
On the Verge of Ptolemaic Egyptian: Graphical Trends in the 30th Dynasty*




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Our understanding of hieroglyphic writing is far from perfect. No matter how industrious egyptologists have been in recent years, one notes little interest in the fundamentals of graphics, which is not prerequisite, however, for accomplishing excellent philological work, such as text editions and translations, which for many represent the peak of scholarly toil. The main reason for this deficiency is the lack of adequate working tools for analysing hieroglyphic writing. Any student wishing to pursue the graphical developments of a certain word beyond the 'Wörterbuch' or 'Gardiner's Grammar' will soon end up finding himself in a vacuum of references. This is a most unfortunate situation and it would certainly be unwise to consider it a minor inconvenience. Through the practice of reading, anyone will quickly get a feeling for graphical features that are more common at certain times, and less common at others, and the judgement made on the graphical appearance will contribute, conjointly with other stylistic criteria, to the proposed dating of the monument. For a language like Egyptian, in which there was no fixed orthography and the written signs were made up of different categories (ideograms, phonograms and determinatives), which combine in intricate and seemingly infinite ways - though still subject to rules of convention - it seems important to study more in detail what really make up these features and how the above-mentioned categories work together in different epochs. It would be desirable to have synchronic sign lists at one's disposal, preferably including descriptions of orthographic rules.

In this paper I make only a few remarks on a group of phenomena pertaining to the graphical system of the hieroglyphs in the 30th dynasty (380–343 BCE), alphabetic writing, complementation and the acquisition of new values for old signs. I will try to illustrate these phenomena by drawing in particular on the inscription of the general Tja-hap-imou, father of Nectanebo II¹. His statue has the advantage of being well dated and has for the author the additional allure of not having been studied often. I fear that the brutal dismemberment of graphical elements, that I consider necessary for my purpose, does not equal the elegance of the hieroglyphs.

Alphabetic Writing

A set of 25 monoconsonantal signs might conveniently be called the Egyptian alphabet. They are used alone for a few monoconsonantal words (*f*, *m*, *n*, *r*) or combine to form words. Except for a few frequent exceptions (e.g. *rḥ* 'to know') they are in the latter case usually followed by a determinative that points towards the intended meaning. It happens at times that monoconsonantal signs replace bi- or triconsonantal signs as well as ideograms, often concurrently with the suppression of determinatives. This phenomenon occurs as early as in the Pyramid Texts.² During the 25th and 26th Dynasties this usage was, as it seems, revived.³ Examples from the period in between concern the so-called cryptographic writing to be found among others in the funerary literature of the Late New Kingdom.⁴ Alphabetic writing also appears in the 30th dynasty, the prime specimen

being the Naukratis stela from the first regnal year of Nectanebo I, ⁵ e.g.  *mdw*, 'word',  *hsk*, 'to cut',  *km* 'completion'.

Its first translator brought forward the idea that the alphabetic writing could be due to Greek influence.⁶ This idea was most authoritatively reinforced by Battiscombe Gunn.⁷ The idea was embraced by various later authors,⁸ although it had already been refuted with good arguments by Piehl.⁹ It is highly unlikely, to put it mildly, that the Egyptians of the Saite dynasty would have been so impressed by the contemporaneous written culture of the Aegeans. Besides, inspiration could be sought for just as well among the various Semitic peoples in possession of alphabetic writing. The view that it has anything to do with the spellings from the Old Kingdom has been questioned recently in an interesting article by Simon Schweitzer.¹⁰ The author makes the apt remark that the Late Period copies of the Pyramid Texts do not show alphabetical spellings and argues 'Eine archaisierende Funktion ist bei den spätzeitlichen alphabetischen Schreibungen nicht erkennbar.'¹¹ He considers it a genuinely Egyptian phenomenon, albeit functionally different from the Old Kingdom writings, since they resemble Ptolemaic writing according to a 'ersetzendes Prinzip'. As one might guess from my way of presenting the alphabetic writings above, I cannot follow suit and despite his counter arguments, I firmly believe that these writings were conceived as archaisms in the 25th and 26th dynasty when they first start to appear more frequently.¹² The observation that they also appear outside the periods that are most strongly characterised by the phenomenon of archaism, such as in the Graeco-Roman temples, is correct, but to me the existence of alphabetic writing in these contexts does not tell anything about its origin and growth. It is customary for an initial motivation to be lost, as soon as it has grown into a habit. I therefore believe that it is still valid to consider the alphabetic writings

of the 30th dynasty as imitations of the writings of the 26th dynasty,¹³ which in turn were inspired by Old Kingdom orthography. Other archaising traits on the Naukratis stela not to be overseen are its overall 'page layout', with vertical rows, and its decor, as well as the shape of individual signs. It is hardly surprising, for political and practical reasons, that at the beginning of the 4th BCE authors and artists alike would turn to Saite models after the long period of the First Persian Occupation (525 – 404 BCE) in which much of the artistic output must have come to a standstill. The very reason that they were not any longer felt as archaising in the Graeco-Roman temple inscriptions had the effect that certain frequent spellings of this kind could occur freely together with graphical innovations of Ptolemaic writing.

The process has parallels in modern languages. In French etymological consonants were sometimes reintroduced in the late Middle Ages in words in which they had been lost for centuries. The Middle French *cors* 'body' thus received 'p', in analogy with Latin *corpus*.¹⁴ A speaker of modern French will hardly perceive the present-day spelling *corps* as an archaism.

Still it is true that the alphabetic writings may be seen in relation to Ptolemaic writing. To make use of the 'ersetzendes Prinzip', present in alphabetic writing, one had to ponder upon how to part from orthographic convention and this certainly stirred the appetite of the scribes for graphical speculation.

The alphabetic writings are used in private inscriptions from the reign of Nectanebo I: Berlin 21596,¹⁵ JE 47291,¹⁶ Moscow Pushkin Museum 5320.¹⁷ One might easily gain the impression that they were less favoured in the latter part of the dynasty, but this is difficult to assert in view of the small number of private monuments that can be securely dated to the reign of Nectanebo II. Partly because of its alphabetic writings Brooklyn 52.89 (Dattari statue) has been

attributed to the reign of Nectanebo I.¹⁸ That they do occur during Nectanebo II can be seen from various monument, e.g. the statue of the general tj^c-h^cp-*imou*, the king's father (New York MMA 08.205.1)¹⁹ One observes there the following examples: 𓆎 *ib* 'heart', 𓆏 *wr* 'great', 𓆑 *s(3)s* in the expression *s3s hsb* 'violate the domain', 𓆒 *sh(w)* 'nourishment'. Another concession to the contemporary pronunciation is 𓆓 for *hft* 'according to'. Another monument from the reign of Nectanebo II in New York (MMA 50.85) that displays alphabetic writings is the Metternich stela.²⁰ A few examples are 𓆔 *t(3)w* 'wind' (220), 𓆕 *nmh.t wth* 'a free citizen who has escaped' (247); 𓆖 *mtn* 'road' (248); 𓆗 *h(3)b* 'send' (252). Fortunately older copies of several of the magical spells on this stela exist. These prove that the text on the Metternichstela has not been servilely copied, but that the writings underwent graphical adaptation to the normative spartan writing in the process of which determinatives were not rarely omitted and phonetic complements dropped.

Alphabetic writings are likewise by no means rare in the immediate aftermath of the dynasty. Thus, several examples are found on the sarcophagus of the general Nekhtnebef in Berlin (Inv. Nr. 7).²¹ It was obviously less en vogue during the Ptolemaic period and it seems as if for some high-frequency words the alphabetic spelling has just become a mere variant, e.g. the use of 𓆘 for 𓆙 *hpr*. As a principle it is completely overshadowed by new tendencies. Finally, one may note an important difference between the alphabetic spellings of the 30th dynasty and those of the 26th dynasty: henceforth biconsonantal signs of which one radical is a weak consonant can be used as a monoconsonantal sign (*s3 > s* ; *k3 > k*). The disregard for lost or weak phonetic elements is shared with cryptographic writing.²²




Alphabetic Complements





It is evident that throughout the Late Period complementation is by far less common than in true Middle Egyptian or Late Egyptian. The decrease of alphabetic complements is a consequence of the spartan trend of the 26th dynasty, which keeps the number of signs to a minimum, albeit sufficient to recognise the word. This trend is evidently the opposite of what is seen in Late Kingdom texts, where one often observes apparently superfluous (in the sense that they do not render any phonetic realisation) signs, mainly *w*, *y* and *t* and likewise double determinatives. Of course, alphabetic spelling itself does affect the possibility of complementation as a result of the reduction of bi- and triconsonantal signs that can receive complementation. In certain cases it seems almost as if complements would be confined to fixed sign groups such as 𓆚 *mn* or 𓆛 *htp*. In the former case one may even ask, whether it should not be more properly analysed in some words as a composite sign in the manner of 𓆜 which doesn't equal a mere repetition of the simple sign.²³ As for complementation, it is worth noting that complements are rarely used with the newly acquired phonetic values in so-called Ptolemaic writing. It is significant that 𓆝 *mn* is not complemented. Parallels for missing complements with new Ptolemaic functions are easily found.

Acquisition of New Values for Old Signs

As is well known, the extended use of signs involving their acquisition of new or additional sound values, is not limited to the Late Period. For example, the use of the red crown for *n* dates back to the Middle Kingdom,²⁴ in the New Kingdom the sign 𓆞 appears from time to time instead of the usual owl (see below), to mention but a few well-known examples.

There is a certain difficulty in sorting out the signs of the 30th Dynasty that have received new sound values in lack of sign lists for the preceding periods, especially the 26th dynasty. In the following I will not comment on any phonologically conditioned changes ($d > t$).







Let us return to the statue of Tja-hap-imou in the Metropolitan Museum. The uncommon phonetic values, that are seen in the preserved part of its inscription, depict various animals. In the first row one has  *mḥ* in *mḥ-ib* ‘trusted’,²⁵  *ikr rh*²⁶ in *ikr rh nfr*²⁷ *šš ḥsb* ‘the diligent one who knows not to transgress the domain’. In the second row one has an occurrence of  probably for *dmi* ‘town’.²⁸


A few other noteworthy intrusive signs from cryptographic writing to be found on other monuments of the 30th dynasty are the following:  *šmꜥw mḥw* ‘Upper and Lower Egypt’,²⁹  *nb* ‘lord’³⁰ (common in the prenomen of Nectanebo I);  *t3.wy* ‘the two lands’³¹  *ntr* ‘god’.³² The importance of cryptography for the development towards Ptolemaic writings is thus hard to deny. Interesting as this fact might be, however, even more interesting is to note that only a small proportion of the suggested cryptographic readings are later on found in Graeco-Roman texts. As seen from the references in the endnotes, the above signs crept in long before into non-cryptographic passages. It thus seems as that the number of newly acquired functions during the 30th dynasty is in no way remarkable. Probably, what one does see, however, is that they obtain an extended use, which I hope to illustrate in the next paragraph.


Two Cases in Point

For reasons of space and time I will limit myself to two cases: the conjunction *ḥnꜥ* ‘and’ and the preposition *m* ‘in’, both being easy to survey.

Certain spellings, which later became very frequent, are still uncommon or not attested. Thus,

besides the old  which is the sole writing in the temple inscriptions of the 30th dynasty-however poorly attested- as well as on the lengthy inscriptions of the sarcophagus CG 29306,³² (11 occurrences), one can note a few other writings. There are a few examples of the writing  (e.g. Cambridge E.5.1909, 4;³⁴ Naukratis, 9). This spelling already occurs in the New Kingdom and on Saite monuments.³⁵ On the Metternich stela (MMA 50.85, 54), one even reads *r-ḥnꜥ* .³⁶ A singularly early example of  is found on Brooklyn 52.89,³⁷ which has been dated to the reign of Nectanebo I. Later on it is frequently met with in the bilingual decrees.³⁸ Another example of it on private statuary is perhaps found on the block statue Baltimore 22.80³⁹ for which a dating ‘30. Dyn. oder später’ has been proposed.⁴⁰ I fail to find an example of  anywhere in a reasonably well dated document.⁴¹ On the healing statue of Djedhor (JE 46341), slightly posterior to the 30th dynasty, one meets with several occurrences of  for *ḥnꜥ*.⁴²

As for the expression of the preposition *m*, it may be worth noting that the owl  is the preferred writing on most monuments that are securely dated to the reign of Nectanebo I.⁴³ The owl scores 73% on the Naukratis stela, 58% on the stela from Hermopolis⁴⁴ and 56% on the naos with the decades, Alexandria JE 25774 + Louvre D 37,⁴⁵ (56%). This is also the case with the naos from el-Arish JE 2248⁴⁶ where it scores 72%. This naos is mostly attributed to the reign of Nectanebo I.⁴⁷

In the private texts that I’ve considered, most of which are only approximately dated to the 30th dynasty, the sign  (Aa15) is the usual sign, e.g. Louvre A 88 (95%). This is the case as early as in the New Kingdom (abundant in Ahmose, son of Ibana). It also makes up the overwhelming majority of cases on the naos from Saft el-Henneh CG 70021,⁴⁸ let alone the stela from the second regnal year of Nectanebo II, RT 2/12/24/3 (96%),⁴⁹ which informs us on the preparations for the

Apis burial. It also makes up the majority of cases in various temples: on the blocks from the *ḥw.t-ḥm3g* of Behbeit el-Hagara,⁵⁰ on the first pylon on Philae⁵¹ and on the portico of Nectanebo II in Hibis.⁵² The kinds of inscriptions found on pre-Ptolemaic temples, however, are less likely than biographical or historical inscriptions to have been affected by innovations in the graphical system such as the archaizing tendency. The same probably applies to the religious texts on e.g. sarcophagus CG 29306⁵³ (66%).

An infrequent variant of *m* since the Third Intermediate Period at the latest is the sign $\hat{\hat{}}$ (Aa 56).⁵⁴ A possible attestation from the 30th dynasty is found on the statue Cairo CG 682.⁵⁵ On the slightly posterior healing statue of Djedhor (JE 46341) one has three examples in the biographical inscription (lines 5, 17, 131).⁵⁶ Within the large group of statues dated roughly to the 30th dynasty or early Ptolemaic period, it is quite frequent. It is not in use for the simple preposition in what may be termed ‘official’ documents of the 30th dynasty except for in the naos CG 70019⁵⁷ and CG 70021 (twice),⁵⁸ both dated to Nectanebo I. Its absence on the naos from el-Arish (JE 2248) should also be noted. Among the datable monuments, it is only with the Metternich stela, dated to the reign of Nectanebo II, that one meets with several attestations of it, where it makes up all of 13% of the attestations of the sole preposition *m*. In Ptolemaic times one didn’t hesitate any longer to use it extensively in temple inscriptions.⁵⁹

In view of the above I would interpret a high frequency of the owl for *m* as a trait of archaism inherited from the 26th dynasty.⁶⁰ It is perhaps significant that even in the documents where the owl accounts for the majority of occurrences, the sign $\hat{\hat{}}$ is by no means rare and it is obviously the less marked member. During the following period one witnesses a decreasingly frequent use of the owl, which keeps a distinct archaic flavour,⁶¹ while $\hat{\hat{}}$ becomes common.

Concluding Remarks



If one were to work out similar tendencies for more graphical elements, one would be in a better position to make a judgement on the nascent Ptolemaic writing. This work would also be an efficient tool, in combination with other kinds of analyses, for dating inscriptions with some more accuracy than hitherto. Especially at the beginning of the dynasty one leaned on archaizing Saite models, recognisable partly through the use of alphabetical spelling and suppression of consonants. There is undoubtedly a link to cryptographic writing leading to Ptolemaic spellings. Concrete cases of innovation in the 30th dynasty are formed by the use of biconsonantal signs for one consonant only in the alphabetic writings. This trend was carried over into the Ptolemaic period. An examination of the material of Macedonian or early Ptolemaic date might help us to find the paths along which newly acquired sign values spread to cover the walls of Graeco-Roman temples.

Endnotes

* I have been able to carry out the present study at the University of Cologne thanks to a post-doctoral fellowship from STINT. I thank H.-J. Thissen for his willingness to let me work there. The English text was revised by Michael Kelly.

- 1- W. M. F. Petrie, *Memphis I*, BSAE 15 (London, 1909), 31–32.
- 2- S. D. Schweitzer, ‘Zur Herkunft der spätzeitlichen alphabetischen Schreibungen’, in S. Bickel & A. Loprieno (eds.), *Basel Egyptology Prize* (1), *AegHelv* 17, 375, 379–382. A few early examples in J. Kahl, *Das System der ägyptischen Hieroglyphenschrift in der 0.-3. Dynastie*, GOF IV/29 (Wiesbaden, 1994), 60.
- 3- K. Jansen-Winkeln, ‘Drei Denkmäler mit archaisierender Orthographie’, *Or* 67 (1998), 170–172; P. Der Manuelian, *Living in the Past* (London, 1994), 81–83. Cf. K. Jansen-Winkeln, *Spätmittelägyptische Grammatik*, *ÄAT* 34 (Wiesbaden, 1996), 21, § 24.

- 4-É. Drioton, 'Essai sur la cryptographie privée de la fin de la XVIIIe dynastie', *RdE* 1 (1933), 9, 34.
- 5-H. Brunner, *Hieroglyphische Chrestomathie* (Wiesbaden, 1965), 23–24; M. Lichtheim, *Ancient Egyptian Literature*, 3 (Berkeley & Los Angeles, 1980), 86–89.
- 6-G. Maspero, in E. Grébaut (ed.), *Le Musée Égyptien I* (Cairo 1890–1900), 40–41.
- 7- B. Gunn, 'Notes on the Naukratis Stela', *JEA* 29 (1943), 56.
- 8-W. Schenkel, 'Die ägyptische Hieroglyphenschrift und ihre Weiterentwicklungen', in H. Günther & O. Ludwig (eds.), *Handbücher zur Sprach- und Kommunikationswissenschaft*, (Berlin & New York, 1994), 295. Cf. J. Quaegebeur, in A. S. Atiya (ed.), *Coptic Encyclopedia* 8 (New York, 1991), 188.
- 9-K. Piehl, 'La stèle de Naucratis', *Sphinx* 6 (1903), 90–91.
- 10- Schweitzer, in Bickel & Loprieno, *BEP*, 371–386.
- 11- Schweitzer, in Bickel & Loprieno, *BEP*, 374.
- 12- For the phenomenon of archaism, see K. Jansen-Winkeln, 'Bild und Charakter der ägyptischen 26. Dynastie', *AOF* 28 (2001), 172–173, with references.
- 13- *Egyptian Sculpture of the Late Period 700 B.C. to A.D. 100* (Brooklyn, 1960) 89; Jansen-Winkeln, *Or* 67, 170–172.
- 14- F. Brunot, *Histoire de la langue française des origines à nos jours*, vol. 1 (Paris, 1966), 545.
- 15- H. De Meulenaere, 'Le vizir Harsiêsis de la 30^{ème} dynastie', *MDAIK* 16 (1958), 230–233, pl. 16.
- 16- H. Gauthier, 'A travers la Basse-Egypte', *ASAE* 23 (1923), 173–175.
- 17- B. Turaev, *Opisanie egipetskago sobranija I. Statui i statuetki Goleniščevskago sobranija* (Petrograd, 1917), 60–62, pl. 9 (1, 3), no. 83.
- 18- *ESLP*, No. 80, 100–102, pl. 76.
- 19- See note 1.
- 20- C. E. Sander-Hansen, *Die Texte der Metternichstela, AnAeg* 7 (Copenhagen, 1956); N. Scott, 'The Metternich Stela', *BMMA* 9:8 (1951), 201–217.
- 21-K. Sethe, *Hieroglyphische Urkunden der griechisch-römischen Zeit* (Leipzig, 1904), 24–26. For its dating see my forthcoming article in *CdE*.
- 22-Drioton, *RdE* 1, 34–35 ; E. Drioton, 'Recueil de cryptographie monumentale', *ASAE* 40 (1940), 405–406.
- 23-W. Schenkel, 'Schrift', *Lexikon der Ägyptologie* 5, (Wiesbaden, 1984), 715.
- 24- Cf. Å. Engsheden, *La reconstitution du verbe en égyptien de tradition*, *Uppsala Studies in Egyptology* 3 (Uppsala, 2003), 101.
- 25- Cf. Jansen-Winkeln, *Spätmittelägyptische Grammatik*, 13, § 10. For mh-ib, see D. A. Pressl, *Beamte und Soldaten* (Frankfurt, 1998), 25–26.
- 26- The reading is confirmed by the stela Vienna 154 (E. A. E. Reymond, *From the Records of A Priestly Family From Memphis*, 1, *ÄgAbh* 38 (Wiesbaden, 1981), 89, l. 4.
- 27- E. Edel, *Altägyptische Grammatik, AnOr* 34/39 (Rome, 1955/1964), 592–594, § 1138–1139.
- 28- Phonetically *dm* as early as in the New Kingdom, *Wb*, V, 453.
- 29- É. Naville, *Bubastis* (1887–1889), *EEF* 8 (London, 1891), pl. 44 n. Cf. Jansen-Winkeln, *Spätmittelägyptische Grammatik*, 13, § 10.
- 30- Common ideogram in the nomen of Nectanebo I (H. Gauthier, *Le livre des rois d'Égypte, MIFAO* 20/4 (Cairo, 1916), 183–191). Cf. Drioton, *RdE* 1, 40, no. 62; Jansen-Winkeln, *Spätmittelägyptische Grammatik*, 12, § 10; J. Leclant, *Montouemhat, BdE* 35 (Cairo, 1961), 291–292.
- 31- Naucratis stela, line 1 (see note 5). Cf. Drioton, *ASAE* 40, 324–325. In normal texts as early as in the Third Intermediate Period (Jansen-Winkeln, *Spätmittelägyptische Grammatik*, 12, § 10) and the Twenty-sixth dynasty (G. Maspero, 'Deux monuments de la princesse Ankhnasnofiribri', *ASAE* 5 (1904), 85).
- 32- Frequent, e.g. Naucratis stela (see above), l. 4. Cf. Drioton, *ASAE* 40, 412; Jansen-Winkeln, *Spätmittelägyptische Grammatik*, 12, § 10.
- 33- G. Maspero, *Sarcophages des époques persane et ptolémaïque*, I (Cairo, 1914), 218–315, 19–21.
- 34- K. Jansen-Winkeln, 'Eine Grabübernahme in der 30. Dynastie', *JEA* 83 (1997), 169–178, pl. 20–22.
- 35- Manuelian, *Living in the Past*, 69. Cf. Jansen-Winkeln, *Or* 67, 169.
- 36- *Wb*, III, 112; A. Erman, *Neuägyptische Grammatik* (Leipzig, 1933), 313, § 627.
- 37- See note 20.
- 38- M.-Th. Derchain-Urtel, *Epigraphische Untersuchungen zur griechisch-römischen Zeit in Ägypten, AAT* 43 (Wiesbaden, 1999), 277: 'eine ausserhalb dieser Denkmäler [sc. royal

- stelae of the Ptolemaic period] nicht anzutreffende Schreibung’.
- 39- G. Steindorff, *Catalogue of the Egyptian Sculpture in the Walters Art Gallery*. (Baltimore, 1946), 53, pl. 29, 114 (Nr. 159).
- 40- K. Jansen-Winkeln, *Sentenzen und Maximen in den Privatschriften der ägyptischen Spätzeit* (Berlin, 1999), 29.
- 41- An isolated example from the Third Intermediate Period, see Jansen-Winkeln, *Spätmittelägyptische Grammatik*, 13, § 10.
- 42- E. Jelínková-Reymond, *Les inscriptions de la statue guérisseuse de Djed-her-le-Sauveur*, *BdE* 23 (Cairo, 1956), 150, 162.
- 43- I have considered the simple preposition only. The *m* has been the object of similar countings before: H. Junker, *Über das Schriftsystem im Tempel der Hathor in Dendera* (PhD. diss Friedrich-Wilhelms-Universität zu Berlin, 1903), 65; J. Hallof, in *Aspekte Spätägyptischer Kultur* (Festschrift Winter), *AegTrev* 7 (Mainz, 1994), 155. A brief diachronic overview is found in F. von Calice, ‘Über das Vorkommen von  und ’, *ZÄS* 35 (1897), 170–171, who also comments on the connection of the owl to the ‘renaissance’.
- 44- G. Roeder, ‘Zwei hieroglyphische Inschriften aus Hermopolis (Ober-Ägypten)’ *ASAE* 52 (1953), 375–442.
- 45- Chr. Leitz, *Altägyptische Sternuhren*, *OLA* 62 (Louvain, 1995), 3–57, 1–23.
- 46- G. Goyon, ‘Les travaux de Chou et les tribulations de Geb’, *Kémi* 6 (1936), 1–42.
- 47- Th. Schneider, ‘Mythos und Zeitgeschichte in der 30. Dynastie’, in A. Brodbeck (ed.), *Ein ägyptisches Glasperlenspiel* (Berlin, 1998), 227.
- 48- E. Naville, *The Shrine of Saft el Henneh and the Land of Goshen* (1885), *EEF* 5 (London, 1888), pl. 1–7; Roeder, Naos, 58–99, 17–32, 33b, 52e, f, 77 b, 78–80.
- 49- W. Spiegelberg, in J. E. Quibell, *Fouilles à Saqqarah 1907–1908* (Cairo, 1909), 89–93, 112, pl. 52.
- 50- Chr. Favard-Meeks, *Le temple de Behbeit el-Hagara*, *SAK Beiheft* 6 (1991), 227–250.
- 51- H. Junker, *Der grosse Pylon des Tempels der Isis in Philä* (Vienna, 1958), 126–154.
- 52- Norman De Garis Davies, *The Temple of Hibis in el Khargeh Oasis*. III. *The Decoration*, *PMMA* 17 (New York, 1953), pl. 61–70, 80.
- 53- See note 33.
- 54- Jansen-Winkeln, *Spätmittelägyptische Grammatik*, 164, § 267.
- 55- R. el-Sayed, ‘Un document relatif au culte dans Kher -Aha’, *BIFAO* 82 (1982), 194, pl. 31.
- 56- See note 42.
- 57- Roeder, Naos, 55–57, 15, 49a, c.
- 58- Naville, *The Shrine of Saft el Henneh*, 2, 3 & 3, 4.
- 59- Early Ptolemaic examples e.g. at Tarraneh: E. Naville, *Mound of the Jew and the City of Onias*, *EEF* 7 (London, 1890), 62.
- 60- Cf. the index of Manuelian, *Living in the Past*, 441–442, from which it appears that in the royal corpus of the Twenty-sixth Dynasty only the Nitocris stela has several instances displayed. Cf. the statue of Oudjahorresne from the reign of Darius I on which the owl is invariably used for *m* (G. Posener, *La première domination perse en Égypte*, *BdE* 11 (Cairo, 1936), 1–26.
- 61- Thus in the Canopus decree, see Engsheden, *La reconstitution du verbe*, 57.