, ${ }^{29}$ in the temple of Karnak, ${ }^{30}$ in the Funerary Liturgy, ${ }^{31}$ and, as will be seen in the following pages, in the second occurrence of this hymn at Philae on the north wall of the 'Court'.

It is with the short invocation at the end of the hymn that a more significant change occurs. While the reciter of the Pyramid Text asks of Atūm to place his arms about the king and about his pyramid 'that the "ka" of the king may be in it', that is, that the very being of Atūm, his 'double', his other self, may pass into the king and into his pyramid, the Philae text accompanying the king's gesture of offering the ornamental collar to Hathor, identified with Isis, ends by asking Atūm to place his arms about Hathor-Isis. It is evident that what is involved here is not a re-editing of a text-used more or less for the same purpose as in its earlier occurrences, as has been observed in the discussion of the hymn accompanying the offering of myrrh to Isis-but a new function substituted for that of the original Pyramid Text. This will be further illustrated by quoting the longer version of this hymn found, as already mentioned, in the upper register of the 'Court' of the Temple of Philadelphus. Owing to the length of this version of the text and to a different spatial arrangement of the reliefs on this wall of the 'Court', there is no initial formula introducing the king and describing his action; with the exception of the words 'I give you all joy with me', there are no other promises made to the king by Isis in return for the benefits bestowed upon her by the recitation of the hymn. Ptolemy II extends the same large ornamental collar to the goddess 'who protects her brother at Biggeh', and recites the hymn:

Hail to you Atūm, hail to you Khepri.
You are exalted as Height.
You shine forth as the 'benben'-stone in the House-of-the-Phoenix (in) Heliopolis.

[^65]You spat out Shu, you expectorated Tefnut.
You placed ${ }^{32}$ your arms about them in the House-of-the- $\mathrm{Ka}^{33}$
that your 'ka' may be in them;
O Atūm may you place your arms about Isis, the Great, the mother of god, the mistress
of Philae
and around her ' $k a$ ' 34 eternally.
O Atūm, place your protection ${ }^{35}$ over Isis, as your protection was placed over Shu and Tefnut;
O you great Ennead which is in Heliopolis:
Atūm, Shu, Tefnut, Geb, Nut, Osiris, Isis and Nephthys . . . ${ }^{36}$
There the text ends abruptly. Seth, who appears before Nephthys in the Pyramid Text (§ 1655 b ), as well as in the temples of the New Kingdom (Calverley et al., op. cit. II, pl. 19; Moret, Le Rituel, 243 n. I), could not possibly be included in the list at this late stage of Egyptian religion in spite of the fact that by omitting him the list remained incomplete and the Ennead appeared composed of only eight members, a difficulty obviated in some other late occurrences of this text by the insertion of other deities, not original members of the Ennead (thus Otto, Mundöffnungsritual, I, 132; II, 119; L. Kákosy, $Z \ddot{A} S 96$ (1970), 112). The lack of space saved the scribe from another inconsistency: if this badly damaged hymn had been completed in the form in which it appears in Pyramid Text § 1655 c ff., Isis too, one of the members of the Ennead, would have been invoked to protect herself.
As to the significance of this hymn, it has been said earlier (see above, p. 132) that its function in the ritual and relief at Philae is different from the function it had in the Pyramid Text. Now, the reinterpretation of this ancient text and the extension of its function did not originate at Philae. It can certainly be traced back to the New Kingdom

[^66]temples in whose libraries or archives the ancient texts were studied and in whose ritual, actually performed in the temple and represented in its reliefs, these texts were adapted to new requirements. In particular, this Pyramid Text (Utterance 600) was used in the temples of the New Kingdom for a multiple cultic purpose. ${ }^{37}$ When it was originally inscribed in one of the chambers of the pyramid, it assured the king that Atūm's arms would for ever protect him and his pyramid, just as, in the mythical time of creation, Atūm's arms, in the form of an embracing ' ka '-symbol, protected Shu and Tefnut and infused in them his divine essence. In the temple service of the New Kingdom the same text was used to cause the offerings to the gods to endure and to make endure the torch used at the New Year Festival. ${ }^{38}$ The same text was recited as part of the daily ritual, when the ornamental wsh-collar was presented and fastened to the neck of the statue of a god or goddess, and also when it was placed on the mummified statue of the dead, on the cultic statue of a sacred animal, ${ }^{39}$ or on a mummified statue of a sacred animal. 40 The characteristic and essential feature, common to all these cultic as well as funerary performances and recitations, was the efficacy of the embracing 'ka'-gesture, ${ }^{41}$ which bestowed divine qualities and eternity upon the king and his pyramid, and guaranteed a perpetual recurrence of offerings to the gods, a regular, indispensable performance of the ritual for the deities, and funerary ceremonies for the dead. The offering of the large ornamental collar on the part of Ptolemy II to Hathor-Isis in his temple at Philae, represents, therefore, one of the well-known episodes of the temple ritual, probably the earliest such fully preserved representation of the Ptolemaic Period. And yet, while thus continuing a centuries-old temple tradition, the scribe introduced a variation on this old ritual theme. As in the adjacent relief which represents the offering of myrrh to Isis, here too Ptolemy II, having recited the hymn which accompanies the presentation of the collar to Hathor-Isis, receives from the goddess similar assurances: 'I give you the life-span of Rē in heaven, I give you all the lands in praise.' ${ }^{42}$ The vertical inscription behind the enthroned Hathor-Isis completes the scene with the words similar to those which conclude the scene of offering the myrrh: 'So long as the heaven shall be firmly established under Rē', Hathor, Lady of Biggeh, shall be firmly established upon this monument which the lord of the crowns Ptolemy has made for her, for ever and ever.' 43 These words aptly describe the special effect which the recitation of the hymn will have on the temple itself, and, together with the concluding words of the adjacent scene of offering the myrrh to Isis, they link the two reliefs into a well-integrated tableau.

Thus, to summarize, the Philae scribe, in both versions of the hymn, introduced Hathor-Isis as the recipient of the benefits of Atūm's embrace: 'O Atūm, place your

[^67]arms about Isis, and about her "ka"'; then he transferred to Isis' temple the eternally enduring beneficial effects originally associated with the king and his pyramid. Symbolically, this was expressed by the presentation of the ornamental wsh-collar to the goddess: just as Atūm's arms in the form of a 'ka'-symbol embraced the king and his pyramid and infused in them the god's divine essence and, with it, permanently beneficial effects, so each time when it is presented to her in the temple ritual and fastened on to her cultic statue, the ornamental wsh-collar fills Hathor-Isis with Atūm's divine qualities and bestows upon her temple an enduring eternal stability. ${ }^{44}$

The true nature of the work of the priestly circles of the great Ptolemaic temples and their contribution to Egyptian culture of that period is yet to be properly evaluated. In that evaluation distinctions will have to be made as to particular historical periods, conscientious attempts at accuracy, background and training of the theologians and artists, their political patronage, etc. Generally speaking, the time of Ptolemy II Philadelphus at Philae was one of sound and creative theological-literary work, a time in which the artists also, working in the same temple, produced some of the finest relief-figures of the Ptolemaic Period.

## Postscript

In an article in MDAIK 25 (1969), nio-20, Abdel-Aziz Saleh translates the above-discussed Pyr. § 1652 a as ' O Atum the ever-being, thou wast eminent like a hill', but he disagrees with those who see in the 'hill' a reference to the 'primeval hill'; he also argues against translating $h \mathrm{hpr}$ as 'Khepri' on the ground that, with one exception (S. Hassan, Hymnes religieux du Moyen Empire, 192), this epithet of the sun-god or the rising sun is confined to the texts of the Eighteenth Dynasty onwards.
As to Saleh's first objection, it is true that the 'primeval hill' is not directly referred to in this text. The word $k_{3}$, and its variants indicate not only a 'hill', or 'high ground', but an 'elevation' in general. In this particular instance the first as well as the following phrase ('you shone forth as the "benben"stone') seem both to allude to an object resembling an obelisk or at least the apex of an obelisk, a pyramidion, and this is the interpretation which I have adopted in translating the Philae version of this hymn. It is possible, however, that, in the mind of those who composed this hymn, such an architectural elevation was reminiscent of the mythical elevation of the 'primeval hill'; otherwise one does not see what other hill could here be referred to.
As to Saleh's objection to translating $h p r r$ as 'Khepri' (or 'Khopri'), it is to be said that the explanation of this word in Pyr. $\S 1587 \mathrm{c}$ ('you are high in this your name of Height, you come into being in this your name of Kheprer', similarly stated in a text published by H. Nelson in 7 JES 8,324 f.), as well as the traditional Egyptian interpretation, all through the Ptolemaic Period, which almost regularly appended to this word a divine determinative (e.g. Calverley et al., The Temple of Sethos I

[^68]at Abydos, 1, 13; II, 19; III, 32; IV, 51; A. Gardiner, Hieratic Papyri in the British Museum, 3rd Series, pl. 53: ind-hr•k Tm ind-hr•k Hpri k3•k $m k 3 y w$, the second phrase, for some undisclosed reason, translated 'thou climbest on high by the High Stairway', p. 91; E. Otto, Mundöffnungsritual, I, 131; II, I19; see both versions of this hymn at Philae, discussed above, etc.) would seem to indicate that $h p r r$, originally 'dung-beetle, scarab', was associated with the sun-god and the creatorgod not only as an epithet, but as a personified epithet, as early as the Pyramid Texts. Subsequently, when applied to these gods, it came to be pronounced as 'Khepri', 'Khopri', or similarly, this pronunciation being derived from the verb $h p r$, rather than the noun $h p r r$ : see now also J. Assmann, $L A ̈ \mathrm{I}, 934 \mathrm{f}$.

As to the translation of the Philae versions of Pyr. §§ 1652 ff . (see above, pp. 130, 132 f .), because of the inconsistency of tenses (see above, p. 133 n .32 ), I did not consider it feasible to translate the $s d m \cdot n \cdot f$ forms as emphatic forms. As will be seen from my observations about the usage of the $s d m \cdot n \cdot f$ form in some of the Philae texts (soon to appear in $Z \ddot{A} S$ ), all the main functions of the $s \underline{d} m \cdot n \cdot f$ (as well as $s \underline{d} m \cdot f$ ) form were well known to the scribes of the Ptolemaic and Roman temples; however, just as in the New Kingdom temples, so too at Philae, the rules were not always observed. This seems particularly to have been the case when the scribe had to adapt or re-edit an ancient text which may have been known to him in several versions. The above-mentioned Pyramid Text is generally consistent in the usage of tenses, and all the sdm $\cdot n \cdot f$ forms occurring in it can be translated well as emphatic forms (with the exception of the first two, in which an $m$ of equivalence by itself provides enough emphasis): ' $O$ Atūm-Khepri, you were exalted as Height, you shone forth as the "benben"-stone in the House-of-the-Phoenix in Heliopolis; Shu it was that you spat out, Tefnut it was that you expectorated, and, in order that your "ka" might be in them, you placed your arms about them as the arms of a "ka".'

I wish to thank Dr Ahmed Kadry, former President of the Organization of Nubian Antiquities, and Messrs Sami Farag, Adel Farid, and Gamal Wahba, resident archaeologists at Philae, for their co-operation and assistance in my work at Philae.



## Plate XVI



# MUSEUM ACQUISITIONS, 1978 

## Egyptian antiquities acquired in 1978 by museums in the United Kingdom

Edited by JANINE BOURRIAU
The Danson collection acquired in 1977 by the Merseyside County Museum, Liverpool (see $\mathcal{F} E A$ 65, 1 51), has been listed separately, and for this reason Liverpool has been omitted before the museum numbers. To save space, measurements and, with a few exceptions, materials have also been omitted.

It has been decided to include from this year onwards newly registered objects in the Petrie Museum of University College London. While these are not new acquisitions, I have in the past included notices of objects acquired earlier and merely registered in the relevant year. The process of registration in the Petrie collection is producing a great deal of new information, and this list may help to draw it to the attention of readers.

## Old Kingdom

r. Red, green, buff, yellow, and grey pigments for inlay, University College 31169 A-E. From Meidûm, mastaba 16. Fourth Dynasty.
2. Rim sherd of 'Meidûm' ware, University College 3 1170. Length 8.1 cm . From Meidûm.
3. Linen with selvedges and hemmed border, University College 3 1171. Length 86.0 cm . From Deshâsheh tomb ioo. Fifth Dynasty.

4-5. Bolt of linen and linen bandage, University College 31173, 3 1194. Lengths $103.0,15.2 \mathrm{~cm}$. From Deshâsheh.

6-7. Two linen tunics with long sleeves, University College 31182-3. Lengths $99.0,35 \cdot 5 \mathrm{~cm}$. From Deshâsheh tomb 148 b. Cf. Petrie, Deshasheh, pl. xxxv, 148. Fifth Dynasty.

8-11. Wooden mallets and chisels, University College 31174-5, $31177-8$. Heights 32.0, 59.2, 21.0, 36.3 cm . From Deshâsheh tombs 86 and rog. Ibid. 33, pl. xxxiv, 14, 16, 18; Petrie, Tools and Weapons, pl. xlix, B31.
12. Skull of Inti, University College 31176. From his tomb at Deshâsheh, Petrie, op. cit. 5, pl. xxxvi, top.

13-15. Human long bones, University College 31179-8i. From Deshâsheh tombs 113, 115, 148 b. Ibid. 22, pls. xxxvii, left, right, xxxv, 148.
16. Glazed steatite beads, University College 31172. From Deshâsheh tomb 117. Ibid. 17 .

17-18. Faience beads and bone fragments for inlay, University College 31192-3. From Deshâsheh.
19. Wooden fragments, University College 3 II95 A-V. From Deshâsheh tomb 44. Ibid. 37-8.

## First Intermediate Period

20. Black steatite cowroid seal, Fitzwilliam E.i.1978. Given by Mr Jan Ellison.

## New Kingdom

21. Fragment of black basalt statue of Sekhmet, Hunterian Museum D.1978.i. From Karnak,

## JANINE BOURRIAU

probably the Temple of Mut. Ex Lanfine collection, MS. catalogue in the museum dated 22 May 1833. Amenophis III.

22-3. Fragment of painted limestone relief and fragment from the lid of the king's alabaster sarcophagus, Hunterian Museum D.1978.3, 4. From the tomb of Sethos I in the Bibân el-Mulûk. Ex Lanfine collection, acquired from Colonel Wilson, who must have visited the tomb after Belzoni but before 1833 .
24. Uninscribed corner fragment from a black granite sarcophagus, Hunterian Museum D.1978.2. Length 7.5 cm . From Thebes.
25. Alabaster vase with incised floral design, University College 30084 (pl. XVII, 2). Height 23.5 cm . From Mêdinet Gurôb. Petrie, Stone Vases, pl. xxxiii, 842. Eighteenth Dynasty.
26. Five dark-blue faience amulets in the form of hieroglyphs, Royal Scottish Museum, 1978.52I A-E. Eighteenth Dynasty.

## Late Period

27. Faience shabti with impressed inscription in one vertical line, of Djeho, 'Great fighter, Lord of Triumph', Ashmolean 1978.330. Height 10.7 cm. Probably from Horbeit. Given by the Egypt Exploration Society through the Griffith Institute. Twenty-fifth-Thirtieth Dynasty.
28. Faience shabti with impressed inscription in two vertical lines, of Ircahpiu son of Ten(t)mehen(t), Ashmolean 1978.331. Height 10.9 cm . Given by the Egypt Exploration Society through the Griffith Institute. Twenty-fifth-Thirtieth Dynasty.
29. Faience shabti of Es-isut with impressed inscription in one horizontal and one vertical line, Ashmolean 1978.753 . Height 14.6 cm. From Campbell's Tomb, Gîzeh. Given by Mrs G. Medlicott. Twenty-seventh Dynasty.
30. Green faience figure of Thoth, University College 30110 (pl. XVIII, r). Height in. 9 cm . From Memphis, Palace of Apries. Petrie, Memphis III, pl. xv. Persian Period.

31-2. Two bronze razor blades, British Museum 68924-5. Length 21.9, 19.9 cm . From Saqqâra. Gift of the Egypt Exploration Society.
33. Yellow glass beads with one in the form of the head of Bes, British Museum 68932. Gift of N. A. Merriman. Ptolemaic Period.

34-5. Wax encaustic portraits of a woman and a man, University College 30081-2 (pl. XVIII, 2). Heights 42.9, $4^{2.2}$ cm. From Hawara, nos. 44, 49. Petrie, Roman Portraits, 13. Graeco-Roman Period.

36-7. Wax encaustic portraits of a woman and a girl, University College 30088-9. Heights 39.7, 30.1 cm. From Hawara, nos. 35, 26. Ibid. 8 (University College 30088). Graeco-Roman Period.
38. Faience amphora, deep blue with band of turquoise-blue petals on shoulder and groups of the same on body, Ashmolean 1978.739. Height 20.1 cm . Gift of Mr Gerald Reitlinger. Early Imperial Period.

## Coptic Period

39. Greek papyrus: a receipt for the price of various quantities of tow, given by Ammonios, village elder, to his sons, Gulbenkian Museum $1978 / 8$. Height 9.0 cm . Width 13.0 cm . Fourth century AD.
40. Linen textile with figure design in tufted wool, Royal Scottish Museum 1978.490. Fourthfifth century AD .

## The Danson collection acquired by the Merseyside County Museum, Liverpool

## Predynastic

41. Limestone vase, 1977.ro9.60. From Naqâda.

42-4. Stone vases, 1977.109.55, 1977.112.65, 86. From Naqâda. Ex Berens and Kennard collections. Burlington Fine Arts Club, Ancient Egyptian Art, 1922, 78 pl. xxvii; Sotheby's Sale Catalogue, 16-19 July 1912, lot 8.

45-7. Stone vases, 1977 .109.58, 68, 70. From Abydos, Garstang excavations, 1909 , 1908 grave 542, 1906 grave 24.
48. Vase, alabaster, 1977.II2.76. From Abydos. Ex Kennard collection. Sotheby's Sale Catalogue, 16-19 July 1912, lot 7 .
49-53. Stone vases, 1977.112.35, 73, 81, 87, 114. Ex Rustafjaell collection. Sotheby's Sale Catalogue, 20-4 January 1913, lots 76, 88, 81, 161, 82.
54-85. Stone vases and bowls, 1977.112.40-2, 57-60, 63-4, 66-8, 69-72, 75, 82-5, 89-90, 92, 100, 108, 116-17, 119, 125, 127, 143-4.
86. Diorite disc macehead, 1977.112.286.

87-8. Flint point and arrow, 1977.112.309-ro. From El-Kâb excavations 1902.
89-90. Flint knives, 1977.1 i2.3 II-12. From Akhmîm 1901.
91-4 b. Flint leaf-shaped points and knives, 1977.II2.302-5, 307-8.

## Early Dynastic

95-7. Vase and bowls, alabaster, 1977.112.62, 132, 174. Vase, ex Rustafjaell collection. Sotheby's Sale Catalogue, 20-4 January 1913, lot 62.

## Old Kingdom

98-106. Vases and dish, alabaster, 1977.109.51, 53-4, 61, 64, 69, 71-2, 128. From Abydos, Garstang excavations, 1909 grave 769,1906 grave unknown and grave 1004, 1909 graves 708,746 , grave unknown, grave 657, grave unknown, grave 748. 1977.109.54 ex Macgregor collection. Sotheby's Sale Catalogue, 26 June-6 July 1922, lot 1008.

107-9. Alabaster vases, 1977.109.56, 62-3. From Abydos, Garstang excavations.
110. Diorite bowl inscribed with the name of Snofru, 1977.112.123. Ex Kennard collection. Sotheby's Sale Catalogue, 16-19 July 1912, lot 6.
iII. Fragment of a diorite bowl inscribed with a royal name, 1977.112.296.

112-18. Stone vases and bowls, 1977.112.38, 50, 52, 56, 91, 106, 124. Ex Rustafjaell collection. Sotheby's Sale Catalogue, 20-4 January 1913, lots 76, 162, 180, 161, 163, 172.
119. Vase, limestone, 1977.II2.39. Ex Macgregor collection.

## 140

## JANINE BOURRIAU

120-51. Stone vases and bowls, 1977.112.28, 33, 36, 43-6, 48-51, 53-5, 77-80, 88, 94, 102, 104-5, 110, 112, 115, 121, 126, 131, 133-4, 172.

152-3. Limestone maceheads, 1977.112.299-300. Ex Rustafjaell collection. Sotheby's Sale Catalogue, 20-4 January 1913, lot 27.

154-8. Maceheads, limestone, diorite, and haematite, 1977.112.285, 287-9, 294.
159. Alabaster headrest, 1977.112.8, Burlington Fine Arts Club, Ancient Egyptian Art, 1922, 6I (2I).
160. Round stone object, possibly net sinker, 1977.112.295.

## First Intermediate Period

161. Alabaster vase, 1977.112.34. Ex Rustafjaell collection. Sotheby's Sale Catalogue, 20-4 January 1913, lot unknown.

## Middle Kingdom

162. Jewellery, gold, carnelian, and garnet beads and amulets, 1977.109.2. From Abydos, Garstang excavations, 1909 grave 342.
163. Steatite scarab, 1977.109.14. From Abydos, Garstang excavations 1906.

164-7. Flint flakes, 1977.109.30-1, 160. From Abydos, Garstang excavations, 1909 grave 657 and season unknown.

168-9. Painted limestone stelae of Sobkemḥēt and User. . ., 1977.109.35, 37. From Abydos, Garstang excavations 1908, Cemetery E, graves 494, 1036.
170. Painted limestone stela of Sekher, 1977.109.36 (pl. XVII, 1). From Abydos, Garstang excavations 1907, Cemetery E, grave 361.

171-3. Stone bowls and vase, 1977.109.52, 65-6. From Abydos, Garstang excavations, 1906, season unknown and 1906 grave 24.

174-88. Alabaster and anhydrite kohl pots, 1977.109.50, 77, 80-9, 137-9. From Abydos, Garstang excavations, 1909 graves 1084, 949, 1908 grave 645 , season unknown grave 627, 1906 graves $1,9,24$, 1908 grave 534, 1907-9 grave 359, 1908 grave 474, 1909 grave unknown, 1906 grave 24, 1907 grave 425,1909 grave unknown, 1907 grave 338.

189-91. Alabaster kohl pots, 1977.109.140-1, 144. From Abydos, Garstang excavations.
192-4. Palette, grinder, and wooden kohl stick, 1977.109.32-3, 142. From Abydos, Garstang excavations.

195-7b. Pottery, 1977.109.97, 115, 121, 127, 135. From Abydos, Garstang excavations, 1906 graves 18, 13, 18 (3 examples).

198-214. Pottery, 1977.109.90-3, 96, 99, 103-4, i16, i19, 122, 124-6, 129, 131, 133 . From Abydos, Garstang excavations, 1907 graves 416, 409, 366, 406, $317,360,350$ (2 examples), 367, 337, 385, 421, 366, 383, 332, 637, 393.

215-19. Pottery, 1977.109.100-2, 120, 123. From Abydos, Garstang excavations 1907, graves unknown.

220-2. Pottery, 1977.109.95, 136, 143. From Abydos, Garstang excavations.
223. Limestone stela of Harḥotpe, r977.110.31. From Esna, grave 267; see J. Garstang, $A S A E 8$ (1907), 144; D. Downes, The Excavations at Esna 1905-6, 30-1, fig. 44.
224. Shell of Sesostris I, 1977.iro.i. From Esna, grave 263. Downes, op. cit. 59, fig. 30 (right).
225. Faience figure of Bes, 1977.IIo.2. From Esna, grave 275. Downes, op. cit. Io6, fig. 90.

226-38. Pottery, 1977.1ı.1ı-18, 24-5, 27-8, 33. From Esna, graves 246, 257, 346, 224, 238, 324, 306, 217, 334, 224, 236, 353, 133.
239. Faience beads, 1977.1 ro.6. From Esna, grave 232.

240-3. Alabaster vases and bowl, 1977.1 $12.29-30$, 47, 95. From Asyût, Kâu el-Kebîr, Luxor, and Edfu (purchased).

244-5. Alabaster vases, 1977.112.18, 31. Ex Rustafjaell collection. Sotheby's Sale Catalogue, 20-4 January 1913, lot 185 (1977.112.3I only).

246-74. Stone vases, kohl pots and lids, 1977.110.35, 1977.112.19-25, 32, 37, 97, 101, 103, 113, 137, 186, 218-22, 224, 229-35.

275-6. Stone kohl sticks, 1977.112.223, 225.
277. Alabaster shabti, 1977.112.9.

278-80. Glazed steatite and amethyst scarabs, 1977.112.262, 269-70.

## Second Intermediate Period

281-3. Jewellery, beads, and amulets, 1977.109.5a-f, 7-8. From Abydos, Garstang excavations, 1906 graves 24, 3, 23.
284. Scarab, 1977.109.12. From Abydos, Garstang excavations, 1909 grave 1078.

285-6. Beads and scarab, 1977.110.3, 5. From Esna, graves 21 7, 154. Downes, op. cit. 62, 124, 122.
287-92. Pottery, i977.II0.8, 19-22, 26. From Esna, graves 142, 318, 264, 297, 260, 329.
293-321. Pottery, 1977.112.187, 190-4, 196-216, 236.

## New Kingdom

322-31a. Jewellery, 1977.i08.i-ir. From Abydos, Garstang excavations, 1909 grave 941, see fy $E A 65$ (1979) pl. XXVI, $1, ~ \mathrm{r}-2 ; L A A A 2(1909), \mathrm{pl} . \mathrm{xv}$.

332-3. Jewellery, 1977.109.3-4. From Abydos, Garstang excavations, 1909 graves 1037, 912.
334-42. Jewellery, 1977.109.9, 21-7, 34. From Abydos, Garstang excavations 1908, 1909.
343-5. Scarabs and seal, 1977.109.10-11, 13. From Abydos, Garstang excavations, graves 752, 836, 939.
346. Faience amulets, 1977.109.6. From Abydos, Garstang excavations, 1909 grave 977.

347-50. Seals, 1977.109.15-18. From Abydos, Garstang excavations.
351. Faience bowl, 1977.109.1. From Abydos, Garstang excavations, 1909 grave 949.

352-7. Ivory clapper, bowl of spoon, box, pins, and spatula, 1977.109.19-20, 150-3. From Abydos, Garstang excavations, 1909 graves 779A, 509, seasons 1907-8.

358-9. Eyes from coffins, 1977.109.28-9. From Abydos, Garstang excavations, 1908 grave 471 and season unknown.
360. Offering table with hieratic (?) inscription, 1977.109.39. From Abydos, Garstang excavations.

361-8. Stone vases and lid, 1977.109.59, 67, 73-5, 79, 159, 1977.112.139. From Abydos, Garstang excavations, 1909 graves $868,627,1018$, 1906 grave 242 , 1909 grave 748 , season unknown graves 302, 309, 1909 grave unknown.

369-71. Bronze knives, 1977.109.154-6. From Abydos, Garstang excavations, 1908 graves 499, 141, and season unknown.

372-88. Pottery, 1977.109.94, 98-9, 105-14, 117-18, 130, 134. From Abydos, Garstang excavations, 1907 grave 565,1906 grave 8 , 1907 grave 360 , 1909 grave 1057, 1909 grave unknown, 1906 grave 18, 1907 graves $385,409,393$, 1906 grave 18,1907 graves 395,404 , grave unknown, 417 , grave unknown, season unknown grave 562, 1907 grave 350.

389-90. Beads and amulets, 1977.iro.4, 6. From Esna, graves 16, 232.
391-2. Pottery, i977.110.23, 34. From Esna, graves 320, 253.
393. Alabaster vase, 1977.109.57. From Reqaqnah.

394-6. Alabaster vases from foundation deposit of Tuthmosis III, 1977.112.15-17. From Nubt, ex Kennard collection. Sotheby's Sale Catalogue, 16-19 July 1912, lot 14.
397. Faience rosettes for wall inlay, 1977.112.313. From Tell el-Yahûdîya.

398-9. Shabtis of Pedeamūn and King Sethos I, 1977.II2.10-1ı.
400-30. Stone vases, 1977.112.26-7, 74, 93, 96, 98-9, 107, 109, 111 , 118 , 120, 122, 128-30, 136, 138-9, 140-2, 145-5I, 173 .

431-6. Kohl sticks, ivory pin, and knob from a box, 1977.112.291, 226-7, 256, 255, 277 .
437-8. Double and triple wooden kohl tubes, 1977.112.290, 293.
439-41. Scarabs, 1977.112.257, 261, 263.
442-4. Bronze needle, tweezers, and furniture fittings, 1977.112.276, 283, 279.
445-8. Pottery vases and mould, 1977.112.14, 217, 237, 273.
449. Limestone trial piece of a swallow, 1977.112.12.
450. Steatite statuette of the Horus falcon, 1977.112.13.
451. Limestone stela showing man offering to Osiris, 1977.112.4.
452. Upper part limestone stela with three lines of text, 1977.112.5.

## Third Intermediate Period

453-7. Pottery, 1977.110.7, 9-10, 29-30. From Esna, graves 133, 139, 250, 300 (2 examples). 458. Hawk from Ptah-Sokar-Osiris figure, 1977.112.301.

459-60. Amulets, udjat eye and headrest, 1977.112.265, 268.

## Late Period

46i-6. Limestone stelae, 1977.109.40-3, 46-7. From Abydos, Garstang excavations, 1907 graves 226D, 102, 226, 202, 213, 210. Graeco-Roman Period.

467-8. Limestone stelae, inscribed in Demotic, 1977.109.44, 48. From Abydos, Garstang excavations, 1907 grave 65, grave unknown. Graeco-Roman Period.
469. Painted limestone stela with hieroglyphic and Greek inscriptions, 1977.109.45 (pl. XVIII, 3). From Abydos, Garstang excavations, possibly 1907 grave 74. Graeco-Roman Period.
470. Offering-table of Esinḥert, 1977.109.49. From Abydos, Garstang excavations, 1909 grave 893.
471. Offering-table with Greek inscription, 1977.109.38. From Abydos, Garstang excavations. Graeco-Roman Period.

472-3. Alabastra, 1977.109.76, 78. From Abydos, Garstang excavations.
474. Offering-table, inscribed, 1977.110.32. From Esna, grave iro. Graeco-Roman Period.

475-506. Alabastra, 1977.112.61, 152-71, 175-85, 228.
507-1 I. Amulets, 1977.112.250-1, 264, 266-7.
512. Bronze furniture fittings, 1977.112.275.
513. Heart scarab, 1977.112.298.

514-16. Inlaid eye and wooden ears from coffins, 1977.112.252-3, 260.




# REVIEW ARTICLE 

Resheph in Egypt

By RAPHAEL GIVEON

The appearance of a new monograph on Resheph ${ }^{1}$ presents a good opportunity to make some general statements on the character of the worship of Resheph in Egypt, to survey the Egyptian material on this Asiatic god, treated in the first chapter of Fulco's book, and to add some items not included by him.

Personal names which include 'Resheph' are those of Asiatics who came to Egypt. They range from the Middle to the New Kingdom, and do not point to the worship of the god in Egypt. This begins with the reign of Amenophis II ( $1450-1425 \mathrm{BC}$ ) of the Eighteenth Dynasty. Resheph is a royal god at this stage, just as Anat is the personal goddess of Ramesses II. This royal association begins and ends with Amenophis II. Curiously, there is a renaissance of Resheph in official representations, especially on temple walls, in the Late Dynastic and Ptolemaic Periods.

After the reign of Amenophis II Resheph appears as a god of the common people. He is a god who 'hears prayers' to whom a private and humble person can come with his sorrows and hopes. This is true of other Asiatic gods from the Eighteenth Dynasty onwards, and is due to the influx of Asiatic workmen and merchants into Egypt. The evidence for this cult consists of private and mostly simple stelae many of which derive from Deir el-Medîna. The names of the owners are mostly Egyptian and not Semitic. There is nothing in the religious geography of the workers' settlement and of the necropolis to connect the cult of Resheph there with Amenophis II; Deir el-Medina is simply a site where more stelae of workmen have been found than anywhere else; therefore we have a larger number of Resheph-stelae from the area than from any other context. On these stelae Resheph is depicted with his usual weapons, though he is not employing them against enemies: on the contrary, he figures as a Schutzgott who 'hears prayers'. This rather surprising transformation is, however, easily understood; he was beneficial to Amenophis II as a warlord: thus, with the same attributes, he will be efficient in acting for individuals. In fact, the stance of Resheph is a royal one: kings are represented in precisely the same attitude, smiting or sacrificing the enemy before a god. This may account for the frequent association or identification of Resheph with Montju with whom the king is often compared.

Frequently Resheph forms part of a triad with Qadesh, the Canaanite goddess of love, standing on her lion, and Min, the god of male fertility. What can his function be in relation to these two deities of sexuality? It seems possible that Resheph, in this context also, is a benevolent god who represents life and well-being. We may even have here, in addition, an echo of the oracular activities of Resheph in Asia: he is there to ensure a happy future of the expected child.

The gazelle-head or gazelle-horns are Resheph's distinguishing mark. It has been said that he was originally, in Asia, a stag-god, and because there are no stags in Egypt the animal chosen was the gazelle. Simpson claims ( $\mathcal{f} A O S 73$ (1953), 86) that the animals on the forehead of gods and kings were species which inflict harm. This is certainly true of the uraeus, but less evidently the case for the vulture on the forehead of queens. The gazelle was hardly chosen to decorate the forehead of one of the three 'princesses' of Tuthmosis III because it was an obnoxious animal, and the same is true as far as Resheph is concerned. The notion of the gazelle as an enemy is

[^69]a fairly late one: it arose probably because it was associated with Seth as an animal of the desert, and consequently as an animal sacrificed to Seth. However, it was also regarded as a beautiful animal of gracious movement seen by travellers and hunters in the desert, symbolizing the eastern desert and eastern lands and, at the same time, the principle of beauty. In a document of the Eleventh Dynasty from the Wadi Hammamat the kernel of both attitudes to gazelles emerges: a gazelle is sent by god to show an expedition of quarry-workers the fine stone which they are seeking and is then sacrificed as a burnt-offering. We should remember that, since Seth and Resheph are both desert gods, the gazelle is naturally their animal. The seal from Gaza shows Resheph as a god who saves gazelles from their enemy, a lion. This is not in contradiction to the relief where a gazelle is brought to Resheph as a sacrifice (E. 8): the god of the gazelles, who adorns his crown with the horns of the animal, is keen to preserve 'his' animal, to protect it and to use it for his own purposes. The iconographic background of the gazelle-horn on the forehead of Resheph can thus be explained by the Egyptian attitude to gazelles without the intervention of Anatolian mythology.

## Remarks on the catalogue of Egyptian documents

Fulco gives a repertoire of Resheph-documents arranged more or less chronologically. Each Egyptian document is given the letter ' $E$ ' and a serial number. This is not a corpus because serial numbers are given even where the author doubts whether Resheph is depicted.
E 2. N. 6. Ranke is said to have dated the personal name Ršpw to the Middle Kingdom. In fact Ranke has 'N.R.'. Ranke is corrected by the author concerning the quotation of a work by Kminek-Szedlo. The right quotation would have been: G. Kminek-Szedlo, Catalogo di antichità egizie (Museo Civico di Bologna) (Turin, 1895), 155-6 (no. 1821), and not as given by Fulco. A more recent mention of the statuette occurs in S. Curto, L'Egitto antico nelle collezioni dell'Italia settentrionale (Bologna, 1961), 74-5 (no. 32), pl. 21 : see also K. Piehl, Inscriptions hiéroglyphiques, I (Stockholm, 1886), pl. 35 B; II (Commentaire) (Leipzig, 1888), 43; J. Vandier, Manuel d'archéologie égyptienne, III (Paris, 1958), 467.
E 3. See also Christiane M. Zivie, Giza au deuxième millénaire (Cairo, 1976), 86-7. The phrase quoted should be translated: '. . . then he did . . . while he was doing all that . . $\therefore$ '
E 4. $P M_{\mathrm{II}^{2}}$ (1972), I 85 for further bibliography.
E 5. A parallel text is Urk. IV, $1302,7-1311,2($ not 1131 ).
E 8. The last hieroglyphic group has been omitted: هـ.
E 9. The reference to the paper by Spiegelberg should read $O L Z_{\text {II }}$ (not i2). The plate in Grdseloff's monograph is II, not 'LL'. There the two fragments are shown joined together. In Roeder, Aegyptische Inschriften . . . Berlin, II (Leipzig, 1924), 200, there is only a part of the inscription (the upper left). The text has $R s$ špw; the text on the right reads 'I offer every good and pure thing to thy $k 3^{\prime}$ '.

E ıо. The title of the man named ' $m m n-m-i p t$ is $s d m$ which is short for $s d m$ rš, 'servant'. Add to n . 19: pl. 16.
E 12. Add to the references in n. 24: Roeder, op. cit. 201.
E 13. Correct in n. 30: Griffith, $P S B A 22$ (1900), 271-2; Goossens, $C d E$ 15 (1940). The argument of H. De Meulenaere was based on the name of the man which occurs in the early Eighteenth Dynasty (but not only at this period).
E 14. N. 31: Plate Ic (not 16, ic). Nnn. 34 and 35: $A S A E 4$ r.
E r6. This is S (= seal) 57 in Rowe's catalogue: see Rowe, 249-50. Definitive publication: O. Tufnell et alii, Lachish II: The Fosse Temple (London, 1946), pls. 38, 47; p. 73 (description).

E 17. The offerer is described as a 'servant ( $s d m$ ( $s$ ') in the Place of Truth to the west of Thebes'. There is therefore nothing 'probable' in the origin of the object, which is Deir el-Medîna. N. 39: The proper title of the book is: A Guide Book to the Egyptian Galleries: Sculpture. To shorten it hereafter as Guidebook is misleading.
E 18. If there is a find-register, why is the origin of this stele in Memphis only 'probable'? For the personal name see Ranke, PN I, 120, 1.
E 20. The definitive publication of this seal is J. L. Kelso, 'The Excavation of Bethel', Annual of the American Schools of Oriental Research, 39 (1968), 85-6. The object was found in a dump with objects dating from Middle Bronze II, Late Bronze and early Iron Ages.
E 25. See now H. M. Stewart, Egyptian Stelae . . . from the Petrie Collection (Warminster, 1976), 44, pl. 35, 2. University College no. 1400. See also PM III, 220. The plate in Petrie's book (which has E. Mackay and G. Wainright as co-authors) is xxxix, not xxiv.

E 24. In n. $5^{1}$ correct Habachi, $A S A E$ 52, 443-559 (instead of 513-14). To the bibliography of this stele add G. Roeder, $Z A ̈ S$ 61 (1926), 62; H. Kaiser, Die ägyptischen Altertümer . . . Hildesheim (Hildesheim, 1973), 66 (no. rioo), pl. 54; PM Iv 26. Dr Bettina Schmitz of the Hildesheim Museum kindly informs me that the stele is rubbed at this spot and indicates signs and remains of signs which can without doubt be reconstructed as on -题'11. This justifies the reading suggested by Habachi. N. 52: The author of Treasures of the Pharaohs is Jean Yoyotte; the introduction is by Christiane Desroches-Noblecourt.
E 25. Stele BM 647 (263) is now published by T. G. H. James, Hieroglyphic Texts from Egyptian Stelae etc., 9 (London, 1970), 44-5, pl. 43. It is dedicated by a 'servant of the Place of Truth', i.e. Deir el-Medîna (cf. $P M_{\mathrm{I}^{2}, 2,730 \text { ). }}$
E 26. Recto ${ }_{11}$, $\mathrm{I}^{-14}$ is quoted but not given in the text. Massart, op. cit. (Fulco, n. 48) translates: 'then shalt thou go before those whom Resheph killeth.' Correct the reference to Burchardt thus: M. Burchardt, Die altkanaanäischen Fremdworte und Eigennamen im Aegyptischen, II (Leipzig, 1909), 10, no. 177. He does not say ' $\mathrm{itwm}=\mathrm{c} d w m=\mathrm{Edom}$ ' but ' $\mathrm{itm}=\boldsymbol{i d m}=\mathrm{Edom}$ '. Burchardt does not render the $w$, as does Grdseloff, correctly.
E 27. From Deir el-Medîna (PM I², 2, 733). N. 57: CdE 25 (1950).
E 28. A. Moret, Rec. Trav. 35 (1913), 48-9, pl. 6 (5), where he reads Mont instead of Reshpu. Leclant, Syria 37 (1960) 26, has a bibliography of the stele, illustrated on p. 27 by a new photograph. The man who dedicated the stele is again a 'servant ( $s d m$ rs) in the Seat of Truth'. His name is Hay. He does not seem identical with the deputy (idnw) of tomb 267 at Deir el-Medîna with the same name. (Dominique Valbelle, La Tombe de Hay à Deir el-Médineh (MIFAO 95), (Cairo, 1975), 267.

E 29. Without doubt from Athribis. A minor change is necessary in the translation given by Simpson in the book under review: instead of 'great god' there is 'good god' ( $n \underline{t r} n f r$ ) as can be observed on the original in the Oriental Institute (see pl. XIX, i). The phrase below is: di.f $n \cdot k r n h \quad s n b$ $n b r c n b$, 'May he give you all life and health every day'. In the transcription the word $n b$ after $s n b$ is missing. Concerning the word $q b \cdot f(=q ; b \cdot f)$ there may be a connection with the meaning 'intestine'. Resheph as lord of inner parts of the body is alluded to in Papyrus Chester Beatty 7 (here E 21) (where Gardiner's translation 'marrow' does not seem 'quite unlikely' as indicated by Fulco (p. in n. 47): see B. Couroyer, Revue Biblique 85 (1978), 15 I n. 6, and G. Lefebvre, Tableau des parties du corps humain mentionnées par les Egyptiens (CASAE 17) (1952), 12 n. 13. For $q 3 b$ and its semitic equivalent קרב, 'intestine', see also P. Lacau, Les Noms des parties du corps en égyptien et en
sémitique. (Mémoire de l' Académie des Inscriptions et Belles-Lettres), 44, 98, §§255-8. The suggestion by Hallo (Fulco, 15 n .67 ) is taken from a different meaning of the same stem. In the context of the inscription which follows, i.e. wishes for life and health of the priest, a warlike expression seems out of place despite the fact that the god is armed. For the object see also P. Vernus, Athribis (Cairo, 1978) (Document 6i). For Khenti-Kheti see O. Koefoed-Petersen, RdE 27 (1975), 134-6.

E 31. N. 68: Spiegelberg, OLZ 1 (1908), col. 530 (3). N. 69: the year is 1929, not 1932.
E 32. The object comes from Memphis (PM iII ${ }^{1}$ ), 220; Petrie et al., Meydum and Memphis III (London, 1910), pl. 29. To say: 'there is no legible inscription for verification' is misleading. There is simply no text on this stele.
E 33. Leibovitch obtained the object from Keimer who bought it from a Cairo antiquities dealer.
E 34. Louvre C 68. N. 71: Capart, CdE 17. For the work by de Rougé see E. de Rougé, Lettre à Lajard, in E. de Rougé (ed. G. Maspero), Euvres diverses II. Bibliothèque égyptologique 20 (Paris, 1908); $P$ I I', 2, $^{2} 19$.

E 36. PM $\mathrm{I}^{2}$ 2, 733. See M. Tosi-A. Roccati, Stele e altre epigrafi di Deir el Medina (Turin, 1972), 290 (Stele no. 50066). Time of Ramesses II. The transcription of the second part of the phrase given on p. 16 as: $h k 3 n h t w n t r r h h$ and translated as: 'master of power, everlasting god' has to be corrected into: $h q^{3} p s d t n b n h \underline{h}$, 'Ruler of the Ennead, Lord of Eternity'.
E 37. PM 1², 2, 717. See T. G. H. James, Hieroglyphic Texts from Egyptian Stelae, etc., 9 (London 1970), 355, pl. 42, A, 2. The man is not a judge but a servant in the Place of Truth. The shortening
 reconstructs the name a $n i i$, which may be the Anii of E 38 .
E 38. $P M \mathrm{I}^{2}, 2,723$. James, op. cit. 46, pl. 39, 2. There are certainly no tefillin here: the headband often seen with Asiatics in Egyptian art, does not even touch the gazelle-head. Anat has the 'atef'crown and is sitting.

E 39. Spiegelberg, $O L Z$ II (not 12) (1908); $P M_{\text {Iv, }} 37$.
E 43. This is pl. xvii in the paper by Leibovitch quoted in n. 89. Before Resheph there stands a man holding a sort of brazier or incense burner. For this kind of implement and its ritual use see O. Keel, Vetus Testamentum 25 (1975), 424-36 with figs. 6-7.

E 46. N. 94. The plate number in Müller, Researches, is 41, 3.
E 48. N. 98. OMRO ıо (1929); Mariette, Karnak (Leipzig, 1975). Add J. Leclant, Montouemhat (Bibliothéque d'études 35) (Cairo, 1961), 234. The 'spear with the curved head' is the well-known combination of mace and axe. Qudsu does not stand on a lion's back; there are two lions below the triad of gods. The goddess does not hold 'a serpent and lotuses', but serpents and a flower.

E 49. N. 105. For this spelling of Astarte see M. Weippert, Orientalia 44 (1975), 12-21.
E 50. The object is a basin for libations. The name of the goddess is not Anat, but 'The Beautiful One' ( TSBA 3 (1874), 427, 'Ant who loves her mother'. See also J. Leclant in Lexikon der Ägyptologie 1 , 255 and n. 38. The imaginary pairing of Anat and Resheph on this object is referred to again on pp. 40-1 (n. 212 ) and p. 66 in the present book. It occurs also in Gaster ( n .107 of the present volume) who is quoted by Simpson (n. 106 in Fulco). For the object see P. Vernus, op. cit. 123; L. Habachi, Tavole d'offerta (Turin, 1977), 104. For hwot Ršp see V. S. Golenischeff, ZÄS 20 (1882), 142; H. Gauthier, Dictionnaire des noms géographiques, IV, 108.

## REVIEW ARTICLE

E 51. PM iI², 3, I; J. Charbonneaux, Fondation E. Piot. Monuments et Mémoires 47 (Paris, 1953), 116-18, fig. 20.
E 53. The definitive publication is Olga Tufnell, Lachish, iv (London, 1958), pls. 37 and 38 no. 295 . Clearer and larger reproductions of the photos taken in 1937 by the photographer of the Palestine Archaeological Museum, Jerusalem, M. S. Y. Schweig (see pl. XIX, 2-5), show more details than the publication by Albright (n. 112 in Fulco: W. F. Albright, The Proto-Sinaitic Inscriptions and their Decipherment (Harvard Theological Studies) (Cambridge, Mass., 1969), figs 2 and 3).

## Additions to the Catalogue of Egyptian Documents (Inscriptions and Representations)

The owner of a coffin of the Thirteenth Dynasty was called Resheph. He was buried with a man whose name was Ba'al. The two coffins, found in Asiut, are unpublished ('A. Hassan, Stöcke und Stäbe im Pharaonischen Ägypten (Münchner Ägyptologische Studien 33), (Munich-Berlin, 1974), 93).
To the proper names of the New Kingdom add J. Cerný, Hieratic Inscriptions from the Tomb of Tutrankhamun (Oxford, 1965), l. C 413 ( $=$ G $3206=$ Journal d'entrée 62306). rpr-ršpw is the chief vintner of the sweet wine of the House of the Aton (l.p.h.) of the Western River.
A writing board in the British Museum has rpr-ršp twice. The board is unpublished and of unknown origin. It was acquired from the Hay Collection. It is mentioned in G. Posener, Syria 34 (1957), 148 n .3 , and contains a list of offerings to various temples. rpr-ršp is a charioteer.
An inscription with the name rpr ršpw is to be found in the Cairo Museum (Journal d'entrée 62306) quoted in Ranke, Personennamen, 1, 416, 25, and Posener, op. cit. n. 4.
Mention should be made of the occurrence of the name of Resheph on a stone bowl of Horemheb, though its authenticity is disputed: see D. B. Redford, BASOR 211 (1973), 36-49; W. Helck, Historisch-biographische Texte der 2. Zwischenzeit und neue Texte der 18. Dynastie (Wiesbaden, 1975), 144. The gods listed are Ptah, Astarte, Anat, Resheph (Ršpw), and Qadesh. The campaign of Year 16 mentioned begins at Byblos and ends at Carchemish. The writing of Byblos found here is unique: see H. Gauthier, Dictionnaire des noms géographiques, v (Cairo, 1928), 197; S. Horn, 'Byblos in Ancient Records', Andrews University Seminary Studies I (1963), 59-6i.

Qadesh and Resheph are depicted with Min on a stele in Copenhagen (O. Koefoed-Petersen, Les Stèles égyptiennes (Copenhagen, 1948), 37, pl. 49).
University College London has a stele (no. i440r), purchased in the Delta, of a man called ws $h$ dedicated to 'Rsspw, the Great God'. The god is holding a shield and a spear in his left hand, and brandishes a weapon in his right hand over his head. He wears the white crown with two streamers, and on the lower seam of his short kilt there are tassels (H. M. Stewart, Egyptian Reliefs and Paintings from the Petrie Collection (Warminster, 1976), 44, pl. 35, 1. Stewart sees in the tassels and the seam a compound bow).
Qadesh on a lion is depicted with Resheph on the stele: Müller, Egyptological Researches, I (Washington, 1906), 33, pl. 41, 2. To the right of Resheph there is a worshipper. Originally there was at this spot a representation of ithyphallic Min.
The Berlin Museum stele (14426; E9 above) shows Resheph striding to the right: above him is the inscription: 'Ršpw, the great god who listens to prayers' (G. Roeder (ed.), Aegyptische Inschriften . . . Berlin, in (Leipzig, 1926), 200; J. Leibovitch, $A S A E 39$ (1939), pl. 15, 2).
To document E 43 of Fulco's list there has to be added another stele from Zagazig, now in Cairo (Journal d'entrée 71815): Leibovitch, $A S A E 39$ (1939), pl. 18. It shows Resheph with a quiver whilst a man with an incense burner stands before him. This man is called ' $I b$, with a title which may mean Overseer of the Fields.

Resheph, sitting, a lance in his hand, is depicted on a stele from Deir el-Medîna (B. Bruyère, Rapport sur les fouilles de Deir el Medineh 1935-1940 (Cairo, 1948), 1 15, fig. 196; PM 1 $^{2}, ~ 2, ~ 727$ ). Ršpw is called 'the great god, lord of heaven'. The stele is dedicated by Neb-nefer, 'the great one of (the) gang in the Place of Truth to the West of Thebes'. He is elsewhere called 'Chief of the Gang': see J. Cerný, A Community of Workmen at Thebes in the Ramesside Period (Cairo, 1973), 44, 1. He is the son of Nefer-hotep, also a 'Great One of the Gang'.
Resheph with shield and white crown is depicted in B. Bruyère, Rapport sur les fouilles de Deir el Medineh (FIFAO го) (Cairo, 1934), 86 (4), fig. 54 (on p. 87); PM I ${ }^{2}$, 2, 705. In front of the god there is an offering-table with bread upon it.
Another stele with Resheph, Qadesh, and an undefined god (in long garment and with two high feathers on his head (Onuris?)) is in the Golenicheff Collection. This stele (Moscow Museum of Fine Arts no. $56 \mathrm{I}_{3}$ ) comes from Deir el-Medîna: E. S. Bogolovsky, Vestnik. Fournal of Ancient History 2 (120) (1972), English Summary, 92; pl. 6; B. Couroyer, Revue Biblique 85 (1978), 151.
B. Bruyère-Ch. Kuentz, La Tombe de Nakht-min (MIFAO 54) (Cairo, 1926), 31, quote a stele published in Quibell, The Ramesseum (London, 1898), pl. xiii, 3 and 4. There is a god depicted there with a typical long Asiatic garment, but an Egyptian beard. What is left of the epithets of the god may be translated as '(great) god, ruler of truth (?)'. The first title is too common to justify any conclusion; the other does not occur elsewhere applied to Resheph. $P M \mathrm{I}^{2}, 2,682$, see here the group: Min, Isis, Resheph, and Anath.
In Papyrus Wilbour (from which Fulco took his document E 45) there is also a personal name Ršpw. He is a stablemaster, mentioned twice, in Text A, Section II, 41, 5 and 68, 36, pl. 19 and i9 A; pl. 32 and 32 A. See also Ranke, Personennamen, II (Glückstadt, 1952), 374 (addition to 227, 13).
In discussing scarabs with the name or representation of Resheph we have, it seems, to eliminate all the examples where a winged god appears (as in the 'Cassirer-scarab', Fulco's E 14). All the examples given by Matouk in F. S. Matouk, Corpus du scarabée égyptien, il (Beyruth, 1976) are such: cf. his p.76(drawings on p.337). See another example in Petrie, Hyksos and the Israelite Cities (London, 1906), pl. 37, 20 (329). In Matouk's drawing 173 (from the Matouk Collection) there is no reason to call the god at the right Resheph. The drawing does not reproduce exactly the photograph on p. 377 (210).
A scarab which seems to have the name Resheph determined by the Seth-animal is in Basle. The Seth-animal takes up most of the surface of this seal but there is a $m r$-sign below. This scarab is unique. (E. Hornung-Elisabeth Staehelin (eds.), Skarabäen und andere Siegelamulette aus Basler Sammlungen (Mainz, 1976), 32 I (no. 660), pl. 73. In the same catalogue no. 705 (p. 330) is not certainly Resheph and no. 707 (p. 331) is the winged deity whom we discussed above.
Resheph appears on an amethyst scaraboid bought in Gaza, probably from the site of Tell el-Ajjul near that city. It was formerly in the Reitler Collection, now in Wilfried Israel House, the museum in Kibbutz Hazorea, pl. 3, fig. I (R. Reitler, $Z D P V 77$ (1961), 88-92, pl. 7 A). It shows the god with a short kilt and the white crown with two horns or gazelle-heads. Resheph is holding an 'cankh'-sign in his right hand, a little gazelle in his left; another gazelle, this time a male grown-up specimen, jumps up on the god, its legs touching the left side of the god. A lion or lioness is seen crouching to the left of Resheph. A lion opposing a young and a grown-up gazelle is also seen on the decoration of a game-box of the Seventeenth Dynasty (W. C. Hayes, The Scepter of Egypt, in (Cambridge, Mass., 1959), 25 (fig. 10)). The political interpretation of this scaraboid and its dating to the Hyksos Period by Reitler (op. cit.) we think mistaken. We should prefer a date in the Eighteenth or Nineteenth Dynasty. Amethyst scarabs at this period are rare, but not unknown (Hornung-Staehelin, op. cit. 22). It seems to us that Resheph is shown here as god of the eastern desert, who protects the animal of the desert which is sacred to him and, in hunt and sacrifice, reserved for his use.

In the Oriental Institute, Chicago, there is a carnelian scarab (no. 17402, from the collection of Mrs T. Campbell) which shows, in fairly rough carving, a god with the white crown, sitting on a horse, holding a spear and shield in his left hand and brandishing a sword over his head (see pl. XX, 2-3). The reins of the horse are tied round his hip. On the crown there are two hornlike projections which may be slightly deformed gazelle-heads. This piece should be dated on grounds of style, material, and content to the Eighteenth Dynasty.


2
Courtesy of the Department of Antiquities, Isr


3
Courtesy of the Department of Antiquities, $I s r$


## Plate XX



I
Photograph by Moshe Weinberg, Institute of Archæology, Tel Aviv University


# BRIEF COMMUNICATIONS 

A sacrificial bull's head from Illahun

## Introduction

In the osteological collections of the Department of Zoology at the British Museum (Natural History), amongst the material collected by Sir Flinders Petrie, is the head of a bull from Illahun. This specimen, marked in pencil F3, is registered under the number ARC 1979 5028. It is of particular interest because, as well as the horn sheaths, a considerable part of the hair and skin covering the frontal region of the skull is preserved (see pl. XXI). A holograph letter from Petrie to the Keeper of Zoology, C. Tate Regan, dated 27 July 1921, refers to the head and offers to donate it to the Museum. Petrie states that the head had been buried in a foundation deposit of the Twelfth Dynasty and he continues: 'As this is the only example with the furry hide remaining, showing the lie of the hair, it may be of interest for the Natural History Museum.' The head is clearly recognizable today as the one shown in pl. xxv a (9) of Lahun II (Petrie, Brunton, and Murray, 1923) in which the Distribution List (p. 43) also records that a bull's head from the Heb-Sed Chapel (the function ascribed to the building by Petrie) was sent to the Natural History Museum at South Kensington (see also B. Adams, 'Petrie's manuscript notes on the Koptos foundation deposits of Tuthmosis III', $\mathfrak{f E A}$ 6I (1975), ro8-9). Comparison of the head with the photograph in the Illahun volume shows that the hide and horns are still in '. . . the wonderful state of preservation . . .' that Petrie described (Lahun II, 19).

The head came originally from a pit at the north-east corner of the Heb-Sed Chapel situated about 60 m north of the Illahun pyramid. Only the rectangular foundation of the building had survived, with pits at each of the four corners. One of these, at the north-west corner, was empty but the other three contained intact foundation deposits beneath a fill of fine sand, each of which included the head of a bull evidently buried immediately after the animal had been killed. The best preserved of these heads, from the north-east pit, and apparently the only one now extant, is the the subject of this note. Such inscriptional evidence as was found indicates that the building was constructed by Sesostris II (c. 1897-1878 вc) (see Lahun II, 18-20, pls. iii, xx; PM Iv (1968) 107, 110).

The intrinsic archaeological and biological value of this kind of material is greatly enhanced when its age can be confirmed, and comparative osteological measurements and other appropriate studies are made. Because of its known provenance and excellent state of preservation the bull's head from Illahun is a key archaeozoological specimen and its measurements form a valuable addition to the metrical data that are gradually being built up on the remains of early domesticated animals. Our examination of this head forms part of a continuing study of the animal remains from Ancient Egypt donated by Sir Flinders Petrie to the British Museum (Natural History) (Burleigh, 'Applications of radiocarbon dating to Egyptology', MASCA fournal 1 (4) (1980), in press). Three important aspects have been considered: osteological measurement, confirmation of the historical age of the head by means of radiocarbon dating, and stable carbon isotope analysis of the hair.

## Archaeozoological examination

The head is small in size with upswept, rather 'cow-like' horns although the facial region is long and bull-like; the sutures of the skull are still open. Probably the animal stood no more than $1,475 \mathrm{~mm}$

## BRIEF COMMUNICATIONS

at the shoulder. The hair is dark brown in contrast with the light-coloured head found in the southeast pit (Lahun II, 19). This variation in the colour of Ancient Egyptian cattle is also reflected in wall paintings.

The osteological measurements that could be taken were as follows (in millimetres and according to the procedure of von den Driesch, 'A guide to the measurement of animal bones from archaeological sites', Bulletin of the Peabody Museum I (1976), passim):

| Length of left horn (outer curvature) | $\mathbf{3 2 5}$ | Least width between orbits, along intercornual <br> ridge | 138 |
| :--- | ---: | :--- | ---: |
| Circumference of horn at base | 190 | Condylo-basal length <br> Basal length | 390 |
| Length of left horn core (outer curvature) | 220 | Palatal length | 362 |
| Circumference of horn core at base | 157 | Least frontal breadth | 131 |
| Anterior-posterior diameter of horn core | 54 | Baseon-anterior $\mathrm{P}^{2}$ | 174 |
| Dorso-ventral diameter of horn core | 44 | 253 |  |
| Width between base of horn cores (approx.) | 145 | Length of tooth row (left) $\mathrm{P}^{2}-\mathrm{M}^{3}$ | 129 |

The state of eruption of the teeth ( $\mathrm{P}^{2}$ erupting; $\mathrm{p}^{3}$, $\mathrm{p}^{4}$ worn milk teeth; $\mathrm{M}^{1}, \mathrm{M}^{2}$ erupted; $\mathrm{M}^{3}$ erupting) according to the criteria of Silver ('The ageing of domestic animals' in D. Brothwell and E. Higgs (eds.), Science in Archaeology (London, 1969)) indicates that the animal was about two years old when it was killed, perhaps the optimum age for sacrifice. That the animal was killed on the spot and the head buried at once is supported by the absence of the pupal cases of flies, or of fly-blows. Indeed, Petrie records that the sand under and round the neck of one of the other heads, found in the south-east pit, was caked and discoloured, presumably by congealed blood (Lahun II, 19). Traces of a black substance on the surviving head proved, however, to be a kind of resin (identified by Mr R. H. Harris, Histology and Preservation Section, Department of Zoology, British Museum (Natural History)), perhaps the residue of a libation, and not dried blood as at first considered possible. In earlier correspondence (1899) with M. R. Oldfield Thomas, Petrie refers to an apparently similar black substance applied in antiquity adhering to remains from Dendera.

The sex of the animal cannot be verified by the method of Armitage and Clutton-Brock ('A system for classification and description of the horn cores of cattle from archaeological sites', fournal of Archaeological Science 3 (1976), 329-48) based on the shape of the horns, which is only applicable to North European cattle that are of Bronze Age or later date. This is because the shape of the horns does not conform with that of modern cattle in which the horns of the bulls are shorter and flatter in cross-section than those of the cows. If we use the allometric relationships established by Grigson for Bos primigenius and Bos taurus, when the logarithm of the least frontal breadth of the Illahun skull (2.24) is plotted against the logarithm of its palatal length (2.12) (as in Figure 3, p. 113, of Grigson, 'The craniology and relationships of four species of Bos, II. Basic craniology: Bos taurus L. Proportions and angles', fournal of Archaeological Science 2 (1975), 109-28), it falls in the male range. This appears to support Petrie's subjective assumption that the animal was a bull.

## Radiocarbon dating

About three grams of hair were removed from the frontal region for radiocarbon dating. This sample was washed successively with methanol, acetone, dilute hydrochloric acid, and distilled water, and thoroughly dried. Following this pretreatment the sample was combusted to carbon dioxide and converted chemically to benzene for measurement of its ${ }^{14} \mathrm{C}$ activity by the liquid scintillation counting method. The date obtained from this measurement (BM-r 420 ) was $3420 \pm 80$ bp ( 147 obc ) on the basis of the conventional Libby half-life for ${ }^{14} \mathrm{C}$ of 5,570 years. When corrected


Oblique lateral view of the bull's head of the Twelfth Dynasty from Illahun showing the remarkable state of preservation of the hair and hide and the horn sheaths

## A SACRIFICIAL BULL'S HEAD FROM ILLAHUN


I. The broken anchor found on the port proper

2. One of the pair of anchors which formed the upper row of the pedestal of Ankhow's shrine
for the known differences between the radiocarbon and historic time scales caused by natural ${ }^{14} \mathrm{C}$ variations, this result is equivalent to a calendar date of $1790 \pm 110 \mathrm{BC}$ (using the tables of Clark, 'A calibration curve for radiocarbon dates', Antiquity 49 (1975), 251-65). Within the limits of the combined error of the ${ }^{14} \mathrm{C}$ measurement and its calibration this date agrees well with Petrie's attribution of the head to the Twelfth Dynasty.

## Stable carbon isotope analysis

The stable carbon isotope ratio of the hair ${ }^{13} \mathrm{C} /{ }^{12} \mathrm{C}$ expressed as $\delta^{13} \mathrm{C}$ : see Burleigh and Brothwell, 'Studies on Amerindian dogs', fournal of Archaeological Science 5 (1978), 355-62) was found to be - 17.12 per mille compared with the more usual value for mammalian hair of about -20.00 per mille. The most probable explanation for this difference is that so-called $\mathrm{C}_{4}$ plants comprised about 22.0 per cent of this animal's diet. Most $\mathrm{C}_{4}$ plants are grasses adapted to growth in hot arid regions by the possession of a specialized and more efficient mode of photosynthesis. They are characterized by a stable carbon isotope ratio $\left(\delta^{13} \mathrm{C}\right)$ different from that of other plants. This is reflected in turn in the tissues of animals feeding upon $\mathrm{C}_{4}$ plants and this fact sometimes enables conclusions about diet to be drawn. Although the role of wild $\mathrm{C}_{4}$ grasses cannot be completely excluded, the high $\delta^{13} \mathrm{C}$ value observed for the hair of this animal suggests the presence of a cultivated $\mathrm{C}_{4}$ plant in its diet. The only cultivated $\mathrm{C}_{4}$ plant likely to have been fed to cattle by the Ancient Egyptians is millet (Setaria sp.). Of the other cultivated members of the grass family, barley, oats, rice, rye, and wheat belong to the much more widespread $\mathrm{C}_{3}$ class, and only sugar-cane, maize, and sorghum are $\mathrm{C}_{4}$ plants. Sugar-cane was not introduced into Egypt until the seventh century ad and maize spread to the Old World only after the Spanish conquest of America in the sixteenth century. Sorghum, although native to the North African region, was apparently unknown to the Ancient Egyptians (Darby et al., Food: the Gift of Osiris, II (London, 1977), 494-6). They appear, however, to have cultivated several kinds of millet (op. cit. 494), and our observation may constitute an independent corroboration of this.

## Conclusions

Examination and measurement of the head of this sacrificial bull from Illahun, together with the confirmation of its historical age by radiocarbon dating, have greatly increased the value of this specimen for comparative purposes. The information recovered from stable carbon isotope analysis of this specimen suggests that such measurements should be extended to other animal and human remains from Ancient Egypt. Finally, we would like to emphasize the more general point that the potential importance of the remains of domestic animals such as this, that are held in museum collections, is largely under-appreciated. When their age can be confirmed their detailed study may have much to contribute to our knowledge of the history of the domestication of animals.

Richard Burleigh and Juliet Clutton-Brock

## 'Liaison' $\boldsymbol{n}$ reconsidered

In his communication on 'liaison' $n$ to $\mathcal{f} E A 64$ (1978), 129, Faulkner discusses sentences where an intrusive $n$ appears between two adjacent words of which the first is a suffix pronoun, usually $\underline{t} n$ or $s n$, and the second the dependent pronoun first person singular, e.g. $m_{33} \cdot s n n$ wi. He tentatively suggests that the intrusive $n$ serves as 'a liaison in speech, strengthening the $n$ of the suffix when followed by wi'. However, a parallel to 'liaison' $n$ may occur in Arabic which suggests an alternative explanation. This is the $n$ of 'support' or 'preventive' $n$, e.g. the verb yără, 'to see', a tertiae infirmae verb, takes
$n$ before the first pronominal object to become yărā-Ni (actually yărā-Nee)' '(he) sees me', a verbal sentence with an implicit subject pronoun, i.e. 'he', and a pronominal object in the first person ( $i$ ) with a 'preventive' $n$ prefixed to it; a verb with a final consonant, such as yarham, 'to have mercy', makes yärhām- $N i$, 'he has mercy on me'. In such cases the function of the $n$ is to prevent absorption of the $i$ by the preceding vowel $a$ or consonant $m .{ }^{\text {i }}$

It is conceivable that Egyptian 'liaison' $n$ is to be explained in a similar way. If wi were lightly pronounced it would be subject to the same danger of phonetic absorption as the Arabic $i$. The 'liaison' $n$ may, therefore, have been added to provide support for it in exactly the same way as Arabic's preventive.
M. A. Nur-el-Din

## Observations on recent discoveries at Wâdî Gawâsîs

## I

## The stone anchors

In an article published in this periodical ${ }^{2}$ and in another one published elsewhere, ${ }^{3}$ I dealt briefly with the anchors which I had discovered at Wâdî Gawâsîs on the Red Sea shore during two seasons of excavations (March 1976, Jan.-Feb. 1977). These brief accounts aroused the interest of scholars, particularly those concerned with marine archaeology. ${ }^{4}$ Therefore, I propose to deal here with the whole matter in a more comprehensive study describing all the anchors which I had found.

It is noteworthy that all the discovered anchors are made of the same material (limestone) and are nearly identical in their general features. They are triangular in shape and have an upper large hole. A channel (groove) runs from the upper hole to the apex on both sides of the anchor. Apparently the function of the upper hole and channel was to make it possible to hang the anchor when dipped in water. The difference between these anchors is confined to the existence, shape, and position of the lower small hole. The anchors can be classified according to their find-spots as follows:
(a) On the site of the port proper, i.e. at Mersa Gawâsîs, we found a broken anchor (see pl. XXI, i) nearly similar in shape to, but smaller in dimensions than, the other anchors. It measures 60 cm in length, whilst its breadth at the upper hole is about 30 cm . It has an upper round hole, and a lower square one.
(b) Under the shrine of Ankhow (which lies at about 250 m to the west of the port proper), ${ }^{5}$ anchors were found constituting the pedestal of the shrine. Although the shrine itself is composed of three other anchors, I shall deal only with the anchors of the pedestal because they were left intact (unlike the anchors of the shrine which were cut off and converted into stelae). ${ }^{6}$

The anchors of the pedestal of Ankhow's shrine are four in number and are arranged in two rows (fig. I). They are nearly identical in dimensions (length, $82-4$; breadth, $52-4$; thickness, $24-6 \mathrm{~cm}$;
${ }^{1}$ Cf. W. Wright, A Grammar of the Arabic Language, $\mathrm{I}(1955)$ ) §§ 183, 306.
${ }^{2}$ Abdel Monem A. H. Sayed, 'The recently discovered port on the Red Sea shore', $\mathcal{F E A} 64$ (1978), 69-71.
${ }^{3}$ Id. 'Discovery of the site of the 12th Dynasty port at Wâdî Gawâsîs on the Red Sea shore', RdE 29 (1977), 140-78. The reader is advised to check these articles with the present one.
${ }^{4}$ An excellent article on these anchors in relation to comparable material was published by Miss Honor Frost in Mariner's Mirror 65 (1979), 137-60. Miss Frost ascribed to me the assumption that the seven anchors of the shrine of Ankhow were the complement of a single ship (p. 154). I did not assume that, nor do the hieroglyphic texts which I translated mention the word 'ship' in the singular form (cf. RdE 29, 170 and n . 18; $\mathcal{f} E A 6_{4}, 7 \mathrm{In} .7$ ).
${ }^{5}$ RdE 29, map 3, p. 149.
${ }^{6}$ Op. cit. fig. 2, p. 157.


Fig. I. Diagram of the anchors which formed the pedestal of the shrine of Ankhow showing their original position (viewed from the west)
diameter of the upper hole, $\mathrm{I}_{3}-14 \mathrm{~cm}$ ). They only differ in the shape and position of the lower hole. The upper pair of anchors have square lower holes (fig. 1 , a-b and pl. XXI, 2). One of them is pierced through one corner by an L-shaped cavity (pl. XXI, 2-XXII, r); the other has a blind hole (fig. I a). The lower pair of anchors have round lower holes (fig. i, c-d, and pl. XXII, 2). Both are pierced with an L-shaped cavity, but one of them is pierced through the base (fig. $\mathrm{I}, \mathrm{c}$ ), while the other is pierced through the side (fig. $\mathrm{r}, \mathrm{d}$ ). The use of these cavities is apparently to facilitate the fastening of a supplementary cord to help disengage the anchor from the bottom of the sea, ${ }^{1}$ while the blind hole of the other anchor may be intended to hold a wooden fluke.


Fig. 2. The anchor which formed the pedestal of the stela of Antefoker showing the incisions and the channel (groove) cut to fit the stela

[^70](c) The third place where we found anchors is under the stela of Antefoker (at about 200 m west of the shrine of Ankhow), where an anchor was used as a pedestal of the stela. This anchor has no lower hole. Instead, eight small incisions were cut in two rows on the four edges of the anchor (fig. 2). Apparently, these incisions were intended to hold the supplementary rope. It is clear that the groove or channel cut across the anchor's upper face was a later modification to hold the stela firmly; for it fits exactly its base ( $50 \times 15 \mathrm{~cm}$ ). Another exceptional feature characterizes this anchor in that it lacks the apical groove which is dominant in all the other anchors.
(d) The last place where we found anchors was under the huge rock which is situated on the slope at the northern edge of Wâdî Gawâsîs, on a nearly direct cross-line with the stela of Antefoker. ${ }^{1}$ The shelter under this rock furnished us with the two unfinished anchors and the small one. The latter is partly broken and measures about 20 cm in width (pl. XXII, 3). As I suggested elsewhere, ${ }^{2}$ it may have been used for a rescue boat. The two unfinished anchors are smaller in size than the other specimens. Their measurements are as follows: height, $70-1 \mathrm{~cm}$; breadth, 51 cm ; thickness, 16 cm ; diameter of the hole, 11 cm . Both of the anchors show coarse workmanship; for they were not dressed. There are no lower holes and the upper hole of one of them is still blind (pl. XXII, 4). The finding of these unfinished anchors is significant; for they are clear evidence that the anchors were made on the site of the port, unlike the ships which were built on the Nile bank. ${ }^{3}$

As I stated in the afore-mentioned articles, these specimens of anchors which were found for the first time on an Egyptian sea-shore, helped us to identify the triangular shapes represented on Egyptian shipping scenes. The most conspicuous of these shapes is that which occurs on the walls of the causeway of King Unas, where we can see an anchor with an upper hole exactly like the newly discovered anchors. ${ }^{4}$

## II

## The mortised blocks

Another find relating to marine archaeology has aroused the interest of specialists in this field. It consists of the 'regular pieces of wood with mortises' to which I referred in one of the aforementioned articles. Some have wondered whether these pieces could have been part of a ship. 5 I here publish the pictures of the most substantial of these pieces in which the mortises are very clear. As we see, it is a cubic block measuring 38 cm in length, 14 cm in breadth, and 12 cm in thickness. It has three rectangular mortises measuring 6 cm long, 2.5 cm wide and 4 cm deep (see pl. XXII, 5 and fig. 3). Unfortunately, we have not yet received the result of the analysis of the wood from the laboratory of the Department of Egyptian Antiquities to define its age, but when we consider that these pieces were found in the same levels as the inscribed sherds which mention names of places and buildings connected with kings of the Twelfth Dynasty, ${ }^{6}$ we can conclude that the wooden pieces go back to the same period, i.e. to the time of the port. I suggest that these pieces of wood were among the remains which were left over after the ship-assembling operation had taken place in the port. For some reason they were dispensed with and used as fuel by the workmen who took shelter under the huge rock and around it, some of the pieces even retaining traces of burning.

[^71]

Fig. 3. Line-drawing of piece of wood showing mortises

Abdel Monem A. H. Sayed

## An important lacuna in Ranke's Personennamen: the Tomb of Rnni

It is only to be expected that by now, twenty-eight years after the publication of Ranke's second volume of Personennamen, one must consult a good many recent publications to supplement his data. I wonder, however, how many Egyptologists have noted-as I myself have only recently-the omission of an important source of names that was published as early as 1900, in Tylor's Tomb of Renni. This is the sole record of one of the very few well-preserved tombs that can be dated to the earliest years of the Eighteenth Dynasty. Tylor's Tomb of Sebeknekht is likewise neglected, but in this case the facsimiles are not wholly reliable, and nearly all of the names that can be identified with certainty are known otherwise from other sources. The Tomb of Renni, on the other hand, is published in photographs (retouched by hand) instead of drawings; the names may be read with much greater facility and assurance, and more than two dozen of them are missing from Ranke's repertory, although, in about a half dozen cases, they differ only slightly from his evidence. Before considering the material to be added, it may be well to begin with those names that are already attested, pointing out, with an asterisk (*), the ones that most profitably supplement Ranke's references. ${ }^{1}$
(1) 'Irh-ms (m.), pls. 1, 6, 8, 9, 10, 14, 16. PN

I, 12 (19).
(f.), pls. 2, 3, 4, 6, 10, 16.
(2) $\operatorname{Ir} h-h t p(w)$ (f.), pl. 8. $P N_{\text {1, }} 13$ (8).
*(3) Iwy (f.), pl. 15. PN i, ı6 (ı6: once f.).
(4) $1 p w$ (m.), pls. 3, 4, 5, 7. $P N$ 1, 23 (6).
(f.), pls. 4, 15 (? or m. ?).
*(5) Ipw wr (f.), pl. 5. PN i, 23 (19: once).
*(6) Ipw ky (m.), pl. 14. PN 1, 23 (22: once).
*(7) $1 t$ (m.), pls. 7, in. PN i, 49 (24: once, M.K.).
(8) Idy (f.), pl. 8. PN I, 54 (3); iI, 345.
*(9) $W b n$ (m.), pls. 4, 8. PN i, 77 (8: once).

[^72]

Oblique lateral view of the bull's head of the Twelfth Dynasty from Illahun showing the remarkable state of preservation of the hair and hide and the horn sheaths

## A SACRIFICIAL BULL'S HEAD FROM ILLAHUN


I. The broken anchor found on the port proper

2. One of the pair of anchors which formed the upper row of the pedestal of Ankhow's shrine

## Plate XXII




Section
B-B


Section
A-A


Elevation

2. One of the pair of ar which formed the lower r the pedestal of Ankhow's
I. Diagram of the anchor of Pl. XXI, 2 showing the L-piercing

3. The small anchor

4. One of the two unfinished anchors

5. One of the pieces of wood mortises


Fig. 3. Line-drawing of piece of wood showing mortises

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I, 12 (19).
(f.), pls. 2, 3, 4, 6, 10, 16.
(2) $\operatorname{Ir} h-h t p(w)$ (f.), pl. 8. $P N_{\text {1, }} 13$ (8).
*(3) Iwy (f.), pl. 15. PN i, ı6 (ı6: once f.).
(4) $1 p w$ (m.), pls. 3, 4, 5, 7. $P N$ 1, 23 (6).
(f.), pls. 4, 15 (? or m. ?).
*(5) Ipw wr (f.), pl. 5. PN i, 23 (19: once).
*(6) Ipw ky (m.), pl. 14. PN 1, 23 (22: once).
*(7) $1 t$ (m.), pls. 7, in. PN i, 49 (24: once, M.K.).
(8) Idy (f.), pl. 8. PN I, 54 (3); iI, 345.
*(9) $W b n$ (m.), pls. 4, 8. PN i, 77 (8: once).

[^73]（10）$B m b w(\mathrm{~m}$.$) ，pl．7． P N$ 1， 96 （15）．
＊（11）P3－hwry（m．），pl．16．PN 1，i15（25）； II， 354 （twice）．
（12）$M s(\mathrm{~m}$.$) ，pls． 7$, if．$P N$ I， 164 （18）．
（13）$N b(\cdot i)-m s(w)(\mathrm{m}),$. pl．16．$P N$ ı， 185 （8）； II， 367.
（14）$N b-s n y(\mathrm{~m}),$. pl．16．$P N$ I， 186 （14）．
（15）Nfr－htp（m．），pl．ı6．PN i， 198 （14）．
＊（16）$N h i(f$.$) ，pl．in． P N$ I， 207 （15：only m．）．
＊（17）Rnni（m．），pls．1，2，4，9，10，12，16．PN I， 224 （4：twice，only m．）．
（f．），pls．7，8， 13 ．
（18）$H_{3} t($ f．），pl． $8 . P N$ I， 232 （13）；iI， 375.
（19）$S_{3 t-i r h(f .), ~ p l s . ~ 7, ~ 12 . ~}^{P N}$ 1， 285 （16）．
（20） $\operatorname{Sbk-htp(w)(m.),~pls.~7,~8,~13,~14.~} P N_{\text {i，}}$ 305 （6）．
（f．），pl． 8.
（21） $\operatorname{Sn}(\cdot i)-n f r(\mathrm{~m}),$. pl． $6 . P N$ 1， 309 （5）；in， 387.
（22） $\operatorname{Sn}(\cdot i)-\operatorname{snb}(w)($ f．$)$, pl． $8 . P N$ 1， 309 （19）．
（23）$S n$－Dhwty（m．），pl．16．$P N$ I， 310 （5）．
（24）$S n w$（m．），pl．4．PN I， 3 II（5）．
（25） $\operatorname{Snt}$（f．），pl．5．PN I， 31 I（12）．
（26）$K 3 y(\mathrm{~m}$.$) ，pl． 4 . P N$ i， 332 （24）；in， 39 i．
＊（27）$K y k y(\mathrm{~m}$.$) ，pl．6． P N$ I， 343 （21 ：once m．， once f．）．
（28）Dhwwty（m．），pls．2，4，6，10．$P N$ 1， 407 （13）．
（f．），pl． 15 ．
＊（29）Dhwoty šri（m．），pl．16．$P N$ 1， 407 （14： once）．
（30）Dhwoty－ms（w）（m．），pl．14．PN I， 408 （5）．
（31）Dhwoty－nfr（m．），pl．ı6．$P N$ i， 408 （6）．
＊（32）Dḥwty－Re（m．），pls．3，4，14．PN I， 408 （10：twice）．

Nos． 5 and io belong to a composite name： $1 p w / B m b w$ ．
Note also that Ranke＇s single source for no． 6 should refer to Davies，The Tomb of Two Sculptors， rather than the older publication of Scheil，and that the variant $Q \square \square$ Davies＇s pl． 5 （lower right），where the alleged 0 is well below the level of $Q 4$ and is apparently hieratic $\sim$（retaining its original orientation）for 绝，the man－determinative．Furthermore $k y$ is probably not an integral part of the name，but an adjunct meaning＇another＇；cf．Ranke，$P N$ II，II and n．7．Otherwise，for convenience，I have adhered fairly closely to Ranke＇s transliteration．

The names to be added to Personennamen are the following：

| （33） 0 N | $3 t w s^{\text {šryt（f．），pl．} 6 .}$ |
| :---: | :---: |
| （34）$\cong ⿰ 丨 丶 111^{\infty}$ | ＇Irnt（m．），pl．2．Cf．$\triangle 4^{m m \times 2}$ I， 4 I （16）． |
| （35）${ }^{\text {S }}$ 等 | $W r-t \underline{z} w(?)(\mathrm{m}),. \mathrm{pl} 12$. |
| （36）堛㴓 | $B 3 b_{3}(\mathrm{f}),$.pl II． |
| （37）ل $x^{3}-4$ | $B w f i(\mathrm{~m}),. \mathrm{pl} .6$. |
| （38） 48 | $M 3 y$（m．），pl．16．Cf． $3 \backslash\{$（f．），$P N$ I， 143 （26）． |
| （39） 4 | Mi（m．），pl．9．Cf．\＆$¢, P N$ I， 145 （20）． |
| （40）－ 1 |  |
| （41）－ 4 | $N_{3 i}$ šr ${ }^{\text {r }}$（m．），pl． 6. |
| （42）万最蛊 |  |
| （43） |  |
| （44）\％近 | Hzwy－s（？）（m．），pl． 7. |


| （45）$二 ⿰ ㇒ ⿻ 土 一 𧘇$ | $H_{\text {Hw－sw（ }}$（？）（f．），pl． 15. |
| :---: | :---: |
| （46）$⿻ 上 丨^{?}$ |  |
| （47） 8 吸 |  |
| （48）${ }^{2} \times \sqrt{18}$ |  |
|  | $S k \cdot n-W \operatorname{sir}$（？）（m．），pl． 4. |
| （50） 8 ¢ $\downarrow$ |  |
| （51）以景！ |  |
| （52）知1界 |  |
| （53）－ | $T_{3}$ cmmt（？）（f．），pl．8．Cf．${ }_{\text {d }}$（f．，Late）$P N$ ir， 324 （8）． |
| （54）－s， |  |
| （55）$\triangle$－ |  |
|  | Di－nm（m．），pl． 7. |
|  | Dd－m3 C －hrv（m．），pl． 5. |
| （58）\＆直的成 | $D_{3}-b_{s-m-R e}(\mathrm{~m}$.$) ，pl．го．$ |
| （59）\｜絧 | $D_{3}-k_{3}-m-R r(m),$. pl． 6. |

For the ending $\theta_{1}$ in no． 34 see Ranke，$P N$ in， 159 ．Note the alternative use of and in $B ; b s$ and $K 3 k$ ，nos． $3^{6}, 52$ ，as well as $D_{3}-b j / k s-m-R c$ ，nos． $58-9$ ．The name $R c-n-\underline{-} r w \cdot f$ ，＇a sun for his underlings＇${ }^{1}$（no．43），is the most remarkable of the series；it belongs to a lowly farmhand （rhwty），yet prefigures a royal epithet of a kind that is only known from the later New Kingdom，

 name，again referring to the king．No． 44 may likewise be part of an incomplete statement，assuming that the transcription is correct：＇Would that I might ．．！！＇In no． 47 Griffith reads the first sign as $n f r$ in one of the two occurrences，and $n f r$（？）in the other，${ }^{3}$ but it is almost certainly $\ell$ ；if the correct reading is $H r w-p w$ ，it may refer to the first cry of the infant at birth：＇That＇s a voice！＇4 No． 49 is perplexing；the transcription assumes a slight readjustment of signs；if the readjustment were carried further，one might read $-\boldsymbol{m}$ might be thought that $T_{3}$（ $3 m t$ ，＇the Asiatic＇，is a designation of ethnic origin，in which case the dubious last sign alone might represent the name，but this is unlikely since the individual in question is one of the daughters of the owner．Is the $n m$ of no． 56 a writing of the $\operatorname{god} N m(t y)$ ？${ }_{5}$ In no． 57

[^74]the last sign strongly supports the reading m3r－hrw since it occurs after the epithet m3r－hrw on pl． 8.

Apart from a few very incomplete names the only omission from my list is an unclear feminine


## Lexikalisches zum Papyrus Berlin 10463

Die Publikation des Dokuments P．Berlin 10463，eines hieratischen Briefes aus der Mitte der 18. Dynastie，durch R．A．Caminos ${ }^{2}$ hat in lexikalischer Hinsicht noch einige Fragen offen gelassen，die seitdem erst zum Teil befriedigend gelöst worden sind．Das Wort mrhnn（rto．4），von Caminos als ＇unknown word of Semitic appearance＇charakterisiert，${ }^{3}$ findet mit Recht seinen Platz in W．Helcks Aufstellung＇asiatischer Fremdworte im Ägyptischen＇． 4 Dort wird es mit＇Kleinholz＇wiedergegeben und versuchsweise mit＇jungbab．marhanu＂ein Holz＂＇zusammengestellt．Der Deutung Helcks kann zugestimmt werden，obgleich die keilschriftliche Fassung des offenbar einzigen akkadischen Beleges die Verdoppelung des $n$ nicht bezeugt und die Semantik des Wortes durch von Soden nur fragend mit＇ein Baum＇beschrieben wird．${ }^{5}$ Dazu aber kommt，daß mrhnn nicht das einzige Fremd－ wort aus dem Bereich der Pflanzennamen zu sein scheint，die im Kontext eine Rolle spielen．

Für den auf das bekannte $h r r t$＇Blumen＇in rto． 4 folgenden Ausdruck，vorläufig mit 9 品 wiedergegeben，${ }^{6}$ kann Caminos＇quote no other instance nor establish its reading with any degree of certainty＇；${ }^{7}$ das von ihm untranskribiert belassene Zeichen＇might be 〕＇．Ein Vergleich der Schreibung mit Varianten der Graphie $r$ aus anderem hieratischen Kontext läßt aber auch eine hieroglyphische Wiedergabe $\sigma$ als gerechtfertigt erscheinen．${ }^{8}$ Dieses vermutliche $r$ ist in Ligatur mit einem r verbunden，welches Zeichen in der Gruppenschreibung auch für $m$ zu stehen pflegt． Daraus ergibt sich eine Lesung hrm，für das das ägyptische Wörterbuch zwar kein Äquivalent anführt，das Akkadische jedoch in hu／ar－mu mit der Angabe＇eine Pflanze＇ein Vergleichswort bereithält，das ebenso wie $m r h n n n=m a r h a n u$ im Jungbabylonischen belegt ist．${ }^{9}$ Das im Agyptischen beigefügte Determinativ der Pflanze bestätigt hier die Gattung，die womöglich ihrerseits eine noch unbekannte Spezifikation darstellt．

Ebenfalls in Z．rto． 4 findet sich das Wort $\underset{111}{ }$ 便，welches Caminos sbwliest und mit＇boards＇ wiedergibt，eine Übertragung，die er selbst als＇a sheer guess＇bezeichnet．${ }^{10}$ Es handelt sich nach ihm um ein＇extremely rare substantive＇，dessen Belegstellen＇afford no clue as to its meaning＇．Indessen notiert schon Erman zu P．Turin 136，6，daß das angehende Wort dort＇neben Balken genannt＇ sei．${ }^{11}$ Nun gilt es wohl zu beachten，daß die Schreibung $\AA \perp$ außer für $s b$ auch für bloßes $s$ Verwendung finden kann．${ }^{12}$

Damit stellt sich die Frage einer Gleichsetzung mit der häufiger belegten Schreibung
${ }^{1}$ Tomb of Renni， 2.
${ }^{2}$ R．C．Caminos，＇Papyrus Berlin 10463＇， $\mathfrak{F E A} 49$（1963），29－37 mit pl．vi．
${ }^{3}$ Op．cit． 33.
${ }^{4}$ W．Helck，Die Beziehungen Ägyptens zu Vorderasien im 3．und 2．Fahrtausend v．Chr．${ }^{2}$（Wiesbaden，1971）， 513 （Nr．99a）．Die Publikation des Papyrus wird dort versehentlich einem anderen Autor zugeschrieben．
${ }^{5} \mathrm{AHw} 6$ ria．
${ }^{6}$ Vgl．Taf．VIa i．
${ }^{7}$ Caminos，op．cit． 33.
${ }^{8}$ Vgl．etwa Hier．Ostr．pl．iv， 4.
${ }^{9}$ AHw 359a．${ }^{10}$ Caminos，op．cit． 33.
A．Erman，＇Die mit dem Zeichen $\overline{1}$ geschriebenen Worte＇，$Z \ddot{A} S 48$（1911），35；vgl．auch Wb．iII，432， 1
${ }^{12}$ Vgl．Erman，op．cit．31；Gardiner，Sign－list 035.
die seit dem MR bezeugt und deren Bedeutung mit 'Balken' gesichert ist. ${ }^{1}$ Allerdings besteht auch hier die Möglichkeit, ein semitisches Wort zum Vergleich heranzuziehen. Von Soden verzeichnet ein Nomen $s \vec{a} ’ u$ (Nebenform sabbu) mit der Bedeutung 'ein Baum', leider ohne nähere Spezifikation. ${ }^{2}$ Ob hier Abhängigkeitsverhältnisse bestehen, bedarf noch weiterer Prüfung.
M. Görg

## Sbht as a term for a wooden screen

Among the articles of temple equipment which are shown, in the relief of Tuthmosis III at Karnak, ${ }^{3}$ as being presented to the god Amūn, is a row of screens one of which is distinctly labelled $n w b b s h t$, 'a screen of gold' (fig. r). ${ }^{4}$ Two other screens had the same legend although in neither case is the text intact, while the remaining screens, which are on the uppermost surviving register, do not have their labels preserved. One can assume, however, that they were all originally described as sbht although the material with which they were plated may have differed.

Although the labels describe the screens as being made of gold, they would, in fact, have been made of wood and then gilded, ${ }^{5}$ giving them the appearance of metal objects. It is, therefore, hardly surprising that such screens have not survived the passage of time and the depredations of plunderers. They could have been easily removed whenever the temple administration was weak, the metal stripped from the wood and both put to other uses.


Fig. I

The screens in the Karnak scene are shown to have been supported by carved legs which are depicted from the side to satisfy the convention of Egyptian art that an object should be shown from its most characteristic view. In the position in which they have been drawn the legs clearly could not have supported the flat screens; to do so they must have been placed at right-angles to the frame of the screen itself.

The fact that $s b h t$ was used as the name of a wooden screen was recognized by the Wörterbuch ${ }^{6}$ but not by Faulkner, 7 and both dictionaries were misled by an error in Urkunden, iv, into assuming

[^75]
## BRIEF COMMUNICATIONS

that this word could also be used for a 'Kasten' or a 'pylon-shaped chest'. ${ }^{2}$ The object which has been thus interpreted occurs on a lower register of the same scene and is reproduced in Urkunden, Iv, as in fig. 2. ${ }^{3}$ From the order in which the objects are numbered it



Fig. 2 is clear that this is intended to be the shrine or box at the left of the group next to the items of jewellery (no. 16). This object is, in fact, unlabelled and the legend sbht belongs with the shrine at the right end of the group (no. 12) ${ }^{4}$ (fig. 3). ${ }^{5}$ This sbht has a double-leafed door and a frieze of uraei along the top. It could be a shrine, although such a meaning for sbht is not attested elsewhere, and it is possible that this was an elaborate three- or four-sided screen which stood around a sacred image. There is, therefore, no evidence that sbht was used to describe a box or chest.
Only two further texts are quoted by the Wörterbuch for sbht as an article of temple equipment and both describe work on screens which cannot be identified. The first of these concerns work carried out on 'a noble sbht of electrum' named 'Presenting Truth' (scrt ms $(t),{ }^{6}$ while the second describes the making of 'many sbhwt worked in electrum and black copper'. 7 Both of these texts are also from the reign of Tuthmosis III, and the fact that they are described as being made of (in fact, plated with) metals would indicate that they were wooden screens rather than monumental stone porches. The determinatives of each of these are usual forms for words with the stem $s b h$ and do not represent the objects in question.


Fig. 3
${ }^{1} \mathrm{~Wb} . \mathrm{Iv}, 92,5$.
${ }^{2}$ Faulkner, loc. cit.
${ }^{3}$ Urkunden, iv, 634, v, no. 16.
${ }^{4}$ Op. cit. 634, v, no. 12.
${ }^{5}$ Fig. 3 is based on Wreszinski, loc. cit. Urkunden, iv, 627-8, states that this scene, which is not adequately published, was collated from old publications, notes and photographs. This is, presumably, the reason for the error, although the correct labelling can be seen on Wreszinski's photograph. The entries in Urkunden, iv should be emended to read: 12 . Kasten mit Uräen, $\prod^{\ominus} ل_{\Delta}^{\ominus}$ Zahl $\mathbf{1} ; 16$. Kasten, Zahl I . Champollion (Monuments de l'Egypte et de la Nubie, iv (Paris, 1845), pl. 316) gave the group $m \int_{\square}$ ل instead of sbht next to the 'shrine' with uraei. Urkunden, iv, 633 n . b, suggests that this is an error for the group $\mathbb{I}$ which ends the text over the previous object, a chest on carrying poles (Urkunden, iv, $\mathbf{6}_{33}, \mathrm{v}, \mathrm{no}$. 1 I ). This label was omitted altogether by Champollion, although the mim in the group which he gave must be from this other text. An examination of the scene both in photograph (Wreszinski, loc. cit.; G. Jéquier, L'Architecture et la décoration dans l'ancienne Egypte, (Paris, 1920), pl. 47) and on the site has shown that both labels exist.

6 Urkunden, iv, 422, 2.
${ }^{7}$ Op. cit. 174, 9.

This is the sum of the evidence presented by the Wörterbuch, but there are other texts which provide more conclusive proof that sbht was the name of a screen. A parallel to the screens in the list of gifts to Amūn occurs in the temple of Osiris at Abydos. This also belongs to the reign of Tuthmosis III and, although it is badly preserved, it included a sbht of black copper, the determinative of which is clearly another screen (fig. 4). ${ }^{\text {I }}$ The dedication texts of the temple of Sethos I at Abydos include 'a golden sbht' for both Isis ${ }^{2}$ and Osiris, ${ }^{3}$ while 'a painted sbht' is contained in a list of what appears to be funerary furniture on a Nineteenth Dynasty ostracon. ${ }^{4}$ Another ostracon, of the Twentieth Dynasty, records that the price for de-


Fig. 4 corating a sbht was I oipe which, as Janssen noted, was much less than the cost of decorating a tomb-door. ${ }^{5}$ Finally a papyrus from the end of the same dynasty details a charge brought against two carpenters who, it is claimed, cut up the sbht of the pr of the Ennead and made it into four boards. ${ }^{6}$ This can only have been a wooden screen.

The sbht-screen was also used in scenes of the Book of the Dead to replace the more correct depictions of the sbhwt of the Underworld. In the religious texts these were mythological versions of the monumental 'porches' through which the deceased had to pass to gain entry to the Underworld. Usually these were shown in a stylized form surmounted by various protective friezes or symbols, ${ }^{7}$ with the demon-guardian seated within (fig. 5). ${ }^{8}$ However, occasionally, the sbht was

${ }^{1}$ W. M. F. Petrie, Abydos, il (London, 1903), pl. 34; also in Urkunden, iv, 206, 14.
${ }^{2}$ K. A. Kitchen, Ramesside Inscriptions, 1, 134, $9 . \quad{ }^{3}$ Op. cit. 133, 9.
${ }^{4}$ H. Goedicke and E. F. Wente, Ostraka Michaelides (Wiesbaden, 1962), pl. xlix, 6 (Ost. Mich. 14, verso, 6). S. Allam, Hieratische Ostraka und Papyri aus der Ramessidenzeit (Tübingen, 1973), 21 I, translated sbht here as 'Amulett'.

5 J. J. Janssen, Commodity Prices from the Ramessid Period (Leiden, 1975), 391 (Ost. Strasbourg H.84, unpublished).
${ }^{6}$ T. E. Peet, The Great Tomb Robberies of the Twentieth Egyptian Dynasty, il (Oxford, 1930), pl. xxi, 4, verso, 12 (Papyrus B.M. 10053 ).

7 E. A. W. Budge, The Book of the Dead, the Papyrus of Ani, I (London, 1913), pls. 11-12.
${ }^{8}$ Budge, loc. cit.; E. Naville, Das Aegyptische Todtenbuch der XVIII bis XX Dynastie, I (Berlin, 1886), pls. clx, clxi, clxiv. For a more realistic depiction of the sbhwt of the Underworld see A. Piankoff, The Tomb of Ramesses VI, I (New York, 1954), pl. 61 et al.


Fig. 6
represented as a screen behind which the guardian waited (fig. 6). ${ }^{\text {r }}$ This could be due to confusion of the two identically sounding words, but since both kinds of sbht were designed to hide and protect, in the one case the doorway of the temple and in the other sacred objects, their function was essentially the same.
Both words had a common origin in the verb $s b h$, 'to enclose', ${ }^{2}$ in which was implied a strong element of protection so that anything which was called a sbht was regarded not only as 'enclosing' but also as 'protecting'. Both the monumental porches and the screens served these functions and it is worth noting that there was another noun sbht which described an amulet. ${ }^{3}$ In Coptic the noun chue, 'shield', ${ }^{4}$ is generally regarded as having its etymological origin in the stem $s b h .{ }^{5}$
There can be no doubt, in view of this evidence from texts of the New Kingdom, that there was a noun sbht which referred to the gilded wooden screen which formed a part of the standard temple equipment. This noun is quite distinct from the better-known sbht which was used to describe a monumental porch and the two terms should not be confused.

## Amenophis III and Akhenaten : co-regency proved?

The identification of the 'Elder Lady' from the tomb of Amenophis II as Queen Tiye, wife of Amenophis III and mother of Akhenaten, ${ }^{6}$ would seem to settle once and for all at least two questions about Akhenaten's reign. The main one is the co-regency issue which has long divided scholars. It has now been shown that Tiye was in her forties at death. 7 She was married for approximately thirty-eight years, as we know from Amenophis III's Year Two scarab, 8 and survived her husband, as we know from several of Tushratta's letters to her and to Akhenaten, ${ }^{9}$ in particular that which congratulates the latter on his accession. ${ }^{10}$ In the tomb of Huya at El-'Amarna ${ }^{11}$ she is shown

[^76]dining with Akhenaten, Nefertiti, Meritaten, and 'Ankhesenpaaten. It appears that all Akhenaten's daughters were born by his Year Nine, since all six appear in the Year Twelve 'foreign-tribute' scene in the tomb of Meryrē $\mathrm{II},{ }^{\mathrm{I}}$ and, if the youngest was old enough to attend public functions by Year Twelve, it would seem likely that they were all born by Year Nine at the latest. This in turn means that 'Ankhesenpaaten was born by Year Six at the latest. If we allow another four or five years for her to be old enough to dine with her parents and grandmother, this would suggest that the dinner took place in Year Ten at the earliest-at any rate, after Year Nine. Even if the iconography of the princesses is unreliable, the dinner must have happened after Year Eight, since the later Aten-name is employed.

If there were no co-regency, and Akhenaten succeeded upon his father's death, and only then married and started a family (since there is no indication that he had any children before he became king), this would mean that Tiye survived her husband by at least nine years, or else she could not have been depicted dining with her son and his half-grown children. But if she survived him by this length of time, it means that she would have had to be married before she was born! (see Table I).

## Table I

Akhenaten Year 9-12 Tiye visits Akhenaten, and dies some time within these three years, aged 45/46
Akhenaten Year I
Amenophis III Year 38/39
Amenophis III Year I
Tiye aged c. 35/36
Tiye aged $c .-2 /-1$
Since this is clearly an impossibility, it follows that there must have been an overlap of at least nine years between the two reigns. In fact it is now possible to ascertain the length of the co-regency more closely than this, because Tushratta's congratulatory letter must now be dated to Year Twelve rather than Year Two, which in turn indicates that the overlap was of between eleven and twelve years' duration, as postulated by Aldred. ${ }^{2}$ Perhaps the following chronology (Table II) may be suggested:

## Table II

Amenophis III Year $1 \quad$ Tiye aged 6 Amenophis III Year 38/39

Tiye aged 44. Akhenaten Year 12
Tiye dies a year or so later, which closely fits the physical evidence.
This proof of the co-regency also settles the question of whether or not Nefertiti can be identified with Tadukhipa, the Mitannian princess who married Amenophis III shortly before his death and then married Akhenaten. ${ }^{3}$ By the time this marriage took place, Akhenaten had been married to Nefertiti for at least eleven years, and had six children by her.

Juliette Bentley

## Reconstruction of a shoulder harp in the British Museum*

The shoulder harp is a member of the arched-harp family. The family trait is a body made of a long arched neck stiffly joined to a resonator box at one end; the strings are attached near the distal ends

[^77]of the stick and the box. Depending on the shape of the box one usually ${ }^{1}$ distinguishes between shovel-, ladle-, and boat-shaped harps (the shoulder harp is a sub-species of the latter). Iconographic evidence shows arched harps in Egypt ${ }^{2}$ from the Fourth Dynasty (c. 2700 BC ) up to, at least, Hellenistic times (c. 200 BC ). Shoulder harps, however, had an extraordinarily brief vogue; for, as Hickmann ${ }^{3}$ put it, 'they first appeared in Egypt during the reign of Tuthmosis III (c. 1500 BC ), quickly became fashionable and vanished from Egyptian musical life already 80-100 years later'. Subsequent history has been kinder to the shoulder harp: the overwhelming majority of the ancient arched harps that survive today ${ }^{4}$ are shoulder harps. Mostly, only the wooden structures remain but in the British Museum's Egyptian collection there is a unique harp (no. 38 r 70 ) which has much of its ancient skin preserved. ${ }^{5}$ The skin with its 'sound holes' and hole for the stick ${ }^{6}$ is clearly shown in the recent catalogue of musical instruments in the British Museum's Egyptian collection. ${ }^{7}$ However, in another regard the catalogue is in error: the stick is shown pointing away from the skin and, thus, with no contact with the skin. The other shoulder harps in the catalogue have also been reconstructed in the same erroneous manner.

Inspection of harp no. 38170 shows that the stick must have been in close contact with the skin, since there are distinct stretch marks on the skin caused by the pressure of the stick as well as by the strings that once were wound around the stick. With this in mind, we obtain the reconstruction ${ }^{8}$ given in pl. XXIII. Here the stick/skin contact agrees with the ancient pictorial evidence ${ }^{1}$ on (nonangular) harps. Furthermore, the contact can be justified on acoustic grounds: it transmits the string vibrations in the stick into the skin cover of the resonating box. Since the skin has a larger surface than the strings, it radiates sound more effectively.

The narrow waist in the middle of the resonator box is quite characteristic ${ }^{9}$ of the extant shoulder

[^78]harps. It is not immediately clear if the waist was present in the original harps or if the inward bending of the box sides was produced by the skin tension during the subsequent tomb storage. The modern Burmese harp, in many ways similar to the ancient Egyptian shoulder harp, has three rods squeezed between the side walls of the resonator ${ }^{1}$ preventing a collapse of the sides. The shoulder harp appears not to have had such supporting rods. A well-preserved but fairly roughly cut shoulder harp in the Metropolitan Museum of Art ${ }^{2}$ settles the question. Because of the coarse carving, the wood grain inside the box clearly shows that this harp was originally made with a waist. It seems safe to assume that the waists in all extant shoulder harps were made intentionally. Shoulder harps, then, provide the first example of waisted resonator boxes, a design now mainly associated with the violin family, the guitar, and some Indian instrument groups.

In modern times there are several types of arched harp, perhaps the most conspicuous being the African harp ${ }^{2}$ and the Burmese harp. ${ }^{1}$ Organologists ${ }^{3}$ have remarked on the close similarity between the Ancient Egyptian arched harps and the modern ones and speculated on a possible ancestral relationship. The reconstructed harp of pl. XXIII makes it clear that there is a greater affinity with the Burmese than with the African harp because of the spatial arrangement of the stick and the skin: in African harps the stick is always placed underneath the skin, ${ }^{4}$ while in the Burmese harp only the ends of the stick lie under the skin with the central portion (to which the strings are attached) protruding above. ${ }^{1}$ Because the stick penetrates the skin in both the Egyptian and the Burmese harps (once in the former, twice in the latter), there are large curvature changes along the skin in both cases. Also, in both cases each end of the stick is attached fairly rigidly to the box: ${ }^{5}$ the stick of the Burmese is nailed ${ }^{6}$ into the back of the box and clamped with steel wire to the front; the stick of the Egyptian harp is inserted into a slot in the front and tied down with string at the end. The sticks are comparatively robust in both cases-in the extant shoulder harps the sticks seem curiously over-dimensioned. The African harp, on the other hand, has a thin stick that is fairly lightly attached to the sides. Such light construction is possible because some of the string tension is taken up by the skin stretching above the stick.

There is nothing new about the 'tuning pegs' at the end of the neck in our reconstruction. As is well known, these pegs were rigidly inserted into the instrument. They could not have functioned in the same way as the rotatable tuning pegs we find in modern instruments (e.g. violins). Most likely the pegs merely acted as supports for the strings which were tied around the neck. If so, how was the harp tuned? In 1948 Hickmann ${ }^{7}$ gave an answer that seems to have become accepted: ${ }^{8}$ the instrument was tuned through adjustment of the stick elevation, i.e. adjustment of the string that ties the stick to the protruding butt of the resonator box (seen in the foreground of pl. XXIII).
${ }^{1}$ M. C. Williamson, Selected Reports (Institute of Ethnomusicology, UCLA), I (2) (1968), 46.
${ }^{2}$ Ankermann, 'Die afrikanischen Musikinstrumente', Ethnologisches Notizblatt K. Museum für Völkerkunde in Berlin 3 (1901), ェ6. See also n. 4.
${ }^{3}$ C. Sachs, 'Die Musikinstrumente Birmas und Assams', Sitzungsberichte der k. Bayerischen Akademie der Wissenschaften (Munich, 1917); id. Die Musikinstrumente des alten Ägyptens (Berlin, 1921); id. The History of Musical Instruments (London, 1940), 92; id. Geist und Werden der Musikinstrumente (Berlin, 1929); H. Hickmann, BIE 35. See also L. E. R. Picken, fournal of the International Folk Music Council 7 (1955), 94.

4 African harps presumably inspired Wachsmann when he erroneously wrote: 'The strings (in ancient Egyptian harps) run from the neck to the sound-table where each string pierces the skin . . $\therefore$ in chapter I of A. Baines (ed.), Musical Instruments through the Ages (196r).

5 The joint is not as rigid as in a 'musical bow' where the neck and the stick are simply the same piece and the resonator box hangs under this assembly. Hickmann ( $B I E$ 35, 320-1) established that the Ancient Egyptians never illustrated their arched harps as a musical bow. Earlier, Sachs (see n. 3) had thought a Fourth Dynasty relief had, in fact, shown a musical bow. Hickmann re-examined the particular relief and drew a different conclusion.
${ }^{6}$ M. C. Williamson, private communication (1979).
7 H. Hickmann, $A S A E 48$ (1948), 639. $\quad 8$ W. C. Hayes, Scepter of Egypt, in (1959), 23.

Tuning of our reconstructed harp clearly shows that Hickmann's idea is wrong on two grounds: (i) it is impossible, in general, to bring all four strings into tune by the movement of one stick and (ii), even if it were possible to tune the strings by the adjustment of the stick elevation, this would not necessarily occur when the stick makes the proper contact with the skin. (One may, of course, attempt to bring the stick into the proper contact but this would immediately cause the strings to lose their relative tuning.)

After some experimentation on the reconstructed shoulder harp we arrive at a different tuning procedure: (i) the stick elevation is initially adjusted to give a desirable tone; for example, our harp becomes slightly louder if the end of the stick is not in very tight contact with the butt of the resonator box while still being in close contact with the skin; (ii) the strings were then tuned individually by suitable adjustments at the neck. Most probably the tuning mechanism at the neck was the same as on lyres (Egyptian, Greek, African, etc.) and on the Burmese harp: ${ }^{1}$ the strings were attached to a collar (made of the string itself or some other material) around the neck of the harp. The collar could be turned to adjust the tension of the string. Friction prevented the string from unwinding. Bo Lawergren

## Chicago, Or. Inst. 8798, 3-4 and Cairo CG 34057, 12-13 <br> (JEA 62, 59, 61-2, pls. XI, XIA)

The incompletely preserved word in the phrase ir wn[n] $3 h \cdot[t] w[h r] \ldots$ (lost) . . . hprw m mnt nt
 to E. Brovarski ( $\mathcal{f} E A 62,59,6 \mathrm{r}-2)$. The word in the corresponding version (Cairo CG 34057,
 was convincingly read and translated by J. Černý (Coptic Studies in Honor of W. E. Crum, 1950, 36-7; cf. also his Coptic Etymological Dictionary, 66, with references to earlier discussions) as $k d f$, 'to gather', 'to pick'.

The group in Chicago, Or. Inst. 8798, 4, should then in all probability be restored as Dr Janet H. Johnson, who has been so kind as to examine the relevant part of the text on the original and whom I wish to thank for her help, informs me that, in her opinion, the incompletely preserved tall narrow sign shows a slight widening to the right, thus making the reading $k d$ plausible. Furthermore, the 'sign' above the break is not as deeply cut as the other hieroglyphs, and is probably just a fortuitous break in the stone.

The translation of the whole passage then runs as follows: 'if one is transformed [because of] . . . [to assume] the form of a swallow of the God's Land to gather on [incense-]trees.' The lexicographical point of interest lies in the fact that the bird could pick on ( $h r$ ) as well as under ( $\underline{h r}$ ) the incense-trees, a not unnatural image.

Jaromír Málek

## The reign-length of Ramesses VII

The chronology of the kings of the middle of the Twentieth Dynasty remains uncertain in detail. Dated royal monuments have only rarely survived, and the dating formulas of contemporary documents regularly omit the royal name. Few dates can be attributed with certainty to the reign

[^79] as Ramesses VII. The highest so far recognized is the twenty-sixth day of the third month of shomu in his seventh year. ${ }^{2}$ As yet there is no evidence to show how much longer he may have reigned.

Among their facsimiles of papyri in the Turin Museum Pleyte and Rossi reproduce ${ }^{3}$ the record of the commissioning of some copperwork, dated to the twenty-fifth day of the fourth month of shomu of an eighth regnal year. The reign to which this 'year eight' belongs may be fixed within narrow limits by the mention in the text of two foremen of the works on the royal tomb, Nekhemmut and Hor[mose]. The succession of such foremen through the Nineteenth and Twentieth Dynasties is sufficiently well documented to exclude the possibility of serious error in such dating.

The foreman Hormose is so far attested with certainty only in the reign of Ramesses IX. ${ }^{4}$ His father and predecessor in office, the foreman Anherkhau, is attested ${ }^{5}$ with certainty from the second decade of the reign of Ramesses III into the reign of Ramesses IV, but it can be shown with great probability that he survived into later reigns. One text mentions Anherkhau acting with the foreman Nekhemmut in the seventh year of a king who should be either Ramesses VI or Ramesses VII, ${ }^{6}$ and another shows him acting with Nekhemmut and the scribe Horisheri in a fourth regnal year that can hardly belong to any king earlier than Ramesses VII. ${ }^{7}$ Hormose, therefore, succeeded to his father's post, at the earliest in the middle of the reign of Ramesses VII, at the latest in the early years of Ramesses IX. His contemporary, the foreman Nekhemmut, the younger of that name, is attested from the second year of Ramesses IV until the seventeenth year of Ramesses IX, and these provisional limits probably account accurately for his full tenure of office. ${ }^{8}$ As a result of these preliminary remarks it is clear that the 'year 8 ' here under discussion will fall in the reign either of Ramesses VII or of Ramesses IX. The ephemeral reign of Ramesses VIII need not be taken into account.

The sole royal name written on this Turin Papyrus, above and to the left of the date with which the text was headed, was read by Pleyte as that of Ramesses II. Recent commentators have tended ${ }^{9}$ to follow a suggestion of Peet, ${ }^{10}$ who recognized that reign as an impossible dating of the papyrus. He dissociated the name from the date, disregarded it for dating purposes, and suggested the reign of Ramesses IX as the most likely date for the composition of the text. To support this hypothesis he noted that the royal name was introduced by the words $n n s w$, 'of King', and observed that this formula ('Such and such a year, month and day of King X') was not to be found at the head of a document. Rare examples of this very formula do, however, occur on ostraca, ${ }^{11}$ and Peet's objection

[^80]may be overruled. Indeed, it is difficult in principle to see any real justification for such a hypothesis. There is no loss to the papyrus at this point, and, since a blank space stands at the top of the papyrus above the date, ${ }^{1}$ there is no other sentence to which the name might be attached. It is, therefore, to be treated as an additional part of the date. Precisely when and why it should have been thought necessary to add the royal name is unclear, but the example is not unique. At the top of the unpublished record ${ }^{2}$ of a court case of the reign of Ramesses IX the phrase $n n s w(N f r-k z-R r, S t p-n-R r)$, 'Of King (Neferkarēc, Setepenrē])', stands above the normal introductory date. One may also note an ostracon ${ }^{3}$ where the first cartouche of Ramesses IV stands on the top edge, just above and to the left of the date in the first line of the recto.

In this Turin papyrus, therefore, the royal name in its first line should indicate the reign in which it was written. The reading, however, is problematical, the reasons against the obvious interpretation of it as the name of Ramesses II being set out above. The initial part of the name is, without difficulty, to be read as ( $W s r-m s\ulcorner t\langle-R\ulcorner \rangle, S t p-n-R r$, but the following groups are cursive, carelessly written, and defective. Their transcription must therefore be a mixture of elimination and guesswork. Černý, in his unpublished preliminary transcription, did not commit himself to a reading, although confirming the basic accuracy of Rossi's facsimile. He adds, however, the valuable information that the loss at the end of the line, as indicated by Rossi, was no more than a rough dash. The scribe did not include the second cartouche. One may therefore suggest that the whole addition be
 perhaps completed by an even more defective writing of a further royal title, although the final group is quite obscure. ${ }^{4}$ At this point the scribe ceased to trouble himself.

The scribes of the latter part of the Twentieth Dynasty are frequently careless of the precise writing (particularly at the end) of royal names, and wrote no more than they felt necessary for recognition. Particularly relevant here is a defective writing of the selfsame cartouche in a document from the seventh year of Ramesses VII:s (Wsr-ms८t-Rr, Stp-n-Rr, Mry〈-Imn). The contemporary scribe clearly felt in no serious danger of confusion with Ramesses II, dead some eighty years before.

If acceptable, this reading will increase by one year the provisional reign-length of Ramesses VII, until the twenty-fifth day of the fourth month of shomu in his eighth year, and define more closely the succession of Hormose to his father's post of foreman at the royal tomb in the second half of that reign.
C. J. Eyre

## Harmachis the High Priest of Memphis : Wilkinson's copy of BM 391

The High Priests of Memphis in the Ptolemaic Period have recently come in for some attention, and three articles by Quaegebeur ( 7 JES 30 (1971), 23-70; Ancient Society 3 (1972), 77-109; CdE 49 (1974), 59-79) have added greatly to our knowledge. The importance of this priestly family has also been stressed by Reymond (Orientalia 46 (1977), $1-24$ ), and it is obvious that the last word on the subject has yet to be said. As it happens, there is among Wilkinson's papers in the Griffith
${ }^{1}$ A note on the Cerný manuscript agrees with Rossi's facsimile in this respect.
${ }^{2}$ O. Gardiner 143, now in the Ashmolean Museum, Oxford.
${ }^{3}$ Gardiner and Cerný, op. cit. pl. xlviii, 2.
4 At the end Cerný tentatively suggests a defective writing of the title $N b h r w$, which would have in its favour that it would correctly stand before the second cartouche and $N b t ; w y$ would not. That the difficult group which I have here read as 'Imn might be a writing of the royal title $S ; R r$, or the normal ending of a cartouche, $\uparrow n h w d z s n b$, seems palaeographically unlikely.
${ }^{5}$ Janssen, $\mathcal{F E A} 52$ (1966), pl. xvii, 14. Perhaps see also Gardiner and Cerný, op. cit. pl. xix, 2, vs.: 'the work of King (Wsr-m3 $\quad$ t-Rr'. In pl. lxix, $I$, vs. 6, the tomb of Ramesses VII is referred to as 'the tomb of King (It $t \cdot f$-'Imn) '.

Institute, Oxford, a copy which he made of one of the stelae in this series, and I am very grateful to Dr Jaromír Málek for bringing to my attention an item of evidence which, though not perhaps of the highest importance, might otherwise have gone unnoticed. The stela in question is BM 391, formerly in the Salt collection, and the hieroglyphic text was published in Sharpe, Egyptian Inscriptions, 1, pl. 3; for further information see, among others, BM Sculpture Guide (1909), 267-8 no. ı000, Gauthier, Livre des rois, v, 272, and Quaegebeur, $\mathcal{F} N E S 30$ (1971), 251. Harmakhi (Harmachis) followed his father 'Anemḥo II as high priest, and his stela must date to $c$. 190 (Quaegebeur, $C d E 49$ (1974), 69, inv. no. 22). The text contains a list of the various offices held by Harmakhi at the time of his death and gives basic details of his ancestry; it is thus very similar to other stelae from this family, and must have come from the burial vault somewhere in Saqqâra.

## 

Fig. I

The short line of Demotic directly below the hieroglyphs is also interesting (see fig. r). The text is essentially the same as the adscript to the other surviving stela of Harmakhi, Vienna 52 (Brugsch, Thesaurus, 915-16), and it reads [wr-hm (?)] hm-ntr Pth Her-mhy ss hm-ntr (Pth) stm wr-hm rn-m-hr s; $h m-n t r$ Pth wr-hm Ns-ist(y) mwt•f Hr-rnh, ['greatest of artificers], prophet of Ptaḥ Harmakhi, son of the prophet (of Ptaḥ), setem-priest and greatest of artificers 'Anemho, son of the prophet of Ptah and greatest of artificers $N s$ - $i s t(y)$, his mother being Hacōnkh'. The Demotic group for the grandfather's name $N s-i s t(y)$ is different from the writing given in Brugsch, op. cit. 906 , and it is difficult to see how the scribe interpreted this unusual name, the Greek equivalent for which is still unknown (for the etymology see De Meulenaere, Kêmi 16 (1962), 31-5, and Quaegebeur, CdE 49 (1974), 66 n. r). The Demotic text is now scarcely visible.

The role of Harmakhi was discussed by Reymond (Orientalia 46 (1977), $9,15 \mathrm{ff}$.), but it is difficult to accept some of her conclusions. The identification of the high priest Harmakhi with the rebelking of the same name is unlikely, even though the two were contemporary, and the idea is in fact ruled out of court by the discovery that the king's name is to be read Hr -wn-nfr and is identical with the otherwise floating Hyrgonaphor of the Abydos graffito (Zauzich, GM 29 (1978), 157). Equally difficult to accept is the idea (Orientalia 46 (1977), 17) that the hieroglyphic dates and the Demotic colophon of BM 39I were erased by a vengeful faction; the Demotic was still legible in Wilkinson's day, as his copy shows, and the hieroglyphic dates were simply never inserted in the text. The stela must have been written in anticipation of Harmakhi's death, and was never completed, while the ink of the Demotic probably fell victim to the soot of nineteenth-century London. Thus Egyptology has one more reason to be grateful to Sir J. Gardner Wilkinson. J. D. Ray

## An illustration of the Coffin Texts on a Roman cartonnage

The British Museum owns a painted cartonnage case of the priestess Isunes, daughter of Tabakamūn (BM 29583), which was found at Edfû and is dated to the first century ad. ${ }^{1}$ The painting on the
${ }^{1}$ E. A. W. Budge, A Guide to the First, Second and Third Egyptian Rooms (London, 1924). 131-2, pl. xxvi;
 of the British Museum for the photograph and permission to publish it.
cartonnage is composed of two parallel pictures situated on both sides of the central vertical inscription (see pl. XXIV, r). Each of the two panels shows a procession of gods and, in the middle of the picture, a winged snake with four legs (see pl. XXIV, 2). Both snakes are represented as transporting a mummy on their backs. The only difference between the two animals concerns their heads. One of them is ram-headed, the other one has the head of a hawk. This picture seems to be unique among the Egyptian representations of the netherworld.

Ram-headed snakes without wings and legs are known from the reliefs of the Roman Period in the temple of Esna, ${ }^{1}$ the Tomb of Two Brothers in Athribis, ${ }^{2}$ and on the coffin of Petamenopet, found in Tell Abu Seif (Eastern Delta), now in the Cairo Museum (CG 29318). ${ }^{3}$ A similar syncretistic figure is attested by objects called wr h hksw that were probably used in the ceremony of the opening of the mouth in Ptolemaic temples. ${ }^{4}$ The only pre-Ptolemaic representation of a ram-headed snake is to be found in the Book of the Two Ways which is a part of the Coffin Texts. ${ }^{5}$ In the case of this Middle Kingdom text the snake is a form of the sun-god's 'secretary' who mediates between Rē (or Atūm) and other gods. ${ }^{6}$

On the basis of fragments of the Coffin Texts we may propose an identification of the ram-headed snakes either with the god Atūm or with his two daughters whom he made out of his eyes and sent away in order to help the deceased during his journey to the netherworld. ${ }^{7}$ The 'Spell for being transformed into a divine falcon' mentions a messenger who was made by Atūm, who identifies himself with Atūm (being satisfied with his own beauty), and who is the lord of the two royal snakes. ${ }^{8}$ Other chapters of the same texts represent the snakes from the perspective of the deceased who wishes to go down on their coils, if they go down to the earth as snakes, and to go up on the top of their wings, if they go up to the sky as vultures. ${ }^{9}$ This association is illustrated on the cartonnage of Isunes.

The hawk-headed snake may be interpreted as a reminiscence of the celestial journey of the deceased on the back of a snake, whilst the ram-headed specimen illustrates his descending into the netherworld.

Such iconographic details as the wings and the legs of the snakes seem to be a copy of a New Kingdom pattern known from the Amduat. A similar snake in the eleventh division of this book is an animal of the god Atūm. ${ }^{10}$ The god appears out of its coils. The only later iconographic addition to this version is the head of another animal. Such a syncretistic combination and the contrast of two different heads on the cartonnage of Isunes illustrate the idea contained in the Coffin Texts more precisely than the pictures accompanying these texts.

One may conclude that the literary tradition of the Middle Kingdom was a source of artistic inspiration until the Roman Period, or that the painting on the cartonnage of Isunes is a copy of an earlier picture which would be a missing link in a sequence of syncretistic conceptions which are first attested by the Coffin Texts.

Karol Myśliwiec

[^81]
I. BM 29583. Roman cartonnage

2. Facsimile of text on same

Courtesy of the British Museum

AN ILLUSTRATION TO THE COFFIN TEXTS

## A Second Dynasty King in a Demotic Papyrus of the Roman Period

Among the more obscure rulers of Ancient Egypt is the Second Dynasty king Nfr-ks-Skr, attested, in native sources, only in the Ramesside kinglists of Turin and Saqqâra. ${ }^{1}$ The purpose of this note is to call attention to a new attestation of that king in a Demotic papyrus written in the second century AD.

The papyrus in question, P. Vindob. D. 6319, has been recently published by E. A. E. Reymond (From Ancient Egyptian Hermetic Writings (MPER, ns ir), pls. 1-3 and pp. 45-103). It comes from the Fayyûm and is inscribed with a treatise on temple planning and construction. The badly damaged eighth line of the $(x+)$ third column of this treatise contains these traces: which Reymond has read $n 3 . w-n f r$ kst $n$ snte and translated 'Beautiful is the work of founding'.

This reading and translation of P. Vindob. D. 6319, x+III, 8 must be rejected for a number of reasons. First, the word after $n s . w-n f r$, written with divine determinative, is clearly $k$, 'ka', rather than $k_{3 . t}$, 'work'. (For this scribe's writing of the latter word cf. P. Vindob. D. 6319, x+III, 15 and 19. For a similar writing of the word for 'ka' in another Demotic text cf. Stela Cairo 27541, 1. 2.) ${ }^{2}$ Moreover, in view of its position relative to the base of the line the determinative of the word after $k z$ must be the Hieratic divine determinative (Möller, Hieratische Paläographie, 1II, no. 1888), and not, as Reymond takes it, the Demotic wood-determinative. (For the relative positions of the two compare the divine determinative of 'Iwnw, 'Heliopolis', in P. Vindob. D. 6319, x+III, 7, with the wood-determinative of inwh, 'rope', in P. Vindob. D. 6319, x+II, 15 and 21, x+III, 20.) Thus, the word following $k_{3}$ should be a divine name written in Hieratic, and, in fact, the traces visible before the determinative, bolt-s written above two other low, broad signs, are unmistakably those of $\overline{\bar{\sigma}}$, the phonetic signs of the divine name $S k r{ }^{3}$ Finally, the traces after the divine determinative of $S k r$, interpreted by Reymond as a man-with-hand-to-mouth-determinative, are actually the end of a cartouche plus the abbreviation of ‘ $n h \not{w d} d ; s n b$, 'life, prosperity, and health', commonly used to determine royal names. (Compare the undamaged examples of the same combination in the writings of Pr-r3, 'king', in P. Vindob. D. 6319, x+III, 2, 15, and 20.) Thus, what is actually preserved in P. Vindob. D. 6319, x+III, 8, is the name of a king, $N_{3} . w-n f r-k s-S k r$. Since no other suitable candidates exist, this king is plainly to be identified with the Second Dynasty ruler Nfr-k3-Skr. ${ }^{4}$

Given the badly damaged state of both the line and the column of P. Vindob. D. 6319 in which ( $N_{3} . w_{0}$-nfr-ks-Skr is mentioned, the role of that king in the narrative of the text cannot be established with any certainty. The portions of it preserved immediately before his name, however, are suggestive. In P. Vindob. D. 6319, x + III, 2, a king 'rch-ms is mentioned while, four lines later, there occurs the phrase [ ] ns nt wsm m3y, '[ ] those which were fallen into ruin anew'. Since the ensuing text is concerned with temple construction, it is tempting to suppose that this phrase was originally part of a reference to the redecoration or rebuilding of sacred edifices. Perhaps the text described a king Irh-ms (either the Eighteenth Dynasty or the Twenty-sixth Dynasty monarch of that name) ${ }^{5}$ initiating such a programme of reconstruction and consulting for guidance an ancient

[^82]
## BRIEF COMMUNICATIONS

plan found or written down in the time of ( $\left.N_{3} . w\right)-n f r-k s-S k r$. Such a description would be comparable to the well-known ones of Tuthmosis III undertaking building work at Dendera with the guidance of plans from the times of Cheops and Piopi I, ${ }^{1}$ but unless additional fragments of P. Vindob. D. 6319, or a duplicate version thereof, come to light, this or any other such reconstruction of the text must remain conjectural.
M. Smith

## Current research for higher degrees in Egyptology, Coptic, and related studies in the United Kingdom, No. 4

For the previous list see $\mathcal{F E A} 64$ (1978), 148-9. The compiler wishes to thank colleagues who have provided information. The following dissertations, in addition to those previously listed, are being prepared:

## Birmingham University

1. Aston, D. A. 'Tomb groups from the New Kingdom to the Saïte Period'. 1979. Ph.D. Dr M. A. Leahy.
2. Taylor, J. H. 'The stylistic development of coffins during the Third Intermediate Period'. 1979. Ph.D. Dr M. A. Leahy.

## Durham University

1. Kourachanis, P. 'A reappraisal of the Egyptian contexts of L.H.IIIA2-IIIB pottery, with particular reference to Gurob'. 1979. Ph.D. Professor J. R. Harris.

## Liverpool University

1. Abdallah, A. O. A. 'Upper Egyptian funerary stelae of the Graeco-Roman Period'. 1979. Ph.D. Professor A. F. Shore.
2. Strudwick, N. 'Aspects of administration in the Old Kingdom'. 1977. Ph.D. Professor A. F. Shore.

## London University. Institute of Archaeology

I. Amer, Miss F. D. 'The archaeological and epigraphic evidence from the site of Kom Abbou Bellou'. 1977. Ph.D. Professor J. J. Wilkes.

## London University. University College

I. Martin, Mrs R. 'Demotic protocols from North Saqqâra'. 1978. M.Phil. Professor H. S. Smith.

## Manchester University

I. Riley, Miss J. E. 'An in-depth study of the reign of Akhenaten, with special reference to the archaeological evidence in the Cairo and British Museums'. 1979. M.A. Dr A. R. David.
2. Smith, Miss J. M. 'Akhenaten and the Amarna Age'. 1979. M.A. Dr A. R. David.

## Oxford University

r. Harpur, Miss Y. M. 'Scenes of daily life in Old Kingdom private tombs: a study in artistic development'. 1977. D.Phil. Professor J. R. Baines.

[^83]2. Pinch, Mrs G. R. 'New Kingdom votive offerings to Hathor'. 1977. D.Phil. Professor J. R. Baines.
3. Roberts, Miss A. M. 'Cult objects of Hathor: an iconographic study'. 1977. D.Phil. Professor J. R. Baines.

Dissertations mentioned in previous lists, which have been completed and approved: List No. I ( $\mathfrak{F E A} 60$ (1974), 261-3): Cambridge, no. 2; Liverpool, nos. 1, 3, 4, 5, 6; London, nos. 10, 11, 14; Oxford, nos. 1, 10 (B.Litt.). List No. 2 (fEA 62 (1976), 188-9): Cambridge, no. 2; Liverpool, no. 3 (M.Phil.); London, Institute of Archaeology, no. I.

The following theses will not now be submitted: List No. 2: Liverpool, no. 4; List no. 3: London, University College, no. 2.

## REVIEWS

Studies in Honor of George R. Hughes. Edited by Janet H. Johnson and Edward F. Wente. The Oriental Institute of the University of Chicago. Studies in Ancient Oriental Civilization No. 39. Pp. xviii +282, figs. 52. Chicago, 1976. Library of Congress C.C. No. 76-47851. Price £9.50.

This volume of nineteen articles is dedicated to the distinguished American scholar George R. Hughes, a brief biography of whom appears at the beginning of this work. In the first study, James Allen publishes the funerary texts of King Wahkarēc Akhtoy which were inscribed at the head and foot of a coffin found at El-Bersheh (pp. 1-29). He concludes that they were copied in the Twelfth Dynasty from an earlier master copy. He does not suggest why this particular manuscript survived at El-Bersheh, but it should be noted that the nomarchs of the Hare Nome appear to have remained loyal to the Heracleopolitan dynasty until close to its overthrow. Thus the original manuscript probably reached the Hare Nome some time during the Tenth Dynasty. The second study by E. Brovarski also covers the First Intermediate Period (pp. 31-4I). He presents two unpublished pieces from Gebelein to support Fischer's contention that Gebelein lay in the Theban Nome. His reconstruction of the history of that period understandably does not take account of the recently published stela of Hetepy from El-Kab (G. Gabra, MDAIK 32 (1976), 45-56) which is dated to the reign of Inyotef II and mentions a severe famine. If this famine is identical to that chronicled by 'Ankhtify of Mo'alla, then the date of the latter must be brought down.

The following article by M. Ciccarello deals with the role and iconography of the god Shesmu who the author argues stemmed originally from Letopolis and whose depiction as a lion was influenced by that of the neighbouring goddess Sekhmet (pp. 43-54). Carl DeVries publishes an object, found during the Nubian campaign, which he identifies as an A-group censer carrying the earliest known sunk relief from Ancient Egypt (pp. 55-74). The scenes have stylistic affinities with late Predynastic and Archaic Egyptian depictions, but, unfortunately, the archaeological context does not appear to be firmly datable. Although its importance has led this piece to be treated in isolation, it is hoped that the publication of the entire cemetery will not be long delayed. M. Gilula discusses a new interpretation of the closing line of the Shipwrecked Sailor disputing the traditional translation of $h \underline{d} t$ (pp. 75-82). L. Habachi gathers together the scattered monuments of the scribe Amenmose son of Penzert and his family (pp. 83-103). He is surely right to regard one provenance, Tolemaita in Libya, as due to removal in Roman times. Amenmose's tomb, no. 373 at Thebes, remains to be published.

There follow a study of Demotic dialects by Janet Johnson (pp. 105-32), the publication of an Amduat papyrus by L. Lesko (pp. 133-8), and a re-examination of the Naucratis stela of Nectanebo II by M. Lichtheim (pp. 139-46). Thomas Logan publishes plates and hand-copies of a Demotic religious text, Papyrus Harkness, in the Metropolitan Museum but refrains from any translation of the main text (pp. 147${ }^{61}$ ). Interested Demotists will need a large magnifying glass to study these, and no copy is given of the fragmentary column i. W. Murnane reviews the sources for the accession date of Akhenaten and concludes that it took place within the first eight days of I Proyet (pp. 163-7). He draws attention to the fact that Amarna tablet EA 27 can no longer be used as evidence for or against a co-regency. C. Nims emphasizes the parallels between the Ramesseum and Medinet Habu showing that here, as in other aspects, Ramesses III modelled himself on Ramesses II (pp. 169-75).
R. Parker vigorously defends the traditional Sothic dates of the Twelfth Dynasty and the Eighteenth Dynasty against recent doubts (pp. 177-89). It should be noted that the position of Sekhemrēc Khu-tawy in the Thirteenth Dynasty has been touched upon by Vercoutter, RdE 27 (1975), 221-34, in his study of Wegaf whom he believes to have been the first ruler of that dynasty. He attacks the arguments for putting Sekhemrè Khu-tawy towards the beginning of the Thirteenth Dynasty and doubts that he was the third ruler as Parker supposes. If he is correct, then Sekhemrḕ Khu-tawy may be identical with the fifteenth ruler in the Turin Canon, Sekhemrē Khu-tawy Sobekhotpe, who may in turn be identified with AmenemhētSobekhotpe, thus necessitating a renumbering of the Sobekhotpes. However, Parker's attribution of the

Year 7 of the Illahun papyrus to Sesostris III remains unaffected as there is no evidence, apart from the case of Sekhemkarē which he discusses, that any of the first fifteen rulers of the Thirteenth Dynasty reigned seven years. R. Scranton next reviews the possible references to the Santorini eruption in Greek myths (pp. 191-9).
D. Silverman publishes a stelophorous statue of the servant of Amūn (sdm ršn'Imn) Pashed (OI 13700) and a fragmentary stela of a Pashed which names Nefertari and Mutnofret who are probably his daughters (OI 1370I) (pp. 201-7). Despite the author's assertions, there is no evidence that either piece was connected with Deir el-Medîna. As he admits, the title of Pashed does not occur at Deir el-Medîna and in fact must refer to a post at one of the Theban temples dedicated to Amūn, probably Karnak (see Helck, Materialien, 54, for a list of other holders of this title). The stela, if it refers to a different Pashed, might have come from Deir el-Medîna. The names are very common and occur together only in the family of the draughtsman Pashed whose wife was Nefertari and whose mother and granddaughter were named Mutnofret, but he had no known daughters of these names (L. Habachi, Tavole d'Offerta Are e Bacili da Libagione (Turin, 1977), 30 where the younger Mutnofret should be the sister and not the wife of Pashed the younger). E. Thomas publishes an interesting ostracon from the Valley of the Kings which names the tombs of the Greatest of Seers Meryatūm, Isisnofret, and possibly that of a general who the author suggests might be Ramesses II (pp. 209-16). It is more likely that the general is one of the sons of Ramesses II, Amenherkhepeshef or Merenptah, who bore this title. None of these tombs has yet been discovered, and the possibility remains that the ostracon refers to the Valley of the Queens where one would expect to find the tombs of princes and queens rather than to the Valley of the Kings where it was found.

A long and important article by E. Wente and C. Van Siclen restudies the chronology of the New Kingdom and argues convincingly in favour of 1279 BC as the accession date of Ramesses II (pp. 217-61). The inception of the Eighteenth Dynasty is dated to 1570 bC with the major change being an attempt to lengthen the reign of Tuthmosis IV on the evidence of his supposed jubilee. The authors re-examine the function of the Sed-Festival and rightly conclude that it was celebrated normally in a ruler's thirtieth year. The attempt to explain away the Year 22 celebration of Osorkon II as a mistake in Naville's copy is possible but a bit forced. There could equally have been another reason for the choice of Year 22 of which we are now ignorant. The thirty-year principle fixes the length of the reign of Tuthmosis II as Hatshepsut must have dated her jubilee in Year 16 from the death of her father. The use of jubilee evidence is more debatable in the case of the reigns of Amenophis II and Tuthmosis IV as the phrase sptpy whm hbsd occurs in contexts which would imply a wish on the part of these kings rather than a fact (E. Hornung and E. Staehelin, Studien zum Sedfest (Basel, 1974), 64-5). Thus these anticipatory wishes cannot be considered as evidence for a first and an imminent second jubilee. However, the authors present other evidence in the form of the Lateran obelisk inscription for Amenophis II and the Karnak temple of Tuthmosis IV to show that these monarchs did indeed reign thirty or more years. It is hoped that the complete publication of the latter monument will soon resolve that question. The fact that Tuthmosis IV had three queens and a large number of children need not necessarily indicate a long reign as he might have had a large number of concubines while his queens died in quick succession in childbirth. The authors also accept a two-year co-regency between Amenophis III and Akhenaten which is extremely dubious (see Murnane, Ancient Egyptian Coregencies (Chicago, 1977), 231-3).
The authors cast doubt on the use of the biography of the high priest of Amūn, Bakenkhons, to determine the length of the reign of Sethos I, suggesting that he reckoned a year during which he changed office as assignable to both posts and that he may have spent time in the stable of Ramesses I and not Sethos I. In fact, there appears to be no evidence that a stable of $M n-p h t y-R \subset$ survived his death by nine years (Ramesses I reigned less than two full years and Bakenkhons served eleven years in the stable), and the traces in the cartouche in the Bakenkhons inscription place the $m n$-sign last which is standard for the praenomen of Sethos I but not for that of Ramesses I for whom such an arrangement occurs only on two of the eight citations in $K R I$ I. Even if Bakenkhons counted his changeover-years twice, his career as outlined on his statue would still span sixty-five years after the stable and stop prior to the death of Ramesses II whose cartouches date his statue. It could just about be contained in the sixty-six years and ten months of Ramesses II if we assume that Bakenkhons left the stable immediately prior to or on the death of Sethos I, but it cannot be ruled out that part of his subsequent career took place in the reign of Sethos I which would then be slightly lengthened above the authors' figure.

## REVIEWS

The authors analyse in detail the sources for regnal dates in the Nineteenth and Twentieth Dynasties which are set out in a table of attested dated documents and a register of citations. The authors have omitted a number of published ostraca and papyri from this register, but, as these duplicate the year dates given, it would not be profitable to list them here. Doubtless continuing publication of documents from this period will add more examples of known dates but is unlikely to affect the authors' basic conclusions. One should note that O DM 62I of Year 2, probably of Merenptah, has been doubted by Krauss (SAK 4 (1976), 167-8), but defended by Bierbrier (The SSEA fournal 8 (1977), 35-8), while O DM 594 assigned to Year 8 of Siptah may belong to Merenptah (Bierbrier, The SSEA fournal 8 (1978), $138-40$ ). There may also be some minor adjustments such as the possibility that the reign of Amenmesse was not separate but contained within that of Sethos II (Krauss, SAK 4 (1976), 161-99; SAK 5 (1977), 131-74). Their intensive study shows that very few years are unattested and strongly supports the minimum chronology which they advocate. This conclusion is confirmed by the genealogies of the families of this period.

There follow the publication of some minor Demotic wisdom texts by R. J. Williams (pp. 263-7I), the publication of extracts from the diary of Mrs Andrews concerning the discovery of the 'Tomb of Tiyi' by the late John Wilson (pp. 273-9), and a full bibliography of George R. Hughes (pp. 281-2). This volume is indeed a fitting tribute to an outstanding scholar.
M. L. Bierbrier

Fragen an die altägyptische Literatur. Studien zum Gedenken an Eberhard Otto. Edited by Jan Assmann, Erika Feucht, and Reinhard Grieshammer. Pp. vii +529 . Wiesbaden, i977. ISBN 388226002 5. No price given.

The authors and titles presented in this memorial volume are: E. Otto, 'Zur Komposition von Coffin Texts Spell in 30 '; H. Altenmüller, 'Bemerkungen zum Kannibalenspruch'; R. Anthes, 'Zur Echtheit der Lehre des Amenemhet'; J. Assmann, 'Fest des Augenblicks-Verheissung der Dauer. Die Kontroverse der ägyptischen Harfnerlieder'; E. Blumenthal, 'Die Textgattung Expeditionsbericht'; H. Brunner, 'Verkündigung an Tiere'; E. Brunner-Traut, 'Der Sehgott und Hörgott in Literatur und Theologie'; R. A. Caminos, 'The Moscow Literary Letter'; H. G. Fischer, 'Some Iconographic and Literary Comparisons'; R. Giveon, 'Remarks on the Transmission of Egyptian Lists of Asiatic Toponyms'; H. Goedicke, 'The Date of the "Antef Song"'; M. Görg, 'Komparatistische Untersuchungen an ägyptischer und israelitischer Literatur'; R. Gundlach, 'Der Denkstein des Königs Ahmose. Zur Inhaltsstruktur der Königsnovelle’; W. Helck, 'Das Verfassen einer Königsinschrift'; S. Herrmann, 'Die Auseinandersetzung mit dem Schöpfergott'; F. Junge, 'Die Welt der Klagen'; L. Kákosy, 'Osiris als Gott des Kampfes'; P. Kaplony, 'Die Definition der schönen Literatur im alten Ågypten'; A. Korostovtsev, 'A propos du genre "historique" dans la littérature de l'ancienne Egypte'; E. Lüddeckens, 'Zum demotischen Gedicht vom Harfner'; C. D. G. Müller, 'Was lehrt uns die ägyptische Literatur über die Eheethik im Nillande?'; J. Osing, 'Die Patenschaft der Götter für die Königin Hatschepsut'; G. Posener, 'La complainte de l'échanson Bay'; H. Quecke, 'Ich habe nichts hinzugefügt und nichts weggenommen. Zur Wahrheitsbeteuerung koptischer Martyrien'; W. Schenkel, 'Zur Frage der Vorlagen spätzeitlicher "Kopien"'; E. Schott, 'Die Biographie des Ka-emTenenet'; I. Shirun, 'Parallelismus membrorum und Vers'; W. K. Simpson, 'Amor dei: $n \underline{t} r ~ m r r ~ r m \underline{t} m t s$ ws (Sh. Sai. 147-148) and the Embrace'; V. Wessetzky, 'An der Grenze von Literatur und Geschichte'; W. Westendorf, 'Das strandende Schiff. Zur Lesung und Übersetzung von Bauer B i, $58=$ R ior'; J. Zandee, 'Bemerkungen zu einigen Kapiteln aus den Sargtexten'.
A short time before his death in October 1974 Professor Eberhard Otto had been planning a seminar in Heidelberg, and the present volume has appropriately been given the title which he then chose, although the scope of the contributions has been widened. There is a great deal here that is of much interest and value. The opening study, by Otto himself, was found among his papers. In it he reverts to a theme treated by him previously in Der Vorwurf an Gott (Hildesheim, 1951) and in CdE 7 (1962), 249-56. The shift of interest revealed in the third study is typical of an attitude reflected in several other contributions to the volume, and S. Herrmann addresses himself to some aspects of it. In Der Vorvurf an Gott Otto discusses the development of the controversial dialogue in Egyptian literature and he refers to the Lebensmïde, Admonitions, and to the earliest form of the 'Dialogue of Atūm and Osiris'. Here and in the second study he carefully compares
earlier and later forms, but his main interest is in the content and significance of the works discussed, including their sociological implications. In his last paper he examines Spell 1130 of the Coffin Texts and is especially concerned with its origin as a genre. He does not believe that it originally belonged to funerary literature of any kind or to the category of dramatic texts. He recognizes the two self-predications of Atūm as Aretalogies, and suggests that they originated in a rite of religious service to the god and were recited as the speech of the sun-god at the moment when his image appeared. The apologetic and anti-Osirian character of the speeches points to a date, he thinks, between the end of the Sixth Dynasty and the beginning of the Middle Kingdom. Here, then, is an impressive essay in Formgeschichte. Yet in Der Vorwurf an Gott Otto tells us more about the basic significance of the text. It should be added, however, that his last essay presents a full translation of the spell with valuable notes on the text. In this book there are several contributions that emulate the breadth and depth of his scholarly achievement; by and large it is a volume worthy of the scholar commemorated.
J. Gwyn Griffiths

Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings. II. Theban Temples. By the late Bertha Porter and Rosalind L. B. Moss. Assisted by Ethel W. Burney. Second Edition, revised and augmented. Pp. xxxv +586, plans 50. Oxford, 1972. ISBN 019920026 2. Price £20.00. III. Memphis. Part 2. Saqqâra to Dahshûr. Fascicule I. By the same. Second Edition, revised and augmented by Jaromír Málek. Pp. xxxiii +182 (numbered 393-574), plans 18. Griffith Institute, Oxford, 1978. ISBN ○ 900416 13 0 . Price $£_{15} 1500$.

The revised edition of the Topographical Bibliography proceeds with admirable momentum, justifying in each successive volume the careful design of the original conception, wonderfully up-to-date, and yetsuch is the flood of new publications-always a little out-of-date. The tasks of revision, of addition and of correction never come to an end, and the stamina of the editors is as much to be admired as their universality of reference and almost unfailing accuracy. It has often been boasted by Egyptologists (myself among them) that no other ancient discipline possesses a tool of like kind and quality, but I wonder how often the scholar in his study reflects on the prodigious achievement which the whole enterprise represents. Familiarity with the first edition may not breed contempt, but it undoubtedly induces a kind of suspension of judgement. The work is not perfect, and the editors have always been the first to admit it. Every volume contains an exhortation to the user to send corrections and information to the Griffith Institute. It is a true exhortation, a genuine call for co-operation and assistance, a message inspired by the knowledge that even the most careful research is, in the final reckoning, bound to be inadequate. The humility of the compilers of the Topographical Bibliography should stand as a perpetual reminder to scholars that no work of scholarship can fail to be improved by discussion and the willing acceptance of help. Inspired thus, the editors of the Topographical Bibliography, by hard work and a genius for organization, have established a continuing publication which is one of the glories of Egyptology.

For the greater part of its existence as a publication the Topographical Bibliography has been controlled, planned, and prosecuted by Dr Rosalind Moss, greatly assisted by Mrs Ethel Burney. Their capacity to extend the scope of the work by the examination of unpublished archives, by the compilation of useful indexes and informative maps and plans, has distinguished the revised volumes of the second edition, and none more clearly so than volume II, devoted to the Theban Temples. The simple statistics of size give some indication of the progress effected since the first edition appeared. The 1929 volume ran to 203 pages; the second edition has 586 pages. Ten collections of unpublished manuscripts were consulted initially, and no fewer than forty-six (including photographic archives) utilized in the 1972 revision. The richness of these documentary sources combined with the knowledge derived from excavations and specialized publications subsequent to 1929 accounts for much of the new information. But the simple recital of increases in size and enlargement of the documentation do not themselves adequately indicate the particular changes which make this new edition so great an improvement on its predecessor. In the first edition the editors were concerned principally with documenting what was published, or available in unpublished but accessible sources; in the second edition they treat the monuments in their entireties, whether published or unpublished, and

## REVIEWS

with sufficient detail to make the work a far more comprehensive reference-tool than formerly. The treatment of the finds from the Karnak Cachette amply demonstrates this point: three and a half pages in 1929 become thirty-one pages in 1972. The listings of statues and stelae with names and museum numbers represent a remarkable piece of detective work which must have involved many months of sustained effort; for it includes not only those pieces lodged in the Cairo Museum, but also those which have found their way (legitimately as well as improperly) into other collections. So thorough is the survey of Theban Temple monuments that it even includes putative structures like the Chapel of Hatshepsut (pp. 278 f.), the discovery of which was described by Budge in By Nile and Tigris, in, 368 f . Doubt has been cast on the existence of an actual chapel (BSFE 75 (March, 1976), 29 f.), but the sculptures said to have been found in it, and which are now mostly in the British Museum, are usefully recorded under the necessary entry. The positive effort to identify what may have been found in specific sites, and published inadequately, is nowhere better exemplified than in the section dealing with the Deir el-Bahri temple of Mentuhotpe III (pp. 381-400). Naville and Hall published the results of their work on the temple in the three volumes, The XIth Dynasty Temple at Deir el Bahari. The speed with which this publication was made was in itself exemplary, but it unfortunately did not permit the authors to make much of the material they found. Further, from the volumes it is difficult to establish where many of the finds were placed. This task of identification has now, to a very great extent, been accomplished in the revised edition of Volume II of the Topographical Bibliography.

At the end of the Introduction to this revised Volume II, Dr Moss and Mrs Burney write as follows:
After more than forty years the present editors retired at the end of 1970, and have been fortunate in finding an excellent successor in Dr Málek, of Charles University at Prague, who has been with them at Oxford for the last three years, and is preparing the new edition of Volume III, the first part of which is ready to go to press. He will be glad to receive corrections and information sent to him at the Griffith Institute.

The revision of Volume III further exemplifies the fissiparous tendency of the Topographical Bibliography. In planning to produce the new edition in two parts Dr Málek was only following the lead shown by his predecessors in their treatment of Volume I. Part I of the new Volume III appeared in 1974, and dealt with monuments from Abû Rawâsh to Abûṣir. It was reviewed in $\mathcal{F} E A 62$ (1976), 197. Now, the second part is itself split, and will appear in the form of fascicles, three in all, the first (here reviewed) dealing with the Saqqâra pyramid-field and the parts of the Saqqâra Necropolis north of the Step Pyramid and around the Teti Pyramid. The second fascicle will complete the survey of the Saqqâra Necropolis, and the third will include Dahshûr and Memphis. Each fascicle will contain its appropriate plans, which should ultimately be assembled at the end of fascicle three, if the three fascicles of Part 2 are to be bound as a single volume. Several compelling reasons have prompted Dr Málek and the Committee of Management of the Griffith Institute to adopt publication by fascicle, above all the wish to establish a regularity in the appearance of parts of the new edition without the need to wait until a whole volume, or part-volume, might be ready for the press. In practical terms for the users of the Topographical Bibliography it will mean that the fascicles will be more up-to-date on appearance than the former complete volumes were; it will also mean that the expense of purchase will be spread. The remarkable efforts made by the new editor-whose excellence, commended by Dr Moss and Mrs Burney in the words cited above, all Egyptologists will surely endorse-in keeping up with, if not ahead of, the field of publication, is admirably demonstrated here. For the Tomb of Mose, notable for the text which formed the subject of Gardiner's early monograph, The Inscription of Mes, he refers to Gaballa's Memphite Tomb Chapel of Mose, which appeared at the same time as this fascicle. For many of the discoveries made by Emery in North Saqqâra he can cite G. T. Martin's The Tomb of Hetepka, which was still in press when this fascicle was published.

Again, comparison with the first edition clearly shows the extent to which the revision has improved and enlarged entries. The recording of the tomb of Hesy-Rē provides a good example. In 1931 the famous wooden panels were dealt with collectively in a paragraph of eleven lines; in the new edition they are recorded collectively and individually in fifty-seven lines. Understandably, the entries for the great mastaba chapels in the neighbourhood of the Teti Pyramid are very much larger than formerly; they demonstrate the proliferation of publications over the last half-century, and the extent to which the industry of the editor and his predecessors has been stretched. Even more admirable is the order brought to the many discoveries,
often inadequately published, made during the same period. The fine mesh of the Oxford net has comprehensively trapped the smallest inscribed object with an association which links it to this part of the Saqqâra Necropolis. And much more is now admitted as suitable, like the inscribed labels found by Emery in his First Dynasty tombs, and the inscribed vessels recovered from below the Step Pyramid.

The great inconvenience of the fascicle method of publication is that the first two fascicles will be rather difficult to consult without the indexes, which will be included in the third and final fascicle. To this extent the first fascicle will for a time be a less useful tool than earlier revised volumes, or parts of volumes. Scholars who are well acquainted with the topography of Saqqâra, or have the first edition to hand, will be able, with some difficulty, to find their way about; but for many, especially the casual, as opposed to the regular, consulter, the best will not be obtainable from this revision until the whole of Volume III, Part 2, is published. It is known that the second fascicle is well advanced, and we must here express the hope that no undue delay may impede the completion of the whole. The experience both of the editor and of the users of the Topographical Bibliography should then be considered most seriously before subsequent revisions are printed. The peculiar difficulties of the Memphite Necropolis scarcely apply to the regions dealt with in later volumes, and it may be possible to revert to complete volume or part-volume publication.

These strictures on the method of publication should not mark the end of this review. The continuing achievement of the Topographical Bibliography is beyond ordinary praise, and every encouragement should be directed to the editor that he may relax in no way the standards he has inherited, and now maintains with such conspicuous success; and also to the Committee of Management of the Griffith Institute that it may endeavour in every way to foster the project and to support the publication of revisions. There are few undertakings in the world of Egyptology which are of comparable value with this noble work.
T. G. H. James

Der spätägyptische Papyrus BM 10808. By Jürgen Osing. Ägyptologische Abhandlungen, $33.250 \times 176 \mathrm{~mm}$. Pp. 261, I plate. Wiesbaden, 1976. ISBN 344701726 o. Price DM 34.
Many a life-long dream, when realized, has turned sour for the dreamer. It seems only fair that the Egyptologist should share this sobering experience, this ironic comment on the vanity of human wishes; for here we have, before our very eyes, the satisfaction of an old craving for an extensive, unambiguously vocalized Egyptian text, and yet its contribution to the resolution of the grammatical system is, to say the very least, meagre.

Dr Osing has not only edited here the long magical text on the MS P. BM ro808, earlier tentatively interpreted by Crum and Volten, but he is also offering an entirely new decipherment, carried out in painstaking detail with an admirable, often awe-inspiring ingenuity, a grammatical analysis with an esquisse de grammaire, a translation and a detailed, step-by-step commentary. This book is certainly a unique experience for the Egyptian linguist. It is one, however, which leaves him with rather mixed feelings. Before proceeding to several critical comments on Osing's discussion of fundamental points of grammar, followed by a gleaning of reflections on points of detail, let me first state at some length my reservations regarding the methodological soundness of this inferential tour de force:
I. The panchronic approach to questions of morphological identity (especially 'identification by vocalizationpattern') and of grammatical phenomenology raises grave doubts of basic methodological legitimacy. Elementary decisions, such as whether or not our text represents at all an état de langue (Osing accepts it, p. 45, as a 'coherent Egyptian text', i.e. a testo di lingua), which would necessarily entail some definition of language-phases and their interrelation, ${ }^{2}$ are not even mentioned, nor is the premise assuming the legitimacy of resolving pan-Egyptian facts, e.g. the morphological identity of the non-geminating $s d m \cdot f(\mathrm{p}$. 169). In stages (O.E., M.E.) where this distinction is pertinent, it is an obviously non-monolithic category (see below); in trying to resolve or identify forms Osing resorts to dizzying flights across literally millennia (see also pp. 148 f.), his evidence consisting of proper names (from the very earliest to Hellenistic) and Coptic
${ }^{1}$ The crucial question. If it does, the linguist must ascertain that all phonetic processes are synchronous (for which he must have information regarding relative chronology).
${ }^{2}$ Cf. Stricker's unsurpassed Indeeling der Egyptische Taalgeschiedenis (Leiden, 1945).
phenomena from all dialects, not all even internally clear (see inter alia nn. 223, 227, 247, 265 ff ., 291, etc.). The evidence (pp. 174 ff .) includes practically every $s d m \cdot f$ category identifiable at any stage of the language. Does a panchronic morphological entity (e.g. 'sdmi•f') have any significance whatever ? It seems even rasher to make inferences from late spellings or transcriptions about the prehistory of a form (n. 217); for no language with a respectable research tradition would such methodological frivolity be tolerated. (Imagine employing modern French to resolve the Latin system, let alone for the reconstruction of Italic, pre-Italic or even IndoEuropean situations.) ${ }^{3}$ This accusation should not really be laid at Osing's door; the preoccupation of some Egyptological schools with vocalization-issues leads them to speculative panchronic and comparative operations, considering almost exclusively the moyens d'expression, with far too little attention being given to categories. Moreover, it is almost too convenient to assume (as Osing does, and as a working hypothesis!) a mixed, pan-Egyptian system in which anything goes. ${ }^{4}$ It is also over-optimistic to presuppose (as Osing does, implicitly and explicitly, p.45) a complete understanding both of vocalic development and of grammatical system of every stage of Egyptian. Two distinct issues which ought to be carefully kept apart, namely the synchronic description of the linguistic norm in our text, and the diachronic significance of this norm, are inextricably mingled in Osing's argumentation. This is but another facet of its circularity, to be discussed next.
II. Circularity. It is a truism that, in analysing a text such as ours, where the immediately, unambiguously recognizable elements constitute less than 5 per cent of the total (undivided!) linear stretch, a single initial working hypothesis does not suffice; one has to operate in a continuous, circular procedure:

## INTERPRETATION THEORY

or, to use Osing's parlance,
'sinnlich/lautlich/syntaktisch (usw.) zufriedenstellend ${ }^{\text {' }}$ 'Kontext/Lauttheorie/ Grammatik (usw.)'
Now these proceedings are at best slippery. When carried out in an unfamiliar landscape with few objective landmarks to refer to, they must be handled with extreme caution. I regret to say that Osing's use of the closed-system method seems far too easy-going. Typically, his interpretative statements are as a rule introduced by signals of hermeneutical self-confidence ('sicher', 'offensichtlich', 'offenbar', 'kommt nur in Frage', 'kann nur . . . sein' and so on and so forth, expressions of positive assertion, e.g. pp. 54-67, passim); this confidence is not always shared by the observer, and the same is often true of Osing's conviction that he knows what is 'grammatisch korrekt' (e.g. pp. 54, 73, 78, 223, n. 181 (pp. 148 f. (a)), n. 758), given the grammatical eccentricity of the material in question. This inductive circle is particularly striking as regards the lexicon. ${ }^{5}$ Osing operates with the Wörterbuch: ( 1 ) dividing the graphemic sequence according to whether 'a stem $x y z$ exists' (i.e. in the $W b$.) or not (e.g. pp. $58,68, \mathrm{nn} .439,490$, etc.), despite the fact that the $W b$. is incomplete and often inadequate, that the lexemic division and the graphemic-phonemic information are no less constituents of the theory than of the interpretation; (2) picking the $W b$. entries ${ }^{6}$ according to a preconception of contextual suitability. (I counted sixteen postulated lexemes signifying 'fire, heat', 'fiery, hot', eleven for 'pain, disease', seven for 'foe', and so on.) This is, however, a matter of personal discretion, if not taste, ${ }^{7}$ as is also the improbably intricate, often fantastic text postulated by Osing (e.g. pp. 93, 102, 118).

3 For all that need be said in this respect see Polotsky, Orientalia 33 (1964), 267-85.
4 Admittedly the grammatical norms in related texts ('Spätzeit' magical texts) are strange (see below), but, since they are in Egyptian script, their basic (lexemic) intelligibility is established. The question is, in fact, whether in deciphering such a text as ours we can freely pick and choose from the total diachronic inventory (and even posit such items as are wrong in any given stage).

5 For some characteristically circular or arbitrary decisions (including emendations) consider pp. 56 f., 58, 60,66 f., 69,74 f., 77 f., 80,88 , II If. (p. 112 providing a neat illustration of the need for an inverse dictionary), II6 (tpjt) ; nn. 516, 852 .
${ }^{6}$ Occasionally with a startling argumentative gap (e.g. p. 89 pia: 'enthält zweifellos das Substantiv prw, 'Feuer, Glut' ( $r_{3}$ 'great')). Here too Osing is eclectic, choosing indiscriminately from any stage of the language.

7 See (inter alia) pp. 56-9, 68, 70, 74, 97, 103, etc., nn. 379, 393, 409, 421, 524, 759, 949, or Osing's haphazard application of the pan-Egyptian lexical inventory.

Yet in such a predicament one feels entitled to parallels, as being our sole means of breaking free from the procedural circle. Osing's parallels are amazingly few. ${ }^{8}$ (Occasionally he even flies full in the face of directly relevant evidence, p. 125, nn. $507,527,76 \mathrm{r}$.) Consequently, one cannot help viewing the resulting texts as basically Osing's handiwork, on the whole unsubstantiated as a piece of Egyptian evidence.
III. The grammatical norm. As hinted above, Osing's pedantry is much more in evidence in questions of form (here predominantly vocalic patterns) than of categories. If the forms are ambiguous and insufficiently differentiated, one ought to resort to different, structural methods of resolution, notably the syntactical paradigm (as applied, although not in such terms, by Polotsky)-as we certainly would if our text were (as one involuntarily wishes!) in Egyptian characters. Osing's grammatical presentation in the grammatical sketch (for a linguist, the display-window of the work) is anything but systemic. ${ }^{9}$ If one were to represent his (postulated) verbal system in diagrammatic form, it would look somewhat like this:
(ungoverned, non-attributive)
circumstantial

main clause
neg. pos.

NB: (1) Non-existent in the exposition are the present (adverbial predicate pattern); ${ }^{10}$ future; ${ }^{\text {II }}$ the issue of perfect vs. perfective; the assignment of the various forms enumerated. (2) The perfect (state) and preterite (point) may be considered a single category, the lexemes attested for them being in complementary distribution; we might perhaps suggest a past : non-past opposition.

Now this system is doubly remarkable: first, in its very existence in a text claimed to be non-homogenous (see below); secondly, in a subcategory and two constituents hardly conceivable in any known synchronic Egyptian system: a perfect statal sdm•f with intransitive verbs, ${ }^{12}$ unattested also in any of the Egyptian texts immediately called to mind as candidates for linguistic similarity to ours. ${ }^{13}$
IV. The term 'Sprachform' used by Osing ( $\$ 2.9$ ) evades the état de langue issue. His brief isoglossic survey is superficial and not always exact (his conclusion being that our text is really in a L.E.-M.E. 'Mischsprache'). ${ }^{14}$ Obviously, Osing considers BM 10808 to represent an idiom similar to that classified by
${ }^{8}$ Mostly for idiomatic, unspecific and cliché-like combinations of lexemes, e.g. nn. 359, 460, 527, 576, 646, $660,683,822,938,966$. Some contextual parallels : nn. 334, 380, 467, 586.
${ }^{9}$ Indeed, Osing's catalogic 'particles' section (§ 2.7) is an admission of failure in systemic assignment, including as it does lexical particles, the circumstantial converter, various $i w$-morphemes, and negations.
${ }^{10}$ Some fortuitous or oblique references: pp. 27 (n. 188), 58, 69, 87, 94, 103 ( $N+$ stative). Osing never considers patterns, only forms. This is equally true of other predicative patterns, e.g. p. 76.
${ }^{11}$ A mention in § 2.7122 (from L.E. on not a 'pseudoverbal' pattern any more!).
${ }^{12}$ See Cerný-Groll, Late Egyptian Grammar (1975), § 14.2; Frandsen, Late Egyptian Verbal System (1974), § I (esp. p. 1, sub 2.); Satzinger, Neuägypt. Studien (1976), §§ 2.3.2-5.
${ }^{13}$ Notably the Metternich Stela (ed. Sander-Hansen): instances of circumstantial sdm $\cdot \boldsymbol{n} \cdot f / \mathrm{s} d m \cdot f$; emphatic $s d m \cdot n \cdot f$; ' $m k$ sdm $m \cdot f$ '-in a Koinzidenzfall? -line 125); the spells in Klasens, Magical Statue Base (f. 20, i. 18, cases of dramatic Koinzidenzfall). In these texts the stative is the narrative and perfect predication for intransitive verbs. There is no adequate grammatical description for these difficult texts-the only existing one is Junker's rather dated 1906 Grammatik der Denderatexte-in which the preconceptions of 'dialogue', 'narrative', 'modal', 'synchronous', etc. must be applied with caution, owing to our imperfect grasp of their exact purport. It is risky to handle them 'by intuition', as is often done, the fluent, off-hand translation implying as it were an understanding of grammatical usage. Among other comparable texts are P. Bremner-Rhind (ed. Faulkner) and ritual Ptolemaic texts (such as the Dramatic Edfu Texts, ed. Alliot).
${ }^{14}$ Prospective and perfective $s \underline{d} m \cdot f$ forms occur in L.E.; so do possessive suffixes, sdm$\cdot \boldsymbol{n} \cdot f$ forms, syntactic determination; $b w$ and $b n$ in L.E. are but graphemes, probably representing nasal phonemes (cf. Coptic); for the negative imperative $m$ - in L.E. cf. $m$ - $d i$ as well as $m-i r$; and so on. In fact, it is hard to find any exclusively M.E. phenomena in our text, unattested in later phases.

Erman as 'späte Schriftsprache' (Agypt. Chrestom. xiv f.: see Osing's p. 149). Given the lack of grammatical description for these texts (Osing's own admission, n. 309), ${ }^{15}$ a decipherment based on their norm or usage, as also on the very concept of 'Mischsprache', would appear rather hazardous, this 'Sprachform' being too suspiciously convenient as a working hypothesis.

So, in summing up this methodological impression of Osing's work, one might compare it to joining a jigsaw puzzle in which most of the pieces are of some soft, pliant material and the picture very vague. It is virtually as impossible not to succeed at the first attempt, as it is to check the finished picture against any illustration.

Grammatical observations: (a) The non-emphatic $s d m \cdot f\left(\mathrm{pp} \cdot 3^{2-6}, 164-78\right)$. Without entering here into a discussion of this controversial issue, let me point out that by the joint application of the (scanty) morphological differentiation data and identification by the 'syntactical paradigm' one arrives at a formal proof that this is not a single category, but includes (at least in M.E.) three: ${ }^{16}$ the perfect $s d m \cdot f$ (Osing's B 2 ?), the prospective ( $\mathrm{A}_{1}, 2,6$ ), and circumstantial $s d m \cdot f\left(\mathrm{~A}_{3}\right)$. I cannot see my way to identifying Osing's 'A 4' (not a 'that'-form, so probably not prospective) and ' BI ' (perfect with intransitive verbs); 'A 5' and ' $\mathrm{B} 3,5$ ' must be conjunctional ('that'-) forms. 'B 5 ' is extra-temporal rather than 'preterital'. Be that as it may, Osing's 'Tempuslage' classification is simply not sophisticated enough, even if one could confidently postulate temporal categories in this obscure context. (Note that many of the 'uses' are but of a single attestation.)
(b) Emphatic $s d m \cdot f(\mathrm{pp} .3 \mathbf{1}, \mathbf{1 6 1} \mathbf{1} 4)$. One finds it rather remarkable that the only syntactical function of this form not represented here is that of the logical subject ('glose') before an adverbial predicate, whereas this function is the sole one attested for the form from L.E. through Coptic. In fact, at no stage of Egyptian is this function excluded.
(c) $s d m \cdot n \cdot f(\mathrm{pp} .30 \mathrm{f} ., \mathrm{I} 6 \mathrm{I}) .{ }^{17}$ Both a syntactical (main clause, circumstantial, 'that'-form) and lexemic (transitive, intransitive) classification, essential for resolving this category, are conspicuous by their absence. The relative (including emphatic) and 'predicative' (presumably circumstantial) $s d m \cdot n \cdot f$ are by no means identical, formally or functionally ( $\$ 2.63, \mathrm{n} .216$ ).
(d) The syntax of a postulated retrodependent ${ }^{18}$ iw $\cdot f$ hr sdm (§ 2.821, pp. 87, 116, nn. 308, 354, 910). Osing assumes a construction nty $i w \cdot f \mathrm{hr} \operatorname{sdm}$ (1. 19) '+conj.' (1.40) which is ungrammatical for any stage of Egyptian: (1) the relative adjective nty cannot, to the best of my knowledge, precede $i w \cdot f \mathrm{hr} \mathrm{sdm}$, a noninitial, clause conjugation form; ${ }^{19}$ (2) the conjunctive is, as a rule, not categorized by the retrodependent $i w \cdot f h r s d m$. In L.E. this may be the only form with this exclusion property. ${ }^{20}$ Osing himself must be aware

15 One would look in vain for a description or definition of 'Spätägyptisch' among the Handbuch d. Orientalistik sketches. A short bibliographical review by S. Sauneron occurs in Textes et langages de l'Egypte pharaonique, $151-6$; see also Junker's introduction to the Dendera-Grammar, and Stricker, op. cit. 31 ff.
${ }^{16}$ See esp. Polotsky, Egyptian Tenses (1965) and the recent (1976) 'Les transpositions du verbe en égyptien classique' (Israel Oriental Studies, 6, 1-50). See Satzinger, GM 20 (1976), 39-43.
${ }_{17}$ Polotsky, 'Les transpositions du verbe', §§ 2.6, 3.2, 3.4 .
${ }^{18}$ Osing's term is 'preterital', but it is the (preceding) context of this form which establishes its reference (a comparable misnomer would be to call its dialogue counterpart, the conjunctive, 'future', 'imperative' and so on).
${ }^{19}$ See Cerný-Groll, op. cit. §§ 37.2, 38-9 (with ref., pp. 428, 434); Frandsen, op. cit. 236 f. Osing's references (n. 308 ) are irrelevant, being to examples of $n t y+f u t u r e ~(n t y+i w \cdot f r s d m, n t y-i r-N s d m$ ), or $n t y-i w=$ as the Demotic writing of the relative present. Incidentally, Osing's classification of this form as 'pseudoverbal' ( $\$ 2.712$ ) is totally wrong. The predicate of this clause conjugation form is the infinitive (negated by $t m-$ ) alone, not the durative-adverbial paradigm (see the reference above, also Satzinger, op. cit. §§ 2.7, 2.7.2). The same mistake appears in Hartmann, The Kadesh Inscriptions of Ramesses II (1967), 84.
${ }^{20}$ Cerný-Groll, op. cit. §42; Frandsen, op. cit. §73; Satzinger, op. cit. 248, and § 1.4.1.1.2. There are several controversial cases where the conjunctive may be taken to continue iw $f \mathrm{f} \mathrm{hr} \mathrm{s} \underline{d m}$ in a future (apodotic?) context, but this could well be the circumstantial present predicated by an emphatic $i w \cdot f ~ h r ~ s d m$ (Polotsky, Egyptian Tenses, 9 n. 19). The extremely rare instances of the conjunctive in narrative context (Hintze, Untersuchungen, 6 I f.; Erman, $N G \S 582$ suggests a functional distinction) could hardly serve as a basis for postulation in a case like BM 10808.
of this basic incompatibility, since he describes this conjunctive as 'continuing a relative' (p. i16). Now the postulated relative itself is here unwarranted (see (1)). Moreover, the authorities Osing quotes in support of this analysis are irrelevant. ${ }^{21}$ In view of these difficulties I would query the validity of Osing's interpretation of these passages, perhaps even their context.
(e) Determination, determinative syntagms (pp. 2I ff.). Without presuming to tackle this problem here, complex in Egyptian as it is in Coptic, I would refer to several of Osing's statements and terms:
(I) 'genitive': the removal of this ethnocentrism, even in a contrastive presentation, from Egyptian linguistic terminology is long overdue, especially in Coptic, where it obscures the identity of the determinative and attributive groups. The subspecies of these syntagms are definable in terms of relative determination, not the other way round, as implied in Osing's presentation.
(2) Osing does not distinguish formal anaphoric from combinatory (semantic) determination (p. 2r). It is difficult to see how both in $N^{\boldsymbol{\theta}} n-N^{d e t}$ and $N^{e} n-N^{e}$ the first member is determined (p. 23).
(3) The binary category def. article : zero (p. 22) is alien to Egyptian. (Even in literary L.E. there exists an intermediate degree, pace Osing.) In such a system it is difficult to evaluate the case of an undetermined rectum ( $(2.252$ ) which, in a triple system, marks the syntagm as attributive.
(4) 'adjective'. The documentation for its variability ( $\$ \$ 2.312,2.3^{2}$ ) is suspiciously poor (a marked form only for r 3 , also variable in Coptic). The questions of whether there exists such a category at all in Coptic (§ 2.31 'wie im Koptischen') and how it is to be defined are far from settled.
(5) p. 42 bottom ( $\mathrm{ad} 1.5^{2}$ ). Osing formulates a rule ('regulär') concerning the adnominal sentence after an undetermined nucleus on the basis of one (postulated!) example. On the other hand, a relative form cannot 'determine' ( n . 347) the antecedent and simultaneously be conditioned by its determination.
p. 14 (§2.11). A suffix-pronoun as actor after the infinitive is strange. This may be connected with the neutral diathesis (transitive/intransitive) of the infinitive, which ought to be discussed in the framework of a valence theory; see also p. 30, 4 (2nd pers. fem.). Is $e$ the syllabic glottal stop or $e \emptyset$ ? To judge by $e^{\prime}$, it is the latter.
p. 25. aho =f nim: very unCoptic (Sah. ØN nim ntaf or ØN nim epōf pe).
p. 27 (§2.509). $h n s$ : it recalls the use of $-h i$ - (vs. -mn-) in Coptic (here coordinating $\emptyset N \ldots$. nim or substantivized relative forms).
p. 28 (§2.61). The stative: sadly wanting in syntactical details: no information concerning the patterns, nor a formal basis for the circumstantial function (see pp. 28, 30 f., $65,80,100,110, \mathrm{nn} .498,664$ ).
p. 29 (§ 2.62). The 'Gebrauchsweisen' of the infinitive would be better presented as syntactic distribution facts, distinguishing between conjugational and adverbial status; 'freies Gebrauch' (p. 30 ) is inadequate.
pp. 30, 124. tm may well be a 'negative verb' in our text ( $\mathrm{tm} \cdot f \mathrm{fdm}$, its prospective form, p. 35, 'A 2'); still, 'negative verb' and 'negative complement' are blatant diachronisms used of a text of the second century ad-unless well justified. In Coptic (n. 988) tm is not an infinitive (cf. eršantmpröme sōtm). Incidentally, I see no reason why $\mathrm{hr} \mathrm{tm} \operatorname{sdm}$ could not be a negated infinitive as adverbial adjunct (not 'virtualer Umstandssatz'; it is neither virtual nor a sentence).
pp. 38 ff . A very neat distribution of the relative contructions: see now Polotsky, 'Les transpositions du verbe', §2.2.
p. 41. I would not treat under one heading (§2.71) the different morphemes written as $i w-$ ( $e-$ ). They are clearly distinct, by syntagmatic and paradigmatic criteria.

[^84]
## REVIEWS

(§ 2.73). ${ }^{22}$ It is not clear what purpose the historical information here is meant to serve. Does it imply a synchronic distinction? As regards $n n$ (§2.731), 'existential' is preferable to 'general' negation.
p. 42. izwfr sdm, a fully privileged tense in L.E., is a mode in Sah. Coptic. It is rarely converted, never a Second Tense. The situation is different in Bohairic.
pp. $64 \mathrm{f} .(+\mathrm{n} .494), 66$. A striking illustration of what may be the chief difficulty in a textual analysis of this kind: the absence of morphological (lexemic) or phonological boundary signals. (In Egyptian script we would have the determinatives.) 'Sinnvolle Isolierung' is, therefore, necessarily circular.
p. 76. mhau: typically, Osing considers this a metathesis of an unattested ' $h m a u$ ' simply because 'heat' seems suitable to a postulated context. (What about Dem. $m h(D G$ 173), variant of $m \underline{h}$, 'burn'?)
p. 80. mhau eipn ei-could well be a Cleft Sentence with the vedette preceding the circumstantial glose

p. $88 . s p e t=s p d \cdot t i$, 'indem du scharf/stechend bist', a typically arbitrary decision. Similarly p. 93, tai.
p. 98. ouēn (stative, 'open', 'loose') could be here appropriate, as the opposite of rēr, 'bound'.
p. 99. $r$ irt . . . irt: even for this seemingly self-evident construction parallels would have been in order.
p. iro. No parallel to the sense '(wenn) ich ihn bewirkt habe Ruhe zu geben' for (iw) ir.i sw hr htp (Osing's n. 885).
p. II9. Osing treats $n ; m h k z w$ as a self-evident predication, on which any comment is superfluous. This adverbial pattern of 'status' predication is common enough in kindred texts. Still, some parallels and remarks (also regarding the substantival $n$ ) would not be amiss. The 'resultative' stative, with no preceding subject, ought to be introduced and indeed substantiated. Quoting the Medical Texts Grammar is not really sufficient support for its postulation in our text.
p. 120 (n. 943). ouan- $=w_{j} j \cdot n$-: I suggest an emphatic sdm $\cdot n \cdot f$, predicating 'for ever and ever'.
p. 125. On what grounds does Osing complete 'ako'? Why not the patient? (In similar texts it is a god who does the reciting.)
p. 125. It would be preferable grammatically to take ohi as a stative ('standing', in the recitation instructions), predicate of a circumstantial present (numerous examples in similar texts), rather than $\underset{r}{ } r+$ infinitive which, for this verb, would be irregular in the durative pattern.
n. ir8. $h \bar{o} \bar{o}=f$ : in Coptic this augens means 'for (his) part' rather than '(him)self'.
n. 301 . Add Copt. ete-, ent- (with $n t$ - a sub-form), $e$-(šaf-, mef-, nef-), $n$-(šaf-, Fay.).
n. 573. Instead of assuming a dittography in mid-line, we might take the second vowel as the preceding one 'echoed' in a laryngal reflex, in presuffixal close juncture (cf. $k a a=$, $h o o=$ etc.).
n. 680. er- is neither a relative pronoun nor per se preterital; it is historically a pre-object participle of iri $\boldsymbol{i}$ i.i.ir-; synchronically, it may be considered the adnominal transformation-form of $a$ - in afsötm.
n. 8ir. If one were to give up the rule (based on postulated forms!) regulating the complementary distribution of $n$ - and $m$ - ( $\$ 2.503, \mathrm{nn}$. 180-1), $m$ h $h i(n h o t i)$ could be construed as an adverbial predicate ( $m$ - + verb of motion).

In retrospect, I am fully conscious of Osing's great merit in having tackled this formidable task at all and in having offered a comprehensive interpretation. The foregoing criticism notwithstanding, I frankly confess my own inability to propose an alternative.
A. Shisha-Halevy

The Demotic Ostraca in the National Museum of Antiquities at Leiden. Edited, with introduction, transliterations, English translations, notes, indexes, facsimiles, and selected plates, by M. A. A. Nur el-Din.

[^85]Collections of the National Museum of Antiquities at Leiden, r. $315 \times 235 \mathrm{~mm} . \mathrm{Pp}$. xii +680 (incl. 100 pp . of facsimiles) +32 pls. +2 pp. errata. Leiden, E. J. Brill, 1974. Current price G. 199. ISBN 9004 O4018 8.

It is a great pleasure to welcome the first book of our Egyptian colleague M. 'Abd al-Halīm Nūr al-Dīn. This massive volume is virtually identical with the editor's Leiden University thesis of which numerous copies are in circulation. It is announced as the first of a series, although no news is yet forthcoming of further volumes. To date, a review by H.-J. Thissen has appeared in Enchoria 6 (1976), 139-41.

As is clearly explained in the editor's Introduction, the volume deals with all the ostraca housed in the Rijksmuseum van Oudheden te Leiden (which also possesses many ostraca in other scripts). There are great advantages in this comprehensive method of publication. The reader knows that he has all the Leiden material at his disposal, and that any possibilities of joining fragments, or of the existence of small 'archives', or of links between the subject matter of texts will have been investigated systematically. However, the interest and value of the Leiden ostraca vary widely, and a number of uninformative pieces have received a rather lavish presentation.

Of the 590 ostraca edited two belonged to G. Anastasy, and were published in the second part of Aegyptische monumenten|Monumens égyptiens. They are without provenance. The remainder were acquired for the museum over a period of years by J. H. Insinger, when resident at Luxor. The editor cautiously reviews the various unsatisfactory records of their provenance. Most of them seem from their contents and from other indications to have come from Thebes. In some cases there can be no doubt of this, but in many others certainty is impossible. The suggested ascription of no. I2I to Ombos (less confidently expressed in the notes to the text than in the Introduction) does not seem very secure. The material is spread over a fair range of dates, Ptolemaic and early Roman, although few texts are actually dated. There is no certain example of a pre-Ptolemaic ostracon, and no hint that any might be later than the second century aD (indeed, only one text is securely dated in the second century). The Introduction ends with a useful bibliography of publications of Demotic ostraca, arranged chronologically, designed to bring the list provided by G. Mattha, Demotic ostraka (1945), 70-1, up to 1972. From that date the literature can perhaps most easily be gleaned from the annual lists in Enchoria, 'Demotistische Literaturübersicht'.

The editions of the texts are grouped together according to their contents. This arrangement is entirely satisfactory, and the somewhat odd division of the book into 'chapters' is of little moment. Brief introductions are provided to the various groups, incorporating the essential bibliography. The careful collection of evidence on $q t m$ and $i s w$ (pp. 25-9), with accurate copies of the writings of these words, is particularly useful. On this topic, as on several others, the editor does not pretend to have found a solution, but is very properly satisfied with presenting the evidence and the bibliography. Sometimes, however, he appears over-cautious: in the case of the temple-oaths (nos. 278-322), some of which had already been published by U. Kaplony-Heckel in Die demotischen Tempeleide (1963), and also the two 'liturgical contracts' (nos. 323-4), his comments on the subject matter are not always helpful.

The range of the Leiden ostraca is remarkable: taxes, leases, memoranda and accounts, legal texts, curses, astrological and medical pieces, letters, school exercises (perhaps also texts such as no. 215 should be read in this way), and lists of names. Much of this is of value for administrative and legal history, and, in view of the limitations of our knowledge of Demotic literature, all the sub-literary pieces repay close attention. A point that emerges clearly is the extent to which careful work even on fragmentary and unpromising material can contribute to Egyptian lexicography. Text no. 199 with its list of metal articles is particularly interesting. The editor provides many useful philological notes, and his regard to matters of orthography has proved especially rewarding. An example is his discussion of the word(s) $\check{s}(m) y m$ 't etc. (pp. 52-3). J. Cerny's Coptic Etymological Dictionary of 1976 has an emphatic statement (pp. 242-3) on part of this problem.

The editor generally gives transliterations and English translations. The latter are probably worthwhile even with the most fragmentary material as they afford those trying to use the book without any knowledge of Egyptian at least some access to the material. The indexes are generously laid out, with numerous hand copies. The procedures of a Leiden doctorate in effect require the candidate's thesis to be submitted for examination in the form of a printed book. In consequence it would perhaps be out of place to blame the
editor for not having remodelled his work before publication, and it might be ungenerous to complain that the book would have benefited from a thorough revision of the English, not for the sake of elegance, but to ensure that the meaning was at all points clear and unambiguous. The facsimiles are excellent throughout. The decision not to print any facsimiles of ostraca that could not be copied by tracing (p. 4) is unfortunate. Hand copies are essentially a demonstration of what the editor thinks he can see, and too much can be made of the mechanical accuracy with which they are produced. III ostraca are illustrated in the plates, and they have been well chosen. Ostraca are notoriously difficult to photograph, but it must be said that by the highest standards the quality of the photographs varies from the rather good to the fairly poor. We should, however, be very grateful that they have been included. The Errata correct a few printing errors, and contain two improved readings.

The editor is to be congratulated warmly on the industry and scholarly achievement displayed in this volume, and his future work is to be awaited with the greatest interest.

W. J. Tait

Grammaire fonctionelle et progressive de l'égyptien démotique. By Pierre du Bourguet. $255 \times 173 \mathrm{~mm}$. Pp. xii + ro4. Editions Peeters, Louvain/Belgique, 1976. ISBN 280170027 4. Price $£ 13.30$.
The need for a new Demotic grammar is stressed by Père du Bourguet in the very first sentence of his introduction to this textbook and in most respects this compact volume is to be welcomed. The work is divided into twelve lessons or progressive stages and ends with five appendices of which the third and fourth are particularly useful-and unexpected in so compact a book-for they include the numerous graphic variations entailed by the attachment of suffixes to common prepositions and list comprehensively the forms of the principal Demotic signs with their variant writings. The fifth appendix comprises graded exercises to be used in conjunction with the lessons and, most important for any beginner, the answers that go with them.

The idea of dividing from its neighbour each word written in the Demotic script certainly gives greater clarity to the examples, but nothing at all is gained from writing the transliterations so as to be read, like the Demotic, from right to left. A further complication arises from hyphenated transliterations which are to be read from left to right against the direction of the rest of the words. This unnecessary difficulty is excellently illustrated by a simple three-word transliteration in section 31, d. It would surely have been far better to have left the transliterations running from left to right; the separation of the word-groups in the Demotic script would have made quite obvious which group of signs accompanied which transliterations.
It is extremely unfortunate that the book suffers from a great number of misprints, especially involving the transliteration of the four 'h's. At random I have found $\mathrm{kr} \cdot \mathrm{s}$ for $\mathrm{hr} \cdot \mathrm{s}$ (section 87 a ), $h n \cdot s$ for $\underline{h} n \cdot s$ (section 90a), Hr for Hr (section II2, 1, first example), $h t$ for $h t$ (section I12, 2, first example), shmt for shmt (section
 literation as $m$-mst of what is clearly a writing of $m$-sss (section 79a), $r$ rh instead of $r \underline{h r}$ (section 147, p. 58), $n-i-m t r-n$ instead of $n-p-m t r-n$ and the writing of $m-k t i$ in Demotic backwards (both section 154). I found
 and scarcely useful as examples for students. The omission of the diacritical mark in sft (section 97, r) and $m$-šs (section 161) and its incorrect inclusion with $t$ (section 167) are additional inaccuracies. To confuse further, the transliteration of the word 'kill' is given as $\underline{h} t b$ in section $98,2 \mathrm{~b}$, and $\underline{h} t b$ in section $129,3 \mathrm{~d}$; the word generally read as mtr.w is transliterated as m3r.w in section 100. Amongst other errors the Demotic writing of $t 3 i . w$ has been omitted in section 22's example from Setne 3,26 and a $w$ has been added to the 3 rd person singular dependent pronoun (section 28, 1); in the answer to Exercise II, question 2, there is an extra psy at the beginning of the sentence and in VIII, question 2, the writing of the $r$ in Demotic before $w n-n 3 w-i w \cdot f$ has been omitted.

I found Père du Bourguet's division of the ist person singular pronominal form of the First Present into $t$-wi rather than $t w-i$ extremely idiosyncratic: it can scarcely be a misprint on this occasion, occurring as it does in at least three separate instances (sections 28, no. 2, 31, no. 2g and 33, example 1 ). All these slips
must vitiate the excellent intentions of the author which, in a book with so limited an aim, are virtually attained. For the time being, therefore, students of Demotic must be grateful to Père du Bourguet for his enterprising work, but might a plea here be made for a new comprehensive Demotic grammar in English? Carol A. R. Andrews

Papyri aus Hermupolis. Agyptische Urkunden aus den Staatlichen Museen Berlin, Griechische Urkunden, XII. Band. Edited by Herwig Maehler. Pp. xxviii +166, 12 pls. Berlin, Staatliche Museen Preussischer Kulturbesitz, 1974. No price given.

This volume of $B G U$ papyri is, like the last, the work of Dr Herwig Maehler, who has produced it singlehanded and with commendable speed. It consists of seventy-nine documentary texts (2132-210), almost all of them from the Byzantine Period. Many are from the fifth century and, taken together with those since published by Rea in $C P R$ v, they go a long way towards counterbalancing the well-known shortage of papyri of this date, a shortage which was no doubt always entirely fortuitous. The format follows that of $B G U$ xi and the editing is again of a high standard, all texts being provided with translations, good explanatory discussions, and bibliographies.

A welcome innovation is a brief section of the introduction (xxvi-xxviii) in which Maehler draws attention to the general importance of the volume, notably for social and economic history, and to the most important individual texts. These include 2168, apparently a straightforward tax-receipt from AD 497/8, but argued by Maehler with considerable ingenuity to be a key text for the development of small properties into latifundia with autopragia; and 2173, of exceptional juristic importance as the first documentary example of an editio actionis ( AD 498 ). I would add 2200 ( AD 56 I ), in which a man appears, because of poverty, to be pledging or 'leasing out' his daughter(?), exactly five years after Justinian had forbidden the practice.

Another section of the introduction discusses the family of Flavius Taurinus I, his son Johannes, and his grandson Taurinus II, to whom many of the papyri in this volume relate. Taurinus I rose from a simple soldier to piapxos, to centenarius, and finally primicerius. His son similarly advanced from soldier to scriniarius and then to primicerius, while his grandson, after reaching the rank of scriniarius, left the army to become a presbyter of the church at Hermopolis. This steady rise in fortunes brought with it increasing economic wealth, as is well documented in the 'archive'.

For a volume which consists mainly of routine contracts (notably leases) and receipts there is a remarkably large number of points of special interest, only a few of which can be indicated here. Especially important information in the consular dating is to be found in 2151 (ad 476), where Leo II appears as Néov イéovtos, and 2187 (AD 520), dated by Flavius Rusticius alone; cf. also 214I (AD 446; Nomus as magister officiorum),
 $\xi \eta \rho o \sigma \tau\left[\right.$, and the editor has interesting comments on the meanings of $\gamma \rho \alpha^{\prime} \pi \tau \rho a$ (2134), $\mu \tau \sigma \theta \circ \phi o \rho i a=$ rent
 for a brother and sister in 2156.4 , and for three sisters in 2164.7 (though this is hardly 'ein Versehen des Schreibers', cf. LSff s.v. 3). The notes on indictions are sometimes misleading: 2139.15 does not prove that the indiction began in Epeiph, but that it began after ist Payni; it is an oversimplification to describe Hunt's note to P.Oxy. II 30.3 as incorrect (2156.2n.); here and in P.Berl.Zill. 7, referred to in 2204.4n., the problem is much more complicated and needs a more detailed discussion than is possible here.

2134, a report of comarchs, enables us to make better sense of P.Oxy. 895, even though it need not be such a close parallel as Maehler believes; in line $6 \dot{a} v a \gamma \kappa a i \omega[s \dot{\epsilon} \pi \iota \delta i \delta o \mu \epsilon \nu$ would remove the need to suppose a spelling mistake. Since 2136 relates to a toparchy it is presumably earlier than their disappearance (AD 307); the numbers need re-examining, since they add up to 104, whereas the total is given as 102; in
 type of lease illustrated in 2148 fits best the fourth century, to which both of the editor's palaeographical parallels belong, as does the use of $\pi v \rho o o^{\prime}$ (cf. H. Cadell, Akten Marburg, 64); the date of aD 466 suggested must therefore be considered somewhat doubtful. 2151 contains the earliest use ( AD 476 ) of the formula with

cf. 2158.5 , ôv $\nu \omega \nu$ may be kept, translating 'the number of arouras, whatever that may be'. A Jewish $\pi \rho a \gamma \mu a \tau \epsilon v \tau \eta$ 's is mentioned in 2161. In 2162.4 (Plate) the scribe has inadvertently repeated $\Theta_{\eta \beta \alpha i] \kappa o \hat{v}}$ $\lambda_{\imath} \mu i$ itov before $\pi(a \rho a ́)$. Whatever the small circle in 2165.13-14 stands for, it cannot represent zero (contrast 2136.17).
Maehler has an important note on $\mu \in \rho i^{\prime}$ followed by a personal name in 2169 intr.; his suggestion that the people had been exactores whose name was then still used for many years to designate the $\mu \in \rho \rho^{\prime}$ (not $\mu \epsilon \rho \iota \sigma \mu \rho_{s}$ ) is attractive. The proportion of gold to carats in 2170 is normally $1: 6$, and this proportion is to be found also in 1. II if we alter $\delta \delta$ to $\kappa \delta$. At 2173.9 (Plate) est may be possible after rov́roıs before
 $\chi \omega \rho]$ is (cf. 2201.8) would fill the lacuna. Maehler thinks the Church controls payment for vvктoof $\rho a ́ \tau \eta \gamma o$ or in 2190 , but we should perhaps await further evidence before interpreting the text in this way. Nevertheless, this text, with 2189 and 2191-3, does, as he suggests on p. xxvii, reflect the importance of the Church as an
 evidence for Numidae Iustiniani at Hermopolis. At 2198.12 (Plate) the reading appears to be $\beta o i \omega \nu$, which might make sense if a word like $\kappa \tau \eta^{\prime} \nu \omega \nu$ followed in the lacuna. The general pattern of 2202 (especially 1. 16)

J. David Thomas

Greek Papyri from Roman Egypt. Agyptische Urkunden aus den Staatlichen Museen Berlin, Griechische Urkunden, XIII. Band. Edited by W. M. Brashear. Pp. xvi +239 , 14 pls. Berlin, Staatliche Museen Preussischer Kulturbesitz, 1976. No price given.

The thirteenth volume of this illustrious series contains 156 documentary texts of which the great majority are from the Roman Period, the rest from the early Byzantine. The whole is a miscellany of official and private documents illustrating features of Roman Egypt with which we are by now familiar: the organization of religion (nos. 2215-19), the census (2220-8), the dike-corvée (2255-62), and receipts for tax and toll (2283-325). Orders, contracts, lists, accounts, and letters of diverse origin supply a wealth of detailed information on the economic and social activities of the populace. Anyone who has edited a papyrus text is unlikely to underestimate the amount of skill and effort which has gone into this volume. If the remarks which follow seem unduly selective and critical this is to be attributed to the nature of a review; they should not obscure the fact that the editor has placed papyrologists and historians of Roman Egypt in his debt.

First some general observations. It is somewhat disquieting to realize, on examination of the plates, that the editor's transcriptions do not always match what the eye can detect. Undoubtedly there will be some cases where this is merely due to the quality of the photograph and the editor should have the benefit of any doubt. But a token anxiety might be aroused by 2278.3 (to take a trivial example) where one would read from the plate (IX) [A] $\pi \sigma \lambda \lambda \omega \nu i \omega \tau[\hat{\omega} \kappa \alpha i$ (the papyrus seeming clearly to be broken after tau) compared to the editor's $A \pi \sigma \lambda \lambda \omega v i \varphi \tau \hat{\varphi} \kappa \alpha i$. This is germane to my second point. The editor has supplied us with a very large number of readings of personal names which are addenda onomasticis. As is the way with such, some will prove to be ghost-names; a few can be improved from the plates (see below), others resist, but in the majority of cases the reader can only guess or concur. The salutary remarks of Jean Bingen (ZPE $\mathbf{I}$ (1967), 189-95) need to be borne in mind. Finally a point about provenance, of which Brashear has a curious view. In the preface he mentions papyri which were written in Alexandria and found in the Fayyûm. There are clearly some documents for which the provenance is deduced from the content of the text. 221 I (see below) is a case in point; the heading at the right gives 'Alexandria?'; the content of the text clearly originated in the prefect's office but this papyrus could have been written or found anywhere. This is not a mere quibble; Alexandrian papyri are very rare and one needs to be absolutely clear about the criteria employed in describing provenance, particularly in regard to the find-spot and the nature of the text (original or copy); this caution can also be applied to, inter alia, 2240, 2244, and 2250.

Several of the papyri invite attention for individual points of interest or doubt (in some cases allayed by information too recent to have been available to the editor). 22II is a copy of a letter addressed probably to
the strategoi of several nomes (including the Phthemphuthite) announcing a visit by the prefect Larcius Memor (attested elsewhere only once, P.Ryl. 77). Apart from its provenance (see above), the nature of the text needs clarification. It is clearly a fragment of a register or compilation of copies of correspondence (cf. e.g. P.Oxy. 2228,3191), perhaps to a strategos; the original of which this is a copy was not written by the prefect (as 1.6 makes clear), but perhaps by an epistrategos or other official of procuratorial rank. The entry which precedes might conceivably relate to provision of annona for this visit, so we might perhaps supply
 tains seventeen individually written but identical salutations to an unnamed prefect; its form is precisely paralleled by P.Oxy. 3171 -concluding subscriptions to an honorary or congratulatory decree? 224 I is a fragmentary petition but important because, in conjunction with 2275 , it confirms the existence of a strategos of the Themistes and Polemon division of the Arsinoite whose name is Onomastos. 2253-4 are notable as texts of a new type, receipts issued by public hunters to the presbyteroi of Soknopaiou Nesos acknowledging assistance received in the hunt of wild asses. 2279, a fragmentary and obscure piece, is described by the editor as a revenue return and tentatively dated to AD 226. It is evidently an account of some kind and contains entries for $\epsilon i \delta \eta$ and $\sigma \tau \epsilon \phi a \nu \iota \kappa o ́ v$ but the $\bar{\epsilon} \pi i \mu \epsilon \lambda \eta \tau \alpha i$ concerned do not have the title of $\beta o v \lambda \epsilon v \tau \eta \prime s$, as is stated in the introduction. Some light is cast by a comparison with $B G U 362$.VI. I6 ff. where there is a similar reference to the god Suchus (2279.3) and to $\sigma \tau \epsilon \phi a \nu \iota \kappa \alpha$ paid into the temple of Jupiter Capitolinus at Arsinoe; it seems likely that 2279 is part of a similar document and that the $\epsilon \boldsymbol{\epsilon} \pi \kappa \epsilon \in \lambda_{\epsilon \iota a}$ is concerned with temple revenues. 2293 (reign of Antoninus) is important because, along with 2275, it
 the editor is puzzled by the anomalous titulature of Caracalla and I wonder whether the first line does not in fact contain an abbreviated version of Aùтокрáтороs Kaíaдрos; in 1.7 one might expect some reference to the measure, e.g. $\mu \epsilon \boldsymbol{\epsilon} \tau \rho \omega \delta \eta(\mu o \sigma i \omega) \xi v \sigma \tau \hat{\omega}$. In 2330 (contract of loan or sale, ad 89) the reading of the
 $4[0] \mu \tau \tau \not \subset \varphi o \hat{v} \sum_{\epsilon} \beta a \sigma \tau o v \hat{\kappa} \kappa \lambda$. , which makes the length of the lines approximately equal. 2352 is a private letter (third century) addressed to a certain Saturnila from a person whose name appears in the genitive as X $\boldsymbol{\omega} \mu \mu a \tau i o v$ whence the editor deduces a female Chromation; but the masculine name Chromatios will do (cf. Acta Sanctorum Jan. $2^{3}, 629$ ff.) and removes the need for the alteration of $\mathfrak{a} \xi \iota \omega \sigma \alpha a s$ to $\dot{\alpha} \xi \iota \omega \sigma \alpha \sigma\langle a\rangle$ in 1.4. 2358, a private account of the early fourth century, puzzles the editor because the amount of money paid for relish and bread is much higher than that paid for radish-oil and eggs but this is odd only if one assumes that the amounts are unit prices; the document is simply an account of expenditures on different quantities of different commodities. 2336 contains a very curious titulature apparently relating to Macrinus; it has not only Aurelius instead of Opellius but also two honorifics which Macrinus is not known to have taken (Britannicus and Germanicus). The plate seems to confirm the readings but it would be interesting to know whether the papyrus is really blank, as it seems to be, after the first word of l. 4.

Finally some suggestions on minor points of detail. 2213.2: read ' $A \rho \sigma$ (ıvoíov) [, since the remains of a high abbreviation stroke can be seen at the broken edge. 2215.2: read $\lambda$ ó $\boldsymbol{\epsilon} \iota \mu$ аи ( $\lambda o ́ \gamma \iota \mu a \iota$ or $\lambda o \gamma^{\prime} \mu a$ ); the following word $\lambda[\iota] \mu \nu a i o v(?)$ is hard to explain though it is attested as a proper name. 2217.5: read perhaps ] $\sigma \epsilon \kappa \eta$ s oivo.[, e.g. oivoroias; in 1. 16 both figures are surely to be taken as weights, i.e. the two

 specific suggestion for a reading in 1 . 17 but we should expect a declaration by the informant such as $\Delta \iota \delta a \bar{s}$
 similarly named person appearing in Syene at about the same period should not be overstated since the Roman nomina are very common. 2235-8: on these declarations of camels one may consult S. L. Wallace, Taxation in Egypt from Augustus to Diocletian, 88-9. 2238.8: read ${ }^{\text {' } E \rho i \epsilon \epsilon \omega \text {. 2244: on provenance, see above; }}$ in 1.3 it is hard to believe that $\Gamma \lambda \epsilon \beta \rho i \omega \nu \iota$ or $\Gamma \lambda a \beta \rho i \omega \nu \iota$ was not written; the suggestion in 15 note that Titus Pactumeius might be a son of the prefect T. Pactumeius Magnus is curious-more likely perhaps a Roman citizen styling himself after the prefect in office at the time of the grant of citizenship. 2251 . I note: the remarks on nomination to liturgy are very cursory and the 'Severan reform' does not date to ad 202, but ad 199-200. 2263.8 and 2264.II.11: in both cases the name is presumably Onnophris. 2278.6: the name Tathares is unattested and the plate suggests some doubt about the middle letters; Foraboschi,

## REVIEWS

Onomasticon, has other names which would fit (though not of guaranteed authenticity), e.g. Taaunes, Taases. 2301. II note: on the term $\mathfrak{\epsilon} \pi \alpha / \tau o \nu$ in sitologos receipts see now Schumann, $C d E 50$ (1975), 278-84, arguing that it applies to the measure and means 'scant', but reservations are justified. 2304.2: perhaps ] . . v $\nu \mathrm{s}$ Mє́ $\mu \phi \epsilon \omega$ s.

A random check of converted dates revealed that the following emendations need to be made. 2285, Feb. 5, 194 (the heading 194-5 is misleading). 2287, Jan. 3, 162. 2306, Jan. 6, 52. 2310, Nov. 2, 145. 2313, Sept. 22, 183 or 215.2322 , Oct. 16, 180 or 212.
alan K. Bowman

## Other books recieved

1. Papyrus Grecs de la Bibliothèque Nationale et Universitaire de Strasbourg. Publiés par Jacques Schwartz. Nos. $60 I$ à 640 . Publications de la Bibliothèque Nationale et Universitaire de Strasbourg V, i-2. $250 \times 160 \mathrm{~mm}$. Pp. 60 . Strasbourg, 1976. Nos. 64 I à 660 . Publications de la Bibliothèque Nationale et Universitaire de Strasbourg, V, $3.250 \times 160 \mathrm{~mm}$. Pp. 91. Strasbourg, 1977. ISSN 0585 3990. No price given.
2. La Prospection archéologique de la vallée du Nil, au sud de la cataracte de Dal(Nubie Soudanaise), Fasc. 5 . Le district de Ginis Est et Ouest. Par André Vila, avec la collaboration de Francis Geus, Yves Labre $\dagger$, Jacques Reinold, Yussef Muktar et Sid Ahmed Abd el Magid Kamir, Alain Fouquet, René Filliol et François Rodriguez. $270 \times 210 \mathrm{~mm}$. Pp. 166, figs. 83. Paris, Centre Nationale de la Recherche Scientifique, 1977. ISBN 222202029 8. Fasc 6. Le district d'Attab, Est et Ouest. Par André Vila, avec la collaboration de Yves Labre $\dagger$ et Sid Ahmed Abd el Magid Kamir, Alain Fouquet René Filliol et François Rodriguez. $270 \times 210 \mathrm{~mm}$. Pp. 98, figs. 52. Paris, Centre Nationale de la Recherche Scientifique, 1977. ISBN 222202030 I. No price given.
3. Religion und Geschichte des alten Agypten. Gesammelte Aufsätze. By Siegrried Morenz. Herausgegeben von Elke Blumenthal und Siegfried Herrmann unter Mitarbeit von Angela Onasch. $245 \times 175 \mathrm{~mm}$. Pp. 652, figs. 29. Weimar, Hermann Böhlaus Nachfolger, 1975. No price given.
4. Repertoire Onomastique Amarnien. By Robert Hari. Aegyptiaca Helvetica 4. $295 \times 210 \mathrm{~mm}$. Pp. xxii+tables 335. Ägyptologisches Seminar der Universität Basel et Centre d'études orientales de l'Université de Genève, 1976. No price given.
5. Roman Pottery in the Royal Ontario Museum. A Catalogue. By John W. Hayes. $310 \times 230 \mathrm{~mm}$. Pp. $\mathrm{x}+\mathrm{125}$, pls. 40, figs. 13. Toronto, Royal Ontario Museum, 1976. ISBN o 88854 172 4. Price $\$ 13.50$.
6. Le Secret des Bâtisseurs des Grandes Pyramides Khéops. Par Georges Goyon. $255 \times 185 \mathrm{~mm}$. Pp. 320, pls. 16, figs. 103. Paris, Editions Pygmalion, 1977. No price given.
7. Staatliche Museen zu Berlin. Archiv für Papyrusforschung und verwandte Gebiete. Herausgegeben von Reinhard Koerner, Wolfgang Müller, Kurt Treu, and Fritz Uebel $\dagger$. xxiv/xxv. Band. $250 \times 175 \mathrm{~mm}$. Pp. ii + 334, figs. 21. Leipzig, BSB B.G. Teubner Verlagsgesellschaft, 1976. No price given.
8. Studien zu den "Geographischen Inschriften" (ro.-I4. o.äg. Gau). Von Horst Beinlich. Tübinger Ågyptologische Beiträge, 2. $240 \times 165 \mathrm{~mm}$. Pp. iv +r 79 , pls. 38 figs. 4. Bonn, Rudolf Habelt Verlag GmbH, 1976. ISBN 37749 1381 i. Price DM 48.
9. Untersuchungen zu Wesen und Kult der Göttin Sachmet. Von Sigrid-Eike Hoenes. Habelts Dissertationsdrucke, Reihe Ägyptologie, Heft I. $205 \times 145 \mathrm{~mm}$. Pp. xvii +274 . Bonn, Rudolf Habelt Verlag GmbH, 1976. ISBN 3774912289 . No price given.

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[^0]:    ${ }^{1}$ See $\mathscr{F} E A 64$ (1978), 24-6.

[^1]:    ${ }^{2}$ A T-shaped canal-ending at Karnak in the late Eighteenth Dynasty is thought to be the subject of a wellknown painting in the tomb of Neferhotep at Thebes: see Davies, The Tomb of Nefer-hotep at Thebes, 32-3, pl. xlii. No steps are shown. For part of the quay at Karnak as revealed by excavation, with lateral steps, see Karnak v (1970-2), 7, fig. 3. The classic example for the New Kingdom is Medinet Habu, although the Tshape canal-ending is a restoration: see Hölscher: The Mortuary Temple of Ramses III, II, II-13, with further artistic representations cited on p. 12 n. 32; Hölscher, General Plans and Views, pls. 7, 8. A good example, though dating probably from the Roman Period, of a stone quay with flanking steps is that excavated at Me damûd: see Bisson de la Roque, Rapport sur les fouilles de Médamoud (1931 et 1932), 9-13, pl. i.
    ${ }^{3}$ Winlock, Excavations at Deir el Bahri 19II-193I, 90, pl. 44; cf. Badawy, A History of Egyptian Architecture: the Empire, 495-9.
    ${ }^{4}$ e.g. Davies, Two Ramesside Tombs at Thebes, 17, pls. i, x (tomb of Userhat); Lhote, Les Chefs-d'œuure de la peinture égyptienne, pl . 14 I (tomb of Neferrenpet).
    ${ }^{5}$ Nagel, La Céramique du Nouvel Empire à Deir el Médineh, 1, 61-2, 212-3, figs. 44, 186: tombs 1153-5. Tuthmosis III's donated vessels are illustrated in fig. 187.
    ${ }^{6}$ e.g. Davies, op. cit. 35 nn. 1, 2; Bruyère, Rapport sur les fouilles de Deir el Médineh (1928), pl. i, adjacent to tombs Pro97, P291.

[^2]:    ${ }^{1}$ J.-Ph. Lauer and J. Leclant, Le Temple haut du complexe funéraire du roi Teti, IFAO (Le Caire, 1972), pl. xxxv.

[^3]:    ${ }^{2}$ Lauer and Leclant, op. cit. 7 -

[^4]:    ${ }^{3}$ J. E. Quibell, Excavations at Saqqara (1905-6) (Cairo, 1907), pls. i, xxvi-xxix.

[^5]:    ${ }^{4}$ Quibell, op. cit. 29 and pl. xxxi, 5.

[^6]:    ${ }^{1}$ fyEA 60 (1974), 19-21, figs. 2, 5, 10; pls. iv, v.
    ${ }^{2}$ ЭEA 63 (1977), 26-7.

[^7]:    ${ }^{3} \mathcal{F} E A 60$ (1974), 21.

[^8]:    ${ }^{4} \mathcal{F} E A 59$ (1973), 15, fig. 4a, pl. xvi, 2.
    ${ }^{5} \mathcal{F} E A 63$ (1977), 23, fig. 1.

[^9]:    ${ }^{6}$ H. S. Smith, 'Dates of the Obsequies of the Mothers of Apis', RdE 24 (1972), 180.
    7 Alan B. Lloyd in G. T. Martin, The Tomb of Hetepka (Oxford, 1979), 102 ff.

[^10]:    ${ }^{8}$ G. Daressy, Le Couvent de Nahieh (Cairo, 1917), 274-6.

[^11]:    ${ }^{3}$ Since this table was compiled, the author discovered from the Museum's register that it is in complete accord with that made by Professor Josef Szombathy when the skulls entered the Naturhistorisches Museum.

[^12]:    4 See Elliot Smith, 'The causation of the symmetrical thinning on the parietal bone', F. Anat. Phys. 41, 232-3.
    ${ }^{5}$ See J. L. Angel, 'Porotic hyperostosis or osteoporosis symmetrica', in D. Brothwell and A. T. Sandison (eds.), Diseases in Antiquity (Illinois, 1967), 378-89.
    ${ }^{6}$ See A. Lucas, rev. J. R. Harris, Ancient Egyptian Materials and Industries, 4th edn. (London, 1962), 30-2.

[^13]:    ${ }^{7}$ See S. Hillson, Chronic Anaemias in the Nile Valley (in press). For a general discussion on disease in earlier times see Brothwell and Sandison, op. cit., and for Egypt in particular see O. V. Nielsen, Human Remains (Copenhagen, 1970).

[^14]:    ${ }^{8}$ See P. A. Toller, 'Osteoarthrosis of the mandibular condyle', Brit. Dent. F. 134, 6 (1973), 223-31, and H. Ogus, 'Rheumatoid arthritis of the temporomandibular joint', Brit. F. Oral Surg. 12 (1975), 275-84.

[^15]:    ${ }^{1}$ For the first two campaigns see $\mathcal{F} E A$ 64, (1978), 35-43.

[^16]:    ${ }^{1}$ Cf. J. Assmann, $G M 25$ (1977), 7 ff., and especially 14 f. The triads can also be classed in the category of 'Konstellationen' of gods.
    ${ }^{2}$ J. Gwyn Griffiths, $Z A ̈ S$ 100 (1973), 28 ff.; J. Leclant in F. Dunand-P. Lévêque, Les Syncrétismes dans les religions de l'Antiquité(Leiden, 1975), offprint ıo ff.; H. te Velde, $\mathcal{F} E A 57$ (1971), 80 ff .; S. Morenz, Ägyptische Religion (Stuttgart, 1960), 150 ff., 270 ff. : cf. J. Gwyn Griffiths, Orientalia 28 (1959), 34 ff.
    ${ }^{3}$ See the very important article of Griffiths in $Z \ddot{A} S$ 100 (1973), 28 ff.
    4 Morenz, op. cit. 152.
    ${ }^{5}$ iv, 21 (J. Zandee, $O M R O 28$ (1947), pl. iv): cf. Griffiths, $Z \ddot{A} S$ 100, 30.
    ${ }^{6}$ Bonnet, $R A ̈ R G 643$.

[^17]:    7 N. de G. Davies, The Temple of Hibis in El Khärgeh Oasis, iII (New York, 1953), pl. 5, register, v.
    ${ }^{8}$ M. Calverley-A. H. Gardiner, The Temple of King Sethos I at Abydos, in (London, 1935), pl. 23. 'Ibid.

[^18]:    ${ }^{14}$ Cf., e.g., $L \ddot{A}$ I, 1102 (Altenmüller); Bonnet, $R \ddot{A} R G 150$. On the djed in the Old Kingdom see H. Goedicke, feA 4 (1955), 3 Iff .
    ${ }^{15} C T$ if, 286 c.
    ${ }^{16}$ Urk. v, Abschnitt 21, p. 49.
    ${ }^{17} \mathrm{rv}, 4$.
    ${ }^{18}$ L. V. Žabkar, A Study of the Ba Concept in Ancient Egyptian Texts (Chicago, 1968), 160 et passim.
    ${ }^{19}$ Davies, op. cit. pl. 3 reg. vi.
    ${ }^{20}$ e.g. in P. Berlin 3048: ix, in a; ix, io b; xi, 7 (W. Wolf, ZÄS 64 (1929), 35, 37, 40).
    ${ }^{21}$ Fr. Junge, MDAIK 29 (1973), 195 ff .: cf. $L \ddot{A}$ i, 1068 f. (Altenmüller).
    ${ }^{22}$ S. Morenz, Die Heraufkunft des transzendenten Gottes . . . SSAW 109 (2), (1964), 20 f.; S. Schott, ZäS 74 (1938), 94.

[^19]:    ${ }^{23} C T$ 1, 336 c. 337 c: cf J. Zandee, $Z A ̈ S$ 97 (1971), 16ı.
    ${ }_{24} C T$ I, 338 a ; II $39 \mathrm{c}-\mathrm{d}$. In some texts Shu was exhaled from the nostrils of the Creator ( $C T \mathrm{I}, 338 \mathrm{~b}, 356 \mathrm{a}$ ).
    ${ }_{25}$ H. Junker, Die Götterlehre von Memphis (APAW, 1939), no. 23, p. 55.
    ${ }^{26} C T$ I 354 c .

[^20]:    ${ }^{1}$ E. Naville, The Temple of Deir el Bahari, v (London, 1906), 1 and pl. cxix; vi, 25.
    ${ }^{2}$ L. Dabrowski, 'The main hypostyle hall of the temple of Hatshepsut at Deir el-Bahri', $\mathcal{f} E A 56$ (1970), roi-4, pls. xlviii-lii.
    ${ }^{3}$ The preliminary results of my researches were mentioned in Z. Wysocki, 'Deir el-Bahari. Chronique des fouilles', Etudes et Travaux 7 (1973), 257; cf. also id., 'Badania, studia i wnioski oraz realizacja prac reintegracyjnych zabudowy górnego tarasu świątyni królowej Hatszepsut', Biuletyn Informacyjny PKZ 27(1975), 33-62.

[^21]:    ${ }^{4}$ In Naville, op. cit. vi, 28: 'We must bear in mind that the masonry was not prepared as we do it in these days, each stone carefully cut to shape before it is set in position. The Egyptian method was to set up in its intended position a roughly-shaped cube of stone, its smallest dimension being the extreme size of the column or a little more. When built, the column appeared as a rectangular pier with a very rugged surface. In the present case this rectangular pier was cut by the masons, as it stood, into an octogon, and from that figure into a polygon of sixteen sides. These sides are not hollowed after the manner of the fluting of a Doric column, but each face is flat.'

[^22]:    5 A. Niwiński, 'Les colonnes proto-doriques avec inscriptions du Temple de Hatshepsout à Deir el-Bahari', Etudes et Travaux 9 (1976), 104-7, figs. 14 and 19.
    ${ }^{6}$ Dabrowski, op. cit. 103-4, pl. li.

[^23]:    7 J. Karkowski, 'Dekoracja kolumn Górnego Dziedzińca', Biuletyn Informacyjny PKZ 27 (1975), 21-32; cf. the French summary in Wysocki-Karkowski, 'Deir el-Bahari 1971-1972. Chronique des fouilles', Etudes et Travaux 8 (1975), 347. Recently J. Lipińska (The Temple of Tuthmosis III, Architecture, Deir el-Bahari II (Warsaw, 1977), 35 with nn. 53-4) proposed three rows of columns on the north and south sides of the Hatshepsut court on the basis of the similar arrangement of columns in the side colonnades of Tuthmosis III's hypostyle at Deir el-Bahri. This is also the conclusion in Karkowski, 'The arrangement of the architraves in Hatshepsut's temple at Deir el-Bahari', Etudes et Travaux $\mathrm{I}_{3}$ (in press-kindly communicated by the author), based on the re-examination of the available evidence from Hatshepsut's temple.

[^24]:    ${ }^{8}$ Cf. n. 5 above. $\quad 9$ Cf. n. 7 above.

[^25]:    ${ }^{1}$ Accession number W 1150 (BM).
    ${ }^{2}$ N. de Garis Davies, The Tomb of Nakht at Thebes (1927), frontispiece.
    ${ }^{3}$ The City of Akhenaten, il (1933, reprinted 1972), 114 ff .
    ${ }^{4}$ Op. cit. pl. 29, 5.
    ${ }^{5}$ Op. cit. 94 .

[^26]:    ${ }^{6}$ Op. cit. 18-19.
    7 Op. cit. 114 .
    ${ }^{8}$ Ibid.
    ${ }^{9}$ The Scepter of Egypt, II (1959), 250.
    ${ }^{10}$ I. E. S. Edwards, Treasures of Tutankhamun (The Metropolitan Museum of Art, 1976), Cat. No. 22, pl. I5.
    ${ }^{11}$ C. Aldred, fewels of the Pharaohs (1971), 216 and pl. 88; average length 5 cm .

[^27]:    12 Op. cit. $216^{\prime}$. . . jewels of this character were given by high officials to the kings they served on such important events as coronations and jubilees.' Cf. p. 20: 'on such great occasions valuable gifts were offered to the Royal Family by their courtiers, either from their bounty or by virtue of the duties of their office.'

    13 'Die Musik der Sumerer, Babylonier und Assyrer', in Orientalische Musik. Handbuch der Orientalistik. 1. Der Nahe und Mittlere Osten, Ergänzungsband iv (1970), 194-7.

    14 The men with lute who are shown marching in the procession of the Opet Festival at Luxor illustrate how the lute could be used for marching music: see Walther Wolf, Das schöne Fest von Opet (1931), pl. 2, 2.
    ${ }^{15}$ H. Kayser, Die ägyptischen Altertümer im Roemer-Pelizaeus Museum in Hildesheim (1973), 66 and fig. 54, no. inoo. The two tassels hanging on a string from the long neck of the lute are identical with the tassels of the lute on our ring-bezel. Kayser does not seem to have recognized this, because he describes it thus: 'Hinter dem Gott ein eigenartiges Symbol.'

[^28]:    ${ }^{16}$ Der Tanz im Alten Ägypten (1938), 65.
    ${ }^{17}$ See H. Hickmann, Instruments de musique (CCG, 1949), no. 69, 42 I.
    18 'The lute of the singer Har-Mose', $B M M A$ (Jan. 1944), 159-63.
    19 (1975), 70.
    20 Stauder, op. cit. 196.
    ${ }_{21}$ Manniche, op. cit. 80.
    ${ }_{22}$ Op. cit. 35 n .7 . IDi6 is referred to, not quite correctly as a 'Skarabäus'.
    ${ }^{23}$ W. H. Peck, Drawings from Ancient Egypt (1978), pl. 15. The bowl is in the Rijksmuseum van Ondheden, Leiden.

[^29]:    24 Op. cit. 33.
    ${ }^{25}$ Catalogue for the exhibition 'Sumer, Assur, Babylon: 7000 Jahre Kunst und Kultur zwischen Euphrat und 'Tigris' (23. Juni-24. September 1978) in Hildesheim, Römer und Pelizäus Museum. Cat. No. 109 I.M. 32 062 (Iraq Museum) : 'Scheibe mit Darstellung von Tänzerinnen, Musikanten und Affen. Ca.2000-1600 v.Chr. Terracotta. Durchmesser 15.5 cm . Dicke 4.8 cm .'
    ${ }^{26}$ E. W. Forte, Ancient Near Eastern Seals (New York, 1976), 57-9: 'The angular but delicate modelling of the nude goddess on this Syrian seal is similar to that on other Syrian seals dated to the second half of the 19th century B.c.'
    ${ }_{27} B M M A$ Eg. Exp. 1933/4, 36 and fig. 31. See also E. Brunner-Traut, op. cit. 35, fig. 12.
    ${ }_{28}$ Theban tomb no. 95. The song is quoted in $B M M A$ 1944, 163.
    ${ }^{29}$ Op. cit. 73-4.

[^30]:    ${ }^{30}$ Accession number 60.197 .9 ; h. 23.5 cm ; br. 53.3 cm . Limestone.
    ${ }^{31}$ Amarna Reliefs from Hermopolis in American Collections (1965), 87-8, no. 52.
    ${ }^{32}$ Akhenaten and Nefertiti (1973), 194, no. 126: 'Fishing in the Marshes.'
    ${ }^{33}$ (1969), 405, P.C.31, and pl. 175.

[^31]:    ${ }^{35}$ Op. cit. 194.
    ${ }^{36}$ In his letter of 12 July 1977, Aldred wrote: 'I think I can now detect what may be the foremost of the two tassels that usually hang near the distal end. What I took to be the spud at the end of the shaft of the spear is probably the beginning of the sound box, and the fingers of the right hand, in so far as one can judge from the little that remains, appear to be curved as though plucking a string.' He concludes : 'I now am of the opinion that you are right and the woman is playing the Langhalslaute.'

[^32]:    ${ }^{37}$ Berlin 1877 see A. Herman and W. Schwan, Ägyptische Kleinkunst (no date), 61.
    ${ }^{38}$ H. Fechheimer, Kleinplastik der Ägypter (1921), pl. 141 left; U.C. 14365.
    ${ }^{39}$ Fechheimer, op. cit. pl. 140 right. $\quad{ }^{40}$ Petrie, Illahun, Kahun and Gurob (1891), pl. 20, 3.
    ${ }^{41}$ Cyril Aldred, Akhenaten (1969), 156, pl. x (colour) and pl. 35.
    42 'Iconographic and literary comparisons' in Fragen an die altägyptische Literatur (1977), 161-5; p. 161:
    'Boats manned with women (Westcar v, I ff.)'; figs. 10 and 1 I : pictures from Ukhhotpe's tomb chapel at Meir.
    ${ }^{43}$ N. de G. Davies, The Rock Tombs of El Amarna, II (1905), 34-6 and pl. 32.

[^33]:    ${ }^{44}$ Op. cit. $176=$ vi H 6 d .
    45 Akhenaten and Nefertiti (1973), 194.
    46 'Amarna Crowns and Wigs', fEA 59 (1973), 56.
    47 H. W. Müller and J. Settgast, Nofretete, Echnaton (1976), no. 19.
    ${ }^{48}$ R. W. Smith and D. B. Redford, The Akhenaten Temple Project, I (1976), pl. 29: panels from the side of $G m(t)$ - $p$-itn gateway, 2 : 'The queen and one daughter making offering.' New stone number 2805-12.
    ${ }^{49}$ Aldred, Akhenaten and Nefertiti (1973), 126 no. 48 with bibliography.
    ${ }^{50}$ Aldred, Akhenaten (1969), pl. 10.
    ${ }^{51}$ Ibid. pl. 80.
    ${ }_{52}$ Ibid. pls. 97, 98 and pl. xiv (colour). $\quad{ }^{53}$ Ibid. pl. 67.
    ${ }^{54}$ Pace Aldred's claim in Akhenaten and Nefertiti, no. 27, that the royal pair are often represented, as on this slab, with the same Nubian wig.

[^34]:    ${ }^{55}$ e.g. on some representations of the little golden shrine: see I. E. S. Edwards, Treasures of Tutankhamun 1972), no. 25.
    ${ }_{56}$ Aldred, Akhenaten, pl. ix (colour).
    ${ }^{57}$ Op. cit. ${ }^{59}$, Kap.V H ia.
    ${ }^{58}$ Op. cit, 87 no. $52 . \quad{ }^{59}$ Akhenaten and Nefertiti, 194 no. 126.
    ${ }^{60}$ H. Hickmann, 'Altägyptische Musik' in Handbuch der Orientalistik. i. Ergänzungsband iv, Orientalische Musik (1970), 149 and 151. Tomb of Mereruka, Saqqâra.
    ${ }^{61}$ Amply exemplified in the representations on the little golden shrine of Tutcankhamūn: see n. 55 above.

[^35]:    62 Op. cit. 20.
    ${ }_{63}$ Aldred, Akhenaten and Nefertiti, 61.
    64 The City of Akhenaten, I , 109 ff . ' Maru-Aten, or the precinct of the southern pool.' Cf. pl. 29.
    ${ }^{65}$ Op. cit. Kapit. viI B, 'Reliefs aus bestimmten Gebäuden in Amarna' 8a: 'Der südliche Palast MaruAton', pp. 356-7; d:Gebäude II.

    66 The City of Akhenaten, I, 119.
    ${ }^{67}$ Op. cit. 359, B8K.
    68 The City of Akhenaten, i, 150 : Inscriptions. In Maru-Aten II $96 \%$ of the names are of the later form; the bulk of the building was constructed after year 9, the year when the change in the doctrinal name of the Aten had been officially promulgated, while the building Maru-Aten viri was commenced before the change of name.

[^36]:    1 'Les Temples d'Abou Simbel et la famille de Ramsès II', BIE 38, 2 (1965: Session 1956-1957), 107-30. His arguments have generally been accepted, e.g. E. Edel, 'Zwei Originalbriefe der Königsmutter Tūja in Keilschrift', $S A K$ I (1974), 105-46 and 295, especially 127-31, where an incorrect analysis of the genealogy of Ramesses II's family is presented, and L. Habachi, Features of the Deification of Ramesses II (Glückstadt, 1969), $7^{-1 I}$. An earlier study, now outdated, on the family of Ramesses II is presented by J. Janssen, 'La reine Nefertari et la succession de Ramsès II par Merenptah', CdE 38 (1963), 30-6. For a more complete and up-todate study see F. Gomàa, Chaemwese, Sohn Ramses' II. und Hoherpriester von Memphis (Wiesbaden, 1973), 2-I I with K. Kitchen's review of that work in $\mathscr{f} E A$ 61 (1975), 270-2.

    2 The problem with the previous inaccurate assumptions dealing with the Apis and Mnevis Bull burials in the first three decades of Ramesses II's reign is presented by Kitchen in his review of Gomàa, cited in the last note; Gomàa, Chaemwese, 16-18; and the texts now published in $K R I$ II, 363-77. The Mnevis Bull burial was in Year 26; the two Apis Bull burials took place in Years 16 and 30 . Prince $R c-m s-s(w)$ lived well beyond the second decade of Ramesses II's rule. Older studies: J. Yoyotte, 'Trois généraux de la XIXe dynastie', Orientalia 23 (1954), 227-8 and Edel, $S A K$ I (1974), 131-3. The objects of the vizier $P_{3}-s r$ will be found in $K R I$ II, 366, $8-367,3$ with those of the other individuals in $K R I$ II, $366-77$.
    ${ }^{3}$ BIE 38, 2 (1965), 127.
    4 Ibid. 126.

[^37]:    5 'Quelques remarques sur le grand temple d'Abou-Simbel', La Revue du Caire 47 (1961), 303-33 and Abou Simbel et l'épopée de sa découverte (Brussels, 1965).

    6 See Chapter VIII in particular. Note also the detailed review of the work by Kitchen, $C d E 41$ (1966), 305-8.
    7 Op. cit. above, n. i.
    8 For Edel's arguments, based for the most part on Christophe, see op. cit. above, n. I. Habachi's position will be found in his work, op. cit. above, n. I.
    ${ }^{9}$ See already the cryptic remarks of B. Trigger, Nubia under the Pharaohs (Boulder, 1976), 124. He states that the work on the temple of Abu Simbel may have been begun by Sethos I, a position with which I cannot agree.
    ${ }^{10}$ Features of the Deification of Ramesses II, 2-10.

[^38]:    ${ }^{11}$ Ibid. 9-10.

[^39]:    12 W. Wreszinski, Atlas zur altaegyptischen Kulturgeschichte, iI (Leipzig, 1935), pl. 184 and J. Černý and S. Donadoni, Abou-Simbel, porte d'entrée et grande salle F (Centre de Documentation, Cairo, n.d.), F i-6.
    ${ }^{13}$ Features of the Deification, 6-7.
    ${ }^{14}$ On the sons of Ramesses II and these in particular, see Gomàa, Chaemwese, 2-II and 3 in particular with his foldout at the end of the work. Additional studies on Ramesses' sons: Christophe, 'La carrière de prince Merenptah et les trois régences ramessides', $A S A E$ (1951), 335-72; Yoyotte and Lopez, review of Schulman, Military Rank, Title and Organization in the Egyptian New Kingdom, BiOr 26 (1969), 14-15; H. De Meulenaere, 'Le Vizir Ramesside Hori', Annuaire de l'Institut de philologie et d'histoire orientales et slaves 20 (1968-72), 191-6; Kitchen's review of Gomàa, op. cit. above, n. 1. Note also Janssen's work, op. cit. above, n. I.
    ${ }^{15}$ Wreszinski, Atlas, II, pls. 179-80 with F 60 and F 57 in the Centre de Documentation copies.
    ${ }^{16}$ Ibid. pls. $169-78 . \quad{ }^{17}$ Ibid. pl. 183 with F 53 in the Centre de Documentation copy.

[^40]:    ${ }^{18}$ See my comments 'A Canaanite ritual found in Egyptian military reliefs', Fournal of the Society for the Study of Egyptian Antiquities 8 (1978), 47-60.
    ${ }^{19}$ Wreszinski, Atlas, II, 182 and F 54 in the Centre de Documentation copy.
    ${ }^{20}$ On the term $t s t$ and its parallel $\underline{d} w$ 'mountain' see the important comments of Kitchen, 'Some new light on the Asiatic wars of Ramesses II', $\mathcal{F E A} 50$ (1964), 47-70 and 66 (with notes) in particular. On the Shasu and their relations with Egypt in the New Kingdom see R. Giveon, Les Bédouins Shosou des documents égyptiens (Leiden, 1971), 39-13I (reigns of Sethos I and Ramesses II) with important reviews (and corrections) by W. Ward, 'The Shasu "Bedouin"', $\mathfrak{F E S H O} 15$ (1972), 35-60 and M. Weippert, 'Semitische Nomaden des zweiten Jahrtausends', Biblica 55 (1974), 265-80.
    ${ }^{21}$ Wreszinski, Atlas, II, 181 and F 55 in the Centre de Documentation copy.

[^41]:    ${ }^{22}$ As, for example, J. Sliwa, 'Some remarks concerning victorious ruler representations in Egyptian art', Forschungen und Berichte 16 (1974), 97-117.
    ${ }^{23}$ Wreszinski, Atlas, i1, 183.
    ${ }^{24}$ See p. 93 below and $K R I$ II, 144-5.
    ${ }^{25}$ Gomàa, Chaemwese, 5 and n. 5 and p. 93 below.

[^42]:    ${ }^{26}$ The major publication of the temple is by H. Ricke, G. Hughes, and E. Wente, The Beit el-Wali Temple of Ramesses II (Oriental Institute Nubian Expedition Memoirs 1) (Chicago, 1967). For general comments on this temple and its importance for the regency between Sethos I and Ramesses II see the introductory comments of the authors, pp. 1-5 (Ricke) and pp. 6-9 (Hughes); K. Seele, The Coregency of Ramesses II with Seti I and the Date of the Great Hypostyle Hall at Karnak (SAOC 19) (Chicago, 1940); W. Murnane, 'The earlier reign of Ramesses II and his coregency with Sety I', $\mathcal{F} N E S 35$ (1976), 161-2 with his Ancient Egyptian Coregencies (SAOC 40) (Chicago, 1977), 57-9 and 67-70 in particular; Gomàa, Chaemwese, 9-10, 15, and 91, for a brief discussion of this matter. I have dealt with the Beit el-Wali temple and its importance for the army career of the young Ramesses (before he was regent with his father) in 'Traces of the early career of Ramesses II', in $\mathcal{F} N E S 38$ (1979), 271-86, where a more detailed discussion of the war-reliefs at Beit el-Wali (and Sethos' war-monument at Karnak) will be found.
    ${ }^{27}$ The latest discussions of this war will be found in J. Vercoutter, 'Une campagne militaire de Séti I en Haute Nubie', RdE 24 (1972), 201-8; Kitchen, 'Historical observations on Ramesside Nubia', in Ägypten und Kusch, eds. E. Endesfelder et al. (Berlin, 1977), 214-19; and K.-H. Priese, 'I $r m$ und ${ }^{\prime}{ }^{3} m$, das Land Irame, ein Beitrag zur Topographie des Sudan im Altertum', AOF I (1974), 7-41, especially 23-4.
    ${ }^{28}$ On the name of the first son of Ramesses II and its change see Gomàa, Chaemwese, 2-6 and 9-1I and Kitchen's review of his work in $\mathcal{F} E A$ 6I (1975), 271.
    ${ }^{29}$ For the vizier 'Imn-m-ipt see, in general, G. Reisner, 'The viceroys of Ethiopia', $7 E A 6$ (1920), 38-9; Seele, The Coregency of Ramesses II with Seti I, 36; Habachi, 'The graffiti and work of the viceroys of Kush', Kush 5 (1957), 26-7; H. Gauthier, 'Les "Fils Royaux de Kouch"', $R T$ 39 (1921), 201-7; my comments in fNES 38 (1979), 271-86. References to his activity will be found in $K R I$ 1, 99, 14-15; 101, 2; 302, 7, 10, 14-15; 303, 4-5, 8; 304, 9-10; 11, 199, 2 and 4 (tentative: cf. 1, 303, 6).

[^43]:    ${ }^{30}$ See Wreszinski, Atlas, II, pls. 42 and 43 with $K R I$ I, 9, 12-13 and the most recent comments of Murnane, Ancient Egyptian Coregencies, 60-1 and K. Weeks, Oriental Institute, News and Notes 27 (May 1976), 3.
    ${ }^{31}$ Wreszinski, Atlas, II, pls. $5^{-2}$ and $K R I$ 1, 21, 14-15 with Murnane, Ancient Egyptian Coregencies, 60-1 (Ramesses over a troop-commander Mehy).
    ${ }^{32}$ Missing reliefs: Weeks, Oriental Institute, News and Notes 15 (March 1975), 1-3 and 27 (May 1976), 3 with Murnane, Ancient Egyptian Coregencies, 60-1.
    ${ }_{33}$ 'Traces of the early career of Ramesses II', $\mathcal{F N E S} 38$ (1979), 271-86.

[^44]:    ${ }^{34}$ Kitchen, 'Historical observations on Ramesside Nubia', 214-15 and my comments, op. cit. above, n. 33 . ${ }^{35}$ See the references above, n. 28.
    ${ }^{36}$ In addition to my comments above, n. 33, see the basic studies on Iwny: Reisner, 7 EA 6 (1920), 39-40; G. Daressy, 'Un "Fils royal en Nubie"', $A S A E 20$ (1920), 129-42; J. Breasted, 'First preliminary report of the Egyptian expedition', AySL 23 (1906), 29 fig. 19 (Abu Simbel); Helck's analysis in 'Die Große Stele des Vizekönigs $S_{t}$ tww aus Wadi es Sabua', $S A K$ (1975), 104-5 and n. 50, p. 105, in particular. The texts are now in $K R I$ iII, 69.

[^45]:    ${ }^{37}$ On Hhs-nht: Reisner, $9 E A 6$ (1920), 40-1 ; Helck, SAK $_{3} 3$ (1973), 104-5 and n. 51, p. 105, in particular; with A. Rosenvasser, 'Preliminary report on the excavations at Aksha by the Franco-Argentine Archaeological Expedition, 1962-1963', Kush 12 (1964), 97; A. Fouquet, 'Deux hauts-fonctionnaires du Nouvel Empire en Haute Nubie', CRIPEL 3 (1975), 129-33; A. Vila, La Prospection archéologique de la vallée du Nil au sud de la cataracte de Dal 7: Le District d'Amara West (Paris, 1977), 26-7, for the lintel depicted in fig. 2 of Fouquet's article. The texts are now in $K R I$ iII, 69-73.
    ${ }^{38}$ However, see the comments of Kitchen, $\mathcal{F E} A$ 6I (1975), 271 n. 2.
    ${ }^{39}$ Gomàa, Chaemwese, 5 and 20.

[^46]:    ${ }^{40}$ Kitchen, $\mathcal{F} E A$ 61 (1975), 27 I n. 2.
    ${ }^{41}$ Kitchen, $\mathscr{f} E A 50$ (1964), 50 : first son ( $K R I$ iI, 180,8 ); 61 : third, fifth, and thirteenth sons ( $K R I$ II, 183 , 1-2). These reliefs of Ramesses' war in Transjordan are probably to be dated after his tenth regnal year: Kitchen, op. cit. 69-'Perhaps one may also place the Edomite and Moabite undertaking within this period' (i.e. Years II-20 inclusive). See also Schulman, 'Aspects of Ramesside diplomacy: the treaty of Year 21', Fournal of the Society for the Study of Egyptian Antiquities 8 (1978), 112-30, and p. 116 with n. 33, pp. 125-6 in particular. Schulman states that they are to be placed in Year 11, but this is not certain.
    ${ }^{42}$ See Kitchen's comments, op. cit. above, n. 38. For the temple of Derr: A. Blackman, The Temple of Derr (Cairo, 1913) and $16-17$ with pls. xi-xii in particular. Comments of a more general nature will be found in Gomàa, Chaemwese, 3, and Habachi, Features of the Deification, 13-15. For the Nubian scene see also Wreszinski, Atlas, II, pl. 186 a.
    ${ }^{43}$ Habachi, Features of the Deification, 13-14; Blackman, The Temple of Derr, 5-8 and pls. iii-v.
    ${ }^{44}$ Blackman, The Temple of Derr, 5-8 and pls. iii and v in particular.

[^47]:    ${ }^{50}$ Vercoutter, Kush 10 (1962), 112-13 and in6-17 with pl. xxxiv c.
    ${ }^{51}$ Note the comments of Vercoutter, 'New Egyptian texts from the Sudan', Kush 4 (1956), 82, and Kush 10 (1962), pl. xxxii a with p. in2.

    52 See pp. 96-7 below and the comments of Kitchen, 'Historical observations on Ramesside Nubia', 220-1.
    ${ }^{53}$ For $H_{k j}$-nht the references are presented above, n. 37. For his role at Aksha see Rosenvasser, Kush 12 (1964), 97, and $K R I$ III, 71, 14-72, 1.

    54 See below, n. 57.
    55 In 'Historical observations on Ramesside Nubia', 220 and n. 27. Actually, K. Seele had first noticed this change: W. Peck, 'A Ramesside ruler offers incense', $\mathcal{F} N E S_{31}$ (1972), 15 n. 24. Seele argued from the spelling of the nomen in the hypostyle court, which was built during his early years (first as regent and then as sole Pharaoh). Similar arguments can be made based on the Beit el-Wali data. Also to be observed is the later figure of Amūn in Ramesses' name. Of course, one can add the prosopographical data of Ramesses II's officials who lived during the first two decades of his reign. For example, the objects of the vizier $P_{3}-s r$ present for the most part the early spelling of the nomen: see, e.g., his stela at the Boston Museum of Fine Arts: S. Smith, Ancient Egypt as Represented in the Boston Museum of Fine Arts (Boston, 1946), 129-30 and fig. 84-in a style quite close

[^48]:    58 'Historical observations on Ramesside Nubia', 220.159 Ibid.
    ${ }^{60}$ 'The administration of Nubia during the New Kingdom with special reference to discoveries during the last few years', Mémoires de l'Institut d'Egypte (Cairo, 1969), 70-1 and pl. ii with fig. 4. The early spelling of Ramesses' nomen is clear.
    ${ }^{61}$ 'Historical observations on Ramesside Nubia', 220.
    62 Ibid. 220-1 with H. Fairman, 'Preliminary report on the excavations at Amarah West, Anglo-Egyptian Sudan, 1947-1948', $\mathfrak{f E A} 34$ (1948), 8-9; 'Preliminary report on the excavations at Sesebi (Sudla) and 'Amarāh West, Anglo-Egyptian Sudan, 1937-1938', fEA 25 (1939), 140-3; and, in general, his reports 'The recent excavations at Amarah West', The Connoisseur 103 (1939), 322-8 and 344, and 'An Ancient Egyptian frontier town', Discovery 2 (1939), 385-92.

[^49]:    63 Helck, $S A K 3$ (1975), 105 and n. 49; Priese, $A O F$ I (1974), 22-4.
    64 In general see Habachi, Features of the Deification. Note that this event occurred when the second hall at Abu Simbel was being carved with relief work. The nomen $R c-m s-s(w)$ was still in use. This can also be observed on the Stela Hildesheim ro79 ( $=$ Habachi, Features of the Deification, 31 and fig. 18, with G. Roeder, 'Ramses II. als Gott', $Z \ddot{A} S 61$ (1926), 62 and pl. v), in which the deified Ramesses appears with the early spelling of his nomen. (The object originally came from Qantir/Tell ed-Daba.) Despite Habachi's remarks on p. 33 concerning the vizier Rachotpe his career is of no use to the question of Ramesses II's deification, as his floruit occurred in the second half of the king's reign: see De Meulenaere, 'Deux vizirs de Ramsès II', $C d E 41$ (1966), 223-32.

[^50]:    ${ }^{1}$ M. L. Bierbrier, The Late New Kingdom in Egypt (Warminster, 1975), xiv. For all abbreviations used in this study see J. Janssen, Commodity Prices from the Ramessid Period (Leiden, 1975), xxi-xxvi.
    ${ }^{2}$ H. G. Fischer, Egyptian Studies I: Varia (New York, 1976), 19-21.
    3 S. Allam, Hieratische Ostraka und Papyri aus der Ramessidenzeit (Tübingen, 1973), 193-5 and pl. 54.
    4 For this individual and his family see Bierbrier, op. cit. 36-9. Allam, op. cit. 194 takes the text at its literal meaning, but J. Cerný, A Community of Workmen at Thebes in the Ramesside Period (Cairo, 1973), 297, considers the younger Anherkhacu as a grandson of the elder.

[^51]:    7 For Pay the younger see J. Lieblein, Dictionnaire de noms hiéroglyphiques en ordre généalogique et alphabétique (Leipzig, 187 Iff .), no. 2234.
    ${ }^{8}$ Cerný, Répertoire onomastique, 51-7; J. Vandier, La Tombe de Nefer-abou (Cairo, 1935).
    9 Vandier, op. cit. 55.
    10 Cerný, Répertoire onomastique, 69-74.
    ${ }^{11}$ Ibid. 75-6.
    12 Bruyère, Rapport DeM 1934-35, 362.
    ${ }_{13}$ Bruyère, Rapport DeM 1929, 64; Moret, Rec. Trav. 35 (1913), 49; Cerný, Répertoire onomastique, 77.
    14 Tosi-Roccati, Stele, 114; Bruyère, Rapport DeM 1926, 63; see also Bierbrier, op. cit. 24-5 where the reading of the name of Amenmose's wife should be corrected to Henutwedjbu.

    15 Cerný, Répertoire onomastique, 84.
    ${ }^{16}$ Bruyère, Rapport DeM 1930, 44-5; fragments of the Stato civile from Cerný Notebook 15 in the Griffith Institute. I wish to thank the Trustees of the Griffith Institute for permission to examine the transcription of the Stato civile in the Cerný Notebooks and Dr Curto of the Egyptian Museum, Turin, for permission to mention relevant extracts in this study.

[^52]:    ${ }^{17}$ Bierbrier, op. cit. 27-8.
    18 Cerný, Community, 137-40; D. Valbelle, La Tombe de Hay à Deir el-Médineh (Cairo, 1975), 37-8.
    ${ }_{19}$ Bruyère, Rapport DeM 1930, 33-70; Bierbrier, op. cit. 36-9. The tomb was completed not earlier than the reign of Ramesses IV whose cartouche appears in one of the titles in this tomb.

    20 Cerný, Graffiti, nos. 1082, 1323, 1324, 1338.
    ${ }^{21}$ American Research Center in Egypt Inc., Annual Meeting at New York University Abstracts 1978, 9. For Meramendua's parentage see Stato civile, Fragment 74 in Cerný Notebook 15.
    ${ }_{22}$ Hier. Ostr. 36, 1 of a Year 7; Janssen, op. cit. 69; Tosi-Roccati, Stele, 65.
    ${ }_{23}$ Botti-Peet, Giornale, pl. i 1 1. 4.
    ${ }^{24}$ For Nebamūn son of Amenemone see J. Černý, Egyptian Stelae in the Bankes Collection (Oxford, 1958), no. 10; Speleers, Recueil, 62 no. 257, and O. Cairo 25737. For Nebamūn, son of Weskhet, see Bruyère, Meret Seger, 299; Speleers, Recueil, 49 no. 182 l. 29. $\quad{ }^{25}$ Bruyère, Rapport DeM 1930, 46.
    ${ }^{26}$ For Amenemheb without filiation see O. DeM. 236; Hier. Ostr. 25, 1. For the son of Telmont see O. DeM. 262. There were at least two other workmen named Amenemheb at this period.

[^53]:    ${ }^{27}$ O. DeM. 142 and A. H. Gardiner, Ramesside Administrative Documents (Oxford, 1948), 46 ll . 1 and 5.
    ${ }_{28}$ Janssen, op. cit. 78-9 and D. Valbelle, Catalogue des Poids à inscriptions hiératiques de Deir el-Médineh (Cairo, 1977), no. 5199. The Telmont who flourished under Ramesses V is probably a grandson of the first and undoubtedly the son of Amenemheb.
    ${ }^{29}$ The sons of 'Anakht and Reshpeteref both appear on O. DeM. 413. J. López, Ostraca ieratici (Milan, 1978), no. 57006 verso, 1. 9, and Speleers, Recueil, 49 no. 182 1. 26, prove that the name is to be read Amenpaha ${ }^{\text {a }}$ pi and not Amenpayom or Amenpamer when the last syllable is not written in full. For the son of Kenna see J. Monnet Saleh, Les Antiquités égyptiennes de Zagreb (Paris, 1970), 32-3, where the name is partially restored.
    ${ }^{30}$ For example, Kenna, son of Ruti (O. Cairo 25242 ; O. DeM. 34), Ķenna, son of Seba (López, op. cit. nos. 57006, 57039), or Kenna, son of Siwadjyt (O. DeM. 222).
    ${ }^{31}$ Bruyère, Rapport DeM 1930, 45.
    ${ }^{32}$ Bruyère, Rapport DeM 1928, 137.
    ${ }^{33}$ Cerný, Graffiti, no. 1221; O. Cairo 25627; Speleers, Recueil, 49, no. 182 1. 33; López, op. cit. no. 57006.
    ${ }_{34}$ Cerný, Répertoire onomastique, 36, and Bierbrier, op. cit. 34.
    ${ }_{35}$ Cerný, Bankes Stelae, no. 11 ; Janssen, op. cit. 27.
    ${ }^{36}$ Janssen, op. cit. 80; Bierbrier, op. cit. 34.

[^54]:    37 Botti-Peet, Giornale, pl. 12 ll. 10-1 1.
    38 Valbelle, Hay, 28.
    ${ }^{39}$ Botti-Peet, Giornale, pl. 12 l. 9.
    ${ }^{40}$ Bierbrier, op. cit. xiv.
    ${ }^{41}$ Tosi-Roccati, Stele, 114-15.
    ${ }^{42} K R I$ I, 409; Bierbrier, op. cit. 24-5; Bruyère, Rapport DeM 1927, 78-82 for Tomb 220 of Khacemtri and 53-68 for Tomb 218 of his father Amennakhte; Bruyère, Rapport DeM 1924-25, 113-73 for Tomb 335 of Nakhtamūn.
    ${ }^{43}$ Bierbrier, op. cit. 24-5; Tosi-Roccati, Stele, 114-15; Hierogl. Texts, 10 (forthcoming).
    44 The wife of Minmose appears in the tomb of her brother-in-law Nakhtamūn; see Bruyère, Rapport DeM 1924-25, 124. For Ese, daughter of Pashed, see $K R I$ I, 409.
    45 Cerný, Répertoire onomastique, 52.

[^55]:    ${ }^{46}$ For Tentamentet, wife of Maanakhtef, see Bruyère, Rapport DeM 1923-24, 82; for the sister of Nefer'abet see Cerný, Répertoire onomastique, 53, and Hierogl. Texts, 9, pls. 30-2.

    47 Bruyère, Rapport DeM 1923-2 4, 139; Habachi, op. cit. 37-8.
    48 Cerný, Répertoire onomastique, 52-3; Hierogl. Texts, 9, pls. 30-2.
    ${ }^{49}$ Hierogl. Texts, 9, pl. 30.
    ${ }^{50}$ Ibid. pl. 32.
    51 Bruyère, Rapport DeM 1929, 40.
    52 For Pay see Lieblein, op. cit. no. 2234 and for Nebnetjeru see above.
    53 For Pashed and (Pa)Baki see Bruyère, Rapport DeM 1929, 40, for a stela of [Maana]khtef and his sons. Janssen, op. cit. 39 n. 39, casts doubt on the relationship of Baki to his it Maanakhtef on O. DeM. 328, but this stela proves that the reference is one example in which it can be taken at its literal meaning. For Ipu see Lieblein, op. cit. no. 2234, and Habachi, op. cit. 32-7.

    54 Cerný, Répertoire onomastique, 52.
    55 Bruyère, Rapport DeM 1924-25, 132.
    ${ }^{56}$ Bierbrier, op. cit. 24; Bruyère Rapport DeM 1924-25, 167.

[^56]:    57 Cerný, Répertoire onomastique, 44-50; Clère, $R d E 27$ (1975), 70-7; Letellier, RdE 27 (1975), 160; Bierbrier, op. cit. 24-5.

    58 W. Spiegelberg and B. Pörtner, Aegyptische Grabsteine und Denksteine aus süddeutschen Sammlungen, I (Strasbourg, 1902), no. 26 p. 15 and pl. xiv; J. Cerný and A. F. Sadek, Graffiti de la Montagne thébaine, III, 3 (Cairo, 1971), no. 2796 (the transcription in IV, 2 is erroneous); Cerný, Répertoire onomastique, 16 and 22; Bierbrier, op. cit. 30. Wadjshemsu is possibly to be identified with the like-named man on Tosi-Roccati, Stele, 34 no. 50002 , in which case the stela would date to Dynasty XIX and be a commemoration of Tuthmosis I.
    ${ }^{59}$ C. Maystre, La Tombe de Nebenmât (Cairo, 1936) especially pl. iv, 25-6 where Nefertari, her husband, and two sons appear together with her sister Pashed and her family and her father Kaner (whose name is spelled Kar on other monuments) and his wife. See Bruyère, Rapport DeM 1930, 114 for the children of Pendua and Nefertari on a statue in Turin.
    ${ }^{60}$ Maystre, op. cit. pls. i, I (where Nebrēe is termed a brother (-in-law) of Nebenmacet), ii, 13 and iv, 25-6; Bierbrier, op. cit. 36 ; Hierogl. Texts, $9,49-50$ and pl. 40 for BM 818 which gives the fullest list of Kar's family.
    ${ }^{61}$ Grdseloff, $A S A E 40$ (1941), 533-6.
    ${ }^{62}$ Habachi, op. cit. 37.
    ${ }^{63}$ Bruyère, Rapport DeM 1927, 70; Tosi-Roccati, Stele, 92; G. Roeder, Aegyptische Inschriften aus den Staatlichen Museen zu Berlin, II (Leipzig, 1924), 162.
    ${ }^{64}$ O Staring, Brussels $=$ Hier. Ostr. 69, 3 and Allam, op. cit. 247 with the name partially restored. For Ipu son of $(\mathrm{Pa}) \mathrm{Ra}$ Cḥotpe see n .53 .

[^57]:    ${ }^{1}$ My thanks are due to Dr P. R. S. Moorey and Mrs J. C. Payne of the Ashmolean Museum for the facilities they have kindly provided me for the study and publication of this papyrus.
    ${ }^{2}$ Apparently so, presumably Theban Tomb no. 331 and not Theban Tomb 48 of Surero, where large numbers of fragments of papyrus were found: cf. Gardiner, $\mathscr{F} E A 21$ (1935), 140.
    ${ }^{3}$ See Cerný, Paper and Books, 16-17.
    4 My thanks are due to Miss Helen Murray, archivist of the Griffith Institute, for her assistance, and for access to these and other documents in the Cerný bequest. The present transcriptions are registered under the numbers Cerný Mss, 17.48.15-17.

[^58]:    ${ }^{5}$ Cf. Cerný, Community, 183-90, for lists of the service staff. He quotes only one dubious example of the inclusion of a smith in the staff ( $189-90$ ). O. Cairo 25581, vs. seems to me definitely to exclude smiths from the staff, but there are difficulties in understanding the text there.
    ${ }^{6}$ Cf. Cerný, Community, 125, 298-300, 301.
    ${ }^{7}$ A fisherman Sethi of about this date worked for the right side, DM 274; O. Cairo 25593. There seem to have been two contemporary workmen Horemwia, one on each side of the crew: cf. Gardiner and Cerny, Hierat. Ostr. LI, I, vs. 10 against rt. 17 and O. Cairo 25523, vs. II, 8 against rt. I, 4. For Neferemsesnet the position is unclear. It seems more likely that he belonged to the left (see Gardiner and Cerny, Hierat. Ostr. Lxxxiv, 8; DM 189, II, 5 and compare his position in the list DM 266 against the list of people under the charge of the foreman of the left in Gardiner and Cerny, Hierat. Ostr. LI). Yet he is probably the father of the future foreman of the right side, Paneb: see Cerny, $\mathcal{F} E A 15$ (1929), 254; Community, 302.
    ${ }^{8}$ On the problem of numerous contemporary scribes of the Tomb and scribes in charge of the service staff see Cerny, Community, 191; table facing p. 23r; 233-7. In the reign of Ramesses XI the names of scribes in charge of each side of the staff are clearly recorded: see Cerný, Community, 189-90.

[^59]:    - DM 179.
    ${ }^{10}$ O. Cairo 25582.
    ${ }^{1 I}$ DM 323, fish and wood in charge of Anpuemheb and a certain Neferhotep-the predecessor or successor of Pentaweret? DM 325, 4-5; wood and fish from Pentaweret. See also DM 623, vs. and DM 606.

    12 DM 179 records both. DM 323, 3 puts Anpuemheb on the right. In the unpublished ostracon Strassburg Hiro (see Cerny Mss, 17.35.71) one side of the crew, led by the foreman Anherkhau (that is the left side), received grain rations from grain provided by Pentaweret, the other side of the crew from grain provided by Anpuemḥeb.

[^60]:    ${ }^{1}$ e.g. the ritual of Amenophis I, in A.H. Gardiner, Hieratic Papyri in the British Museum, 3rd series (London, 1935), 78 ff.; E. Bacchi, Il Rituale di Amenhotpe (Torino, 1942): cf. also H. H. Nelson, 'Certain reliefs at Karnak and Medinet Habu and the ritual of Amenophis I', 7 NES 8 (1949), 201-32, 310-45.

    2 e.g. Hieratische Papyrus aus den königlichen Museen zu Berlin, I: Ritual für den Kultus des Amon (Leipzig, 1901): see A. Moret, Le Rituel du culte divin journalier en Egypte (Paris, 1902).
    ${ }^{3}$ PM vi, 243, (358)-(359) ; Berlin Philae Photo 1032; G. Bénédite, Le Temple de Philae (Paris, 1893), Textes, 6I, tabl. I' (with many errors in the text), pl. XXII $\beta$ : see here plate XV, left.

[^61]:    -This vertical inscription behind the king on plate XV, left, is obscured by shadow; it reads : 'Ii•n nsw-bit Wsr-ks-rc-mry-imn hrt 3st int nt ‘ntyw pri m Pwnt sndm styt dit. For an almost identical introductory phrase see the scene of the second register of the west wall of the same Room X which shows Ptolemy II offering 'the unguent which comes from Punt' to Osiris; on this inscription see E. Winter, Untersuchungen zu den ägyptischen Tempelreliefs der griechisch-römischen Zeit (Wien, 1968), 20 f.

    5 A synonymous phrase occurs at Edfu, II, 219: mn $n \cdot k$ rntyw pri m Pwnt sty-ntr pri $n$ (for $m$ ) hm $k$, 'take to yourself the myrrh which comes forth from Punt, the divine fragrance which issues from your majesty'. For the idea that the sacred unguents and oils are the secretions of deities themselves see Moret, Le Rituel, i96, and A. M. Blackman, $Z \ddot{A} S 50$ (1912), 69 ff .
    $6{ }_{6}{ }^{\prime} s p i b \cdot f$ swt-ib: cf. Wb. IV, 533, $2 . \quad{ }^{7}$ Lit. 'fills'.
    ${ }^{8}$ Only $r$ of $r d i$ is visible; the second sign has been effaced. Perhaps the word, because of the narrowness of space, was never fully written. In the words 'Geb gives you his inheritance', $r(d i) n \cdot t G b i w r \cdot f$, there is possibly an allusion to the Memphite Theology according to which Geb, having made Horus the King of Lower Egypt and Seth the King of Upper Egypt, changed his mind, and gave his entire kingdom to Horus. Here the inheritance of Upper Egypt, originally the domain of Seth, would on this assumption be given to Isis: 'Geb gives you (Isis) his (Seth's) inheritance.'
    ${ }^{9}$ At Philae the presentation of the myrrh occurs several times in the Mammisi (Junker-Winter, Das Geburtshaus, 29, 53, 61, 165, 299, 395; the last two examples, though from the time of Augustus, are the most significant ones since they contain some phrases very similar to those of the above-quoted hymn): see further Junker, Der grosse Pylon, 195 f.; for Edfu see, e.g., $P M$ vi, 143, 147, 152, etc.
    ${ }^{10}$ Cf. Nelson, 7 NES 8, 223.
    ${ }^{11}$ See Hieratische Papyrus aus den kgl. Museen zu Berlin, I, xxxir, 3-5: cf. Moret, Le Rituel, 193.

[^62]:    12 Calverley et al., The Temple of Sethos I at Abydos, II, pl. 10: ( $m h \cdot n \cdot i n \cdot k$ irt $\cdot k m m d t$ ), mh•n $\boldsymbol{i} n \cdot k t p \cdot k m m d t$ imyt hat $\mathrm{Hr} .$. . ; elsewhere, at the same temple at Abydos, a slightly different text occurs: ii $\cdot n \cdot i m h \cdot n \cdot i t w m m d t$ prt $m$ irt $H r, m h \cdot i t w i m \cdot s . \ldots$ (ibid. II, pl. 5 ; similarly 1 , pls. 6, 19, 27; iII, pl. 46). In the application of this text to the funerary ceremony of the 'Opening of the Mouth' the scribe in some instances included both readings, the short one of the Pyramid Text § 50 and the versions of the temples at Abydos and Philae, and thus produced an expanded version: 'I fill for you your eye with the unguent, I fill for you your head with the unguent which issues from the Eye of Horus in this its name of "Unguent", I place it in front of you for you; Sekhmet burns for you the followers (of Seth), and Geb gives his inheritance to you'; a variant reading: 'The bright Eye of Horus, it burns for you the followers of Seth, and Geb gives you his inheritance', Otto, Mundöffnungsritual, I, 137 f.; II, 123.
    ${ }^{3}$ Lit. 'she burns'.
    ${ }^{14}$ Cf. Wb. 1, 205, 15.
    15 Lit. 'it burns'.
    ${ }^{16}$ See Otto, Mundöffnungsritual, 1, 1; II, 34: 'Performing the Opening of the Mouth for the statue of N. in the House-of-Gold (i.e. the temple laboratory)', irt wpt-r $n$ twt $n$ N. $m$ hwt-nbw.

    17 'Ihyt is the name of the sanctuary ('Holy of Holies') of the temple of Philadelphus at Philae: see Bénédite, Textes, 58 Fi, and Urk. II, 117, 10.

    18 Wn sht mn(ti) hr shty wn 'Ist di ‘nh nb Irk mn(ti) mihyt•sir•(n) n•s nb tiwy Wsr-ks-re-mry-imn nḥh dt. Such constructions occur elsewhere at Philae, e.g. Junker-Winter, Das Geburtshaus, 243; Junker, Der grosse Pylon, 279, etc. Wn sht . . . wn'Ist stands for wnn sht . . . wnn'Ist as in the Middle Egyptian occurrences and

[^63]:    elsewhere at Philae: cf. Gardiner, Grammar, § 326; Junker, Grammatik der Denderatexte, §§ 156, 125, 120,2. Two figures at the end of the vertical inscription represent two seated gods: the first wears an 'atef'-crown and holds a $w s s$-sign on his knees, the other, hawk-headed, wears a sun-disc and holds an $\mathrm{r} n h$-sign on his knees; the two figures stand for $n h h d t$, 'for ever and ever': see H. W. Fairman, BIFAO 43 (1945), 105. The same two figures appear also at the bottom of the adjacent vertical inscription.
    ${ }^{19}$ Bénédite, Le Temple de Philae, Textes, 61, tabl. I (with several errors in the text), pl. xxii $\beta$ : see here pl. XV, right, and plate XVI.
    ${ }^{20}$ See, e.g., F. Daumas, ZÄS 95 (1968), 4, 6, and 8: cf. id., Les Dieux de l'Egypte (Paris, 1965), 58.
    ${ }^{21} N$ for $m$ as frequently at Philae and elsewhere.
    ${ }^{22}$ As my collation showed, the seated divine figure has an Isis-emblem on her head, and is to be read as $3 s t$ 'Isis'. This clearly shows that Hathor, mentioned twice in the inscriptions of this relief, is here identified with Isis.

[^64]:    ${ }^{23}$ Cf. E. Edel, Altägyptische Grammatik, § 119, Nachträge; H. W. Fairman, BIFAO 43 (1945), 77; Wb. v, 14, 4 and 157, 4-6; 1, 140 f. (igp; igrt), etc.
    ${ }^{24}$ PM vi, 240, (310)-(3II); Bénédite, Textes, 20 f., tabl. III (a faultily copied text), pl. vii; Berlin Philae Ph. 705.
    ${ }^{25}$ See Berlin Philae Photo 1106; Bénédite, Textes, 34 1. 2: cf. H. Junker, Grammatik der Denderatexte, § 10; Wb. iv, 282 f .
    26 Junker, Grammatik der Denderatexte, § 20: cf. A. Erman, Neuägyptische Grammatik, § 36.
    ${ }^{27}$ Fairman, $A S A E 43$ (1943), 238 no. 248 d; id., BIFAO 43 (1945), 77.

[^65]:    ${ }_{28}$ R. O. Faulkner, The Ancient Egyptian Pyramid Texts (Oxford, 1969), 247 n. 1: cf. A. H. Gardiner, Late Egyptian Stories (BAe I, Brussels, 1932), $69 \mathrm{a},(2,20)$, where Gardiner considers the $n$ of $n n z t ; w$ as a possible very early example of the $\pi$ (for $m$ ) found in Coptic before the direct object.
    ${ }^{29}$ Calverley et al., The Temple of Sethos I at Abydos, 1, 13; 11, 19; 1II, 32.
    ${ }^{30}$ H. H. Nelson, $\mathcal{F} N E S 8$ (1949), 324.
    ${ }^{31}$ A. H. Gardiner, Hieratic Papyri in the British Museum, 3rd series, pl. 53; Otto, Mundöffnungsritual, 1, 32; II, 1 I9.

[^66]:    32 There is here the same inconsistency of tenses as observed in the occurrences of this hymn in the New Kingdom temples: $i \xi \xi \cdot n \cdot k m S w t f \cdot n \cdot k m$ Tfnwt, but $d i \cdot k$ (instead of $d i \cdot n \cdot k$ ) $(w y \cdot k$.

    33 The text is badly damaged, and the reading of this sign is not certain; it could be a $\ulcorner$ or r , see $W b$. 1 , 159 , 15 and 160, 1 ff.; A. H. Gardiner, Ancient Egyptian Onomastica, II, 206* f.; H. Junker, Der Auszug der HathorTefnut aus Nubien (Berlin, 1911), 3 1; F. Daumas, $Z \ddot{A} S 95$ (1968), 3 ; $m-r(t)-K_{3}$ could possibly refer to a sacred room or a temple in Heliopolis. For some abnormal writings of the 'house'-determinative see Fairman, $A S A E$ 43, 286 n. 7.

    34 Lit. 'together with her 'ka" (hnr $\left.K_{3} \cdot s\right)$ '; for similar examples see Calverley et al., The Temple of Sethos $I$ at Abydos, I, pl. 13 : 'may you place your arms about Osiris that he may live with his "ka"'; similarly Otto, Mundöffnungsritual 1 , 132; II, 119.

    35 Dhnsin $k$ corresponds to dnhnh $\cdot k$ of Pyramid Text § $1654 a$ and $c$ and The Temple of Sethos I at Abydos, II, pl. 19 (Moret, Le Rituel, 243 n. 1): a metathesized form of $d h n h n$ (out of $d n h n h$ ), following the pattern of thnhhn:ṭhnn, or hnhn:hnn(Edel, Altägyptische Grammatik, §§ 427, Nachträge; 439), developed further as *dhnn; then by analogy with some 3 -lit. inf., and apparently some other verbs (Edel, op. cit. §§ 435, 433), an $i$ was inserted after the first $n:$ : dhnin; the 3 -sign in the Philae text (dhnsin) could possibly be attributed to the influence of Late Egyptian orthography (cf. $d g 3 i$ and $d g i$, th $3 i$ and thi etc. : see A. Erman, Neuägyptische Grammatik, § 260 f. $; W b$. $v, 497,4 ; 319,3 ; 1,150,12 ; 339,1$, etc.). It is interesting to observe that the Edfu scribe in his version of this Pyramid Text simplified the problem by creating a verb thn ( $E d f u, 1,97 ; W b . v, 327,19$ ) which in Mundöffnungsritual (1, 132; II, 119) appears as dhn.
    ${ }^{36}$ The text of this entire hymn is badly damaged. In 1976 I was able, however, to collate the Berlin Philae Photo 705 with the inscription in situ and obtain the text on which this translation is based :'Ind-hr$\cdot k$ 'Itm ind -hr $\cdot k$
    
     Tfnwt hy psdt 「3t imyw 'Iwnw 'Itm S゙w Tfnwt Gb Nwt Wsir 3st Nbt-hwt . . .

[^67]:    ${ }^{37}$ See also E. Otto, Studi in Memoria di Ippolito Rosellini, II (Pisa, 1955), 225-37; id., Mundöffnungsritual II, 120; for the ritual adaptation of a Pyramid Text in the temple of Edfu see A. Grimm in Göttinger Miszellen 31 (1979), 35 ff .
    ${ }^{38}$ See H. H. Nelson, $7 N E S$ 8, 324 f., 232.
    ${ }^{39}$ See P. Bucher, Kêmi 1, 160, 9; J. Assmann, Ägyptische Hymnen und Gebete (Artemis Verlag, Zürich und München, 1975), 343.
    ${ }^{40}$ See L. Kákosy, $Z A ̈ S ~ 96$ (1970), $112 . \quad{ }^{41}$ Cf. Otto, Studi Ipp. Rosellini, in, 233.
    
    

[^68]:    44 At this point I do not intend to discuss in detail some other examples of the presentation of the wsh-collar to a deity at Philae. In most cases there is either a very brief allusion to the above-quoted Pyramid Text (e.g. Junker-Winter, Das Geburtshaus, 192 f.), or there is no reference to that text at all(e.g. Berlin Philae Phs. 700, 1071, III5; Junker-Winter, Das Geburtshaus, 40 f.). There is, however, a relief in the West Portal of the First Pylon in which Ptolemy VI Philometor is presenting to Isis the wsh-collar with the words which, though damaged, contain, in a different version, the first part of the Pyramid Text § 1652 a-b. The transcription of this text in the West Portal of the Pylon can in some points be rendered more accurately than it was in Junker's publication (Junker, Der grosse Pylon, 235 f.; cf. also LD iv, 26).

[^69]:    ${ }^{1}$ W. J. Fulco, The Canaanite God Resép (American Oriental Series) (New Haven, Connecticut, 1976).

[^70]:    ${ }^{1}$ A. Nibbi, 'Egyptian anchors', $\mathcal{F} E A$ 61 (1975), 39.

[^71]:    ${ }^{1}$ FEA 64, 70-1.
    ${ }^{2}$ Op. cit. 7 r.
    3 Ibid. n. 7.
    ${ }^{4}$ B. Landström, Ships of the Pharaohs (London, 1970), 64, fig. 192. ${ }^{5}$ Frost, op. cit. 152.
    6 The preliminary reading of the hieratic inscriptions which occur on the sherds found under the huge rock and around it (i.e. together with the pieces of wood) suggests the occurrence of the name of the mortuary temple of Sesostris II and the name of an official who lived in the time of Sesostris III. I hope that the final reading of these inscriptions will be published soon by Professor G. Posener.

[^72]:    ${ }^{1}$ I have inquired of Professor Herman De Meulenaere whether the Belgian mission has made any new copies or photographs of the tomb. He has informed me that no such records exist and that, since it has been inaccessible for some time, no new publication can be planned in the foreseeable future. He has therefore encouraged me to prepare the present compilation.

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[^74]:    ${ }^{1}$ The form of $\pi$ is odd，having a round bottom like $\triangle$ ；this feature gradually became more common in the course of the Eighteenth Dynasty．
    ${ }^{2}$ See Grapow，Die bildichen Ausdrücke des Aegyptischen，30－1．Wb．11， 401 （9）says＇Seit M．R．＇，but the Belegstellen do not include examples of this date；for the closest Middle Kingdom analogies see Elke Blumenthal， Untersuchungen zum ägyptischen Königtum，1，99－102．The examples given here are from Petrie，Six Temples， pl． 12 （16），and Davies，Rock Tombs of El Amarna，Iv，pl． 35.

    3 Tomb of Renni， 3.
    4 For this type of exclamation，uttered at the birth，see Ranke，$P N$ ir， 198 ff ．
    5 For theophoric names of this pattern see Ranke，$P N$ 1， 396 （12）， 397 （7，8，10，14），and 11， 332 （2，5，II and for Nmty see O．D．Berlev，Vestnik drevnej istorii，I（1969），3－30．

[^75]:    ${ }^{1}$ Vgl. Wb. III, 419, 14-17.
    ${ }^{2} A H w$ ro33a.
    ${ }^{3}$ Top. Bibl. II (Oxford, 1972), 97, (282), I.
    4 Fig. 1 is based on W. Wreszinski, Atlas zur altaegyptischen Kulturgeschichte, II (Leipzig, 1924-35), pls. 33 a (photograph), 33 b (copy).
    ${ }_{5}$ A. Lucas and J. R. Harris, Ancient Egyptian Materials and Industries (London, 1962), 231-3.
    ${ }^{6}$ Wb. Iv, 92, 5.
    7 R. O. Faulkner, A Concise Dictionary of Middle Egyptian (Oxford, 1962), 220.

[^76]:    ${ }^{1}$ Naville, op. cit. I, pls. clv, clxiv.
    2 Wb . IV, 91, 10-20. ${ }^{3}$ Ibid. 92, 10.
    4 W. E. Crum, A Coptic Dictionary (Oxford, 1939), 324 a.
    ${ }^{5}$ J. Cerný, Coptic Etymological Dictionary (Cambridge, 1976), 148.
    6 J. E. Harris, E. F. Wente, et al., 'Mummy of the "Elder Lady" in the Tomb of Amenhotep II : Egyptian Museum Catalog Number 61070', Science 200 (9 June, 1978), 1149 ff.

    7 The report does not make it clear whether early, middle, or late forties is meant, but it seems to indicate the middle forties; were either end of the decade intended, the age would presumably be given as 'around forty' or 'around fifty'.
    ${ }^{8}$ C. Aldred, Akhenaten, Pharaoh of Egypt (London, 1968), 44.

    - EA 26, 27, 28, 29.
    ${ }^{10}$ Op. cit. 27. ${ }^{11}$ N. de Garis Davies, The Rock Tombs of El Amarna, iII, pl. vi.

[^77]:    ${ }^{1}$ Ibid. II, pls. xxxvii, xxxviii.
    ${ }^{2}$ Aldred, op. cit. ch. VII, passim.
    ${ }^{3} E A 23$ and 27.

    * I wish to acknowledge many stimulating discussions on this subject with Messrs L. Libin, S. Pollens and W. V. Davies, and Drs C. Lilyquist and E. Winternitz.

[^78]:    ${ }^{1}$ L. Manniche, Ancient Egyptian Musical Instruments (Munich, 1975), 58. Shoulder harps are here called 'portable boat-shaped harps'; H. Hickmann, Bulletin de l'Institut d'Egypte 35 (1954), 21.
    ${ }^{2}$ Hickmann, op. cit.; id. Musikgeschichte in Bildern: Ägypten (Leipzig, 1961), 128.
    ${ }^{3}$ Musikgeschichte, loc. cit.
    4 Manniche, op. cit., lists twenty-seven arched harps where the wooden bodies have survived fairly completely, and nineteen of them are shoulder harps. A fair sample of the shoulder harps can be found in the Cairo Museum (well photographed in Hickmann's Catalogue Général des Antiquités Egyptiennes du Musée du Caire; Instruments de Musique (1949)) and in the Metropolitan Museum of Art in New York (C. Lilyquist, private communication). It is apparent that most of the shoulder harps had a total length of between 90 and 140 cm ('grand pattern'), although a few are 50 cm or less.
    ${ }^{5}$ An angular harp in the Louvre has a well-preserved skin cover, but it is about a millennium younger than the shoulder harp.

    6 'Stick' refers to the wooden rod which spans the length of the resonator box and to which the strings are tied. It has variously been referred to as 'tail piece' (Wachsmann, see n. 4 overleaf), 'suspension rod' (Manniche, op. cit.) and 'baguette' (Hickmann, see nn. 1,2 ). In the modern concert harp it is called 'eyelet piece'.

    7 R. D. Anderson, Catalogue of Egyptian Antiquities in the British Museum. III. Musical Instruments (1976).
    ${ }^{8}$ Fig. $\mathrm{I}_{3} 8-42$ in Anderson, op. cit. The cut in the skin at the sides of the body in pl. XXIII is not present in the British Museum harp. The split seemed necessary for the skin used here (calf) but may not be needed for the (undetermined) skin of the British Museum harp.

    9 The observation is based on the four harps in Cairo (nos. 69401-2, 69423-4) and two in MMA (nos. 14.10.6, 25.3 .306 A ) which are of the 'grand pattern' (see n. 4). (The smaller harp, on the other hand, is not invariably waisted.) The extent of the 'waisting' may, perhaps, best be quantified in the following way: first we imagine an instrument with no indentation at the waist, i.e. the sides form a straight line between the 'shoulder' of the box where it is joined to the neck and the 'hip' at the other end of the box where the rounded bottom starts. At the position of the waist, this imaginary box has a width of WI while the actual instrument has a measured width of WR. The difference (WI-WR) gives a measure of the absolute amount of 'waisting', but a better measure is the relative amount $(\mathrm{WI}-\mathrm{WR}) / \mathrm{WI}=\mathrm{D}$. ( D varies between 0 when there is no indentation at the waist and I when the waist line comes all the way into the middle of the box.) For the six 'grand pattern' shoulder harps in the sample $\mathrm{D}=0.26 \pm 0.07$ (the error term is the Standard Deviation). For comparison, violins have $\mathrm{D}=0.55$ while a Levine Spanish guitar has $\mathrm{D}=0.26$.

[^79]:    ${ }^{1}$ M. C. Williamson, Selected Reports (Institute of Ethnomusicology, UCLA), I (2) (1968), 46.

[^80]:    ${ }^{1}$ On monuments the order is sometimes reversed to ( $\left.W s r-m 3 \subset t-R r, M r y-I m n, S t p-n-R r\right)$ : cf. Gauthier, Livre des rois, III, 202-4.
    ${ }^{2}$ P. Turin Cat. 1907/8, III, 13-14; O. Strassburg H. $84=1256$. See Janssen, $\mathcal{F} E A 52$ (1966), 91-2.
    ${ }^{3}$ F. Rossi and W. Pleyte, Papyrus de Turin (Leiden, 1869-76), pl. $29=$ P. Turin Cat. 1883+2095. A provisional transcription made by the late Professor Cerný, now deposited amongst his papers in the Griffith Institute, Oxford, under the number Cerný Mss, 17.53.55-6, was made known and available to me by the kind offices of the archivist, Miss Helen Murray.
    ${ }^{4}$ J. Cerný, A Community of Workmen at Thebes in the Ramesside Period (Cairo, 1973), 308-9; M. Bierbrier, The Late New Kingdom in Egypt (Warminster, 1975), 38.

    5 Cerný, op. cit. 306-8 and 125 ; Bierbrier, loc. cit.
    ${ }^{6}$ Ostr. DM. 207.
    7 Ostr. DM. 133.
    ${ }^{8}$ Cerný, op. cit. 307-8; Bierbrier, op. cit. 32-3.
    9 J. J. Janssen, Commodity Prices from the Ramessid Period (Leiden, 1975), 96; Bierbrier, op. cit. 38 and n. 177, against W. Helck, Materialien zur Wirtschaftsgeschichte des Neuen Reiches (Wiesbaden, 1961-70), 112 and 981.
    ${ }^{10}$ BIFAO 30 (1930), 490.
    ${ }^{11}$ S. Allam, Hieratische Ostraka und Papyri (Tübingen, 1973) I (Tafelteil), pl. 75, 1 (O.U.C.L. 196ı4); A. H. Gardiner and J. Cerný, Hieratic Ostraca (Oxford, 1957), pl. xxviii, 2, 1 -5.

[^81]:    ${ }^{1}$ S. Sauneron, Esna, iv, fig. 1, 3, p. xv, 71.
    ${ }^{2}$ O. Neugebauer and R. A. Parker, Egyptian Astronomical Texts, III (London, 1969), pl. 51, nr. 72.
    ${ }^{3}$ G. Maspero et H. Gauthier, Sarcophages des époques persane et ptolémaïque (CGC) II (Le Caire, 1939), 115-26; K. Myśliwiec, Studien zum Gott Atum, I, Die heiligen Tiere des Atum (Hildesheimer Ägyptologische Beiträge, v) (1978), Katalog Nr. 42, Taf. xlviii-xlix.
    ${ }^{4}$ Myśliwiec, op. cit. Taf. xliv-xlvii, and the chapter 'Schlange mit Widderkopf-Vorschlag einer Interpretation'.
    ${ }^{5} C T$ vil, pl. 1, $37-8, \mathrm{Sp} .1066,1067$.
    ${ }^{6}$ Cf. the translations of L. H. Lesko, The Ancient Egyptian Book of the Two Ways (London, 1972), and n. b on that page, and A. Piankoff, The Wandering of the Soul (Princeton, 1974), 3.
    ${ }^{7}$ Myśliwiec, op. cit. 161.
    ${ }^{8}$ CT iv, 75a; 76a-b; 8og, Sp. $312 . \quad{ }^{2}$ CT 1II, 24a-b, Sp. 167; 6ih-j, Sp. 175.
    ${ }^{10}$ E. Hornung, Das Amduat, Die Schrift des verborgenen Raumes, I (Wiesbaden, 1963), Nr. 755-6, p. 18ı.

[^82]:    ${ }^{1}$ Cf. Gauthier, Livre des rois, 1, $27 . \quad{ }^{2}$ Spiegelberg, CG 30601-31166, pl. 23 and p. 70.
    ${ }^{3}$ The right-hand tip of the $k$ in this name is what Reymond has mistaken for a genitival $n$.
    4 The writing of $n 3 . w-n f r$ in place of $n f r$, although an anachronism, presents no obstacle to this identification since, in the Late Period, adjective verbs occurring as elements in personal names could be written with or without initial $n s(w)$, and such variation is sometimes found in different writings of a single person's name: cf. Ranke, Die ägyptischen Personennamen, 1, 169; 11, 82, as well as Spiegelberg, Studies Presented to F. Ll. Griffith, 176 n. .
    ${ }^{5}$ A h.t-sp 7.t, 'Regnal Year 7', which occurs in P. Vindob. D. 6319, x+III, 3 (unnoticed by Reymond), could belong to either one.

[^83]:    ${ }^{1}$ Cf. Fischer, Dendera in the Third Millennium BC, 44 ff ., and, for further parallels, Osing, Lexikon der Ägyptologie, 1, 149-54.

[^84]:    ${ }^{21}$ All are instances of either future (including in Coptic -nēu, see Stern, Kopt. Gr. 277), which the conjunctive would continue in an independent predication, or a 'hypothetic' (or protatic) relative ('whoever . . .', cf. Latin $q u i \pm$ conjunctive), Stern, op. cit. 280 f .-but this has to do rather with the conjunctive continuing any protatic construction, whatever its form (also ene-, ešōpe, ešje-, empf- etc.; e.g. Shenoute ed. Leipoldt, III ro8. 13, 139. 18, IV 3 I .5 etc .).

[^85]:    ${ }^{22}$ See Gilula, $\mathcal{F E A} 56$ (1970), 205-1 I ; Polotsky, 'Les transpositions du verbe', §§4.1-2.

