# EGYPTIAN STUDIES II <br> THE ORIENTATION OF HIEROGLYPHS 

By Henry George Fischer<br>Lila Acheson Wallace Curator in Egyptology, The Metropolitan Museum of Art

Parti. REVERSALS

The Metropolitan Museum of Art New York 1977

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## THE ORIENTATION OF HIEROGLYPHS

Part i. REVERSALS


Twelfth Dynasty coffin of $\mathcal{N h t}$ - $\mathrm{H} n m w$, MMA I5.2.2

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## LILA AGHESON WALLAGE



## PREFACE

The purpose of the present volume is, first, to review the various situations which call for a reversal of the dominant orientation of hieroglyphic inscriptions, facing right and reading from right to left; and, secondly, to review those situations which call for a change in orientation within the same inscription, whether the prevailing orientation be rightward or leftward. Although my survey covers the whole of ancient Egyptian history, including examples from the Late Period, I have, as a rule, concentrated on the beginning, floruit and development of the phenomena under consideration, and the evidence of the latest periods is only produced insofar as it relates to that of earlier times, down to the end of the New Kingdom. The emphasis is on reversals that enhance and illuminate the meaning rather than those which-along with other cryptographic devices-attempt to obscure it. While the study is certainly far from complete, even within the framework I have indicated, I hope that it will suggest the range of possibilities and will foster a more comprehensive understanding of the subject.

Since the material has not previously been examined systematically, its arrangement has required much thought and has imposed some difficult decisions. In general the organization is governed by use and context, the aim being to facilitate comparison as much as possible, so that the logic of the reversals may be examined to best advantage. If, in following this procedure, I have been obliged to separate some cases that are structurally comparable, that disadvantage has been remedied, so far as possible, by cross-references.

The illustrations are no more than is strictly implied by that term; they are designed to elucidate the text rather than the objects and inscriptions that are pictured. With only a few exceptions, the inscriptions illustrated are not translated or discussed in full, especially if they have been dealt with elsewhere, and most of these exceptions are relegated to an appendix.

Although the topic of retrograde orientation is reserved for the second part of this work (Egyptian Studies III), some reference to that topic could hardly be avoided ( $\S \S 3,6,21,23,33 \mathrm{~b}$ ). Those who wish to obtain a more comprehensive idea of the various types of retrograde inscriptions may consult my summary in "L'orientation des textes," Textes et langages de l'Egypte pharaonique I (Cairo 1973), pp. 21-23. Egyptian Studies III will include an index to both volumes. In the meantime the table of contents and list of illustrations may prove helpful in assisting the reader to locate the details that interest him.

I am again indebted to many individuals and institutions for their assistance, most particularly the Egyptian Department of Antiquities and the Oriental Institute of the University of Chicago. The manuscript was initially typed by Edna Russmann, who also began the checking
of references. This task, along with some editing, including the preparation of the list of abbreviations, was continued by Janet Thorpe. Mrs. Gertrud Magnus has generously given much time to checking the references of the last two chapters, and has assisted Miss Thorpe and myself in reading proofs. And once more I have been able to count on the unfailing assistance of William Pons, the head of the Metropolitan Museum's photographic department.

Even more than the first volume of these Studies, the present work has imposed a difficult task on the printers, who, under Bert Clarke's able guidance, have handled every problem with skill and efficiency. But the greatest measure of thanks must go to Lila Acheson Wallace, without whose generosity this book would have been neither written nor published. In a very real sense this book is hers.

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## ABBREVIATIONS AND SYMBOLS

| $A \cdot A$ | Ȧgyptologische Abhandlungen, Wiesbaden. |
| :---: | :---: |
| Abu Bakr, Giza | Abdel-Moneim Abu Bakr, Excavations at Giza 1949-1950. Cairo 1953. |
| Aeg. Inschr. | Aegyptische Inschriften aus den königlichen (or staatlichen) Museen zu Berlin, 2 vols. Leipzig 1913-1924. |
| $A F$ | Agyptologische Forschungen, Glückstadt. |
| $A J A$ | American Journal of Archaeology, Princeton, New Jersey. |
| Aldred, Jewels | C. Aldred, Jewels of the Pharaohs: Egyptian Jewellery of the Dynastic Period. London 1971. |
| Alexandria Museum | Greco-Roman Museum, Alexandria. |
| Amada IV | Mohamed Aly, Fouad Abdel-Hamid, M. Dewachter, Le Temple d' Amada, Cahier IV (Centre de Documentation et d'Études sur l'Ancienne Egypte, Collection Scientifique). Cairo 1967. |
| Amarna | Norman de G. Davies, The Rock Tombs of El Amarna, 6 vols. London 1903-1908. |
| Amenemhët | Nina de G. Davies and A. H. Gardiner, The Tomb of Amenemhēt (No. 82). London 1915. |
| Arnold, Der Tempel des Königs Mentuhotep II | Dieter Arnold, Der Tempel des Königs Mentuhotep von Deir el-Bahari <br> II: Die Wandreliefs des Sanktuares. Mainz am Rhein 1974. |
| $A S A E$ | Annales du Service des Antiquités de l'Egopte, Cairo. |
| $A Z$ | Zeitschrift für ägyptische Sprache und Altertumskunde, Leipzig and Berlin. |
| Barguet-Leclant, Karnak-Nord IV | P. Barguet and J. Leclant, Karnak-Nord IV (1949-195I) (FIFAO 25). Cairo 1954. |
| Barta, Opferliste | W. Barta, Die altägyptische Opferliste von der Frühzeit bis zur grie-chisch-römischen Epoche ( $M \ddot{A} S_{3}$ ). Berlin 1963. |
| BASOR | Bulletin of the American Schools of Oriental Research, Baltimore. |
| Beni Hasan | P. E. Newberry, Beni Hasan, 4 vols. London 1893-1900. |
| Berlin + museum nos. | For museum numbers on objects acquired prior to 1924, see Aeg. Inschr. |
| Bersheh | P. E. Newberry, El Bersheh, 2 vols. London 1894-1895. |
| Biblio. d'Etude | Bibliothèque d'Étude, Institut français d'Archéologie orientale, Cairo. |
| BIFAO | Bulletin de l'Institut fraņ̧ais d'Archéologie orientale, Cairo. |
| Bissing, Re-Heiligtum | F. W. von Bissing, editor, Das Re-Heiligtum des Königs Ne-woser-re (Rathures), vols. II, III. Leipzig 1923/1928. II. Die kleine Festdarstellung by F. W. von Bissing and H. Kees. III. Die grosse Festdarstellung by H. Kees. |
| BM | The British Museum, London. |
| $B M F A$ | Bulletin of the Museum of Fine Arts, Boston. |

BMMA
Boeser, Beschr. aeg. Sammlg.

Bologna
Borchardt, Denkmäler des A.R.
Borchardt, Grabdenkmal Sashu-rer
Borchardt, Statuen und Statuetten
Bosticco, Stele egiziane

Brooklyn
Brussels
Bubastite Portal
de Buck, $E R B$

Calverley, Temple of Sethos

Caminos, $\mathcal{N} .-K$. Temples of Buhen
$\mathbf{C G}+$ number

Bulletin of The Metropolitan Museum of Art, New York.
P. A. A. Boeser, A. E. Holwerda and J. H. Holwerda, Beschreibung der aegyptischen Sammlung des niederländischen Reichsmuseums der Altertümer in Leiden, 14 vols. The Hague 1905-1932.
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See CG + number.
L. Borchardt, Das Grabdenkmal des Königs Sashu-rer, 2 vols. Leipzig 1913.

See CG + number.
S. Bosticco, (Part I) Le Stele egiziane dall' antico al Nuovo Regno, Museo archeologico di Firenze; (Part II) Le Stele egiziane del Nuovo Regno, Museo archeologico di Firenze. Rome 1959/1965.
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Monuments in the Egyptian Museum, Cairo, numbers referring to Catalogue général des antiquités égyptiennes du Musée du Caire: CG 1-1294 L. Borchardt, Statuen und Statuetten von Königen und Privatleuten I-V. Berlin 191 1-1936.
CG 1295-1808 L. Borchardt, Denkmäler des Alten Reiches I-II. Berlin 1937-1964.
CG 1308-1315 and 17001-17036 C. Kuentz, Obélisques. Cairo 1932.

GG 2000 I-20780 H. O. Lange and H. Schäfer, Grab-und Denksteine des Mittleren Reichs I-IV. Berlin 1902-1925.
CG 20781-21000 A. Moret and J. J. Clère, Stèles du Moyen Empire. Unpublished.
CG 2400I-24990 G. Daressy, Fouilles de la Vallée des Rois I89899. Cairo 1902.

CG 2800I-28126 P. Lacau, Sarcophages antérieurs au Nouvel
Empire I-II. Cairo 1904-1906.
CG 34001-34189 P. Lacau, Stèles du Nouvel Empire I-II. Cairo 1909-1926.
CG 42001-42250 G. Legrain, Statues et statuettes des rois et des
particuliers I-III + index volume. Cairo 1906-1925.
CG $52001-53855$ E. Vernier, Bijoux et orfèvreries I-II. Cairo 1927.

CG 57001-57212 A. Moret, Ancien Empire. Unpublished.
CG 70001 - 70050 G. Roeder, $\mathcal{N a}$ as I-II. Leipzig 1914.

| Clère-Vandier, TPPI | J. J. Clère and J. Vandier, Textes de la Première Période Intermédiaire et de la XI ${ }^{\text {min }}$ Dynastie, Fasc. i (Bibliotheca Aegyptiaca io). Brussels 1948. |
| :---: | :---: |
| Cleveland | Cleveland Museum of Art, Cleveland. |
| Copenhagen Ny Carlsberg Glypt. IIN | Ny Carlsberg Glyptotek, Copenhagen, Egyptisk InventarNummer. |
| Couyat-Montet, Hammâmât | J. Couyat and P. Montet, Les Inscriptions hiéroglyphiques et hiératiques du Ouâdi Hammâmât (MIFAO 34). Cairo 1912. |
| $C T$ | A. de Buck, The Egyptian Coffin Texts, 7 vols. (OIP 34, 49, 64, 67, 73, 81, 87). Chicago 1935-196ı. |
| Curto, Gli Scavi italiani a el-Ghiza | A. Curto, Gli Scavi italiani a el-Ghiza. Rome 1963. |
| Daressy, Fouilles de la Vallée des Rois | See CG + number. |
| Deir el Bahari | E. H. Naville, The Temple of Deir el Bahari, 6 vols. London $1894-$ 1908. |
| Deir el-Bahari XIth Dyn. | E. H. Naville, The XIth Dynasty Temple at Deir el-Bahari, 3 vols. London 1907-1913. |
| Deir el Gebrâwi | Norman de G. Davies, The Rock Tombs of Deir el Gebrâwi, 2 vols. London 1902. |
| Dublin | National Museum of Ireland, Dublin. |
| Dunham, Naga-ed-Dêr Stelae | D. Dunham, Naga-ed-Dêr Stelae of the First Intermediate Period. London 1937. |
| Dunham-Janssen, Semna Kumma | D. Dunham and J. M. A. Janssen, Second Cataract Forts I: Semna Kumma. Boston 1960. |
| Dunham-Simpson, Mastaba of Queen Mersyankh III | D. Dunham and W. K. Simpson, The Mastaba of Queen Mersyankh III. Boston 1974 . |
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| $G M$ | Göttinger Miszellen: Beiträge zur ägyptologischen Diskussion, Göttingen. |
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| ILN | Illustrated London News, London. |
| $\mathrm{J}+$ number | Journal d'entrée, Egyptian Museum, Cairo. Unpublished unless otherwise noted. |

Jacquet-Gordon, Noms des domaines
James-Apted, Khentika
JAOS
JARCE

## JEA

Jéquier, Mon. fun. Pepi II
Jéquier, Pyrs. des reines
Jéquier, Temples I

JNES
Junker, Giza

Kaplony, Inschr. der äg. Frühzeit

Kêmi
Ḳen-Amūn

Kitchen, Ramesside Inscriptions II

Kuentz, Obélisques
Kush

Lacau, Sarcophages
Lacau, Steles
Lacau-Chevrier, Chapelle de Sésostris Ier

Lange-Schäfer, Grab- und Denksteine L $D$

LD Ergänzungsband
$\mathrm{L} D$ Text

Legrain, Statues et statuettes
Leiden
loc.
Lutz, Steles

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MDIK

Médamoud 1927

Medamoud 1929
Medamoud I93o
Medinet Habu

Meir

Melbourne
Menkheperrasonb

Mereruka

MFA
MIFAO

MMA
MMJ
Möller, Paläographie
Moscow
Müller, Felsengräber
Munich ÄS
Musée Egyptien I

Naville, Bubastis
Nefer-hotep

Nelson, Key Plans

OIP
OMRO

Or. Inst.

ABBREVIATIONS AND SYMBOLS
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Münchner Ägyptologische Studien, Münchener Universitätsschriften, Philosophische Fakultät, Munich-Berlin.
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| Pyr. | Pyramid text reference, in terms of K. Sethe's arrangement in Die altägyptischen Pyramidentexte, Leipzig 1908-1922, and his Ubersetzung und Kommentar zu den altägyptischen Pyramidentexten, Glückstadt 1935-1939. |
| RdE | Revue d'Egyptologie, Paris. |
| Rec. trav. | Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes, Paris. |
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| T + numbers | Temporary Register, Egyptian Museum, Cairo. Unpublished, unless otherwise noted. |
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| Tombeau de Ti | Le Tombeau de Ti, 3 fascicules (MIFAO 65). Cairo 1939-1966. <br> Fasc. I by L. Epron, F. Daumas, G. Goyon, P. Montet, i939; Fascs. 2 and 3 by H. Wild, 1953-1966. |
| Toulouse | Musée Georges Labit, Toulouse. |
| Turin | Museo Egizio, Turin. |
| University Museum, Philadelphia | University Museum, Univ. of Pennsylvania, Philadelphia. |
| Untersuchungen | K. Sethe, editor, Untersuchungen zur Geschichte und Altertumskunde Aegyptens, Leipzig. |
| Urk. I | K. Sethe, Urkunden des Alten Reichs, and edition (Urkunden des ägyptischen Altertums I). Leipzig 1933. |
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| Vernier, Bijoux et orfevreries | See CG + number. |
| Warsaw | National Museum of Warsaw, Warsaw. |
| Wb. | A. Erman and H. Grapow, editors, Wörterbuch der ägyptischen Sprache, 5 vols. Leipzig 1926-1931. |

Wb. Belegst.
Weill, Décrets
Wolf, Die Kunst Agyptens WZKM
A. Erman and H. Grapow, editors, Wörterbuch der ägptischen Sprache: Die Belegstellen, 5 vols. Leipzig-Berlin 1935-1953.
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* before texts and translations, indicates a hypothetical reading
[ ] in texts and translations, indicates a restoration
〈 > indicates an emendation
$\rightarrow \quad$ indicates that hieroglyphs or figures face right
$\leftarrow \quad$ indicates that hieroglyphs or figures face left
. . . omission
—— in translations, indicates that one or more words are untranslated
........ beneath hieroglyphs, emphasizes that their orientation conforms to that of the original text


# THE ORIENTATION OF HIEROGLYPHS 

Part i. REVERSALS

## I. Normal Reversals (§§i-19)

## A. The logic of orientation

§ r. Logicality. 'The logicality of the Egyptian mind is one of its most striking aspects,"'Sir Alan Gardiner has said, in reference to the religious beliefs of that ancient civilization. ${ }^{1}$ Again, in his essay on "Some Aspects of the Egyptian Language" he emphasizes "the very striking logicality and self-consistency of Egyptian syntax," and he suggests that the same characteristics are also to be found in Egyptian art. ${ }^{2}$ The truth of his observation becomes even more apparent if one examines that singular phenomenon in which Egyptian art and language are united--hieroglyphic writing-and if, in particular, one examines the orientation of hieroglyphic texts. At the outset, however, it is essential to stress the fact that Egyptian art and writing are interrelated to a degree that is unparalleled in any other culture. ${ }^{3}$ For it is from this fact that the orientation of hieroglyphic texts derives its logic.
§2. The unity of art and writing. If hieroglyphic writing may be described as a series of concrete representations, some of which are phonetic in character and others ideographic, it is equally valid to consider Egyptian sculpture and painting as the equivalent of the ideographic component. In paintings and relief the difference is a matter of relatively greater size, with the addition of pictorial detail and a certain degree of interaction. The scenes of daily life (and particularly those of the Old and Middle Kingdoms) generally show a complementary relationship between the smaller hieroglyphs, which supply the phonetic component, and the accompanying larger figures, which supply the ideographic component, or what is usually called the "determinative." Thus, in Fig. I, the hieroglyphs provide a strictly phonetic writing of "lassoing the ibex by the hunter," while the ideographs of the lasso, ibex and hunter are combined in the accompanying scene; the same inscription in isolation would normally place each of these "determinatives" at
 vidual artists might make a different choice of the determinatives that were felt to be supplied by the scene, and the writing $\rho \square \rho$ actually occurs in the same situation where other examples omit

[^0]

Fig. I
the final $\rho .{ }^{.}$The retention of the determinative might, in fact, be expected to occur much more often than it does, given the Egyptian fondness for reiteration.

In the case of statuary the principal ideograph is expanded not only in size, but into three dimensions, ${ }^{6}$ while it is the phonetic signs, inscribed upon this "generic determinative," that actually "determine" its identity. The relationship is most clearly seen in the inscriptions on statues of the Archaic Period and the Old Kingdom, which are usually confined to the owner's titles and name, ${ }^{7}$ and which omit 通, or ${ }^{\circ}$ at the end of the name. ${ }^{8}$ Here, as in the case of the two-dimensional examples that have just been cited, one may apply Gardiner's observation, in his Egyptian Grammar, §23, that: "it might be more truly said that the phonograms determine the sound of the ideogram, than that the ideogram determines the sense of the phonograms."
pictures (ibid., p. 57), than it is to regard the new style of art as an enlargement and elaboration of determinatives. Determinatives seem to occur in some of the earliest hieroglyphic labels, as in 〕, combining Thnw and the land-determinative (ibid., pp. 59, 123), although this example might also be interpreted as two words: $t 3$-Thnw "the land of Libya" (cf. Pyr. 1456-8). At all events, the complementary roles of writing and pictures were less clearly and discretely distinguished in the Protodynastic Period, as exemplified by the captions discussed in $n .46$ below, than they were in the Old Kingdom.
5. The determinative is twice included in N. de G. Davies, The Mastaba of Ptahhetep and Akhethetep II (London rgoi),

Pl. 22 ; it is omitted in Petrie, Deshasheh, Pl. 12, and in Meir II, Pl. 4 (the latter dating to the Middle Kingdom).
6. Cf. Wolf, Die Kunst Agyptens, p. 285 : "Auch die Rundbilder sind letzten Endes 'Hieroglyphen'."
7. Cf. JARCE 2 (1963), 24 ff ,, where a rare exception is discussed.
8. Some exceptions to this rule are examined in "Redundant Determinatives in the Old Kingdom," MMJ 8 (1973), 7-25; they are particularly apt to occur after feminine names in cases where these names are associated with names of men.
§3. The arrow indicating orientation. As the preceding footnote references will indicate, Borchardt, Gardiner, Davies and Gunn were well aware of the hieroglyphic character of Egyptian art between 50 and 70 years ago. Yet Gardiner and his English colleagues failed to see that "Egyptian pictorial art" does not merely show "analogies with the methods of writing," 9 but is so intimately related to the hieroglyphic system that it virtually is writing. A symptom of the false distinction is their use of the arrow ( $\rightarrow$ or $\leftarrow$ ) in two different ways to indicate orientation, so that $\rightarrow$ means "facing right" if it applies to "nongraphic pictures of human beings and animals," but means "reading from left to right" if it applies to hieroglyphs. ${ }^{10}$ This inconsistency not only belies the integrity of Egyptian writing and art, but also leads to difficulties of a more practical kind. Gunn, for example, describes a retrograde inscription, with signs facing right, as "moving $\rightarrow$ " 11 and Lacau, still more confusingly, describes the same sort of inscription as " ( $\leftarrow$ ) rétrograde." ${ }^{12}$ If one adopts a more consistent notation, in which the arrow always indicates the direction of the figures, such an inscription is more comprehensibly termed " $\rightarrow$ retrograde." That is the system which will be adopted in the following pages. It would be tedious to list more than a sampling of the Egyptologists who use the arrow to indicate direction of signs ${ }^{13}$ or direction of reading, ${ }^{14}$ but their numbers seem to be fairly evenly divided. As the matter stands, it is impossible to predict which of the two alternatives has been adopted in a given work, and since the reader is rarely given any advance notice, he must discover this matter for himself by comparing the original texts or photographs thereof. ${ }^{15}$

It appears certain that the ancient Egyptians themselves would have used the arrow in the manner that has been prescribed (indicating the direction in which the signs face), if they had had any use for it at all. That conclusion is confirmed by Herodotus (II, 36; Rawlinson's translation):

When they write or calculate, instead of going, like the Greeks, from left to right, they move their hand from right to left; and they insist, notwithstanding, that it is they who go to the right and the Greeks who go to the left.
9. JEA 2 (1915), 74.
10. Gunn in Teti Pyr. Cem., p. 85. Similarly Gardiner in Amenemhet, pp. 22 ff ., in reference to larger figures and pp. 13 , 44, in reference to the direction of writing.

I1. Teti Pyr. Cem., pp. 227 ff.
12. There might be some measure of justification for this in the case of a retrograde procession of columns within each of which the order of signs is normal, but none whatever in the case of horizontal retrograde hieratic (e.g. Lacau, Sarcophages I, Pp. 184-185).
13. E.g. Lange and Schäfer, Grab- und Denksteine; Borchardt, Statuen und Statuetten and Denkmäler des A.R.; Bosticco, Stele egiziane I-II (as noted on p. 7 of each volume); Kuentz, Obélisques; Legrain, Statues et statuettes; M. Malinine, G. Posener, J. Vercoutter, Catalogue des stelles de Sérapéum de Memphis (Text and Plates; Paris 1968) (as noted on p. xvi); Roeder, Naos; Sauneron, Esna (as noted in Vol. II, p. xix; III, p. xxxiv); K. Sethe, Die altaegyptischen Pyramidentexte III (Leipzig 1922).

[^1]While Herodotus had in mind the direction followed by the hand and eye, his Egyptian informants evidently were thinking of the direction of the writing itself, as expressed by the orientation of the hieroglyphs, which troop rightward. ${ }^{16}$ The difference between these two views is shown by the way the Greeks and Egyptians reversed the labels applied to the right-hand member of confronted pairs of two-dimensional figures, as explained in $\S 8$.
§4. Dominant rightward orientation. The dominant rightward orientation of Egyptian writing is undoubtedly explained by the prevalent righthandedness of mankind; ${ }^{17}$ as in the case of Su merian and Chinese, the scribe began on the side where the hand that did the writing happened to be situated. There can be no other reason for this orientation since, in Mesopotamia as in Greece, it was eventually reversed in favor of the practical advantages of writing from left to right. ${ }^{18}$

Inasmuch as the majority of the Egyptian hieroglyphs, and particularly those representing men and animals, are drawn in profile, they logically had to face rightward so that they might file past the eye that read them. ${ }^{19}$ Any procession must be read from the direction toward which it advances; and it does not matter, in this connection, whether the inscription consists of a horizontal line or a series of vertical columns, any more than it matters whether the procession consists of a single file or serried ranks.

In view of the complementary interdependence of Egyptian art and hieroglyphic writing, it is equally logical that the scenes depicted on the earliest inscribed monuments, dating to the beginning of the First Dynasty, show the same dominant orientation, ${ }^{20}$ and this remained true as long as the ancient culture survived; in any isolated representation the principal figure is nor-
16. J. Gwyn Griffiths discusses this passage at length in $A S A E 53$ (1955), 139-144, and comes very nearly to the same conclusion, only to reject it because he does not perceive that the Greeks and Egyptians could have had two different ideas in mind when they spoke of writing "going" towards the right or left. Even though demotic is a good deal removed, as he says, from the pictorial hieroglyphs, hieroglyphs undoubtedly continued to be regarded as the basis of the cursive forms. This is demonstrated by the Roman list of hieroglyphic and hieratic equivalents that Petrie found at Tanis (F.Ll. Griffith and W. M. F. Petric, Two Hieroglyphic Papyri from Tanis [London 1889]).
17. This very obvious explanation seems generally to have been overlooked; cf. Wolf, Die Kunst Ägyptens, p. 282, who entertains the possibility that the right-to-left direction of writing might be the result of some magical belief. Michael Corballis and Ivan Beale, who explore the physiology and psychology of righthandedness in Scientific American (New York) 224/3 (March 1971) fail to distinguish the orientation of the earliest scripts from those that were in use by A.D. I 500 and therefore erroneously conclude (p. 102) that "the direction of reading and writing seems to be merely a matter of convention."
18. In Mesopotamia the reorientation of clay tablets, which took place by the middle of the Third Millenium, was accomplished by rotating the tablet $90^{\circ}$ leftward, so that what
had been a series of short columns, written from right to left, became a series of short lines, written from left to right (D. O. Edzard in Allgemeine Grundlagen der Archäologie, ed. Ulrich Hansmann [Munich 1969], pp. 216-217; cf. Edward Chiera, They Wrote on Clay [Cambridge, Eng., 1939], pp. 59-60). In Greece boustrophedon orientation preceded a complete change in direction, but after 500 b.c. Greek writing was normally written from left to right (D. Diringer, The Alphabet [London 1948], p. 453).
19. This is equally true of Sumerian when it was still being written from right to left. Archaic Chinese appears to be irregular in this respect, but relatively few of the pictographs were distinctly oriented in either direction, and a frontal view was often favored in preference to profile.
20. Cf. H. Schäfer, Von ägyptischer Kunst (4th ed.; Wiesbaden 1963), p. 308; Wolf, Die Kunst Agyptens, p. 282. Prior to the First Dynasty the prevailing orientation of figures, as displayed on painted pottery, shows different predilections. The "white line" decoration seems to show a preference for rightward orientation on the exterior of the vessel, sometimes complemented, in the case of bowls, by the opposite orientation within. But the evidence is small, and there are many exceptions. Naqada II pottery typically shows an upper register (including a boat and some animals) facing left, and a lower register of animals facing right.
mally directed towards the spectator's right. Here again an illuminating contrast is provided by Mesopotamia. In Sumerian art, where there is much less evidence of an interrelationship between art and writing, the major figure is directed rightward only if it is in action; if there is no action, and the figure sits in a chair or stands passively, the orientation is reversed. ${ }^{21}$

The relationship between two- and three-dimensional art is also significant, the latter being clearly influenced by the dominant rightward orientation of the former; thus Egyptian statues normally advance the left foot (and arm, if one arm is advanced), ${ }^{22}$ they nurse or hold children


#### Abstract

21. E.g. the alabaster vase from Warka (H. Frankfort, Art and Architecture of the Ancient Orient [Baltimore 1954], Pl. 3 [A]), where the goddess $(\leftarrow)$ receives offerings from a procession of bearers ( $\rightarrow$ ); stelae from Ur and Telloh (ibid., Pl. 33), showing the same orientation, as does the scene at the top of the Hammurabi stela (ibid., Pl. 65). All of these cases are the reverse of the Egyptian procedure. They cannot very well have been influenced by the change in the direction of Sumerian writing, since the original orientation persisted on stone monuments down through the time of Hammurabi in the eighteenth century b.c. The use of rightward orientation for figures in action is well explained by H . von Recklinghausen, "Rechtsprofil und Linksprofil" $A Z 63$ (1928), 14-36; but the comparison with Sumerian art shows that his explanation is not applicable to that of ancient Egypt. 22. W. M. F. Petrie made this observation concerning the advanced left leg as early as 1885 in Tanis I (2 vols.; London 1885-1888), p. 13, n. I. In the meantime others have come to the same conclusion (e.g. G. Steindorff, Catalogue of the


Egyptian Sculpture in the Walters Art Gallery [Baltimore 1946], p. 5), but it has not been universally recognized; even so perceptive an authority as William Stevenson Smith is able to assert in HESPOK, p. 274: "We know from statues that the man really carried his staff in his left hand and the wand in his right." It is only natural to assume that the staff was actually held in the right hand, and that procedure is evidently reflected by Pyr. 220b and 224b, where the king's scepter is said to be "at the head of the living," (i.e. on the east, synonymous with "left" in Egyptian), while his staff is "at the head of the spirits" (the "westerners," west being synonymous with "right").

Note that Mesopotamian statues also show the left foot advanced, although the legs of Sumerian statues are usually together: e.g. Frankfort, Art and Architecture of the Ancient Orient, Pls. $20(\mathrm{C}), 21,64,66$. But this orientation is reversed in the case of the high relief from Al Ubaid (ibid., Pl. 27 [A]) : cf. n. 21 above.


Fig. 2


Fig. 3
with the left arm ${ }^{23}$ or carry burdens on the left side (Fig. 2). ${ }^{24}$ Similarly lions and sphinxes normally show the tail on the right side (Fig. 3), ${ }^{25}$ corresponding to the rightward orientation of hieroglyphic . The influence of the dominant rightward orientation of two-dimensional art is also to be recognized in Archaic statuary that shows the left hand raised upon the chest, following a model such as Fig. 120 below; in Old Kingdom statuary (e.g. Fig. 27 below) it is, more naturally the right hand that is raised. Possibly this revision is the result of assimilation to the three-dimensional equivalent of , which evidently showed the right hand raised, rather than the left, from the very beginning (Petrie, Abydos II, Pls. 2 [7-8], 3 [18]); here there may have been an overriding repugnance against putting the left hand in the mouth.

[^2]42068 is described as "imberbe" and CG 577 is said to lack both beard and nose. The same orientation is consistently applied to the earlier symmetrically paired lions tabulated by Roeder in Miscellanea Gregoriana (Monumenti Vaticani di Archeologia et d'Arte 6; Vatican 1941), pp. 188-189. Only in the Late Period were sphinxes paired so that one had the tail on the left (e.g. Alexandria Museum, nos. 11218-11219, with name of Apries).

Since the well-known limestone statue of a dog in the Louvre (E.11657) also shows the tail on the proper left side, it probably belongs to a symmetrical pair, similarly to be dated to the Late Period, and not to the New Kingdom as has generally been supposed: best illustrated in A. Vigneau, Encyclopédie photographique de l'art; Musée du Louvre I (Paris 1935), Pls. 82-83.
§5. Three reasons for reversal of orientation. Three factors-confrontation, symmetry and con-cordance-are responsible for the reversal of a figure in Egyptian art, and these factors are operative whether they apply to a scene, an inscription, or a combination of scene and inscription. A confrontation is involved, for example, when a king presents offerings to a god, or when two or more craftsmen are engaged in the same task, facing inward towards the object of their activity. Symmetry is generally displayed on portal elements, such as door jambs, architraves and obelisks, but also on stelae, and most particularly those stelae which have the form of the so-called false door. The term concordance is used not only to designate the similar orientation of larger figures and the smaller-scale hieroglyphic texts that are attached to them, but also to designate a situation in which the orientation is affected by a more external factor. The orientation of a seated statue, for example, normally affects the direction of the inscriptions on either side of the seat, both of which face front, the proper left side being subject to a concordant reversal (cf. §i5).

These three factors are related, and all three may be involved in a specific situation. Thus if a scene consists of two standing figures, representing the king and a god, these figures face each other because a confrontation is involved, but at the same time the resultant composition provides a considerable degree of symmetry. If, in addition, the scene is located some distance to the left of the god's temple, then a concordant reversal may relocate the god so that, instead of occupying the dominant position on the left side, facing right, he appears to emanate from his cult center (cf. §§12, I5).

It must be emphasized, however, that the dominant orientation could be, and was, frequently retained as an alternative to such reversals, even in situations where reversals had become virtually the rule. Some examples of the retention of rightward orientation are given in §§ 7, 9, if (8), i5, 18.

## B. Confrontation

§6. Hieroglyphic examples independent of scenes. Confrontation is so frequently exemplified in scenes from tombs and temples that it is scarcely necessary to go into further detail. The following uses occur within hieroglyphic inscriptions that are independent of such scenes. They will open the presentation of evidence that is the principal subject of this monograph-the evidence for representational factors that have affected the orientation of writing.
(i) Elements of the royal protocol are commonly arranged so that they confront each other. An early example is the opposition of the Horus and $N b t y$ names on a wooden tag dating to the last reign of Dynasty I (Fig. 4). ${ }^{26}$ The cylinder seal impressions belonging to the following dynasty show variations in elements of the titulary, as displayed in Fig. 5;27 the Horus and Seth

[^3][^4]

NORMAL REVERSALS

a


Fig. 4


Fig. 6

a

b

Fig. 7


Fig. 8
names of Khasekhemui may confront each other to a greater or lesser extent (Fig. 5a, b); they may both be confronted by a god or the title(s) of an official (Fig. 5 c ). ${ }^{28}$ The last arrangement was continued throughout the Old Kingdom, the name of the official being regularly omitted, ${ }^{29}$ and the opposition of the names of king and god is known in every period (e.g. Figs. 93, ror, below).

Possibly the Fifth Dynasty cartouche shown in Fig. $6(\rightarrow)$ is to be compared with the confrontation of separate elements of the royal protocol, with šps's'opposed to $k$. $f$. If the sign wowe were turned the other way this writing of Shepseskaf might be regarded as "honorific retrograde" but in such cases the signs are normally oriented in the same direction as the cartouche. ${ }^{30}$

A confronted pair of figures appears in the writing of New Kingdom royal names, as is first attested in seal impressions of Amenophis III. In these cases his prenomen $N b-m 3 s t-R r$ is written with some variation of 㚜 for $n b$, and this addresses the figure of Maat (Fig. 7 a ) ${ }^{31}$ or, more frequently that of some other divinity, as in Fig. 7b, where he is "beloved of Amun." ${ }^{32}$ This second arrangement became quite common in the Ramesside Period, from Ramesses II onward (Fig. 8). ${ }^{33}$ It disappeared after the reigns of Amenemope and Siamun in the Twenty-first Dynasty, and was revived by Nectanebo II, after which it remained popular throughout the Ptolemaic Period.

A particularly curious example, involving an overlapping opposition of prenomen ( $\rightarrow$ ) and nomen $(\leftarrow)$, occurs on one of the pectorals of Tutankhamun (Fig. 9). ${ }^{34}$ The elements of the two names may be sorted out as follows:


In the space between the cartouches the head of the vulture faces the prenomen (cf. §г 7 ), while the name of the goddess Nut ( -0 ) is oriented so that it addresses the nomen.
(2) Reversals produced by the name of a divinity are very occasionally attested. Two of the

[^5]cial of Amenophis III, the phrase:
"as the King of Upper Egypt praises you, and the King of Lower Egypt loves you" (Varille, ASAE 40 [1941], Pl. 65, col. 2). In another part of the same inscription (col. 7) the
 two preceding epithets of the sun ('Itn): $n b s h w, w b n m s h t$ "Lord of Light, Who Shines forth from the Horizon: Re, King," where 4 算 apparently belongs to the first epithet, and to the second. W. Helck's explanation of this group as "König der Sonne (?)" hardly seems possible (Urkunden der 18. Dynastie: Ubersetzung zu den Heften 17-22 [Berlin 1961], p. 283 , referring to 1847 [7]).
33. From W. M. F. Petrie, Ehnasya 1904 (London 1905), Pl. 25.
34. Illustrated in color by C. Desroches-Noblecourt, Vie


Fig. 9
three examples shown in Fig. Io are dated to the reign of Ramesses II (a, b) and the other belongs to the reign of Iuput in Dynasty XXIII.

In the first example (a) the name of the king is turned towards that of the god in three out of four writings of the title the cattle that are in the temple of (King) Ws'r-m3 $t-R r, S t p-n-R r$ in the domain of Amun." ${ }^{35}$

The second (b) is perhaps an epithet: "Who adores Ptah in secret (?)"36
et mort d'un pharaon: Toutankhamon (Paris 1963), Pl. 37b, and by Aldred, Jewels, PI. 92; cf. ibid., Pl. 97, where Nut again faces $\leftarrow$, her name $\rightarrow$, but the king's names face inward.
35. Petrie, Abydos I, Pl. 67. On p. 45 Weigall translates 'Superintendent of the Cattle in the Temple of Ramessu II, in the Amen Temple," but this does not take account of the fact that the first $m$ is actually $\rho$, var. $\stackrel{\sigma}{\circ}$, evidently representing imyt. The temple in question is not the one at

Abydos, but the Ramesseum; cf. H. Gauthier, Le Livre des rois d'Égypte III (MIFAO 19; Cairo 1914), p. 54 (LXVIII). 36. Petrie, Abydos II, Pl. 37 (Boston MFA 03.1891). Griffith (Petrie, op. cit., p. 45) translates "priest (?) of Ptah in ...." The last word is possibly a reversed writing of $\rightleftharpoons \mathrm{D}$. This example is comparable to among the funerary wishes on a Dyn. XVIII stela: W. Helck, Urkunden der 18. Dynastie, Heft 18 (Berlin 1956), p. 1512.


Fig. 10
The third (c) represents a "sistrum player of the ram of Mendes" (ihyt $b ;-n b-\underline{D} d t) .{ }^{37}$
These examples are to be distinguished from the much more frequent cases in which the name of the divinity is reversed; compare, in particular, Fig. iob with $P$ 㕫 ( $\leftarrow$ ), a very usual version of $d w s$-ntr which came into vogue at a much earlier date. The latter probably evolved in the context of scenes representing the worship of a divinity and are therefore discussed under the heading of concordant reversals ( $\$ 33 \mathrm{a}$ ). The former are probably related to the confrontation of divinities in late New Kingdom royal names, and to a predilection for emblematic combinations of hieroglyphs that is also characteristic of the later New Kingdom and the Libyan Period. ${ }^{38}$
(3) Vocative reversals constitute so distinct a category that a separate chapter (II) has been devoted to them.

## C. Symmetry

§7. Symmetrical reversals. These, as stated earlier, occur most frequently on portal elements, including doorlike offering niches and their derivatives, but they also occur in other situations that call for a framing band of inscription, particularly offering slabs. Offering slabs of the Old Kingdom generally adhere to the dominant orientation throughout their inscriptions, however, ${ }^{39}$ and it was not until the Eleventh Dynasty that symmetrical reversals became the rule. ${ }^{40}$

[^6]Cem., Pl. II (6) and p. 224 (47), Pl. 55 (2).
40. It may also be applied to any other situation where a space is framed or flanked by inscriptions, but here again the OId Kingdom tended to adhere to the rightward orientation. Compare, for example, the three columns of inscription (all $\rightarrow$ ) on the back of Hetepheres' carrying chair (ReisnerSmith, Hist. Giza Necr. II, Pl. 28) and the three columns of inscription $(\rightarrow \rightarrow \leftarrow)$ on the back of Tutankhamun's folding chair (H. S. Baker, Furniture in the Ancient World [New York 1966], Fig. 92). Similarly the inscriptions that flank the head


Fig. in

Similarly some of the earliest offering niches of the Old Kingdom show the dominant rightward orientation on the decorated jambs of both the right and left sides. ${ }^{4 x}$ The same situation occurs again (probably through negligence) at the very end of the same period. ${ }^{42}$

The earliest evidence for symmetrical reversals is, nonetheless, virtually as old as the introduction of writing, being attested by the round-topped stelae of the Protodynastic kings from Abydos. That of King W3dty, for example, faces left and must have been a companion piece to one that showed the dominant rightward orientation. The same orientation occurs on the surviving stela of Semerkhet and it is probably to be recognized on the intact stela of Queen Mert-Neith, to judge from the Neith emblem (Fig. in); the stelae of King Qa-a face both right and left, thus presumably inward, although neither of the pair remained in its original location. ${ }^{43}$ Inward orientation is a regular feature of Old Kingdom door jambs, as well as the small obelisks (cf. §I4) that sometimes flanked the doorways or false doors of tombs dating to the end of the Fifth Dynasty and Dynasty VI. Architraves (as distinct from a simple band over the door which constitutes part of a framing inscription) were sometimes symmetrical in the Old Kingdom, but more frequently so in later periods, and in such cases the orientation was usually inward, or a combination of inward and outward $(\rightarrow \leftarrow \rightarrow \leftarrow) . .^{44}$

The back-pillars of statues, from the New Kingdom onward, may display two or more columns of inscriptions which are symmetrically oriented inward or outward. And the inscriptions on the backs of a pair of royal statues may similarly be oriented so that both face inward, as in the case of the so-called colossi of Memnon, which originally flanked the entrance of the mortuary temple of Amenophis III (Fig. 12). 45
of Rr-htp (Borchardt, Statuen und Statuetten, CG 3) both face rightward.
4I. W. S. Smith, AJA 46 (1942), 511 ; Egyptian Studies I: Varia, Fig. 1, p. 28. A second example is provided by the wooden false door in J. Garstang, Tombs of the Third Egyptian Dynasty at Reqâqnah and Bêt Khallâf (Westminster 1904), Pl. 29, and a third is to be found in a pair of niche jambs from Mariette's Saqqara mastaba B 4, now in the possession of Dr. Unger of Mexico City (MMJ io [1975], p. 18, Fig. 13). The same arrangement persists in an early Fifth Dynasty example, Berlin 1107 (LD II, Pl. 18).
42. Junker, Giza VI, Figs. 83 (both inner jambs), 85, 97; Hassan, Giza III, Fig. 15. In some cases the jambs of the false door are all $\leftarrow:$ ibid., Fig. 104 and Vol. VII, Fig. 57.
43. As listed in JARCE 2 (1963), 41, their orientation is as follows:

| (2) | Djer | $\rightarrow-$ |
| :--- | :--- | :--- |
| (3) | Wadjty | $-\leftarrow$ |
| (4-5) | Mert-Neith | $-\leftarrow$ |
| (6) | Den | $\rightarrow-$ |
| (7) | Semerkhet | $-\leftarrow$ |


| (8-9) | Qa-a | $\rightarrow$ |
| :--- | :--- | :--- |
| (10) | Ra-neb | $\rightarrow$ |
| (II-12) | Peribsen | $\rightarrow$ |

It will be noted that the last pair reverts to the dominant rightward orientation in both cases, and the same may have been true of the other Second Dynasty example (io). It is possible, however, that Peribsen had two pairs of stelae, of which only the left ones are preserved (Artibus Asiae [Ascona] 24 [196I], p. 55, n. 30).
44. Old Kingdom: outward orientation, Teti Pyr. Cem., Pl. 10 ; inward, Z. Y. Saad, $A S A E 43$ (1943), Pl. 44 on p. 48 I. Middle Kingdom: inward orientation, Beni Hasan I, Pls. 24, 33; Meir III, Pl. 19. Combination of inner and outer in Old Kingdom, Z. Y. Saad, $A S A E 40$ (1941), 686; Middle Kingdom, Simpson, JARCE 2 (1963), Pl. 8; New Kingdom, PetrieQuibell, Naqada and Ballas, P1. 77.
45. The facsimile is taken from Habachi, Festgabe für Dr. Walter Will, ed. Siegfried Lauffer (Köln-Berlin-BonnMünchen 1966), pp. 72-73. For a photograph see Jéquier, Temples I, PI. 72.


Fig. 12

## D. Concordance

§8. The normal situation. Concordant reversals are necessarily as old as writing itself in Egypt, given the complementary relation between the hieroglyphs and larger representations, as outlined in § 2. On the obverse of the Narmer Palette, for example (Fig. 13), the king's name faces right, as does the designation of the attendant who precedes him, while the designation of the boat faces left, along with its cargo of decapitated enemies. ${ }^{46}$ The orientation, based on the direction of thesigns, entails the reversal of the label applied to the leftward figures. The red-figured
46. The drawing is from Quibell, $\ddot{A} Z 36$ ( 1898 ), $81-84$ and PI. 12. A connection between the inscription and the decapitated figures is evident, and the same reversal is applied to the caption of the smitten foe on the verso of the palette. It is curious, however, that the boat is only presented as a hieroglyph, perhaps a determinative. The first words "great door" may refer to a fort (cf. r-rs wr, JNES 19 [1960], 261) or port
(cf. Gauthier, Dict. géog. I, p. 132), while "Horus the Harpooner" (cf. Schott, Hieroglyphen, p. 23) identifies the boat. Neither this nor the inscription at the upper left, which Schott (ibid., pp. 23, 123) explains as d ${ }^{(b)}(t)+$ det. "robing room," are as closely integrated with the larger representations as are the Old Kingdom captions shown in Fig. I above.


Fig. 13
vases of the Greeks likewise apply reversed labels to figures facing leftward, but there the reasoning was quite different. By the time this style of painting was in vogue, the Greeks had adopted the left-to-right direction of writing that subsequently became the norm in all European scripts. Thus the labels of the figures facing leftward were intended to reverse the direction of writing rather than to reverse the direction of the signs; it is true that the orientation of the signs was likewise reversed, but their direction no longer had any meaningful relationship to the figures they accompanied.

As a rule the inscription attached to a given scene will maintain the same orientation throughout the length of a line or column, and throughout any further lines or columns that represent an inseparable continuation. There are a certain number of interesting exceptions, however, and these will be taken up in Chapter III.
§9. Retention of rightward orientation. It also happens that inscriptions belonging to figures facing left occasionally retain rightward orientation. This discrepancy first became common in the Eleventh Dynasty and is doubtless due to the fact that many of the inscriptions of that period are hieratic or semi-cursive. ${ }^{47}$ In general it may be said that the more cursive the signs were, the greater was the resistance to reversing their direction.
§ro. Noncontiguous concordance. The concordant reversal of a scene or inscription may be produced by factors that are located beyond the immediate vicinity of that scene or inscription, and may not even be visible. In some situations the logic of such reversals was only gradually or sporadically pursued to its ultimate limit over a considerable period of time, and each of several categories of situations must therefore be considered individually.
47. E.g. JARCE 1 (1962), Fig. 3 on p. 21 (hieroglyphic); Deir el-Bahari XIth Dyn. III, Pls. 2-3 (hieratic); Fischer, Inscriptions from the Coptite Nome, p. I 19 and Pl. $3^{8}$ (hieroglyphic); Lange-Schäfer, Grab- und Denksteine, CG 20007 (hieroglyphic), 20012 (cursive), 2003I (semi-cursive), 20035,

20605 (hieroglyphic). The first one may be earlier than the Eleventh Dynasty; the last two are later Middle Kingdom. Hieratic examples occurred as early as the Fifth Dynasty: A. M. Moussa and H. Altenmüller, The Tomb of Nefer and Ka-hay (Mainz 1971), Pl. 4.
§II. The fronts and backs of portable objects. Since both sides of such objects are readily compared, one might expect the backs to show concordant reversal much more frequently than is actually the case. Note that more than half of the few examples that follow are protodynastic, although no such reversal is known to have been applied to the verso of the commemorative palettes of that period, such as that of Narmer.
(I) The Pitt-Rivers knife handle, probably to be dated to the very beginning of the First Dynasty, is decorated with rows of animals on both sides (Fig. 14);48 those on the obverse show the dominant rightward orientation, while those on the reverse (with projecting boss) are oriented leftward, so that all face the same direction, towards the blade.
(2) On a similar handle in the Metropolitan Museum, MMA 26.7.1281,49 the orientation is almost identical to the foregoing example, with all the animals on the verso oriented $\leftarrow$ with one exception, at the bottom right.

[^7]

Fig. 14


Fig. 15
(3) Another similar handle in the Brooklyn Museum, Brooklyn og.889.11850 shows all the animals oriented $\leftarrow$ on the verso, so that they again face the blade on both sides.
(4) A less easily categorized example is provided by some ivory handles from Hierakonpolis: three curved pieces, possibly belonging to batons flourished by dancers, as Quibell suggests. ${ }^{51}$ In all cases processions of animals show concordant orientation, so that all face one way in relation to the object itself.
(5) On an ivory comb in the Metropolitan Museum, MMA 30.8.224 (Fig. 15), ${ }^{52}$ rows of animals are arranged in boustrophedon fashion, and each line mirrors the orientation of its counterpart on the side opposite.
(6) A Middle Kingdom headrest from Sedment (Fig. 16) ${ }^{53}$ is exceptional in any case, since headrests, as a rule, are inscribed on the front only, if they bear any inscription at all. $5^{4}$
(7) On the scimitar of Yapi-shemu-abi from Byblos tomb 2,,55 dating somewhat later than the end of the Twelfth Dynasty, the column of hieroglyphs on each side of the blade faces the convex cutting edge.
(8) In the case of a dagger of King Amosis, Cairo CG 52658,56 the reversal of the inscription on the back (Fig. 17) is contrary to the arrangement that is found on knife handles of the same period or later, such as the Hyksos example in the Cairo Museum (CG 52768: ASAE 7 [1906], 118-1 19) or that of Tuthmosis I in the Metropolitan Museum (MMA 22.3.75: Hayes, Scepter II, Fig. 40, p. 76), or the bronze scimitar of Takelot, also in the Metropolitan Museum (MMA 60.16). All of these show the dominant rightward orientation on both sides.
(9) Scimitar handle of Sethos I, Brooklyn 49.167.57 The inscription, containing the name of

[^8][^9]


Fig. 18
this king and a few epithets, is presented in a horizontal line along the center of the handle; the right side shows the normal rightward orientation, while the left side is reversed so that the hieroglyphs face the blade in both cases, as in example 7 above.
( 10 ) A casket of Tutankhamun might be considered here, but its orientation is so clearly related to that of temples that it will, instead, be discussed in §i9 (2).
§12. Fronts and backs of stelae. Stelae, and similar isolated monuments, sometimes show a reversal of the normal orientation on the front or, if both sides are inscribed, on the back. In the majority of cases the original situation of the stelae has not been recorded with any precision; but, to judge from the instances where this information is available, it is evident that reversals on


Fig. 19
the front were often caused by the proximity of a cult center, towards which they were oriented.
(I) A reversal of the expected orientation occurs on both the outer and inner architraves that were placed above the temenos entrance of the temple of Pepy I at Bubastis (Fig. 18). ${ }^{58}$ This structure, identified as a $h w t-k z$ on the inner architrave, was subsidiary to the main temple, and the main temple must have been located to the right of this entrance, as were the later structures that replaced it (Fig. 19). ${ }^{59}$ On the outer architrave the local goddess Bastet therefore faces leftward, contrary to the dominant orientation that would ordinarily be applied to the principal personage in an independent scene. The king correspondingly faces right, in accordance with the location of his kahouse, which is situated to the left, and, again correspondingly, a leftward orientation is applied to the inner architrave, which displays the name of Pepy and his modest sanctuary. ${ }^{60}$
(2) The Sixth Dynasty architrave on the facade of 'Idw's rock-cut chapel, Giza tomb 7102 (Fig. 54 below) shows a reversal of the usual orientation, presumably because the offering place and burial are located to the right (Fig. 20), ${ }^{61}$ rather than to the left. More usually, in Memphite chapels, the entrance is located at the north end of the facade; cf. Fig. 42. The rightward location of this offering place was particularly evident because the court, which gave access to the tomb, was reached by a downward flight of steps directly opposite the left end of the architrave.


Fig. 20

[^10][^11]

Back


Back

Fig. 21


Front


Front


Fig. 23
(3) The Twelfth Dynasty stela of Mntw-htp, Cairo CG 20539, comes from the area to the left (west) of the Osiris temple enclosure at Abydos, and the orientation of the front and back is so arranged that the figure of Osiris, at the top of the stela, faces away from the temple, while the main texts address the temple, as seen in Fig. $21 .{ }^{62}$ It should also be noted that the texts on the right and left edge both face front. The date is the reign of Sesostris I.
(4) The rather similar but later stela of $S h t p-i b-R c(C G 20538)$ dating to the reign of Amenemhet III, and deriving from the same general area, was presumably located in the same manner. The main text shows the rightward orientation on both sides, unlike CG 20539, but the figure of Osiris similarly faces $\leftarrow$ on the front and $\rightarrow$ on the back, i.e. from the direction of the adjacent temple (Fig. 22). ${ }^{63}$
(5) The shrine of Tuthmosis III at Deir el Bahri, which contained the well-known statue of the Hathor cow, was situated to the left of his mortuary temple. Like the temple of Hatshepsut

[^12]


Fig. 24


Fig. 25
which lay beyond it, this was regarded as a sanctuary of Amun. The scene on the rear wall accordingly shows Amun on the right, facing leftward (Fig. 23). ${ }^{64}$
(6) Among the Ramesside stelae that honor "Ptah of the Valley of Queens," near Deir el Medina, at least three show symmetrical orientation, but three others are oriented so that the worshiper represented upon them is turned rightward, towards the Valley of the Queens. 65
(7) One of the clearest examples from Serabit el Khadem is stela 247 of Sethos I (Fig. 24), which was located southwest of the temple, its right edge facing the sanctuary. The east side (recto) shows Sethos $(\rightarrow)$ addressing Hathor, who is on the north ( $\leftarrow)$, while the west side shows him $(\leftarrow)$ before Horakhty, who is again on the north. In both cases the main text is aligned as the king is. 66

[^13]PI. I), on the right side.
65. B. Bruyère, Mert Seger à Deir el Médineh (MIFAO 58 ; Cairo 1930), Pl. 2: one stela at the point marked C, and two at E. The stelae at A, B, D, and possibly F, show a symmetrical inward orientation.
66. Gardiner-Peet-Cerný, Sinai, Pl. 68 (no. 247) and map on P1. 91. The text and captions more schematically refer to "south" instead of "east" and "north" instead of "west." Actually the verso is east-southeast.

b


Fig. 26 fering niches of Old Kingdom tombs, dating to the end of the Fifth Dynasty and later, are usually inscribed on the front only, and these inscriptions face inward. ${ }^{70}$ In a few cases, however, two or four sides are inscribed and they show the arrangement shown in Fig. 26a and b. ${ }^{71}$ As

## 67. BM 589: Hieroglyphic Texts IX, Pl. 31 .

68. Middle Kingdom: P. Miller, JEA 23 (1937), 1 ff.; Engelbach, Harageh, Pl. 72 (3); Boeser, Beschr. aeg. Sammlg. II, Pls. 24 (34), 25 (35). New Kingdom: Zayed, RdE 16 (1964), Pls. 7-8. But the Middle Kingdom stela Louvre C 85 shows reversed orientation on the back ( $M M J_{5}$ [1972], Fig. 27, p. 20); on the front the standing figure of the owner faces $\rightarrow$ as usual; so too the stela shown in Petrie, Koptos, Pl. II ([5] verso, University College London 14322; [6] recto, University College London 14323 ). The date of the latter is not Eleventh Dynasty, as Petrie says (and Arkell, JEA $4^{8}$ [1962], 158 ), but is no earlier than Dyn. XII, as shown by the epithet whm $r n h$, and may even be later.
69. The earlier usage is not apparent from the many Eighteenth Dynasty royal stelae which show a symmetrical arrangement at the top, but this usage is illustrated by Cairo CG 34016 and Gardiner-Peet-Černý, Sinai, Pl. 64 (198) (both Tuthmosis III), as compared with the later arrangement, ibid., Pl. 68 (244, 247) (Ramesses I, Sethos I). The example illustrated is from W. M. F. Petrie, Qumeh (London 1909), Pl. 45, (Siptah), with corrections from Caminos in Ägyptologische Studien, ed. O. Firchow, (Deutsche Akademie der Wissenschaften zu Berlin. Institut für Orientforschung, Nr. 29; Berlin 1955), p. 19; translation ibid., p. 27.
70. Two obelisks of a man named 'Ihy both show the dominant orientation ( $\rightarrow$ ): Berlin 1146 (LD II, PI. 88b) and $B M F A 20$ (1922), 27. The more usual inward orientation of pairs is well illustrated (in situ) by Jéquier, Pyrs. des reines, Fig. 1, p. 4 and Fig. 24, p. 43.
71. (a) is exemplified by Cairo CG 17001, 17002 and BM 495; (b), which is evidently related, is exemplified by


Fig. 27

Cairo CG 17010 and Petrie, Dendereh, Pls. 6 and 13 (cf. Fischer, Dendera, p. 102). BM 495 is unpublished, evidently from Heliopolis, as are all the others except the one from Dendera. Those from other places are usually inscribed on the front only.

Engelbach has pointed out, the arrangement shown in Fig. 26c became usual in the Middle Kingdom and later, as first attested by the obelisk of Sesostris I at Heliopolis. ${ }^{72}$
§15. Sides of statues. Inscriptions on the sides of the block on which statues are seated show, as a rule, the same orientation as the statue between them, facing front, so that those on the proper left are turned leftward. The first evidence for this arrangement is the statue of Mtn, dating to the first reign of the Fourth Dynasty, that of Sneferu (Fig. 27). ${ }^{73}$ Statues of earlier date are seated on well-defined stools rather than blocks of stone, and the inscriptions are located elsewhere, on the base, lap or shoulder. ${ }^{74}$

A somewhat unusual case is presented by a Twelfth Dynasty statue from Bersha ${ }^{75}$ which shows the following arrangement on the sides of the seat (Fig. 28):


Fig. 28
The offering formula begins on the proper right ( $\rightarrow$ ) and continues on the left. But the first column on the left side also continues the same rightward orientation, and the concordant reversal of the signs is applied only to columns 5 and 6 , where the deceased recipient of the offerings is identified.

Exceptions to the normal frontward orientation can be cited from various periods, the dominant rightward orientation being applied to both sides in such cases. ${ }^{76}$ Although the inadequacy of the available publications precludes a very comprehensive tabulation, it is my impression that exceptions of this kind were somewhat more frequent in the Old Kingdom than they were thereafter; in other words, the frontward orientation gradually prevailed with greater consistency.

The rightward orientation could also, on occasion, be applied to the proper left side for a very specific reason, of the kind that has been so frequently demonstrated in §ı2. On a Twenty-
72. Engelbach, $A S A E 29$ (1929), 25-30.
73. Berlin 1106 . The orientation is shown incorrectly in Aeg. Inschr. I, p. 68, correctly in LD II, PI. 120 (c-e).
74. R. Weill, Les Origines de l'Égypte pharaonique I: La IIe et la IIIe Dynasties (Annales du Musée Guimet, Biblio. d'Études 25; Paris 1908), pp. 144-145 (Cairo CG 1); 181 (Leiden 19
[D 93]); $\mathbf{1 8 2}$ (Louvre A 39); 185 (Leiden 18 [D 94]); 256 (BM 70); 271 (Berlin 14277).
75. Cairo J 35145: ASAE 3 (1902), p. 95 and plate.
76. Old Kingdom: MMA 37.2.2 (AJA 66 [1962], p. 67 and Pl. 18 [3]); Cairo J 37713 (Bulletin of The Detroit Institute of Arts 5 [ [1972], p. 72, Fig. 3) ; Reisner, Hist. Giza Necr. I,
second Dynasty statue (Fig. 29), ${ }^{77}$ which had been placed in the precincts of the temple of Karnak, this side shows the kneeling figure of the owner facing rearward ( $\rightarrow$ ) along with a hymn (b) that he addresses to a representation of Khonsu ( $\leftarrow)$. The orientation of this text reverses

Pls. 67 (c), 7 I (e); Hassan Giza V, Pls. 53 (A), 55; VI, Pt. 3, Pl. 19; X, Pl. 9 (c). Middle Kingdom: Garstang, El Arábah, Pls. 3, 15 (E 45); Brussels E 2146 (Gardiner-Peet-Černý, Sinai, Pl. 19 [67]); Cairo J 5 I 170 (Jéquier, Mon. fun. Pepi II,

III, p. 31 and Pl. 50 [4]). New Kingdom: Berlin 19286 (Aeg. Inschr. II, p. 26); Dublin L 1853.
77. Cairo CG 4221 I . The drawing has been made from the photograph in Legrain, Statues et statuettes III, Pl. 20.


Fig. 29
that of the line above it (a), which gives the owner's titles and name and which corresponds to the orientation of the statue itself. Below the address to Khonsu is a second statement (c), this one addressed to priests visiting the temple and accordingly facing front again $(\leftarrow)$. For the varying orientation of these two statements clearly indicates that the statue was directed outward from the temple, in relation to the temple's sanctuary or the longitudinal axis; it may well have been placed on the left side of a doorway. On another block statue of the same dynasty (Cairo $J 375^{22}$ ) the owner is similarly represented facing rearward on both sides; on the proper left side he makes an offering $(\rightarrow)$ to Amun, while on the right he offers ( $\leftarrow$ ) to Mut and Khonsu; and on the front he again offers $(\leftarrow)$ to Amun..$^{78}$ The same explanation is to be applied to a seated statue of the Eighteenth Dynasty, Cairo CG 624; although the owner is not represented on the sides of the seat, the texts contain invocations to the gods, each introduced by $4 \mathcal{S}$, and they again face rearwards on both sides. It is more difficult to explain why the rearward orientation appears on both sides of a seated Middle Kingdom statue, Cairo CG 390, for the texts contain only the owner's name, titles and epithets, but here again the orientation may reflect its location in a temple.
§16. Backs of statues. Inscriptions occasionally appear on the backs of statues in the Old Kingdom, ${ }^{79}$ and they occupy this location with increasing frequency thereafter; in all such cases, prior to the New Kingdom, they usually show the normal rightward orientation. The alabaster statuette of Pepy I (Fig. 30) is therefore highly exceptional. ${ }^{80}$ Possibly this was the left-hand member of a symmetrical pair (cf. § 7), but it is far more likely that the explanation for the re-


Fig. 30 versal of the Horus name is to be seen in the three-dimensional nature of the first hieroglyph, the falcon, since this is visible from the front, where it displays the normal dominant orientation,
78. The same orientation is displayed on the sides of another block statue of the same period (P. Barguet and J. Leclant, Karnak-Nord IV [Cairo 1954], pp. 145-150 and Figs. 140-143); also a block statue that may be later: Brooklyn 51.15 (The Brooklyn Museum, Five Years of Collecting Egyptian Art 1951-1956 [Brooklyn 1956], no. 12, pp. 12-13 and Pls. 26-27).
79. E.g. Cairo CG 130 $^{\circ}$ (B. Hornemann, Types of Ancient Egyptian Statuary I [Munksgaard [1951]], no. 123, mistakenly shows the inscription $\leftarrow$; cf. Borchardt, Statuen und Statuetten I, p. 98); Cairo CG 172 (same person); Junker, Giza II, Fig. 34,
p. 189 and Pl. 14; VII, Fig. 64, p. 153 ; Hassan, Giza V, Pl. 54 ; VI, Pt. 3, Pl. 97. In some cases Old Kingdom statues are inscribed on the sides and back: Cairo CG 17 (Chephren); G. A. Reisner, Mycerinus (Cambridge, Mass., 1931), Pl. 47 b; Berlin ino6 (Mtr ).
80. Brooklyn 39.120; J. Cooney, Egyptian Art in The Brooklyn Museum Collection (1952), no. 21; C. Aldred, Old Kingdom Art in Ancient Egyt (London 1949), Pls. 62-63; Smith, Art and Architecture, p. 80 and Pl. 55; B. Hornemann, op. cit. III, no. 767 .
facing rightward. ${ }^{81}$ Precisely the same situation is exemplified by a headless diorite statue of Chephren (Fig. 31), the back-pillar of which shows traces of a falcon with folded wings, facing left, with a correspondingly reversed serekh below it. ${ }^{82}$

It is only in the Nineteenth Dynasty that the reversal of inscriptions on back-pillars became at all common on isolated statues. ${ }^{83}$ Some of these belong to the well-known series of wooden statuettes and stone statues which bear a staff in the left hand, representing a divinity, and in such cases the inscription on the staff is oriented towards the man who holds it (Fig. 32). ${ }^{84}$ The staff is necessarily in the left hand in accordance with the pattern of hieroglyphic of (cf. §4), but,


Fig. $3^{1}$
81. Daumas, BIFAO 52 (1953), $164^{-165}$, believes that a falcon in the round was similarly placed at the top of the back-pillar of another seated statue of Pepy I, found at as is pointed out in §I7, it was apparently permissible in any case to assign the representation of a god to the secondary position ( $\leftarrow$ ) if that representation was only an appurtenance of lesser size and importance than the statue to which it belongs. Since the emblematic top of the staff is visible at the back, a similar confrontation between the god $(\rightarrow)$ and the holder ( $\leftarrow$ ) might explain the reversal on the back-pillar-much as in the case of the statuette of Pepy I. But the reversal is not found on

Dendera. But only the lower part is preserved, and the signs show the normal orientation ( $\rightarrow$ ). The composition of the two inscriptions is also different, as is the material (limestone in this case, alabaster in the case of the Brooklyn statue), and the scale of the Dendera statue is much larger. It is therefore certain, in any case, that they were not companion pieces.
82. Cairo CG 9; Borchardt, Statuen und Statuetten I, pp. 9-10. A fragmentary standing statue of the same king (GG 16) has a more complete titulary on the back-pillar, with the signs oriented $\rightarrow$ as usual.
83. An earlier example is to be found on the back-pillar of a statuette of Queen Tiye in the West Park Museum at Macclesfield, England, but the orientation is normal. ( $\rightarrow$ ) on the back-pillar of a statuette of her husband, Amenophis III (MMA 30.8.74: Hayes, Scepter II, Fig. 142, p. 2:37). It may also be noted in this connection that the scribal statue of Horemhab, MMA 23.10.1 (Winlock, JEA io [1924], 1), shows the scribal kit as 相 on the front, 関 on the back.
84. Wooden statuettes: MMA 65.114 (complete text given in Appendix), h. 48 cm .; Turin 3046, 3050 (data provided by Dr. Curto) ; Leiden D 19, 43 (Boeser, Besihr. aeg. Sammlg. XII, Pls. 5, 6). Stone: BM 687 (Hieroglyphic Texts, IX, Pl. 10; cf. Deir el-Bahari XIth Dyn. III, Pl. X [C] as well as a second statue of the same man in Philadelphia [B]); Berlin 10835 (Naville, Bubastis, Pl. 2 [A]; Aeg. Inschr. II., p. 12, Ramesses II); Cairo J 67841, a small limestone statue of Ramesses II.


Fig. 32



Fig. 33
all back-pillars of the series in question, ${ }^{85}$ and it occurs on the back-pillars of some Nineteenth Dynasty statues that lack the emblematic staff. ${ }^{86}$ Perhaps, then, the concordance of orientation on the front and back is in itself sufficiently logical that no further explanation is required, particularly since this sort of logic was emphasized in other ways during the Ramesside Period (§§ Ir [9], $12[6]$, I3).

Similar reversals appear on the back-pillars of later statuettes, although with less frequency. ${ }^{87}$ In the Ptolemaic Period a reversal of the inscription was sometimes linked with a scene, at the top of the back-pillar, in which a divinity $(\rightarrow)$ is addressed by the owner of the statue $(\leftarrow)$, as
85. Wooden examples with normal orientation $(\rightarrow)$ : Turin 3047, 3048; Brooklyn 47.120.2; with symmetrical orientation $(\rightarrow \leftarrow)$ : Berlin 6909 (Aeg. Inschr. II, pp. 76-77); a similar example in stone: Steindorff, Cat. of Eg. Sculp. in the Walters Art Gallery, no. 107. Cairo CG 42194 also shows normal orientation.
86. Petrie, Abydos I, Pl. 65 (9, 10); BM 2376 (Hall, JEA $I_{5}$ [1929], 238 and Pl. 41). In other cases, involving large-scale
royal statues, the inscription facing left may have been balanced by one on a companion statue, facing right: BM 67 (Hieroglyphic Texts IX, Pl. 5 [2]) ; W. M. F. Petrie and J. G. Duncan, Hyksos and Israelite Cities (London 1906), Pls. 16 (right) and 32 (top right); $A S A E 60$ (1968), 258 and Pl. 53.
87. Cairo CG 559 (Dyn. XXII, temp. Osorkon I), Cairo CG 42219 (also Dyn. XXII).


Fig. 34


Fig. 35
shown in Fig. $33 ;^{88}$ in this particular case the name and epithets of the god who is addressed are subject to concordant reversal in the lower part of the first column.
§17. Pendants and pectorals. A naoform steatite pendant of the Middle Kingdom, bearing the name of Amenemhet III (Fig. 34) ${ }^{89}$ seems to provide earlier evidence for the logic of orientation on the front of Nineteenth Dynasty statues, where: the text on the kilt referring to the owner ( $\rightarrow$ ) is confronted by the text on the stave carried in the left hand, referring to a divinity ( $\leftarrow)$. The front of the pendant shows the king ( $\rightarrow$ ) receiving life and other benefactions from the god Sobek ( $\leftarrow$ ). On each side the king faces forward, harpooning a hippopotamus. Unlike the Nineteenth Dynasty statues, the inscription on the back-a single cartouche-is not reversed, and the inscriptions on the top face the wearer, as though it were intended that he should read them, ${ }^{90}$ or perhaps in order to oppose the name of the king to the three-dimensional figure of a crocodile that stands between them.

A certain number of later pendants and pectorals also show divinities facing leftward (Fig. 35) ${ }^{9 r}$-again, perhaps, with the intention of making them address the wearer. That is certainly so when the owner's name shows the usual rightward orientation, as in the case of Fig. 36, a pectoral of Ramesses II. ${ }^{22}$ But in some cases such pendants may have been combined with others that were oriented in the opposite direction, so as to produce a balanced group. Pectorals represented on statues of the Late Period almost always show the usual rightward orientation. ${ }^{93}$
88. Cairo CG 697, drawn from the photograph shown in E.L.B. Terrace and H. G. Fischer, Treasures of Egyptian Art from the Cairo Museum (London 1970), p. 178; the text is discussed by Robert Bianchi in his forthcoming dissertation The Draped Striding Male Figure of Ptolemaic Egypt. Cleveland $481 \mathbf{4}^{1}$ (Ranke, JAOS 73 [1953], 193 ff.). Leiden D 6I (C. Leemans, Monuments égoptiens II [Leiden 1842], Pl. 15). Not, however, Lausanne Eg. 7 (Wild, BIFAO 54 [1954], 173 ff. and Pl. 2). 89. Redrawn from Shafik Farid's figure in "Preliminary Report on the Excavations of the Antiquities Department at Tell Basta (Season 1961)," $A S A E 58$ (1964), 97 . The measurements are $2.8 \times 2.1 \times 22 \mathrm{~cm}$.
90. Cf. the similar inversion of texts on the base of a Middle Kingdom dyad, Boston MFA 05.89a (MMJ 9 [1974], 18-21 and n. 70).
91. MMA 65 . 194 , height 3.8 cm .; cf. a similar piece in C. R. Williams, Gold and Silver Jewelry and Related Objects (N. Y. Historical Society; N. Y. 1924), Pl. 28 (I25 a-b) and another (BM 60346) in Egyptian Mythology (Paul Hamlyn:

London 1965), p. 47. Other examples of reversed divinities are Boston MFA 68.836 (Aldred, Jewels, PI, 128), Louvre E 79 (ibid., Pl. 145) and Garstang, El Arábah, Pl. 22. A number of examples are to be found among the pendants of Tutankhamun, as well as others oriented rightward; for the lefiward orientation see M. Vilimková, Egyptian Jewellery (LondonN. Y.-Sydney-Toronto 1969), Pls. 32 (Aldred, Jewels, Pl. 103), 34-35, 36 (ibid., Pl. 106), 43 (ibid., Pl. 97), 45, 4:6, 50 (ibid., Pl. 104), 51 (ibid., Pl. 96) and ibid., Pls. 92, 108. The pendants correspondingly show the king $\rightarrow$ with divinities flanking or facing him $\leftarrow$ (ibid., Pls. 100, 106).
92. Drawn from É. Vernier, La Bijouterie et la jocillerie égyptiennes (MIFAO 2 ; Cairo 1907), Pl. 7 (1). Cf. also PM III, p. 206; Towry Whyte, Proceedings of the Society of Biblical Archaeology (London) 15 (1893), Pl. 1 foll. p. 408; Aldred, Jewels, Pl. 145 . Although this may have belonged to the burial equipment of the crown prince Khaemweset, it was undoubtedly made for the king himself.
93. There is no evidence for the late New Kingdom, The


Fig. 36

A similar question is raised by the leftward orientation of the inscription on a dog's collar (CG 24075) dating to the Eighteenth Dynasty. Evidently the inscription, consisting of two columns ( $\leftarrow)$, is located at the front of the collar, for the hunting scenes on each side advance towards it, with the victims oriented, for the most part, in the same direction as the animals that
rightward orientation is shown by all the examples of 书pendants illustrated by Grdseloff, $A S A E 40$ (1940), 187 ff ., Pls. 29-31; also Cairo CG 689, 700, Berlin 21596 ( $\ddot{A} Z 56$ [1920], 67), Louvre A 83. All of these are later than the New Kingdom as are other statues which show pendants repre-
senting divinities: e.g. G. Roeder, Ägyptische Bronzefiguren (Mitteil. Ägypt. Sammlg. [Berlin] 6, Text and Plates; Berlin 1956), Pl. 45. The only example known to me that shows a divinity facing $\leftarrow$ similarly belongs to the Late Period: Cairo CG 688 (a crocodile with ram's head).
pursue them. Probably the pursuing animals are dogs rather than lions or the like, ${ }^{94}$ but in any case they must have been intended to run in the same direction as the dog for whom the collar was made. Thus one cannot resort to the logic of $\S 16$, which, in any case, would hardly be applicable unless there were an inscription not only on the back $(\leftarrow)$ but on the front $(\rightarrow)$ as well. Assuming that the inscription was indeed located on the front, the only clue that I can find to explain its reversal is the fact that it alludes to the dog's owner: "the dog of his house, $T_{3-n t-n i w t . " ~ T h e ~ u s e ~ o f ~ a ~ p r o n o u n ~ i m p l i e s ~ t h e ~ o w n e r ' s ~ p r e s e n c e, ~ o n ~ t h e ~}^{\text {a }}$ animal's right, and the reversal may reflect that presence. An earlier example of this kind is discussed in §26 below.
§r8. Coffins and sarcophagi. Coffins and sarcophagi of the Old Kingdom frequently bear only a single band of inscription on the front. If all four sides are inscribed, as well as the lid, the orientation shows one of three basic patterns, as set forth in Fig. 37. The dominant rightward orientation may prevail throughout (a),95 or it may be retained on the head and foot ends, while the back alone is affected by concordant reversal (b), ${ }^{96}$ or (c) it may show a reversal on the head end as well as the back. ${ }^{97}$ In a very general way the development is in the direction of complete concordance, which was the rule in the Middle Kingdom. ${ }^{98}$ But at least two examples of complete concordance can be dated well within the Fourth Dynasty. Except for the secondary reversal of a column of inscription at the left end of the front, which was introduced to produce a symmetrical balance (Fig. 38), the sarcophagus of Queen Mr.śs $n h$ II, a daughter of Cheops, conforms completely to this pattern. ${ }^{99}$ And it is exemplified even more completely by the sarcophagus of $M n w-h r . f$, a son of Cheops who survived into the reign of Chephren. ${ }^{100}$ A sampling of the remaining Old Kingdom evidence is presented in Fig. 39, and it will be seen that several of these conform to Fig. 37c (which shows complete concordance) more closely than to the other two types. ${ }^{\text {III }}$
94. Daressy describes these as "des lions ou des panthères" (Fouilles de la Vallée des Rois, p. 34); H. Kantor refers to "a lion" and "another carnivore" (AJA 51 [1947], 69). Cf. Daressy's Pl. II and Kantor's Pl. 21 (A, B), which is copied from Daressy. For the date see W. S. Smith, Ancient Egypt as represented in the Museum of Fine Arts, Boston (4th ed. rev., 1960), p. 124: the owner, $M 3-h r-p r i$, was a contemporary of Amenophis II.
95. Notably the sarcophagi of Queen $M r . s-r n h$ III (Cairo J 54935: Dunham-Simpson, Mastaba of Queen Mersyankh III, Fig. 14) and Prince $H r-b 3 . f$ (Cairo CG 1 788), both dating to the Fourth Dynasty. Later examples: ASAE 13 (1914), 167, 172, 176, 177; 15 (1915), 251-256; also probably Hassan, Giza VII, pp. 103-104 (orientation of back unrecorded).
96. Prince $K_{3}(. i)$ - $m$-shm (Cairo CG 1789 ); also Junker, Giza VIII, Figs. 74, 75, pp. 152-153; ASAE 1 (1900), 160; 16 (1916), 195 ff. and 208-209; Mereruka, Pl. 210 (and Teti Pyr. Cem., Pl. 60) ; Boston MFA 13.3085 (but inside of foot end is $\rightarrow$ ).
97. Junker, Giza VIII, Figs. 41-44, pp. 99-102, and Figs. 69-71, pp. 144-147; ASAE 12 (1912), 108; Queen ${ }^{\text {rnh-n. } f-P p y ~}$
(Cairo J 65908); Petrie, Deshasheh, Pls. 28-29. Possibly also Hassan, Giza VII, Figs. 98-100, pp. 103-104 (the orientation of the inscription on the back is not specified).
98. Lacau, Sarcophages, p. iii, and $A S A E 26$ (1926), 70-71 and n. 3 (referring to an earlier observation by Lepsius, $A Z_{2}$ [1864], 85); É. Chassinat and C. Palanque, Une Campagne de fouilles dans la nécropole d'Assiout (MIFAO 24; Cairo 1911), p. 7.
99. Boston MFA 27.441 (Dunham, BMFA 25 [1927], 96-97). For the relationship to Cheops see Reisner-Smith, Hist. Giza Necr. II, pp. 7-8.
 All four sides are concordant; the lid is uninscribed.
101. (a) Cairo J 48078 (the inscriptions at the head and foot are on the edge of the lid). (b) James-Apted, Khentika, Pl. 39. (c) Teti Pyr. Cem., p. 104 and Pl. 58 (5-6). (d) Ibid., p. Ioi and Pl. 58 (ı-3). (e) Cairo J 6668ı (Hassan, Giza I, Pls. 63-64). (f) Cairo CG 1790 (cf. Musée Ég》ptien I, Pl 21). (g) Junker, Giza VIII, Figs. 66-67, pp. 141-142 (with foot end abnormally reversed).


Fig. $3^{8}$


Fig. 40

The burial chambers of the Fifth and Sixth Dynasty pyramids (Fig. 40) show an increasing degree of conformity to the same arrangement, as compared with the earliest of the inscribed chambers, that of Unis (W), which addresses the spells on the north and south walls towards the deceased, but is not otherwise influenced by the orientation of the sarcophagus. That of Pepy II (N), conversely, shows complete conformity, while those of his three predecessors show a concordant reversal of direction on the east wall. ${ }^{102}$

The reason for the complete concordance of orientation on all four sides of the coffin is imposed by their relation to the body that they enclosed. This connection becomes evident if one compares the normal orientation of the hieroglyph representing a recumbent individual; the form $\rightarrow$ is appropriate to the rightward inscription that appears on the front of the coffin, while $\models(\leftarrow)$ is appropriate to the inscription on the other side, so that the head is front in both cases ${ }^{103}$ Fig. 4 shows an elaborate example of this hieroglyph on the back of an Eleventh Dynasty sarcophagus. ${ }^{104}$

More specifically, the direction of the inscriptions on all four sides is imposed by their relation to that point, to the left (east) of the head, from which the deceased person received the funerary benefits performed before the false door, in the offering chapel aboveground. In the Sixth Dynasty this point of access began to be indicated by a smaller reproduction of the false door behind


Fig. $4^{1}$
the front of the coffin, and a pair of eyes on the exterior. ${ }^{105}$ The logic of this orientation was further emphasized a little later, when the outstretched body, formerly supine, was turned on its left side. ${ }^{106}$

The eyes and false door were retained on many anthropoid coffins and sarcophagi of the New Kingdom, as was-for the most part-the orientation of the inscriptions. A departure from the original logic of the orientation is to be seen, however, in the disposition of a series of gods on either side; these face the same direction (headward) as the hieroglyphs identifying the deceased occupant. ${ }^{107}$ On late Middle Kingdom coffins the divinities are not depicted, but their utterances are frequently introduced in columns of inscription, and in such cases the columns on the front are oriented towards each other, as though the divinities were gathering about the occupant (Frontispiece). ${ }^{108}$ On the back of the coffin the orientation of the columns is more or less the same or is uniformly $\leftarrow$ (headward). ${ }^{109}$ When representations of the gods began to be introduced they almost necessarily had to be turned uniformly towards the head end, for the figures would otherwise seem to be walking away, in contradiction to their utterances, which invariably proclaim that they "have come" to assist the deceased.

Fig. 42 illustrates these relationships and the parallel orientation of an Old Kingdom chapel (exemplified here by the simple L-shaped form that continued to be used in provincial mastabas at Dendera and elsewhere). If, in addition, it is noted that the body itself constituted the determinative of the texts on the coffin that encompassed it, one begins to appreciate the logic with which this study is concerned. ${ }^{110}$

The implications of that logic may be carried even further. It may well explain why, during the Old Kingdom, the first person singular suffix pronoun and dependent pronoun were not

[^14]front ( $\rightarrow$ ) and back ( $\leftarrow$ ):


1 1 0 . To the best of my knowledge, Battiscombe Gunn was the first to point out that "the omission, on a sarcophagus, of a determinative in the name of the occupant is not necessarily a superstitious suppression, but is more probably an example of complemented writing, the corpse replacing the determinative." His contention is borne out by earlier Old Kingdom sarcophagi which antedate such suppressions. The following Fourth Dynasty examples show human figures in the inscriptions, but omit the name-determinative: Cairo J $488{ }_{52}$ (W. S. Smith, JEA 19 [1933], 150-159); Cairo CG 1787 , 1790; and the name-determinative is similarly omitted on several other sarcophagi of the same date: Cairo CG 1788 ,
written 蛋 and 覴，as they were subsequently，but omitted the seated figure．${ }^{110 a}$ The sign 造， in these cases may be considered as a redundant determinative，which was formerly supplied by the speaker，just as the corpse supplied the determinative of the name on its coffin．
${ }_{17}{ }^{8} 99$ ，MMA 54.80 （N．E．Scott，$B M M A$ I5［1956］， 80 ［5］）； MFA 27．441（Dunham，BMFA 25 ［1927］，97）．There are， however，some exceptions，where the determinative is used： Cairo J 6668ı（Hassan，Giza I，Pl． 63 ［but not 64］）；J 54935 （Dunham－Simpson，Mastaba of Queen Mersyankh III，Fig．14， where it seems to have been erased）；Hassan，$A S A E 38$（1938）， 505，Fig．72．These cases are analogous to the occasional use of a redundant name－determinative on Old Kingdom statues （cf．note 8 above）．Lacau，$A S A E 26$（1926），70－71，n．3，offers a less satisfactory explanation for the relationship between the position of the body and the orientation of the texts on the coffin；he says this is＇l＇orientation la plus commode pour permettre au mort la lecture des formules．＂The texts would have been read with equal facility if all the signs faced right－ ward．
ı Ioa．For details of the earliest uses see Schenkel，Frühm． Studien §r3．He observes that religious texts use 4 发 for the suffix pronoun（King Ibi of Dyn．VIII onward），adding the determinative 盡 to the phonetic writing $\backslash$ which appears
in the Pyr．Texts，whereas non－religious texts，which for－ merly showed no writing，eventually used 色 alone．

The use of 负 in writings of the first personsingular pronouns seems to have come somewhat later into the scenes of daily life than it did in independent inscriptions．Thus Meir I，PI．I I， shows $\stackrel{n}{m} \neq \frac{1}{4}$＂I am placing him on his side for thee＂； and so too，evidently，Meir II，Pl．4，as compared with Meir III，Pl．23，where we find $4-\overbrace{\mu} \rightarrow$ putting a bird to cook for thee．＂The first two examples belong to the reign of Amenemhet I and Sesostris I，and the third to the reign of Amenemhet II．In N．de G．Davies，The Tomb of Antefoker（London 1920）（reign of Sesostris I）the phonetic $f$ is used instead of 逆 ：e．g．，in Pl．II：$\Delta \overbrace{4}^{\text {mm }}$
 me some srmt－I＇m hungry．＂The suffix is not necessarily written even in New Kingdom captions，as in the case of背 （Deir el Bahari IV，Pl．107）．


Fig． $4^{2}$
§19. Temples. Just as the coffin, burial chamber and tomb chapel are oriented in relation to the deceased occupant, so the temple scenes and inscriptions are related to the divine occupant of the $h w t-$ ntr "house of the god."
(1) Orientation of king and god. The most essential difference in the decoration of the temple, as compared with a nonroyal tomb, is the constantly reiterated role that the officiant, in the person of the king, plays in relation to the divine recipient of offerings. The relative orientation of this pair is totally predictable on the lateral surfaces (side walls) of the temple, on all of which the god faces out, away from his sanctuary at the rear, while the king faces inward. ${ }^{111}$ In general the exterior of each transverse surface (such as the facades of pylons) similarly shows the god directed outward, away from the longitudinal axis, and the king inward. In the surviving temples of the New Kingdom, however, as evidenced by those of Amenophis III and his successors at Luxor, Karnak and elsewhere, the orientation is usually reversed on the interior of each axial gateway. Thus, on the front of a pylon, the king approaches the entrance; once inside, he seems to make a circuit of the courts and halls. The exceptions to this rule, such as they are, are almost always explained by the context of the scene (as described below, under the heading "king and adversary") or by the presence of a secondary entrance.

This point is clearly illustrated by Fig. $43,{ }^{112}$ which shows the orientation of the king's figure on the walls of a relatively simple structure, and one that is exceptionally well preserved-the temple of Ramesses III at Karnak that abuts on the First Court of the Great Temple of Amun. Here the inscriptions on the sides of the Osiride statues are oriented frontward (towards the axis), as usual. In the Second Court of the same ruler's temple at Medinet Habu, where the Osiride statues are ranged along the front and back, the inscriptions of these statues echo the inward and outward orientation of the king on the adjacent walls (Fig. 44), although some of the scenes behind them (a-c) reverse this orientation. ${ }^{113}$ In the great temple of Abu Simbel the two lateral rows of Osiride statues, representing Ramesses II, are backed by pillars each of which shows the king facing outward towards the adjacent wall, while the god faces inward (Fig. 45). ${ }^{\text {II4 }}$ And in the hypostyle hall of a small temple built by Ramesses II at Mit Rahina the same arrangement is shown on the front and back of each pillar (Fig. 46). ${ }^{115}$

Earlier evidence for the same scheme is supplied by the southern temple of Buhen, built by Hatshepsut and Tuthmosis III (Fig. 47). ${ }^{116}$ Outward orientation would hardly be expected on

[^15]captives; (e) he leaves in a procession; ( $\mathbf{f}$ ) discussed below.
114. Based on a plan made by the Egyptian Department of Antiquities.
115. Based on the plan by Jacquet in R. Anthes, Mit Rahineh 1956 (Philadelphia 1965), Pl. 2, and photographs. 116. Based on Caminos, $\mathcal{N} .-K$. Temples of Buhen I, Pl. 10. The apparent exceptions are explained as follows: (a) the original scene showed Hatshepsut enthroned, flanked by gods; (b) the king is represented as a child flanked by gods; (c) the king is crowned by a god, perhaps representing a statue-group such as those discussed by W. K. Simpson, $J E A 4^{1}$ (1955), 112-114; this group is addressed by a priest, who thus fills the role that is otherwise assumed by the king.


Fig. 43
(Here, and in the succeeding figures, the arrow indicates orientation of King.)


Fig. 44
the rear (west) face of the pilasters on either side of the outer forecourt, which were attached to the north and south walls; in any case these do not show large-scale figures, but only columns of inscriptions. The same is true of the inner door jambs, which again show inward orientation as do the outer ones. The room at the very back of the temple (the "inner sanctuary") is entered at the south end and establishes a northward progress of its own, which may reflect the presence of the adjacent north temple.


Fig. 45

In the case of walls flanking the outside and inside of a passageway, the inward and outward orientation of the king may simply emphasize his entrance from without and his emergence within (and, conversely, the exit from within and emergence of the god whom he confronts). In view of the fact that this orientation was sometimes applied to the fronts and backs of pillars, it seems likely, however, that a further consideration is involved. Although the divine presence was chiefly concentrated in the sanctuary, where the images of the gods were lodged, it also invested the walls upon which these gods were pictured; their images became the object of veneration by the public at large, who were not admitted beyond the forecourts. ${ }^{117}$ This divine presence within the walls may well have affected the orientation of adjacent pillars, offsetting the attraction towards the longitudinal axis of the temple that results from the central location of the sanctuary.

Such an explanation seems very specifically applicable to the curious reversal of orientation on the back of the northwesternmost pillar in the Second Court of Medinet Habu (Fig. 44 [f]); it is influenced by the representations of Amenre and Mut on the east reveal of the adjacent doorway, which was evidently regarded with particular veneration, as were several other representations of divinities in the thicknesses of doorways belonging to the same temple. ${ }^{118}$
117. See Nims, Proceedings of the Twenty-third International Congress of Orientalists (London 1954), 79-80, and Fischer, AJA 63 (1959), 196-198.


Fig. $4^{6}$
118. See ibid., example 4 (Medinet Habu V, Pl. 304A; the scene on the back of the pillar is Pl .282 B ).



Fig. $4^{8}$
(2) King and adversary. The principles governing the orientation of ritual scenes also apply, for the most part, to the scenes of battle and hunting that are so prominently displayed on the exterior of Ramesside temples, and they likewise apply to the inner walls of the forecourts. In attacking his adversary, either human or animal, the king usually faces outward from the rear of the temple (or from the longitudinal axis) ${ }^{119}$ as though defending the divine "Lord of Maat" from the forces of chaos. ${ }^{120}$ The return, with prisoners, is again in the direction of the god. It is difficult to say whether such scenes were similarly oriented prior to the New Kingdom; a pair of
119. E.g. Medinet Habu II, Pls. 116-1 17 , showing animals pursued away from the temple $(\rightarrow)$ behind the southern end of the first pylon, while, behind the opposite end of the same pylon (Pls. 67, 68, 87), the Hittite and Libyan foe are attacked, again away from the temple $(\leftarrow)$. The latter scene is preceded, on the north wall of the temple (Pls. 70, 88, 90), by further scenes of battle directed away from the rear of the temple $(\leftarrow)$ and ( Pl .73 ) the king's return in the opposite direction ( $\rightarrow$ ), bringing captives to the gods. In certain cases local considerations may outweigh the overall scheme, particularly in a structure that is as complex as the temple of Karnak. Thus the scenes on the exterior of the walls flanking the hypostyle hall are oriented in relation to the entrances that penetrate these walls, rather than in relation to the rear of the temple; the enemy is driven away from the
entrance, on either side of it, and prisoners are led towards it. Cf. K. A. Kitchen, Ramesside Inscriptions II, pp. 125-128. Here it may be noted that on the back of the pylon of the Ramesseum (p. 127), the orientation has not been brought into agreement with the reversal that is normal when the king faces the gods; were this the case, he would rout the enemy towards the door. As it is, the orientation is essentizully the same as that which is found on the front of the Luxor pylon (p. 126).
120. Although the apotropaic nature of the battle scenes has been observed previously (cf. D. Arnold, Wandrelief und Raumfunktion, pp. 1, 109), no one, to my knowledge, has recognized the significance of their orientation in this connection, and-probably for this reason-the similar nature of the hunting scenes has likewise escaped notice.
examples from the funerary temple of Sahure suggests that this tradition does not, at any rate, go back to the Fifth Dynasty. ${ }^{121}$

The same orientation is applied to a casket of Tutankhamun, on which the four scenes, on the long sides and on the two longitudinal halves of the barrel-vaulted lid, all face away from the front, where the king would have opened it. ${ }^{122}$ The king advances rightward against the Syrians on the one side of the box, and against ostriches, antelope and hyenas on the corresponding part of the lid. The opposite side shows him advancing to the left against the Nubians (on the side) and against lions (on the lid).
(3) Offerings. A particularly interesting example is of somewhat earlier date. The so-called botanical garden of Tuthmosis III, a series of reliefs that purports to be a record of the flora and fauna that the king collected during his first campaign in Syria, was arranged in one of the side rooms of the Festival Hall "that they might be in the presence of his father Amun. . . ." This purpose was effected by actually turning each representation (wherever possible) in the direction of the god. The pictures on the short walls face north, toward the sanctuary that belonged to the adjacent Festival Hall, and towards the next room which contained more plants and in which Amun also appears to have been worshiped. The pictures on the long walls face west towards the longitudinal axis of the Festival Hall, and towards the principal sanctuary of Amun belonging to the main temple (Fig. 48). ${ }^{123}$

This arrangement has a long tradition behind it. Even on offering scenes of the Archaic Period and Old Kingdom, the listing of food is generally oriented towards the recipient even if it is not related to human offering bearers but is merely a hieroglyphic inscription (cf. § 25).

[^16][^17]

Fig. 49

## 2. Vocative Reversals (\$820-23)

§20. Reversed statements. In two Old Kingdom tomb chapels, where the owner of a tomb addresses members of his family in order to give them testamentary instructions, the orientation of his statement is reversed, along with the words that introduce the statement. One of the two examples, at Giza (Fig. 49), ${ }^{\text {r24 }}$ shows the tomb owner facing right, along with a label above his head that identifies him as a certain $W p-m-n f r t$. Opposed to this $(\leftarrow)$ is a date followed by the words: "The Sole Companion Wp, he says, 'I have given to my eldest son, the lector priest 'Iby...,'" and continuing with the specifications of the bequest. The son, holding the document in question, also faces the speaker, as do the witnesses (not shown here) in whose presence it was delivered.

The second and earlier case, dating to the earlier part of the Fifth Dynasty, comes from the chapel of $\mathcal{N y}$ - $k 3-r n h$ at Tehna (Fig. 51). ${ }^{125}$ The tomb owner and his wife are seated at the right end of the east wall ( $\leftarrow)$, and, like $W p-m-n f r t$, he raises one hand in a gesture of address. Before him ( $\rightarrow$ ) are the words: "He makes an order for his children to do service for Hathor, Mistress of Tehna." The order itself (again $\rightarrow$ ) is a direct address, using the first person singular, and the persons addressed are pictured beyond it ( $\rightarrow$ ). Further to the left (Fig. 50) the seated couple reappear $(\leftarrow)$ with another column of inscription before them $(\rightarrow)$ : "He speaks with his mouth vis à vis his children while he is upon his (own) feet and living." ${ }^{126}$ The speech itself has been lost along with the entire left end of the wall, and it cannot be determined whether the wife was mentioned here as well as the children. In the fully preserved statement she is the foremost of the beneficiaries and it may be for that reason that the inscription above her figure, to the right of her husband (Fig. 51), shows a reversal of orientation ( $\rightarrow$ ) and retrograde sequence. ${ }^{127}$ But it seems more likely that this reversal indicates nothing more than a tendency to retain the normal rightward orientation of the signs, and the same explanation is applicable to the similar arrangement of $\overbrace{0} \boldsymbol{r}_{6} \theta$ 图, preceding her title and name on the right jamb of her false door. ${ }^{128}$

Another and more peculiar type of reversal is to be found in an "address to the living" that inexplicably appears on the east wall of a Sixth Dynasty burial chamber at Giza (Fig. 52). ${ }^{129}$ The occupant, $K_{3}(. i)-h r-P t h$, is shown facing left, since his coffin is situated to the right of this representation, and the hieroglyphs in the accompanying statement are predominantly oriented

[^18][^19]

Fig. 50


Fig. $5^{2}$


Fig. ${ }^{1}$


Fig. 53


Fig. 54
rightward. Since the columns are to be read from left to right, the sequence gives the impression of being retrograde. Columns 3 and 5 face leftward, however, and if their orientation is considered in relation to the entire inscription, including the titles and name in column 7 , which also face left, it becomes evident that the scheme of orientation is an alternating one. The result is three confronted groups of signs as shown in Fig. 53.

Unlike the vocative reversals that have previously been described, the sequence of words is not redirected away from the speaker in this case, and the idea of direct address is emphasized solely by the confrontation of hieroglyphs. It is almost as though, in the absence of visitors who were neither expected nor desired, the signs were made to address one another.
§21. Reversal of $\underline{d} d . f$ preceding a statement. Instead of turning an entire statement around, together with the words introducing it, the scribes of the Old Kingdom sometimes applied the reversal solely to the introductory word 乌- "he says," following the speaker's titles and name, in order to point up the fact that the following words were a direct quotation. The sixteen ex-

amples I have noted range from the mid-Fourth Dynasty down through the Sixth Dynasty:
(1) Urk. I, p. 18 (9); Hassan, Gîza IV, Fig. ir8, p. 168.
(2) Urk. I, p. 35 (1o); Aeg. Inschr. I, p. 28.
(3) Urk. I, p. 7 I (16); Aeg. Inschr. I, p. 43.
(4) Urk. I, p. 204 (1); Reisner, BMMA 23 (1925), 27; W. K. Simpson, The Mastabas of Qar and Idu (Boston 1976), Fig. 33 (my Fig. 54). ${ }^{130}$
(5) Urk. I, p. 229 (16); Cairo CG 57123; Curto, Gli Scavi italiani a el-Ghiza, Pls. 23, 25 and Fig. 32; Reisner, Hist. Giza Necr. I, pp. 49 Iff. (G 4630 ).
(6) Urk. I, p. 263 (5); Cairo J 49803; Frankfort, JEA $\mathrm{I}_{4}$ (1928), Pl. 20 (3) facing p. 237.
(7) LD Text I, p. 127 (my Fig. 55). ${ }^{131}$
(8) Couyat-Montet, Hammâmât, no. 188.
(9) Junker, Giza VI, Fig. 32, p. 1 Io.
130. I am indebted to Dr. Simpson for a large-scale photograph of the drawing that is reproduced in his publication;
it has been executed by Nicholas Thayer. 131. A partial translation is presented in the Appendix.


Fig. $5^{6}$
(IO) Junker, Gîza IX, Fig. 30, p. 75.
(II) Junker, Gîza IX, Fig. 74, p. 164.
(12) Abu Bakr, Giza, Fig. 48, p. 73.
(13) False door, Ny Carlsberg Glyptothek: O. Koefoed-Petersen, Les Stèles égyptiennes 'Copenhagen 1948), no. 4; Egyptian Studies I: Varia, Pl. $4 .{ }^{132}$
(14) Unpublished records of MFA, Giza tomb 5210 (my Fig. 56). ${ }^{133}$
(15) Unpublished records of MFA, Giza tomb 46 I ( (Niwty) (my Fig. 57). ${ }^{134}$
(16) Unpublished lintel of ' $I y-n-H r$, Saqqara. ${ }^{135}$

Most of the examples (at least eleven of the total) are definitely known to come from the Memphite cemeteries, and all but one of these eleven (16) are from Giza; the same is probably true of another three whose provenance is unspecified (2), (3), (13). Only two of them are known to derive from other places-Abydos (6) and Wadi Hammamat (8)-and in both these cases a close link with the Memphite Residence is evident. Abydos was the center of royal administration in Upper Egypt during the Old Kingdom, ${ }^{136}$ while the inscriptions in Wadi Hammamat were left by royal expeditions; in this particular case a "king's eldest son" was involved.
132. The change in orientation is not noted in $O$. KoefoedPetersen, Recueil des inscriptions hiéroglyphiques de la Glyptothèque Ny Carlsberg (Brussels 1936), p. 37, but the reversed 2 is quite clear on Pl. 4 in Koefoed-Petersen, Steles. The text is discussed in Egyptian Studies I: Varia, pp. 19-21.
133. A segment of the frieze inscription of $H m t . n(. i)$, continuing LD II, Pl. 26a-c, based on a copy made by W. S.


Smith: "The Wcb-priest of the King, One Revered with the Great God, the Acquaintance of the King Hmt.n(.i), [he] says . . . ." I am obliged to Dows Dunham for the use of Smith's copy and notes.
134. This was inscribed outside the tomb, north of the entrance. The same tomb yielded the drum lintel shown in LD II, Pl. 89a, and Mitteilungen des Instituts für Orientforschung (Berlin) 7 (1960), 314; cf. PM III², Pt. 1, p. 133. Translation: "The Inspector of Dancers Nizty, he says, while living upon his two feet." Presumably a statement was meant to follow, but if so, it was either not completed, or has been lost. The copy has been made from a field photograph in the Museum of Fine Arts, Boston, kindly supplied by Dows Dunham.
135. A long architrave inscribed ( $\rightarrow$ ) with five horizontal lines of offering formulae and a sixth and last line of stereotyped autobiographical statements introduced by the reversed group $\stackrel{2}{2}$. It is now possible, as this book goes to press, to cite the publication of the architrave in Selim Hassan, Excavations at Saqqara 1937-1938 III (Cairo 1975), Fig. 33 and Pls. 47, 48 (8).
136. Fischer, JAOS 74 (1954), 26-34; Fischer, Dendera, pp. 69, 129, 201-202.


Fig. 57

The earliest example ( $\mathbf{(}$ ) is that of $D b h . n(. i)$, who made his tomb in the reign of Mycerinus. Here only the signs $\bigcap$ are reversed in $d d . f$, and the next earliest example (14) is quite possibly incomplete, but there is otherwise no instance of 2 where the orientation of the verb fails to agree with that of its suffix. In two cases, which omit the suffix, it seems unlikely that the reversed $\Longrightarrow$ should be understood in quite the same way as other examples of the suffixless $d d$, where this occasionally follows the name of the speaker in biographies of the Old Kingdom and (more frequently) thereafter. This use of $d d$ is generally to be interpreted as a participle, i.e. "who says," ${ }^{137}$ but in one of the two examples in question (4) the supposed participle has no antecedent; $;{ }^{138}$ and in the other case (2) the antecedent is feminine, so that the expected participial form would be気. ${ }^{139}$ The only really satisfactory explanation for these two cases is to regard $d d$ as an infinitive meaning "statement," as in $\underline{d} d-m d w$ "recitation of words." ${ }^{140}$

[^20]omitted.
140. Cf. the use of to introduce an address to the living on a Second Intermediate Period stela from Edfu (Daressy, $A S A E 17$ [1917], 243); also the use of $r d d$ in one of the Eleventh Dynasty epistolary formulae, T. G. H. James, The Hekanakhte Papers (New York 1962), p. 120; K. Baer, JAOS 83 (1963), p. 2, n. 3 .


Fig. 60
The site of Abydos is not only the source of one of the two examples that are definitely not from the Memphite cemeteries, but has also provided an interesting further development of this device. In the well-known biography of $W n i$, a long inscription written in columns facing rightward as usual, the entire first column is reversed so that the speaker's titles and name address the words that follow. ${ }^{141}$ Although the bottom of this column is missing, the amount of space makes it virtually certain that ${ }^{2}$ is to be restored here, and it is equally certain that the orientation of these signs agrees with the signs above it.

The final step in this development is also attested at Abydos (Fig. 58). ${ }^{142}$ In place of the reversal of a single column, the reversal is applied throughout the relevant part of the inscription in such a way that the sequence is retrograde (Fig. 59, lines 6-8). Here it is less graphically apparent that the speaker is made to address the following statements, since they face the same direction as he does, but the same idea is expressed inasmuch as the first column of words is the one nearest the two columns ( $4^{\prime}, 5^{\prime}$ ) which name him. It is significant that this retrograde arrangement, which will be examined more particularly in Egyptian Studies III, eliminates the phrase $d d . f$ altogether. ${ }^{142 a} \mathrm{~A}$ translation is given below, in the Appendix.

At least one example of reversed ${ }^{2}$ ? reappears on the back-pillar of a Twenty-sixth Dyrasty statue, introducing a biographical statement. ${ }^{143}$ This may be in imitation of Old Kingdom tradition, for I know of no other evidence for its use beyond the Sixth Dynasty. But an analogous reversal occurs on the pyramidion of Amenemhet III from Dahshur ${ }^{144}$ and, somewhat less consistently, on that of Khendjer from Saqqara. ${ }^{145}$ In these Twelfth and Thirteenth Dynasty examples the orientation of the entire phrase $d d-m d w$ in NN "recitation of words by (the god) NN" is opposed to a direct quotation, which is in apposition to $m d w$ and hence, like $m d w$, the object of the infinitive $d d$. The example illustrated in Fig. 6o reads: "Recitation by Ptah: $\overrightarrow{\mathrm{I}}$ have given all life, stability and dominion to the Good God the Golden Horus 'Abiding of Life,' Ny-mset-Rc." It will be noted, however, that the cartouche of Amenemhet III is followed by a recurrence of the phrase $d d-m d w$ in NN, introducing another speech, and that the phrase is not reversed in such recurrences. This circumstance suggests that the chief motive of the initial reversal was to orient

[^21]143. Alexandria Museum 26298: Hassan S. K. Bakry, Oriens Antiquus (Rome) 9 (1970), Fig. 3 on p. 335, and PL. 40. The statue holds an offering slab which is ingeniously inscribed so as to oppose, by means of the orientation, the godloving visitor who is willing to recite the offering formula and the impious visitor who will not do so (ibid., Pl. 39).
144. Cairo J 35133 : Maspero, $\operatorname{ASSE}_{3}$ (1902), p. $20 \%$.
145. G. Jéquier, Fouilles à Saqqarah: Deux pyramides du Moyen Empire (Cairo 1933), pp. 21-24 and Pl. 6.



Fig. $5^{8}$


Fig. 59
the speaker towards the king's name rather than towards the speech. But since the king is not directly addressed, it is not possible to associate this usage with the reversals that will next be considered (§22). In two Twelfth Dynasty inscriptions from Sinai (Figs. 6r, 62) ${ }^{146}$ the orientation of the phrase $d d-m d w$ or $\underline{d d}-m d w i n$ is opposed both to that of the adjacent column $(\rightarrow$ identifying the king who receives the message) and to that of the following words ( $\rightarrow$ identifying the goddess who speaks and the message itself).
§22. Reversal of $\boldsymbol{w} \underline{d}$-nsiwt preceding the addressee. Clearly related to the aforementioned reversal
 in the heading of Old Kingdom royal decrees and letters. In the preceding case the individual who is named (NN) is the speaker, and the reversal is directed towards his speech, which is, in its entirety, the object of $d d . f$; in the second case the individual who is named is the recipient of a
146. Gardiner-Peet-Černý, Sinai, Pl. 20 (74), reign of Amenemhet II, and Pl. 38 (114), reign of Amenemhet III. It is difficult to restore the lacuna at the top of the first of these inscriptions. The text (p. 88) suggests that $H t-[h r]$ is fol-
lowed by ${ }^{〔}[\Delta](\rightarrow)$, which would presumably represent di.s enh $n b$ (cf. end of $\S 33$ b). It would seem, however, that the sign naming the goddess ( ing $d d-m d w$ are in $\mathcal{N} b t M f k s t$ 'by the Mistress of Turquoise."


Fig. 61

Fig. 62

message, and the word wd is turned towards the recipient. ${ }^{147}$ Whether $w d$ "decree" is to be regarded as a noun, as most scholars have taken it, or whether it is a verb, as Goedicke has recently argued, ${ }^{148}$ its relationship to NN is dative. The following tabulation will clarify this point (all examples shown $\rightarrow$, as in the original documents): ${ }^{149}$
(I) NN $\propto$
(2) NN $\left\{\begin{array}{l}0 \\ \text { Dyn. VI, Pepy I-Pepy II. }\end{array}\right.$
(3) NN ${ }^{\circ} \ddagger$ Dyn. VI, Pepy II.
(4) NN



(8) NN $=19$ Dyn. XVII, Intef V.
(9) NN $\ddagger f$ (vertical) Dyn. XVIII, Tuthmosis I.

As this tabulation indicates, the dative $n$ regularly appears in examples of the Twelfth Dynasty and later, ${ }^{150}$ which do not show any reversal in the preceding signs, whereas the $n$ is

[^22](Goedicke, Königliche Dokumente, p. 203 and Fig. 25, p. 205; Goedicke does not show a ligature, but he also fails to note this detail in other cases where it certainly exists). (5) Sethe, Lesestücke, p. 70 (15) and Schäfer, "Die Mysterien des Osiris," in K. Sethe (ed.), Untersuchungen IV (Leipzig 1905), Plate following p. 86. (6) Cairo J 38655: Deir el-Bahari XIth Dyn. I, Pl. 24. (7) Line B i8o. (8) Sethe, Lesestücke, p. 98 (2), and W. M. F. Petrie, Koptos (London 1896), Pl. 8. (9) Berlin ${ }^{13725,}$ Aeg. Inschr. II, p. 21 i ; Urk. IV, p. 8o. Elke Blumenthal ( $\AA$ Z 100 [1973], 73) discounts the usefulness of such. a comparison because of the paucity of intact Old Kingdom examples, but she overlooks the additional evidence from letters, providing three additional examples of type 1 (Urk. I, pp. 60 [14], 62 [14], 179 [12]) and one additional example of type 2 (Urk. I, p. 128 [2]); in addition, she overlooks the distinctive ligature of type 4 . W. Helck, Altägyptische Aktenkunde des 3. und 2. Jahrtausends v. Chr. (MAS 31 ; Munich 1974), p. 14, makes the same omission.
150. So also in Middle Kingdom letters, as pointed out by Helck, op. cit., p. 43.
omitted in all but one of the Old Kingdom writings (3) since the reversal sufficed to convey the dative idea. ${ }^{151}$

Goedicke's case for interpreting $w \underset{d}{ }$ as a verbal form ( $s \underline{d} m . f$ ) primarily rests on the fact that it lacks the determinative - in all of the Old Kingdom examples, while this determinative generally accompanies $w \underline{d}$ when it is used as a noun. The lack of a determinative might be explained, however, on the grounds of a conciseness that is characteristic of formulae. The same factor, as well as the presence of honorific transposition and the reversal of $w d$, would explain the use of the direct genitive (cf. note 15 I above), rather than ${ }^{\circ} \neq$, which occurs in the body of some of the decrees that bear the heading in question. ${ }^{152}$ To translate "the king commands" is to assign too active a meaning to $w \underline{d}$, since, as Gunn has emphasized, ${ }^{153}$ a document headed $w \underline{d}$-nswt need not involve any "command" whatever; some of the earliest examples pertain to messages that are purely congratulatory. The later writings, from the Twelfth Dynasty onward, may result from a reinterpretation of the phrase, but, in the absence of any proof to the contrary, they suggest that the earlier writings employ $w d$ as a noun, with nswt preceding this as a case of the direct genitive, honorifically transposed. Two Nineteenth Dynasty decrees seem to provide
 dressed in the Majesty of the royal court on this day to the vizier, the magistrates, etc." ${ }^{154}$

In the group 1 writing already contained a transposition of signs for aesthetic reasons. By deflecting only the initial sign of nswt the ingenious scribe adapted the orientation of this word to the reversal of the other one without giving up its initial position (so that the sequence was speaker, speech and person addressed, in that order) and without giving up its honorific transposition. His Sixth Dynasty successors seem to have considered this ingenuity excessive and conducive to ambiguity, since \& ingly adopted (2). Finally, by linking the two signs in the Eighth Dynasty scribes evidently felt

[^23]of headings have (as Goedicke supposes) the sdm. f form. In $\ddot{A} Z 100$ (1973), 73, Elke Blumenthal has independently come to the same conclusion that the reversal of $\}$ "soll wohl nach dem Rebusprinzip die Präposition $n$ phonetisch darstellen." She adduces further arguments and notes (p. 75) that T. N. Savel'eva has also set forth similar arguments, stressing that honorific transposition would only be possible if the associated word were nominal (summary in Vestnik Drevnej Istorii [Moscow] 108 [1969], Pt. 2, p. 159).
552. Also in Urk. I, p. 21 (10).
153. ASAE 27 (1927), 234-235.
154. The text is that of the Decree of Elephantine; the one from Nauri is virtually identical. Griffith, JEA 13 (1927), 200, 207 and PI. 40. Also Edgerton, JNES 6 (1947), 220.
155. Elke Blumenthal has independently noted the possibility of this interpretation, $\ddot{A} Z$ Ioo (1973), 73-74, and rightly observes that neither the absolute use of the relative form (cf. Gardiner, Egyptian Grammar, §390) nor the abbreviated writing of $\$$ (except in titles) would be expected in the Old Kingdom. But the heading wd-nswt does, like titles, show a
that this group was set off sufficiently to permit them to revert to the earlier $\quad \underset{\sim}{\circ} \neq .^{156}$ Since the intricate arrangement of Old Kingdom decrees, with its interlocking headings and subheadings, was abandoned in the Middle Kingdom, it is not surprising that wd-nswt assumed a more conventional orientation from that time onward. ${ }^{157}$

The logic of this reversal sporadically reasserted itself in later periods, however. On at least two Twenty-second Dynasty statues, for example, the $\operatorname{sign}{ }^{\circ}$, representing $i$ "O," is reversed as in the following case:

And at the rear of the hypostyle of the Roman temple of Esna the sign $\xlongequal{ }$ is again reversed on the two columns that flank the doorway. ${ }^{159}$ The ideograph stands at the head of a series of invocations to "praise this noble god [Khnum] twice over," and is opposed to the direction of the following signs whenever these signs face outward, away from the central axis, but not otherwise. In this case the idea is to orient the litanies in the direction of the entrance leading to the sanctuary of the temple.

Three further examples may be considered here. One is the characteristic grouping of signs that is used to introduce the dialogues of the Shabako Stone ${ }^{160}$ and its Middle Kingdom predecessor, Pap. Ramesseum B; ${ }^{661}$ e.g., in column 7 of the latter ( $\rightarrow$ ):


This group, like the Old Kingdom writings of wd-nswt, evidently contains a nominal form (in this case the infinitive) and is to be read $\underline{\underline{d}} d-m d w$ (in) Dhwty ( $n$ ) Wsir "recitation of words (by) Thoth (to) Osiris." ${ }^{162}$ But, unlike the reorientation of wd-nswt, the reversal is not applied to the introductory words, including the name of the speaker, but rather to the person who is addressed.

The second instance (Fig. 63), ${ }^{163}$ from the temple of Hatshepsut at Deir el Bahri, fails to
certain degree of abbreviation, since $\oint$ lacks $\leadsto$. And the similarity to a relative form might still have seemed disturbing even if it was not yet normally used in such a context.
156. Some other examples of similar hieroglyphic ligatures, all involving a tall sign and ${ }^{3}$, are attested between Dyn. VI and the Middle Kingdom, as specified in $W Z K M_{57}$ (1961), $65,66,72$. A further Dyn. X example has been published by H. D. Schneider in OMRO 52 (1971), 10-11; the writing of S $\sim$ duplicates that of the same title in J. E. Quibell, Excavations at Saqqara (1905-1906) (Cairo 1907), Pl. 15.
157. Goedicke (Königliche Dokumente, p. 10) speaks of a recurrence of 19. it is not to be found on the stela of Apries which is the subject of Gunn's article in $A S A E 27$ (1927), 211 ff .
158. The example quoted is from Legrain, Statues et statu-
 etc. in the case of CG 42220 (f). The same reversal is found on CG 42222 (c).
159. Column left of doorway: Sauneron, Esna IIII, pp. 330-331 (opposed to succeeding inscription, which faces outward), pp. 332-333 (same direction as succeeding inscription, which faces inward). Column right of doorway, ibid., pp. 310-3II (opposed to succeeding inscription, which faces outward).
160. Sethe, Dramatische Texte, p. 7 and passim. Facsimile by Breasted in $\mathscr{A} Z 39$ (igor), Pls. 1-2, foll. p. 52.
161. Sethe, op. cit., passim.
162. Sethe (op. cit., p. 106) translates "Thoth spricht Worte zu Osiris," as though the reading were * $\underline{\underline{D}} d \underline{D} h w e t y ~ m d w$
(n) Wsir. He does not explicitly state that this is his interpretation, however, nor does he offer any evidence for it.
163. Deir el Bahari II, Pl. 47; cf. Urk. IV, pp. 220-221. The columns of this inscription are arranged in retrograde sequence, and it is for this reason that the basic orientation is rightward.
reverse the introductory words ${ }^{2}(\mathbb{\pi})_{\infty}^{\infty}$ "a recitation," but does reverse the identification of the speaker: "by the King's Wife and King's Mother Ahmose." The next words, "to the Majesty of this noble god Amun, Lord of Thrones-of-the-TwoLands," resume the original orientation. Thus the orientation of the names corresponds to that of the opposed figures of Amun $(\rightarrow)$ and Ahmose $(\leftarrow)$, who are pictured at the left. A few unusual reversals of Hatshepsut's name are to be found in the same temple (see beginning of $\S 33 \mathrm{a}$ ), but this is the only vocative example, reversing the agential $\perp .{ }^{164}$

A third example (Fig. 64), from the Twelfth Dynasty tomb of Dhwty-htp at Bersha, ${ }^{165}$ not only reverses the agential $i n+$ speaker in agreement with the orientation of the latter, but detaches this phrase so that it is more directly associated with the herdsman to whom it refers. As in the passage in Hatshepsut's temple, the words $d d$-mdw "recitation" are oriented with the one who is addressed-in this case a herd of cattle-and with the direct statement that follows. The interpretation of the dative $n$ following $d d-m d w$ is unfortunately obscured by the lacunae in the succeeding words, but in any case it is hardly possible to interpret the beginning as 2 $4-\ldots$, as Sethe has done, introducing a redundant $(i) n .{ }^{666}$
§23. A comparison of these reversals. The logic of the vocative reversed and vocative retrograde inscriptions is only partially defensible. Evidently this device is supposed to reinforce the idea that the statement proceeds from the mouth of the speaker towards the ear of the person who is addressed. In the case of the retrograde inscription shown in Fig. 58 this is true to the extent that the speaker, at the left, is named in advance of the persons he addresses. But, as was stated at the beginning of this chapter, the first word emitted from the speaker's mouth must necessarily be the farthest from him, and the last the nearest, if these words are presented in strictly logical sequence.

The reversal of $d d . f$ is subject to a similar criticism. Such a reversal should properly indicate a confrontation between the speaker and the person he addresses, rather than the words he speaks. It is doubtless for this reason that the reversal of $\underline{d} d . f$ was not more frequently adopted. Even at Giza, where it was most in vogue,


Fig. 63
164. Cf. the reversal of $\frac{1}{}$ in the headings of the cursive retrograde texts of some coffins, designed to reorient these texts in the opposite direction. In another case (Deir el Bahari II, Pl. 53) a concordant reversal is similarly applied to 979 introducing a statement "by all the gods," but here the introductory phrase $d d-m d w$ in is not reversed.
165. Bersheh I, Pl. 18.
166. Urk. VII, p. 5 (13), and so too Waltraud Guglielmi, Reden, Rufe und Lieder (Bonn 1973), p. 135. Guglielmi assumes that "die Hirten sprechen zu $\langle r\rangle$ den Rindern," apparently on the basis of the terminal phrase which Sethe restores
$\left[\begin{array}{ll}2 \\ 4\end{array}\right]$ "der Gaufürst Thothotep wird, Willkommen' zu euch sagen" (Reden, p. 135). But the end of this phrase seems incomplete and the final words may be $\leftrightarrows[0 \| \mid]$ "welcome to the census." Alternatively it is possible that the beginning of the phrase is to be restored [ 0 ] : "the Count Dhwty-htp has come in peace for you," where $i i r$ has the meaning discussed by de Buck in Studies Presented to F. Ll. Griffith (London 1932), pp. 57-58. In any case it hardly seems possible that $d d r$ would ever be used for "speak to" rather than $\underline{d} d n$.


Fig. 64
this phrase was far more usually left in its normal orientation. The reversal of $w d-m d w$, on the other hand, is completely logical, since the speaker and the word "command" are graphically directed, in that order, towards the names of those who were to receive the statement. It is therefore understandable that, unlike the reversal of $\underline{d} d . f$, this usage was consistently employed during the Old Kingdom, varying only in some minor details of orthography.

The comparison that has just been made recalls the use of an arrow by modern Egyptologists in some cases to indicate the direction of the reading and in other cases, more validly, to indicate the way the signs face. In the two reversed statements described at the beginning of $\S 20$ the emphasis is on the direction of reading as also in the case of the reversed $d d . f$ and retrograde orientation, but retrograde orientation brings in the other factor as well, for the signs a.gree with the direction of the speaker. Of the various devices that emphasized the direction of reading, the vocative retrograde inscription was accordingly the only one that enjoyed much popularity beyond the Old Kingdom, although, as will be seen in Egyptian Studies III, it always remained a rather exceptional alternative to normal orientation.

## 3. Concordant Reversals within a Single Line ( $8824-37)$

§24. An overview. This chapter concerns the somewhat exceptional cases where concordant reversals produce an alternation of orientation within a single line or column of inscription, so that various segments of the inscription are graphically related to figures located to the left or right. Some closely related cases will also be considered, in which the reversal is applied to one or more of a series of lines or columns, all of which would normally be expected to maintain the same direction, whether the sequence is normal or retrograde. In general the related figures are immediately adjacent to the inscription in question, or relatively near at hand. As one of the earliest examples ( $\$ 26$ ) demonstrates, however, the reversal of orientation may allude to a personage who is not in sight but is represented by another monument some distance away (cf. §1o).

These reversals are linked to the direction of an action, which, in the case of $\S \S 25,26$, is only implied or represented, but is more usually stated. In most of the examples involving offerings, as in the case of the vocative reversals described in Chapter II, the reversal is applied to the subject of the action-the donors of the offerings ( $\S \S 25,26$ ) or the offerings which either accompany the donors or present themselves ( $\S \S 25,27$ ). In both cases the reversed element confronts the indirect object, the recipient of the offerings, whereas in examples that describe the presentation of offerings to a god ( $\$ 33 \mathrm{a}$ ), it is usually the indirect object, the recipient, whose name is reversed, and this reverse is sometimes extended to a following subordinate clause ( $\S 33 \mathrm{~b}$ ), which accordingly shows a shift in meaning. One might take exception to the rather free use of "subject" and "object" here, but it reflects a very real distinction: an emphasis on the king as the "doer" in the temple scenes; an emphasis on the deceased as the "one for whom it is done" in the scenes of funerary chapels. In a genitive example, involving the epithet mry, following the name of the king ( $\S 32$ ), the reversal may be either subjective or objective. Most of the other cases apply to the object, either direct ( $\S 30$ ) or indirect ( $\S \S 29,31$ ). But the reversal described in $\S 36$ is unique; here the intention is not so much to reverse one of a pair of clauses, as to make them face each other so as to reflect a back-and-forth movement. A comparison of the two very similar examples presented in $\S 28$, one reversing the agent, the other the action, will illustrate how relative such distinctions may sometimes be.

## A. Reversal of subject (offerings and their bearers)

§25. Offering lists and formulae. Old Kingdom lists of offerings (from Dynasty III onward) are very commonly turned so that the hieroglyphs address the person for whom they are intended. ${ }^{167}$

[^24]

Fig. 65

Thus they are related to the funerary priests who brought offerings to the deceased, and who are frequently represented in the vicinity of the false door where these offerings were presented. In at least one case this confrontation occurs on the crossbar of a Fifth Dynasty false door, so that the offerings face the title and name within a single line of inscription (Fig. 65). ${ }^{168}$
as opposed to the last three (Pls. 27-30) which are evidently Third Dynasty; cf. Kaplony, Inschr. der äg. Frühzeit I, p. 240. Some of the Old Kingdom lists show interesting variations of the opposed orientations; in the case of Snnw-k; (.i), for example (Smith, HESPOK, Pl. 45 [b]), the list is directed away from the owner but concludes in the midst of the last line, and this line is completed by a short supplementary list oriented in the opposite direction, towards the owner's face. In the case of Mry-nswt (Bulletin of The Detroit Institute of Fine Arts 5 [ [1972], Fig. 7, p. 68), almost all of the first three lines are oriented towards the owner, but the orientation shifts at the end of the third line, and the whole of the last line faces the opposite way-perhaps attracted by the presence of the
offering scene on the adjacent false door.
168. Leiden F 1939/2.1: OMRO 41 (1960), Pl. 15. The offerings are similarly reversed at this point on one other Old Kingdom false door, but the name is evidently not included (Junker, Giza V, Fig. 57 [cf. OMRO $4^{1}$ (1960), 3]). In four other cases where a list of offerings on the crosspiece precedes the name of the person(s) shown in the panel above, with all the signs facing rightward, one might expect to find a dative mm , but it is consistently omitted (C. S. Fisher, Minor Cemotery at Giza, Pl. 44 [2]; Field Museum, Chicago, no. 315;06; Curto, Gli Scavi italiani a el-Ghiza, Fig. 22 and PI. 2; Berlin ${ }^{1} 54{ }^{16}$ [Aeg. Inschr. I, p. 17]). In yet another case the list of offerings on the crosspiece faces rightward and is followed

On some Old Kingdom monuments the offerings that address the recipient are accompanied by an offering formula which is also oriented towards him. As a rule his name is not appended in such cases, ${ }^{169}$ but if it is, it follows the same orientation. ${ }^{170}$

The opening word, or words, of the offering formula are occasionally reversed, but examples are by no means common, and several of them, deriving from poorly executed inscriptions, may be purely accidental. The evidence is scattered over a number of periods, however, and in general it may be assumed that the reversal was again intended to direct the offerings towards the recipient. This is probably the explanation of the change of orientation on a fragment from the sun temple of Neuserre (Fig. 66), ${ }^{171}$ where "a gift which the king gives" is evidently directed to " of Nekhen" and the $i$ trt-shrine of Upper Egypt. ${ }^{172}$


Fig. 66

The only other reversal of this sort that is known to me from the Old Kingdom occurs in the chapel of Queen Mr.ś-rnh III at Giza (Fig. 67). ${ }^{173}$ Here a reversed figure of Anubis replaces the king at the head of the offering formula, addressing not only the remaining signs in the formula, but also the chamber of offerings, which is situated to the west. It should be noted, however, that the figure of Anubis appears again towards the end of the same line, suggesting that the idea was perhaps to make these two figures appear to flank the formula symmetrically. ${ }^{173 a}$

Three stelae of the First Intermediate Period reverse the opening words of the offering formula so as to make these words address the figure of the owner. One of the examples (Fig. 68) ${ }^{174}$ comes from the region of Gebelein; the other two are of unknown provenance but are clearly made by the same hand, both for a certain $D d$ (Figs. 69 and 70). ${ }^{175}$ This pair may in turn be compared with an early Middle Kingdom stela in Florence (Fig. 71), which similarly begins

[^25]one that appears in Mastaba of Queen Mersyankh III, Fig. 6 173a. Cf. also $\triangle$ dmin $(\rightarrow)$ "Anubis Who Is Upon His Mountain" in a Dyn. XX offering formula (Peet, JEA 6 [1920], p. 56 and Pl. 7); the preceding phrase htp di nśwt does not, however, reverse $\neq$. Possibly this example is to be explained as a simple opposition of hieroglyphs such as is occasionally found in inscriptions from the late New Kingdom onward ( $\$ 6$ [2]).
174. Lutz, Steles, PI. 24 (47); Fischer, Kush 9 (1961), 62 and Pl. I2 b. The end of the inscription (for which see Dunham, Naga-ed-Dêr Stelae, p. 63) is presumably mum $4>]$ $\AA{ }^{[2 m m]}$ 'to the revered 'In-it.f."
175. Cairo CG 20507 and CG 20513. For a translation of the second, see the Appendix.


Fig. 67


Fig. 68


Fig. 69


Fig. 70


Fig. 71
the $h t p-d i-n s w t$ formula at the top $(\leftarrow)$ and continues the formula in a vertical inscription at the right ( $\rightarrow$ ). ${ }^{776}$

An Eighth Dynasty coffin from Gebelein consistently reverses the first sign of $4,7(\rightarrow)$ on the front and back, ${ }^{177}$ and it will be noted that $\downarrow$ is used instead of $\ddagger$, as on the stelae of $D d$;
176. Florence 6364: Bosticco, Stele egiziane I, no. 17 . The almost identical stela shown in B. Pörtner, Aegyptische Grabsteine und Denksteine aus Athen und Konstantinopel (Strassburg i. E. 1908), Pl. 5 (17) is evidently a modern copy, as pointed
out in $M M J 9$ (1974), 14 $4^{-1} 5$ and Figs. 12, 13.
177. Turin Suppl. 13.268: Edward Brovarski, "Two Monuments of the First Intermediate Period from the Theban Nome" in Studies in Honor of George Hughes (Chicago 1977).
this particular variant is uncommon, and suggests that the stelae come from the same place. ${ }^{177 a}$ Similar reversals of $\ddagger^{0}{ }^{178}$ or $\ddagger^{179}$ are to be found in Middle Kingdom offering formulae and at least one Saite example of the same kind may be cited. ${ }^{180}$

Possibly a similar idea is expressed in the case of a Seventeenth Dynasty stela which invokes the god Osiris in the offering formula and reverses the suffix pronoun in the phrase ${ }_{4}^{\infty}(\rightarrow)$ "that he may give." ${ }^{181}$ But the reversed hieroglyph is less boldly incised than other occurrences of - in the same inscription, and its orientation may be fortuitous, even though it departs from the normal rightward orientation. The existence of a second example, on a very crude stela of

177a. Note, however, that the use of $\rceil$ for $\neq$ also occurs on a Dyn. XI stela from Abydos, Cairo CG 20012.
178. W. M. F. Petrie, A Season in Egypt, 1887 (London 1888), Pl. I I (286).
179. CG 20059, $20440^{\circ}\left(7^{\circ}\right)$; Garstang, El Arábah, Pl. 13 (E 347); Boeser, Beschr. aeg. Sammlg. II, Pl. 8. It may be significant that another modification of $\nrightarrow$ is also attested in the Middle Kingdom, namely the use of the composite form $\mp$, introducing a pair of symmetrically oriented formulae $(\rightarrow \leftarrow)$. The earliest occurrence known to me, perhaps Dyn. VIII, is that of $S_{3} b n i$ at Aswan (unpublished tomb adjacent to $H k j$ - $i b$, excavated by Labib Habachi). Middle Kingdom examples are: CG 705; CG 20491; Nash, Proceedings of the Society of Biblical Archaeology (London) 32 (1911), 104 and Pl. 13; Garstang, El Arábah, P1. 8 (236); T. E. Peet, Cemeteries of Abydos II (London 1914), Pl. 23 (4) and p. 1 14, Fig. 69. 180. W. M. F. Petrie and J. G. Duncan, Hyksos and Israelite

Cities (London 1906), Pl. 39 (bottom right) ; from Saft, Grave 23 (cf. p. 49). In another case (T. E. Peet, The Cemeteries of Abydos II [London 1914], Fig. 68 and Pl. 26, Fig. 6) the first part of the htp-di-nswt formula, invoking Re, is opposed ( $\rightarrow$ ) to the mention of offerings and the identification of the recipient $(\leftarrow)$.

The same intention can hardly have been responsible for the shift in orientation that occurs in an offering formula on a statue of Senmut, dating to the Eighteenth Dynasty (BM 174 ; Hieroglyphic Texts V, Pl. 30). Here two columns of texts on the front show outward orientation ( $\leftarrow \rightarrow$ ), but the one on the spectator's left reverts to the dominant rightward orientation when it reaches the titles and name of the owner.
181. Bologna B 1927: Silvio Curto, L'Egitto antico nelle collezioni dell'Italia settentrionale (Bologna 1961), Pl. 17 (20).


Fig. 72
the Second Intermediate Period, scarcely reinforces the first, for in this case - is less appropriately reversed in other places, as well as in $\frac{2.4}{\text {. } .^{182}}$
§26. An Old Kingdom list of estates. The series of names in Fig. 72, listing the funerary estates of $\mathcal{N t r - p w - n s w t ,}{ }^{183}$ appears on the west wall of his tomb chapel, which was decorated during the second reign of the Fifth Dynasty or only shortly thereafter. Thanks to the scrupulous attention that Helen Jacquet-Gordon has devoted to matters of orientation, it may be observed that: the fourth of these names is reversed, not only in relation to the other names, which face left, but also in relation to the personification which accompanies it. This explains the exceptional use of a
 with thee." ${ }^{84}$ If one considers the location of the tomb in the Giza necropolis, the identity of the pronoun is readily discovered less than 70 meters from the entrance to $\mathcal{N} t r-p w-n s w t$ 's chapel where the pyramid complex of Queen Hnt - $k 3 w . s^{\prime}$ is situated (Fig. 73). ${ }^{185}$ Evidently the direction of the signs in $H t p t . s^{\prime}-h r . k$ was reversed so as to associate them with the queen and so that the offerings expressed therein appeared to issue from her funerary chapel. The offerings from this estate were therefore a "reversion" ( $w d b-r d$ ) of the sort discussed by Grdseloff in ASAE 42 ( 1943 ), 39 ff . In one of his three examples, all of which concern the Giza necropolis, the $w d b$ - $r d$ provided offerings for Pr-s'n after they had been presented in the tomb chapel of Queen $\mathcal{N} f r-h t p . s^{\prime}$ 1go meters away, and the queen is accordingly mentioned in the name of one of Pr-sn's estates. ${ }^{186}$ In the tomb chapel of $\mathcal{N y}$-m3st-Rr the source is identified as the nearby chapel of Queen $\mathrm{Hr} r-m r r-n b t y$, at 135 meters distance, and the reversion offering is personified by a female bearer, as is frequently done in the case of estates, including the present example.

In ascribing a very definite purpose to the reversal that is under consideration, $I$ should point out that there is further evidence, in the same tomb chapel, of a preoccupation with graphic


#### Abstract

182. Warsaw no. 141266 . I owe my knowledge of this unpublished stela to a slide made by Bernard V. Bothmer, which Edna Russmann kindly brought to my attention. 183. Jacquet-Gordon, Noms des domaines, p. 245. 184. I must acknowledge that the traces of the painted inscriptions are evidently much less distinct today than they were when Mme. Jacquet recorded them. In the first word, which she reads as $\frac{\Delta}{\theta}$, there does not appear to be much space for o (nor would this necessarily be expected if the meaning is "offering"). Furthermore the breadth of the rounded sign appears to be rather narrow for e, suggesting the possibility that the preposition is $\mathcal{P}$. If so, the name might be $H t p . s-h r . k$ "She is content with thee," perhaps referring to the payment made for reversion offerings; for $h t p h r$ in such business transactions cf. Urk. I, pp. 158 (2), 225 (9); MMJ 8 (1973), 20, Fig. 21 (although in these cases satisfaction is expressed with the payment rather than with the payer). It seems less likely that the designation of the estate begins with the personal name $H t p-h r . S(\leftarrow)$, since the fol-


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lowing would then be difficult to explain; nor is there any other evidence for this personal name in Old Kingdom designations of estates. For the question of pronouns without apparent antecedents see $R d E 24$ (1972), 64-69; also the inscription of the "dog of his house" discussed above, end of §17.

Mme. Jacquet kindly reexamined the estate name while this book was still in proof. Her new copy does not resolve the choice between $\theta$ or $\vartheta$; although there is a slight irregularity on the left side, at a point that might correspond to the top of the ear, this irregularity turns inward rather than outwrard. On the other hand, her copy clearly confirms the reversal of $\checkmark$, with the handle on the left side. 185. Taken from the map at the front of Hassan, Giza IV; a further 43 meters brings one to the nearest entrance of the queen's funerary complex, so that the distance to be traversed was II meters in all. 186. Grdseloff, op. cit., 53-54; cf. Jacquet-Gordon, op. cit., pp. 21-22 and 335. The present example is not identified as a reversion offering, however, nor is it considered elsewhere.




Fig. 73
devices of a similarly ingenious nature. ${ }^{187}$ It seems more doubtful, however, that the reversal of an estate name is equally meaningful in the case of a second tomb chapel at Giza. ${ }^{188}$ This shows an estate labelled $\}=1$, which is oriented $\rightarrow$ in a procession that otherwise faces $\leftarrow$, and
187. One example is the curious honorific transposition of $n b$ imsh and $h r$ NN "possessor of reverence with (king) NN," as shown in $A S A E 25$ (1925), 180. Another occurs on the right reveal of the entrance where a pair of epithets graphically
echoes the principal elements of the owner's name (to be published in $\ddot{A} Z$ ).
188. Junker, Giza II, Fig. 20 on p. 154.


Fig. 74
may possibly be turned backward so as to ward off an unlucky connotation, as expressed by the determinative. As Helen Jacquet-Gordon points out, following a suggestion by Clère, the sign $\propto$ apparently represents a town from which flames are emerging; a second name in the same list is written which recalls in Pyr. $1876 \mathrm{~d} .{ }^{189}$ In the second case the hieroglyphs are symmetrical and therefore cannot display their reversal except, possibly, in the determinative, in which the flame is again turned away from the recipient of the offerings. There are also some reversals in other names of the same list, however, which can only be regarded as meaningless reversions to the dominant rightward orientation. And that may be equally true of the "burning towns."
§27. Viewing of a presentation. In two Old Kingdom tomb chapels at Giza aninteresting reversal occurs in the caption of a scene that shows the tomb owner inspecting cattle that are brought from his estates. One belongs to 'Iy-mry and dates to the second half of the Fifth Dynasty (Fig. 74); ${ }^{190}$ the other, dating to the Sixth Dynasty, belongs to $K_{3}(. i)-h i . f$ (Fig. 75). ${ }^{\text {r91 }}$ As is usual in such cases, a column of inscription intervenes between the onlooker and the scene he watches, and the whole of this statement is generally oriented to conform to the direction of the owner. These two cases, however, reverse the word or words following $m 33 n d t-h r$ "viewing the presentation." In the case of ' $y$-mry the reversal is applied only to the first of the next words, innt "which is brought," and the remainder of the statement is normal: "to make invocation offerings, from [the towns of the funerary estate]." One might consider this case among the hieroglyphic reversals involving certain verbs of motion (§41), were it not for the second example. $K_{3}(. i)$-hi.f follows the phrase "viewing the presentation" with a reversal of all the succeeding words: "of cattle, desert animals and fowl which are brought from his towns." These variations are certainly intentional, for in other cases the same type of statement is oriented with the scene of presentation, rather than with the owner, if the word "seeing" is absent. ${ }^{192}$ In one instance, the two elements of the statement are separated (Fig. 76); a column introduced by the words "bringing the presentation" faces right, while a horizontal line before the owner, and oriented
 $h t p . " 193$

It should also be noted that a second description of "viewing" in the chapels of 'Iy-mry and $K_{3}(. i)-h i . f^{194}$ keeps to the same orientation throughout its length, agreeing with the direction of the tomb owner, and does so since, in both cases, the figures in the related scene face in various directions and do not advance uniformly toward the onlooker.

In at least three other cases the legend accompanying the "viewing" of offerings is completely reversed so that it faces the onlooker. The earliest of these exceptions is to be explained

[^26]p. 166; LD II, Pl. 46 .
193. M. A. Murray, Saqqara Mastabas I (London 1905), Pl. 9.
194. LD II, Pl. 51, and Junker, Giza VI, Fig. 41, p. 13 1.


Fig. 75


Fig. $7^{6}$
by the fact that it consists of two horizontal lines, the second of which is a list of offerings; as noted earlier ( $\$ 25$ ), such lists generally address the recipient on Old Kingdom monuments, and in this case they have influenced the direction of the preceding words. ${ }^{195}$ The next earliest example, dating to the end of the Fifth Dynasty, again describes the viewing of offerings; the caption does not appear in a column before the owner, however, but in a line above each of several registers depicting livestock being brought to him. ${ }^{196}$ In the third case the caption does appear in a vertical column before the owner, but the date of this is later than the Old Kingdom, and it may be considered one of the vagaries of the First Intermediate Period. ${ }^{197}$
195. LD II, Pl. 22a-b (the latter also in Junker, Giza II, Fig. 11, p. 128); for the orientation of the offerings on the thickness of the entrance of. Junker, G£za I, Fig. 23.
196. Paget-Pirie, Ptah-hetep, Pl. 31. 197. Petrie, Athribis, Pl. 9.


Fig. 77


Fig. 78


Fig. 79
§28. Performance of funerary ritual. In two cases the reversal entails the opposition of an action and the agent of the action, introduced by in. Fig. $77^{198}$ shows the lower right corner of the false door of Pth-htp in his well-known mastaba at Saqqara. The text above the owner's head forms a continuous statement, part of which is reversed in relation to the rest: "That there be made for him (the ceremonies of) crossing the lake ${ }^{199}$ and his transfiguration, in performing the rituals, $\overrightarrow{\mathrm{by}}$ the lector priest." It is obvious that the statement is a funerary wish, for the infinitive ${ }_{\square}^{\infty}$ would have been used if it were a caption describing an action. A similar phrase appears at the top of the central jamb of the same false door (Fig. 78): "That (the ceremonies of) crossing the lake and transfiguration be performed for him by the embalmer (for) Pth-htp." Both phrases are to be understood as a continuation of the formula "an offering which the king gives." In accordance with this reasoning, it is also clear that, in Fig. 77, the main part of the phrase is oriented normally, in the same direction as the owner, and that the reversal applies to the final words in $h r y-h b t$. This reversal is closely related to the size of the concluding determinative, which has been enlarged to the point that it functions as a representation, showing the lector priest addressing the owner as he performs his functions. ${ }^{199 a}$

The second example (Fig. 79) ${ }^{200}$ is essentially the same as the preceding one, but here the officiant is not merely an enlarged determinative, but is the representation to which the entire inscription is subordinate: $\overrightarrow{p r}(t) n$.f hrw (in) $\overleftarrow{s s} \mathcal{N y w y - n t r} n d s$ ' " $\overrightarrow{\mathrm{in}}$ voking offerings for him, ( (by)
198. Paget-Pirie, Ptah-hetep, Pl. 39 (and Urk. I, p. 189).
199. Cf. Wb. II, p. 265 (8); the Wb. Belegst. includes this example and Mariette, Mastabas, p. 195 (= Cairo T $\frac{24 \mid 11}{24 \mid 6}$, Urk. I, p. igo).
199. This example is reduplicated in the adjacent mastaba
of $\mathbb{T} f w$, but here the text is less completely preserved: Selim Hassan, Excavations at Saqqara 1937-1938 (Cairo 1975) II, Fig. 58, p. 110.
200. From Junker, Giza X, Fig. 44.


Fig. 80
the scribe $\mathcal{N y w y}$-ntr the younger." ${ }^{201}$ It is clear that the reversal applies not only to $-\sim$ of the dative $n . f$, referring to the recipient of the offerings who is situated at the left $(\rightarrow)$, but also applies to $p r(t)$ hrw, for the determinatives of this phrase are $\overline{\delta 0}$ and the loaf of bread normally precedes the jar of beer. Thus the reversed element is the action (and its object) rather than the agent, so that this example might properly be assigned to the next group of examples. In another case where the agent and action are similarly opposed (§35), it is quite impossible to say which of the two elements is reversed.

## B. Reversal of object

§29. Singing "to"' musical accompaniment or dancing. Old Kingdom scenes of daily life sometimes show a man singing to the accompaniment of a flute or harp. This activity is described as $h h^{\prime} t m m_{3 t}$ "singing with the flute" or hist $n m 3 t$ "singing to the flute." ${ }^{202}$ As would be expected, the entire phrase is sometimes oriented with the singer, but in other cases the word designating the instrument is reversed so that it addresses the singer as does the instrumentalist, thus:
which shows the reversal of bnt "harp," as compared with:
요응 (Petrie, Deshasheh, Pl. 12)
showing the normal orientation. In other cases hs't and the name of the instrument are turned towards each other with $n$ omitted, this being supplied by directing one word "to" the other. ${ }^{204}$
 ing." ${ }^{205}$ Both reversals are paralleled by a scene from Giza (Fig. 8 I ) ${ }^{206}$ in which the lower caption is ${ }^{\circ}$ - 月l "singing to . . ." Although the preposition $n$ occupies its normal position in this case, one need not conclude that it was meant to be followed by the word $i b$, "dancing," and that this word, normally oriented, was inadvertently omitted ${ }^{207}$ because the sculptor did not complete his work. Quite possibly, in view of the adjacent juxtaposition displayed by the adjacent caption, "singing to the harp," the missing object of the preposition was thought to be supplied by the opposed representation of dancing, with the figures facing left. A much later relief, dating

[^27][^28]

Fig. 8i
to the Nineteenth Dynasty, is analogous to this one inasmuch as the dative $n$ again occupies its normal position, and is separated from its object, but in this case the object is named: as shown in Fig. 82, the name and image of Amenre-kamutef are followed by the phrase $\& \&\{1 . . . . . .(\leftarrow)$ "may he give life and power to," and the object of the preposition is Ramesses II, who addresses the god $(\rightarrow)$, presenting offerings. ${ }^{208}$

[^29]festivals to . . . " Still later cases of this kind are to be found in the corridor of the Amenirdis chapel at Medinet Habu; these last examples, which were brought to my attention by James Allen, will be discussed in Egyptian Studies III, dealing with retrograde inscriptions.


Fig. 82
§30. Animals giving birth. Another Old Kingdom caption may likewise be interpreted as a normal sequence of two words confronted by another, this being oriented in the opposite direction so as to reinforce their relationship (Fig. 83). ${ }^{209}$ Elmar Edel (Jahreszeitenreliefs I, p. 222;
209. From von Bissing, $A S A E 53$ (1955), Pl. 12, following pp. 319-338. Also reproduced by Keimer, Études d'Égyptologie IV (Cairo 1942), p. 16 (with previous bibliography on p. 15);

Edel, Jahreszeitenreliefs II, Fig. in, following p. 166; EdelWenig, Jahreszeitenreliefs, Pl. 1 .


Fig. 83

II, p. 182) explains the phrase as two symmetrically arranged pairs of words, each beginning with $m s^{\prime}(t)$, this word to be read twice, ${ }^{210}$ i.e.: $m \dot{s}(t)$ gsfnw "giving birth to the weasel (zoril)." But the orientation of the caption, if interpreted thus, is at variance with the orientation of the animals below it: $\leftrightarrows \leftrightarrows$. Were the phrase confined to $m \dot{s}(t) g g^{s} f n w$, it would normally refer to the animal giving birth, as Edel in fact interprets it, and would be aligned with the mother. ${ }^{211}$ Since that is not the case, it is evidently the entire phrase that is to be read twice, and not $m s(t)$ alone, i.e.: (if the first words are read from right to left) $\overrightarrow{m s}(t) g \dot{s} f n w(i n) \overleftarrow{g s f n w}$ "giving birth to a weasel (by a) weasel." The concordance of the inscriptions and representations is thereby explained: it is $\rightleftarrows \leftrightarrows$ in terms of the animal giving birth, which is mentioned at the end of the caption,


Fig. 85 and is $\rightarrow \longleftarrow$ in terms of the offspring being born, which is mentioned in the second word. While the mention of both the mother and offspring is unusual, it occurs in a scene from the Unis Causeway reliefs (Fig. 85), where the caption reads $m s(t) s 3$ pnw (i)n pnw "giving birth to the son of a mouse by a mouse." ${ }^{212}$ The use of $n$ for $i n$ in this case is attested elsewhere, ${ }^{213}$ as is the complete omission of the agential preposition in the other. ${ }^{214}$


Fig. 84
210. I know of only two Old Kingdom captions in which a single sign is similarly read twice; in the first case it serves as the determinative of the repeated word "jar" in a. pair of captions: "turning a jar," "smoothing a jar." Fig. 84 is drawn from a photograph; cf. Tombeau de Ti 1, Pl. 71. The other case is $7 / \ddagger 7$, a double writing of the title $b r p$ sh referring to two butchers $(\rightarrow \leftarrow)$ : E. Mackay, L. Harding and F. Petrie, Bahrein and Hemamieh (London 1929), Pl. 23. In both irstances the arrangement of the captions agrees with the orientation of the figures.

21I. E.g. $m s(t)$ idt "giving birth (by) the cow," Edel, op. cit. II, P. 174; cf. Hassan, Gifa IV, Fig. 57, p. 1 ic.
212. From W. S. Smith, Interconnections in the Ancient Near East (New Haven 1965), Fig. 179 and p. 145 (and Selim Hassan's unpublished Causeway Excavations 1937-1938, Pl. 45). The early use of $s s$ in reference to an animal is noteworthy ( $W$ b. III, p. 408 [16]), but cf. $s 3 t$, lit. "son of the earth," a term for a snake, which is known from Pyr. and later (ibid., p. $4{ }^{10}$ [16]).
213. Edel, Altäg. Gramm. II, §756.
214. Ibid. I, §696.

This instance of confrontation involving an infinitive, with the agential in being understood but not written, recalls a Middle Kingdom example that has been quoted earlier (§22), in connection with vocative reversals:

| 盛皿 | dd-mdw (in) Dhwoty (n) Wsir |
| :---: | :---: |
| $\pi$ | "recitation (by) Thoth (to) |

§31. Destination. Reversals involving movement towards a destination might be expected to occur within a single line, but the cases known to me either consist of an isolated sign (and are therefore dealt with in Chapter IV, and particularly $\S \S 4^{0-42}$ ) or a divine name (as described in §33a [7]). Examples of the latter variety are relatively infrequent and in only two of them is the reversed portion of the inscription so extensive that it unmistakably belongs to the present category. One (Fig. 86) occurs in a scene from the temple of Semna, ${ }^{215}$ where Tuthmosis III $(\leftarrow)$ is led towards the left by the god Montu $(\rightarrow)$ and the accompanying legend reads: " $[\overleftarrow{\text { Going and }] \text { coming, conducting the king and resting } \overrightarrow{\text { in }} \text { the temple of Dedun." The last words }}$ are oriented in the same direction as the figure of Dedun himself, who stands at the left. The second, from the temple of Amada (Fig. 87), ,216 shows Amenophis II $(\rightarrow)$ led towards the right, again by Montu $(\leftarrow)$, and the legend is: " $\overrightarrow{\text { Going and coming, conducting the king in [the }}$ temple] of Horakhty, that he may give thee life, stability, power and every happiness with him, thou living like Re every day." Here it is not clear whether the word "temple" was reversed to agree with the name and figure of Horakhty, and this reversal has not been carried quite far enough; although the sequence of $\xlongequal[f]{f}$ \{ continues the leftward orientation of the preceding signs, the rightward orientation is resumed in $\boldsymbol{m}_{\circ} \dot{8}$ "every happiness with him." The writing of "going and coming" is discussed below, $\S 4 \mathrm{I}$.

A third, much earlier example from the sun temple of Neuserre (Fig. 88) ${ }^{217}$ is not confined to a single line but will nonetheless be considered here since the idea of movement towards a destination has clearly affected the orientation of two pairs of columns, each of which would normally face the same direction (either $\rightarrow \rightarrow \rightarrow \rightarrow, \leftarrow \leftarrow \leftarrow, \rightarrow \rightarrow \leftarrow \leftarrow$ or $\leftarrow \leftarrow \rightarrow \rightarrow$, rather than $\rightarrow \leftarrow \rightarrow \leftarrow$ ). As Edel explains the text, ${ }^{218}$ the right-hand pair of columns reads: "The mullets enter in the Elephantinite Nome" ${ }^{219}$ and the second pair reads: "The $h s k m t$ and $h b s$ mullets come and enter Elephantine." The rightward and leftward reversal of the initial columns presumably corresponds to the representations, since an adjacent scene shows these fish swimming back and forth.
215. This has been drawn from a photograph kindly sup-
plied by Ricardo Caminos, who is preparing a complete
publication of the temple. The same photograph appears
in Dunham-Janssen, Semna Kumma, Pl. 33 ; cf. LD III,
Pl. 56 .
216. Amada IV, B7; cf. Cahier III, p. 3.
217. From von Bissing, ASAE 53 (I955), Pl. 1, following
pp. 319-338; cf. Edel, Jahreszeitenreliefs I, Fig. 2, p. 214; II,

Fig. 13, following p. 174; and Edel-Wenig, Jahreszeitenreliefs, Pl. 12.
218. Edel, Jahreszeitenreliefs I, pp. 211 ff.; also II, pp. 134 ff ., relating the orientation to a second example (his Fig. 4) where opposed orientation is used to express destination, while parallel orientation indicates point of origin.
219. Or perhaps "waters of Elephantine." For the writing of the place name cf. Edel, op. cit. II, pp. 124-125.


Fig. 86

A close relationship between these two examples is indicated by variants of the New Kingdom captions discussed in $\S 33 \mathrm{~b}$, a few of which show confronted orientation in opposed columns of inscription, while others effect the same change of orientation within a single column. Com-
parable variations have already been noted in Old Kingdom captions accompanying the viewing of a presentation of offerings to the tomb owner (§27). One might also compare the reversal of the phrase ${ }^{2}$ within a line ( $(2 \mathrm{I})$ as contrasted with the confrontation, in separate columns, of the speaker and his speech ( $\S 20$ ).


Fig. 87


Fig. 88

## C. Reversals relating to divinities

§32. Reversal of the epithet mry "beloved (of)," as applied to the king. The pillars of the Karnak shrine of Sesostris I repeatedly show two lines of inscription beneath a scene such as the one illustrated in Fig. 89. ${ }^{220}$ These two lines refer to the king, who is introduced by the word 1 M "beloved," and the introductory word is reversed so that it is related to the orientation of the god above it. In other words, the present example should be read: "The beloved of Amenre, given life, stability, power, health, etc. . . ." ${ }^{221}$ Earlier reliefs, such as Fig. $90^{222}$ display a similar
220. Lacau-Chevrier, Chapelle de Sésostris I", Pl. 26.
221. The same arrangement is continued in the Eighteenth Dynasty, as exemplified by the Medinet Habu temple of Tuthmosis III: Jéquier, Temples I, Pls. 41-42, U. Hölscher, The Excavation of Medinet Habu II (OIP 41; Chicago 1939),

Pls. 13, 20. Similarly a pillar of Tuthmosis IV at Kzarnak: Chevrier, ASAE 53 (1955), Pl. 20 following p. 42.
222. Jéquier, Mon. fun. Pepi II, II, PI. 12. For an Eleventh Dynasty example cf. Rec. trav. 31 (1909), p. 65.


Fig. 90

Fig. 89


Fig. 9 I


Fig. 92


Fig. 93
phrase, but here the reversed $\diamond \& \&$ and the adjacent $\Delta f$, etc., are more immediately related to the hieroglyphic groups above, in which the vulture goddess Nekhbet $(\leftarrow)$ confronts the names of the king ( $\rightarrow$ ).

Conversely, on a stela of Sesostris I from Philae (Fig. 91) ${ }^{223}$ the word $\Downarrow 44$ is reversed following the name of "Khnum, Lord of the Cataract," to agree with the orientation of "The Horus Life-of-Births." And similarly, on a rock-cut stela of Amenemhet III at Serabit el Khadim (Fig.
 etc."), is reversed so that it is related to the king, who is again "beloved" of the divinity as in the other examples.

While it is hardly necessary to follow the later use of this device in great detail, ${ }^{225}$ an interesting Ramesside example may be cited (Fig. 93)..226 Here the seated god Montu addresses "the Good God W's-m3rt-Rr, Stp-n-Rr" (Ramesses II), extending the sign of life to the first sign 9 with the words "to thy nose." And the (-sign, oriented with the seated god, is placed behind him to provide the epithet "beloved of Montu."

In yet another case, again dating to the reign of Ramesses II, the figure of a god addresses elements of the royal titulary without the addition of \&. ${ }^{227}$
223. BM 963; Hieroglyphic Texts IV, Pl. I and Brit. Mus., Guide to the Egyptian Galleries (Sculpture) (London 1909), p. 39.
224. Gardiner-Peet-Cerný, Sinai, Pl. 26 (no. 83) ; similarly a stela of the same reign, Cairo J 59488, which comes from the desert east of Abu Simbel, and a Dyn. XVIII inscription, Gardiner-Peet-Černý, op. cit., Pl. 56 (177).
225. E.g. Gardiner-Peet-Cerný, op. cit., Pls. 14 (44), $4^{1}$ (126), $5^{6}$ (175), 59 ( 189 ), 6I (180). All of these are Dyn. XVIII except Pl. 4 (126), which is Dyn. XII. Some examples are obscured by a tendency to write $A$ whether the inscription is $\rightarrow$ or $\leftarrow$ (cf. §38): Gardiner-Peet-Cerný, op. cit., Pls. 18 (56), 57 (181), 58 (179). Keith Seele (JNES 4 [1945], 244) discusses an interesting problem involving the orientation of mry at the end of the inscriptions on some tiles from Amenophis II's shrine near the Sphinx (Brooklyn 36.619.r-
12). As shown by Albright, BASOR 84 (Dec. 1941), Figs. 1 and 2 on pp. 8, io, mry agrees with the orientation of the king's name and that of the god Hr -m-sht, but is reversed when it follows the composite divine name of Hwrwn-Hr-m-(3)ht. Since the orientation of $m r y$ normally agrees with that of the god, Seele may be right in surmising that this variation is related to the location of two sanctuaries, placed side by side. 226. MMA 13.183.2, photograph in Hayes, Scepter II,

Fig. 215, p. 341. This example is not quite appropriate to the present chapter (cf. $\S 6$ ) because the name of the god is not directly related to an adjacent representation; but the orientation does correspond to adjacent representations of the king and other divinities.
227. Gauthier, Ouadi es-Sebouâ, p. 112.


Fig. 94
§33a. Reversal of divine names. The concordant reversal of personal names within a single line is almost entirely restricted to those of divinities.
(1) A few exceptional cases involving a royal name may be found in the temple of Hatshepsut at Deir el Bahri. One of these is evidently to be considered as a vocative reversal, and has been described as such (end of §22). There is no very obvious reason for the others, but in one case the prenomen of Hatshepsut is reversed $(\rightarrow)$ so that it faces inward, towards Amun and towards the rear of the temple, ${ }^{228}$ while in the other case her nomen is apparently reversed ( $\rightarrow$ ) in accordance with an adjacent representation. 229
(2) Another unusual pair of Eighteenth Dynasty examples, in the tomb of $R h-m i-R r$, (Fig. 94) does involve the name of a divinity-the goddess Maat-but it is again somewhat difficult to explain the reasoning. In one instance three female singers chant an admonition as two girls
228. Deir el Bahari II, Pl. 46.
229. Ibid., Pl. 5I, and cf. H. Brunner, Die Geburt des Gott-
königs ( $\ddot{A} A$ 10; Wiesbaden 1964), p. 99. For examples where the royal name is not reversed see Pls. 19, 22, 24, 52, 84, 133 .
offer them wine: "Is Maat in her sight if drunkenness is desired?" ${ }^{230}$ The second (Fig. 95) is the song of a harper, again a woman, who says: "Myrrh upon the locks of Maat! Health and life are with her . . ! !" ${ }^{231}$ Both utterances face leftward and both reverse the name of Maat $(\rightarrow)$. Perhaps this device is simply intended to show that the singers are in the presence of the god-
230. Rekh-mi-Rer, Pl. 64. I cannot follow Davies' translation (p. 62): "Can it be Ma'et in whose face there is a desire for deep drinking?"
231. Ibid., Pl. 66 and p. 61. The terminal phrase 404

逆 is puzzling, and Davies has not ventured to translate it. Can this mean "O thou who acteth therein"? The final 篮 might also be a suffix, however: i.e., perhaps ' O thou who maketh (it, Maat) in me."


Fig. 95
dess, as Davies suggests. ${ }^{232}$ The head of Maat does, in fact, appear on the top of the harp, but it is oriented in the same direction as the harper and thus does not correspond to the reversal. Another reason for the reversal that is considered by Davies, and the one that seems most plausible, is that Maat was thought to emanate from the person of the Vizier $R h-m i-R r$, who is seated at the left ( $\rightarrow$ ) and listens to the singers. This goddess, rather than Hathor, ${ }^{233}$ is probably the "daughter of Re" who is invoked by another group of singers who stand immediately before the vizier and voice the wish that she "place her daily protection behind thee, while she embraces thy limbs." And, as Davies points out, a similar idea is elsewhere expressed by Rh-mi-Rr's retainers: "Thebes is assembled in joy when it sees Maat accompanying thee." ${ }_{234}$ Several of his epithets also proclaim the vizier's close association with the goddess of right and justice. ${ }^{235}$
(3) A fragmentary statue dated to the Middle Kingdom but certainly later than that, and quite possibly a product of the Eighteenth Dynasty, twice mentions * , the god Min, facing right in an inscription oriented $\leftarrow$ on the proper left side of the seat. ${ }^{236}$ The funerary formulae of the same inscription include the wish that the individual who is represented might "enter and leave the temple and receive offerings of the house of Min." If they are intentional, the reversals suggest that the statue was stationed within the courtyard of one of Min's temples, facing inward; it may be recalled that similar considerations have affected the orientation of the texts on the left side of a Twenty-second Dynasty statue which apparently faced outward (end of §r 5 ).
(4) A similar reason may be responsible for the reversal of $\ln ^{8}{ }^{\circ}{ }^{\circ}(\rightarrow)$ in the phrase $d_{w}{ }^{\text {Re }}$ wbn.fre $n b$ "praising Re when he shines forth each day," which appears in a series of funerary wishes, following the $h t p-d i$-nsiwt formula ( $\leftarrow$ ) on a stela of the Eighteenth Dynasty. ${ }^{237}$ Possibly the stela was placed on an interior south wall, so that the sun god faced away from the eastern horizon where he appeared.
(5) The cartouche of Akhenaten's queen, Nfr-nfrw-'Itn Nefertiti, consistently shows a reversal of the name of Aten (Fig. 96, left). ${ }^{238}$ Sayed Tawfik ${ }^{239}$ has very reasonably concluded that this reversal reflects her role as the sole or joint celebrant in the god's ritual, and that the reversal does not occur in the name of Akhenaten because his cartouche, unlike hers, does not contain a determinative, i.e. a human figure toward which the god's name might be directed. It must be noted, however, that this phenomenon is rather different from the confrontation of figuresking and god-which occurs on seals of Akhenaten's predecessor Amenophis III (Fig. 7 above), and which became a regular feature of cartouches in the Ramesside Period. The presence of a name-determinative in Nefertiti's cartouche, as in that of Queen Tiye, ${ }^{240}$ the consort of Amenophis III, is also unusual. Since, in both cases, these cartouches are frequently paired with those of their royal consort, one is reminded of the early use of "redundant" determinatives in the

[^30]where the inscription is $\rightarrow$.
237. Berlin 7272, Aeg. Inschr. II, p. 109, temp. Amenophis
III. I owe this reference to Edna Russmann and the photographic archives of Bernard V. Bothmer.
238. From Amarna II, Pl. 5.
239. MDIK 29 (1973), 82-86.
240. E.g. Amarna III, Pls. 4, 6, 9.


Fig. 96
names of wives who are identified along with their husbands. ${ }^{241}$ Even in the Karnak scenes where she alone worships the Aten her name is invariably preceded by a reference to Akhenaten
 her cartouche follows two of his, which are in turn confronted by the names of the Aten, as shown in Fig. 96. Thus the reversal in her cartouche may indicate that her husband is the source of her contact with the god. There is, in this relationship, something of the Miltonian concept: "Hee for God only, shee for God in him," although they shared "Thir Orisons, each Morning duly paid." ${ }^{243}$
(6) Most of the other reversals of divine names are more obviously related to the orientation of an adjacent representation. They occur characteristically, although by no means universally, in the captions accompanying ritual actions performed by the king in temple reliefs of the Eighteenth Dynasty and later. ${ }^{244}$ Earlier examples are known as well, but it is difficult to be certain when they originated, for the god is rarely mentioned by name in ritual captions prior to the New Kingdom, and the evidence for such captions is in any case very meager before that period. Two examples from the Fifth Dynasty apply the normal, unreversed orientation to the name of Bastet, ${ }^{245}$ and another dating to the Eleventh Dynasty similarly shows $9=8 \star\{\underset{\sim}{4}(\leftarrow)$ "praising the god Amun . . .," without the reversal of either 9 or the name of the god. ${ }^{246}$ The
241. Most clearly attested for the Old Kingdom, MMJ 8 (1973), 7-25, but also, at least occasionally, as late as Dyn. XVIII, not long before the Amarna Period (ibid., p. 24 and Fig. 27). Although a redundant determinative commonly follows the names of nonroyal individuals, both male and female, at Amarna, its use in the queen's cartouches is nonetheless significant.
242. See the reconstruction by Leslie Greener in National Geographic Magazine (Washington, D.C.) $13^{8(1970), ~ 646-647 . ~}$ 243. Paradise Lost, Book IV, 299; V, 145.
244. Reign of Tuthmosis III: D. Randall-MacIver and C. L. Woolley, Buhen (Eckley B. Coxe Jr. Expedition to Nubia 7-8; Univ. Mus.; Philadelphia 1911), Pl. 28; DunhamJanssen, Semna Kumma, Pls. 21, 60; of Hatshepsut: Deir el Bahari I, Pl. 23; III, Pl. 82; V, Pls. 137, 140; but not Vol. II, Pls. 36, 37.
245. Borchardt, Grabdenkmal Śashu-rer, Pls. 35, 36.
246. MMA 07.230.2, showing Nb -hpt-Re Mentuhotep $(\leftarrow)$ before the god $(\rightarrow)$; for a reconstruction of the entire scene see Arnold, Der Tempel des Königs Mentuhotep II, PI. 25.



Fig. 98


Fig. 99

Fig. 97
custom of reversing divine names was well established by the early Twelfth Dynasty, however, as attested by the reliefs of Sesostris I. The pillar behind an Osiride statue of this king, from Karnak, represents, on the proper left side (Fig. 97) ${ }^{247}$ the king facing backward ( $\rightarrow$ ), evidently towards the sanctuary of Amenre who is named, with Atum, in the opposite direction $(\leftarrow)$. As shown by his gesture of invocation, the king himself pronounces the offering formula in front of him, all of which is oriented as he is, except for the name of the divine recipient. The change of direction does not, to be sure, occur in the midst of a single line or column, but is set off in the second of two short horizontal lines that are continued in a column: ( $1 \rightarrow$ )"An offering that the king gives, and Geb, to ( $2 \leftarrow$ ) Amun, the Overlord of the Two Lands, ( $3 \rightarrow$ ) a thousand of bread and beer, $r$-geese, $t r p$-geese, $s t$-geese, and everything sweet and good every day and forever." The Karnak shrine of the same ruler shows a similar reversal in three out of four cases where the name of the god clearly forms part of the ritual caption, and in these cases the continuity is uninterrupted (Fig. 89 and Fig. 98). ${ }^{248}$ One of these reversals (Fig. 99), has caused the entire caption to be reversed. ${ }^{249}$ On the other hand the phrase $9 \star$, "praising god," shows the normal orientation of 9 throughout the Karnak shrine ${ }^{250}$ and the same is true of most examples prior to the New Kingdom ${ }^{25 I}$ with the exception of one belonging to Amenemhet III, of Dynasty XII, and Neferhotpe, of Dynasty XIII, ${ }^{252}$ but a somewhat earlier example of $P$ is evidently to be found at Bersha. ${ }^{253}$ A stela of Queen $\mathcal{N} b w-h r . s$, dating to the Seventeenth Dynasty (Louvre $\mathrm{C}_{13}$ ) reverses the name of Khentamentiu.
(7) A slightly different and less frequent reversal is involved in the Ramesside example illustrated in Fig. roo, which does not depict a ritual but shows the gods Montu and Atum "conducting the king to the temple of his father Amun." ${ }^{254}$ Cf. $\S 31$ above, and Figs. 86,87 , where the reversal is more extensive in similar cases involving destination.
(8) At the top of a fragmentary back-pillar, probably of Ramesside date, the name of Osiris is reversed in the $h t p-d i-n s w t$ formula, which is expressed by a monogram:

247. Cairo J 48851, from a photograph. Other views are listed in $\mathrm{PM} \mathrm{II}^{2}$, p. 89 .
248. Lacau-Chevrier, Chapelle de Sésostris Itr, Pls. 26 (Scène 30, shown here), 31 (Scène 10'), 41 (Scène 29'). But not Pl. 40 (Scène 28'), nor the scene in Petrie, Koptos, Pl. 9.
249. Lacau-Chevrier, op. cit., Pl. 3 (Scène $10^{\prime}$ ), but not Pl. $4^{1}$ (Scène 29'). Cf. Lacau, op. cit., Text, p. 115.
250. Ibid., Pls. 27, 34, 36, $4^{1 \text { r. }}$
251. Dyn. XII: ASAE 23 (1923), 149 (Sesostris I) : Dyn. XIII: $A S A E_{51}$ (1951), Pl. I5 foll. p. 91 (Sebk-hotpe IV); CG 20146 (Sebk-hotpe). Dyn. XVI: CG 20044 (Ahetepre). Dyn. XVII: Petrie, Abydos II, Pl. 32 (3) (Nbw-hpr-Rr Intef V). A private stela of the Second Intermediate Period similarly shows the normal orientation of $\chi$ " "praising Horus-Min": CG 20240; but CG 20360 shows the reversed

9 in $\times 9$.
252. Gardiner-Peet-Černý, Sinai, Pl. 26 (83) and CG 20601.
253. Bersheh II, p. 44. This is probably correct, although Sayce has 7 (Rec. trav. 13 [1890], 190); both copies are given in hieroglyphic type. For Eighteenth Dynasty examples of reversed ${ }^{〔}$ in the same phrase, see Deir el Bahari IV, Pl. 92; R. Mond, O. H. Myers, et al., Temples of Armant (2 vols.; London 1940), Pl. 103 (written ). Similarly a Dyn. XXV example of : Cairo J 37386 (Gunn, BIFAO 30 [1930], 794 [c, 10]). Cf. also a comparable example, cited in note $3^{6}$ above, where $\frac{f}{j}$ is reversed instead of
254. Medinet Habu IV, Pl. 246; also Karnak loc. D 455 (Hatshepsut) and block from Karnak shrine of Hatshepsut, PM II ${ }^{2}$, p. 70 ( 260 ).


Fig. 100

The remainder of the columnar inscription shows the normal rightward orientation, even though the portion that is preserved consists of epithets that refer to the reversed Osiris: Lord of Eternity, Ruler of Perpetuity, Onnophris. . .."254a
(9) Sauneron has noted that, in the Roman temple of Esna, which faces east, the figures of the gods may face east, north or south but never west, towards the rear of the temple (cf. §19[r]) and that the same rule applies to the names of divinities in the inscriptions, which are therefore reversed if the inscriptions face westward. 255
§33b. Reversal of the terminal phrase in ritual captions. At the end of the descriptions of ritual acts, in which, from the Middle Kingdom onward, the name of the divine recipient of the action was so frequently reversed, there is commonly a concluding phrase that varies depending upon the gender of the royal officiant and the divinity: $: 25$
(king and god):
(king and goddess):
(queen and god):

On the basis of such variations it has been recognized that the first suffix pronoun refers to the king and the second to the god he serves. The interpretation of $d y(n . f)$ as a perfective passive participle is also generally accepted, ${ }^{257}$ as is that of the old perfective $f$ (fem. $f 8$ ) in an equivalent phrase that is attested earlier, and which ultimately became less popular than the other, viz. $\approx=f .{ }^{258}$ In both cases the dative may be eliminated, leaving $\& f$ or $\infty$. The chief problem is the connection between the terminal phrase and the preceding iri.f. Gardiner ${ }^{259}$ and Lefebvre ${ }^{260}$ assume that $d y(n . f)$ enh or $\operatorname{cnh}(w)$ is a direct object, and the same interpretation is implied by the translation offered by the Wörterbuch. Lacau, on the other hand, translates"(le roi) a fait (cela) pour lui (le dieu) étant vivant," ${ }^{26 r}$ and this may be nearer the mark, although Gardiner, Lefebvre and others are certainly right in considering iri.f to be optative. Lacau's translation would seem excessively redundant if applied to a dedication such as $4 \mathrm{~mm} \ldots\left(41_{0}^{\circ}=\right.$


254a. J. J. Clère in Studi in memoria di I. Rosellini (Pisa 1955), pp. 35-42 and Pl. 5.
255. Sauneron, Esna II, p. xix; III, p. xix.
256. Wb. I, 198 (Wb. Belegst. 6-9); Gardiner, Egyptian Grammar, §378.
257. For a similar elipsis cf. JARCE 2 (1963), p. 24, n. 2. The name of Hatshepsut is frequently followed by $\frac{\Delta f}{\Delta}$, however (Deir el Bahari III, Pls. 59, 61, 66; V, Pl. 131), as also in
 These cases, if they do not merely represent a meaningless proliferation of the feminine ending $t$, raise the possibility that $f$ was at least sometimes regarded as old perfective. In this case $\Delta_{\Delta}^{f}$ would mean "caused to be living" (dyt rnh.ti).
258. Wb. I, p. 112 (Wb. Belegst. 8-1 1); Gardiner, Egyptian Grammar, $\S 378$. For an Old Kingdom example see Fischer, Dendera, p. 39, n. 162. This formula continued to be popular down to the reign of Hatshepsut (Deir el Bahari, passim).
259. Gardiner, Egyptian Grammar, §378: "May he (the king) make 'given life' for him (the god)."
260. G. Lefebvre, Grammaire de l'égyptien classique (2nd ed., rev, and corr. with collaboration of S. Sauneron) (Biblio. d'Étude 12; Cairo 1955), §455: "Pour qu'il puisse être (ou: devenir) un (roi) gratifié de la vie . . . ."
261. Lacau-Chevrier, Chapelle de Sésostris $I^{t r}$, p. 40 and passim.


Fig. ioi

Upper and Lower Egypt Djoser, that he might act for him, being given life [like] Re.' ${ }^{262}$ Nonetheless this translation offers the most satisfactory solution that has yet been suggested. ${ }^{263}$

At all events it is clear that the king, not the god, is given life, while the god is consistently associated with the formula $\Delta \sim f$ (var. $\Delta f$ ) "may he give life"; the Twelfth Dynasty example shown in Fig. IoI concisely exemplifies the relationship. ${ }^{264}$

If these elementary facts may appear to have been set forth in excessive detail, it is to stress the extraordinary implications of a change in orientation that was sometimes applied to the more common variations of the formula, and particularly to $\Delta f$, In many of the New Kingdom examples these phrases are reversed after a preceding reversal of the name of a god, as described in $\S 33$ a and that is also true of an early Twelfth Dynasty example in the Karnak shrine of Sesostris I, although in this case the words describing the action are also reversed (Fig. 99); in such cases the orientation might be attributed to carelessness on the part of the draftsman. But no such preceding reversal of the name of the god is to be found in some other relatively early examples of the reversed phrase, dating to the Thirteenth Dynasty (e.g. Fig. 102) ${ }^{265}$ and in one of them (Fig. 103) ${ }^{266}$ the reversed phrase is isolated from the ritual caption; it is relocated even closer to the royal officiant, rather than in proximity to the god with whom it is oriented.

This reversal was infrequent during the Eighteenth Dynasty, ${ }^{267}$ but again became common during the Ramesside Period. Early Nineteenth Dynasty ritual scenes, as evidenced in the temple of Sethos I at Abydos, show a contradiction in the interpretation of $\Delta f$. This phrase is frequently reversed so as to be aligned with the divinity whom the king serves, ${ }^{268}$ the reorientation sometimes being presented in a separate column (Fig. I04); ${ }^{269}$ but the same phrase iri.f di $\because n h$ (usually without reversal) is applied to acts performed for a goddess. ${ }^{270}$ Later, in the temple

[^31]Museum shows an exceptional example; see Fig. 23 above. Much more striking is the reversal of $\Delta P$ on a stela of Amenophis I from Qasr Ibrim (Plumley, JEA 50 [19'54], Pl. 1 [3]), where, as in the Thirteenth Dynasty examples, this phrase is not preceded by the god's name.
268. E.g. several examples of Ramesses II on interior of girdle wall, Karnak, loc. $\mathrm{I}_{7} 8,79,85$; also loc. II6ob, 162 , 164. Calverley, Temple of Sethos I, I, P1. 12; II, Pl. 2:2; III, Pls. 14, 17, 20, 44; IV, Pls. 21, 27, 37, 45, 73.
269. Ibid. III, Pl. 16 and cf. IV, Pl. 27. Also Karnak, Khonsu Temple, locs. 197 (Taharka) and 230 (Herihor).
270. Calverley, Temple of Sethos I, I, Pl. 21 ; III, Pls. 44, 46; IV, Pls. $I_{5}, 34,68(2 \mathrm{~B}, 2 \mathrm{C}), 69(3 \mathrm{~A}-\mathrm{B}-\mathrm{C}), 71(5 \mathrm{~B}), 72(6 \mathrm{C})$, 73 ( $7 \mathrm{~B} / \mathrm{S}$ ), 75 ( $9 \mathrm{C} / \mathrm{S}$ ), 77 ( $1 \mathrm{IC} / \mathrm{S}$ ). Reversed examples: III, Pl. 5; IV, Pl. 73 (7B/W).

of Ramesses III at Medinet Habu, this inconsistency was eliminated in favor of a new interpretation, and the end of the ritual caption relating to a goddess (usually reversed) was regularly written $\Delta \psi \psi^{271} \mathrm{~A}$ single (unreversed) example of $\Delta f$ is also known from the Twenty-second
271. Medinet Habu V, Pls. 260, 261, 271, 273, 280, 281, 282, 287, 294. Without reversal: V, Pl. 283 B. See also Barguet and Leclant, Karnak-Nord IV, Fig. 121 , following p. 120 (precise date unknown). This and the following refer-
ences show that such examples are not confined to Medinet Habu as K. Martin indicates in Studia Aegyptiaca I: Recueil d'études dédiées à Vilmos Wessetzky, pp. 294-295, n. 25.

Dynasty, ${ }^{272}$ and another from the Twenty-fourth, ${ }^{273}$ although reversals of the phrase in question became less frequent after the New Kingdom. The Twenty-fourth Dynasty example of $\underset{\sim \sim}{c>} \Delta f$, on the Athens stela of Tefnakht, is especially significant because it is accompanied by the masculine equivalent $\Delta f$, the former referring to the goddess Neith, the latter to the god Atum. ${ }^{274}$ In such cases the revised meaning is evidently "may she (the goddess, or he, the god) effect the giving of life." ${ }^{275}$

Despite the aforementioned inconsistency, there are further indications that, even as early
272. Naville, Bubastis, Pl. 39.
273. J. Capart, Recueil de monuments égyptiens II (Brussels 1905), Pl. 92; cf. Spiegelberg, Rec. trav. 25 (1903), 191.
274. Cf. the equally clear cases where a woman offers to a god: Shepenwepet I before Amun, the caption reading $\Leftrightarrow \Delta f$ (Karnak, loc. Hı45; PM II², p. 205); similarly

Amenirdis I (locs. 147, 148) and Ankhnesneferibre (BM 1519; PM II², p. 19).
275. In this case $A f$, as the object of iri, must have been regarded as a compound like Coptic TAN2O, Demotic ti-rnh (W. Erichsen, Demotisches Glossar [Copenhagen 1954], p. 63 ).


Fig. 103


Fig. 104
as the Nineteenth Dynasty, the ritual captions similarly identify the god as the giver of life. Thus from the reign of Ramesses II onward the phrase $\Delta f$ at the end of ritual captions was frequently reduced to $\Delta t . .^{276}$ This abbreviation is regularly preceded by a reference to the godmost frequently as $i t . f$, "his (the king's) father." Since $i t . f$ is virtually never reversed, and since
276. At least one occurrence (perhaps accidental) is as early as Hatshepsut (obelisk, Karnak loc. $\mathrm{C}_{4}$ 1) and another dates to Amenophis III: W. M. F. Petrie, Six Temples at Thebes (London 1897), Pl. 10. Examples dating to Ramesses II: R. Anthes, Mit Rahineh 1956, p. 62 (W4) and Pl. 22, p. 62
(S2) and Pl. 20 (a); Gauthier, Ouadi es-Sebouâ, pp. 127, 128, ${ }^{1} 33$ (none reversed); E. H. Naville, Ahnas el Medineh (London 1894), Pl. 2 (A, B; neither reversed); Karnak, locs. Bi45, $\mathrm{C}_{73}, \mathrm{C}_{75}, \mathrm{~L}_{39}$, above $\mathrm{L}_{45-47}$; $\mathrm{L}_{2}$; Ehnasya column in Boston, MFA 91.259 (as well as 4 ( 4 ).


Fig. 105
both signs in the group $\Delta f$ are symmetrical, it may not be significant that this phrase is reversed in only 8 out of 60 cases ( $13 \%$ ) in the temples of Ramesses III at Karnak and Medinet Habu. 277

Very occasionally the ritual caption concludes with the phrase di.f $f n h, d i . s f n h$, or the like; one example may be cited from the temple of Amenophis III at El Kab (Fig. 105), ${ }^{278}$ and two

[^32]278. Redrawn from J. J. Tylor, Wall Drawings and Monuments of El Kab: The Temple of Amenhetep III (London 1898), Pl. 7.
more from the Medinet Habu temple of Ramesses III. ${ }^{279}$ The first of these examples is certainly intentional, as may be seen from the drawing, and they indicate that $\Delta f$, in reference to a divinity is to be interpreted as "who gives life." The same interpretation would suit the following exceptional variations, virtually all of which belong to the Eighteenth Dynasty and later:
(1) $\pm \Delta f$ "it is done for the one who gives life" 280
(2) $\& \Delta f$ "it is done for him, the one who gives life" 281
(3) $=\Delta f$ "it is done for him as the one who gives life" ${ }_{282}$

It may be noted that, in the only feminine examples known to me ( $\cong \Delta f)$ the supposed participle $\Delta$ does not show a feminine ending; ${ }^{283}$ but the same is true of a Dyn. XXII example of $\Delta f$ after the name of a queen, which contains the feminine old perfective ${ }^{284}$.

The suggested interpretation of these phrases is also borne out by the conclusion of ritual captions in the tomb of Horemheb, referring to a goddess:
$\cong$ 解 "it is done for her eternally"285
=819 "it is done for her like Re" ${ }^{286}$
Similarly an architrave of Sethos I shows as well as $04,{ }^{287}$ and an early Eighteenth Dynasty example of is perhaps to be understood in the same manner. ${ }^{288}$

Furthermore the phrase $d i\ulcorner n h$ "who gives life" not infrequently follows the captions of gods represented on stelae of the Late Period. ${ }^{289}$ It also quite commonly follows the names of gods on bronze statuettes of similar date, and, in both cases, is probably to be considered a contraction of the older di.f $n n h$ "may he give life." ${ }^{290}$ And there are also a few scattered examples of much

[^33]284. Naville, Festival Hall, Pl. 4 bis (I4).
285. E. Hornung, Das Grab des Haremheb im Tal der Könige (Bern 1971), Pl. 19. The complete context is "Worshiping the god four times; it is done for her like Re forever in joy because of ( $\uparrow$ ) the arms of the Lord of the Two Lands" (which are raised in adoration). This translation seems more plausible than that of Hornung, who assumes (pp. 43-44) that $\cong$ is the same as optative $s d m . f$ : "damit sie... gestalte" and that $h r$ cwy $n b-t z w y$ means "zugunsten (?) des Herrn der Beiden Länder."
286. Ibid., Pl. 15b, and cf. Pl. 18. Hornung translates (p. 43) "damit sie handeln möge." Where the divinity is masculine the captions show (Pls. 4, 20a) and (PI. 15a).
287. Ahmad Badawi, ASAE 54 (1956-57), 161 and Pl. 5.
288. Amosis: Edwards, JEA ${ }_{51}$ (1965), 24 and Pl. io (3).
289. E.g. BMMA 15 (1956), 86-87; Kitchen, JARCE 8 (1969-70), 59 and Fig. 1; Malinine-Posener-Vercoutter, Cat. des stèles du Sérapéum, PI. 16 (52); Bakir, ASAE 43 (1943), 77-78 and PI. i ; also CairoJ 3686I (Taharka), ${ }^{6615}{ }_{5} 8$ (Apries: ASAE 5 [1904], 95) and 36907 (Apries). The Athens stela of Tefnakht (Capart, Recueil de monuments égyptiens II, PI. 92) applies $\Delta \notin$ to the god Atum, $\Delta \cap \nmid$ to the goddess Neith.
290. E.g. Roeder, Aegyptische Bronzefiguren, Figs. 33, 38, $74,87,148,149,157$ (with name of Psamtik II) and passim.


Fig. 106


Fig. 107
earlier date. A Twelfth Dynasty stela shows the phrase $\Delta f$ behind the god Min (Fig. 106). ${ }^{291}$ Preceding the same figure are the words $\gamma 1$ Q 49 "beloved of Min the Coptite," and thus $\Delta f$
 ever, that it refers to the god and was considered as the equivalent of $\Delta=-f$ since this phrase normally follows $\uparrow \AA \cap$ in such cases, as shown in Fig. 92 above. ${ }^{292}$ The same interpretation would suit a Fifth Dynasty example (Fig. 107) where vultures with outstretched wings offer the king $\circ$ and $f$, in each case preceded by $\{f f \&$ (following the orientation of the right-hand scene, with the vulture facing $\leftarrow) .{ }^{293}$ Here a retrograde sequence is used to show that the giving proceeds from divinity to king, with $\Delta$ located nearest the donor. This arrangement is paralleled by later reliefs in which the customary $\Delta_{n} f$ precedes the name of the god who faces the king, and is thus inserted between the divine giver of life and the royal recipient. ${ }^{294}$ Finally, there are a few indisputable cases of Dynasties II and III, the earliest of these occurring in a seal impression of Khasekhemui (Fig. Io8), ${ }^{295}$ where the figure of the god Ash is accompanied by his name and the words $\triangle \uparrow$ 亿気 "who gives life and dominion forever."
291. From the original at Durham University; cf. Erman, $A Z_{20}$ (1882), 203-204 and S. Birch, Cat. of Coll. of Eg. Ant. at Alnwick Castle (London 1880), Pl. 3 foll. p. 268. For an Eighteenth Dynasty example of this phenomenon (temp. Tuthmosis IV), see Gardiner-Peet-Cerný, Sinai, Pl. 20 (58).
292. E.g. Medelhavsmuseet, Stockholm, 32004 (B. J. Peterson, Orientalia Suecana [Uppsala] 14-15 [1965-1966], Fig. I, p. 4); Cairo J 7 Igor ( $A S A E 39$ [1939], 188 ff.)-both Middle Kingdom; similarly BM I5I5 (Hieroglyphic Texts VIII, Pl. 45)-Dyn. XVIII.
293. J. E. Quibell, Excavations at Saqqara (1908-9, 190910): The Monastery of Apa Jeremias (Cairo 1912), Pl. 89.
294. E.g. Figs. 87, 92, 101, 114 of this work, as opposed to

Figs. 21, 22, 23, 82, 91, 97, 99, 105 , in which the phrase follows the god's name.
295. Redrawn from Kaplony, Inschr. der äg. Frühzeit III, Pl. 80 (line 303) ; cf. also ibid., Fig. 304. The first is like Petrie's no. 199 in Royal Tombs II, Pl. 23; the second is taken from J. Garstang, Mahâsna and Bêt Khallâf (London 1903), Pl. 9 (4), where the god is Horakhty, the king is Djoser and the caption (probably miscopied) ends with instead of ${ }_{-}^{2}$. Another example occurs on a rock inscription of Djoser in Gardiner-Peet-Cerný, Sinai, Pl. I (2). All three of the last references are also cited by K. Martin, Studia Aegyptiaca I: Recueil d'études dédiées à Vilmos Wessetzky, p. 292, n. 8. For yet another example see Urk I, p.I54 (=Smith, HESPOK, p.135).


Fig. 108

These examples show that $\Delta f$ could be applied to a god "who gives life" at almost any period, although it seldom replaced the phrase $\mathbb{A}^{*} \sim$ f before the end of the New Kingdom. They do not necessarily indicate that $\Delta f$ embraced this meaning (as well as the passive "given life") when applied to the king, as K. Martin has recently argued. ${ }^{296}$ That ambivalence may possibly have crept in by the beginning of the New Kingdom, ${ }^{297}$ but the iconographic evidence seems to indicate that the king was initially represented as the recipient of life-and only as the recipient-in temple scenes (cf. $A Z$ 100[1973], 23). At all periods these scenes stressed the reciprocity of service from the king in exchange for blessings from the god, and that reciprocity is expressed by the original meaning of $\approx \Delta f$ : "that he might serve (the god), being given life (by him)." In both roles-as donor and recipientthe king simultaneously represents his subjects, but it seems doubtful that this representation was explicitly formulated in the second case any more than it was in the first: I do not think the phrase in question ever means "that he may serve, being-given/one-who-gives life."

## D. Other concordant reversals

§34. Emphasis of various elements. A crudely incised architrave ${ }^{298}$ dating to the very end of the Old Kingdom or even later, ${ }^{299}$ displays, at the right end, a crowded inscription referring to the funerary servant $\underline{H} n m t i$, who presents a foreleg of beef (Fig. Iog). If the text is accepted as it is, without making any emendations, the most simple and straightforward translation is the following: (1) $\overleftarrow{\text { As }}$ for $[$ th] $]$ is(?) tomb, ${ }^{300}$ (2) the funerary priest $\underline{H} n m t i$, he says, (3) " $\overrightarrow{\mathrm{M} y}$ lord $\overleftarrow{\text { ap- }}$ pointed me as assistant ${ }^{301}$ (4) of the funerary priest. He acquired (? or "I acquired for him")
296. K. Martin, op. cit., pp. 287-295.
297. Martin, op. cit., p. 288, cites "who gives life" as an epithet of Amosis, $U_{r} k$. IV, p. $I_{5}$ (6). But there seems to be no evidence for $\Delta x+f$ as a variant of $A f$, paralleling $\Delta f$ as a variant of $\Delta \sim f$.
298. CG 1634 (according to Borchardt, Denkmäler des A.R. II, although it bears the number 1635 in the photograph, PI. 85) : B. Grdseloff, ASAE 42 (1943), 26-38; Tycho Mrsich, Untersuchungen zur Hausurkunde des Alten Reiches (Berlin 1968), pp. 41-47; Hans Goedicke, Die privaten Rechtsinschriften aus dem A.R., pp. 178-181.
299. Grdseloff (op. cit., p. 29) dates this to the reign of Pepy II; Goedicke, for no apparent reason, assigns it to the previous reign (op. cit., p. 178).
300. Grdseloff's reading $\ell \subset \mathcal{f}{ }^{\circ}$ is also accepted by Harari (ASAE 51 [1958], 293) and by Tycho Mrsich, but the
reading $\ell \triangle A$ a is suggested by Borchardt (op. cit., p. ror, n. I) and Goedicke (op. cit., p. 178); the traces admit this alternative and it is much more plausible than ir imyt-pr. Goedicke, however, interprets this as a title, iry is, comparing Mereruka, Pl. 8. The possibility of the terminal $[\mathbb{[ D ]}$ has not previously been considered.
301. Suggested by Goedicke (op. cit., 179 [5]), on the basis of $W b$. IV, p. 526 , which refers in turn to a single example,
 52) attaches the first word to the preceding name and interprets the whole as "Idi the younger (?) who belongs to the herdsman Neferpöret." Edwards (JEA 5I [1965], 29) similarly translates "Idi the younger(?) (son) of the herdsman Neferporet." Dr. O. D. Berlev has informed me, however, of a second Middle Kingdom occurrence in a rock inscription at Kashtamna West (G. Roeder, Der Tempel von Dakke I
(5) this architrave for the price of a bolt of cloth ${ }^{302}$
(6) when I had come forth ${ }^{303}$ from it (my former position) to be a funerary priest." ${ }^{304}$

Alternatively one might isolate line 5 from the rest ("this lintel was in exchange for a bolt of cloth"), so that lines 3-4-6 form a more continuous statement: "My lord appointed me as assistant of the funerary priest. I served him when I had come forth from it (my former position) to be funerary priest." I do not know of a parallel, however, for the use of $m$ isw without a preceding verb such as $i r i$ "acquire" or $i n i$ "buy." Furthermore adverbial statements rarely lack an introductory word (cf. Edel, Altäg. Gramm., §915); it seems unlikely, although not impossible, that is to be read twice.

As Tycho Mrsich has already recognized, the reversal of ..... may be intended to agree with the orientation of the tomb owner, who is represented at the left, facing right. The reversal of $s b ; p n$ is explained on the same basis because it refers to the architrave, the principal portion of which is similarly situated at the left. The following words $m$ isw dsiw understandably continue this orientation because of their close relation to $s b^{\prime}$, and because the continuation of the reversal serves to isolate the entire clause from the statements concerning the funerary priest.

Evidently these reversals are intended to clarify


Fig. 109 the complexity of a statement which, in the same breath, rather confusingly combines two distinct and separate facts, one relating to the speaker's advancement to the position of funerary priest, the other referring to payment for the lintel.
[Cairo 1930], Fig. 47, p. 372; B. B. Piotrovski, Drevniaia Nubia [Moscow-Leningrad 1964], Fig 7, p. 237): $\leftrightarrows$ 娒
 Kuban $R$-зw."
302. Taking the word to be $d(3) i w$, as Grdseloff suggests, but interpreting this as a length of cloth rather than "pagne"; cf. JARCE 13 (1976), p. 18; n. 31, p. 20.
303. Reading $\square_{m \times n}$, with Borchardt (Denkmäler des A.R. II, p. 10I), rather than $\square \checkmark$, as read by Grdseloff. In the latter case the meaning would be much the same ("I having come forth") but the use of the old perfective would be unusual; I cannot in any case accept the translations of Grdse-
loff ("je la franchis," scil. "cette porte"), Goedicke ("mögest du durch sie hindurchgehen") or Mrsich ("er hat mich dazu konstituiert, daß ich von ihm abstamme").
304. An office "goes down" to someone ( $h 3 i n$ ) when it devolves upon him (Fischer, Dendera, p. 96) and similarly one "goes down" to an office when he assumes it (hsi $r$ : JNES i9 [1960], 265 [n]; also Sethe Lesestücke, p. 81 [21]). It therefore appears logical that the complementary verb pri would be used when one leaves a function in order to assume another. Cf. the use of this verb in [ir] hm-ks $n b$ prty.fy $n k y$ $S \delta m$ " [as for $]$ any funerary priest who shall go off because of another matter" (Urk. I, Pp. 13, 14).


Fig． 110
§35．Emphasis on shifting direction．In a third case（Fig． 1 Io）${ }^{305}$ it is impossible to say whether it is the phrase containing the infinitive that is reversed or the phrase expressing the agent（cf．end of $\S_{2} 8$ ）．The Fourth Dynasty reliefs of $\mathcal{N b}(. i)-m-$－hht show a group of men（both $\rightarrow$ and $\leftarrow$ ） seizing a bull $(\leftarrow)$ ，and their action is accompanied by a caption，the first part of which is to the right of the bull＇s head，oriented $(\leftarrow)$ with the men on that side，while the last part，identi－ fying the agents of the action，is placed on the left $(\rightarrow)$ ，oriented with the remaining group of men．Hassan translates the first part：＂Holding（the bull）and turning steadily，＂but in so doing
 interpretation seems to be＂seizing a ng；$⿱ 乛 ⿻ 上 丨 匕$－bull who turns exceedingly，by his（the tomb owner＇s） crews．＂The orientation in both directions reflects the fact that the action is pursued from both sides，and that the object of the action shifts direction．
§36．A divided action．A more complex example，involving what might be described as a di－ vided action，is known from the Eighteenth Dynasty．Among the various rituals that are depicted in Hatshepsut＇s temple at Deir el Bahri，one is of a particularly curious nature，both in respect to the representations and the captions（Fig．III）．${ }^{306}$ The king，at the right，（ $\leftarrow$ ）confronts Hathor（ $\rightarrow$ ）and he holds a ball and stick．His action is explained by two columns of inscrip－ tion the first of which is oriented as he is，the second facing left with the goddess：（ 1 ）＂striking


Fig. 11 I
the ball" (2) " $\overrightarrow{\text { for }}$ Hathor who is commander ( hryt-tp) of Thebes." At the bottom of this scene, facing the king ( $\rightarrow$ ), and on a smaller scale, are two priests, each of whom holds a ball. Two alternative translations, neither of which is altogether convincing, have recently been offered for the accompanying caption by C. De Vries, ${ }^{307}$ who suggests that the meaning is either "it is the prophet who catches it for him" (in hm-ntr hnp n.f sy) or "catching it for him by the prophet" (hnp n.fśy in hm-ntr). He rightly recognizes that there is a shift in the orientation of the inscription,


Fig. 112
part of which relates to the king and part to the priests, but does not pursue this insight to its logical conclusion. The word $k n p$ must pertain to the priests, but in this case ) cannot belong to the same word since it faces $\leftarrow$, and since, in any case, no such determinative is known to be associated with that word. ${ }^{308}$ It can only have the value km s and must begin the second prart of the statement, relating to the king. The complete caption therefore reads $\overrightarrow{\vec{h} n} p$ in $h m-n t r \underline{\kappa} \overleftarrow{k m}_{3}$.n.f $f y$ "the priest catching after he (the king) has thrown it." ${ }^{309}$ The convergent orientation emphasizes the back-and-forth nature of the ritual, as well as the fact that it is reciprocal: the priests receive the ball from the king after the king throws the ball to them.
§37. Some possible exceptions. A possible exception to the logic of concordant reversals (and notably the first case described in §26) is to be found on a Second Intermediate Period offering slab from Edfu (Fig. 112). ${ }^{10}$ The shorter of the two offering formulae on the top, referring to

> 3o8. Faulkner, Concise Dictionary, p. 192, makes the same error in attaching ) to hnp, but the Wörterbuch recognizes the presence of $k m$ in this passage (V, p. 33; Wb. Belegst. 10).
> 309. The use of the dependent pronoun $s(y)$ indicates that hms(.t) in the upper caption is regarded as feminine; cf. Wb. III, p. $93 ;$ Wb. Belegst. 12 .
> 310. Cairo J 46202 , described by Daressy (ASAE 17
[1917], 241-242), who appreciates the significance of the reversal, but mistakenly likens it to cases such as those covered in §33. The wife's name is $S n b$; the husband is the lector priest路 $D \frac{\pi}{4}$; his father's name begins with $\&($ not $A)$ and his mother is $D d t-N b w$. The other man, again a lector priest, is $\dagger_{0}^{\dagger}(?) \stackrel{A}{\sim}$ (Nfrt-htp? -cf. PN I, p. 202 [24]).
the wife，introduces her name with the words 若奇 $(\rightarrow)$＂his beloved wife，＂so that the third person suffix pronoun is reversed．Although this reversal is doubtless intended to reinforce the allusion to her husband，who is named on the side opposite，it does not correspond to the direction of the signs in his name，since his inscription shows the dominant rightward orientation just as hers does．And the same is true of the funerary formula along the right edge，which concludes，pre－ cisely below the phrase in question，with what is evidently a repetition of the husband＇s name． It seems scarcely possible that this phrase alludes to the quite different name which appears on the left edge，and which shows the opposite orientation．

It is difficult to regard this example as a mere lapse on the part of the scribe or craftsman who executed the inscription－particularly since it cannot be explained as a retention of normal rightward orientation but is，on the contrary，a departure from that orientation．Although the $\operatorname{sign} \AA$ is reversed in the name of Osiris，as is frequently the case in funerary formulae of the Second Intermediate Period，all the other signs，including $x_{m}$ ，are oriented normally．The same is generally true of the other Edfu stelae belonging to the same period，many of which are far less carefully inscribed，${ }^{31 I}$ but two Second Intermediate Period stelae of unknown provenance show reversals of $x_{0}$ which may well be fortuitous（end of §25）．

This isolated example is reminiscent of the Old Kingdom reversal of to make the words ＂he says＂point to a following statement（§21）．In both cases the purpose of the device is readily apparent，although it runs counter to the prevailing principles of concordance and opposition （cf．§23）．

Another apparent exception is to be found on the stela of an overseer of craftsmen of Ptah named 4 是，the style of which suggests that it belongs to the reign of Amenophis III．${ }^{312}$ Since the name is repeatedly written with the initial signs reversed，regardless of whether the orientation is rightward or leftward，it is certain that this peculiarity is intentional．${ }^{313}$ Evidently it was meant to emphasize that was part of the name rather than a title．This linking up of the elements of a name might possibly be associated with names，initially royal，which begin to be written emblematically from the reign of Amenophis III onward，and in which the figures of gods are opposed．

3if．Two Edfu stelae show a reversed $\Longleftarrow$（ $A S A E 22$ ［1922］，114，121）．In the second case a name determinative （逆）is also reversed，possibly in order to make it agree with the figure to which it belongs；but the orientation of the in－ scription is not described in sufficient detail to confirm this point．

312．Cairo $T \frac{2111}{24 \mid I}$ ．I owe this example to David Silver－ man，who has also recognized the motive for the reversal．A
reference to it is to be found in PN I，p． 233 （10）．
313．As distinguished from the stela of the same name is written normally on the left side，with the signs facing right：W．M．F．Petrie and G．Brunton，Sedment II （London 1924），Pl．53．Cf．also the writings of the name Wsr－ hat in N．de G．Davies，Two Ramesside Tombs at Thebes（New York 1927），Pl． 5 ．

# 4．Reversal of Individual Hierolgyphs（ $8838-45$ ） 

§38．Real or apparent anomalies．Among the repertory of hieroglyphs in common use，as repre－ sented in Gardiner＇s Sign List，there are a few exceptions to the usual orientation－exceptions， moreover，for which no explanation has yet been offered．The most perplexing of these are the inverted staff $\rrbracket\left(\mathrm{S}_{43}\right)$ ，the sail that is blown backwards ${ }_{⿳ 亠 二 口}^{1}\left(\mathrm{P}_{5}\right)$ ，the reversed boat $\left(\mathrm{P}_{2}\right)$ ，the uses of $\propto$ and $\propto\left(F_{23}, 24\right)$ and of $\Delta$ and $\wedge$（ $\mathrm{D}_{54}, 55$ ，both individually and in combination）． Another curious reversal，the sign $\mathbb{B}$（as opposed to 飞飞， $\mathrm{HI}_{\mathrm{I}}$ ）is not included in Gardiner＇s list， doubtless because it is peculiar to a limited number of inscriptions dating to the Eleventh Dy－ nasty．In considering these problems one must take account of an occasional tendency to retain the prevalent rightward orientation in inscriptions that face left．An example is Gardiner＇s 相 （ $\mathrm{Y}_{4}$ ，an alternative form of 射， $\mathrm{Y}_{5}$ ），which Gunn explains on this basis in Teti Pyr．Cem．，p．147， n．I．Gunn has observed the same abnormality in the case of $\ddagger, q, \infty, \eta$ ，and $\uparrow$ as well as in groups that include a pair of small signs，such as ${ }_{\Delta-}$ for ${ }^{-a}{ }^{314}$ Once this＂nonreversal＂has oc－ curred，it may then produce an incorrect reversal in inscriptions that are normally oriented． The following possibilities are in fact attested in the Old Kingdom：
（a）correct reversal $\cap(\rightarrow)$ and $\cap(\leftarrow)$
（b）lack of reversal $\cap(\rightarrow)$ and $\eta(\leftarrow))^{315}$
（c）reverse of（a）$\quad \cap(\rightarrow)$ and $\cap(\leftarrow)^{316}$
（d）reverse of $(\mathrm{b}) \quad \cap(\rightarrow)$ and $\cap(\leftarrow))^{317}$
§39．The sign ${ }_{\text {学 }}$（Gardiner＇s P5）．Similarly oriented in the Theinhardt List（P16），this repre－ sents a＂nonreversal＂of the sort that has just been described．No orientation whatever is indi－ cated in the Old Kingdom version（車），${ }^{318}$ and similar completely symmetrical examples were still common in the Nineteenth Dynasty and later．${ }^{319}$ The earliest examples that show the sail
 right：several well－dated examples are to be found in the burial chamber of Snzesirt－rnh，who evi－

[^34]317．Junker，Giza VII，Fig．48a（left）；$\|(\leftarrow)$ occurs on the fragment at right．

318．E．g．Petrie，Medum，Pl．14；Junker，Gfza V，Fig．14b， p．63；Pyr．261，28r，291，309，324，66i，877，etc．；Meir V， Pls．22， 23.

319．E．g．Petrie，Abydos II，P1． $3^{8}$ ；Medinet Habu II，Pls． 85， 92 ．
dently made his tomb in the reign of Sesostris $\mathrm{I} ;{ }^{320}$ another may be seen in the tomb of $S_{n b i}$ at Meir (B i, reign of Amenemhet I, Meir I, Pl. ri ); and yet another occurs on the funerary jar of Sst-Hthr-'Iwnt, the daughter of Sesostris II, who died in the reign of Amenemhet III. ${ }^{32 \mathrm{I}}$ Since the forms shown in Gardiner's font "are those normally used in the tombs of the Eighteenth Dynasty" (Gardiner, Egyptian Grammar, p. 438), I have given particular attention to examples of this period, and have tabulated 67 in all, including five from the temple of Hatshepsut at Deir el Bahri. ${ }^{322}$ The results are as follows:

| (a) $\stackrel{\square}{\text { \% }}$ 号 $(\rightarrow)$ | (b) | (c) ${ }_{\text {c }}^{\text {\% }}$ | (d) $\stackrel{\square}{\text { \% }}$ ( $\rightarrow$ ) |
| :---: | :---: | :---: | :---: |
| 33 | I I | 21 | 2 |

Thus $65 \%$ of these cases are perfectly normal, about $32 \%$ represent "nonreversals" and less than $3 \%$ clearly conform to Gardiner's orientation. ${ }^{323}$ The three private tombs that yield the largest number of examples, those of $P 3-h r y,{ }^{324} R h-m i-R r^{325}$ and $H w y,{ }^{326}$ consistently show $\frac{3}{3}$ regardless of the orientation. In terms of the customary orientation of hieroglyphic type ( $\leftarrow$ ) this result means that Gardiner's $\frac{\pi}{\%}$ should be replaced by $\#$, and the implied direction of the sail follows that of the other hieroglyphs. ${ }^{327}$

Some scholars have, in fact, whether consciously or unconsciously, adopted the correct orientation, and notably Möller (Paläographie II [but not III], no. 379), the Wörterbuch (e.g. II, $250-25^{1}$; V, 350-353), de Buck (e.g. ERB 6 [1], 8 [4], 100 [14]), while others (e.g. A. M. Blackman, Middle-Egyptian Stories, Pt. i [Bibliotheca Aegyptiaca II; Brussels 1932], 13 [6], 42 [II]) have sometimes adopted the symmetrical form 卑, which avoids the problem. G. Lefebvre, on the other hand, in his Grammaire de l'Egyptien Classique, follows Gardiner's example in respect both to this sign and the one discussed next (ist ed., Cairo 1940, p. 405; 2nd ed., 1955, p. 409).
§40. The sign (Gardiner P2). Although there is slightly more justification for the reversal


[^35]323. The two anomalous examples are Amenemhet, Pl. 30 (D), and Nina de G. Davies, Private Tombs at Thebes IV: Scenes from Some Theban Tombs (Oxford 1963), Pl. 3. Earlier examples are equally rare: Jéquier, Mon. fun. Pepi II, III, Fig. 29, p. 41 ; Berlin 1629 (Aeg. Inschr. I, p. 161).
324. J. J. Tylor and F. Ll. Griffith, The Tomb of Paheri at El Kab (bound with E. H. Naville, Ahnas el Medineh; London 1894), Pls. 1, 3, 5, 8, 9 (5), 10, including 12 examples.
325. Rekh-mi-Rer, Pls. 7, 8, 14 (6), 22, 27 (22), 46 (2A), 66, 76 (left and right), 113 c , including ${ }^{15}$ examples.
326. Huy, Pls. 29, $3^{8}$ (C, E, F), including 4 examples.
327. Note also that the forward curve of $\frac{\vec{Y}}{Y}$ ultimately leads to a resemblance between this sign and $\%$ in hieratic (cf. Posener, RdE 7 [1950], 194, referring to de Buck).
for it is seldom attested apart from a single Twelfth Dynasty tomb，that of＇ $1 m n-m-h s t$（Beni Hasan I，Pls．7－8）；his inscriptions repeatedly reverse the sign，both 婁（ $\rightarrow$ ）and and they contrast the orientation of $h d i$ and $h n t i$ in the epithet $1 \cdots-\pi$ who made a welcome for everyone who traveled downstream and upstream＂（Pl．7，right）．This reversal also occurs very rarely in the phrase $m h d i(t) h n t i(t){ }^{328}$ and 9 $h d i(t) m$ hsfwit ${ }^{329}$＂going downstream and upstream，＂which may in turn be compared with
选运口元 sailing upstream．＂${ }^{330}$ As a rule such phrases show both boats oriented normally，but the verb ${ }_{\mathrm{hnti}} \mathrm{at}$ least once again shows the determinative in Tuthmosis I＇s description of the Euphrates as＂that body of water which is turned around，＂家＂解＂ 041 ＂going downstream in go－ ing upstream＂（Urk．IV，p． 85 ［14］）．Here the reversal may have been intended to stress the roundabout orientation of a river that flows south instead of north，as the Nile does．${ }^{33 I}$ In view of the fact that tomb chapels of various periods frequently show boats rowing north and sailing south，${ }^{332}$ and that wooden models of boats were correspondingly oriented in Middle Kingdom burial chambers，${ }^{333}$ it may seem surprising that the contrast in orientation is not more frequently represented．${ }^{334}$ But perhaps some difficulty was felt in deciding which of the two boats was to be reversed．${ }^{335}$ Several Eleventh Dynasty stelae from Naga ed－Deir do，in fact，apply the opposite

328．Cairo CG 20569 and（N［ The latter，an archaizing inscription of the Late Period，is published by W．K．Simpson in $R d E 24$（1972），169－175 and Pl． 15 （c）．
329．On two stelae that present other similarities of style and phrasing，both evidently from Abydos：Louvre C 196 （Gayet，Stèles，P1．59）and BM 584 （Hieroglyphic Texts II，P1． 14）．Cf．also to the reign of Sesostris I（BM 489：op．cit．IV，Pl．4）．

330．Urk．I，pp． 223 （17）and 224 （12）．The speaker，at Meir in Middle Egypt，was evidently thinking of travel to and from the Old Kingdom capital of Memphis，some dis－ tance northward．A similar geographical relationship is ap－ plicable to the Middle Kingdom phrases from Beni Hasan and Abydos，again referring to the capital which was simi－ larly situated to the north．

331．Goedicke（GM 1о［1974］，13－17）translates mw pf $k d w h d d m h n t y$ as＂that water which turned the one who was trying to sail north into one sailing south，＂taking $k d$ as a transitive verb，the meaning of which would more precisely be＂turn around．＂This transitive use is said to be known from demotic，but no evidence is given for it．If it is valid， the reversal of remains equally pertinent．

332．Examples on east wall of chapels，sailing south $(\rightarrow)$ ， rowing north（ $\leftarrow$ ）：Old Kingdom：LD II，Pl．43a；L $D$ Ergänzungsband，Pl．20；Meir IV，Pl．16；B．de Rachewiltz， The Rock Tomb of Irw－kz－Pth（Leiden 1960），Pls．14－17； Hassan，Gîza V，Fig．104，p．245．Middle Kingdom：Beni Hasan I，Pls．14－16．On west wall，rowing north（ $\rightarrow$ ），sail－
ing south（ $\leftarrow$ ）：Old Kingdom：LD Ergänzungsband，Pl．40； Mereruka，Pls．140－144，145．Middle Kingdom：Beni H．lasan I， Pl．29．New Kingdom：Tylor－Griffith，Tomb of Paheri at El $K a b$, Pl． 3 ．

333．H．Schäfer，Priestergräber und andere Grabfunde vom Ende des Alten Reiches bis zur griechischen Zeit vom Totentempel des $\mathcal{N e}$－user－Rê（Leipzig 1908），pp．16－17．

334．Hnti and $b s f w$ frequently show the generic determina－ tive－ak，especially in the New Kingdom．Among the vritings which show the unreversed boat under sail，all Middle Kingdom or only slightly later，are the following：Cairo CG 20016， 20538 （Side II，23），20609；Berlin 19500（Aeg． Inschr．I，p．26I）；Dyroff－Pörtner，München，Pl． 2 （3a）；Geneva 19583（Valloggia，Genava［Geneva］ 20 ［1972］，57）；Engel－ bach，Harageh，Pl． 72 （I and 3）；Siut tomb III（lines 1，19： Montet，Kêmi 3 ［1930］，pp．90，93）；Siut tomb IV（line 73： ibid．，p．106）；Siut tomb V（line 19：ibid．，p．109）；Boeser， Beschr．aeg．Sammlg．II，P1．4；Spiegelberg－Pörtner，Aegyptische Grabsteine I，Pl． 6 （10）；J．de Morgan et al．，Catalogue des monu－ ments et inscriptions de l＇Égypte antique I（Vienna 1894），p． 86 （ $20=$ Sethe，Lesestücke，p．85）；Hansen－Soghor，JARCE 6 （1967），Pl． 18 （Fig．34）．

335．Here it may be noted that Blackman consistently reverses in his transcription of the Shipwrecked Sailor （Blackman，Middle－Egyptian Stories，Pt．I［Bibliotheca Aegyp－ tiaca II］，pp．41－48）．There is nothing in the hieratic form that justifies this orientation，and de Buck（ERB，100－106） transcribes the sign normally．
orientation to of the aforementioned groups $\hat{\wedge}$ and $\triangle \wedge\left(\S \S 4^{1}, 4^{2}\right)$ ．This orientation suggests that the Thinite nome capital was felt to be oriented in the direction of Thebes when the stelae were made；that being the case，it would be understandable that visitors to Thinis would＂come downstream＂ and＂go upstream．＂${ }^{337}$ The same explanation might be applied to a further reversal of the de－ terminative of $h d i$ on a stela from Abydos dating to the Thirteenth Dynasty： $1=-\infty$ ©＂then an official of．．．journeyed，sailing downstream．＂${ }^{338}$ Although his point of departure has not been identified，he evidently came north to visit Abydos．${ }^{339}$ Alternatively（or in addition to the foregoing considerations）the orientation of the inscriptions may have influenced that of the two boats．The specific emplacement of these particular stelae is not known，but those of Naga ed－Deir derive from tombs which were cut in the cliffs on the east side of the river，and，at least in some cases，the stelae from this cemetery were set against the east wall of a small un－ decorated chapel．${ }^{340}$ As illustrated by the east walls of decorated tomb chapels（note 332 above）， this location of the inscription（ $\rightarrow$ ）would suit a leftward orientation（ and a rightward orientation（）for ships under sail，so that the hieroglyph corresponding to the first of these would logically be the one that is reversed．
§41．Writings of šmt $\boldsymbol{i w t}$＇＂going and coming．＂The sign $\Delta\left(\mathrm{D}_{54}\right)$ is the normal generic deter－ minative for most verbs of motion，and is usually replaced by the reversed form a（ $\mathrm{D}_{55}$ ）only in verbs such as enn＂turn back＂and htht＂be reversed．＂${ }^{341}$ But the reversal also appears sporadi－ cally in verbs meaning＂come＂ 342 and＂bring，＂doubtless because such verbs also have the meaning＂come back＂or＂bring back．＂Old Kingdom examples of $i w$ with reversed $\Delta$ occur in a funerary formula $\uparrow \frac{\square}{\square} \Delta \rightarrow$＂an offering that Anubis gives，that he come， as a possessor of reverence，to the West＂（tomb of $R r-h t p$ ，Medum）；$;^{343}$ in a place－name $\wedge \rho-\rho_{0}$ $\left(\rightarrow\right.$ ）＇Iw．s－řs．s，which derives from the name of a divinity（same tomb）；${ }^{344}$ in a personal name

336．Dunham，Naga－ed－Dề Stelae，nos． 37 （Lutz，Steles， no．34），55，69，73．All belong to the group discussed by Clère， RdE 7 （1950），p．19，n．ı；cf．Schenkel，Frühmittelägyptische Studien，$\S 38$（g）．

337．Cf．the orientation，in scenes such as those listed in n． 332 above，of sailing and rowing boats traveling between Abydos and points south of that city（Amenemhet，Pl．12）and north of it（Beni Hasan I，Pls．14，29）；in the first case boats row to Abydos，and in the second case they sail to it，with the boats reversed on the return trip．

338．Louvre C 12 （Sethe，Lesesticke，p． $7^{6}$［14－r 5$]$ ）．
339．Cf．K．Sethe，Erläuterungen zu den Aypptischen Lese－ stücken（Leipzig 1927），p．II7，where $\square_{1}$ is taken as a deter－ minative．Probably the place is $[\mathbb{\sigma}|\mid \square$ ，as it is written in the contemporaneous Ramesseum Papyrus，A．H．Gardiner， Ancient Esyptian Onomastica（3 vols．；London 1947），Pl． 2 （191）， and ${ }_{1} \sigma$ on a Twelfth Dynasty stela（Boeser，Beschr．aeg． Sammlg．II，Pl．4，and Sethe Lesestïcke，p． 72 ［3］）；so too Beni Hasan I，Pl． 13 （temp．Sesostris I）．

340．Dunham，Naga－ed－Dêr Stelae，pp．1－1 I．

341．Note also exceptional reversals of the determinative in J几 $\Delta$＂flee＂（ $\delta$ 回：Gebel Barkal stela of Tuthmosis III，line 20：de Buck，ERB，p． 59 ［7］）and S $\|$＂be slack，＂＂neglect，＂var．今 $\left.\right|^{*}$ U Urk．IV，p． 353 ［8］）．

342．Possibly this meaning is also implied by the reversed determinative in $0.00 .10 \times(\rightarrow)$ referring to visitors＂who will pass by＂（swisty．sn）the tomb，on a stela of the Second Intermediate Period，Toulouse 4．9．273．The example of ANW］． cf．J．Capart，Une Rue de tombeaux à Saqqara（Brussels 1907）， Pl． 22 and J．S．F．Garnot，L＇Appel aux vivants dans les textes funéraires égyptiens（Recherches d＇archéologie，de philologie et d＇his－ toire 9；Cairo 1938），pp．32－33．

343．The key word is lost in Petrie＇s copy，Medum，Pl．13， but is recorded in the earlier copy of A．Mariette，Monuments divers recueillis en Égpte et en Nubie（Paris 1889），Pl． 18 （a）．

344．Petrie，Medum，Pl． 12 ；oriented normally，ibid．，Pl． 15. The direction is $\rightarrow$ in both cases．For the name see Gauthier， Dict．géog．，p． 61 and Vandier，$R d E{ }_{1} 6$（1964），p． 56.
 statements accompanying scenes of daily life, both $\wedge(\leftarrow)$ and 昏 $\Delta \wedge(\rightarrow)$ "come" (Jéquier, Mon. fun. PepiII, II, Pl. 56), and in the Pyramid Texts: $-1 \wedge$ " "donot come" (Pyr. 55 Ia [N]). Examples of the imperative $m i$ are: $\sim A$ "come in peace" (Pyr. 2095a [N]), ${ }^{346} \wedge$ (Neith
 both $\wedge(\leftarrow)$ and $\underset{A}{A} \wedge(\xrightarrow{\sim}(\underset{)}{ })$ "come!" in ritual scenes (Bissing, Re-Heiligtum II, Bl. 25 (84), 13 (33b). ${ }^{349}$ There are also Twelfth Dynasty examples of $1 \AA$ "come!" (Hayes, Se'n-

 may be influenced by the reversed orientation and retrograde sequence of the offering list above them, but cf. also $\|_{0 . \circ}^{\circ}$ in Bersheh I, Pl. 34, where the offering list is evidently normal. ${ }^{350}$ The Beni Hasan examples are from tomb no. 2, which otherwise shows normal writings of $\boldsymbol{p}_{0}^{\circ}{ }_{A}^{\circ}$ (Beni Hasan I, Pls. $18[\leftarrow]$, i9 $[\rightarrow]$ ) but also has both ${ }_{\Omega}$ and ${ }_{\Omega}$ for pri "come forth" (the latter twice $[\leftarrow]$, ibid., Pl. 18, and cf. the further examples quoted below, $\S 4^{2}$ ). Tomb no. 2 is also the source of the writing for hdi hnti ( $\$ 4^{\circ}$ ), which has in turn been compared with groups such as $\hat{\wedge}$ or $\Delta \cap$ for srmt izwt.

One of the earliest examples of a group such as the last occurs in two rock inscriptions of Merenre at the First Cataract (Urk. I, pp. 110-111), where the king's visit to this place is de-
 himself," rather than smt iwt, which represents the more usual sequence. The emphasis is on the destination, as in the case of $A$ speaks of "ten men coming and ten men going" in reference to the king's attendants who are sent to fetch him (B 248-249).

Fairman has recognized a particularly unusual Twelfth Dynasty occurrence of šmt tizet in the caption to a scene at Meir (Fig. 113 ) ${ }^{351}$ and Blackman accordingly translates: "For recitation: The Governor proceeds in order to view [every] pleasant pastime." The compound idea
345. Cf. also the name $\sim$ 皿 $(\rightarrow)$ on a late Second Intermediate Period stela: Florence 7605 (Bosticco, Stele egiziane $\mathbf{I}$, no. 61).
346. This reversal also explains an isolated occurrence of A "take" in Pyr. 1419b (M); cf. A "take" in Pyr. $2 \mathrm{~m}(\mathrm{~N})$, where the determinative has again been borrowed from $m i$ "come." Wb. II, p. $36(1-2)$ makes the determinative ^ appear to be more normal than it really is; so also $\mathrm{A} . \mathrm{H}$. Gardiner, Notes on the Story of Sinuhe (Paris 1916), p. 88, n. 3 . 347. Jéquier, Pyrs. des reines, Pl. 28 (741); R. O. Faulkner, Ancient Egyptian Pyramid Texts: Supplement of Hieroglyphic Texts (Oxford 1969), p. 33 .
348. As compared with two normal writings of $A$, Tombeau de Ti 2, Pl. 122.
349. It seems hardly possible that $\wedge$ represents $m i$ iw, as S. Schott reads it in his Hieroglyphen, p. 143, or that the reversed $\Omega$ exemplifies the sort of confrontation he has in
mind. But I am doubtful about the significance of the divergent orientation displayed by $\frac{\Delta}{A}$ (Bissing, Re-Heiligtum III, Beiblatt B and Bl. 13 [229]).
350. And also the reversals involving ini in $\S_{27}$ above, which are explained on the basis of concordance with the adjacent scene. In the label ${ }^{2}$ "the liegeman 'In-k3.f (Abu Bakr, Giza, Fig. 4i B, p. 65 ) the apparent reversal of all but the last sign is probably to be explained as the retention of rightward orientation in an inscription facing left; so too $\AA_{\substack{\circ}}(\leftarrow)$ in Boeser, Beschr. aeg. Sammlg. II, Pl. 3 (4), where the name is also written $\underset{\sim}{\infty}$
351. Meir VI, Pl. I3 and p. 2 , $\mathrm{A}, 3$. The reading is corroborated by the frequency of this phrase in royal inscriptions, for there are many such borrowings in the same tomb: see ibid., pp. 26, 30-31, 35, and cf. Meir I, pp. 12-13.

of ${ }^{\prime} m \mathrm{~m} t \mathrm{izet}$, for which $W b$. IV, p. 462 (12) compares Coptic $\mathbb{D} \in \in 1,352$ is well expressed by the ambiguity of this writing, for it is impossible to say whether šmt precedes izot or vice versa.

The same deliberate ambiguity is more artfully contrived in temple scenes which show the king being escorted by one or more divinities. The earliest ambivalent example of smt iwt in such a context is provided by the Karnak shrine of Sesostris I (Fig. I I4): "Going and coming of the king, reposing in the god's palace of Upper Egypt." ${ }^{353}$ Here the group ${ }_{\wedge} \stackrel{\Delta}{\Delta}$ may be interpreted either as $\stackrel{a}{a}+\Delta$ or ${ }^{\circ} \Delta+\Lambda^{\circ}$, so that it is again difficult to say whether smt or iwt takes precedence. Lacau transliterates $\not \approx \wedge \wedge \wedge$ as $c k$ prt nśwt, i.e. $¥ \Delta+\wedge \wedge$, but this is disproved by later parallels, in which the initial $\triangle$ is clearly associated with the following $\Lambda .{ }^{354}$
352. Cf. also the Dyn. XII occurrence of $\pi 44 \Omega$ in Gardiner-Peet-Černý, Sinai, Pl. 17 (53) and p. 80.
353. Lacau-Chevrier, Chapelle de Sésostris I ${ }^{\text {r, }}$, Pls. 13 (Scène
3) and XXVI; photograph in $I L \mathcal{N}$ (June 4, 1938), p. 908.
354. Also cf. Médamoud (1930), Pl. 9, where virtually the same phrase is written $\neq \frac{s}{\circ}$


Fig． 115
An identical arrangement occurs in at least half of a total of ${ }_{14}$ Eighteenth Dynasty examples associated with the names of Hatshepsut and Tuthmosis III，as illustrated by the Festival Hall of Tuthmosis III（Fig．II5）：＂Going and coming 〈to／from〉 the pr wr．＂${ }^{355}$ From this time onward the word＂king＂is usually introduced after the group in question rather than before it－e．g．：$\therefore \Delta \neq 0$ 70 to／from the temple of Amun．＂${ }^{356}$ One of the examples of Hatshepsut，from her temple at Deir

355．Fig． 115 is redrawn from Bissing，Re－Heiligtum III， Beiblatt A：Karnak，Festival Hall（Nelson loc．F273）．Three examples on blocks from the Karnak shrine of Hatshepsut （references to $\mathrm{PM} \mathrm{II}^{2}$ ，pp． 64 ff．，plus Oriental Inst．photo－ graph no．）；$\wedge$ ． photo． $6698 ; \underset{\sim}{\text { 人 }}$ photo．7099；same，Tuthmosis III，PM II²，p． 66 （141－2）， photo．7II6．Two other examples of the same pattern，both Tuthmosis III as in Fig． 115 ：Medinet Habu（LD III，Pl． 37 a and G．Jéquier，Temples I，Pls． 43 ［1］， 44 ［1］；here the text reads＂going and coming，the king going to the Great Man－
sion＂＇）；Medinet Habu（Jéquier，ibid．，Pl． 42 ［1］）．The refer－ ence for the seventh example，quoted below，is given in the following note．

356．Karnak shrine，PM II ${ }^{2}$ ，p． 68 （ $139-40$ ），Or．Inst． photo．7105．The preposition $m$ is sometimes replaced by $r$ in the Eighteenth Dynasty examples；e．g．Deir el Bahari III， Pl． 64 （r pr．s＂to her house＂）；LD III，Pl．37a；Karnak，loc． F99，Fi33；in the Nineteenth Dynasty the preposition $r$ be－ comes the rule．Note that one block from Hatshepsut＇s Karnak shrine evidently shows the older writing with $\nrightarrow$ at the beginning：$\stackrel{\ddagger}{\wedge}$（Nims，JNES 14 ［1955］， 122 ［4a］）．
 ${ }^{5} m t .{ }^{357}$ Thus the orientation is probably inward, as is more evident in the case of three other ex-
 successor of Tuthmosis III, Amenophis II, shows outward orientation at Amada ( $\hat{A} \rightarrow$ ), , ${ }^{361}$ and the remaining examples of Tuthmosis himself all appear to read outward: $\hat{A}_{\wedge}(\rightarrow),,^{362}$ $\left.{ }^{[~} \wedge 0\right]$ ] $(\leftarrow),{ }^{363}$ and $\triangle \wedge . .^{364}$ The last of these variations is usual in examples of the Nineteenth Dynasty and later, when the outward orientation became the rule, ${ }^{365}$ but one of the earliest Nineteenth Dynasty writings, dating to Sethos I, once more shows the feet facing inward: ค. $\hat{.}(\rightarrow) .^{366}$
§42. Writings of $\mathbf{r k p r t}$ 'entering and coming forth." Mention has already been made of two Middle Kingdom occurrences of $\mathfrak{R}^{\mathfrak{D}}$ (Beni Hasan I, Pl. 18). Another tomb at the same site (ibid. II, Pl. 16) writes $p r i$ with reversed $\wedge$ in the epithet $\kappa k(\underline{h} r) h s t$, $p r i$ ( $\underline{h} r)$ phwey "who enters first and comes forth last" (Fig. I 16). ${ }^{367}$ The verb pri similarly shows the reversed $\wedge$ on a stela invoking Ptah Sokar $\square{ }^{\wedge}{ }^{\wedge}(\leftarrow)$ "that he (the deceased) may come forth on the great festival" (Cairo CG 20559) and, less significantly, in the cursive texts $(\leftarrow)$ of a Middle Kingdom coffin, which speaks of ${ }_{\circ}^{\circ}$ A $\odot$ "coming forth by day" (Cairo CG 28024 , Lacau, Sarcophages I, p. 57), while a statue of the earlyNewKingdom has a formula invok-


Fig. 116
 "everything . . . that emanates from her" ${ }^{368}$ and at least one other occurrence of this kind (but $\rightarrow$ ) is known from the same period. ${ }^{369}$ Finally, on the Bubastite Portal at Karnak, the reliefs of

[^36]$\Delta \wedge$, Karnak, loc. I 168, 187; Gauthier, Ouadies-Sebouâ, Pl. 13 and p. 23. Ramesses III: $\Delta \Lambda$, Medinet Habu IV, Pl. 235; V, Pl. 257; $\Delta \wedge$, Karnak, loc. Gi12; $\stackrel{\wedge}{\wedge}(\rightarrow)$, Karnak, Khonsu Temple, loc. 645b. Ramesses IV: $\Delta \wedge$, Karnak, loc. Gi8i. Herihor: $\triangle \Lambda$, Karnak, Khonsu Temple, loc. M200.
366. Karnak, loc. B23I (LD III, Pl. I24d). Here mention should also be made of the example $\Lambda_{0} \Lambda_{0}$ on the north face of the Eighth Pylon, which is evidently a restoration (LD III, Pl. 14; cf. PM II ${ }^{2}$, p. 174 [517]).
367. From Beni Hasan II, Pl. 16. Cf. J. Janssen, De Traditioneele Egyptische Autobiografie voor het Nieuwe Rijk I (Leiden ${ }^{1946}$ ), pp. 52 (II, O 15 ), 60 (II, $\mathrm{Ak}_{21}$ ) and ibid. II, p. 8o; he compares LD Text II, p. I03; also Sethe, $\ddot{A} Z 59$ (1924), 62, and the normal writing of the same epithet in Bersheh II, Pl. 13 (16). Sethe notes that the preposition $h r$ "under" is indicated by the position of with the tail beneath and by the lower level of the last two signs.
368. $M M J 9$ (1974), p. 31, Fig. 43; pp. 32-33 (g).
369. Petrie, Gizeh and Rifeh, Pls. $27^{\mathrm{B}}$ (bottom left), ${ }_{27} \mathrm{~N}$ (1).

Osorkon I show an unusual writing of the epithet that is frequently applied to Horus the Behdetite：ㄷ．＂who comes forth from the horizon＂（Bubastite Portal，Pl．I3）．The reversal of the determinative also occurs in a writing of $\tau k$ written $\xrightarrow[A R]{\sim}(\rightarrow)$ ，on another Middle Kingdom coffin，but this isolated exception may be an error．${ }^{370}$

The same reversed orientation is applied to pri in a group which most frequently takes the form $\wedge_{\Delta}^{\wedge},{ }^{371} \wedge,{ }^{372}$ or $\wedge \Omega,,^{373}$ and appears in a funerary context，specifically in the very common New Kingdom formula that is more fully written $\Delta$ 号 $\subseteq$ g＂entering and coming forth from the necropolis．＂There are several variations，in which the word＂necropolis＂may be re－ placed by the synonymous $r$－stzw ${ }^{374}$ or a term for＂temple．＂One of the earlier examples of the
 referring to a god：Brussels i 103），${ }^{376},{ }^{\triangle} \triangle \square^{\circ}$（Brussels E 3053）．${ }^{377}$ In all but a very few exceptional cases the orientation is outward，as in the later abbreviation $\uparrow\left\{\begin{array}{l}\text { 行 }, ~\end{array}{ }^{378}\right.$ which also
 confirmed by the fact that the $t$－ending，when it is written，is almost always associated with the second pair of legs，whereas even the most similar writings of $\check{m} m t i w t$, mostly dating to the late New Kingdom，normally apply the ending to both elements（as indicated in note 365 above）．

In at least two cases，however，the feminine ending is exceptionally written twice：$\stackrel{\wedge}{\circ}$ $(\rightarrow)^{380}$ and $\left.\xlongequal[\wedge]{\wedge} \cap(\rightarrow)\right)^{38 \mathrm{I}}$ These are doubtless assimilated to writings of $\check{s} m t-i w t$ ，and it will be noted that the second group shows the ambivalent orientation that is characteristic of the earlier writings of that phrase．

The rare examples of inward orientation almost exclusively show the form $\simeq \Delta . .^{382}$ While it

370．Bersha coffin BM 30840，as shown in $C T$ V， 330 （d）； another occurrence in the same text（ $f$ ）is normal，as are the writings in two other Bersha coffins．

371．N．de G．Davies，The Tomb of Nakht（New York 1917）， Pl．8；Ken－Amūn，Pl．65；L．Habachi，Tell Basta，Pl． $4^{\circ}$ ； BM 1368 （Hieroglyphic Texts VI，Pl．44）；Cairo CG 42123， 42171；Turin 172；Louvre C 286 （de Buck，ERB，p． 113 ［3］； mistakenly copied as $\stackrel{\wedge}{\wedge}$ by Faulkner，Concise Dictionary，p．9ı， and wrongly read prt－hst）．

372．Kêmi VI（1936），146；ASAE 12 （1912），135；Louvre C．63，64；G．Foucart，M．Baud，E．Drioton，Tombes Thébaines： Le Tombeau de Panehsy（MIFAO 57；Cairo 1932），p． 8 and Fig．1；Huy，Pl． $3^{8(G)}$ ；BM 1131 and 480 （Hieroglyphic Texts V，Pls．34，39）；CG 579.

373．Menkheperrasonb，Pl．39；Petrie，Abydos III，Pl． 25 （left）；$A S A E 59$（1966），Pls．77，82，83，92，foll．p．184；Cairo J 13708.

374．Louvre C 71，74， 286 （de Buck，ERB，p． 113 ［3］）； BM I131（Hieroglyphic Texts V，Pl．34）；Huy，Pl． 38 （G）； Rekh－mi－Rēr，Pl．8；Petrie，Illahun，Kahun and Gurob，Pl． 24 （7）； cf．Ken－Amün，Pl． 38 （imht＇netherworld＂）and a Dyn．XIII example，Louvre C 55 ，which has $r$ is．$i$＂to my tomb．＂Here it may be added that the preposition $m$ is rarely replaced by r：ASAE 33 （1933），p． 7 and Plate；Menkheperrasonb，Pl． 39
（both Dyn．XVIII）；Nefer－hotep I，Pl． 38 （early Dyn．XIX）． Contrast the regular use of $r$ after $\delta m t$ iwt in Dyn．XIX（note 356 above）．

375．Borchardt，Statuen und Statuetten IV，p．85，dates this to the Middle Kingdom，but it probably is somewhat later； see above，§33a（3）．

376．On statues placed in the courtyards of temples： Brussels E 1103 （L．Speleers，Recueil des inscriptions ésyptiennes des Musées royaux du cinquantenaire à Bruxelles［Brussels 1923］， p． 60 ［250］）；Cairo CG 42171 ；L．Habachi，Tell Basta，Pl． 4 。 Similarly the four－sided monument BM 467 （Hieroglyphic Texts VII，Pl．2），which also has $m$ hrt－ntr．Cf．，on another statue，Cairo CG $4^{2123}, m^{\prime} I p t-s w t$ ，the temple of Karnak．

377．Speleers，op．cit．，p． 40 （149）．
378．G．Steindorff，Mission archéologique de Nubie 1929－ 1934：Aniba II（Plates）（Glückstadt－Hamburg－N．Y．1937）， Pls． 34 （2，8）， 38 （a），and Cairo CG 1212 （Libyan Period）． 379．N．de G．Davies，Two Ramesside Tombs a！Thebes （New York 1927），Pl． 18.

380．$A S A E 59$（ı966），PI．73，foll．p． 184.
381．Amama I，Pl． 34.
382．E．g．$A S A E 33$（1933），p． 7 and Plate；Boeser，Beschr． aeg．Sammlg．IV，Pl．9；CG 613， 42181 ；Cairo stela＇T $\frac{10 \mid 6}{24 \mid 8}$ ； Turin 180；Field Museum，Chicago， 31288 （T．G．Allen，
is possible that this arrangement indicates a reversed sequence of $p r t$ and $c k$, as in $\wedge \wedge(\rightarrow)$ and $\hat{\hat{N}}(\rightarrow),,^{383}$ that is clearly not the case in one exceptional example (Quibell, Excav. at Saq. [1908-9, 1909-I0], Pl .74 [r]) which is more fully written:

§43. Orientation of $\propto$ and $\infty$. Probably because it is "thus always in hieratic," Gardiner takes (his $\mathrm{F}_{23}$ ), to be the norm, listing it before ( $\mathrm{F}_{24}$ ), which is said to be also "common in hieroglyphic at all periods." Although $\propto(\rightarrow)$ does become the standard hieratic form, both $\propto$ and $\propto$ occur in hieratic texts of the Oild Kingdom, ${ }^{384}$ just as in the case of $\sigma$ and $\varnothing .{ }^{385}$ The hieratic forms of these signs show some similarity and their reversal, producing a downward stroke in front, is doubtless related to the fact that isolated signs in hieratic tended to be written by moving the pen from left to right. ${ }^{386} \mathrm{In}$ any case, while $\quad .(\rightarrow)$ emerged as the standard hieratic form, $\propto(\rightarrow)$ retained its position as the normal form in hieroglyphic. The same may well be true of $\underset{\sim}{\infty}(\rightarrow)$ and $\ldots(\rightarrow)$, but if so, the frequent use of both forms in hieroglyphic texts remains to be explained.

If these two forms of the bovine foreleg are considered as the horizontal equivalent of a vertical sign such as $!\left(F_{25}\right)$, which represents only the shank and hoof, it becomes apparent that on should in fact be taken as the norm. ${ }^{387}$ For it is generally true that the top of a tall sign corresponds to the front end of its horizontal equivalent: the most common examples are and

Egyptian Stelae in Field Mus. of Nat. History [Chicago 1936], p. 30); also $\uparrow$ in back-pillar of Cairo J 37966 (Libyan Period, from notes of Caminos). Note that Wb. I, p. 52 I , gives only this rarer form, although on p. 232 it gives $\Lambda$ as well as $\Lambda \Delta$. Note also at least one exceptional case of $\hat{A}(\leftarrow)$ : Petrie, Illahun, Kahun and Gurob, Pl. 24 (7).
383. Louvre C 68 and C 71. Cf. also $\stackrel{\substack{\text { s. }}}{ }(\rightarrow)$, Rekh-mi-

384. P. Posener-Kriéger and J.-L. de Cenival, Hieratic Papyri in The British Museum: The Abu Sir Papyri (London 1968), Pal. Pl. 3: two examples of $\sim(\rightarrow)$ and two of $\Sigma \approx$ $(\rightarrow)$, to which a third example may be added: Pl. $48(\dddot{\mathrm{~A}})$. This last is apparently the same as the single example given by Möller, Paläographie I, no. I64.
385. Posener-Kriéger and de Cenival, Abu Sir Papyri, Pal. Pl. 13, and Möller, op. cit., no. 511. Cf. E. Edel, Die Felsengräber der Qubbet el Hawa, Sect. II, Vol. I (Wiesbaden 1970), where $\approx(\rightarrow)$ and $\because(\rightarrow)$ appear in inscriptions of the same person (Pls. $21 \dddot{\mathrm{~A}}, 22 \mathrm{~A}$, and $151 \mathrm{~A}, 153 \mathrm{~A}$ as compared
with 150 A; also Pls. 186, 187, 194).
386. For this tendency, first noted by Brugsch, cf. Möller, op. cit., p. 7.
387. Cf. the First Dynasty examples of vertical $\}(\rightarrow)$ in W. B. Emery, Excavations at Saqqara: Great Tombs of the First Dynasty II (Cairo 1949), Fig. 141, p. 113 and cf. Fig. 105, p. 102, and comments on pp. 103, ino. Most of the few later examples $I$ know of occur in 9 (etc.), listed among offerings in a series of Dyn. XI coffins from Akhmin: CG $28001-$ 28004, 28006-28007, 28009, 28013, 28020. Cf. also ? ( $\leftarrow)$ in Ricke-Hughes-Wente, Beit el-Wali Temple, Pl. 8 and p. II (temp. Ramesses II). It may be noted, however, that the hieroglyph f(F25) also includes the shoulder in some late First Intermediate Period examples at Naga ed-Deir; these assume the appearance of a vertical en, but with a rounded top: Dunham, Naga-ed-Dêr Stelae, no. 73; Cairo CG 1627; Melbourne no. 39. Also cf. BM 1372 (Hieroglyphic Texts $\mathrm{I}^{1}$, Pl. 54).
 principle may be observed in rarer cases，such as $\uparrow$ for $<390 \|$ for $=39$ and $\|$ for $<.392$ Two conspicuous exceptions are known from the Middle Kingdom onward：\｜for $\varnothing$（AaII）${ }^{313}$ and $\psi$ for $\leqslant$（ $\mathrm{T}_{21}$ ）；${ }^{394}$ if the first of these seems inexplicable，the second is understandable on the basis of Old Kingdom scenes which show that the implement was held point downward when not in use（Meir IV，Pl．7；Junker，Gîza IV，Fig． 8 foll．p．28）．

The orientation of $\infty$ is also particularly appropriate if the foreleg is regarded as an offering． In this context the joint minus the shank（ $\sim$ ）is sometimes called $t p n h p s$ ，apparently meaning ＂the head of the foreleg．＂${ }^{395}$ More significantly，the direction of $\propto$ corresponds to the way it was carried when being presented by a funerary priest，as depicted on countless paintings and reliefs of all periods（Fig．117）．${ }^{396}$ Several ivory spoons of the Archaic Period from Helwan and

388．The vertical mummiform hieroglyph（A53）makes its first appearance in Dyn．XI（e．g．Clère－Vandier，TPPI， $\S \S ⿺ 6$［p．12］， 33 ［line 9］as det．of twt＂image＂；Louvre C 15 ［line $\mathrm{X}+8$ ］as det．of $w i$＇mummy＂），and examples of the mummy on a bier are not much earlier，but－as Gardiner points out－the latter replace Old Kingdom determinatives of $s d r$ which represent a man on a bed，similarly oriented： e．g．Urk．I，p．130，（10，12）；Meir IV，Pl．4；Hassan，Giza V， Fig．101a，p．24i；Junker，Giza III，Fig． 28 foll．p．166； Petrie，Athribis，Pl．6．In Petrie，Deshasheh，Pl．7，this also serves as the determinative of $\triangle \mathrm{mmm} \frac{4}{4} x$＂who goes to his ka．＂The orientation of $\xlongequal{\sim}$ and remains fairly con－ stant，although there are some exceptions in the later New Kingdom：Amarna II，Pl．2I；IV，Pl． 27 （left side only）；VI， Pl． 33 （w）；Nefer－hotep I，Pl． 54 （but not Pls．24，35， 58 ［n］）； Medinet Habu III，Pl． 182.

389．An Old Kingdom example of horizontal - occurs in the name $H m w$ ，Gardiner－Peet－Cerný，Sinai，Pl． 9 （17）． The sign is crudely incised，and its orientation is uncertain （cf．Urk．I，p． 113 ［13］），but clearer examples are to be found in Junker，Giza IV，Pl．10： $14-$＂oar＂and $\square$ — ＂steering oar．＂

390．Montet，Kêmi 6 （1936），i 8 （Qasr es－Sayyed，Dyn． VI）；cf．the almost vertical examples of somewhat later date at Gebelein and Moalla：Kush 9 （1961），79－80（f）．

391．Junker，Giza V，Fig．40，as opposed to a later and less logical example of \｜（ Cairo CG 20694）．

392．Two Eleventh Dynasty stelae，both evidently from Abydos：Turin 1513 and Berlin 1197 （the latter in LD II，Pl． 144）．

393．Gardiner，Sign List AaI I，says＂sometimes vertically f or \｜，＂but the former，with the pointed end downward， seems more usual in the Middle Kingdom：e．g．Meir II，Pl．6； III，Pl．9；VI，Pl．5；Petrie，Abydos II，Pl．29；W．M．F．Petrie， Antaeopolis：The Tombs of Qau（London 1930），Pl．26；R． Engelbach，Riqqeh and Memphis VI（London 1915），Pl．24； Garstang，El Arábah，Pls． 4 （E 181）， 7 （F）；Gautier－Jéquier，

Mémoire sur les fouilles de Licht（MIFAO 6），Figs．52，60，62， 103， 117 ．Also later：Rekh－mi－Rer，Pl．8；Amenemhett，Pl．3．The pointed end is often upward at Beni Hasan（Beni Hasan I， Pls．7，11，13，14，15，20，24），but sometimes downward （ibid．，Pls．12，13，24）；also upward in Bersheh II，Pl．$;$ and on BM 5288ı（Hieroglyphic Texts V，Pl．3）．

394．Five Old Kingdom examples are known to me： Junker，Giza IV，Fig．8，facing p．28；Hassan，Giza II，Fig． 213，facing p．181 ；LD II，Pl． 30 （＝Reisner G4920）；Murray， Saqqara Mastabas I，Pl．8；ASAE 35 （1935），152．A vertical example from the Middle Kingdom is said to point upward （Borchardt，Statuen und Statuetten II，p．20：CG 408）but this seems doubtful，to judge from the photograph（Pl．6i7）．The same is true of an alleged New Kingdom example（ibil．，p．92： CG 547，line 3，and cf．Pl．91）．For further New Kingdom examples see CG 579 ；BM 550 （Hieroglyphic Texts VIII，Pl． 27）；BM 589 （ibid．IX，Pl．31）；Louvre C 26 ；Huy；PI． 21 ； Rekh－mi－Rer，Pls．41，74，etc．

395． （2）（ASAE 3 ［1902］，Pl． 5 to pp． 122 ff ．）；號（BMFA 32 ［1934］，Fig．2，p．2）；Detroit 71.292 （Bulletin of The Detroit Institute of Arts 51 ［1972］，Fig． 5A［44］，p．74，and n．9，p．79，with reference to the use of $t p$ as＂Ende des Knochens，＂Wb．V，p． 266 ［1］）．Kaplony quotes the example in $B M F A$ from Junker，Giza II，p．90， where the determinative is inaccurately represented as en rather than 5 ，and he translates＂bestes Stück vom Vor－ derschenkel＂（Inschr．der äg．Frïhzeit II，p．ro14；cf．also Barta， Opferliste，p． 74 ［45］）．In the case of the vertical examples of If mentioned above，and discussed by Kaplony，ibid．，pp． 303－4，it is just possible that the upright position is intended as a writing of $t p$ ．If $t p h p s$ refers to $\sigma$ as the＂head＂of $\infty$ ， it should be noted，however，that Pyr．1546a uses a different term for＂upper foreleg＂一是象，which is distinguished
 tian Onomastica II，p．243＊．

396．From Tombeau de Ti 3，Pl． 179.


Fig. 117
elsewhere have handles in the form of a foreleg that is oriented in the same manner; probably these implements were designed for the presentation of offerings ${ }^{397}$ (cf. Fig. 119, p. 128 below).

In virtually all these offering scenes the accompanying text correspondingly uses the form $\infty$ in the determinative of $h p s$ "foreleg" and stpt "choice cuts" and the same is true of the offering lists which are arranged so that the hieroglyphs face the recipient. It is also true of most butchering scenes, where the orientation of $\infty$ is not so obviously affected by the context, and where the sign must be turned rightward and leftward within the same scene, depending on the way the butcher is facing when he speaks of the foreleg or "choice cuts."

The offering lists show the greatest degree of conformity in the use of $\infty$; a few lapses may be found even in lists of the Old Kingdom, ${ }^{398}$ but the proportion of error is no greater in later examples, including those of the New Kingdom. ${ }^{399}$ Until that time the scenes of presentation

[^37](Junker, Giza VII, Fig. 70, p. 167). A survey of the lists assembled in Hassan's Giza VI does not give an accurate idea of the proportion of discrepancies, for some of his examples of reversed orientation are actually normal, including nos. 40 (LD II, Pl. 58), 5 (Cairo CG 1485), 59 (Petrie, Deshasheh, Pl. 20), 96 (Junker, Gíza IV, Pl. 16). The proportion of reversals is probably no more than $7 \%$.
399. Some examples: Dyn. X-Teti Pyr. Cem., Pl. 21 B (Boston MFA 24-593). Dyn. XII—Beni Hasan I, Pl. 19; II, Pl. 15; Meir II, Pl. 8. Dyn. XVIII—Nelson, JNES 8 (1949), Pl. 20B (as opposed to four normal cases from the same source, the Luxor reliefs of Amenophis III, cf. note $4{ }^{13}$ below). Nonroyal offering lists of Dyn. XVIII regularly con-
and butchering even more regularly adhere to the same pattern ${ }^{400}$ but, particularly in the case of the butchering scenes (which diminished in popularity in any case), the orientation of oa was less carefully observed from the New Kingdom onward. ${ }^{401}$

As might be expected, the hieroglyphic sign a tends to conform to the reversed orientation of its hieratic counterpart in hieroglyphic offering formulae that are not directly associated with a representation of the recipient. This sort of exception is more frequent, however, on stelae of the Middle Kingdom and somewhat later, ${ }^{402}$ than it is in the more carefully executed inscriptions of Eighteenth Dynasty tombs and stelae. 403

In addition to the influence of the hieratic orientation, there was evidently a further and more meaningful reason for the reversal of the hieroglyph on. In those cases where it is metaphorically employed as a term for "oxlike arm" or "strength" of a man, the orientation of $\infty$ provides a better comparison with - , and it may be noted that $h p s$ in this sense is written $\stackrel{\theta}{\square}-404$ and $0 \square, 405$ as well as ${ }_{\square}^{\sim}, 406$ on First Intermediate Period stelae of the Girga region.

The distinction between $\infty$ as "foreleg of beef" and $\propto$ as "arm" or "strength" is evidently to be recognized in the Pyramid Texts, as shown by a tabulation of 23 examples:407
form to tradition: Amenemhēt, Pl. 21 ; Menkheperrasonb, Pl. 29; Rekh-mi-Rēr, Pl. 91 ; N. de G. Davies, The Tomb of Puyemrê at Thebes II (N.Y. 1923), Pl. 50; N. de G. Davies, The Tomb of the Vizier Ramose (London 1941), Pl. 20.
400. Some O.K. examples of presentation: Borchardt, Grabdenkmal Śashu-rer II, Pls. 28, 31 ; Jéquier, Mon. fun. Pepi II, I, Fig. 1, p. 2; Cairo CG 1418, 1419, 1492, 1779; Meir IV, Pl. 12 ; V, Pls. 1 I, 29, 33, 34. M.K. examples of presentation: MDIK 4 (1933), Fig. I1, p. 187; Dieter Arnold, Der Tempel des Königs Mentuhotep von Deir el-Bahari II (Mainz 1974), Pls. 19, 21 ; Lacau-Chevrier, Chapelle de Sesostris I ${ }^{\text {er }}, \mathrm{Pl}{ }_{24}$; BM 576 (Hieroglyphic Texts II, Pl. 10); Meir I, PI. 9; II, Pl. 2; III, Pls. 16, 17, 25; VI, Pls. 15, 18, 19; Beni Hasan I, Pls. 17, 18; CG 20504 (incorrectly printed in typescript). Some O.K. examples in butchering scenes: Borchardt, Grabdenkmal Sashu-rer II, Pl. 57; Jéquier, Mon. fun. Pepi II, II, Pls. Ioo, IOI ; F. W. von Bissing, Die Mastaba des Gem-ni-kai II (Leipzig 191 1), Pl. 26; Deir el Gebrâwi I, Pls. 8, 12 ; Mereruka, Pls. 54, ro9. M.K. examples: Meir I, Pl. 11 ; Beni Hasan I, Pls. 17, 18, 35; Cairo CG 20024 (Musée Égyptien I, Pl. 17); Kitchen, JEA 47 (1961), p. 15 and Pl. 3.
401. The evidence from private tombs of the New Kingdom is very inconsistent as compared with the royal examples, for which see n. 413 below, and compared with the earlier (Dyn. XIII?) royal presentation in Petrie, Abydos II, Pl. 23 (3), and the later butchering scene in the tomb of Merneptah (Champollion, Monuments de l'Égypte et de la Nubie III, PI. 247), both of which conform to older tradition. The examples of $5 \geq$ in Rekh-mi-Rer (Pls. 91, 105, 106, 107) are always written thus regardless of the orientation of the context, except for one example in the offering list ( $\rightarrow \rightarrow$, Pl. 91) and another cited in n. 403 below. The traditional orientation appears in the presentation scenes of Menkheper-
rasonb, Pl. 29; Säve-Söderbergh, Private Tombs I, Pl. 26; R. A. Caminos and T. G. H. James, Gebel-es-Silsilah I (London 1963), Pl. 52, as opposed to Davies, Tomb of Puyemrê II: Pl. 53; Amenemhēt, Pl. ro. The traditional orientation appears in the butchering scenes of $\underline{H} r w . f$ (Fakhry, ASAE 42 [1943], p. 486 and Pl. 45) as opposed to Davies, Tomb of Puyemrê II, Pl. 52, and Davies, Five Theban Tombs (London 1913), Pl. ic.
402. Dyroff-Pörtner, München, Pl. 2 (3); Louvre C 30 (Sethe, Lesestücke, p. 64 [ 15$]$ ); Petrie, Illahun, Kahun and Gurob, Pl. у $;$ BM 828 (Hieroglyphic Texts II, PI. 21 ); Müller, Felsengräber, Fig. $4^{2}$ (but $\stackrel{\Sigma \wedge}{\infty}[\leftarrow]$ ibid., Fig. 34); Cairo CG 20390, 20498 (as seen from typescript); Brooklyn 37.1346 E (T. G. H. James, Corpus of Hieroglyphic Inscriptions in The Brooklyn Museum I [Wilbour Monograph 6; Brooklyn 1974], no. 46 , Pls. 6, 3 I).
403. Traditional orientation in Rekh-mi-Rer, Pl. 86 (lines 5, 8, 11); Davies, Tomb of Vizier Ramose, PI. 21 ; Säve-Söderbergh, Private Tombs I, Pl. 27 (c); Randall-MacIver and Woolley, Buhen, Pl. 34 (bottom); Cairo CG 34025, recto, line 26 (Amenophis III); Cairo CG 20775, line 3 (seen from typescript). For two reversed examples, see N. de G. and Nina de G. Davies, Tomb of Two Officials of Tuthnoosis IV (London 1923), Pl. $3^{8}$ (M) and Habachi, Kush 7 (1959), Fig. 6, p. ${ }^{1}$.
404. Dunham, Naga-ed-Dêr Stelae, no. 12.
405. Cairo J 55607 (Aulad el Sheikh).
406. Dunham, Naga-ed-Dêr Stelae, nos. 42 (Lutz, Steles, no. 38), 62, 69, 78; Cairo CG 1609; University M.useum, Philadelphia, 40-19-1 (Smith, Art and Architecture, Pl. 57); Melbourne no. 39.
407. Foreleg (a) Pyr. 12c (N), 1026b (P), 1546a (P), 1649a (N), 1651c (M); G. Jéquier, Fouilles à Saqqarah: La

|  | (a) $\infty \sim \ldots$ | (b) $\infty$ | (c) $\square$ | (d) $\ldots \ldots$ |
| :--- | :---: | :---: | :---: | :---: |
| Foreleg | 7 | 4 | 1 | 3 |
| Arm | 1 | - | - | 7 |

Since the exceptional cases of $\infty$ for "foreleg of beef" occur in normally oriented inscriptions (i.e. $\underset{\sim}{\infty}[\rightarrow]$ ), they may show the influence of hieratic reversal in the original text. Another occurrence of $\propto$ (Pyr. 1867a[N]) has been omitted because it is difficult to categorize; the king is compared to a calf. In general the occurrences meaning "arm" refer to the arm of a foe except for Pyr. $3^{16 c}(W)$ which provides the earliest evidence for ${ }_{\square}{ }^{\circ}$ meaning "strength."

In one case (Pyr. 1286) the arms and hearts of the king's foes are severed, recalling a later text in which offerings are equated with the vanquished enemy. ${ }^{408}$ This association might well explain the single exceptional writing of on for "arm" in the texts of Queen Neith, but it must be kept in mind that her texts are relatively faulty.

The use of $\infty$ as an expression for "arm" or "strength" is frequently attested in Upper Egyptian inscriptions of the First Intermediate Period and Eleventh Dynasty, ${ }^{409}$ all but one of them referring to nonroyal persons who extol their fortitude or self-reliance. The one royal example, naming $\mathrm{Nb}-\mathrm{hpt}-\mathrm{Rr}$ Mentuhotep (after the reunification of Egypt), is only preserved in a hand copy. ${ }^{40}$ The evidence of the Twelfth Dynasty is much more meager. I have assembled a total of 25 examples covering the entire period between the Old and New Kingdom, and their orientation is as follows: ${ }^{411}$

| (a) | (b) $\leftarrow$ | (c) ธ | (d) $\underset{\sim}{\sim}$ |
| :---: | :---: | :---: | :---: |
| 21 | 0 | 2 | 2 |

[^38]MMA 12.183.8 (Fischer, Dendera, p. $207 \subseteq \mathbb{D}[\leftarrow]$ ); Gebelein region-BM 1671 (Polotsky, JEA 16 [1930], facing p. 194 [twice]); Cairo CG 20001; Berlin 24032 (Kush 9 [1961], 47); Vandier, Moralla, p. 206 and note on p. 212. AsyutSiut V, 16 (H. Brunner, Die Texte aus den Gräbern der Herakleopolitenzeit von Siut [AF ${ }_{5}$; Glückstadt-Hamburg-N.Y. 1937], p. 66). No provenance-Cairo CG 20506.
410. Deir el-Bahari XIth Dyn. I, p. 5: $\rightarrow(\rightarrow)$.
411. (a) All of the unspecified examples in notes 406,409 above and the following later examples: Berlin 1157 (Aeg. Inschr. I, P. 258, line 3); Couyat-Montet, Hammâmât, no. 43 (3), Pl. 13; Cairo CG 20732 (4) (Second I.P.). (c) MMA 12.183.8; Asyut coffin (ASAE 23 [1923], 21 ; note, however, that this inscription shows several other signs that retain rightward orientation). (d) Cairo CG 1596 and the reference in n. 410 . The example of $\sim$ in Meir VI, p. 8 and P1. 13, is too incompletely preserved to determine the orientation.

Thus there are four occurrences which do not conform to the expected orientation, and two of these ( $\Sigma a$, facing $\leftarrow$ ) might be explained as a retention of rightward orientation. Much more conclusive evidence is available from the New Kingdom, when epithets like $n b h p s{ }^{2}$ were frequently applied to rulers in the large-scale inscriptions of their monuments, and the usefulness of this evidence is enhanced by the fact that leftward inscriptions are more fully represented. A random sampling of 53 examples, dating from Tuthmosis I to Ramesses II, inclusive, has yielded the following tally:412

| (a) <br> $\rightarrow$ | (b) $\sim$ | (c) <br> $\leftarrow$ | (d) $\rightarrow$ |
| :---: | :---: | :---: | :---: |
| 25 | 20 | 6 | 2 |

Thus $85 \%$ of the sampling shows the anticipated orientation, and six of the eight exceptions can be explained as a retention of rightward orientation.

In order to compare the use of $\propto$ as "arm" or "might" with the use of $\infty$ as "foreleg of beef" I have tabulated the data from royal inscriptions of the early New Kingdom, prior to the Amarna Period; although this procedure may seem to restrict the evidence unduly, it is the only way of obtaining a body of evidence that is truly comparable. The results fairly convincingly confirm the validity of the distinction in orientation that corresponds to the difference in meaning:

| "Foreleg"413 | (a) $\underset{\sim}{\sim}$ | (b) | (c) $\sim$ | (d) $\vec{a}$ |
| :---: | :---: | :---: | :---: | :---: |
| Offering lists | 2 | 4 | 2 | I |
| Presentation | 4 | 8 | I | 3 |
| Butchering | 2 | 4 | - | - |
| Totals | 8 | 16 | 3 | 4 |
| "Arm" 414 | (a) $\triangle$ | (b) $\sim$ | (c) $\ldots$ | (d) $\rightarrow$ |
|  | 15 | 12 | 5 | 2 |

412. (a) Tuthmosis III: Gardiner-Peet-Cerný, Sinai, Pl. 64 (198); Amada IV, L 15-19; Deir el Bahari V, Pl. 137; Caminos, $\mathcal{N} .-K$. Temples of Buhen I, Pl. 62 (twice). Amenophis II: C. Kuentz, Deux stèles d'Aménophis II (Biblio. d'Étude Io; Cairo 1925), Pl. 3; Badawy, $A S A E 42$ (1943), Pl. 1, foll. p. 24
(line 6); Petrie, Six Temples at Thebes, Pl. 9 (3, 8). Tuthmosis IV: Amada IV, C 3 (and C 3a), C $35, \mathrm{C}_{45}$. Amenophis III: Chevrier, ASAE 28 (1928), 126; Säve-Söderbergh, Private Tombs I, Pls. 32 (twice), 33. Ramesses II: Gardiner-PeetCerný, Sinai, Pl. 70 (252); Naville, Bubastiv, P1. 36 (E);

The correctly oriented examples of on for "foreleg" total 24 out of 31, or almost $80 \%$, while those of $\propto$ for "arm" total 27 out of 34 , or again $80 \%$. Given the fact that this distinction did not exist in hieratic, and taking into account the tendency to retain rightward orientation in inscriptions facing left, one can only be surprised that the Eighteenth Dynasty draftsmen differentiated these forms as clearly as they did.

It must be conceded, however, that the case of $\overleftarrow{a}$ and $\vec{\sim}$ meaning "offering" is much stronger than the one for $\leftrightarrows$ and $\underset{\infty}{ }$ meaning "arm." One might argue that if the context did not specifically require $\vec{m}$ ( 12 cases, of which $2 / 3$ are correct), the orientation tended to follow that of hieratic $(\vec{a})$. And it scarcely need be emphasized that this collection of New Kingdom evidence is very small and that the addition of only a few more examples might alter the proportions considerably.
§ 44. Reversed 7. The sign 8 is reversed in several Theban inscriptions of the Eleventh Dynasty, beginning with the reign of $W^{3} h$ h-cnh Intef. ${ }^{455}$ Although this peculiarity may possibly be traced to Abydos, only two examples are definitely known to derive from any site other than Thebes, and both of them come from the nearby cemetery of Dendera. ${ }^{416}$ As a rule only $\mathbb{Z}$ is

Petrie, Tanis I, Pls. 8 (50), 9 (52); Tanis II, Pls. 2 (77, 78, 78 bis), 3 ( 8 I ), 5 (102).
(b) Tuthmosis I: LD III, Pls. 5a, 6 (w.). Tuthmosis III: LD III, Pl. 36b; Caminos, $\mathcal{N} .-K$. Temples of Buhen I, Pl. 55. Amenophis II: Amada IV, J r6-20, N 1-3; Petrie, Six Temples at Thebes, Pls. 9 (4), 10; R. A. Caminos, Shrines and RockInscriptions of Ibrim (London 1968), Pl. 28 (and 32). Tuthmosis IV: Amada IV, C 44. Amenophis III: LD III, Pl. 7Ib; Cairo CG 34026. Ramesses I: H. E. Winlock, The Temple of Ramesses I at Abydos (New York 1937), Pl. 2. Sethos I: Gar-diner-Peet-Černý, Sinai, Pl. 68 (247). Ramesses II: Naville, Bubastis, Pl. 37 (A); Petrie, Tanis I, Pls. 8 (50), 9 (52), 10 ( $53,54,55$ ).
(c) Hatshepsut: LD III, Pl. 38b. Tuthmosis III: LD III, Pl. 38d; Cairo CG 34013. Tuthmosis IV: Amada IV, C 32-33. Amenophis III: J. J. Tylor, Wall Drawings and Monuments of El Kab: The Temple of Amenhetep III, Pis. 7, 8.
(d) Tuthmosis IV: Cairo CG 34022. Amenenophis III: Badawi, $A S A E 42$ (1943), Pl. 1, foll. p. 24 (line 1).

It should be added that several more examples of (d) are to be found in the drawings of A. Gayet, Le Temple de Louxor (Paris 1894), but these drawings are notoriously inaccurate and I have not been able to verify the cases in question.
413. Offering lists-(a) Amenophis III, Luxor: Nelson, JNES 8 (1949), Pl. 19 (loc. Ei26); also loc. Fifo (PM II², p. $33^{1}$ [183]). (b) Tuthmosis III: Medinet Habu IV, Pl. 210 (Bi86-7). Amenophis III, Luxor: JNES 8 (1949), Pl. 20, loc. E97; also loc. Fi67 (PM II², p. 33I [184]); Maspero, ASAE 9 (1908), 86 (Sebua, in typescript). (c) Amenophis III, Luxor: JNES 8 (1949), Pl. 20 B (loc. E224); also loc. D214 (PM II², p. 319 [1I0]). (d) Tuthmosis III: DunhamJanssen, Semna Kumma, Pl. 16. Presentation-(a) Hatshepsut,

Karnak block: Or. Inst. neg. 7119 (PM II², p. 68 [West, IV]). Tuthmosis III: Dunham-Janssen, Semna Kumma, Pl. 17; Medinet Habu loc. Bı62 (PM II², p. 468 [42]); Karnak loc. F250 (PM II², p. 117 [379]). (b) Hatshepsut: Deir el Bahari IV, Pl. 1II; Karnak blocks, Or. Inst. negs. 6562, 6712,7112 (PM II², pp. 70 [II], 70 [III], 68 [West III]). Tuthmosis III, Medinet Habu locs. Bi82, 185 (PM II ${ }^{2}$, p. 469 [47]; Karnak loc. Di94a (twice, PM II², p. $9^{8}$ [284]). (c) Hatshepsut, Karnak loc. $\mathrm{D}_{456}$ ( $\mathrm{PM} \mathrm{II}^{2}$, p. 103 [302]). (d) Tuthmosis III: Dunham-Janssen, Semna Kumma, Pls. 19, 53; Ch. Desroches-Noblecourt, S. Donadoni, G. Moukhtar, Le Speos d'El-Lessiya (Centre de Documentation et d'Étude sur l'Ancienne Égypte ; Cairo 1968), Pl. 20. Butchering-(a) Hatshepsut: Deir el Bahari IV, Pl. 107 (twice). (b) Hatshepsut: loc. cit. (four times).
414. Details in note 412 above.
415. Almost all cited by H. J. Polotsky, Zu den Inschriften der II. Dynastie (Untersuchungen zur Geschichte und Altertumskunde Aegyptens 11; Leipzig 1929), §Ir. Definitely from Thebes: Clère-Vandier, TPPI, §§ $14,16,17,20,22,27(\varepsilon, 2$ and $\tau$, 2); Moscow 5603 (4071) (R. I. Roubinštein, Vestnik Dreunej Istorii 1952, no. 3, 126-133, P1. 2); BM 647 (Hieroglyphic Texts I², Pl. 35 [2]). Possibly from Abydos: BM 159 (Faulkner, JEA 37 [1951], 47 ff.); Copenhagen Ny Carlsberg Glypt. ÆIN 963 (Koefoed-Petersen, Les Stèles égyptiennes, no. 9; the question of Abydos provenance is discussed in $\ddot{A} Z 100$ [1973], 20).
416. University Museum, Philadelphia, 29-66-803 (D 6379) and Cairo CG 20804. Polotsky (loc. cit.) thinks also Cairo CG 20543 (Petrie, Dendereh, Pl. 15, left), but this is quite uncertain, for the reversed $\mathbb{Z}$ is lacking in most of the Dyn. XI examples from that site.


Fig． 118


Fig． 119
reversed，in the group $q$ 若＂a thousand of cattle and fowl，＂but in at least three cases the reversal is applied to $\varangle$ as well． 417 Twelfth Dynasty offering formulae occasionally show a sporadic re－ currence of either 7 \％or $4,^{418}$ or both．${ }^{419}$

The orientation of $\&$ is readily explained as a goose with its neck twisted．The fowl was tra－ ditionally killed in this manner（wrn）at the very moment that it was presented as an offering， as shown in Fig．i18，420 and such representations are frequently combined with those showing the presentation of $\approx$ ，as illustrated earlier（Fig．117），${ }^{421}$ while the orientation of $a$ and $\varsigma$ is also embodied in some implements of the Archaic Period from Helwan（Fig．119）．${ }^{422}$ In the

417．Cairo J 88876 （ $\ddot{Z} Z_{100}$［1973］， 20 ［N］，28，and Pl．1， perhaps from Thebes）；MMA 20.2 .29 （Hayes，Scepter I，Fig． 183，definitely Theban）．In Turin 1447 （L．Klebs，Die Reliefs und Malereien des Mittleren Reiches［Heidelberg 1922］，Fig．14， p．22）this feature，in the bottom register，is simply designed to make the offerings face the recipient，as also in Fischer， Dendera，Pl． 27 （cf．$A Z Z$ roo［1973］，20）．Note that the sar－ cophagus of Hnhnt（Clère－Vandier，TPPI，§27（ $\tau$ ）shows the group $\frac{8}{\sim}(\rightarrow)$ on the front and $\underset{\sim}{\theta}(\rightarrow)$ on the lid．

418．Reversal of -7 alone（among determinatives of 닝 $_{0}$ ）： BM 193 （Hieroglyphic Texts II，PI．33）；Petrie，Gizeh and Rifeh， Pl． 13 F．Reversal of $₫$ alone（cf．end of preceding note）： BM 1628 （Hieroglyphic Texts V，Pl．ı）；Louvre C 178 （Gayet， Steles，Pl．33）；E．Ledrain，Les Monuments égyptiens de la Biblio－ thèque Nationale（Paris 1879），Pl．8；CT III， 225 c．Also cf．a
much later example，on a statue of the Twenty－second Dy－ nasty（Cairo CG 42221，from a facsimile by Ricardo Ca－ minos）：天，和（ $\rightarrow$ ）。

419．De Morgan，Fouilles à Dahchour en 1894－95，Fig．130， p．86；Cairo CG 20440.

420．From Tombeau de Ti 3，Pl．181；cf．ASAE 36 （1936）， 40 ，where the action is specified as wrn．

42 I．Some Old Kingdom examples：Junker，Giza III， Fig．10，p．105；XI，Figs．13－14，pp．20－21；Paget－Pirie， Ptah－hetep，Pls．34，38；Deir el Gebrâwi I，Pls．17，19；II，Pl． 12 ； Meir V，Pls．34，36；Fischer，Dendera，Pls．5， $21,22$.

422．Cf．note 397 above．For the implement with a handle in the form of a goose head see Z．Y．Saad，Royal Excavations at Helwan 1945－1947，Pls． $4^{1}$（B）， $4^{2}$（A，B），p． 36.
hieroglyph ( $\mathrm{G}_{54}$ ) the head of the goose is similarly turned backward, and this sign appears in a Middle Kingdom writing of the phrase hieroglyphic form also appears among the offerings represented in the presence of the deceased in Old Kingdom tomb reliefs (Fig. 120).424 In such cases the goose is frequently decapitated, ${ }^{425}$ as in an example dating to the very beginning of the Fourth Dynasty (Fig. 121), ${ }^{426}$ where the foreleg $\infty$ is oriented towards the recipient of the offerings, while the detached head is turned away from him. A similar arrangement is often found in later offering scenes. ${ }^{427}$
The suggested comparison between $\wp$ and $\lessgtr$ is most convincingly demonstrated by the fact
 Period down to the New Kingdom, ${ }^{428}$ while at least two Old Kingdom examples show the same group or $2 \%$, with the head of the goose decapitated and reversed. ${ }^{228 a}$

Although the occasional reversal of $\succsim$ is doubtless primarily the result of graphic assimilation, it may nonetheless be meaningful in its own right. This is certainly the case in an Eighteenth Dynasty text which thrice speaks of the ritual decapitation of a bull and goose:

$$
\underline{A}=d x x^{\prime}-\underline{1} \|=A
$$

"The $r$ r-animal is brought and its head is cut off, the s $\begin{gathered}m n \text {-goose is brought and its head is cut }\end{gathered}$ off." ${ }^{229}$
§45. The sign $\downarrow$, a walking stick (S43). All other hieroglyphs representing implements, show the implement carried as though it were in the hand of its owner. Thus Gardiner appropriately

[^39]to the pyramid cult of Pepy I; this does not prove, however, that the fragment is as early as Dyn. VI; (cf. Fischer, Dendera, p. 91) ; Petrie, Athribis, Pl. 11 (Dyn. IX; Fischer, Dendera, p. 130, n. 574); Clère-Vandier, TPPI, §33, line 4 (Dyn. XI); MMA 12.184 ( $\stackrel{\rightleftharpoons}{\Rightarrow}$ 과 C. L. Ransom [Williams], The Stela of Menthu-weser [New York 1913]: early Dyn. XII); Louvre C 47 (Urk. IV, p. 5 I : early Dyn. XVIII); Louvre C 75 (also Dyn. XVIII).

428a. Paget-Pirie, Ptah-hetep, Pl. 4 (and N. de G. Davies, Mastaba of Ptahhetep and Akhethetep I [London 1900], p. 21 [122], Pl. 8 [122]); Cairo CG 1447.
429. Rekh-mi-Rer, Pl. 107. One of the occurrences shows the normal orientation $\xrightarrow[\sim]{\sim} \xrightarrow{\sim m}$ rr, which is also written where has a determinative resembling a goat (Wb. I, p. 208 [10]), but the determinative in this case is clearly a bull; cf. E. A. W. Budge, An Egyptian Hieroglyphic Dictionary I (London 1920), p. 129, who gives the meaning as "goat, gazelle, ibex, ram, any horned animal." For the logic of the reversed orientation in all these cases cf. also Junker, "Die Feinde auf dem Sockel der Chasechem-Statuen" in Aggptologische Studien Grapow (ed., O. Firchow [Deutsche Akad. der Wissenschaften zu Berlin, Inst. für Orientforschung, No. 29; Berlin 1955]), pp. 162 ff . Probably a slightly different motive is to be attributed


Fig. 120


Fig. 121
explains $\wedge\left(\mathrm{S}_{45}\right)$ as "a flywhisk on shoulder," ${ }^{430}$ and a similar explanation may be applied to व (V23) a whip turned backward by a herdsman who is about to deliver a blow (Fig. 122).431 Although the $n h m n-\mathrm{jar}$ 『 ( $\mathrm{W}_{9}$ ) seems to have its handle turned forward, and hence out of reach, the apparent handle is one of three straps that secure the lid, and the actual handle is a smaller loop at the rear. ${ }^{432}$ The orientation of the razor in $\triangle \Delta \square$ "shaving" (Beni Hasan II, Pl.4) is contrary to that of Gardiner's $\ddagger\left(U_{37}\right)$; as in Pyr. 1428, which writes $\underset{\Delta}{\Delta} \underset{\sim}{\square}$; this represents the blade from the viewpoint of the barber rather than a man who shaves himself. ${ }^{433}$

In the case of $\rrbracket$, the orientation appears to be upside down, since the representations of all periods normally show the larger or knobbed end upward when the staff is in use. Prior to the reign of Cheops, however, it was regularly depicted with the larger end downward. This may be seen in the panels of $H s y$-R $r^{434}$ and the two statues of $S_{p}$; in the Louvre, ${ }^{435}$ which constitute the sole evidence that clearly antedates the Fourth Dynasty. And it applies to all of the more numerous examples that can plausibly be dated to the reign of Sneferu, including those of $R c-h t p$ (Fig. 123 ). ${ }^{436}$ The same feature persists in the reliefs of $H m$-iwnnw, ${ }^{437}$ which are generally attributed to the next reign, that of Cheops, and it occurs in those of $\mathcal{N f r} r^{438}$ and $\zeta_{r y,}, 439$ which may be even later. ${ }^{440}$ The revised position of the staff, with the wider or knobbed end upward,
to the reversal of (both $\rightarrow$ and $\leftarrow$ ) in an inscription of the Late Period: Gunn, JEA 5 (1918), p. 125 and Pl. 21. Here the idea is to deflect the evil associations of this determinative.
430. It should be noted, however, that $\uparrow$ appears as the determinative of $n h 3 h_{3}$ in Pyr. 2204b (while Neit, line 322, has $\mathbb{A}$ and $\wedge$ ), and that the forward orientation reappears in BM ${ }_{13} 67$ (Sethe, Lesestïcke, 63 [15]); this variation is doubtless to be attributed to representations showing the object held in front of a seated figure (e.g. Reisner-Smith, Hist. Giza Necr. II, Fig. 6b).
431. From Tombeau de Ti 2, Pl. 113; cf. N. de G. Davies, Rock Tombs of Sheikh Said (London 1901), Pls. 8, 16; LD II, Pls. 51, 56; Mohr, Mastaba of Hetep-her-akhti, Fig. 46, p. 80; Bersheh I, Pl. 25. Exceptionally held forward in Petrie, Medum, Pl. 28.
432. Cf. Balcz, "Gefäßdarstellungen des Alten Reiches" in MDIK 5 (1934), 9 ( ${ }^{-94}$. Reversals of this sign are common in inscriptions facing left; cf. $\S 38$.
433. Cf. also $(\rightarrow)$ does occur in New Kingdom hieratic. See Möller, Paläographie II, no. 490; but Faulkner, Concise Dictionary, p. 201, notes hieroglyphic $\underset{(\rightarrow)}{ }(\rightarrow)$ (Urk IV, p. 1369 [5]; cf. de Linage, BIFAO 38 [1939], pls. 24 [4], 25 [13]).
434. In most cases the staff is held in midair, but in Cairo CG 1419 the larger end is on the ground. $H r$-bsw-Skr (CG ${ }^{1385}$ ) is not cited because the ends of the staff are not clearly differentiated.
435. One of these is well illustrated in Smith, Art and Architecture, PI. 23.
436. Rr-htp (from Petrie, Medum, Pl. i 1 ; cf. Pls. 9, 10, 12, 14, and Smith, HESPOK, Pls. 33-34) ; Nfr-muct (Petrie, op. cit.,

Pl. 19); Ntr-rpr.f (Cairo J 89290: Fakhry, Monuments of Sneferu II, Pt. 2, Pl. $4^{\circ}$; more clearly in Fischer, Dendera, Pl. 1) ; shty-htp (BMMA 18 [1959], 35); shty-cs (Louvre B 1; Smith, op. cit., Pl. 35) ; 'Iy-nfr (Cairo CG 57120, 57121: $A S A E 3$ [1902], pp. 198 ff. and Pl. 1; Smith, op. cit., Pl. 36; Smith, Art and Architecture, Pl. 28) ; also probably Mtn (MDIK 21 [1966], Pl. 7). The relief published in JNES 18 (1959), Pl. 11 and p. 262, may well belong to this reign, as also Cairo CG ${ }^{1740}$.
437. Junker, Gfza I, Fig. 23, p. 146, and Pl. 17 (a).
438. Reisner, Hist. Giza Necr. I, Fig. 241 and Pl. 30 (b).
439. Cairo CG 1384 and BM 1192 (Hieroglyphic Texts $\mathrm{I}^{2}$, Pl. 13 [3]; Brit. Mus., Guide to the Egyptian Galleries [London 1930], Fig. 155, p. 285).
440. The completion of the tomb of $\mathcal{N f r}$ ( G 2110 ) is dated to the reign of Chephren by Reisner, Hist. Giza Necr, I, p. 67, and by Smith, HESPOK, p. 163. K. Baer, Rank and Title in the Old Kingdom (Chicago 1960), p. 227 [250], says the sequence of titles points to the mid-Fifth Dynasty, but concedes that the titles are few and that the date could well be earlier. Smith, op. cit., p. 173 (and $A J A 46$ [1942], 515), assigns the relief of $\zeta_{r y}$ to the mid-Fourth Dynasty. The relief of Wpi which is in Brussels (E2160, Musées royaux d'art et d'histoire, Département égyptien, Album [Brussels 1934], Pl. i) can hardly be later than this date, nor can two other pieces which belong to the same person: Cairo CG 57165 (large end of staff downward, held off ground) and 57166 (large end resting on ground). The same is true of BM 1168 (Hieroglyphic Texts I $^{2}$, Pl. 3 [3]) and two other examples in Copenhagen: O. Koefoed-Petersen, Catalogue des bas-reliefs et peintures égyptiens (Copenhagen 1956), nos. 20 (Pl. 19) and 14 (Pl. 21).

132
REVERSAL OF INDIVIDUAL HIEROGLYPHS


Fig. 122


Fig. 123

Fig. 124
seems to begin with the reign of Cheops, as attested by the reliefs of $H$ wwfw-hr. $f,{ }^{44 \mathrm{I}}$ and further examples are known from the reigns of Chephren, Mycerinus and Shepseskaf. ${ }^{422}$

The reliefs that exemplify the older tradition sometimes show the staff held in midair, ${ }^{43}$ or very slightly off the ground. ${ }^{444}$ In this context the staff is much more apt, throughout the Old Kingdom, to be carried with the larger end downward (Fig. 124). ${ }^{445}$ One might therefore consider whether, even in those cases where the wide end rests firmly on the ground, the staff is similarly considered to be merely held, rather than used for support. It is, in fact, much more difficult to handle a staff in this manner, with the staff held near the narrower end, while one is walking.

An observation made by Petrie seems to prove, however, that staves were, in fact, so used. Describing three well preserved specimens which he found in the very early Old Kingdom tombs at Kafr Ammar, near Tarkhan, he says: "Each perfect staff shows signs of wear at its thicker end, indicating that it was in use before the burial." ${ }^{446}$ Perhaps the difficulty of handling the staff with the larger end downward was outweighed by the fact that this end would be less apt to sink in marshy or sandy terrain. If so, the Fourth Dynasty reversal might indicate the more frequent use of the staff on a relatively hard surface.

In any case it is clear that the hieroglyph $\downarrow$ retains the original orientation of the staff, as it was handled prior to the second reign of the Fourth Dynasty. From the reign of Cheops onward the hieroglyph gradually ceased to correspond to current usage. Only for a short interval at Dendera, during the Heracleopolitan Period, was the hieroglyph brought up to date in the form $\|,{ }^{447}$ just as, in the same period, the hieroglyph 躬 was temporarily adapted to the current form of the scribal equipment. ${ }^{448}$ The form $\|$ is also to be seen in an inscription of this period (Fig. 70), the provenance of which is not recorded. ${ }^{449}$

[^40]ing reliefs of Apries from Mit Rahina (W. M. F. Petrie, The Palace of Apries [Memphis II] [London 1909], esp. Pls. 3, 6). Many Old Kingdom reliefs show the staff carried with the larger or knobbed end upward: Hassan, Gfza IV, Figs. 116117, pp. 165-166; Meir V, Pls. 13, 26, 31, 42, 43; Mereruka, Pls. 14, 144, 158, 164, 172 (but downward in Pl. 168); Cairo CG ${ }_{153} 6$.
446. W. M. F. Petrie, E. Mackay et al., Heliopolis, Kafr Ammar and Shurafa (London 1915), p. 10. The three intact staves (from tombs 209, 426 and 480 ) are illustrated in W. M. F. Petrie, G. A. Wainwright and A. H. Gardiner, Tarkhan I and Memphis V (London 1913), Pl. 8 (5).
447. Mrri (Petrie, Dendereh, Pl. 8 [twice]; cf. Fischer, Dendera, p. 145); Mri-Pth (Petrie, Dendereh, Pl. IoA). Note that early examples of the sign ( ${ }_{44}$ "walking stick with flagellum") are sometimes oriented with the knobbed end upward (notably in Petrie, Medum, Pls. 10, 13, 14; but cf. in the offering list, Pl. 13; also Mariette, Mastabas, p. 228) and sometimes downward (Mariette, op. cit., p. 185; Hassan, Giza I, Fig. 13, p. 18; Pyr. 522c).
448. Fischer, Dendera, p. 179.
449. Cf. p. 146 below, comment $i$.

## 5. Chronological Synopsis ( $\$ 846-53$ )

§46. A constant potential. If the foregoing material is reviewed from a chronological point of view, it becomes apparent that all the uses of reversals had their origin in the complementary relationship of phonetic signs and ideographic representations which, at the very beginning of the First Dynasty, played an essential part in the simultaneous creation of Egyptian writing and a new style of art. Yet it is equally apparent that new applications of secondary reversals (as discussed in Chaps. II and III) were constantly developed, so that they are not, in most cases, to be regarded as archaisms, any more than is the continued use of the hieroglyphic script, but must rather be considered as an ever-potential and recurrently exploited aspect of that script. As for the primary reversals discussed in Chap. I, their use too was continually expanded throughout the period under consideration.
§47. The Archaic Period. The first two dynasties provide evidence for all three of the basic situations requiring reversals-confrontation, symmetry (§7) and concordance (§8)-including several uses of hieroglyphic confrontations that are frequent in later periods, notably the opposition of various elements of the royal protocol and the opposition of the names of a divinity and of a king $(\S 6,1)$. One such usage is of more limited duration, however: the opposition, on cylinder seals, of the titles of an official and the name of the ruler he served (loc. cit.). After the Old Kingdom, cylinder seals were replaced by stamp-seals, such as scarabs, which include the official's name but omit that of the king. Another feature, and one that is more particularly characteristic of the Protodynastic Period, in its formative years, is the reversal of registers of animals on the backs of portable objects such as knife handles ( $\S_{1} 1, \mathrm{I}-5$ ). Reversals are occasionally attested on the backs of later knife handles and other objects, but such objects more commonly show the dominant rightward orientation on both sides, and the same is true of the early decorated palettes such as that of Narmer.
§48. The Old Kingdom. The Old Kingdom made increasing use of symmetrical reversals on portal elements such as the jambs of offering niches, which had not previously been inscribed, and the small obelisks of Dyns. V and VI (§§ 7, 14). The use of concordant reversals was also extended to the left side of seated statues ( $\S 15$ ), and to the back and head end of coffins ( $\S 18$ ). But these developments were somewhat gradual: a few of the earlier false doors show rightward orientation throughout, while Old Kingdom coffins frequently show concordant reversal on the back only, not on the head end, and symmetrical reversals appear on only a very few relatively
late offering slabs (§7). In part these developments can be attributed to the gradual increase of inscriptions on monuments, a tendency that continued in the succeeding periods. In one case, however, a reversal was applied in a situation where it definitely had not existed previously: from the Third Dynasty onward the offering list was turned, whenever possible, so that the hieroglyphs address the recipient ( $\$ 25$ ). This development doubtless paved the way for a number of other reversals involving offerings ( $\$ \S 25-28$ ).

The complementary relationship of ideographic representations and phonetic hieroglyphs was more discretely respected in the Old Kingdom, both on reliefs and statues. Thus the inscriptions of statues were confined to the seat or base, or else to some appropriate appurtenance such as a papyrus scroll or a belt, whereas they had formerly strayed onto the statue's lap or shoulder. This degree of discreteness was not maintained in later periods, but the new orderliness of inscriptions nonetheless meant that slight deviations from the established orientation, such as the reversal of a few signs within a line of texts, could now be used in a more meaningful way. The reversals of $d d(\$ 21)$ and wd-nswt (§22) are cases in point, both of them characteristic of the Old Kingdom. Other vocative reversals, some more extensive than these, were also used in this period, and out of them evolved the first extended use of retrograde sequence.

The increasing variety in tomb reliefs of the Old Kingdom was also a factor in producing secondary reversals, several of them related to the object of $n$ "to" ( $\$ 29$ ), $m$ "in" (§31) or to the agent of an action following $i n$ "by" ( $\$ \S 28,35$ ), while in other cases of the same kind the particles $n$ and $i n$ were omitted ( $\$ \S 39,30$ ).

In addition, the Old Kingdom provides the first clear evidence for concordant reversals produced by factors that were separate, and even at some distance, from the scenes and inscrip-
 alternative determinative of the verb $i w$ 'come," a possibility that led to various abbreviated writings such as $\stackrel{\wedge}{\wedge} \stackrel{\wedge}{\Delta}$ for "going and coming/coming and going" in temples of the Middle and New Kingdoms (§4).
§49. The Heracleopolitan Period. The stelae of this period display some of the earliest examples of offering formulae that are reversed so that the benefits are directed towards the recipient ( $\$ 25$ ). An analogous reversal of the sign चֶ, in Eleventh Dynasty formulae, turns the head of the goose backwards, in accordance with the way it was presented when offered (§44). Another hieroglyph, the boat-determinative of $h d i$ "fare downstream" was also reversed at Naga ed-Deir ( $\S 4^{\circ}$ ), introducing similar reversals of boats in the Middle Kingdom, where, however, it was the determinative of hnti "fare upstream" that was turned around.
§50. The Middle Kingdom. Coffins of this date regularly show concordant reversals on the back and head end, and references to several divinities are arranged in various patterns so as to give the effect of addressing the deceased (§18). Obelisks, inscribed on all four sides, show the orientation that became usual from this time onward, with the hieroglyphs facing front and outwards (§i4). The more elaborate of the pendants are generally symmetrical, but one, bearing the name of Amenemhet III, reverses the dominant orientation, as do a number of late New

Kingdom pendants ( $\S_{17}$ ). The most interesting new type of reversal is one that is applied to the names of divinities in ritual scenes from temples, but there are few occurrences of the well-known group P腮 "praising god" that antedate the New Kingdom (§33a, 6).
§5I. The Second Intermediate Period. Temple reliefs at Medamud, dating to Dyn. XIII, reverse the phrase iri.fdi $\subset n h$ at the end of ritual captions; this reversal did not become common, however, until the Ramesside Period (§33b).
§52. The early New Kingdom. This period provides a much greater amount of evidence for the reversal of divine names in the ritual scenes of temples ( $\$ 33 \mathrm{a}, 6$ ), and analogous reversals are known from statues that were placed in the temple forecourt ( $\S \S 15 ; 33 \mathrm{a}, 3$ ). The more abundant evidence for temples also shows a feature that may be quite new: the orientation of the god (outward) and the king (inward) is reversed at the back of pylons, so that the king faces outward, towards the lateral walls of the court, instead of towards the central axis (§19, I).
§53. The Ramesside Period. In the forecourts and on the exterior of Ramesside temples the scenes of hunting and warfare are so oriented that the animals and enemies are driven away from the direction of the sanctuary ( $\$ 19,2$ ). The reversal of the terminal phrase iri.f di $n n h$ became common, and the variations of this phrase show that it gradually was thought to refer to the god rather than to the king ( $\S 33 \mathrm{~b}$ ). The confrontation of a pair of divinities typifies the royal cartouches of this and the following Libyan Period ( $\S 6, \mathrm{r})$, and during this time divine names were occasionally reversed in nonroyal titles ( $(6,2)$.

A concordant reversal was often applied to the inscriptions on back-pillars of Ramesside statues and statuettes, evidently in order to make the inscriptions at the rear agree with those on the front ( $\S 16$ ). And stelae showing a god $(\rightarrow$ ) addressed by a king $(\leftarrow)$ characteristically reverse the main inscription below this scene to agree with the king's orientation ( $\mathrm{I}_{1} 3$ ).

## APPENDIX

Four of the texts or groups of texts illustrated in the preceding pages are considered here in greater detail. The first text (MMA 65.114) has not previously been published, while the second has been published but not translated. A translation of the third (Cairo CG 1431) is offered mainly as a means of appending bibliographical data. The last (Cairo CG 20513) calls for a reconsideration of some aspects of the translations given previously.

$$
\text { MMA } 65.114 \text { (Figs. } 32,125 \text { ) }
$$

## Bibliography:

H. Asselberghs, A. de Buck, D. Cohen. Tentoonstelling van antieke Voorwerpen uit Egypte en Voor-Azie, Hoofdzakelijk uit particulier nederlandsch Bezit in de Zalen van het Koninklijk Oudheidkundig Genootschap in het Rijksmuseum te Amsterdam, 3 October-3I October 1931, p. 42; Album, P1. i i.
D. Cohen, Bulletin van de Vereeniging tot bevordering der Kennis van de Antieke Beschaving te 'sGravenhage 6/2 (Dec. 1931), p. 6, Fig. 6, and p. 9.
H. Fischer, BMMA 24 (1965), 53-54.

Christine Lilyquist in The Metropolitan Museum of Art, Notable Acquisitions 1965-1975 (New York 1975), p. 65.450

## Translation:

On proper right shoulder, with figure of a god (Fig. 125 [a]):
Amenre
Front of kilt (b):
Everything that comes forth upon the altar of Amun in Karnak in the presence of the Great Craftsman in the Place of Truth $\operatorname{Kr}(y)^{\text {a }}$
Staff (c):
An offering that the king gives to Horus, Son of Isis, the Great God, Lord of the Desert, that he may grant that my utterance be sound, going in the Place of Truth, a good life in following his [sic] desire-to the spirit of the Servant in the Place of Truth, the Great Craftsman of the Place of Eternity $\operatorname{Kr}(y)$, justified.

[^41]Médineh (1923-1924) (FIFAO 2, Pt. 2; Cairo 1925), pp. 9397; Rapport sur les fouilles de Deir el Médineh (1933-1934) (FIFAO 14, Pt. r ; Cairo 1937), p. 55. Kry and T3-hrt (Kar and Takha) also figure rather incidentally in the genealogy presented by M. L. Bierbrier, The Late New Kingdom in Egypt (c. ${ }_{\text {I300-664 }}$ B.C.) (Warminster 1975), p. 36.


Fig. 125

Base, in front of figure (d):
(I) An offering that the king gives (to) Amun, Lord of the Thrones of the Two Lands, (2) an offering that the king gives (to) Mut, Mistress of Heaven, (3) an offering that the king gives (to) Khonsu (4) in Thebes, and Nefer-hotpe, Lord of Joy; (5) that they may give life, prosperity, health, all keenness, favor, love, (6) a good life combined ${ }^{\mathrm{b}}$ with health, gladness and rejoicing (7) every day, my two eyes seeing, my two ears (8) hearing, my mouth filled with truth every day, like what is done (9) for a righteous man who puts Amun in his heart ${ }^{c}$-to the spirit of one who is silent, (1o) truly, and who is goodly of character, to the spirit of the Great Craftsman (II) in the Place of Truth $\operatorname{Kr}(y)$, justified, and his son $H y-n f r$, justified.

Surface of base beneath staff (e):
His daughter $P_{3}$ - $s d$, justified; 〈his〉 son Wpwzwt-mś, justified. ${ }^{\text {d }}$
Side of back pillar, above incised figure of woman ( $f$ ):
His sister, his beloved, the Mistress of the House $T_{3}-h r t$, justified. Her daughter, her beloved, Mr.śs-gr, justified.

Back pillar (g):
An offering that the king gives to Amenre, Lord of the Thrones of the Two Lands, Presiding over the Most Select of Places (Karnak), the Noble God, Content with Truth, that he may give a goodly burial after old age, joining the land in the district of those who are praised in the great west of Thebes-to the spirit of the Great Craftsman $\operatorname{Kr}(y)$.

Base, proper right side (h):
An offering that the king gives to Osiris, Who Presides over the West, Wenennefer, Lord of the Sacred Land, that he may grant that my soul live, and that my shade be firm, that my soul be not repulsed from the wish that it desires-to the spirit of the Great Craftsman $\operatorname{Kr}(y)$ and his son $H y-n f r$, justified.
Base, proper left side (i):
An offering that the king gives to Ptah, Lord of Truth, King of the Two Lands, Goodly of Countenance, Who is upon the Great Seat, that he may grant my name to remain in the Place of Truth, that my name be pronounced because I am pleasante-to the spirit of the Great Craftsman $\operatorname{Kr}(y)$, justified.

## Comments:

(a) The writing of the name ( $P \mathcal{N} \mathrm{I}, \mathrm{p} .34^{6}$ [17]) indicates that it refers to a foreign region, specifically Karoy, which was situated as far south as the Fourth Cataract (T. Säve-Söderbergh, Agypten und Nubien [Lund 1941], pp. 156 ff.). Cf. the personal names of three Nubians with prefixed $\operatorname{Kr}(y)\left(P \mathcal{N}\right.$ I, p. $34^{6}$ [18, 20, 22] and II, p. 393), as well as the common N.K. writings of
 Syrian."

For the "Place of Truth" in Kry's titles see J. Cerný, A Community of Workmen at Thebes in the Ramesside Period (Biblio. d' Etude 50; Cairo 1973), pp. 29-67. He demonstrates that in this context
the term refers to the tomb of the reigning king and the community attached to it; and he applies this meaning to formulae such as those in inscriptions c and i (ibid., pp. 54-56).
(b) The determinative of $\underset{J}{ }$ is for $\mathrm{sm}_{3} m$ in the formula see $W b$. III, p. 446 ( $\mathrm{I}_{5}$ ).
(c) For parallels see Maspero, Rec. trav. 2 (1880), 176 (Turin statue 173); B. Bruyère, Rapport sur les fouilles de Deir el Médineh (1922-1923) (FIFAO 1, Pt. I ; Cairo 1924), Pl. 18 (J).
(d) Note that the two names address the figures of the father and mother. The daughter's name is known from BM 818 and from Turin stela 169 (see note 450), from which it is also apparent that she was named for her paternal grandmother. The second name is not known from the tomb or from the other monuments that mention $\operatorname{Kr}(y)$ 's family, but is presumably a miswriting of
(e) While virtually all the formulae of $\operatorname{Kr}(y)$ 's inscriptions are well known from those of his contemporaries, I cannot find another example of this phrase. It does not seem likely that the name of the deceased is to be pronounced "over" his statue, which was undoubtedly placed in the tomb rather than exposed to public view, and such an idea is not expressed elsewhere; in other cases where a statue is the object of the preposition $h r$, the owner requests that the god

 When $h r$ follows $d m r n$ the preposition means "because of," as stated in $W b . V, 449$ (9). The most similar examples are $0 \rightarrow$ 为 -9 "whose name is pronounced because of his character" (Urk. IV, 131[9]) and " of what I have done" (Urk. IV, 1845 [20]).

Presumably the meaning of $t w t$ is that given by $W b . \mathrm{V}, \mathrm{p} .258$. I wonder, however, if it might not have much the same meaning as $k d$, as this term is used in the next-to-last quotation, or $k y$ in other N.K. examples: $\left.\Sigma^{\infty} \Delta \|\right\}^{\circ}$ "beloved of his lord because of his character" (Mariette, Mastabas, p. 450); $\sim_{0}$ ) $4 \|$ "whom the Lord of the Two Lands has chosen because of his character" (Farouk Gomaà, Chaemwese, Sohn Ramses' II. und Hoherpriester von Memphis [ÄA 27; Wiesbaden 1973], Fig. 17, p. 117).

$$
\text { LD Text I, p. } 127 \text { (Fig. 55) }
$$

## Translation:

(1) ... ———, possessor of reverence with his lord
(2) . . . these (?), ${ }^{\text {b }}$ possessor of reverence with the great god
(3) . . Wt W ${ }^{\text {, }}$, he says: he made ${ }^{d}$
(4) [this for me ?] . . . he is more beneficial for me than any son of mine.
(5) A thousand of bread and beer, e a thousand of oxen and fowl, a thousand of everything sweet. ${ }^{\text {f }}$

## Comments:

(a) Lepsius has $\dddot{W}, 0 \ddagger$, of which I can make nothing as it stands; can the second group be $\ddagger{ }_{-}^{\circ}$, i.e. mhnk nśwt?
 [17]) with the determinatives following the entire phrase; but I do not know of any other case where the demonstrative adjunct is followed by a determinative.
(c) For this name cf. PN I, p. 87 (27).
(d) Restore $\left[\frac{1}{6}\right]$ ? Presumably this refers to the son who is mentioned in the following line. Such a statement would, in effect, represent a dedication placed in the mouth of the recipient, for which there does not seem to be any parallel.
(e) It does not seem likely that the group ${ }^{q} \stackrel{\theta}{6}$ represents the object of iri.n. $f$; more probably it belongs to the offering table.


$$
\text { Cairo CG }{ }_{143} \text { I (Figs. } 58,59 \text { ) }
$$

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A. Mariette, Abydos I (Paris I869), Pl. 2 (a).
J. H. Breasted, Ancient Records of Egypt I (New York 1906), pp. 157-I 59.
K. Sethe, Urkunden des Alten Reichs I (2nd ed.; Leipzig 1933), pp. 117-1 19.
G. Lefebvre, "Textes égyptiens du Louvre," $R d E$ I (1933), 96-99.
L. Borchardt, Denkmäler des Alten Reiches (Berlin 1937), pp. III-I 12 and Pl. 24.
J. S. F. Garnot, L'Appel aux vivants dans les textes funéraires égyptiens des origines à la fin de l'ancien empire (Recherches d'archéologie, de philologie et d'histoire 9; Cairo 1938), pp. 66-69, 86-87.451

## Translation:

(I) King's Wife of " Mryre Abides and Is Beautiful," Great of Perfection(?), ${ }^{b}$ Great of Praise, Attendant ${ }^{c}$ of the Great One, Companion of Horus, Friend(?) of Horus, ${ }^{\text {d }}$ (2) King's Mother of "Mrnrr Gleams and Is Beautiful," rnh-n.s-Mryre.
(3) King's Wife of "Mryre Abides and Is Beautiful," Great of Perfection(?), Great of Praise, Daughter of the God, Attendant of the Great One, Companion of Horus, Friend(?) of Horus, (4) King's Mother of "Nfrksrr Abides and Lives," rnh-n.s'-Mryre.
(4') Their brother, the True Hereditary Prince, the Count, the Overseer of the (Pyramid) City, He of the Curtain, Judge and Vizier, the Overseer of Scribes of the King's Decrees, ${ }^{\text {I }}$ Servant of the Souls of Pe, Servant of the Souls of Nekhen, Chief Lector Priest, $S m(t)$-priest, Director of Every Kilt, Treasurer of the King of Lower Egypt, Embalmer and -__s of Anubis, Revered with Osiris, Drw.
(5) Their brother, He of the Curtain, Judge and Vizier, Drw.
(5') The Hereditary Prince $\underline{D r w}$, the Stolist ${ }^{\text {t }}$ of Anubis Drw, the Keeper of the Headdress $\underline{D r w}$, the Sole Companion and Possessor of Love. Drw, the Director of the Great Ones of
451. Some other references are given here, p. 66, n. 1, and a few others in PM V, p. 95. References of a more specific na-

Upper and Lower Egypt, the Scribe of the God's book, the Director of Every Divine Office, the Stolist of Horus, the Attendant of Min, ${ }^{\text {i }}$ the Revered D cw. ${ }^{\text {j }}$
(6) I made this in Abydos of the Thinite Nome as one who is revered with the majesty of the King of Upper and Lower Egypt $\mathcal{N f r k s r e}$ (may he live forever!), with the majesty of ${ }^{k}$ the King of Upper and Lower Egypt Mryrr, and the King of Upper and Lower Egypt Mrnrr, out of affection for the nome in which I was born' by the King's ornament $\mathcal{N b t}$ (7) to my father, the Hereditary Prince, Count and Beloved of the God, ${ }^{m}$ Revered with the Great God, Hwi.

O ye who are living on earth, every overseer of priests, every priest, every šsmt-priest and $d_{3}$-priest ${ }^{\mathrm{n}}$ of the temple of the majesty of my lord ${ }^{\circ}$ Khentamentiu; (8) as the king lives for you, ye shall withdraw ${ }^{p}$ for me invocation offerings-as a reversion offering of this temple, as that which a decree has made for me, and as that which ye do for me yourselves when ye behold my offices under the king, because I was more noble in the sight of the majesty of my lord than [any] dignitary . . . the Hereditary Prince, He of the Curtain, Judge and Vizier [ Dr rw].

## Comments:

(a) Not a separate epithet "attached to," as Breasted says, despite his point that $n(y) t$ occurs in some cases; the latter is indirect genitive; see Montet, Kêmi i4 (1957), 99, and Fischer, JARCE 3 (1964), 123.
(b) Meaning doubtful; see Fischer, JEA 60 (1974), 97 commenting on the remarks of Grdseloff, $A S A E 42$ (1943), i12-120.
(c) This title is elsewhere written - , for which see $W$. III, p. 344 (7).
(d) Junker, Giza II, pp. 189-191, suggests the reading iśt $\mathrm{H} r$.
(e) For the relationship of these two women of identical name see Egyptian Studies I: Varia, pp. 74-75, commenting on Goedicke's discussion in JAOS 75 (1955), 180-183.
(f) Fischer, $O M R O_{41}$ (1960), p. 6 and n. 21 .
(g) Reading unknown; more rarely the writing is $i_{\circ}^{\circ}$ (Teti Pyr. Cem., Pl. 4) or $\mathbb{B}_{\circ}$ (London University College 14368); the first of these variants is reminiscent of the interchange of 잉ㅇㅇ n d $\boldsymbol{d} \boldsymbol{d}$ 3t (cf. James-Apted, Khentika, p. i I), but that reading hardly seems possible. Note that the initial sign is not $\downarrow$, as is indicated in Urk. I, p. 18 (13) and note a, but is identical to hts', as is usually the case, (the bottom sometimes has a distinct "handle," e.g. $\ddagger$, mastaba of shty-htp, Louvre). This error, and the one noted in comment k are both avoided by Borchardt and by Gardiner, $A Z 79$ (1954), p. 95, n. 5.
(h) See Grdseloff, $A S A E 43$ (1943), 357-366.
(i) Wb . III, p. 344 (5) cites only this example for ; the final $w$ does not appear in the further examples cited by H. Gauthier, Le Personnel du dieu Min (Recherches d'archéologie, de philologie et d'histoire 3 ; Cairo 1931), p. 64, or in the other cases known to me, and it may be that the writing of in has been assimilated to the end of the recurrent name -3 . This may possibly represent a nisbe-form with the ending $w$, however (Edel, Altäg. Gramm., §343).
(j) Gardiner comments on the repetition of $\underline{D}$ rw's name in $A Z 79$ (r954), 95-96.
(k) The $n$ of the indirect genitive is not missing, as stated in Urk. I, p. 188 (16) and note b.
(l) Cf. $m$ ts mśkwi im.f "the land in which I was born," Sinuhe B I59-I60, although Black-
$\operatorname{man}(J E A 22$ [1936], 37) takes $t 3$ to mean "Egypt," and translates "Egypt, seeing that I was born therein."
(m) One might expect to find it ntr mry (ntr), and Hwi is, in fact, $ף_{\infty}^{\circ}$ on Cairo CG ${ }_{5} 578$. Brunner ( $A Z 86$ [196I], 96-97) suggests that he acquired this title as the king's tutor rather than as his father-in-law.
(n) These are evidently two separate titles, despite the lack of $\sigma$ after the first of them. The determinative 通 after šśmt speaks against Garnot's translation "tout préposé au domaine Shesemet" (L'Appel aux vivants, p. 67). Cf. Newberry in Studies Presented to F. Ll. Griffith p. 319; he translates "the Shesmet-girdle man" and thinks that this is a priest of the goddess Shesmetet. As he points out, both this and the $\underset{\sim}{d}$ are known from an Eighteenth Dynasty burial scene (Davies, Five Theban Tombs, Pl. io); earlier references for $\underline{d}_{3}$ in the same context are given by $W b . \mathrm{V}$, p. 5 I 5 [7], namely Petrie, Deshasheh, Pl. 24, and Newberry in Beni Hasan II, Pls. 7, I3, but these seem doubtful. The funerary context would well explain the association of these titles with Khentamentiu, whatever their precise meaning may be. Newberry suggests that $d_{3}$ like ${ }_{s} s_{m} t$ refers to some kind of apparel, but $d_{3}$ seems to be the M.K. equivalent of O.K. $d_{3} t$ "clothing" (cf. Wb. V, p. $5^{15}$ [8, 9]); according to Montet (Kêmi o [1949], 82-83) ds refers to a fire-stick, but he offers little in support of this idea.
(o) A somewhat later inscription, at the capital of the same nome, similarly refers to the local god as one's "lord"' the owner of Naga ed-Deir tomb 3737 is "keeper of the headdress in attiring his lord (namely) his city god" (C. N. Peck, Some Decorated Tombs of the First Intermediate Period [Ann Arbor, Michigan, 1958], Pl. 12 and pp. 109-110; also quoted by Fischer, JARCE 3 (1964), 27.
(p) The verb šdi can mean either "read" or "withdraw" (something). Wilson (JNES 7 [1948], 134) and Edel (Altäg. Gramm., §937) prefer the first meaning, "ye shall recite invocationofferings for me," and this meaning might seem more appropriate to the literal meaning of prthrw, "emit the voice." As Clère has pointed out, however, prt-hrw is also applied to the actual presentation of offerings (Mélanges Maspero I [MIFAO 66, Fasc. 2], pp. 788-789). And the existence of actual offerings is indicated by the following phrases, beginning with $m$ wd $b-r d$; for the meaning of the latter see Clère, JEA 25 (1939), 215-216; Grdseloff, $A S A E 42$ (1943), 51-54. I therefore think that Lefebvre and Garnot are correct in translating "vous prélèverez pour moi des offrandes funéraires," "vous allez toucher pour moi des offrandes funéraires."

## Cairo CG 20513 (Figs. 70, 126)

## Bibliography:

Lange-Schäfer, Grab- und Denksteine II, pp. 103-104; Janssen, Trad. Eg. Autobiog. I, Lines 4-5; p. 81 (II Bm 88); Line 6: p. 124 (II Hc 50) and II, p. 166.
W. Schenkel, Memphis • Herakleopolis . Theben: Die epigraphischen Zeugnisse der 7.-1 I. Dynastie Agyptens ( $A A_{12}$; Wiesbaden 1965), p. 204 (312).

Fischer, Dendera, p. 145.


Fig． 126

## Translation：

（1）An offering which the king gives，and Anubis，that invocation offerings go forth to （2）the Chancellor of the King of Lower Egypt，the Sole Companion，the revered Dd，${ }^{\text {a }}(3)$ who says：I am one beloved of his lord，praised of his town．（4）I tended（？）${ }^{\text {b }}$ this my town ${ }^{c}$ of rever－ sions（？？）${ }^{\text {d }}$ and nothing came（amiss）from me．${ }^{e}$（5）I gave a field $\langle$ to 〉 him who had no field，a house 〈to〉 him who had no（6）house．（7）If one spoke unpleasantly to me，I spoke pleasantly to my lord．${ }^{\mathrm{f}}$ I fought ${ }^{\mathrm{g}}$ for my lord ${ }^{\mathrm{h}}$ with a staff of copper．${ }^{\text {i }}$

## Comments：

（a）Here $\Rightarrow$ 酉，which evidently corresponds to $=\|$ on Cairo CG 20507 （Fig．69）．For the
 Kongresses München（1957），pp．76－78 and Fischer，Inscriptions from the Coptite Nome，pp．124－ 125.
（b）Clearly $a$ ．The translation supposes that the verb in question may be $3 t i$ ，which is related to the title $\mathbf{3 t w}$＂custodian＂（cf．Edel，Altäg．Gramm．，§227）．If so，it is still uncertain whe－ ther the writing is an early example of $t>t$ or simply a case of faulty orthography（cf．op．cit．， §r12）．This guess is supported by the fact that inscriptions of Dyns．XI and XII apply the title stw／stw to towns（Fischer，op．cit．，p．107，Fig．15，line 5，and p．142）．
(c) $\bigcirc \subseteq$ does not show the unmistakable detail of the preceding $\otimes_{\infty}^{\infty}$, but "this town" occurs in precisely the same form on stela Cairo CG 20507 (Fig. 69). Note also that the word $h t$ normally shows the determinative - and it does so at the end of the same column.
(d) Cf. Schenkel, "diese Stadt der Einkünfte (?)", referring to Wb. V, p. 553 (4). Clère rightly criticizes the Wörterbuch for identifying this word with "virement d'offrandes" (JEA 25 [1939], 215), but transcribes the third sign of 3 ... as $\triangle$; if that equation be granted, there might yet be a connection with $\mid$ ل $ص \stackrel{\square}{\square}$, which Gardiner (JEA 24 [1938], 87) quotes from LD II,
 equate $\searrow$ and $\Delta$, nor can this very well be a reoriented version of $\searrow$ (M.K. $b d$ "horn"). The only remaining possibility that comes to mind is $\downarrow^{2}$ a $\gamma^{\circ}$ "cucumbers," which occurs in several names of Old Kingdom funerary estates (Jacquet-Gordon, Noms des domaines, pp. 273, 288, 352, 327, 350; cf. p. 46 and Gardiner, Ancient Egyptian Onomastica II, p. 220*). In this case $\gamma$ would represent a vine, the equivalent of ${ }^{\text {fow }} / \mathrm{b}$, but one misses the final $a$, which is part of the stem and not a feminine ending. The determinative $\nearrow$ can hardly
 and Miscellanea Gregoriana [Rome, 1941], p. 115), for this determinative properly belongs to the first word rather than the second, and would not be expected in the writing of "coals" itself. Furthermore, although the absence of the feminine ending a may be readily dismissed, that of $-\infty$ is less easily explained.
(e) The translation of this phrase follows that of Clère, Ägyptologische Studien Grapow (ed., O. Firchow), pp. 38-43, rather than that of Schenkel, $A Z Z 91$ (1964), 137-138 ('nie kam ein Mißgeschick über mich.").
(f) Schenkel: "Was mir in häßlicher Weise gesagt wurde, sagte ich in schöner Weise meinem Herrn." Janssen thinks the reading is probably $d \underline{d} d(w h) m$ (by which he presumably means $\underline{d}$ d. $i(w h) m . i n f r w$ instead of $d$ d. $i m$ nfre.
(g) For the reading of $h_{3}$ as $c h s$ instead of $h w i$ (as formerly understood by Schenkel and myself), one may compare the caption of a more or less contemporaneous scene in which bulls
 "He's a fighter! I shall separate (him)," or "O fighter, I shall separate (thee)"; probably a suffix pronoun is to be restored after the infinitive sffht. A similar sign occurs in Boeser, Beschr. aeg. Sammlg. II, Pl. 39 (no. 51), where the brother of the deceased has the title $17{ }^{\circ}$ may also compare the writings quoted in Fischer, Inscriptions from the Coptite Nome, p. 72, which include ${ }^{1} / 8$ (Dendera stela, University Museum, Philadelphia, 29-66-603) and even closer
 published by Garnot, $A S A E 37$ (1937), 116-124, is therefore almost certainly to be interpreted as imy-r $m s{ }^{5} n b\left\ulcorner h_{3}\right.$ "overseer of every military expedition."
(h) Schenkel translates "Ich schlug jedermann" and in Dendera, p. I45, I have expressed much the same idea: "I confronted everyone." But the expression $h r n b$ does not seem to be attested even as early as the Middle Kingdom; Wb. III, I30 (4), cites Cairo CG 20530, which is certainly later, and Gardiner, Egyptian Grammar, §1o3, cites Admonitions, which is preserved in a

Nineteenth Dynasty MS. that draws upon earlier sources-but the date of these sources remains somewhat uncertain (cf. Van Seters, JEA 50 [1964], 13-23). Furthermore one would expect some indication of the plural rather than the determinative $\Omega$. If $h r-n b$ is ruled out, one must look for another interpretation of $\square \sqrt[3]{ }$, and nothing else is plausible except $h r n b . i$, which must mean much the same thing as $h r-t p n b . i$ "on behalf of my lord." Cf. the stela erected by Sesostris III at Semna on which he speaks to future generations of his image (twt) which he has placed at this southernmost boundary 0 明 $=8 \times$ "that ye might fight for it" (Sethe, Lesestücke, p. 84 [18]).
(i) For the final words of. the passage cited in Fischer, Dendera, p. 145, where the staff is similarly $\|$ rather than the traditional $\downarrow$, and for the hieroglyph representing metal cf. the forms shown in $W Z K M_{57}$ (196r), 61.

## ADDENDUM

p. 122, n. 395. The interpretation of $t p n h p s$ as "head of the foreleg" is also supported by the Abusir Papyri, where the term regularly shows the determinative $\checkmark$ as distinguished from $\infty$ in ${ }^{-0}$ alone, and in one case follows the latter: P. Posener-Kriéger and J.-L. de Cenival, Hieratic Papyri in the British Museum: The Abu Sir Papyri (London, 1968), pl. 45. The determinative $\checkmark$ also appears in pls. 65, 102F, 102I, while $h p s$ shows on in pls. 35 A (3a), 34 (2b), 45A, 45B; 48 A and $\checkmark$ in pls. $43 \mathrm{c}, 65$. For this term see also P. Posener-Kriéger, Les Archives du temple funéraire de Néferikarê-kakai (Cairo, 1976), p. 244, where the same interpretation is adopted.


[^0]:    1. The Attitude of the Ancient Egyptians to Death and the Dead (Cambridge 1935), p. so.
    2. Proceedings of the British Academy (London) 23 (1937), 81-104. Also Fischer, "Further Evidence for the Logic of Ancient Egyptian: Diminishing Progression," JARCE 10 (1973), 5-9.
    3. Cf. Borchardt, Grabdenkmal Sa3hu-ree II, p. 5, and Gardiner in Amenemhet, p. 15.
    4. This example is from the Fifth Dynasty tomb of
[^1]:    14. E.g. F. Bisson de la Roque, Tôd (1934 à 1936) (FIFAO 17; Cairo 1937) as noted on p. 64; Abu Bakr, Giza; E. Chassinat, Le Temple de Dendera (5 vols.; Cairo 1934-1952); H. Chevrier and E. Drioton, Le Temple reposoir de Séti II (Text and Plates; Cairo 1940) (as noted on p. 6); Dunham, Naga-ed-Dêr Stelae (as noted on p. Io); Edwards, Hieroglyphic Texts in the British Museum VIII; Fakhry, Monuments of Sneferu; Hassan, Giza; Lacau-Chevrier, Chapelle de Sésostris Ier (esp. Fig. 33, p. 151) ; Lacau, Sarcophages; H. T. Mohr, The Mastaba of Hetep-her-akhti (Leiden 1943); A. Rowe in C. S. Fisher, The Minor Cemetery at Giza (Philadelphia 1924); Vandier, Moralla. In several cases the arrow is also applied to larger figures in the opposite sense, indicating the direction in which they face (Dunham, Lacau and Chevrier, Vandier).
    15. For the practical difficulties caused by this state of affairs see the comments of Helen Jacquet-Gordon, who uses the notation $\rightarrow$ to indicate direction of signs, on Hassan's Giza, where $\rightarrow$ indicates direction of reading (JacquetGordon, Noms des domaines, p. 228, n. 1).
[^2]:    23. E.g. J. Vandier, Manuel d'archéologie égyptienne III (Album) (Paris 1958), Pls. 8 (4), 40 (5), 8ı (3), 114 (6), ${ }_{162}(3,5)$; Legrain, Statues et statuettes III, CG 42 199. Cf. also Pyr. 1354: ". . . thou art a spirit whom Nephthys has suckled with her left breast."
    24. The figure shows MMA 20.3 .8 (cf. H. E. Winlock, Models of Daily Life in Ancient Egypt [Cambridge, Mass., 1955], P1. 32). Other examples: Vandier, op. cit., Pls. 49-52; Bothmer, BMFA 47 (1949), 9-1 I ; Hayes, Scepter II, Fig. 198, p. 316. An exception: Petrie, Gizeh and Rifeh, Pl. ıo E.
    25. Cairo CG 42069, representing Tuthmosis III; so identified in the Museum's photographic register, but Legrain's entry for this number (Statues et statuettes I) refers to his Pl. 4 I, where the same sphinx is labeled 42068; and it is also illustrated by Borchardt (Statuen und Statuetten II) for CG 577. But
[^3]:    26. Petrie, Royal Tombs I, Pls. 12 (2) and 17 (29); similarly Petrie, Abydos I, Pl. II (II). Later the nomen, preceded by + 䏠, is opposed to the Horus name: e.g. C. M. Firth, J. E. Quibell, J.-P. Lauer, Excavations at Saqqara: The Step Pyramid (2 vols.; Cairo 1936), Pl. 58 (Djoser); Musée Égyptien I, Pl. 8 (Chephren).
    27. Fig. 5 a and b are details of the impressions published
[^4]:    by Petrie, Royal Tombs II, Pl. 23 (197, 192). Fig. 5 c (the entire seal impression) is taken from Kaplony, Inschr. der äg. Frühzeit III, Pl. 78 (291); this is the same as Petrie, loc. cit. (200). Fig. 5a and b show Horus and Seth opposed; Fig. 5c shows them both oriented leftward. Fig. 5a shows opposed within the Horus (and Seth) name, while Fig. 5b presents the same group facing left.

[^5]:    28. The god is $3 s^{x}$, the title $\tau \underset{d}{ }-m r S_{b}$ - $H r-b s w$, "boundary official of the estate $S b z-H r-b w w . "$
    29. The omission becomes the rule after a change in procedure during the reign of Den (Chronique d'ÉEypte [Brussels] 36 [196I], 21-22).
    30. BM 1234; Hieroglyphic Texts I², Pl. 1 (2). For retrograde writings of divine and royal names see Posener, $\ddot{A} Z 93$ (1966), ı7; JEA 54 (1968), 68, note a; this subject will be discussed at greater length in my forthcoming Egyptian Studies III.
    31. Hayes, JNES 10 (1951), Fig. 32 (S 56 ) on p. 177; cf. also S 59 .
    32. Ibid., $\mathrm{S}_{54}$; several other examples on the same plate, involving various divinities, as also in Fig. 31 on p. 174. These seals also oppose the name of Amenophis III and Ti: ibid., Fig. 30, page 173. Compare, in the tomb of $H r-m-h 3 t$, an offi-
[^6]:    37. For the date and bibliography of this inscription, on a door jamb in the Cairo Museum, whose correct number is J 43359, see Yoyotte, Mélanges Maspero I (MIFAO 66, Fasc. 4; Cairo 1961), p. 125 (no. 12). I am indebted to Ricardo Caminos for the use of his facsimile, from which the title has been traced.
    38. These emblematic uses of hieroglyphs are discussed in $M M J 5$ (1972), 17-23.
    39. Some early examples of inward orientation at the bottom: Borchardt, Denkmäler des A.R., CG 1369; Teti Pyr.
[^7]:    48. Petrie-Quibell, Naqada and Ballas, Pl. 77. My Fig. 14 is taken from the drawings of H. M. Stewart in $I L \mathcal{N}$ (Dec. 17, 1955), 106 I , where one side has been reversed.
    49. G. Bénédite, JEA 5 (1918), Pls. 1-2; Burlington Fine Arts Club, Cat. of an Exhibition of Ancient Egyptian Art (London 1922), no. 20, Pl. 52.
[^8]:    50. G. Bénédite, $J E A 5$ (1918), Pl. 34 .
    51. J. E. Quibell, Hierakonpolis I (London 1900), Pls. 13 (1), 14, 16 (1-2), 17.
    52. G. Bénédite, JEA 5 (1918), Pl. 33; Hayes, Scepter I, Fig. 20, p. 28.
    53. W. M. F. Petrie and G. Brunton, Sedment I (London 1924), Pl. 21 (15).
    54. A late Old Kingdom example, inscribed on the sides (i.e. left and right rather than front and back), shows the
[^9]:    dominant ( $\rightarrow$ ) orientation in both cases: Selim Hassan, Excavations at Saqqara 1937-1938 (Cairo 1975) II, Pl. 21 ; but a second (III, Pl. 57 [B. C]), inscribed front and back, top and bottom, reverses one of the inscriptions at the top.
    55. P. Montet, Byblos et l'Égypte (Paris 1929), PI. 100.
    56. Vernier, Bijoux et orfèvreries, CG 52658 .
    57. Right side: J. D. Cooney, Egyptian Art in The Brooklyn Museum Collection (Brooklyn 1952), no. 50. Left side: J. D. Cooney, $\ddot{Z} Z 93$ (1966), Fig. 2, p. 46.

[^10]:    58. Redrawn from L. Habachi, Tell Basta (ASAE Suppl., Cahier 22; Cairo 1957), Figs. 2-3 and Pls. 2-3.
    59. Based on the maps and plans at the back of the aforementioned volume.
    60. The evidence for this conclusion is presented in $A J A 62$
[^11]:    (1958), 331-332.
    61. The summary plan is based on PM III ${ }^{2}$, Pt. 1, Pl. 30. I have carefully examined the blocks of masonry belonging to the upper architrave and feel certain that the inscription was carved after they were mounted in their present position.

[^12]:    62. The front and back are reversed in Lange-Schäfer, Grab- und Denksteine, p. 15 r.

    Schäfer, op. cit., p. 146, but Kamal (ASAE 38 [1938], 265 ff;
    63 . The orientation is correctly presented by Lange-

[^13]:    64. Cairo Museum J 38575. For other views see Deir el-Bahari XIth Dyn. I, Pl. 28 and Jéquier, Temples I, Pl. 58. Two other examples of this kind are perhaps to be explained similarly: ( 1 ) The New Kingdom offering scene at the back of tomb 32 at Aswan is reversed, facing left (Müller, Felsengräber, Pl. 24), perhaps because the cult chamber which leads to the burial is at the right (ibid., Fig. 31). (2) In Meir II, Pl. 12, the owner faces left at the back of the statue niche; perhaps this indicates that his body occupied pit F (ibid.,
[^14]:    105. E.g. Petrie, Deshasheh, Pl. 29 and Junker, Giza VIII, Figs. 41 and 45, pp. 99, 102 ; in these cases the door appears inside, the eyes outside. For the pair of eyes on the exterior see also James-Apted, Khentika, Pl. 39, and Teti Pyr. Cem., PI. 58. The coffin of Impy (MFA 13.3085 ) has the door, surmounted by a pair of eyes, on the inside only. Cf. Borchardt, $A Z 35$ (1897), 116-118.
    106. Body on back: e.g. Petrie, Deshasheh, p. 16 (no. 5, face upward) ; Junker, Giza VII, Fig. 90a, p. 225. Sometimes the Old Kingdom burial shows the head turned on its left side: Petrie, Deshasheh, p. 16 (no. 117); Moussa-Altenmüller, Tomb of Nefer and Ka-hay, p. 43 (and Pl. 40a); in a second case, ibid. (Pl. 40b) the body is entirely on its left side, the knees slightly flexed. The supine position is occasionally found later: e.g. Dunham, Naga-ed-Dêr Stelae, p. 4 (S.F. 5106, as compared with S.F. 509 and Fig. 2); J. de Morgan, Fouilles à Dahchour en 1894-95 (Vienna 1903), Fig. 105, p. 46.
    107. E.g. W. M. F. Petrie, Kahun, Gurob and Hawara (London 1890 ), Pl. 19 (with false door and eyes on both sides); G. Brunton and R. Engelbach, Gurob (London 1927), Pl. $3^{2}$ (false door and eyes on both sides).
    108. MMA 15.2.2. Cf. Hayes, Scepter I, Fig. 207, p. 318.
    109. In each of the following diagrams the long arrow at the top shows the orientation of the offering formula on the
[^15]:    111. As noted by Dieter Arnold (Wandrelief und Raumfunktion in ägyptischen Tempeln des $\mathcal{N} . R$. [MÄS 2; Berlin 1962], p. 128) who does not, however, discuss the orientation on transverse walls.
    112. Based on Nelson, Key Plans, Pl. 25. The apparent exceptions are explained as follows: (a, b) the king turns to cense Amun, who enters in procession; (c) he repels enemies. 113. Based on Nelson, Key Plans, Pl. 13. The scenes at a-c show: (a) the king ( $\rightarrow$ ) repelling enemies, and presenting prisoners ( $\leftarrow$ ) to Amun ( $\rightarrow$ ); (b) the king being escorted $(\rightarrow$ ) to Amun ( $\leftarrow)$, after (c) being purified. The other exceptions are only apparent: ( $d$, top) the king leaves the temple in a procession; (d, bottom) he turns to receive Libyan
[^16]:    121. In one scene the king spears fish ( $\rightarrow$ ) away from the sanctuary, while in a second scene he hunts animals $(\rightarrow)$ in the direction of the sanctuary: Borchardt, Grabdenkmal Sashu-rer II, Pls. 16 and 17; cf. PM III², Pt. 1, Pl. 38, locs. 9,5 ); thus the dominant rightward orientation prevails in both cases.
[^17]:    122. Howard Carter and A. C. Mace, The Tomb of Tut ankh Amen I (London 1923), Pls. 21, 50-54; Nina M. Davies and A. H. Gardiner, Tutankhamun's Painted Box (Oxford ig6i).
    123. Based on Nelson, Key Plans, Pl. 7.
[^18]:    124. From Hassan, Giza II, Fig. 219, foll. p. 190. This and the following inscriptions are discussed at length by $\mathbf{H}$. Goedicke, Die privaten Rechtsinschriften aus dem Alten Reich (Vienna 1970), pp. 131-148, but nothing is said about their orientation.
    125. Fraser, $A S A E 3$ (1902), Pl. 4, foll. pp. 122-130, slightly modified according to Utk. I, pp. 24-28.
    126. Again from Fraser's Pl. 4. As Sethe observes (Urk. I, p. 29), the words $\ominus_{\text {© }}^{\circ}$, which appear in the adjacent space, are similarly oriented, but probably belong to an epi-
[^19]:    thet $\circlearrowleft$ [ 4 in the space above them; perhaps one should
     the statement.
    127. By means of this reversal she would be able, without leaving her husband's side, to become the recipient of his words just as effectively as are the figures of herself and her children, which stand opposite them.
    128. Fraser, op. cit., Pl. 3.
    129. Junker, Giza VIII, Fig. 56, foll. p. I 6.

[^20]:    137. Schenkel, Frïhm. Studien, p. 77; Fischer, Inscriptions from the Coptite Nome, p. 16; Edel, Altäg. Gramm. II, §993.
    138. Unless one assumes that the double architrave (for which cf. note 61) was surmounted by yet another line of inscription, of which there is no evidence.
    139. Cf. Edel, Altäg. Gramm. II, §993, who thinks, however, that this represents $\underline{d} d(. s)$, with the suffix pronoun
[^21]:    141. Borchardt, Denkmäler des A. R., CG 1435, and Urk. I, p. 98 .
    142. Borchardt, op. cit., CG 1431, and Urk. I, p. 1 18. See also Gardiner, $A Z 79$ (1954), 95-96.

    142a. A late Old Kingdom retrograde example of a less obvious kind is published in $M M J_{\text {II (1976), Fig. 12, p. 20; }}$ in this case the statement, in four horizontal lines $(\rightarrow)$ is located to the right (i.e. in front) of a vertical column (again $\rightarrow$ ) containing the name of the speaker and "al "she says."

[^22]:    147. Goedicke rightly dismisses an alternative suggestion made by Gunn (Königliche Dokumente, pp. 10-1 1, and JARCE 3 [1964], 34-35).
    148. Ibid. (both references). Some of the previous opinions will be specified presently (cf. note 15 I below).
    149. (1) Neferirkare: Urk. I, p. 170 (12). Isesi: Urk. I, pp. 60 (14), 62 (14), 179 (12). Teti: Urk. I, p. 207 (16). I suspect that the same form occurs in a badly preserved ininscription of Neferefre, R. Anthes, Die Felseninschriften von Hatnub (Untersuchungen IX; Leipzig 1928), Pl. 2 (cf. Fraser in Bersheh II, p. 57) ; the initial sign is not reversed in the copy, described as a "Skizze," but the top of this may not have been visible. (2) Pepy I: Urk. I, p. 209 (12). Pepy II: Urk. I, pp. 128 (2), 277 (10), 280 (15); Jéquier, Mon. fun. Pepi II, III, Fig. 74, p. 74. (3) Urk. I, p. 289 (2). (4) As noted in WZKM 57 (1961), 66, n. 21 : Hayes' Decree h (Weill, Décrets, p. $90=$ Hayes, JEA 32 [1946], Pl. 3a); l (Urk. I, p. 295 [r7] seen from photograph); o (Urk. I, p. 299 [5] = Hayes, op. cit., Pl. 4) ; r (Urk. I, p. 304 [14] =Weill, op. cit., Pl. 9) ; m (Urk. I, p. 300 [14]) and k (Urk. I, p. 302 [I I]) could not be verified to ascertain the presence of the ligature; similarly Decree $s$
[^23]:    151. Sethe proposed this same interpretation a half century ago, comparing it with similar groupings in the columnar texts of the Shabako Stone and its Middle Kingdom predecessor, Papyrus Ramesseum B, as quoted at the end of this section (Dramatische Texte zu altaegyptischen Mysterienspielen [Untersuchungen X; Leipzig 1928], p. 7). Although Edel (Altäg. Gramm. I, §87) also takes the view that is advocated here, he alternatively suggests that the single Old Kingdom example showing $n$ may represent the indirect genitive ( $w \underline{d} n j n j s w t\langle n\rangle$ ); this is possible although such a construction is rare in the case of honorific transposition, and would more probably be written * $\boldsymbol{q}_{\min }^{\circ}$ 夺 $\}$ as described in $J A R C E 3$ (1964), 123-4. Goedicke, contesting both alternatives, interprets this example as a sdm.n.f form, i.e. ${ }^{*} w d . n$ nswt (Königliche Dokumente, p. 10, and JARCE 3 [1964], 34). It is true that $w d$, as a verb, regularly appears in this form throughout the decrees: wd.n hm.i . . "My Majesty has ordered . . ." (cf. Gunn, ASAE 27 [1927], 233). But that usage is, in fact, so regular that it seems strange that it should only appear once in the heading, while the other Old Kingdom examples
[^24]:    167. The earlier offering slabs of the Archaic Period generally show the offerings facing right, as does the owner: e.g.
    the majority of examples in Zaki Y. Saad, Ceiling Stelae in
    Second Dynasty Tombs (ASAE Suppl., Cahier 21 ; Cairo 1957),
[^25]:    by no name (Fisher, Minor Cemetery at Giza, Pl. 45), and the same may be true of Cairo CG ${ }_{1727}$ B.
    169. Junker, Giza VI, Fig. 9, p. 43; Hieroglyphic Texts I², Pl. 27 (BM II56B).
    170. Junker, Giza VII, Fig. 70, p. 167; but here the owner's titles and name also accompany his representation, oriented in the opposite direction.
    171. Bissing, Re-Heiligtum III, Bl. 17 (289).
    172. For Bsw $\mathcal{N} h n$ and $B s w P$ in connection with the $i t r t$ shrines of Upper and Lower Egypt, cf. E. H. Naville, The Festival Hall of Osorkon II (London 1892), Pl. 4 bis (4 and 12).
    173. A frieze along the top of the north wall of the main chamber; cf. the photograph in Smith, Art and Architecture, Pl. $4^{6(B) \text {. The drawing is a slightly modified version of the }}$

[^26]:    189. Jacquet-Gordon, op. cit., p. 248, n. i.
    190. LD II, Pl. 49, with inscription restored on the basis of examples such as ibid., PI. 54 .
    191. Junker, Giza VI, Fig. 40, p. 127.
    192. E.g. Junker, Gíza II, Fig. 28, p. 182; III, Fig. 27 foll.
[^27]:    201. See Clère, Mélanges Maspero I, (MIFAO 66; Cairo 1935-1938), pp. 771-774, for other Old Kingdom examples where prt-hrw is written without the infinitive ending $t$. Junker (ibid., p. 122) interprets this as $\$ d m . f$ and translates the phrase as an independent statement: "Ein Totenopfer werde (wird) ihm dargebracht."
    202. P. Montet, Les Scènes de la vie privée dans les tombeaux égyptiens de l'Ancien Empire (Strasbourg 1925), pp. 358, 363 . 203. Cairo CG 1533. This example derives from Saqqara, but others are known from Giza: LD Ergänzungsband, Pl. 28 d (same as Fig. 8i below); Hassan, Giza VI, Pt. 3, Fig. 83 and
[^28]:    Pl. 47; Junker, Giza IV, Pl. 15.
    204. As is also pointed out by Emma Brunner-Traut, Der Tanz im alten Ägypten (ÄF 6; Glückstadt-Hamburg-N.Y. 1938), p. 83. BM 718 provides a particularly clear example (Hieroglyphic Texts $\mathrm{I}^{2}, \mathrm{Pl}$ 28).
    205. Note that the last word is not "dancers," i.e. feminine ibswt, for which see Mariette, Mastabas, p. 404; Junker, Giza X, Fig. 46, p. 134, and Fischer, Bulletin of The Detroit Institute of Arts 51 (1972), 77.
    206. From Junker, Giza VII, Fig. 71, p. 171.
    207. As Junker assumes, op. cit., p. 173.

[^29]:    208. MMA 13.183.2, part of a granite doorway from the Metropolitan Museum's excavations at Thebes. The block below this one, illustrated in Hayes, Scepter II, Fig. 215, p. 341, similarly shows Ptah Tatjenen, whose name is followed by the words $A \subset$ als inn. $(\leftarrow)$ "may he grant jubilee
[^30]:    232. Ibid., p. 6r, n. 50 .
    233. Both possibilities are considered ibid., p. 6o, n. $4^{8}$.
    234. Ibid., Pl. 70 and p. 65.
     not to speak of the title $h m-n t r \operatorname{Mrtt}$ (p. 98 [26]).
    235. Borchardt, Statuen und Statuetten IV, p. 85 (CG ir61).

    Note that the sign for Min is normally oriented on the front,

[^31]:    262. Berlin 7702, Aeg. Inschr. I, p. 144; similarly Petrie, Koptos, Pl. 10.
    263. It has recently been proposed anew by K. Martin, Studia Aegyptiaca I: Recueil d'études dédiées à Vilmos Wessetzky (Leiden 1974), pp. 290-291.
    264. Mond-Myers, Temples of Armant, Pl. 102 ( 1 ).
    265. Médamoud 1927, Pl. 4 ( $=1930$, Pl. 11), Pl. 7 ( $=1930$,

    Pl. 9), Fig. 86; Médamoud 1929, Pls. 13, 14; Médamoud 1930,
    Pl. 12 (all reign of Sebk-hotpe II). Also Petrie, Abydos II, Pl. 23 (3), which cannot be as early as Dyn. XI; note the writing of Osiris as $\uparrow$, as well as $\ell_{0}^{\circ}$ instead of the Dyn. XII writing $\ell \rightarrow$ (for the latter see Lacau-Chevrier, Chapelle de Sésostris It ${ }^{\text {tr }}$ pp. 196-197).
    266. Médamoud 1927, Pl. 8 (=1929, Pl. 14).
    267. The Hathor shrine of Tuthmosis III in the Cairo

[^32]:    277. The reversals are: Reliefs at Karnak I, PI. 8; II, Pls. 103 (D, H), 105 (I); Medinet Habu IV, Pl. 245 (C); VI, Pls. 435 (B), 444, 472; VIII, Pl. 594.
[^33]:    279. Medinet Habu VI, Pl. 463; VII, Pl. 496 (A).
    280. Ibid., V, Pls. 275 (C), 280 (C); VI, Pl. 434. Also an earlier example, reign of Tuthmosis III, CG 34013 (Lacau, Steles).
    281. A Dyn. XIII example in Médamoud rgag, Pl. 14; perhaps accidental, since two adjacent captions show Af. Dyn. XVIII, Tuthmosis III: CG 34013 and (unreversed) Berlin 1638 (Aeg. Inschr. II, p. 105); Medinet Habu, loc. $\mathrm{B}_{33}$; Amenophis III: Cairo J $4064{ }^{0}$ (left side, unreversed; $\Delta f$ on right side). Dyn. XIX, Sethos I: (unreversed) Karnak, loc. B249. Dyn. XX, Ramesses III: Medinet Habu V, Pl. 320 and (unreversed) Luxor, loc. G74; Ramesses IV: Karnak, Khonsu Temple, locs. 355, 359, 366, 384, 385, 404. Dyn. XXII, Sheshonq I: (unreversed) Cairo T $\frac{3+12}{24 \mid 2}$; Osorkon II: Naville, Bubastis, PI. 42 (A). Dyn. XXX, Nectanebo I: (unreversed) Cairo CG 70078, J 72130 and Karnak, loc. I 142.
    282. Dyn. XIX examples (Ramesses II), H. Ricke, G. R. Hughes and E. F. Wente, The Beitel-Wali Temple of Ramesses II (Text and Plates; Chicago 1967), Pls. 31, 32.
    283. Amenophis III: Gayet, Temple de Louxor, Pl. 15, Fig. 48. Ramesses XI: (unreversed) Karnak, Khonsu Temple, loc. 268. Osorkon II: Naville, Bubastis, PI. 42 (A) ( $=$ Naville, Festival Hall, Pl. 3).
[^34]:    314．Also in in the First Intermediate Period（JAOS 76 ［1956］，10I），and occasionally much later：e．g．N．de G． Davies，The Tomb of Two Sculptors（N．Y．，1925），Pl．I5； Medinet Habu II，Pls． 86 （34）， 96 （9）．

    315．E．g．Junker，Giza VII，Fig．70，p．167；X，Figs．68， 69, pp． 178 ， 180 ．
    316．Junker，Giza X，Fig．44，p．120．Cf．\＆$(\rightarrow)$ ，
    $(\leftarrow)$ Deir el Bahari VI，Pls．120， 156 ．

[^35]:    320. Hayes, Se'n-Wosret-cankh, Pls. 7 (381, 395), 8 (404); for the date cf. Egyptian Studies I: Varia, Section 8, n. 32. Other evidence of the Twelfth Dynasty and Second Intermediate Period: J. de Morgan, Fouilles à Dahchour 1894 (Vienna 1895), Fig. 26, p. 21; F. Ll. Griffith, The Petrie Papyri: Hieratic Papyri from Kahun and Gurob (London 1898), Pl. 7; Jéquier, Deux pyramides, Fig. 20, p. 24 (temp. Khendjer); D. Randall-MacIver and A. C. Mace, El Amrah and Abydos (London 1902), Pl. 29 (temp. Neferhotpe); Fakhry, Monuments of Sneferu II, Pt. 2, Figs. 340A, 342, Pp. 42, 44; J. E. Gautier and G. Jéquier, Mémoire sur lesfouilles de Licht (MIFAO 6; Cairo 1902), Pl. 20.
    321. W. M. F. Petrie, et al., Lahun II (London 1923), Pis. 25 (7), 26.
    322. Deir el Bahari III, Pls. 72; IV, 114-116.
[^36]:    357. Deir el Bahari II, Pl. 33.
    358. Ibid. III, Pl. 64.
    359. Karnak shrine, block PM ${ }_{11}$ ( ${ }^{(P M ~ I I ~}{ }^{2}$, pp. 67-68) Or. Inst. photo. 6633.
    360. Karnak, Sanctuary complex, loc. D454. Note, however, the traditional orientation of $\triangle \triangle$. go, may she come with Re," where sm and $i w$ are not linked as they are in the other cases: Deir el Bahari IV, PI. 114.
    361. Amada IV, Pl. B7.
    362. Karnak, Festival Hall, Nelson loc. $\mathrm{F}_{133}$; the top of the $\wedge$ is obliterated, but its position seems to preclude $\wedge \stackrel{\wedge}{\wedge}$. 363. Semna: LD III, PI. 56, and Dunham-Janssen, Semna Kumma, Pl. 33.
    363. Karnak, east wall of Room XIV, Nelson loc. F99.
    364. Ramesses I: $\wedge(\leftarrow)$, Tomb, J.-F. Champollion-leJeune, Monuments de ${ }^{l}$ 'Egopte et de la Nubie III (Paris 1845), Pl. 236 (3), and LD III, Pl. 123 a. Sethos I: $\hat{A}(\leftarrow)$, Karnak, Nelson loc. B4. Ramesses II: $\stackrel{\wedge}{\wedge}$, Karnak, loc. B94; $\triangle \triangle \wedge$, Karnak, loc. Gı36; $\Delta \wedge$, Karnak, loc. Bi20; and
[^37]:    397. Zaki Y. Saad, Royal Excavations at Helwan (1945-1947) ( $A S A E$ Suppl., Cahier 14; Cairo 1951), Fig. 6, p. 21, and Pl. 22 (c); the second example (Fig. 119 below) is Louvre E 13919: J. Vandier d'Abbadie, Catalogue des objets de toilette égyptiens (Paris 1972), pp. 28-29 (63); a third example (Louvre E 23486) is shown in Vandier d'Abbadie, loc. cit. (62), and a fourth in Randall-MacIver and Mace, El Amrah and Abydos, Pl. 12.
    398. Some examples: Junker, Giza II, Fig. 21, p. 155 ; X, Figs. 53, foll. p. 144, 64, foll. p. 166; LD II, Pl. 28 (Reisner's G 4940); Curto, Gli Scavi italiani a el-Ghiza, Pl. 39a. The sign (or the like) is more apt to be reversed (e.g. LD II, Pl. 85) and it may be reversed even when on is oriented normally
[^38]:    pyramide d'Aba (Cairo 1935), Pl. 6 (line 186); Jéquier, Fouilles à Saqqarah: La pyramide d'Oudjebten (Cairo 1928), PI. 7 (line 214). Foreleg (b) Pyr. 79d (W, N), 2069a (N); Jéquier, Pyrs. des reines, Pl. 30 (Neit, line 781). Foreleg (c) Pyr. 1939 (N). Foreleg (d) Pyr. 1323b (P), 1326c (P); Jéquier, Pyrs. des reines, Pl. 12 (Neit, line 306). Pyr. 736b might be either (a) or (d). Arm (a) Jéquier, Pyrs. des reines, Pl. 16 (Neit, line 449). Arm (d) Pyr. 316c (W), 405b (W, T), 653 a (T, P, M), 1286a (P).
    408. In the temple of Sethos I at Abydos; see JEA 59 (1973) 225 .
    409. Besides the examples from Naga ed-Deir and vicinity, listed in notes 404-406: Thebes-BM. I 64 (3) (ClèreVandier, TPPI, §33); Cairo CG 20007; Naqada-Cairo CG 1596 (Fischer, Inscriptions from the Coptite Nome, no. 32, $\sim[\rightarrow]$ ); Dendera-Petrie, Dendereh, Pls. II (top r.), 13 (i. bottom) ; University Museum, Philadelphia, 29-66-66r;

[^39]:    423. Rifeh tomb 7, line 27 : Siût, Pl. 19, and Montet, Kêmi 6 (1936), 160. Similarly in wšn "make offering." Siut tomb I, line 239: Siat, Pl. 5 and Montet, Kêmi 3 (1930), 50. Cf. also (det. $\Rightarrow$ with head of goose) "offer" in the inscriptions of Hnw on the south side of the Unis Causeway at Saqqara (cf. Altenmüller, SAK I [1974], 15, where this detail is overlooked).
    424. From JARCE 2 (1963), p. 31, false door of tomb chapel in Boston, MFA 04.1760; cf. Mariette, Mastabas, p. 291. Other examples ibid., p. 195; Reisner, Hist. Giza Necr. I, Pls. 20 (a, b), 30 (a).
    425. Reisner, op. cit., Pl. 19 (b); BM 1223 (Hieroglyphic Texts $\mathrm{I}^{2}, \mathrm{Pl} .8$ ); Cairo CG 1380, 1418, 1422, 1513 . Note particularly the short list of offerings in R. Macramallah, Fouilles à Saqqarah: Le Mastaba d'Idout (Cairo 1935), Pl. 15, where the decapitated goose is oriented backwards, but the sign $E$ is reversed. Cf. also Fig. 79 above.
    426. Munich ÄS 4854: H. W. Müller, Die ägyptische Sammlung des Bayerischen Staates (Munich 1966), no. 18.
    427. Dyn. XII: Lacau-Chevrier, Chapelle de Sésostris Ier, Pl. 3I. Dyn. XVIII: Caminos-James, Gebel es-Silsilah I, Pl. 52; Karnak, loc. D523 (PM II ${ }^{2}$, p. 125 [455]).
    428. Cairo CG 1730 (Borchardt, Denkmäler des A. R. II, p. 160) : a fragmentary false door that bears a title referring
[^40]:    441. Smith, op. cit., PI. 42.
    442. In probable order of sequence: Wnst (Junker, Gfza I, Fig. 63, p. 252, and Pl. 4ob); $K_{3}$-nfr (BM ${ }^{1} 324$ : Hieroglyphic Texts $\mathrm{I}^{2}$, Pl. 10 [ I$]$ and Brit. Mus., Guide to the Egyptian Galleries [Sculpture] [London 1909], Pl. 1, facing p. 4); Dbh.n(.i) (Hassan, Giza IV, Figs. 116 and ${ }_{11} 7$, pp. 165-166); $K 3(. i)$-urb (in chapel of Mr.s-rnh III: Smith, op. cit., Pl. 43).
    443. Notably in the panels of $H_{s y-R} r$, as mentioned earlier.
    444. Cairo CG $174^{\circ}$ and $J N E S$ 18 (1959), Pl. 11 and p. 262. Also note that BM ri69 shows the staff held over the advanced foot, as in the previous two cases (Hieroglyphic Texts $\mathbf{I}^{2}, \mathrm{Pl} .3$ [r]); here the ends of the staff are undifferentiated, but another relief from the same tomb shows the wider end downward (BM 1168 ; ibid., Pl. 3 [3]).
    445. Fig. 124 is from Junker, Giza V, Fig. 20, p. 85. Cf. also Junker, Giza XI, Fig. 36, p. 64; Turin 1840 (seen from a photograph: cf. Curto, Gli Scavi italiani a el-Ghiza, Pls. 17 [a], 18); H. Goedicke, Re-used Blocks from the Pyramid of Amenemhet I at Lisht (New York 1971), pp. 39, 60, 61; Smith, HESPOK, Fig. 113, p. 277 (G7750, attributed to reign of Mycerinus, ibid., p. 164); H. Kayser, Die Mastaba des Uhemka (Hannover 1964), p. 32; Abu Bakr, Giza I, Fig. 91, p. 104 and Pl. 57A; Boston MFA 31.782. This feature reappears in the archaiz-
[^41]:    450. Cf. PM I ${ }^{2}$, Pt. 2, p. 7 II. The same man and his family are mentioned on Turin stela 1636 (Maspero, Rec. trav. 2 [1880], 196), and three other stelae in the British Museum: BM ${ }_{144}, 8 \mathrm{I} 8,328$ (Hieroglyphic Texts IX, pp. 46-50 and Pls. 3940). The statue evidently comes from Deir el Medina tomb 330, for which see B. Bruyère, Rapport sur les fouilles de Deir el
