

# How the Coptic Script Came About

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## Introduction

In the title of my contribution, I explicitly use the term ‘Coptic Script’. This is of importance, because ‘Coptic’ can be used to designate a stage of the Egyptian language as well as a specific set of writing signs. The latter is characterized by the full set of Greek letters plus a number of additional signs derived from the Demotic script. It should be stressed that the writing signs and the language do not have a necessary link. On the one hand, it is in principle possible to write the Coptic language in Demotic Egyptian writing, and indeed it could be argued that at least some of the Demotic Narmouthis ostraca<sup>2</sup> (perhaps also a few sections of the Demotic magical papyrus of London and Leiden) are linguistically more Coptic than Demotic. There are also a few attested cases of the Coptic language being written exclusively in Greek (without the additional signs taken from Demotic),<sup>3</sup> in Arabic,<sup>4</sup> or even in Ethiopic script.<sup>5</sup> On the other hand, the set of Coptic writing signs can be used for texts which linguistically belong to older phases of the Egyptian language – we shall encounter examples of this – as well as for completely different languages, as happens when it is used (again with some additional signs, this time derived from Meroitic) for writing down Old Nubian,<sup>6</sup> or exceptionally Arabic.<sup>7</sup>

In order to properly elucidate my topic,<sup>8</sup> it is necessary to avoid an easy narrow-scope view. Rather, we must start by talking about the situation of multilingualism in Late-Period Egypt,<sup>9</sup> and to what degree the different foreign languages and writing systems which the

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2 Especially the long text written on a partially reconstructed sequence of ostraca published by Menchetti, *Ostraka demotici e bilingui* (see the review by Quack, in: *Enchoria* 30 (2006/2007)).

3 Crum, in: Kenyon, *Isaiah*, IX-XII (Coptic (Fayyumic), Glosses to a Greek manuscript); idem, in: *Proceedings of the British Academy* 1939; see Kasser, in: *BIFAO* 75 (1975).

4 Galtier, in: *BIFAO* 5 (1906), 91–109; Sobhy, in: *BASC* 6 (1940); see Peust, *Egyptian Phonology*, 312f.

5 Strelcyn, in: *RoczOr* 22 (1957).

6 Browne, *Old Nubian Grammar*, 7–9; Rilly, *Le méroïtique*, 17; Peust, in: *LingAeg* 19 (2011), 356.

7 Casanova, in: *BIFAO* 1 (1901).

8 For previous discussions, see especially Kahle, *Bala'izah*, volume I, 252–256; Quaegebeur, in: *OLP* 13 (1982); McBride, in: *JSSEA* 19 (1989); Aufrère, in: Bosson & Aufrère (eds.), *Catalogue de l'exposition Égyptes*; Bagnall, in: Gabra (ed.), *Christianity and Monasticism*.

9 On this, see e.g. Peremans, in: Van't Dack, Van Dessel & Van Gucht (eds.), *Egypt and the Hellenistic World*; Thompson, in: Johnson (ed.), *Life in a Multi-cultural Society*; Rochette, in: *CdÉ* 71 (1996); Ray, in: Bowman & Woolf (eds.), *Literacy and Power*; Fewster, in: Adams, Janse & Swain

Egyptians encountered had an impact on how they dealt with their own language and script. Social and political conditions must also be given due weight. Furthermore, I will try to eschew a teleological reading of the evidence where the final result is seen as the inevitable (and optimal) outcome. Rather, I would like to present a nuanced reading of the attestations in order to see also how it could have turned out quite differently.

## The Egyptians and foreign writing systems

Probably the first foreign writing system with which the Egyptians came into contact was cuneiform writing. Cuneiform texts in Egypt are by now positively attested from the Hyksos period in the middle of the second millennium BCE,<sup>10</sup> and from the New Kingdom we have substantial finds.<sup>11</sup> However, this writing system does not seem to have left any enduring traces in Egypt. Even less relevant for the development of Egyptian writing is early Northwest Semitic writing (which itself is thought by many scholars to be ultimately derived from Egyptian signs).<sup>12</sup>

During the first millennium BCE, the Achaemenid rule over Egypt (526–404/401 BCE)<sup>13</sup> led to the presence of Old Persian cuneiform in Egypt. There are a few actual examples preserved. Along the route of the canal between the Nile delta and the Red Sea built under Darius I, there are several multilingual<sup>14</sup> stelae, which show on the one side a hieroglyphic Egyptian inscription, and on the other side cuneiform inscriptions in Akkadian, Elamite and Old Persian.<sup>15</sup> Less monumentally, there are also a number of alabaster vessels inscribed in cuneiform Akkadian, Elamite and Old Persian as well as hieroglyphs – although from the attested find-spots it seems as if those were often circulating outside

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(eds.), *Bilingualism*; Winnicki, *Late Egypt*; Thompson, in: Bagnall (ed.), *The Oxford Handbook of Papyrology*; Fournet, in: Bagnall (ed.), *The Oxford Handbook of Papyrology*; Papaconstantinou (ed.), *The Multilingual Experience in Egypt*; Rutherford (ed.), *Greco-Egyptian Interactions*; von Lieven, in: Geller et al. (eds.), *Crossing Boundaries*.

- 10 Bietak & Forstner-Müller, in: *Ägypten und Levante* 19 (2009), 115–118; Bietak, in: *Egyptian Archaeology* 38 (2011), 41.
- 11 The so-called ‘Amarna Tablets’, see Knudtzon, *Die El-Amarna-Tafeln*; Moran, *The Amarna Letters*; Rainey, *The El-Amarna Correspondence*; as well as a fragment from Qantir, Pusch & Jakob, in: *Ägypten und Levante* 13 (2003); see also Breyer, in: *Ägypten und Levante* 20 (2010). There are also the cuneiform texts written by Egyptian scribes and sent to the Hittite kingdom in Anatolia; see the comprehensive edition by Edel, *Die ägyptisch-hethitische Korrespondenz aus Boghazköi*; idem, *Vertrag*.
- 12 See e.g. Hamilton, *The Origin of the West Semitic Alphabet*; Morenz, *Die Genese der Alphabetschrift*; Goldwasser, in: *JAEI* 4/3 (2012); Zauzich, *Hieroglyphen mit Geheimnis*.
- 13 For the actual date of the conquest, see Quack, in: *JEH* 4 (2011). Most recent global overview by Vittmann, in: *Herodot und das Persische Weltreich*.
- 14 However, it should be stressed that the different versions are not identical in content, see Roccati, in: Campanile, Cardona & Lazzaroni (eds.), *Bilinguismo e biculturalismo*.
- 15 Edition in Posener, *Première domination perse*, 48–87; See Tuplin, in: Sancisi-Weerdenburg & Kuhrt (eds.), *Achaemenid History VI*; Briant, in: Valbelle (ed.), *Le Décret de Memphis*, esp. 110–113; Wasmuth, *Reflexion*, 105–143.



of Egypt.<sup>16</sup> Another example is a monumental statue of Darius found at Susa but probably originally intended to be erected in Egypt (perhaps at Heliopolis).<sup>17</sup> It has hieroglyphic Egyptian inscriptions as well as cuneiform Old Persian, Elamite and Akkadian. But again, the Old Persian cuneiform system also had no aftermath in Egypt,<sup>18</sup> probably not only because the Persians were resented as oppressive foreign rulers, but also because this was not an everyday writing medium.

The language and writing system actually used for the imperial Achaemenid administration in Egypt was Aramaic. This had a simple writing system of 21 signs, basically consonants, with only limited possibilities for graphically indicating the vowels. There is ample documentation that this writing system was extensively used in Persian-ruled Egypt.<sup>19</sup> In some cases, there are even stelae with Egyptian iconography (and sometimes hieroglyphic inscriptions) as well as Aramaic texts.<sup>20</sup> Still, there seems to have been no enduring impact of Aramaic writing on Egyptian writing, and there are not even many Aramaic loan-words in later Egyptian which can be confidently attributed to the period of Persian domination.<sup>21</sup>

It should be remarked, however, that there is one attested case, on a leather piece from Elephantine now in the Berlin Museum, where Aramaic writing was used to write down what is clearly a text in another language; and it seems quite likely that it is actually the Egyptian language – at least some words can be clearly analyzed as such.<sup>22</sup> Unfortunately, our current information does not allow us to answer with certainty one crucial question: Who made use of this text? Was it an Egyptian, encoding his own language in a foreign script? Or was it somebody else who wrote down an Egyptian text in a writing system with which he was better acquainted? The latter answer is more probable;<sup>23</sup> if so, it would leave the fragment in question without direct relevance for the notation of the Egyptian language by indigenous Egyptians. Still, we should keep in mind that if the Achaemenid Empire had withstood the onslaught of Alexander the Great, something similar to the writing on that Aramaic leather fragment might have become the standard Coptic writing system.

Another Semitic writing system came in contact with Late-Period Egypt, namely Ancient South-Arabian.<sup>24</sup> There are some inscriptions in it from Egypt,<sup>25</sup> of which the best

16 Posener, *Première domination perse*, 137–151; Westenholz & Stolper, in: *ARTA* 2002.005 (2002); Shaw, in: Hudecz & Petrik (eds.), *Commerce and Economy*; Wasmuth, *Reflexion*, 197–206.

17 *Cahiers de la DIFA* 4; Briant, in: Valbelle (ed.), *Le Décret de Memphis*, 105–109; Yoyotte, in: Perrot (ed.), *Le palais de Darius à Suse*.

18 There are a few Persian loanwords in later Egyptian, but the chronology of their borrowing still needs clarification.

19 See the collection of the sources in Porten & Yardeni, *Textbook of Aramaic Documents*.

20 Vittmann, *Ägypten und die Fremden*, 106–115.

21 See Quack, in: Burtea, Tropper & Younansardaroud (eds.), *Fs Voigt*.

22 See Vittmann, *Ägypten und die Fremden*, 118f., with some additions in the review by Quack, in: *JAOS* 124 (2004).

23 See discussion in Quack, in: Knoppers, Lipshits & Oeming (eds.), *Judah and the Judeans*, 390f.

24 Vittmann, *Ägypten und die Fremden*, 180–193.

25 Sidebotham & Zych, in: *Sahara* 21 (2010), 12.

known is on a sarcophagus from the Memphite Necropolis.<sup>26</sup> Although actual attestations of this writing system in Ancient Egypt are quite rare, in one point the ancient South-Arabian script made an important impact on Egyptian writing. This does not concern the letter shapes, or loan-words, but the arrangement of Egyptian words.

In earlier periods, all such cases in Egypt have the words arranged according to semantic categories. In the late period, beginning from the fourth century BCE,<sup>27</sup> we encounter cases, especially ones involving the sequencing of proper names and individual signs, which make use of an arrangement by the first letter of the words. This implies an alphabetic sequence. And this sequence is not based on the Greek or Aramaic, but on the Ancient South-Arabian script.<sup>28</sup> The reasons for the choice of what must have been a relatively exotic script are not completely clear. One option which I consider as possible is that the Ancient South-Arabian alphabet had a relatively large inventory of different sounds, namely 29 consonants. This would make it, of all alphabets the Egyptians knew, the one with which it would be easiest to express most of the sounds of the Egyptian language.

One point of the late Egyptian alphabetic sequence is of some relevance for the future development of the Coptic script: in order to memorize it, each letter was given a name, and more specifically, birds whose name began with the consonant in question were chosen. At least a substantial part of them can by now be ascertained. I will come back to this later.

It should at least be mentioned briefly that also Tamil-Brahmi and Prakrit-Brahmi, two Indian writing systems, are positively attested in Egypt during the Roman period, especially at the Red Sea harbors of Quseir el-Qadim and Berenike.<sup>29</sup> They are not attested in the Nile valley itself, and there are no clear traces of any aftermath to these few cases.

## Writing Egyptian words in Greek

But historically the most important encounter with a foreign language and script concerned Greek. This began with the presence of Greek mercenaries in Saïte period Egypt (from the seventh century onwards),<sup>30</sup> and, after the takeover of power by Alexander the Great and continuing into the Ptolemaic and Roman period, the Greek language and writing became increasingly the dominant medium in an administrative context, as well as an important

26 Robin, in: Berger, Clerc & Grimal (eds.), *Hommages à Jean Leclant*, 291–296.

27 Recently, Haring, in: *JNES* 74 (2015) has proposed to recognize this alphabetic sequence already on an ostrakon from the New Kingdom. While his theory works out rather well for the recto, it fails to explain the sequence on the verso.


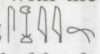
28 Quack, in: *LingAeg* 11 (2003); Gaudard, in: Régen & Servajean (eds.), *Verba manent*; idem, in: Bailleul-LeSuer (ed.), *Between Heaven and Hell*; Devauchelle, in: Dodson, Johnston & Monkhous (eds.), *Studies in Honour of W. J. Tait*. New source material can also be found in Ray, *Demotic Ostraca*, 86–90, see the review by Quack, in: *Or* 84 (2015), 114.

29 Sidebotham & Wendrich, in: *Sahara* 13 (2001); Abraham, in: Sidebotham & Wendrich (eds.), *Berenike 1999/2000*, 291.



30 At this period the Carian language and writing is also of relevance in Egypt, but since it does not seem to have made a lasting impact, I refrain here from going into details. See Vittmann, *Ägypten und die Fremden*, 155–179 for an overview.



factor in literary texts. Greek was also the language of the ruling elite.<sup>31</sup> Especially in the Roman period, we can see how Demotic fell out of use for official contracts, and became increasingly relegated to inner-temple affairs.<sup>32</sup>

Notable and instructive for how the Egyptians perceived the difference between their own writing system and that of the Greeks is the rendering of the word ‘script’ in the Memphis decree as attested in the copy from Rosetta. The passage in question stipulates that the text of the decree should be written down in Hieroglyphs, Demotic and Greek script.<sup>33</sup> While in the Demotic and the Greek text, each time the same word with the same signs is used for ‘script’, the hieroglyphic version (l. x+14) presents a notable divergence.<sup>34</sup> For ‘Hieroglyphs’ and Demotic, it uses the traditional orthography of the word *sh3* with the word-sign of the writing tools (). For Greek, however, a quite different spelling  is used which employs signs with a mono-consonantal value (including one, namely *h3* > *h*, which has become mono-consonantal due to phonetic erosion).<sup>35</sup> The importance of this orthographic variant was pointed out by Antonio Loprieno,<sup>36</sup> but I beg to differ with his interpretation.

For him, this writing points to a derivation from the verb *sh3* ‘to remember’, and according to him, the alphabetic writing would be more aseptic, not affecting the message but rendering it referentially.

The true reason, I think, is quite different. The hieroglyphic writing for ‘script’ that we have on the Rosetta stone is distinctly different from how the text writes *sh3* ‘to remember’ – at the beginning of the same line, the word ‘remember’ (in nominal use of the infinitive) appears in the writing . The difference is striking – the hieroglyphic writing of ‘script’ does not use the determinative of the man with the hand to the mouth nor the , but it does include *y* which is not part of any regular orthography of ‘to remember’. The writing is, however, exactly what would be used in Egyptian writing if one were to write the word *c2A1* ‘to write’ with mono-consonantal signs. So, I would interpret this particular writing as an indication that the Egyptians perceived the difference between their writing system and the Greek one as involving a focus, in the Greek system, on a one-sound-one-sign equivalence.

Obviously, as soon as people using the Greek script came into contact with Egyptians, occasions arose where it was necessary to render Egyptian names and sometimes even

31 It is instructive that Manethon, who was one of relatively few Egyptians at the Ptolemaic court (see Legras, in: *Revue historique* 4 (2002)), wrote his texts in Greek.

32 See e.g. Muhs, in: Lippert & Schentuleit (eds.), *Tebtynis und Soknopaiou Nesos*; Lippert & Schentuleit, *Demotische Dokumente aus Dime* III, 4f.

33 Text in Spiegelberg, *Priesterdekrete von Kanopus und Memphis*, 64. See the facsimile drawing in Quirke & Andrews, *The Rosetta Stone*.

34 This divergence is specific only to the decree of Rosetta; all other known Ptolemaic decrees use the same signs for rendering the word ‘script’ in Greek as in Egyptian writing, see most recently the collection of all attestations in El-Masry, Altenmüller & Thissen, *Das Synodaldekret von Alexandria*, 148f.

35 The Demotic form of the sign in question is regularly used as mono-consonantal sign for *h* in Demotic texts.

36 Loprieno, in: Bolz & Münkler (eds.), *Was ist der Mensch?*, 145. Van den Kerchove, *La voie d’Hermès*, 136 gives a very similar interpretation.

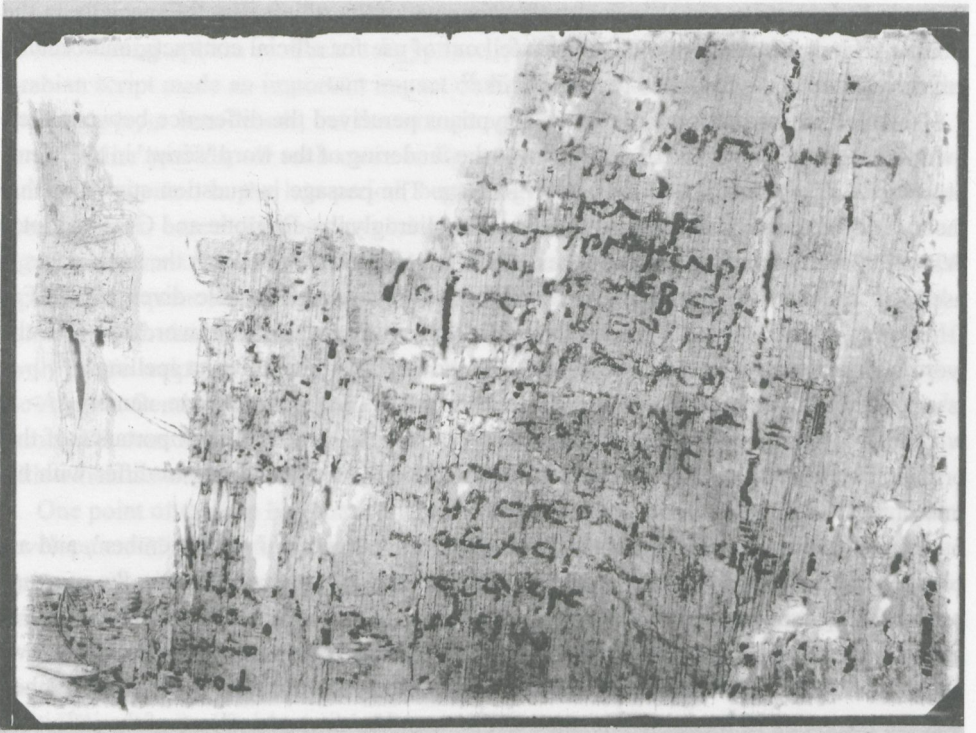


Fig. 1: Papyrus Heidelberg G 414 verso

Egyptian words in the Greek writing system. This can be positively documented as early as 593 BCE, when mercenaries in service for the campaign of Psammetichus II against Nubia left a Greek graffito on the temple of Abu Simbel which gives the name of the leader of the foreign troops as Potasimto, and the leader of the Egyptian troops as Amasis, i.e. the Egyptian names *P3-čj-sm3-t3.wi* and *ʿIh-msi*.<sup>37</sup> Later, we can find the same phenomenon also with Greek literary authors, e.g. Herodotus or Plutarch, who transmit some actual Egyptian words.<sup>38</sup> Also, Egyptian proper names are very frequent in Greek documentary texts from Graeco-Roman Egypt.

An interesting text is P. Heid. inv. G 414 verso, dating to about the third century BCE (fig. 1).<sup>39</sup> This is a list of Greek words with their Egyptian equivalents written in the Greek alphabet next to them. The text does not yet show any trace of the additional letters derived from Demotic signs,<sup>40</sup> but simply makes use of the nearest approximation in the Greek alphabet. Thus, we have κ for *k'*, and φ for *f*.

There are a number of cases in which isolated Egyptian words written in Greek letters are retained as technical terms in an otherwise Greek text. For example, in the Greek copy of

37 Vittmann, *Ägypten und die Fremden*, 200f.

38 See e.g. Thissen, in: *ZPE* 97 (1993).

39 Quecke, in: *ZPE* 116 (1997). Kramer, *Glossaria bilingua altera*, 4f.

40 See the careful discussion of problematic and alleged cases in the papyrus by Quecke, in: *ZPE* 116 (1997), 76–80.



ΠΑΡΩΥΡΑΝ.  
 Λ Ε ΠΟΡΩΥΡΓΟ:ΝΑΦΟΡ  
 ΜΗΙΕΣΙΝΟΜΟΥΣΙΡΕΜΗΙΕ  
 ΜΟΥΝΑΑΛΟΝΤΗΡΓΓΝΟΤΩ  
 ΥΑΙΡΚ ΤΜΗΤ ΤΟΝΕΥΜΑΥΘΟΥ  
 ΟΥΣΟΡΕ ΤΑΝΟΜΠΟΝΑΜΜΗΡΟΝ  
 ΡΥΜΕ

Fig. 2: Graffito in the temple of Seti I, Abydos

the Dream of Nektanebos, the designation of the papyrus boat and name of Ares are explicitly given in their Egyptian form<sup>41</sup> – but of course, this is a text actually translated from an Egyptian version.<sup>42</sup> In a similar way, in the Calendar of Sais preserved on a papyrus from El-Hibe (pHibe 27),<sup>43</sup> in one case Iphthimis is explained to be the Egyptian designation of Prometheus.<sup>44</sup> An illustration of how this can work in administrative texts can be found in SB I 5231. There we have the Greek translation of an Egyptian document with some words left in Egyptian. These are specific local priestly titles not easily translatable into Greek.<sup>45</sup>

But all these are isolated words. What about complete Egyptian sentences written down in Greek letters? There is a remarkable graffito from the temple of Seti I at Abydos, situated at the entrance door to the cella of Osiris (fig. 2).<sup>46</sup> It is dated to year 5 of the reign of King Hyrgonaphor, who is well known as an indigenous Egyptian rebel who succeeded in wresting Upper Egypt from Ptolemaic rule for some time around the end of the third and the early second century.<sup>47</sup> The text can be dated to about 201/200 BCE and is perhaps the earliest example of a continuous Egyptian text rendered in Greek script. It should be all the more stressed that the writer accepted the rule of an indigenous king, wrote the text at a time when the rebel chancellery had gone back to using Egyptian script,<sup>48</sup> used the Egyptian language – and still the graffito is written in Greek, not Egyptian, letters.

Besides this more sociological question, another one of more immediate relevance for the writing has to be posed: Is this just the Egyptian language written in Greek, or is it

41 Koenen, in: *Bulletin of the American Society of Papyrologists* 22 (1985), 177f.

42 Ryholt, in: Blasius & Schipper (eds.), *Apokalyptik und Ägypten*; idem, A Sequel to the Prophecy of Petesis, in: idem, *Narrative Literature from the Tebtunis Temple Library*, 157–170, pl. 20–21.

43 Spalinger, in: *Studien zur Altägyptischen Kultur* 18 (1991); Lehoux, *Astronomy, Weather, and Calendars*, 153–154 and 217–223.

44 Actually, Iphthimis is a phonetic rendering of the Egyptian god Nefertem, see Quack, in: *Jahrbuch für Antike und Christentum* 38 (1995), 119.

45 Torallas Tovar, in: Papaconstantinou (ed.), *Multilingual Experience in Egypt*, 31 claims that this document is evidence for somebody who knew a second language almost perfectly but was lacking certain expressions and terms. Regardless of how good or bad the scribe's competence in Greek really was, the only terms he left untranslated are specific local priestly titles which would be quite impossible to translate regardless of the competence of the translator.

46 Original edition Perdrizet & Lefebvre, *Les graffites grecs*, 13 no. 74; new study with Text and interpretation in Pestman, Quaegebeur & Vos, *Recueil de textes démotiques et bilingues*, volume 1, 102–105, volume 2, 111f. McBride, in: *JSSEA* 19 (1989), 90 discusses this text only on the basis of the earlier, partially outdated publications.

47 Veisse, *Les « Révoltes égyptiennes »*, 11–26.

48 Depauw, in: *Studien zur Altägyptischen Kultur* 34 (2006).

already justified to call this text ‘Old-Coptic’? Here, we encounter a problem inasmuch as some parts of the text still defy decipherment. In those parts which are understandable, there is not a single non-Greek letter. In the unclear parts, there are a few cases where we have strange forms which resist easy identification as Greek letters – but also as Demotic signs as well. In those parts which are clear, however, there is at least one instance where a sound which could not be written in Greek (*h*) is not rendered at all, instead of being rendered by a sign taken over from Demotic. For that reason, I would prefer to classify this inscription not as ‘Old Coptic’ but as ‘Graeco-Egyptian’.

Two other graffiti from the same temple have received less attention.<sup>49</sup> The first begins with a formula  $\eta\beta\beta\lambda\lambda\epsilon\gamma\kappa\upsilon\rho\upsilon$  and gives as the most recognizable element  $\pi\theta\alpha\theta\upsilon\omega$ , which can easily be recognized as a rendering of the Egyptian god Ptah-Tatenen.<sup>50</sup> The second one begins with a very similar formula  $\eta\beta\alpha\lambda\epsilon\gamma\kappa\upsilon\rho\alpha\iota$ ,<sup>51</sup> its final phrase is in Greek.

In one dream-report at the Serapeum of Memphis, in a dream of the Egyptian Nektembes<sup>52</sup> written down by the Greek Ptolemaios, there are a few short non-Greek sections transliterated in Greek (UPZ I, 79, l. 4–5).<sup>53</sup> Unfortunately, they have so far resisted efforts at deciphering them as Egyptian.<sup>54</sup> Again, no signs are used which do not form part of the ordinary Greek alphabet.

A dedication to Thot coming from Hermopolis and dating to the second-first century BCE contains a rendering of the divine name and epithets  $\check{C}h.w.t\dot{i}\ \epsilon\zeta\ \epsilon\zeta\ \epsilon\zeta\ nb\ Hmn.w$  ‘Thot, the thrice great, lord of Hermoupolis’ into Greek letters as  $\theta\omega\theta\ \omega\ \omega\ \omega\ \nu\theta\beta\ \zeta\mu\upsilon\upsilon\nu$ .<sup>55</sup> The inscription does not use any letters derived from Demotic; rather, in the single relevant case, an Egyptian  $\underline{h} > \check{s}$  is rendered approximately by  $\zeta$  (the choice of voiced  $\zeta$  rather than  $\sigma$  is likely to be due to the following  $\mu$ ).

Similarly, in inscriptions from the region of Elephantine, the form  $\chi\nu\omicron\mu\omega\nu\epsilon\beta\eta\beta$  with the variants  $\chi\nu\omicron\mu\omega\nu\epsilon\beta\eta\beta$  and  $\chi\nu\omicron\beta\omega\nu\epsilon\beta\eta\beta$  is attested as the Greek transcription of  $Hnm.w\ \epsilon\zeta\ nb\ \beta b.w$  ‘Khnum the great, lord of Elephantine’.<sup>56</sup> A graffito from the region near Gebelein gives the divine names  $\pi\rho\iota\omega$ ,  $\omega\rho\epsilon\gamma\epsilon\beta\theta\iota\zeta$  and  $\iota\varsigma\ \rho\epsilon\sigma\alpha\kappa\epsilon\mu\iota\zeta$  which could be identified as Egyptian  $P\check{3}-R\check{c}\ \epsilon\zeta$ ,  $Hr-\check{b}b.t\dot{i}$  and  $\check{3}s.t\ rs\ r\ Km.t$ , ‘the great sun-god, Horus of the East and Isis

49 Perdrizet & Lefebvre, *Les graffites grecs*, 54 and 57 no. 295 and 65f. no. 334; noted by Aufrère, in: Bosson & Aufrère (eds.), *Catalogue de l'exposition Égyptes*, 49 and 65 note 197.

50 For the phonetic reduction of  $T\check{3}-tnn$  in late pronunciation, see the Demotic rendering as *tny* or *tn* (for that see Stadler, *Isis*, 232; Smith, *Papyrus Harkness*, 187 (note c) to III, 32).

51 Actually, it is possible that the one version is just a damaged duplicate of the other.

52 For a discussion of the personality of Nektembes, see Wilcken, *Urkunden der Ptolemäerzeit*, 364f.

53 Legras, *Les reclus grecs du Sarapieion de Memphis*, 234f.; Kidd, in: *Bulletin of the American Society of Papyrologists* 48 (2011); Prada, in: *ZPE* 184 (2013).

54 A very daring proposal would be to understand (deleting one letter, changing the word-division as well as the reading of one letter)  $\phi\alpha\{\phi\}\rho\epsilon\ \rho\epsilon\sigma\iota\ \epsilon\nu\rho\epsilon\{\eta\}\langle v\rangle\xi$  as  $p\check{3}\ \check{i}:\check{i}r\check{i}\ r\check{s}y\ n\ rn=k$  ‘he who has rejoiced in your name’. (It should be noted that Letronne gives the word in question as  $\rho\epsilon\gamma\zeta$  which would go better with my hypothesis than the currently accepted  $\rho\eta\eta\zeta$  which is due to Wilcken.)

55 Original edition in Girgis, in: *MDAIK* 20 (1965); presentation in Pestman, Quaegebeur & Vos, *Recueil de textes démotiques et bilingues*, volume 1, 106f.; volume 2, 113f.

56 Locher, *Topographie und Geschichte*, 37 with note 4 (Bernard, *De Thèbes à Syène*, 198 (Nr. 244, IV, line 32) and 201 (Nr. 244, VIII, line 59)).





Fig. 3: Mummy Label Louvre Inv. 532

who watches over Egypt'.<sup>57</sup> A Greek contract gives a rendering of a divine epithet Αθουρ Νουεμοντεσενα (PSI IX 1016, l. 33) which, comparing to Demotic contracts in the same archive, can be easily understood as *Hwt-Hr hmw.t imn.tt čm<sup>c</sup>* 'Hathor, lady of the west of Djeme'.<sup>58</sup> These are just a few of the more spectacular cases of numerous transcriptions of Egyptian deities and their epithets in Greek texts in the Graeco-Roman period.<sup>59</sup>

Two mummy-labels of the Roman period (Louvre Inv. 532 and 550), dated to about the second-third century CE, have a short Egyptian funerary text transcribed in Greek letters (fig. 3).<sup>60</sup> The writing system uses χ for Egyptian *h* and leaves *h* unwritten; it is not certain if it also uses ου to render Egyptian *f*.<sup>61</sup> While these mummy-labels date to a period when there already existed a well-established system of adding Demotic signs to Greek in order to render the Egyptian language more precisely, we will see that other options also remained in existence.

At this point one important question has to be asked: Who needed to write the Egyptian language in Greek letters, and how did this matter as regards the writing system? We have encountered examples of Greeks as well as Egyptians writing the Egyptian language in Greek. While we could easily understand that Greeks would not feel too pressed to try

57 Bricault & Pezin, in: *BIFAO* 93 (1993).

58 *Papiri greci e latine*, 9; Botti, *L'archivio Demotico*, 16.

59 For Greek transcription of Egyptian gods and religious phenomena in general, see Ronchi, *Lexicon*.

60 First edition Baratte & Boyaval, in: *CRIPEL* 3 (1975), 243 no. 616 and 247 no. 632; study by Quaegebeur, in: Boswinkel & Pestman (eds.), *Textes grecs, démotiques et bilingues*, 254f.

61 This was assumed by Quaegebeur, in: Boswinkel & Pestman (eds.), *Textes grecs, démotiques et bilingues*, 255; however, it is also possible and, as far as the vocalization is concerned, even more likely, that the text makes use of the plural form *bʒ.w*.

to accurately write down weird sounds which most of them probably could not pronounce anyway, the case of Egyptians writing the Egyptian language purely with Greek letters is less easily explained. Were these people not trained in Egyptian writing and thus incapable of using signs derived from Demotic? But perhaps the inaccuracy of renderings of Egyptian in Greek writing explains why in one case, in a letter which is otherwise written in Greek, the writer, wishing to describe a dream as precisely as possible, switches entirely into Egyptian (probably his native language), including writing in Demotic.<sup>62</sup> In any case it must be noted that, to the best of my knowledge, down to the very end of the Ptolemaic period, there is not one case where renderings of the Egyptian language in Greek writing resorted to the use of additional signs derived from Demotic. The relevance of this writing is very limited; we have at best a handful of short texts, most of them in low-prestige settings. The rare cases of more 'official' use are limited to the names and epithets of Egyptian deities.

Finally, one important context for rendering the Egyptian language purely in Greek letters in attestations from the Roman period must be addressed at least briefly, namely magical formulae. Here, the situation is quite complicated. In the typical late antique magical texts we have a great number of 'voces magicae', i.e. non-Greek<sup>63</sup> words and passages interspersed in the text.<sup>64</sup> At least some of them are likely to be based on the Egyptian language, even though the etymologies proposed thus far often must be used with caution.<sup>65</sup> Generally, there are no indications for the special sounds of Egyptian; i.e. either they are rendered by the nearest Greek equivalent, or (especially *h* and *h̄*) left completely unwritten. Given the precarious state of research, I do not intend to delve deeply into most of them, but one special case is worth mentioning: In a fairly early (late first century CE) magical manuscript from Oxyrhynchus (pOxy LXV 4468),<sup>66</sup> there are not only contents visibly derived from Egyptian religion, but also one specific section (vs. ii, 23–25), where a formula is explicitly labeled in the text as being in the Egyptian language. It is badly preserved but indeed amenable to an analysis as Egyptian. In the case of the only special sound needed, *f* is rendered approximately by  $\varphi$ .

In other (later) magical manuals, in most cases the linguistic background of specific voces magicae is not given, and even where it is indicated, there is no guarantee that phrases labeled as 'Egyptian' actually do contain words of Egyptian origin.

The case of these Egyptian-derived voces magicae written purely in Greek script gains in relevance if we consider that there are also some sections in later magical manuals which make use of additional signs derived from Demotic in order to write what has been termed

62 Renberg & Naether, in: *ZPE* 175 (2010).

63 In some cases, there is reason to suspect that as a matter of fact they are slightly garbled or un-historically spelled Greek, see Quack, in: Pries, Martzloff, Langer & Ambos (eds.), *Rituale als Ausdruck von Kulturkontakt*, 186.

64 A list of such voces magicae is found in Brashear, in: Haase (ed.), *Aufstieg und Niedergang der römischen Welt*, 3576–3603. See now the (sometimes problematic) discussion in Tardieu, van den Kerchove & Zago (eds.), *Noms Barbares I*.

65 See e.g. the critical remarks by Thissen, in: *ZPE* 73 (1988). The recent proposals of Kosack, *Lexikon des Gräcoägyptischen* are very unreliable.

66 Maltomini, in: *The Oxyrhynchus Papyri LXV* (1998).



'Old Coptic' (see below). It has to be asked if those words not making use of Demotic-derived signs are based on earlier models conceived before the usage of Demotic-derived signs became usual, or if there was a prolonged period of coexistence of two different systems. In any case, normally these voces magicae are restricted to single words or short sequences of epithets, and do not comprise continuous sentences in the Egyptian language.

## Devices for indicating pronunciation in Egyptian texts based on Egyptian writing

Leaving the further development of the Egyptian language written in Greek for the moment, I come to another important point. There is a sort of development within Egyptian texts to provide them by some means, especially through a system of glosses, with an indication about the pronunciation of words, or of parts thereof. This plays an important role for our question, so I will sketch its main specimens trying to sort out chronology.

The first case to be discussed are some religious compositions appertaining to the cult of Osiris. They are, at least partly, characterized by a particularly difficult graphic system.<sup>67</sup> In a few cases, especially in the so-called 'Great liturgy of Geb', the version of pBM 10252 has sometimes noted down simpler and more conventional orthographies.<sup>68</sup> While this has sometimes been called a 'translation',<sup>69</sup> the available documentation makes it more likely that it is an indication of the selfsame text in a less ambiguous writing,<sup>70</sup> thus a first step towards phonetic glossing. In one case, in an unpublished manuscript of such a composition, of Ptolemaic date and currently at Oxford, there even seem to be a few Demotic glosses above the lines, and this would be an important step towards a system of inner-Egyptian devices of glossing.

One interesting system, normally not taken into consideration when discussing the development towards the Coptic writing system, is the option of transposing older Egyptian liturgical texts graphically into Demotic.<sup>71</sup> This is more than a simple change of sign-forms, because Demotic was designed originally to write down the contemporary vernacular speech, and for that reason it lacks the graphic means for writing a good many words and grammatical elements which are needed for more traditional Egyptian texts. One technique often used in such cases is to write other Egyptian words which were close or identical in actual pronunciation. This makes the manuscripts of such texts (mainly hymns and rituals) often semantically quite opaque, but it certainly helped the ancient

67 For these compositions see the overview, including a discussion of their difficult writing system, in Quack, in: Berlejung & Janowski (eds.), *Tod und Jenseits*, 616–620, and now Backes, in: Backes & Dieleman (eds.), *Liturgical Texts for Osiris and the Deceased*. A special study of the 'Great Liturgy of Geb' can be found in Backes, *Der »Papyrus Schmitt«*, 67–329.

68 Schott, *Geheimnisse des Rituals für die Abwehr des Bösen*, 152 (10).

69 Burkard, *Spätzeitliche Osiris-Liturgien*, 16.

70 von Lieven, *Grundriß des Laufes der Sterne*, 259.

71 See the discussion in Quack, in: de Voogt & Quack (eds.), *The Idea of Writing II* with further references; see also Stadler, *Einführung in die ägyptische Religion ptolemäisch-römischer Zeit*, 118–122; idem, in: Pries (ed.), *Die Variation der Tradition*, 37–40; Widmer, *Résurrection d'Osiris – naissance d'Horus*, 44–47.

users to recite them. Such manuscripts are attested from about the middle of the second century BCE onwards.<sup>72</sup> They are especially frequent among the liturgical texts from Roman period Soknopaiou Nesos.

It is at least conceivable that such a writing convention – using homophonous words for rendering the sound of obsolete ones – lies at the root of one important writing technique which I shall discuss next. In contrast to the complete switching to another writing system, however, this technique is simply used to supplement the information contained in the more traditional writing system. This brings us now to the subject of glosses,<sup>73</sup> whose development seems crucial to understanding how a new writing system came into being.

Typologically, the oldest phase of glossing should be one where all information is still couched in some sort of Egyptian writing system. The earliest representative of such a system known to me is papyrus Cairo CG 58034, a religious text in hieratic script dating to about the late Ptolemaic or early Roman period.<sup>74</sup> It makes use of some symbols taken from the Demotic script in order to give additional information about pronunciation. The following symbols are used for the following cases:

Vowel *e*, indicated by a Demotic group of two short vertical strokes – this goes back to the form of the circumstantial converter *iw* whose contemporary pronunciation at that time was *e*. It is used only in a few cases where it serves to mark a *iw* of the basic text as being actually the circumstantial converter (in opposition to the homographic marker of the future III) – so it is not just a pronunciation marker, but also a grammatical indicator resolving potential ambiguity. It is not used to indicate the vowel *e* in any other case.

Vowel *a*, indicated by a Demotic group of a medium-sized downward slanting stroke, derived from the writing of the Demotic preposition *r* whose pronunciation at the time and locality of the text was probably *a* before nouns. This is mainly used to indicate the final part of the Future III tense *iw=f r sçm*, written in the hieratic text by means of the group *iw* and thus homographic with the circumstantial converter which had a different pronunciation. This writing of *a* is also used in a number of cases for the final syllable of infinitives.

The vowel *i* is indicated in two cases by means of the Demotic sign for the verb *iyi*, which at that time was simply pronounced as *i*. Both times it seems to be combined with the sign for the vowel *a*, so this would indicate a diphthong.

A sign derived from the Demotic form of the calling man is probably used two times for the diphthong *ei*. This goes back to the interjection *i*.

72 For the oldest such manuscript actually known, see Quack, in: Quack (ed.), *Ägyptische Rituale der griechisch-römischen Zeit*.

73 I do not consider here the Egyptian glosses in pJumilhac which Aufrère (in: Bosson & Aufrère (eds.), *Catalogue de l'exposition Égyptes*, 51f.) has drawn into the discussion. It should be stressed that these have nothing to do with phonetic indications. Generally, the hieroglyphic marginal additions are corrections to the basic text (written normally in a different hand than the main text), and the Demotic notes indicate the topic of certain sections or sometimes corrections which concern mostly not the text but the layout of the images (see e.g. Zauzich, in: *Enchoria* 4 (1974)). Furthermore, Aufrère follows the analysis of Derchain, in: *RdÉ* 41 (1990) whose basic conclusions have been disproved by Quack, in: Waitkus (ed.), *Fs Kurth*.

74 See Quack, in: Hallof (ed.), *Fs Beinlich*.



The vowel  $\bar{o}$  is indicated once by means of the Demotic form of the sign for the word  $\beta.t$  'back', whose actual pronunciation at that time was  $\bar{o}$ ; in the only attestation it is combined with the Demotic sign for a strong  $t$  retained in pronunciation, and those two together serve to indicate a specific feminine qualitative form which was probably dropped from normal contemporary morphology.

Finally, there is one gloss making use of the Demotic group  $\dot{in}$  whose actual pronunciation was probably  $an$ . This means that the gloss indicates not only a vowel but a sequence of vowel + consonant.

I should also mention the sign of a cross which serves to indicate two words as being closely linked in an accentual unit. While this is not in itself a sign indicating a vocalization, it has relevance for the pronunciation, because in such an accentual unit the first part would be completely unstressed, with the result that all vowels in it are reduced.

Summing up, there was a real possibility of indicating at least most of the vowels by means of signs derived from the traditional Egyptian writing system, if use was made of short Egyptian words which in actual pronunciation were reduced to a vowel. The system is definitely centered on rendering vowels, because all such signs are either purely for vowels, or for a consonant linked with a fixed vowel. It is still used rather sparingly, mainly to address potential ambiguity in the basic text or to help with obsolete forms. It would have been possible to produce a fully alphabetic writing system based on these vowel signs plus Demotic signs for the consonants, but that never came about.

Some vestiges of this system can also be found in the funerary manuscript pLeiden T 32,<sup>75</sup> dating probably to 34 AD.<sup>76</sup> It shows four times a group of two short, slanting vertical strokes (1, 3 (ter), 8, 25) and once the sign for  $\beta.t$  'back' (1, 23). All cases of the two slanting vertical strokes involve a  $s\check{c}m=f$  verbal form with following nominal subject and would thus fit with an interpretation as indication of the vowel  $e$ . The sign for  $\beta.t$  'back' appears above the word  $\epsilon ry.wt$  'gates'. This word  $\epsilon ry.wt$  is not itself attested in a vocalized form, but its formation can be compared to a group of feminine substantives ending in  $.wt > .yt$  which have their stressed vowel  $\bar{a} > \bar{o}$  after the final consonant of the root.<sup>77</sup> This would fit the interpretation of the sign in question as indication of the vowel  $o$ . Overall, in this manuscript only very sparing use is made of indications of vowels by this system.

The next typological step can be seen in papyrus Berlin P 7809 + 7810 + Louvre A11112 (fig. 4).<sup>78</sup> The text is certainly to be dated to the Roman period, probably to about the end of the first or the first half of the second century CE. This papyrus has a much more elaborate system of glossing than pCairo CG 58034, and in some cases the glossing also includes semantic explanations. However, most of the glosses represent phonetic clarifications.

75 For the edition of the text, see Stricker, in: *OMRO* 31 (1950); idem, in: *OMRO* 34 (1953); idem, in: *OMRO* 37 (1956) (still of value mainly for the quality of the plates); new study of the composition Herbin, *Le livre de parcourir l'éternité*.

76 For the question of the date, see the discussion in Quack, in: Verhoeven (ed.), *Ägyptologische „Binsen“-Weisheiten I–II*, 439–441.

77 Osing, *Nominalbildung*, 166–175.

78 Published by Osing, *Hieratische Papyri aus Tebtunis I*, 276–296, pl. 29–30; specific discussion of the glossing system there 279–283.

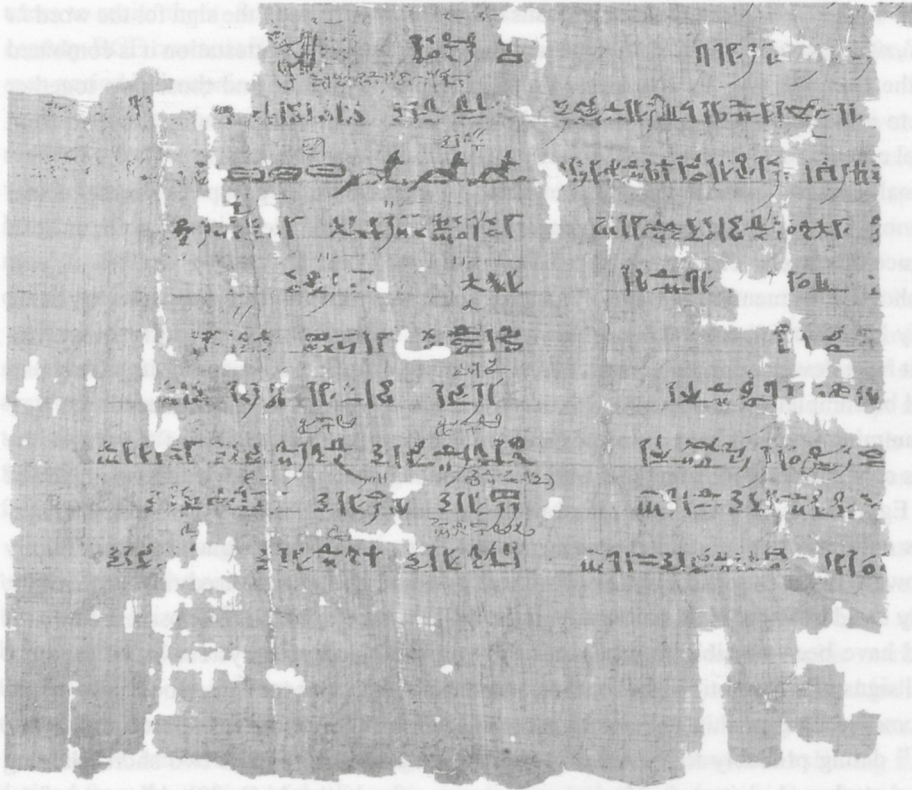


Fig. 4: Papyrus Berlin P 7809 (section)

With the exception of one single letter – the Greek alpha  $\alpha$  (C, 5, 19) – all these glosses are based on the Egyptian writing system (some of them are more hieratic than Demotic). Some just give the consonantal skeleton, but most are aimed at more fully clarifying the pronunciation of the word or at least its most important parts, by fixing also the vowels. The system makes use of short words which are, in actual pronunciation, either reduced to a purely vocalic remainder, or to a vowel and a consonant<sup>79</sup> – in rare cases also to a vowel between two consonants.<sup>80</sup> As a special point, the presence of a syllabic consonant with no vowel should also be noted, as is attested in the use of the prefix of the present I in the second person singular masculine  $\dot{i}w.\dot{i}w=k$ , corresponding to the pronunciation of this form as  $\kappa$  in Coptic.<sup>81</sup>

Altogether, this could have produced a flourishing system of phonetic clarification of traditional Egyptian writing. In some ways it seems structurally comparable to the so-

79 This can be found to some degree in the Demotic orthography in general, see Quack, in: Depauw & Broux (eds.), *Acts International Conference of Demotists Leuven*.

80 The group for *mut*, see Osing, *Hieratische Papyri aus Tebtunis I*, 281.

81 Osing, *Hieratische Papyri aus Tebtunis I*, 280. I beg to differ with his interpretation as far as the supposed use of  $\dot{i}:\dot{i}r=k$  as the prefix of the second tense in C 2, 4 is concerned; I would just read the word in question as  $\dot{c}ky$  ‘sesame’ with simply a dot at the beginning.



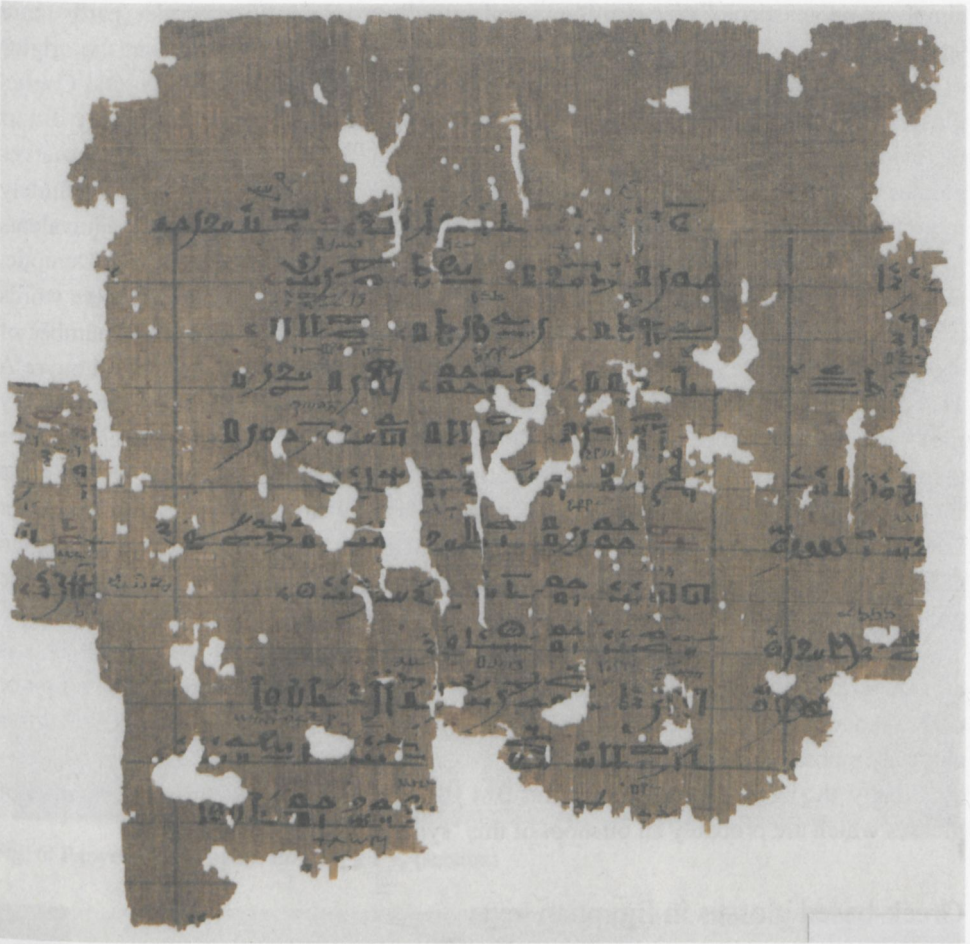


Fig. 5: pCarlsberg 180 (section)

called ‘syllabic’ writing of New Kingdom Egypt, which is why I propose to call it ‘late syllabic writing’ – only that the vocalic values of the groups used in the Roman period are clearer while the status of the ones used in the New Kingdom is still open to debate.<sup>82</sup> However, this potential was rarely fully realized, and in subsequent texts we see such a system either mixed up with Greek letters or increasingly being abandoned.

The next important manuscript to be discussed is pCarlsberg 180 + pBerlin P 10465 + pBerlin P 14475 + PSI Inv. I 76 (fig. 5).<sup>83</sup> It was dated by its editor to the first half or middle of the second century CE, a dating which is likely to be essentially correct. This text is partly

<sup>82</sup> The degree of precision concerning the rendering of vowels inherent in the New Kingdom ‘syllabic’ writing is still much disputed, see critically e.g. Schneider, *Asiatische Personennamen*, 360–402; Zeidler, in: *Sesto congresso internazionale di Egittologia*; more optimistic (but without in-depth discussion of the principles) is Hoch, *Semitic Words*.

<sup>83</sup> Osing, *Hieratische Papyri aus Tebtunis I*, 25–218; discussion of the glosses there 40–64; for the date see 37f.

simply an onomasticon listing words grouped according to semantic categories, partly more specifically a compilation of religious knowledge. In most discussions about the origins of the Coptic writing system, this manuscript has been analyzed only for its 'Old Coptic' glosses.<sup>84</sup> While it does indeed have a good many such glosses, it would seriously distort the evidence to reduce it to these. We have to acknowledge that the manuscript preserves glosses of several quite different types, and that the ones in Egyptian writing are definitely more frequent than those in Greek writing. A first set of glosses gives semantic equivalents in Demotic writing, another one direct transcriptions of the word in question into Demotic, and finally there is a very substantial amount of glosses where again short Egyptian words serve to indicate the pronunciation of the basic words (or parts thereof). The number of signs attested is quite a bit higher than in the papyrus Berlin P 7809 + 7810 + Louvre A 11112, but we have to take into account that the manuscript itself is a lot more substantially preserved. So it would be rash to conclude that the system itself was more developed here than in the other papyrus, but perhaps the scribe was more ambitious in providing a gloss for almost every single word. Again, the sounds covered by this system of glosses are either vowels, diphthongs, or combinations of a vowel and a consonant. Likewise, we have again consonants in vowelless syllables, here also attested for *iw=f* and *iw=s* as writings of the prefixes of the third person singular masculine and feminine of the present I.

A few Demotic glosses are also found in pBerlin P 14447 + PSI Inv. I. 78.<sup>85</sup> This is a manual of religious knowledge coming from Tebtunis. It dates to about the late first or early second century CE. The paucity and poor legibility of these glosses makes a closer analysis impossible.

Finally, the Demotic magical papyrus BM 10070 + Leiden I 383 contains a number of glosses which are probably an offshoot of this 'syllabic' tradition; see below.

## Greek-based glosses in Egyptian texts

We come now to those Egyptian manuscripts which employ also Greek writing in the glosses, normally together with signs derived from Demotic writing which serve to express sounds not present in Greek.<sup>86</sup> I will start with a papyrus I discovered recently in Oxford (fig. 6). It is likely to come from Tebtunis and to date to the first or more probably second century CE. The text itself is an Osirian recitation text with relatively close parallels in an

84 E.g. Bagnall, in: Gabra (ed.), *Christianity and Monasticism*, 16. Aufrère, in: Bosson & Aufrère (eds.), *Catalogue de l'exposition Égyptes*, 54f. takes also the Demotic glosses into account, but I fail to understand why he dates the glosses to the first half of the third century CE – in my opinion they are probably almost contemporary with the basic text which should be dated to the second century CE, most probably to its first half (which is the main period of the Tebtunis temple library).

85 Edited by Osing, *Hieratische Papyri aus Tebtunis I*, 259–275; discussion of the glosses there 260.

86 On these additional signs see also Kasser, in: *Le Muséeon* 93 (1980), 241–270; idem, in: Atiya (ed.), *The Coptic Encyclopedia* 8; idem, in: Immerzeel & van der Vliet (eds.), *Coptic Studies*, whose handling of the Demotic side of the question is unsatisfactory, being done exclusively second-hand, and more especially based on du Bourguet, *Grammaire* which got well-deserved criticism by Demotists (see e.g. Lüddeckens, in: *Enchoria* 7 (1977), 199–204). An in-depth study would need to be based on a large sample of genuine facsimiles of Roman period Demotic writings, not on modern scholars' hand-drawn signs.



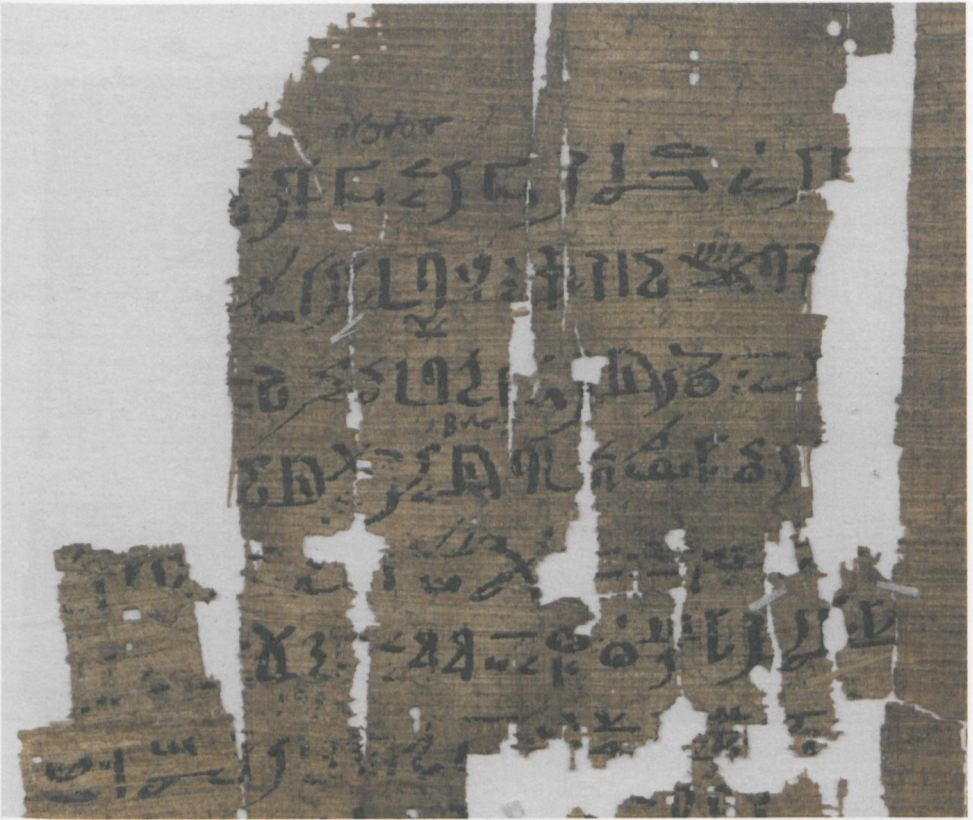


Fig. 6: Papyrus EES Fayum Box 20, 2/1 K (section)

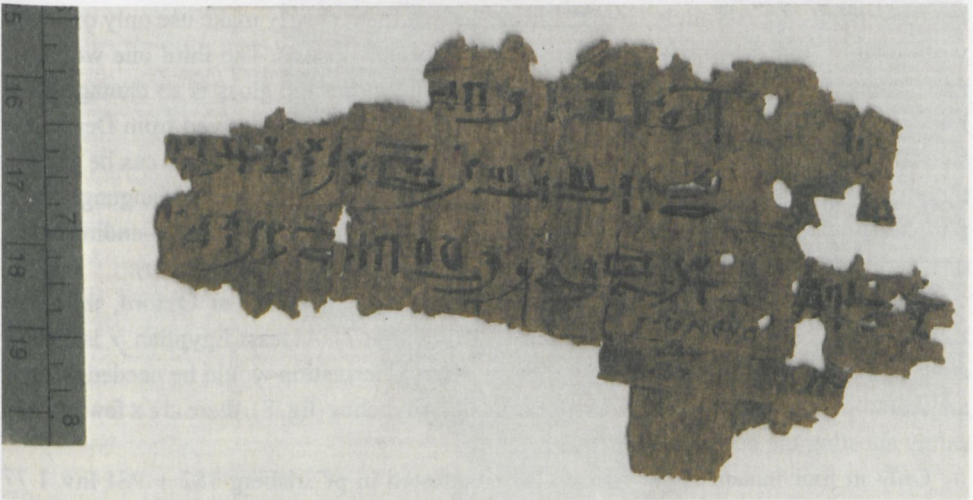


Fig 7: Papyrus EES Oxyrhynchus 3B 4/9 (section)



Fig. 8: Papyrus EES Oxyrhynchus 29 4B.42/H (13) (section)

inscription from the Osirian roof chapels at Dendara (Dendara X, 282–290). In a very few instances, there are glosses above the line. One is just an Egyptian note of an omission, but three others are definitely Greek glosses. Two of them clearly make use only of Greek writing signs, but they involve words with no ‘special’ sounds. The third one would be most interesting because the basic word contains an *h*, but the gloss is so damaged that it is well-nigh impossible to read. My impression is that a sign ϰ derived from Demotic *h* (the tall ‘alphabetic’ form, not the ‘syllabic’ one) is used. As far as the cases can be judged, the glossed words are either forms which had dropped out of the spoken language (non-periphrastic participle with enclitic pronoun *wtt sw*; pseudo-participle with *ti*-ending *bs.ti*), or where sound-shifts had taken place (*ʒhb=k*, where the *b* had changed to *m*).

Another unpublished papyrus fragment of the Roman period at Oxford, this time from Oxyrhynchus, shows one single gloss (3B 4/9; fig. 7). At least Egyptian ϣ is clearly attested, probably also ϰ; no other sign of non-Greek derivation would be needed. In still another unpublished hieratic manuscript from Oxyrhynchus (fig. 8), there are a few glosses safely attesting the additional letter ϰ.

Only in four instances are Greek glosses attested in pCarlsberg 182 + PSI Inv. I 77 (fig. 9), a hieratic manuscript probably from the first or second century CE<sup>87</sup> coming from

87 Owing leaves open the question of the precise date; given that the text is still written with a rush (not a reed pen), it is likely to be among the earlier papyri from the temple library context at Tebtunis; thus a late first century CE dating might be the best guess.





Fig. 9: Papyrus Carlsberg 182 (section)

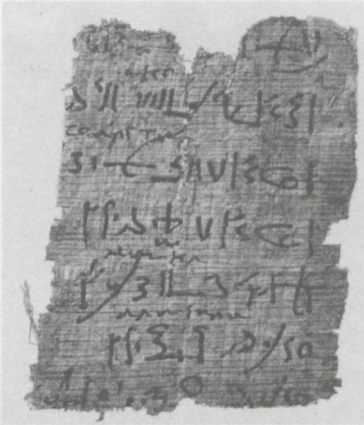


Fig. 10: Papyrus Demotica II 30

Tebtunis, which contains a collection of religious knowledge.<sup>88</sup> One of them also contains one sign of Demotic derivation, namely ʃ (ḥ). Still, it should be noted that in at least one case a gloss to Egyptian *hnm* gives only *nam*, so the non-Greek sound is omitted in the gloss. This is perhaps due not to a reluctance per se to write signs of non-Greek derivation, but rather in this case the scribe was aiming specifically at giving the vowels, and hence indicated consonants only insofar as they were needed to correctly locate the vowels. Overall, in relation to the amount of papyrus preserved, the use of glosses in this manuscript is extremely rare (and all attested instances occur on one single page).

Equally the papyrus pBerlin P 14447 + PSI Inv. I 78, already mentioned above, is relatively restrained as far as ‘Old Coptic’ glosses are concerned. The only additional sign derived from Demotic which is certainly attested is ʒ (a special paleographical form of ʒ). Otherwise, at least once Egyptian ʃ is rendered approximately by Greek θ instead of ʃ. There might also be an instance of c as approximation for ʃ. In a few cases, what is given in ‘Old Coptic’ is not the complete word, but only the stressed vowel, or the stressed vowel plus a neighboring consonant.

There is a papyrus fragment of a ‘schoolbook’ which was dated by its editor on paleographical grounds to the first or second century CE and is now in Munich (P. Demotica II 30; fig. 10).<sup>89</sup> I personally am inclined to date it more specifically to the second half of the second century CE.<sup>90</sup> This papyrus mainly contains personal names,<sup>91</sup> and in three cases there are glosses written above the line, in one case only for the final part of the word, in two others for the whole word. The glosses use Greek letters plus some signs derived from Demotic. The signs ʃ for *h* and ʒ for *h* are certainly attested.<sup>92</sup> There is also another sign which serves to render Demotic ʃ (line x+2 and x+5) and which was understood by the editor to be

88 Edited by Osing, *Hieratische Papyri aus Tebtunis I*, 219–258; discussion of the glosses there 220.

89 Spiegelberg, *Demotica II*, 44–49; see also Erichsen, *Eine ägyptische Schulübung*, 12; Osing, *Hieratische Papyri aus Tebtunis I*, 52 with note 52; Hoffmann, *Ägypten. Kultur und Lebenswelt*, 44f. Choat, in: Riggs (ed.), *The Oxford Handbook of Roman Egypt*, 583 strangely claims that this papyrus does not use Demotic letters. According to information kindly provided by Friedhelm Hoffmann, the papyrus currently cannot be located and has to be considered a probable war loss.

90 The rather high and narrow form of the article *p* as well as the ‘squeezed’ form of the ʃ with only a tiny amount of space for the curve is similar to the signs used in the Demotic sections of pBM 10808 and the Oxford fragment belonging to it, as well as to pBM 10588.

91 One might be tempted to read these as an alphabetical list, since in several cases words with the same initial sound follow each other. However, it is impossible to match them with the late Egyptian alphabetic sequence.

92 Spiegelberg’s remark that the text has ʒ instead of Coptic ʃ (*Demotica II*, 48) is not to the point since these signs serve to render two distinctly different sounds.



a Greek  $\tau$ , although it looks very different from a clear example of  $\tau$  in this papyrus.<sup>93</sup> My suspicion is that this is a paleographically somewhat extreme form of  $\tau$ , hence just an adaptation of the Demotic sign for  $\zeta$ .<sup>94</sup>

Given that in this case the Greek letters are used for a Demotic text (while most of the cases I am studying involve hieratic manuscripts), it should also be noted that there is one single Greek gloss in a very long manuscript of the Ritual for Entering the Chamber of Darkness ('Book of Thot'), namely pLouvre E 10488 + pBerlin P 15499, x+10, 17, dating probably to the second century CE.<sup>95</sup> There, Demotic  $\zeta n y \zeta$  is rendered as  $\alpha \nu \tau$ .<sup>96</sup> No non-Greek sign is needed here for the adequate rendering of the Egyptian word.

Much more elaborate than these texts is the papyrus pCarlsberg 180 + pBerlin P 10465 + pBerlin P 14475 + PSI Inv. I 76 from Tebtunis, already mentioned above. The manuscript shows a full array of signs of non-Greek origin,<sup>97</sup> with  $\alpha$ ,  $\beta$ ,  $\chi$ ,  $\zeta$  (only for etymological  $h$ ), a form  $\rho$  derived from Demotic  $h$  specifically for  $h$ , occasionally a form  $\iota$  derived from Demotic  $h$  (the 'high' alphabetic form) specifically for  $h$ , a form  $\epsilon$  derived from Demotic  $h$  for  $\delta$ , and a form derived from Demotic  $g$  for  $k$ . Exceptionally, even  $n$  can be rendered by a Demotic sign (V 5, 13). Among the renderings of vowels, it should be noted that the sequence  $\alpha \iota$  (written without trema) serves to render simply the vowel  $e$ .<sup>98</sup> In order to put this manuscript in correct perspective, two things should be noted. First, the amount of glosses in Demotic writing is definitely larger than with the Old Coptic glosses. And second, in some cases the glosses using Greek signs do not cover the whole word but only the stressed vowel. This fits in with similar cases in other manuscripts and is probably due to the fact that originally Greek glossing of Egyptian texts started as a device for marking the vowels more clearly, while their use to render the whole word is a later extension of the system.

There are also remnants of what seems to have been a papyrus with hieroglyphs in elaborate layout as well as fairly substantial 'Old Coptic' notes, coming from Tebtunis and now partly at Copenhagen, partly at Florence. Pending further study, nothing detailed can be said about its nature and the system of the 'Old Coptic' writing used therein.

<sup>93</sup> Compare line x+3.

<sup>94</sup> Compare the paleographical table of Crum, in: *JEA* 28 (1942), 21 where some forms of the  $\zeta$  (especially in the magical papyrus of London and Leiden and the papyrus Mimaout) have shapes where the horizontal base line is much longer than the vertical line – except for the missing vertical stroke to the left, they are close to the sign-form of the Munich papyrus. That vertical stroke is generally omitted in Old Coptic writing, see Kasser, in: *Le Muséon* 93 (1980), 257.

<sup>95</sup> Jasnow & Zauzich, *The Ancient Egyptian Book of Thot*, 305.

<sup>96</sup> I would prefer the reading of the Greek as  $\alpha \nu \tau$  to the  $\alpha \pi \tau$  given in the edition. It should be noted that of the parallel manuscripts, B03, 2/17, partially undeciphered in the edition, quite clearly has  $\zeta n y \zeta$ .

<sup>97</sup> Aufrère, in: Bosson & Aufrère (eds.), *Catalogue de l'exposition Égyptes*, 57 claims that this papyrus is less sophisticated than the Demotic magical papyrus of London and Leiden, basing himself on the lesser number of signs derived from Demotic. But firstly his count has to be corrected (he gives six signs for the Tebtunis papyrus, whereas in reality there are eight, even if we do not count the single instance of  $n$ ), and secondly the main point is that the system of the Tebtunis papyrus is more homogeneous and mature, while the magical papyrus is in some points tentative and more often uses different signs for the same sound.

<sup>98</sup> Osing, *Hieratische Papyri aus Tebtunis* I, 57f.

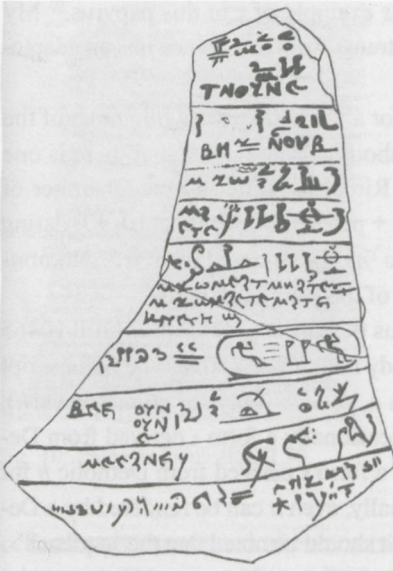



Fig. 11: Ostracon Narmouthis 37

As the next item of evidence, some ostraca from Narmouthis need to be considered. The whole group of ostraca is to be dated to the late second and first half of the third century CE. Among them, there are a few with a basic text in hieratic and also renderings in Old Coptic (fig. 11).<sup>99</sup> In this case, they are not arranged as supralinear glosses. Rather, short sections or even individual words are first written in hieratic, and then are followed linearly (in-line) by their Old Coptic equivalent. The words that are written down in this way are predominantly nouns, with a large percentage of divine names.<sup>100</sup> The repertoire of non-Greek signs is quite full, comprising the non-Greek signs  $\alpha$ ,  $\omega$ ,  $\varphi$ , a sign  $\epsilon$  derived from Demotic  $h$ , and a sign derived from ancient  $g$  (not  $k$  as in Coptic) for  $k$ . The adnexal  $n$  (of the ‘genitive’) is written in its Demotic form (a horizontal stroke) in the only instance where it occurs.<sup>101</sup> It should be noted that the sign  $\alpha$  for  $h$  (actually derived from the Demotic form of  $h$ ) serves also to render historic  $h$  – that is in accordance with a few attestations in late Demotic texts, showing that the ancient distinction between  $h$ ,  $h$  and  $h$  broke down during the second century CE.<sup>102</sup>

The texts presented so far are relatively special insofar as most are quite specifically connected to scholastic topics and consist of lists of words or names rather than a continuous text, especially those with more than only occasional glosses. Still, there is now some evidence for continuous Old Coptic glosses to Egyptian texts. These are found among the unpublished papyri in the Egyptian language coming from Oxyrhynchus.<sup>103</sup> While there are a number of small fragments which seem to show intense or complete glossing, only one manuscript is sufficiently well preserved to allow a more detailed discussion at the moment (fig. 12). The manuscript might date to the second century CE, although I am still reluctant to assign too specific dates to the hieratic hands from Oxyrhynchus. It is fully provided with supralinear glosses, and these are written from left to right (in the usual Greek way) always above short Egyptian text sections marked off by red verse points. Individual words are set

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99 Gallo, *Ostraca demotici e ieratici*, 3–18; see some corrections in the review by Quack, in: *Enchoria* 25 (1999).

100 Many of these were misunderstood by Gallo because he mistook the divine determinative  to be a simple stroke.

101 See also Bagnall, in: Gabra (ed.), *Christianity and Monasticism*, 15f.

102 Spiegelberg, *Mythus vom Sonnenauge*, 375f.; Hoffmann, *Der Kampf um den Panzer des Inaros*, 28; Sérida, *A Castration Story*, 3.

103 My remarks here are based on an inspection of the unpublished manuscripts made possible by Dirk Obbink, to whom I would like to extend my thanks. For a more global presentation of the results, see Quack, in: Ryholt & Barjamovic (eds.), *Problems of Canonicity and Identity Formation*.



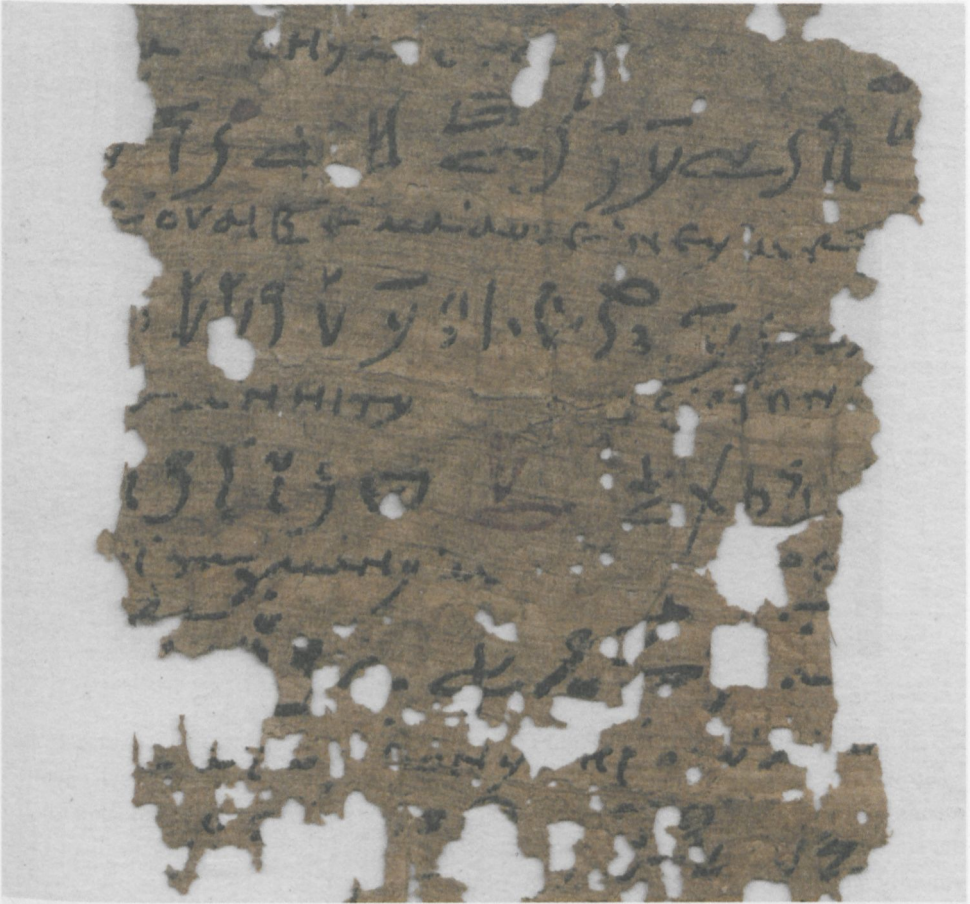


Fig 12: Papyrus EES Oxyrhynchus 25 3B.58 M (a) (section)

off by black dots. Among signs of non-Greek derivation, the signs for *f*, *h/s* and *h* are safely attested in their Demotic forms.

### The late Demotic magical papyri

The next group to be analyzed are the late Demotic magical papyri. Besides their glosses, both partial (mainly vowels) and full,<sup>104</sup> they contain a system of ‘alphabetic’ Demotic which is used for rendering quite accurately invocation passages of non-Egyptian origin, including the vowels<sup>105</sup> – although it does not differentiate between *ō* and *o* and between *ě* and *ē*.<sup>106</sup> Besides, some of these papyri have cipher writing which is used especially for

<sup>104</sup> For the glosses and ‘Old Coptic’ in the Demotic magical papyri, see Dieleman, *Priests, Tongues and Rites*, 69–80.

<sup>105</sup> Normally, vowel indication in Demotic writing is rather limited, but there are some manuscripts that make a somewhat greater use of it (in writing Egyptian words), especially the Leiden manuscript of the Myth of the Eye of the Sun, see Spiegelberg, *Mythus vom Sonnenauge*, 368–375.

<sup>106</sup> For the correspondences of signs and sounds, see Quack, in: Schneider (ed.), *Das Ägyptische*, 433.



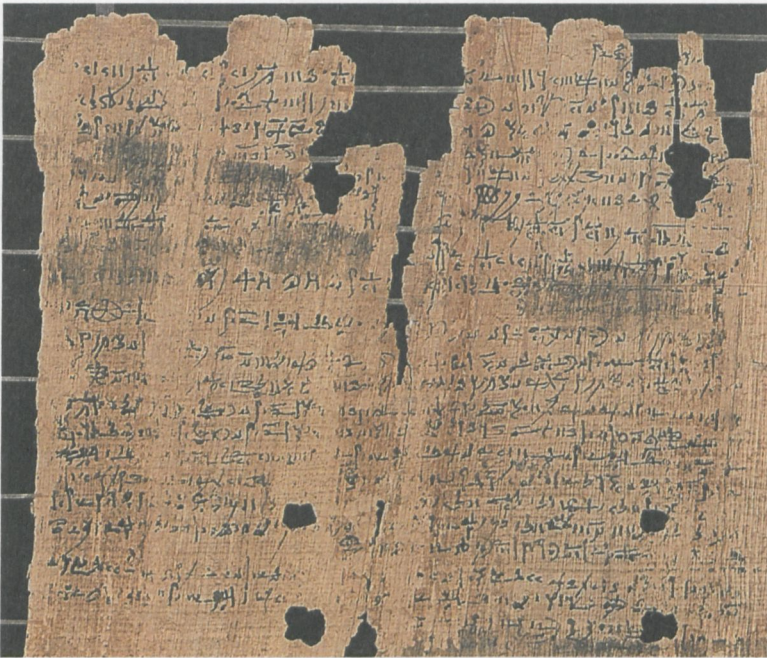


Fig. 13: Papyrus Louvre E 3229 verso (section)

key ingredients and some not-so-legal consequences of the practices, so it certainly has to do with secrecy. The signs used in the cipher writing express one sound each – which means that it also writes out the vowels, although there is more than one sign for some of the sounds. Since the manuscripts show substantial differences, I will present them individually and see if any clear development of the system can be traced.

Dating to about the late second or early third century CE is the magical papyrus Louvre E 3229.<sup>107</sup> This is mainly written in Demotic, but some sections use a substantial number of hieratic writings (sometimes concomitant with relics of the earlier Egyptian language). Greek glosses are used, but only in a few places, and only for non-Egyptian deities invoked (2/7. 21 and 22; 6/9. 10; vs. 9).<sup>108</sup> The glosses are written from left to right according to the Greek norm. There are a few cases of alphabetic Demotic writing for foreign names in the invocations; most of these are without glosses, which means that the scribes sufficiently trusted the capacity of this writing system to render the sound exactly. In one single case, cipher writing is attested. In a few instances on the verso (which was written by a different scribe than the recto), also Greek vowels are directly incorporated into Demotic alphabetic writing, again only for non-Egyptian deities (vs. 9. 10; fig. 13). This hints at the possibility of an alphabetic system using mainly Demotic mono-consonantal signs plus Greek signs only for the vowels. Such a system is later actually used for Syriac (Aramaic) texts if they are vowelized according to the Jacobite (West-Syriac) system. The consonants are Semitic;

107 Johnson, in: *Enchoria* 7 (1977). The date ‘third or fourth century’ given by Satzinger, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 170 is definitely too late.

108 The damaged Greek gloss in 3, 27 is more likely to be the Greek-language equivalent of an Egyptian word than its phonetic rendering, which would not fit at all.



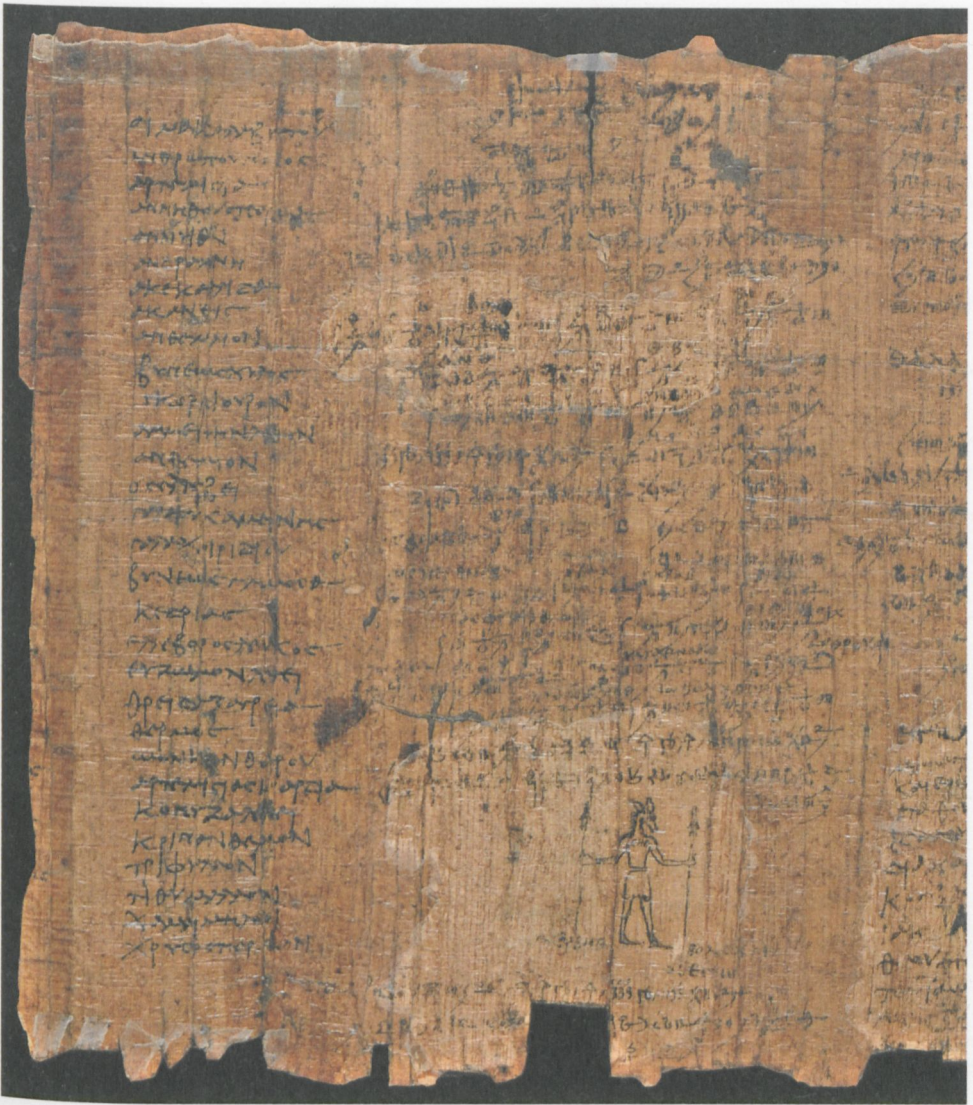


Fig. 14: Papyrus Leiden I 384 vs. (section)

the vowel-diacritics are small Greek vowel letters written over or under the consonant.<sup>109</sup> This would have been functional; but in Coptic it never came about.

There are Demotic sections among the magical spells on the verso of pLeiden I 384,<sup>110</sup> partially incorporating hieratic signs.<sup>111</sup> In one place, a word is written in cipher; it is only

<sup>109</sup> Nöldecke, *Kurzgefaßte Syrische Grammatik*, 8.

<sup>110</sup> Johnson, in: *OMRO 56* (1975). The recto contains an Egyptian religious text written in Demotic, namely the 'Myth of the Eye of the Sun'; see for editions Spiegelberg, *Mythus vom Sonnenauge*; de Cenival, *Le mythe de l'œil du soleil*; see the overview with additional literature in Quack, *Einführung in die altägyptische Literaturgeschichte III*, 160–172 and the German translation in Hoffmann & Quack, *Anthologie der demotischen Literatur*, 194–229 and 356–361.

<sup>111</sup> For the problem posed by the incorporation of hieratic signs and words in Demotic magical papyri, see Quack, in: Lembke, Minas-Nerpel & Pfeiffer (eds.), *Tradition and Transformation*,



incompletely preserved. The text shows a fully functional system of 'alphabetic' Demotic in use for non-Egyptian invocations, and this is combined with Greek supralinear glosses (fig. 14).<sup>112</sup> Where the glosses are first used, in the first two lines of the text, they consist of Greek letters placed immediately above the corresponding Demotic sign, written from right to left (as in the Demotic writing) and incomplete, covering only parts of the words, with a preference for the vowels. The next two lines show complete glossing, with the gloss immediately above the corresponding Demotic sign, and still written from right to left. For the remainder of the text, the glosses are again above the corresponding words, but are now written from left to right, as in ordinary Greek writing. In a few cases, we also have Greek writing already as the basic form; all instances are written in the normal direction. Since only non-Egyptian invocation words are glossed, the glosses do not include any signs having a Demotic derivation, which makes it problematic to speak of 'Old Coptic'<sup>113</sup> when designating this writing system. Here we can clearly envision the scribe in the process of making up the system on the spot.<sup>114</sup> At first, he glosses only the parts he deems most difficult, but soon realizes that it will be more convenient to have fully glossed words. Having done this, he realizes that full Greek glosses written against the normal direction of Greek writing are a potential source of confusion, so he switches the direction.

Written probably by the same scribe is the large manuscript pLeiden I 383 + BM 10070 (fig. 15),<sup>115</sup> dated to about the end of the second or the beginning of the third century CE.<sup>116</sup> This is the only manuscript known where enough cipher entries are preserved to make a detailed study meaningful.<sup>117</sup> At least some of the signs used in the cipher look like the relevant Greek letters but rotated 90 or 180 degrees. For those sounds not present in Greek, there are special signs which correspond quite directly to the Demotic signs for these sounds; specifically attested are *š*, *h*, *f*, probably *h*, and Demotic *g* for *k*. One sign, namely that for *ō*, corresponds to what comes from the 'syllabic' tradition but is also used in the Old Coptic writing system of papyrus Schmidt (see below). The finer points of vocalization present some problems.<sup>118</sup> Given that the basic (Greek) letters are intentionally distorted or have completely new forms, while the specifically Egyptian sounds are simply the Demotic signs with no additional disguise, it is likely that the system evolved originally in a Greek-writing community and was only secondarily adapted to the Egyptian language.<sup>119</sup> The fact that the writing direction is from left to right also supports this conclusion.

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321–324. The suspicion raised there that those sections often go back to earlier prototypes can now be further bolstered by the fact that for the invocation to Imhotep preserved in column I\* of Leiden I 384 vs., there are actual parallels in a late hieratic manuscript now in Brooklyn (47.218.47 vs.) dating probably to the 26<sup>th</sup> dynasty.

112 For the changing system of the glosses, see Johnson, in: *OMRO* 56 (1975), 48–51.

113 As was done by Johnson, in: *OMRO* 56 (1975), 48–53.

114 Johnson, in: *OMRO* 56 (1975), 49.

115 Griffith & Thompson, *Demotic Magical Papyrus*.

116 For the date see Dieleman, *Priests, Tongues and Rites*, 41–44.

117 See Griffith & Thompson, *Demotic Magical Papyrus*, volume III, 106–112.

118 See e.g. Quack, in: *Faits de Langues* 27/2, 208f.

119 Thus Griffith & Thompson, *Demotic Magical Papyrus*, volume III, 108, and more nuanced (correctly distinguishing two separate stages of the evolution) Dieleman, *Priests, Tongues and Rites*, 88–91.



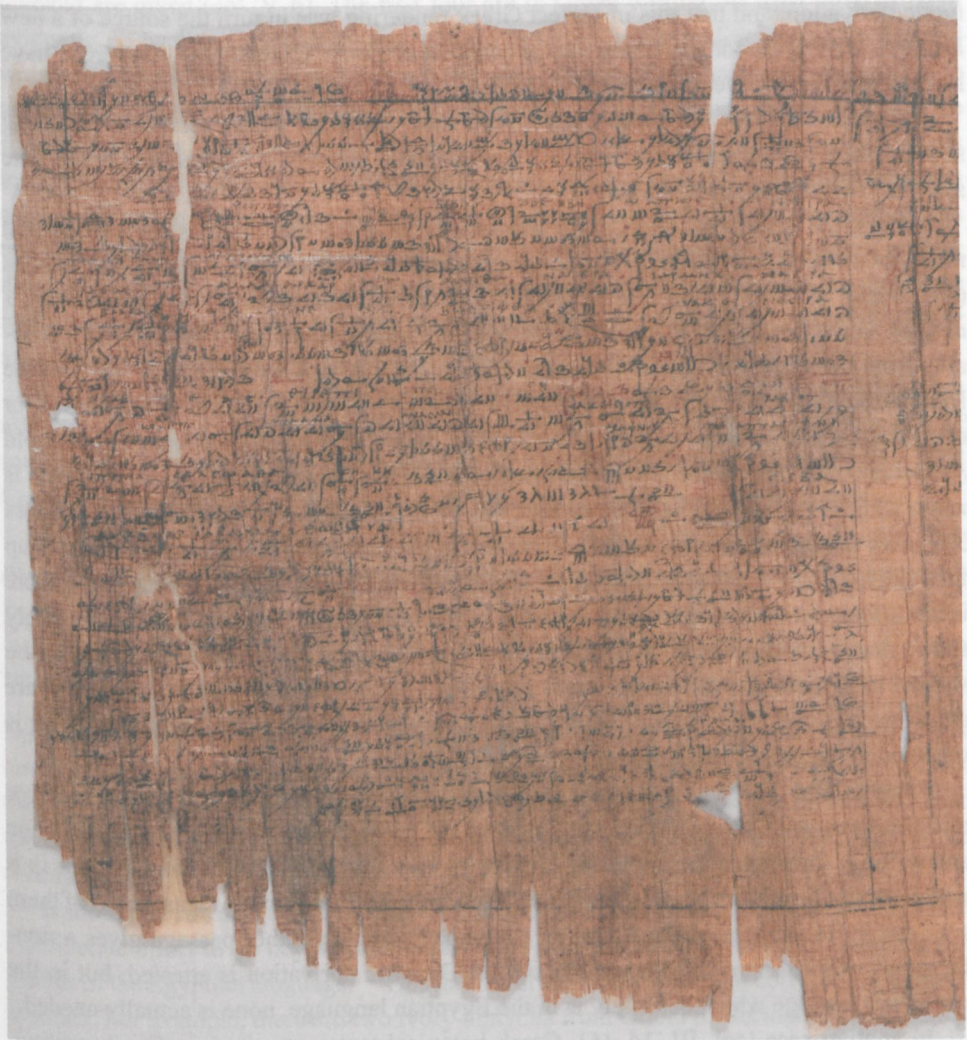


Fig. 15: Papyrus Leiden I 383 (section)

The papyrus also has a great many glosses.<sup>120</sup> These include signs not belonging to the Greek alphabet, so there is some justification in calling them ‘Old Coptic’. However, the situation is more complicated because these glosses are far from being homogeneous.<sup>121</sup> First of all, there are glosses to indigenous Egyptian words as well as to foreign ones, and in these glosses to non-Egyptian words, the Demotic writing (normally ‘alphabetic’) is really secondary to the Greek spelling as attested in the gloss. It can even happen that an original Egyptian expression was first rendered into Greek without any signs having a De-

<sup>120</sup> An index of the glosses is provided in Griffith & Thompson, *Demotic Magical Papyrus*, volume III, 113–136.

<sup>121</sup> In at least one case (Gloss 140), the gloss is not even a phonetic rendering of the basic text but a textual variant (ⲉⲩ ‘they will’ as plural instead of the ⲓⲣ=ⲕ ‘you will’ of the basic text in 9, 24).





invoked are given (col. V, 6). The first four are in Greek writing. At least three of them evidently go back to Egyptian deities, but are distorted by the addition of an ending  $\chi$ <sup>129</sup> which could hardly be expressed in a traditional writing of the name in Egyptian, so it makes sense to use Greek writing. The final three are animal names in Demotic, and no special writing is used. One spell on the verso incorporates a few (rather unclear) words in Greek writing into a running Demotic text (vs. col. I, 5 and 14f.), another one has a section written in Greek letters (vs. col. II, 1–7). As far as can be judged, the passages in question, or at least parts of them, are in the Greek language. They keep their usual writing direction, and the incorporation of Greek words in Greek writing (including the direction) into a running Demotic text can now be compared with the Narmouthis ostraca.<sup>130</sup> Other sections on the verso are entirely in the Greek language and writing.

Summing up, this papyrus does not use cipher, nor ‘alphabetic’ Demotic, nor glosses at all. If non-Egyptian passages are to be incorporated into the Demotic text, it is by means of setting them in Greek writing into the main text. At least tiny parts can be considered ‘Old Coptic’, but nothing can be said concerning its system for the non-Greek sounds.

## Complete texts written only in Greek letters plus signs derived from Demotic

### Introductory Remarks

Now I come to texts in which we no longer are dealing just with glosses, but where this newly created system of Greek letters plus some additional signs derived from Demotic is the only one which is used, and has to succeed in conveying its message on its own. That means, basically, that we have come to what is conventionally dubbed ‘Old Coptic’ in its core meaning.<sup>131</sup>

It should be stressed that the term ‘Old Coptic’ must be reserved for texts which make a deliberate effort to go beyond the limits of the normal Greek alphabet in rendering the sounds of the Egyptian language.<sup>132</sup> This has not always been observed correctly by modern scholars. For example, there are two ivory diptycha from Grand in Northern France which show astral figures, including the Egyptian decans, and for these the Egyptian names are given in Greek letters. In a study by an Egyptologist, this was argued to be ‘Old Coptic’.<sup>133</sup> Since not a single writing sign of non-Greek derivation is used in the writing on these diptycha, and the specifically Egyptian sounds are rendered approximately by the

129 Quack, in: *TUAT NF* 4, 357.

130 There is also an unpublished magical spell from Oxyrhynchus which is basically written in Demotic Egyptian (incorporating some rather hieratic groups) but having at least two lines with magical words written in Greek script.

131 See the remarks by Satzinger, in: Nagel (ed.), *Graeco-Coptica*; overview by Satzinger, in: Atiya (ed.), *The Coptic Encyclopedia* 8; Bosson, in: Bosson & Aufrère (eds.), *Catalogue de l'exposition Égyptes*, esp. 72–74. See also Vycichl, *Vocalisation*, 26–30 (omitting most of the more recent research).

132 Thus, e.g. Quaegebeur, in: *OLP* 13 (1982), 125–136.

133 Goyon, in: Abry (ed.), *Les tablettes astrologiques*, 68 and 76. For a more detailed analysis of the decan names of these tablets, see Quack, *Beiträge zu den ägyptischen Dekanen*.

nearest Greek equivalent, such a classification is obviously inappropriate. They are simply renderings of Egyptian words in Greek.

On the other hand, we have to ask if 'Old Coptic' is to be understood as a graphic or as a linguistic category. If we take it as a graphic category, the differentiation from Demotic is easy, but the differentiation from Coptic requires some definition. In such a perspective, a 'Coptic' text in the larger sense would be something written by means of the Greek alphabet plus additional signs derived from Demotic for those sounds which cannot be appropriately rendered in Greek. The difference between 'Old Coptic' and 'normal' Coptic is, then, that the additional signs of Old Coptic texts are either fundamentally different from those of normal Coptic (i.e. are derived from different Demotic signs) – often also less standardized – or are significantly different from the normal Coptic forms in their shape. I will come back to this final point later.

If, however, we try a linguistic definition, we face the problem that there is not a sharp break but rather a relatively continuous development, and late Demotic is certainly in the process of evolving into Coptic.<sup>134</sup> It has been stated, especially by Satzinger, that Old Coptic is basically Coptic but with pre-Coptic traits – at varying frequency, depending on the text.<sup>135</sup> Still, Old Coptic texts are claimed by him to be linguistically different from Demotic.<sup>136</sup>

In my opinion, we have to pose the question more sharply, and also with an inverted point of reference: To what degree are we justified in saying that the graphically 'Old Coptic' texts are linguistically non-Demotic, i.e. contain features of language which are younger than anything which is possible in Demotic texts?<sup>137</sup> For most (not all) of them,

134 Quack, in: *Faits de Langues* 27/2. Quaegebeur, in: *OLP* 13 (1982), 127 still follows the outdated opinion that Coptic derived directly from Late Egyptian and not from Demotic, as does McBride, in: *JSSEA* 19 (1989), 94.

135 Satzinger, in: Nagel (ed.), *Graeco-Coptica*, 137; similarly idem, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 175.

136 Satzinger, in: Nagel (ed.), *Graeco-Coptica*, 143 note 23 claims that no late Demotic text shows the real spoken language in the way it is assumed for the early Coptic texts. However, on the one hand he did not yet know the Narmouthis ostraca; on the other hand, he has misdated the Demotic magical papyrus by about a century (III/IV instead of the correct II/III CE; for the question of the date of the main manuscripts see Dieleman, *Priests, Tongues and Rites*, 41–44); and he does not realize that the supposedly frequent use of non-periphrastic verbal forms which he sees as a feature distinguishing between Demotic and Coptic is already strongly on the decline in late Demotic, see Quack, in: *Faits de Langues* 27/2, 196–211.

137 See Kasser, in: *Le Muséon* 93 (1980), 70, who claims that Old Coptic is Demotic (and, exceptionally, Late Egyptian) rendered in Old Coptic writing; in a more complicated way idem, in: Immerzeel & van der Vliet (eds.), *Coptic Studies*, 78, defines 'early Old Coptic' texts as having a syntax clearly based on Pharaonic Egyptian, as opposed to 'late Old Coptic' which economizes on the use of Demotic signs and has a syntax which is generally Pharaonic but with occasional Coptic features (I personally doubt that 'Pharaonic' is a good term). Peust, *Egyptian Phonology*, 28 claims that 'the language of most Old Coptic texts seems to be identical to Demotic'. Also Roccati, in: Johnson (ed.), *Life in a Multi-cultural Society*, 292f., stresses the similarity between Late Demotic and Early Coptic and considers Old Coptic to be a transcription of a Demotic text (although I have to disagree with some of his basic assumptions – Demotic, at least during the Roman period, is not geographically unitary. I would also say that it is possible to specify linguistic criteria to distinguish between



an unbiased look at the evidence shows, in my opinion, that they have at least a few pre-Coptic features of the language, but none which are clearly post-Demotic. This will be more profitably discussed below on a case-by-case basis. Only one global point is worth taking up immediately: the almost complete absence of Greek loanwords in Old Coptic texts, which has often been noted.<sup>138</sup> That would indeed be a rather archaic (or even consciously archaizing) feature,<sup>139</sup> going even beyond the state of late Demotic<sup>140</sup> – although below we will have the occasion to nuance this point.

There have been efforts to link individual Old Coptic texts specifically to particular Coptic dialects (or to analyze them as mixing traits of different dialects).<sup>141</sup> These have not been particularly successful, and that is probably because it is a basic methodological fault to simply appeal to what a few centuries later have become the main dialectal differentiations. We should reckon with the fact that some of the features which distinguish between the Coptic dialects are fairly recent innovations, so a text one or two centuries earlier can easily show something which in synchronic perspective might look like an admixture of a different dialect but is simply something which was quite normal in the historical predecessors of many or all of the dialects.<sup>142</sup> In any case, it should be obvious that the Old Coptic texts represent several different dialects, so that it cannot be recommended to group them together under a single unitary sign<sup>o</sup> in a dictionary.

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Demotic and Coptic, even if the separation resulting from them is likely not to correspond exactly to the differentiation of the writing systems). Also Bosson, in: Bosson & Aufrère (eds.), *Catalogue de l'exposition Égyptes*, 73 thinks that the graphic system distinguishes between Demotic and Old-Coptic texts while the syntax distinguishes between Old Coptic and Coptic.

138 E.g. Satzinger, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 174; Bosson, in: Bosson & Aufrère (eds.), *Catalogue de l'exposition Égyptes*, 73; Bagnall, in: Gabra (ed.), *Christianity and Monasticism*, 14.

139 For the relative scarcity of Greek loanwords in Demotic texts see Clarysse, in: Vleeming (ed.), *Aspects of Demotic Lexicography* (with additions in Vittmann, in: Clarysse, Schoors & Willems (eds.), *Egyptian Religion*, 1239 note 53; Vandorpe & Clarysse, in: Verhoogt, & Vleeming (ed.), *The Two Faces of Graeco-Roman Egypt*; Clarysse, in: Vleeming (ed.), *Aspects of Demotic Orthography*); see also Feder, in: Schneider (ed.), *Das Ägyptische*.

140 For the Demotic magical papyrus of London and Leiden, Griffith and Thompson list 64 Greek loanwords, not including names in the invocations (volume III, 102–104), and among these latter names there are clear Greek words which are likely still to have been understood as such (e.g. Nr. 70, 292, 295, 296). There are even mixed Greek-Egyptian expressions (like Gloss 62, see Quack, in: Schneider (ed.), *Das Ägyptische*, 468) of which it is doubtful to what degree they were still understood by the actual user of the manuscript. Also the medical papyrus Vienna D 6257 shows a substantial number of Greek loan-words (especially drug names), see Hoffmann, in: Imhausen & Pommerening (eds.), *Writings of Early Scholars*, 211. The Narmouthis ostraca often labeled 'bilingual' are in many cases rather to be analyzed as containing Greek loanwords (kept in their original writing system), see Quack, in: *Enchoria* 30 (2006/2007), 176f. See also Thissen, in: *BiOr* 66 (2009), col. 233f.

141 Thus already Griffith, in: *ZÄS* 39 (1901); more recently Satzinger, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 172–174.

142 For example, the form  $\text{HM}$  (instead of  $\text{MH}$ ) for 'together with' in the Papyrus Schmidt is not a non(-pre)-Saïdic feature, but simply ancient; equally I suspect the forms  $\text{NAY}$  and  $\text{CNAV}$  in the Old Coptic Horoscope not to be non(-pre)-Akhmimic.

## Specific Examples

An important document is the Papyrus Schmidt (fig. 16) which has now unfortunately been lost.<sup>143</sup> The text is a ‘letter to a god’ where a human being complains about misbehavior by another person, addressing his complaint however to a god instead of a human judge. This textual genre is well attested in Egypt, especially from the Late and Ptolemaic period.<sup>144</sup> Paleographically, the Schmidt papyrus has been dated by its editor to about 100 CE, although this date has recently been called into question.<sup>145</sup> The particular deity invoked (Osiris of Hesperet) points to a provenance in the region around Ashmunein. Satzinger classifies the text in his edition as linguistically ‘Old Coptic’. I beg to differ from that. I fail to see upon what facts Satzinger<sup>146</sup> bases his judgment that the language is less formal than that of contemporary Demotic texts.<sup>147</sup> There is no single linguistic trait which sets the text apart from Demotic, and there are some, especially the relative forms  $\epsilon\rho\lambda\epsilon\iota$  ‘what I have done’ and  $\epsilon\rho\lambda\alpha\iota$  ‘what he has done’, which are typical for Demotic, while hardly or not at all attested for Coptic.<sup>148</sup> Among the writing signs, we encounter a complete system where each non-Greek sound is rendered with a sign derived from Demotic. Graphically, the signs still distinguish in an etymologically correct way between Egyptian  $h$  ( $\rho$ ) and  $h$  ( $\rho$ ), although it is likely that the phonetic differentiation of those two sounds had broken down

143 Satzinger, in: *JARCE* 12 (1975); Richter, in: *JEA* 88 (2002), 247–250. For the provenance, see now Roquet, in: Collombert, Lefèvre, Polis & Winand (eds.), *Aere perennis*.

144 Migahid, *Demotische Briefe an Götter*; Depauw, *The Demotic Letter*, 307–313; Endreffy, in: El-Sharkawy (ed.), *The Horizon*.

145 Richter, in: *JEA* 88 (2002), 249f. I do not think that the linguistic closeness to Saïdic (as far as vocalism is concerned) can serve as an argument for a late dating. The text, which for internal reasons is likely to come from the region around Ashmunein, provides an important argument for situating the original area of the Saïdic dialect around there in Middle Egypt, but then similarities with that dialect are a function of place, not of time. The careful and correct distinction between  $h$  and  $h$  rather points to a relatively old age for the text.

146 Satzinger, in: *JARCE* 12 (1975), 50 note 84.

147 See also the remarks by Richter, in: *JEA* 88 (2002), 248 note 13. It should be noted that the word  $\lambda\theta\rho\eta\eta\eta$  which he judges as being attested only in Coptic is actually already attested in Demotic and, according to its phonetic form, has to be considered a pre-late-period loan, see Zauzich, in: *Fs Papyrussammlung*, 172 note 50; Quack, in: Burtea, Tropper & Younansardaroud (eds.), *Fs Voigt*, 309; the post-negation  $\dot{\imath}n/\lambda\eta$  is as obligatory in Demotic as it is in Coptic (here Richter falls victim to erroneous evaluations by Spiegelberg, *Demotische Grammatik*, § 475). The use of  $\pi\lambda\chi\omicron\iota\varsigma$  ‘my lord’ in the invocation (where Demotic would normally have  $p^3y=y nb$ ) might be phraseologically different, but the word  $\check{\epsilon}3s$  as such is well attested in pre-Coptic Egyptian; I know it in parallelism to  $nb$  in the Demotic praise of Isis in pCarlsberg 652 vs. (second century CE); and in the graffiti Dakke 31, 6 as well as Philae 120, 8f. (third century CE) and Philae 416, 5 (dated 253 CE),  $p^3y=n \check{\epsilon}3s$  is used where older Demotic would use  $p^3y=n nb$ ; Dakke 30, 8, Philae 301, 5 (255/56 CE) and Philae 421, 13 use the plural  $n^3y=n \check{\epsilon}sy^3.w$ ; Philae 411,5 has  $n^3.w \check{\epsilon}sy^3.w$  for ‘my lords’. Simple  $p^3 \check{\epsilon}sy$  for ‘the lord’ is attested in Philae 44 (141/42 CE) and 267 (153/54 CE).

148 For a possible fossilized case in Coptic, see Gardiner, *Some Aspects of the Egyptian Language*, 23 note 10 (the evidence from the ‘Old Coptic’ forms shows that his concern about the phonetic reduction of the form is unnecessary), building upon the analysis by Böhlig, in: *ZÄS* 72 (1936). Still it has to be stressed that the interpretation is problematic, given the different quality of the stressed vowel.



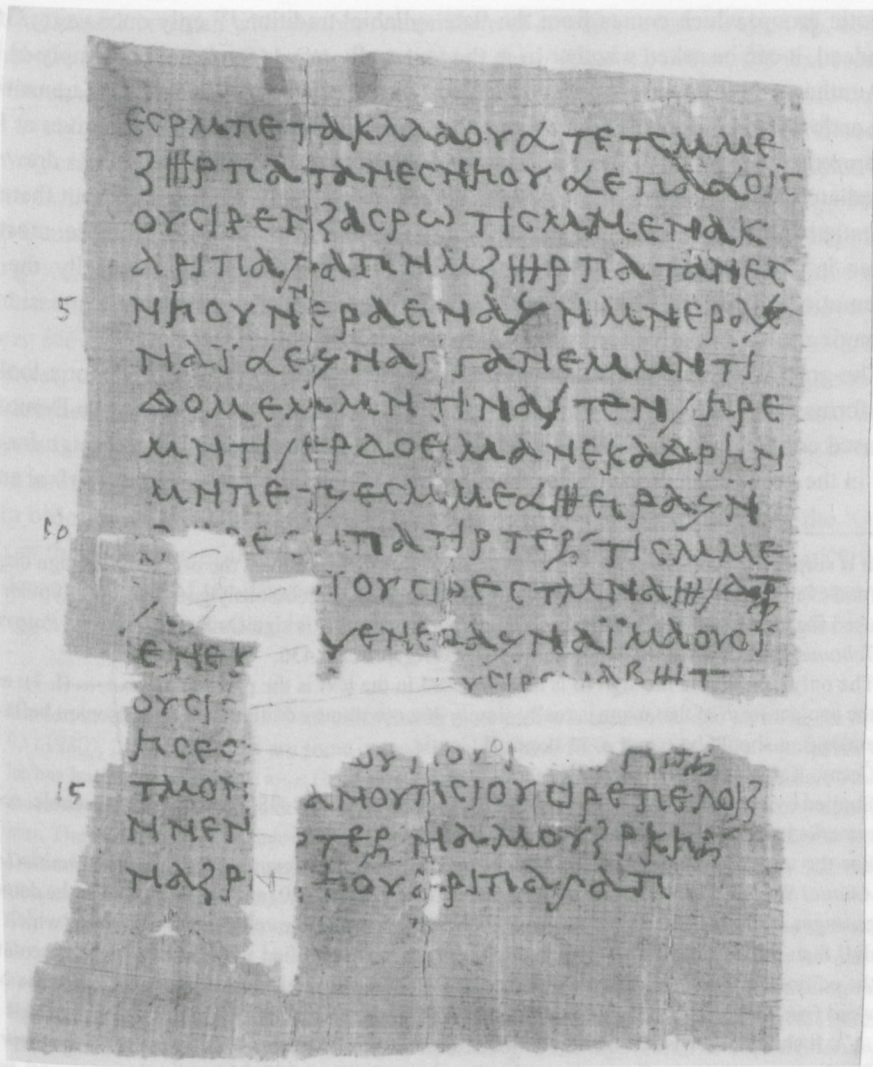


Fig. 16: Papyrus Schmidt

by the Roman period.<sup>149</sup> ⲭ for ⲭ shows a very Demotic shape. The ⲥ-sign has a peculiar, quite unparalleled shape / in this papyrus.<sup>150</sup> Also the sign for ⲕ is noticeable for its shape ⲕ; it might be a very aberrant form of Demotic g.<sup>151</sup> For ⲟ, the text more often writes a

<sup>149</sup> Still, we should consider the option that the distinction was kept operative longer in some areas.

<sup>150</sup> For a proposal to interpret it as the Demotic sign for 100, see Richter, in: *JEA* 88 (2002), 249.

<sup>151</sup> Kasser, in: *Le Muséon* 93 (1980), 265 (whose proposal p. 244 that ⲕⲟⲙ (l. 7) might stand for ⲕⲁⲙ 'bull' is excluded by the context); idem, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 45 and Richter, in: *JEA* 88 (2002), 248 have proposed to derive it from the Demotic form of ⲕ, but that is paleographically far from cogent, and phonetically excluded because Demotic alphabetic ⲕ serves exclusively to write a k-sound which did not evolve into ⲕ, see Quack, in: Schneider (ed.), *Das Ägyptische*, 440; idem, in: Burtea, Tropper, Younansardaroud (eds.), *Fs Voigt*, 324; idem, in: Depauw & Broux (eds.), *Acts International Conference of Demotists Leuven*, 230–232.

Demotic group, which comes from the ‘late syllabic’ tradition,<sup>152</sup> only once using Greek ω (indeed, it can be asked whether ω in the text really stands for  $\bar{o}$  and not simply *o*).<sup>153</sup>

A rather well-known text is the so-called ‘Old Coptic Horoscope’.<sup>154</sup> It is transmitted in pLondon 98 and contains a horoscope for somebody born in 95 CE. This gives at least an approximate date for the text, although we should not be too sure that it was drawn up immediately after the birth of the child. The horoscope itself is in Greek;<sup>155</sup> but there are also rather fully developed sections more in the style of a manual, and of these, most are written in Old Coptic, with only the section headings in Greek. Linguistically, the text is Demotic, not Coptic, as shown especially by the use of the possessive expression  $\lambda\epsilon$  ‘belonging to’ and relative forms like  $\lambda\epsilon\theta\omicron\gamma$  ‘what they did’.<sup>156</sup>

The graphic system of this text appears to be complete. It has very Demotic-looking sign-forms for  $\mathfrak{z}$  ( $\omega$ ),  $\mathfrak{z}$  ( $\mathfrak{z}$ ),<sup>157</sup>  $\mathfrak{z}$  ( $\mathfrak{q}$ ) and  $\mathfrak{b}$  ( $\mathfrak{b}$ ), plus one sign  $\mathfrak{c}$  corresponding to Demotic  $\mathfrak{h}$  and used only in etymologically correct positions;<sup>158</sup> in one case the Demotic sign for *m* is used in the group for  $\mathfrak{m}\mathfrak{c}\omega\mathfrak{y}$  ‘after them’ (which historically derives from *m-sj=w* and is

152 It is surprising that Kasser, in: *Le Muséon* 93 (1980), 256 considers the origin of this sign obscure (and even proposes to derive it from Demotic  $\mathfrak{h}w$ ) when it so obviously goes back to Egyptian  $\mathfrak{h}w$  used for writing  $\mathfrak{b}t$  ‘back’ (Coptic  $\omega$ ). See for the use of this sign Osing, *Hieratische Papyri aus Tebtunis* I, 49; Quack, in: Schneider (ed.), *Das Ägyptische*, 436.

153 The only case where the sign  $\omega$  is actually used in the text is the place-name  $\mathfrak{z}\lambda\mathfrak{c}\rho\omega$  (l. 3); and if the ancient form of that name is really simply *Hsr:t* (without additional weak consonant before the ending), it should be  $\mathfrak{o}$ , not  $\omega$  in standard Coptic.

154 Černý, Kahle & Parker, in: *JEA* 43 (1957).

155 Studied by Neugebauer & van Hoesen, *Greek Horoscopes*, 28–38. For the text as a whole, see the remarks in Bartyn, *Power and Knowledge*, 86–90.

156 For the understanding of  $\lambda\epsilon$  see Quack, in: Tákačs (ed.), *Egyptian and Semito-Hamitic (Afro-Asiatic) Studies*, 118. It should be noted that in lines 128 and 150 (and similarly also in the damaged passages in lines 136 and 137)  $\lambda\epsilon\theta\omicron\gamma$  is more likely to be the relative form  $\mathfrak{l}:\mathfrak{r}:\mathfrak{i}=\mathfrak{w}$  ‘which they did’ than the particle  $\lambda\mathfrak{r}\mathfrak{h}\gamma$  ‘perhaps’ with which it is identified without further commentary in the edition (it should be stressed that similar Demotic astrological treatises never make use of the word  $\mathfrak{r}w$  ‘maybe’; if there are multiple possible options, they say  $\mathfrak{w}n\mathfrak{n}^{\mathfrak{s}}\mathfrak{n}t\mathfrak{l}$  ‘there are those who ...’). It should likewise be noted that  $\mathfrak{m}\lambda\mathfrak{q}\mathfrak{r}\mathfrak{w}\lambda\mathfrak{e}\mathfrak{i}$  in line 151 means ‘one with good fate’ (*nfr-šjy*); for the expression see Quaegebeur, *Le dieu égyptien Shaï*, 217–221, who lists personal names whose vocalization fits perfectly with my proposal; Quack, in: *Enchoria* 34 (2014/2015), 109 with note 24), rather than ‘new profit’ as it was understood (without commentary) in the edition.

157 Used regardless of etymology for ancient *h* as well as  $\mathfrak{h}$ ; it should be remarked that this is a paleographical variant of Demotic  $\mathfrak{h}$ , not a sign with a historical origin different from  $\mathfrak{z}$ . Kasser, in: *Le Muséon* 93 (1980), 267f.; idem, in: *Le Muséon* 116 (2003), 294 with note 52, has not sufficiently understood the historical difference from  $\mathfrak{z}$  which is an inverted form of  $\mathfrak{c}$  (which derives from Demotic  $\mathfrak{h}$ ).

158 This is an important feature linking the text to the Akhmimic dialect; it should be noted that the coalescence of  $\mathfrak{s}$  and (most cases of)  $\mathfrak{h}$  is otherwise already complete in Roman period Demotic (it is even complete in pBM 10070 + pLeiden I 383 which comes from Thebes, an area normally associated with the Akhmimic dialect). In any case, the correctly made distinction between  $\mathfrak{h}/\mathfrak{h}$  and  $\mathfrak{h}/\mathfrak{h}$  in all Old Coptic texts which still use both signs (and even more so the abandonment of a specific sign for  $\mathfrak{h}$  in some texts) shows that the position of Kahle, *Bala'izah*, 253, according to which their distinction was not due to a real difference in pronunciation but probably to conservatism, cannot be upheld.



still, in Demotic, written with an abbreviated form of *m* within a historical group, not with alphabetic *n*). There is no Demotic-derived sign for *k*' (later ⲕ); rather, the text seems to use Greek κ almost exclusively<sup>159</sup> for that sound, while making use of a Demotic-derived sign ⲛ (old ⲕ) for actual *k*.<sup>160</sup> This means that the text is similar in usage to the Glosses in the magical papyrus of London and Leiden as well as to the Coptic papyrus Bodmer VI, to which I will turn later.<sup>161</sup> Besides, for syllabic *n*, it is not the Greek letter but a sign derived from Demotic *n* that is used; this also relates it to pBodmer VI.<sup>162</sup> Furthermore, there is one sign going back to the Demotic form of *in* and probably used with the fixed value of *an*; this last one was also used in the system of 'Late syllabic writing' discussed above. Thus we can see how the writing still harkens back to Demotic, but also that by about 100 CE at the latest, a system was fully established which could render the Egyptian language with Greek letters plus a few additional signs. It should also be stressed that the hand of this papyrus is very sure and accomplished, certainly belonging to somebody who was well at home in this writing system.

In order to set this into perspective, however, it should be mentioned that the 'Greek' parts at the beginning of the text contain some renderings of Egyptian names, specifically the decans as lords of ten degrees of the zodiac. For their rendering, we have some signs having a Demotic derivation, namely the form Ⲡ (for ⲡ) and the form ⲡ for glottal stop,

159 Kasser, in: *JEA* 49 (1963), 159 assumes that in most cases κ is used for *k*, and idem, in: *Le Muséon* 93 (1980), 249 thinks there are some cases where κ is used for *k*, but I do not see on which words he has based his judgment. ⲃⲓⲕⲉ (l. 131) is more likely to be for *bygy* 'to founder' (ⲃⲓⲃⲉ) than for ⲃⲉⲕⲉ 'wage'. ⲕⲱ (l. 171) is doubtful in reading as well as meaning in the context; it might be for ⲕⲱ. That leaves only the second person κ (attested as prefix of the present I), and for this also in Demotic a 'historical' writing is usual, see Quack, in: Depauw & Broux (eds.), *Acts International Conference of Demotists Leuven*, 231.

160 The sign in question occurs in line 149 (twice) and 151, to be understood there as ⲕⲱⲛ 'envy'; in line 153, to be understood as ⲕⲁⲗⲓⲡⲓ 'to rob him'; in line 175, to be understood as ⲛⲧⲣⲓⲕⲁ- 'and he will put'. In the edition, the sign was misunderstood as standing for *z* and indicating ancient Egyptian *z* (even though that sound had coalesced with *s* more than two thousand years before the writing of this papyrus); this is still accepted by Satzinger, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 171, despite the fact that Kasser, in: *JEA* 49 (1963), 159 has pointed out the correct solution.

161 The long discussion about the writing of the velars by Kasser, in: *Le Muséon* 93 (1980), 244–255 is largely in need of being redone. I will only sketch the most important details. In Demotic, as I have shown, we already have a binary opposition of the velars equivalent to that in Coptic, not the tripartite one of older Egyptian (see Quack, in: Burtea, Tropper & Younansardaroud (eds.), *Fs Voigt*, 323f.; idem, in: Depauw & Broux (eds.), *Acts International Conference of Demotists Leuven*, 230–232). In southern Upper Egypt, the local pronunciation of Greek κ had shifted completely to *k*' whereas in the more northern parts of Egypt this shift tended to occur only before high vowels (see Quack, in: Schneider (ed.), *Das Ägyptische*, 440). This means that the writing sign κ was, in the Roman period, firmly associated with *k*' for the Egyptians of southern Upper Egypt (which meant that they had to resort to a Demotic-derived sign for *k*); whereas for the more northern regions, Greek κ could be used for *k* unproblematically, but a Demotic-derived sign was needed for *k*'. Ultimately, the dominance of the Saïdic dialect and writing system imposed the 'standard' usage for writing the velars in the Thebaïc where, however, 'errors' remained relatively frequent. Papyrus Bodmer VI is a relic from the early orthographic traditions of the Thebaïc.

162 For relations between the writing systems of these two texts, see already Kasser, in: *JEA* 49 (1963).

the last one otherwise only attested similarly in pBM 10808 (see below). But it also has to be remarked that the sign ⚭ (for ⚫) is once used for the sound sequence *št*; that *h* is rendered thrice by Greek χ, only once by ϐ; and that the sequence of *p* and *h* is given as Greek φ, while simple *h* seems to be left unwritten once. It is rather surprising that what is clearly a quite inferior system for rendering the Egyptian sounds should have been used here in comparison to the ‘Old Coptic’ section of the same papyrus. This might have to do with the available manual for the Egyptian decan names, especially since there are some indications that the names reached the writer of this papyrus in an already garbled state.<sup>163</sup>

Another astrological text should be mentioned here, precisely because it is *not* immediately relevant for our topic, namely pLondon 130.<sup>164</sup> It is a horoscope for a person born in 81 CE and unlikely to postdate that year very much. Here too we have three names of Egyptian decans, but they are rendered exclusively in Greek writing, without any signs derived from Demotic. This means that a sound *š* (derived historically from *h*) is given as σ in the text, and the sound *h* appears as χ; one probable instance of the sound *h* is omitted completely. That might signal that the late first century CE was really the formative period when ‘proto-Coptic’ writing was coming into existence but had not yet been generalized.

There is a much-damaged papyrus now in Michigan (P. Michigan Inv. 6131 vs.; fig. 17) which comes from Soknopaiou Nesos and is likely to date to the second century CE.<sup>165</sup> While its first editor left it open what this text was really about, subsequent scholars have normally considered it to be a horoscope.<sup>166</sup> This is based on the fact that it has a recurrent word ⲁⲛⲏⲥ at the very beginning of its individual sections which was interpreted hesitantly as *h<sup>c</sup>=f* ‘his life-time’.<sup>167</sup>

I would like to propose a new and quite different global interpretation of this composition. Its clearest pattern is that it has sections introduced by numbers (23 in B x+2, 1; 24 in B x+2, 4; 27 in B x+2, 19; and 29 in C, 7 are completely preserved), followed by the word ⲁⲛⲏⲥ and an η. Afterwards, in the only case sufficiently well preserved, comes ⲛⲟⲩⲁ which

163 A more detailed discussion will be given in Quack, *Beiträge zu den ägyptischen Dekanen*.

164 See Neugebauer & van Hoesen, *Greek Horoscopes*, 21–28.

165 Worrel, in: *AJSL* 58 (1941); new edition in Quack, in: Ryholt (ed.), *The Carlsberg Papyri II*. Since Soknopaiou Nesos was abandoned in the early third century CE (see Jördens, in: Lippert & Schentuleit (eds.), *Tebtynis und Soknopaiou Nesos*, 54–56), the date of the papyrus definitely cannot be later than that. There are additional, unpublished fragments of the text, directly joining, and the position of the published ones could be more clearly established. For the recto see Sijpestein, *Customs duties*, esp. 86 and 183–188 (no. 733–884); it does not provide an exact date, unfortunately. An image can be found online at the site of the APIS project. The numbering system of the papyrus had to be redone due to several new joins; I use here the current one which is different from Worrel’s. For the archaeological context of the papyrus, see Schwendner, in: Ciruolo & Seidel (eds.), *Magic and Divination in the Ancient World*, 115f.

166 Thus e.g. Kasser, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 41; Satzinger, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 170; Bosson, in: Bosson & Aufrère (eds.), *Catalogue de l’exposition Égyptes*, 74; Vycichl, *Vocalisation*, 30; Choat, in: Riggs (ed.), *The Oxford Handbook of Roman Egypt*, 584.

167 Worrel, in: *AJSL* 58 (1941), 85.



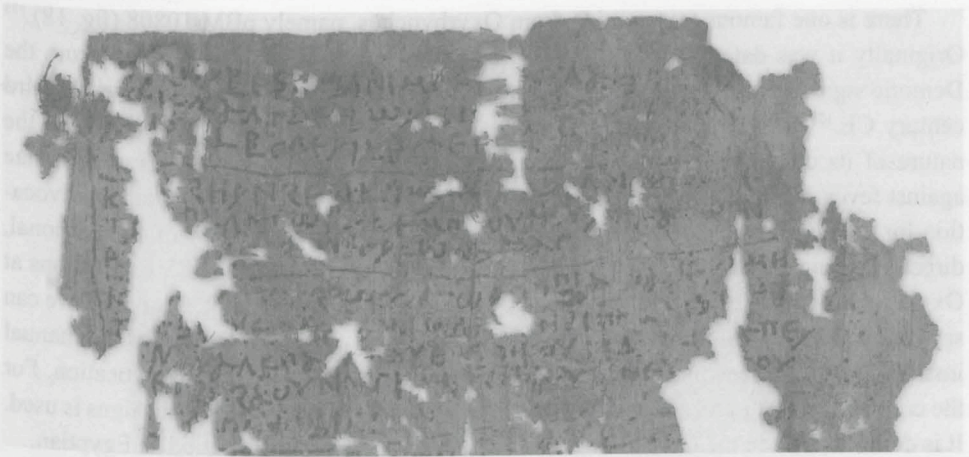


Fig. 17: Papyrus Michigan Inv. 6131 (section)

is the Fayyumic form of the god Horus.<sup>168</sup> In one case at the end of a section, ΠΑΙΩΝΙ ‘this inquiry’ is preserved (B x+2, 11). Now I know of a Demotic divinatory treatise, attested in about half a dozen different manuscripts, which is based on the drawing of numbered lots.<sup>169</sup> Each section of that text begins with a number (in ascending order), followed by the note  $^c h^c = f n$  with the name of a god: ‘it stands for the god X’. At the end of a section, we have  $p^3 \check{s}m nfr n pay \check{s}ny$  ‘the good omen of this inquiry’. It is highly likely that the Michigan fragments come from a manuscript of this treatise which was transposed into Old Coptic writing, but is linguistically Demotic.<sup>170</sup>

The graphic system of this text is quite complete. It has additional signs for  $\alpha$ ,  $\varepsilon$ ,  $\eta$ ,  $\chi$  and  $\beta$ , and a sign for  $k$  not corresponding to  $\sigma$ , but to the Demotic form of  $g$  (B x+2, 2).<sup>171</sup> This means that all non-Greek sounds can be fully and precisely rendered. In one case, there might be a Greek loanword, if Worrel’s restoration of the word as  $\tau\gamma\eta\lambda[\mu\iota\kappa]$  ‘power’ (C 10) is correct. A new attempt at understanding the passage, however, casts doubt on Worrel’s restoration, for which the available space seems insufficient.<sup>172</sup>

<sup>168</sup> It is also likely that in B x+2, 12  $\tau\eta\eta\eta\eta$  (Tefnut) can be read, but the final parts are seriously damaged.

<sup>169</sup> For a preliminary report, see Quack, in: Szpakowska (ed.), *Through a Glass Darkly*, 182–184. Edition by Quack, in: Ryholt (ed.), *The Carlsberg Papyri 11*.

<sup>170</sup> If the analysis of  $^c h^c = f$  as an unmarked emphatic form (attested in literary Late-Egyptian) is correct, the text would even contain a pre-Demotic construction. In any case, the occurrence of  $\lambda\eta\eta\eta$  as vocalization of a  $s\check{c}m = f$ -form which is not the prospective/subjunctive form is worthy of note.

<sup>171</sup> Very clear on the photograph, less so in Worrel’s hand-copy (who, on p. 48, misreads it as Demotic  $k$ ), and perhaps for that reason not included in the list by Kasser, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 42 (and missing in the IFAO Coptic font which is otherwise very complete, also for Old Coptic special signs).

<sup>172</sup> Quack, in: Ryholt (ed.), *The Carlsberg Papyri 11*.





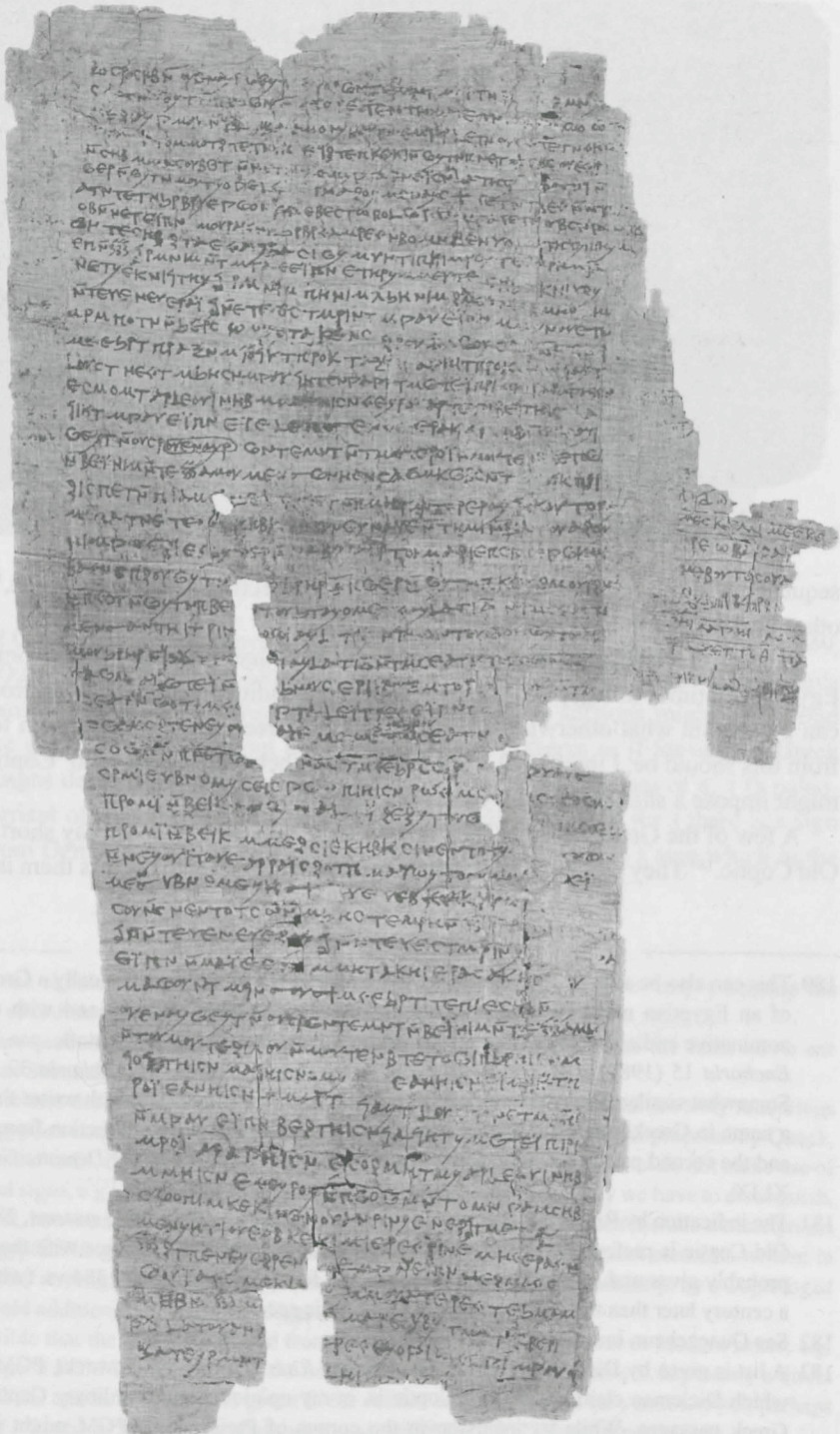


Fig. 18: Papyrus BM 10808

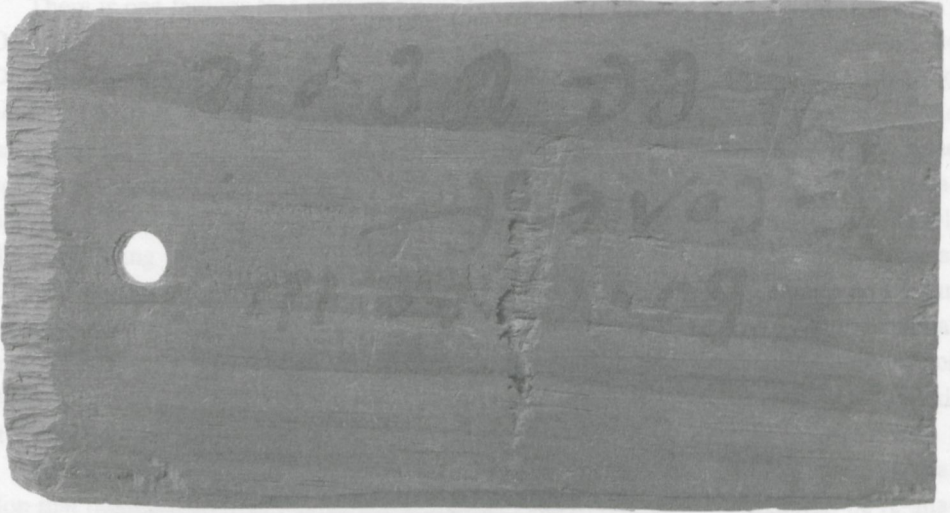


Fig. 19: Mummy Label Berlin ÄM 10541

sequence written from left to right), imitating the direction of Demotic script,<sup>180</sup> which is otherwise not normal in Old Coptic.<sup>181</sup>

Perhaps this is also the appropriate place to note that in Greek papyri from Byzantine Egypt, sometimes in Egyptian personal names the additional signs derived from Demotic can be used in what otherwise is linguistically a ‘Greek’ text.<sup>182</sup> The lesson to be drawn from this should be, I think, that our differentiation between ‘Greek’ and ‘Coptic’ alphabet might impose a sharper boundary than is really warranted.

A few of the Greek Magical Papyri from Late Antique Egypt display short sections in Old Coptic.<sup>183</sup> They are fairly divergent in style, so it is better to discuss them individually.

180 This can also be seen in a graffito in the tomb of Ramses IV which is basically a Greek rendering of an Egyptian name (without making use of Demotic-derived signs, and with a Graecizing nominative ending) combined with the writing of the same name in Demotic, see Winnicki, in: *Enchoria* 15 (1987), 164–166 (who cites further cases); Vinson, in: *Enchoria* 32 (2010/2011). Somewhat similar, but even more extreme, is the Graffito Philae 321 which writes the first part of a name in Greek letters but mirror-imaged to conform to the writing direction from right to left, and the second part in Demotic Egyptian; see Griffith, *Catalogue of the Demotic Graffiti*, 95, pl. XLIX.

181 The indication by Ritner, in: Daniels & Bright (eds.), *The world’s writing systems*, 289, that initial Old Coptic is preferentially written from right to left is not in accordance with the facts; Ritner probably gives undue weight to the direction of a few lines in pLeiden I 384 vs. (which are about a century later than the oldest preserved Old Coptic specimens).

182 See Quaegebeur, in: *OLP* 13 (1982), 131.

183 A list is given by Dieleman, *Priests, Tongues and Rites*, 71 note 69. However, PGM XLIII, 1–21 which Dieleman claims to be Old Coptic is, in my opinion, simply ordinary Coptic with a few Greek passages. While its inclusion in the corpus of Preisendanz, PGM might induce future researchers to set it apart from ‘normal’ Coptic magical texts, nothing inherent in the papyrus itself justifies such a separation.



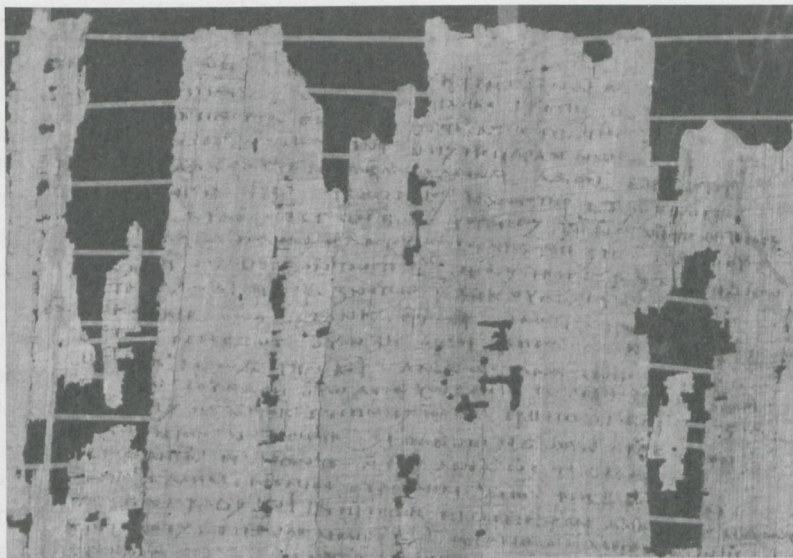


Fig. 20: Papyrus Louvre N 2391 (Papyrus Mimaut; PGM III) (section)

The Old Coptic sections in Papyrus Mimaut (PGM III, 133 (one single word), 347–349, 369, 396–409,<sup>184</sup> 417–421,<sup>185</sup> 633–688, 711; fig. 20)<sup>186</sup> are rather badly preserved and have been little studied.<sup>187</sup> However, even if the semantics of these sections might be beyond recovery, we can still say a lot about the graphic system. It seems as if for all non-Greek phonemes, signs derived from Demotic are in use; we have positive cases of α, ζ (a paleogeographical variant of ς,<sup>188</sup> also used for etymological *h*) and ι (ϫ), and for *š* there is a sign ϸ derived from Demotic *h* > *š*. In one instance (PGM III, 661), there is a sign which in the

184 In 408, one should understand ΜΑΡΙΟΥΘΩΤ ΗΠΙΣΑΞ ΝΟΥ(Υ)ΣΙΡΕ ΠΗΟΥΤΕ ‘may I worship the mummy of Osiris, the god’.

185 Read there probably ΑΗ ΗΣΟΥΣ ΠΗΕΤΟ ‘bring Jesus, the great god!’ (for the form ΠΗΕΤΟ see Quack, in: Schneider (ed.), *Das Ägyptische*, 448 note 78).

186 It is sometimes difficult to decide what are simply ‘magical words’ and what are truly renderings of the Egyptian language; e.g. PGM III, 141f.; 144f. and 484 (for 484 see the proposal by Quack, in: Schneider (ed.), *Das Ägyptische*, 448 note 78) are in principle Egyptian, but do not make use of additional signs, e.g. writing ψοιωω for *p<sup>3</sup> šy<sup>ε3</sup>* ‘the great destiny’. Probably we have to distinguish, in this text, between older passages taken from manuscript traditions which include transcriptions of the Egyptian language in Greek without additional signs, and more recent elements written in ‘Old Coptic’ writing. I would also expect that a careful collation of the manuscript by a Coptologist would yield additional improved readings and interpretations.

187 It is possible that the text has suffered from poor copying in either ancient or modern times; e.g. the passage in PGM III, 663 given in the edition as ΗΝ ΗΤΠΟΚ ΕΤΕΠΗΗΙΟΥ ... is patently a direct parallel to the one in PGM III, 711 given in the edition as ΗΝΗΗΤΟΚ ... ΤΕ ΥΟΗΗΗ ΟΥΟΙ, perhaps *hw=fr in<sub>i</sub> t=k mtw p<sup>3</sup> nfw w<sup>3</sup>i* ‘he shall bring you, and the wind (?) shall recede’.

188 Kasser, in: Immerzeel & van der Vliet (eds.), *Coptic Studies*, 86 has not understood sufficiently the deep-seated difference between this sign and ζ (the more abbreviated form of Demotic *š*).

edition is rendered as ϣ,<sup>189</sup> thus an inverted form of Demotic *h* – however, the context is too badly damaged to decide whether this might not really be a sign derived from a special form of Demotic *h*<sup>190</sup> (if this is the case, it would mean that here, as in the papyrus Schmidt, the etymological differentiation of the two sounds was maintained), or else is simply a deviant paleographical form of *h* (as it appears consistently in pBodmer VI). The only sound not positively attested is *k'*; but this relatively rare sound is never really needed in the text, so its absence probably does not mean anything. There are a few reading aids in the text, especially high points or short slashes to mark word-division. There is also sparse use of the Greek spiritus lenis. Paleographically, the additional signs were not yet brought in harmony with the signs of Greek derivation.<sup>191</sup> Linguistically, from what little can be judged, the text uses at least once the periphrastic participle (επιηγε ‘which has come forth’, l. 636), and also the relative form εμεγειε ‘whom (NN) has born’ (l. 669) which are not ‘standard’ Coptic.<sup>192</sup> A final judgment is difficult, given the poor preservation of the sections.

A very short passage is preserved in pBerlin P 5025 (PGM I 251f.),<sup>193</sup> which is normally dated to the fourth/fifth century CE. The text does not contain any signs of Demotic derivation, but only one would really be needed, namely the *f* at the very end of the sentence – and that sound is completely omitted in the writing of the papyrus. Its absence has sometimes been used to argue that this text is not Old Coptic but only a Greek transcription of the Egyptian language,<sup>194</sup> but in that case we would have expected the scribe to use φ; thus the omission is more likely to reflect the error of a copyist (or his inability to understand the sign).<sup>195</sup> Linguistically, this text is Coptic rather than Demotic;<sup>196</sup> indeed it could be asked if it is in any way specifically ‘Old’ Coptic.

The invocations of PGM LXXIX and LXXX, to be dated probably to the third or fourth century CE, show a mixture of Greek and Coptic language. Their short Coptic sections (close to Bohairic) do not display any signs derived from Demotic, but there are no sounds in the text which would require them. Linguistically, they do not show any pre-Coptic features. PGM XLVIII, dated to about the sixth or seventh century CE, should also rather be considered simply as a Coptic text (with a few Greek passages). PGM XXXVI 315f. (dated to the fourth century CE) has a short sentence in Coptic. Linguistically, it corresponds to regular (Fayyumic) Coptic; there are no Demotic-derived signs needed in it.

189 Kasser, in: *Le Muséon* 93 (1980), 267; idem, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 42 disputes the reading.

190 In Roman period Demotic, there are similar forms of the simple *h*, e.g. in pKroll and some manuscripts from Tebtunis.

191 See the table in Crum, in: *JEA* 28 (1942), 21 where the sign forms of the papyrus are given from a photograph.

192 The periphrastic participle is still fairly wide-spread in the Middle-Egyptian dialect of Coptic, see for discussion Shisha-Halevy, in: *CdÉ* 58 (1983), 315f.

193 For the passage see most recently Phillips, *In Pursuit of Invisibility*, 97–109.

194 E.g. Satzinger, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 170. Phillips, *In Pursuit of Invisibility*, 104f. does not seem to take a definite position on this.

195 The suffix pronoun would be as necessary in pre-Coptic Egyptian as in the Coptic language, so it cannot be a question of linguistic age.

196 The discriminating diagnostic is the formation of the relative phrase of the past as εητλϣϣωτμ.



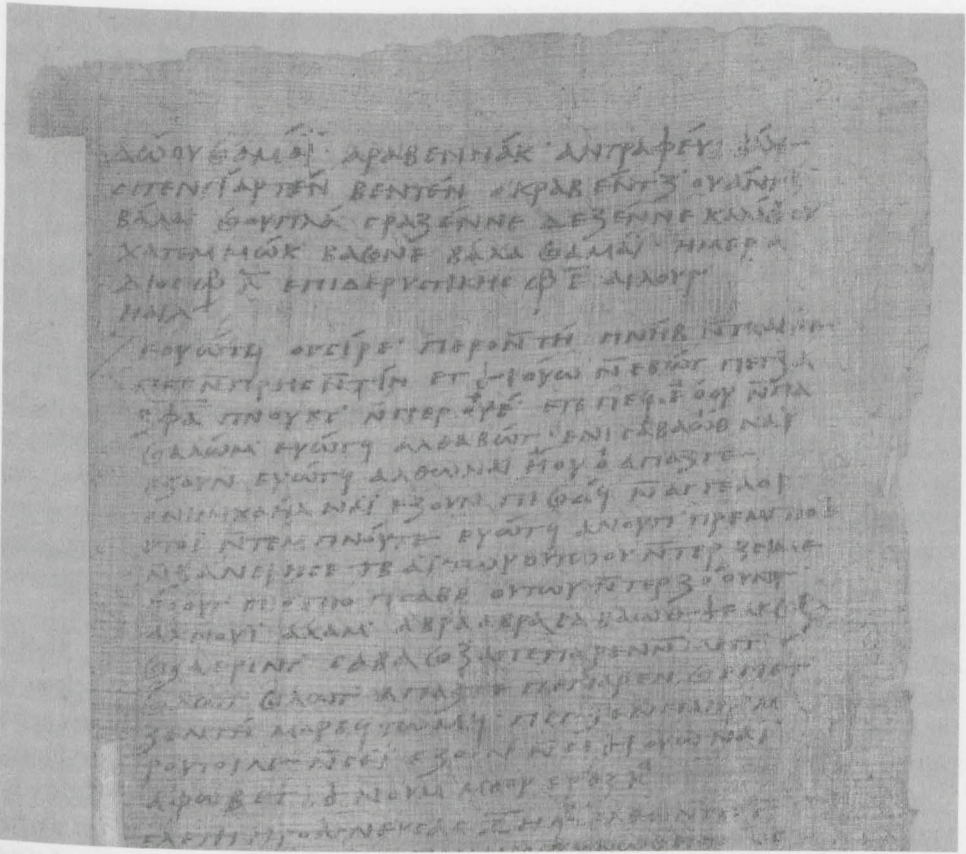


Fig. 21: Papyrus Bibliothèque Nationale 574

Finally, I come to the Old Coptic sections in papyrus Bibliothèque Nationale 574 (PGM IV; fig. 21). The manuscript itself is generally dated to the early fourth century CE, although I would like to re-open that question. The sections contained in it have tended to dominate discussions about Old Coptic writing and language because they are relatively long and well-preserved, and their content, with motifs taken from traditional Egyptian mythology, makes them quite interesting. However, seen against the complete dossier of ‘Old Coptic’ writing, they have to be considered rather as a maverick.

One section in the manuscript, PGM IV, 1231–1239<sup>197</sup> is linguistically quite clear, but noticeable for its graphic system. As far as possible, it tries to avoid the additional signs of Demotic derivation; rather, the nearest Greek equivalent is given. Actually, the only sign with a Demotic derivation used in the text is  $\sigma$  in  $\sigma\text{OM}$  ‘power’ (PGM IV, 1236), and that stands out even more sharply inasmuch as this is a sign which is otherwise rarely attested in our corpus of ‘Old Coptic’ texts.<sup>198</sup> Also, the text is full of Greek loanwords, belying the

<sup>197</sup> See also the study by Merkelbach, *Abrasax*, 58–63. Contrary to his analysis,  $\sigma\alpha\tau\epsilon\tau\epsilon\nu\nu\sigma\theta$  is not Aorist, but limitative ‘until you drive away’ (rendered correctly already in Preisendanz, *PGM* I, 115).

<sup>198</sup> It is also used (in a still strongly Demotic form) in pBM 10808.

normal opinion that Old Coptic avoids them. Still, linguistically the text is simply Coptic (even Christian in content), and it could be questioned whether there is anything other than the exotic writing system that makes it specifically ‘Old’ Coptic.<sup>199</sup>

The other Coptic passages in the manuscript are quite different from this one.<sup>200</sup> The first section in the text (PGM IV, 1–25) was recognized already by Brugsch as a loose variant of one preserved in the Demotic magical papyrus of London and Leiden (21, 1–9).<sup>201</sup> The incantations are in ‘Old Coptic’ while the practical instructions are in Greek. A first part (1–9) makes use of the signs ς and ζ which makes it likely that it once contained the Egyptian language, but in its current state it is hardly more than gibberish and has so far resisted all analysis. The next part is relatively clear. Graphically it uses ς, ζ, and ι; in one case (l. 25), ζ is written erroneously for γ (which is not attested in this section of the papyrus). Old *h* does not occur as such; in the only place where its presence is etymologically certain (l. 12 ζλ for *hr* ‘below’),<sup>202</sup> it is rendered by ζ (which would indicate a phonetic state corresponding to Saïdic, not to Akhmimic). Sometimes, the ζ is misplaced, as in ζCIME (l. 18; for C2IME) and ME3XE (l. 76; for MEK2E). In some cases, a Greek spiritus lenis is used to indicate a glottal stop (or, at least, hiatus between two vowels). The stressed vowel is often marked by an acute accent. Linguistically speaking, apart from the frozen epithet ΤΒΛῙΤΩΥ for *tpi<sup>2</sup>-čw=f* ‘he who is upon his mountain’, there is nothing definitely pre-Coptic in the spell.

Some of the following passages include short Coptic invocations (l. 75–77; 81–82; 83–84; 86–87; 91–93); from the global structure of the text they still seem to belong to the same divinatory practice as the very first passage.<sup>203</sup> In their graphic system, they seem close to the first part, although it should be noted that at least once (l. 93) ς is used for ι.

Another section (l. 94–153) is famous for its content, as it is a love charm where Isis’ sorrow at the adulterous liaison between Osiris and Nephthys is at the center.<sup>204</sup> It should be stressed how different the graphic system of this passage is from other cases of ‘Old Coptic’, especially as far as the rendering of the non-Greek sounds is concerned. For *h*, the text makes use of the Greek spiritus asper,<sup>205</sup> and for *h* it uses Greek χ, in one case even here the spiritus asper. Furthermore, this system, which we would suppose to have been applied consistently in the archetype of the text, is seriously compromised in actual

199 Also Kasser, in: Diebner & Kasser, *Hamburger Papyrus Bil. I*, 111 note 294, states that the text is rather Coptic than Old Coptic.

200 The publication by Erman, in: *ZÄS* 21 (1883) still retains its usefulness due to the plates published there; considerable progress was made by Griffith, in: *ZÄS* 38 (1900). See now Love, *Code-switching with the Gods*.

201 Brugsch, in: *ZÄS* 22 (1884). New study of the text in DuQuesne, *A Coptic Initiatory Invocation*.

202 It is much less certain that ζφλ (l. 13) is really the status constructus of ƆHIƆI ‘the shadow’ (as assumed by editions since Brugsch, in: *ZÄS* 22 (1884), 20); there is nothing corresponding to it in the Demotic parallel, which simply reads *hr p<sup>3</sup> nbs* ‘below the *Nubs*-tree’. Phonetically, the correspondence is far from obvious, and, as Griffith, in: *ZÄS* 38 (1900), 87 correctly notes, we would expect the feminine article before ƆHIƆI.

203 Already Erman, in: *ZÄS* 21 (1883), 91f. recognized that the old Coptic passages of the papyrus can be grouped into two basic parts.

204 Newly studied by Satzinger, in: Giversen, Krause & Nagel (eds.), *Fs Kasser*.

205 This can also be seen in PGM VII, col. XVII (591f.) in the caption to the drawing.



practice, where we find  $\underline{h}$  also rendered by the spiritus asper, or even totally omitted, while simple  $h/\underline{h}$  can also be rendered by  $\times$ ; and not infrequently the two signs are combined. The spiritus asper can also stand erroneously where nothing (or, at most, a spiritus lenis) is required, or it can be a bit misplaced in the word.<sup>206</sup> Of the Demotic-derived signs, only  $\epsilon$  for  $\underline{h}/\underline{s}$  (also used for  $\check{c}/\check{\zeta}$  (sometimes in the combination  $\tau\epsilon$ ) and for  $k'$ ) and  $\gamma$  for  $f$  are in regular use (even  $\gamma$  is often replaced by  $\varkappa$ , l. 96, 110 and 111 (twice), 113, 126, 128), and very occasionally also  $\mu$  turns up (l. 114). Stress marks on the vowels by means of acute accents are frequent. This gives the impression that, firstly, the system of rendering the different  $h$ -sounds was either no longer really understood by at least one of the scribes who copied the text,<sup>207</sup> or it did not really correspond to his own speech in which the opposition was neutralized. We should even seriously consider whether the archetype might always have rendered  $f$  approximately by  $\varkappa$  and  $\check{c}/\check{\zeta}$  by  $\epsilon$ , and that their occasional more careful indication is due to a later copyist. That would constitute a system of rendering the Egyptian language with as few non-Greek signs as possible, only one being indispensable.<sup>208</sup> Also to be noted is that there are relatively well-developed devices for marking word division, mainly by supralinear slanting strokes.

With its efforts to have recourse to devices from Greek philology and to reduce the amount of non-Greek signs to the absolute minimum, the system is fundamentally different from everything we have encountered in Egyptian manuscripts of the Fayum, Middle and Upper Egypt since about 100 CE when functional and complete systems were in place. Perhaps this fact can be combined with another singular feature in the PGM IV Old Coptic sections, namely their oscillation between different dialect forms, sometimes by way of variants for the same words given either as superlinear additions or directly following in the line. Previously, this has been interpreted as deliberate mixing of different dialects in order to enable the user of the manual to find his own personal preference.<sup>209</sup> I would slightly rephrase this assessment. I rather think that what we have here is an effort to adapt a Lower Egyptian text for Upper Egyptian users. I would suppose that the graphic system of this text is most likely to have originated in Alexandria, where the grammarians would be most inclined to use a spiritus asper for  $h$ , to place accents on vowels and to mark word division. With that system in place, some Egyptian-language incantations were written down, at first of course in the Lower Egyptian dialect (which still conserved the distinction between  $h/\underline{h}$  and  $\underline{h}$ , as does Bohairic). When the traditions traveled to Upper Egypt, the formulae were already too charged with meaning to make a complete change desirable, so their strange graphic system was retained; and also their exotic dialect was not simply abandoned but only supplemented

206 For the rather confused actual writings, see Kasser, in: Diebner & Kasser, *Hamburger Papyrus Bil.* 1, 115f.

207 It is probable that more than one act of copying separates the preserved manuscript from the original text.

208 It might be proposed that there is some connection between this tradition and the Bohairic texts listed by Crum, in: *Proceedings of the British Academy* 1939, 259–261, which have a tendency to use Greek signs instead of Demotic-derived ones (especially  $\times$  instead of  $\delta$ ).

209 Satzinger, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 172–174; idem, in: Giversen, Krause & Nagel (eds.), *Fs Kasser*, 220.

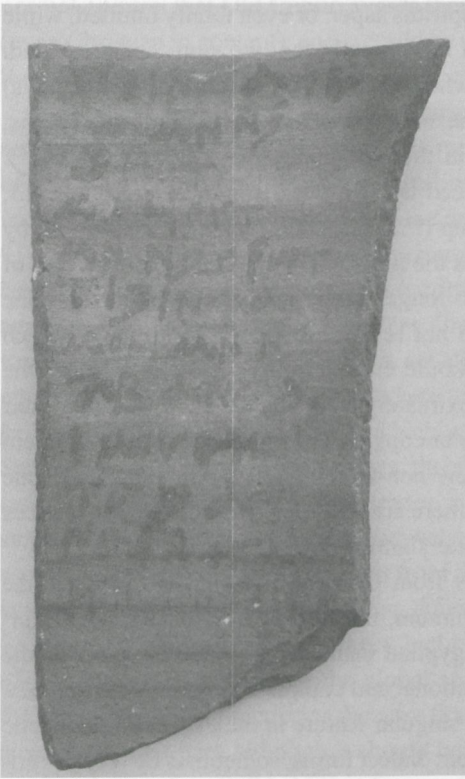


Fig. 22: Ostrakon from Kellis (P. Kellis Copt. 129)

in places by the indication of more familiar options.

Linguistically, the Old Coptic sections in the love charm are largely in a language which I would classify without hesitation as being Coptic, not Demotic. The only pre-Coptic feature is the relative form  $\epsilon\mu\epsilon\zeta\iota\epsilon$  'whom (NN) has born' which is found in the fixed expression  $\eta\eta\mu\ \epsilon\mu\epsilon\zeta\iota\epsilon\ \eta\eta\mu$  'NN whom NN has born'. This means that the way of writing these sections, which differs so much from the free and complete use of the needed Demotic-derived signs in chronologically earlier 'Old Coptic' texts, cannot be ascribed to an early model with a more immature writing system that was copied out later in pBN 574. Rather it has to be recognized as simply a different approach to the same problem and something which cannot be placed in a chronological line between earlier 'Old Coptic' and 'standard Coptic' but is an independent system in its own right.

Furthermore, in order to better put the 'Old Coptic' passages in the Greek magical papyri into perspective, we should not forget that these papyri contain a significant number of Egyptian deities and short phrases written down completely in Greek writing without any indication of non-Greek sounds.

There is an Old Coptic text on an ostrakon from Kellis in the Oasis of Dakhla (fig. 22).<sup>210</sup> From its archaeological context, it can be dated to the third century CE. It stands out among the corpus of 'Old Coptic' for two reasons. The first is that it is an ordinary letter, while the rest of the Old Coptic corpus is made up of subliterate genres like divinatory treatises, religion and magic. The second is that it is different from normal Coptic only insofar as the additional signs have paleographically quite different forms. The form  $\gamma$  for  $\alpha$  is still strongly slanting and with a small head. The  $\alpha$  is not so much simply the Demotic form as an independent effort at adapting it to other Coptic letter-shapes, with a result quite different

210 Gardner, in: *ZPE* 125 (1999); Kasser, in: Immerzeel & van der Vliet (eds.), *Coptic Studies*, 79–96. Gardner, Alcock & Funk, *Coptic Documentary Texts from Kellis*, Volume 2, 299–302. It should be stressed that there are no instances in the text of this ostrakon where a sound derived from ancient  $h$  is used; thus there is no basis for judging whether this sound was still preserved in the speech of the writer of the ostrakon (and eventually rendered by something like  $\epsilon$  or  $\eta$ ) or had fallen together with  $\delta$  (the arguments by Kasser, in: Immerzeel & van der Vliet (eds.), *Coptic Studies*, 86 note 17 are hardly cogent).



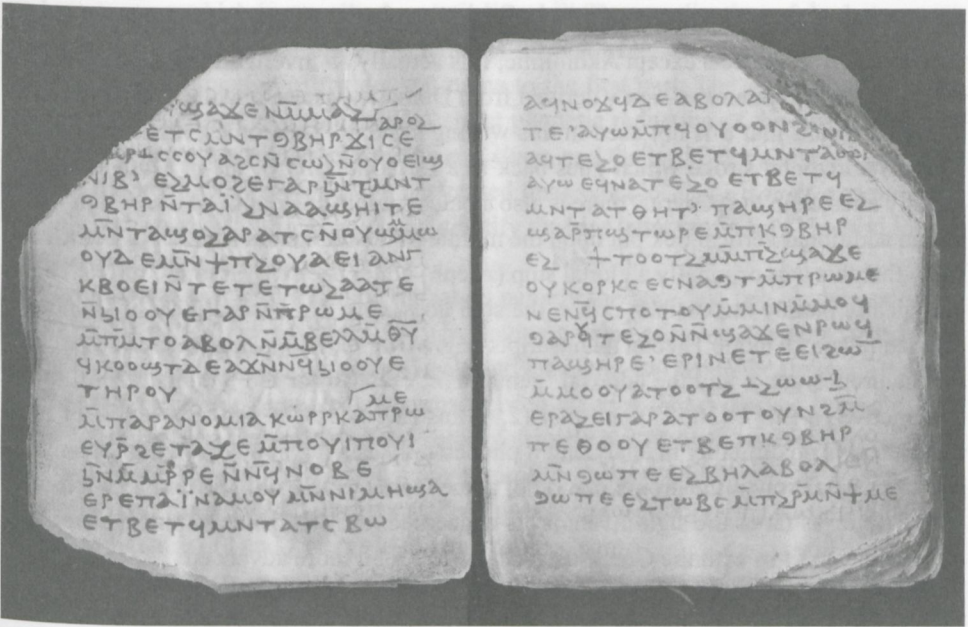


Fig. 23: Papyrus Bodmer VI

from that of mainstream Coptic. The  $\mathfrak{z}$  for  $\omega$  is particularly remarkable. Actually, Demotic writing has two different shapes of the sign for  $\delta$ . One, more elaborate, is predominant in early Demotic as well as in Roman period literary hands, and that is the one from which the actual ‘standard’ Coptic sign-shape is derived. The other, more abbreviated shape is predominant in Ptolemaic times as well as a few Roman period hands mainly from southern Upper Egypt;<sup>211</sup> among the Old Coptic texts it is used in the horoscope of pLondon 98 as well as the glosses to the magical papyrus of London and Leiden. This is the shape lying at the root of the sign of the Kellis ostrakon. Finally, the Kellis ostrakon has also preserved  $\mathfrak{b}$  (b) as a distinct sign.<sup>212</sup> These criteria allow it to be analyzed with some likelihood as a specifically South-Egyptian writing tradition. Aside from the graphic peculiarities, however, the text is linguistically Coptic, not Demotic.

Finally, we should mention Papyrus Bodmer VI (Proverbs; fig. 23),<sup>213</sup> which is normally dated to the fourth or the end of the third century CE, as retaining some ‘Old Coptic’ signs; indeed, for the reasons explained above, the writing system of this papyrus is in many ways a continuation of the horoscope of pLondon 98. Besides the standard signs present in normal Coptic writing (including  $\mathfrak{b}$  which is otherwise usual only in Bohairic),

211 In the later Roman period the abbreviated form seems to be more frequent in the south (e.g. pBM 10070 + Leiden I 383; pBM 10588) than in the north (the literary manuscripts of the Fayum region normally have the more elaborate form).

212 The alleged difference between the forms in lines 3, 5 and 10 suggested by the editor seems to me due simply to slight damage of the curved section at the right side of the sign in the first two cases.

213 Edition Kasser, *Papyrus Bodmer VI*; for the writing system see especially idem, in: *Le Muséon* 116 (2003).

the text has several additional ones. There is a special sign 9 for etymological *h* which becomes *š* in all dialects except Akhmimic; it is actually an inverted form of the Demotic sign *h*.<sup>214</sup> For Egyptian *k*, a sign 2 derived from Demotic *k* is used, while *k'* is rendered by κ (which means that σ is not used in this writing system). Sometimes, *n* is expressed by a single horizontal stroke which goes back to a Demotic form of the *n*. Much more frequently attested in the papyrus, there is also a paleographical variant 1 of that *n* sign which has an additional vertical tick put upon the middle of the horizontal sign.<sup>215</sup> Kasser tried to show that this was originally a glottal stop (Aleph) going back to Demotic 3 or *i*.<sup>216</sup> This is graphically plainly impossible; rather, the sign goes back to a variant form of Demotic *n* attested in late Demotic Theban manuscripts (e.g. pBM 10070 + pLeiden I 383) especially for the preposition *n* and the adnexal 'genitive' *n*, but also for the 'younger' form of the conjunctive (*n-i*:*ir=k* (20, 27) and *n-st* (2, 9) instead of *mtw=k* and *mtw=w*).<sup>217</sup> In most cases there is no difficulty in analyzing it phonetically as an *n*; in others it might point to a sort of nasalization in the pronunciation of some words.<sup>218</sup> All told, the text is graphically 'Old Coptic' as far as the sign-inventory is concerned; only the paleographical adaptation of the signs to fit in with the Greek-derived signs is a bit more advanced.

## Conclusions

Having traced these different steps, one last point remains to be discussed, namely the names of the letters. There is an indigenous tradition of the names of the letters of the Coptic alphabet.<sup>219</sup> While those of Greek derivation preserved their old names, only with slight phonetic developments, the names of the signs of Demotic origin are a bit more interesting. Now, as already noted above, there was a late Egyptian alphabetical order based on the sequence of the Old South-Arabian script and memorized by means of bird names. The logical assumption would be that these bird names would have been conserved, and indeed this can be confirmed in some cases.<sup>220</sup> The 4 has the name of *fay*. For the bird,

214 Kasser, *Papyrus Bodmer VI*, XXI erroneously takes it as going back to Egyptian *h*.

215 The sign of the IFAO Copte font renders the actual shape not quite correctly; the horizontal stroke is significantly longer than the vertical one.

216 Kasser, *Papyrus Bodmer VI*, XIXf. (proposing only the derivation from Demotic 3); idem, in: Orlandi & Wisse (eds.), *Acts of the Second International Congress of Coptic Studies*, especially 93–101 (noting the frequent confusion of 1 and 2); idem, in: Atiya (ed.), *The Coptic Encyclopedia* 8, 44 (proposing to derive it from Demotic *i* with some influence coming from 3).

217 For some points, see already Peust, *Egyptian Phonology*, 210; more fully Quack, in: *ZDMG* 153 (2003), 447. This contributes to the specifically southern Upper Egyptian character of the writing. The writing of the conjunctive is especially interesting, since the conjunctive forms with monosyllabic prefix are consistently written with the 1-sign in pBodmer VI (see Kasser, in: *Le Muséon* 116 (2003), 302).

218 The hypotheses of Kasser, in: *Enchoria* 11 (1982), especially 47–49; idem, *Le Muséon* 116 (2003), 295–308 are in need of correction.

219 See the list in Peust, *Egyptian Phonology*, 58–60.

220 Zauzich, in: *Enchoria* 26 (2000), esp. 152–154; Gaudard, in: Bailleur-LeSuer (ed.), *Between Heaven and Hell*, 67.



we have a name which is actually *fy-sʿ* 'tail-lifter'.<sup>221</sup> The vocalization of the letter-name would fit if we assume that the bird's name is formed using an ancient participle.<sup>222</sup> So, here we have a reduction of the ancient name to the first part. The *æ* is called *djandja*, and the bird letter name here is *čnčn*. A slight phonetic reduction of the final syllable of the name seems to have taken place. The *σ* is *k'ima*, and the bird letter name is *kymy*. This shows a different vocalization of the unstressed final syllable. The *z* is *hōri*, and on a still unpublished fragment at Berkeley, I can identify the bird letter name *hry*. The bird for *š* is not yet identified.

There is one sign of the Coptic alphabet, namely the very last one, Ⲛ, whose origin seems problematic. It stands out already by having a value of two successive sounds, *ti* – which is otherwise attested for a few Greek-derived signs, but would be unique for a sign of Demotic origin in Coptic. It has normally been claimed that it derives from the form of the infinitive *ti* in Demotic, but the actual forms do not fit well; and furthermore it is a point of some concern that this sign never turns up in any 'Old-Coptic' text (where we always have Ⲛⲓ for his sound-sequence). For this reason the proposal by Kasser<sup>223</sup> that it is actually a ligature of *t* and *i* seems to me quite convincing.

I will endeavor to summarize here the basic stages of the evolution, even though it should be stressed that many important steps are only traceable in a pitifully few manuscripts, and that the paleographical dating of key texts is often less certain than one would wish.

For several centuries, there were occasions for writing down the Egyptian language by means of Greek letters without any pressing need being felt to express in an exact way those sounds which could not be written in Greek.<sup>224</sup> This writing system has been called 'Graeco-Egyptian' here.<sup>225</sup>

There was a certain inner-Egyptian desire to make the recitation of traditional formulae easier. At first this was achieved by transposing them entirely into Demotic writing (in some places frequently, less so in others). Later, we can see a system of supralinear pronunciation aids which at first was based entirely on Egyptian writing but could indicate vowels quite precisely. This system is first attested at about the beginning of Roman rule and continues up to the second century CE before being increasingly superseded by a glossing system

221 The name suggests that this might be the wag-tail; for discussion see Gaudard, in: Régen & Servajean (eds.), *Verba manent*, 167 note 16.

222 Layton, *A Coptic Grammar* (Second Edition), 95f.

223 Kasser, in: Hasitzka (ed.), *Das Alte Ägypten und seine Nachbarn*.

224 This militates strongly against the proposal by McBride, in: *JSSSEA* 19 (1989), 90f. that Coptic writing developed in the mixed Graeco-Egyptian milieu of the Ptolemaic period where bilingual people with interest in religion were concerned about the accurate rendering of the sacred sounds.

225 The name is calqued on that of the 'Graeco-Babyloniaca' system which renders Mesopotamian languages (Sumerian and Akkadian) in Greek letters (also without the aid of additional signs for expressing non-Greek sounds – perhaps because cuneiform as a mainly syllabic writing system did not possess signs for pure consonants); for the evidence see Geller, in: *Zeitschrift für Assyriologie* 87 (1997); Westenholz, in: *Zeitschrift für Assyriologie* 97 (2007); Ambos, in: Quack (ed.), *Ägyptische Rituale der griechisch-römischen Zeit*, 353. Other scholars, e.g. Kasser and Bosson, call it 'pre-Old-Coptic' which sounds too teleological to me.

based on the Greek alphabet. Both these systems were initially focused on rendering the vowels of the Egyptian language, but the second one soon developed into a complete rendering of the sound of the Egyptian words, and in that process came to include signs of Demotic derivation in order to express those sounds of the Egyptian language not existent in Greek. The system based on Egyptian writing is called 'late syllabic writing' here. The other, Greek-based, system corresponds to what is now generally known as 'Old Coptic'.

At around 100 CE at the latest, a fully functional system for rendering Egyptian by means of Greek letters and additional signs derived from Demotic is in place in the Fayum, Middle and Upper Egypt – or rather several slightly divergent systems which differ especially in the signs chosen for rendering *š* and *k'*: two different, equally valid Demotic options were available for rendering *š* (i.e. *š* and *h*) and for rendering *k'* (i.e. *k* and *g*), and for *š* there even existed two basic paleographical variants (ϣ and ϣϣ). Most importantly, in the writing of the velars as such, the more northern systems write *k* by means of Greek κ and use a Demotic-derived sign for *k'*, while the more southern ones use Greek κ for *k'* and a Demotic-derived sign for *k*. With very few exceptions, once it was decided to include Demotic-derived signs, a complete system was established where all non-Greek sounds present in the local dialect would be rendered adequately. The multitude of slightly different solutions is no surprise, as it fits into the general image of Egyptian writing of the Roman period which was characterized by regionalization, with quite divergent local paleographic and orthographic norms.<sup>226</sup> The fact that we normally have only one attestation for each of the systems makes this look a bit like an experimental phase, but I would say that the actual solutions are generally quite finished and consistent (with the exception of the PGM IV-passages); so if there was any preliminary experimental phase, it should be located somewhat earlier, during the first century CE (and is not clearly documented<sup>227</sup>).

It seems quite clear that the system of writing the Egyptian language by means of Greek signs plus additional signs derived from Demotic came into being in an Egyptian priestly milieu. The Greeks, by contrast, were quite happy with their imperfect rendering of Egyptian sounds. Still, for the priests it was mainly a helping device, more often glossing texts in traditional writing than replacing them. The fact that its fullest applications are seen mainly in scholastic texts might well indicate that it was predominantly used as a medium of instruction, and thus would have had considerably less prestige than the traditional Egyptian writing, perhaps a bit like today's pinyin system for rendering the Chinese language in European characters.<sup>228</sup> This is in keeping with the fact that numerically the Egyptian literary or subliterate texts in hieratic and Demotic greatly outnumber the Old Coptic texts even in the second century CE, and that the percentage of hieratic texts with glosses is very small.<sup>229</sup>

226 Quack, in: Cromwell & Grossman (eds.), *Scribal Variation*.

227 One possible candidate for it might be pBerlin P 14447 + PSI Inv. I. 78, as well as the manual used for the decan names of pLondon 98.

228 Given the political independence and economic power of China, however, it is unlikely for the foreseeable future that this will become the new general way of writing Chinese.

229 Accordingly, the 'urgent desire' of which Kahle, *Bala'izah*, 252 speaks certainly has to be toned down.



Still, it must be asked why the Egyptian priesthood turned away fairly early from their 'syllabic' system based solely on Egyptian writing traditions in favor of a more Greek-based system. Was the latter perceived as more powerful or easier to learn? Or was this preference due to a social development? The increasing marginalization of Egyptian writing in the Roman period,<sup>230</sup> due to administrative pressure, quite naturally exposed the Egyptians to a larger amount of Greek writing.<sup>231</sup> This is likely to have contributed significantly to the ultimate choice in favor of a basically Greek-based writing system for rendering the Egyptian language when other systems with less or even no input from Greek writing would have been theoretically possible.

What we know as the standard Coptic alphabet grew out of one of these systems, actually one which is not well attested; the strongest affinities appear with what was used in northern Middle Egypt and (less closely) the Northern Fayum.<sup>232</sup> 'Standard' Coptic writing is likely to have started either in the Delta or in Middle Egypt;<sup>233</sup> southern Upper Egypt can be excluded because of the different handling of the velars.

I do not have a definitive answer as to why it was this particular system (which is not intrinsically better than any alternative) which became generalized, but I would guess that the reasons have to be sought in the history of the Coptic church: the first leading center to produce and disseminate Coptic Christian texts on a large scale is likely to have been the one whose writing habits were imitated and generalized. It should be remarked that Bohairic writing (making use of the Demotic-derived sign ⲛ for *h*) must go back to a time when Demotic was still in active use,<sup>234</sup> while Akhmimic writing (using Ⲛ for the same sound) is derived from a form of Coptic writing (probably Saïdic)<sup>235</sup> where that sound had been lost, so it was indicated by a diacritic mark without going back to Demotic writing for getting a fitting sign.

Concomitantly, as we have seen, there was another, more Greek-based system, originally probably located in or near Alexandria, where the use of Demotic-derived signs was kept to a minimum and the influence from Greek grammarians is tangible.<sup>236</sup> This

230 See Stadler, in: Riggs (ed.), *The Oxford Handbook of Roman Egypt*, esp. 466f.

231 See Kaplony-Heckel, in: *Studien zur Altägyptischen Kultur* 1 (1974), 241, who argues (specifically for the Munich papyrus) that Greek letters were familiar to the teacher as well as the student.

232 Of the different attestations, the Michigan papyrus (from Soknopaiou Nesos) and the pBM 10808 (from Oxyrhynchus) are relatively close to standard Coptic writing; to be sure, they have (especially pBM 10808) signs no longer used in Coptic, but they also contain, especially pBM 10808, all the signs which are used in Standard Coptic. The more southern manuscripts are significantly more divergent.

233 It must be kept in mind that for important regions like the Memphite area there is no relevant documentation available.

234 We have very little early documentation for Bohairic, but at least pBodmer III shows that there did exist early Bohairic manuscripts.

235 This assumption would be backed up by the fact that several major Akhmimic manuscripts have been proven to be based on Saïdic models, see Till, *Die achmimische Version der zwölf kleinen Propheten*, XXX; Böhlig, *Proverbientexte*, 35–76; idem, *Der achmimische Proverbientext nach Ms. Berol. orient. oct. 987*, XIV–XVI; Polotsky, in: *OLZ* 55 (1960), 23f.

236 If my hypothesis about the geographical localization of this system is correct, it would militate against the theory of McBride, in: *JSSEA* 19 (1989), 94–98, who ascribes the origin of Coptic to

is poorly attested, and only in Upper-Egyptian offshoots from it, but seems to have co-existed for some time with the other system.

Finally, we have the various solutions developed in the late Demotic magical texts, which seem to a considerable degree to have been the product of a few select people. They look very much like a ‘bricolage’<sup>237</sup> where chunks of pre-existing systems are adapted to create ad-hoc solutions.

This sketch, based on a good many previously unknown or misunderstood testimonies, might provide some arguments that are relevant to the conflict of opinion between Frankfurter and Bagnall concerning some key issues. Frankfurter saw a direct connection from the Egyptian temples to the Christian monasteries.<sup>238</sup> According to him, ‘the main locus in Coptic society for ritual expertise was the monastic scriptorium and the ecclesiastical apparatus of Coptic shrines’.<sup>239</sup> Furthermore, based on the Old Coptic texts, he was of the opinion that Coptic as a medium came about in the temple for ritual purposes. So he posits that some early Coptic writers may well have carried traditional assumptions about the power of writing and vocalized sacred texts into the monasteries along with their skill in Coptic translation. He provided evidence of Coptic hagiographic records mentioning the conversion of sons of pagan priests to Christianity.<sup>240</sup> In this way an image of late Egypt takes form with monks coming from a traditional priestly background who might have continued their traditional literary and religious sensibilities.

Bagnall disputed this,<sup>241</sup> pointing out that at Kellis, documentary Coptic papyri were attested in a non-monastic community within some fifteen to twenty years of the earliest known monastic use. Moreover, he disputed that there was a direct connection between Old Coptic and Coptic. This last point can indeed be refined by my present survey, which shows that it was not ‘Old Coptic’ en bloc that was the ancestor of Coptic, but rather that ‘standard’ Coptic writing grew out of one of the existing versions of ‘Old’ Coptic,<sup>242</sup> while the others are rather ‘siblings’ than ‘parents’. Still, that by no means excludes that one such system was transferred from a temple-based use (primarily for teaching purposes) to a Christian group (or rather, several groups, if we include the Gnostics) as well as (probably secondarily) the Manichaeans.<sup>243</sup> The logical candidate for carrying out such a transmission would certainly have been sons of priests trained in a temple school (but perhaps not getting a reasonably paid job in the temple and for that reason turning away from their traditions). It would be difficult to propose any other social group in Roman Egypt that

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Lower Egypt, especially Alexandria.

237 The term is, of course, taken over from Lévi-Strauss, *La pensée sauvage*.

238 Frankfurter, *Religion*, 248–264.

239 Frankfurter, *Religion*, 258.

240 Frankfurter, *Religion*, 262f.

241 Bagnall, in: Gabra (ed.), *Christianity and Monasticism*, 12f.

242 The main step which still remained to be taken was the paleographical development of the Demotic-derived signs to bring them into greater aesthetic harmony with the Greek-derived signs.

243 I feel unable to judge definitively if the Manichaeans received their writing system independently from the Christian communities, but the general similarity of the script makes that rather unlikely (although the Kellis ostrakon might be a candidate for independent transmission of a writing system).



would have had the knowledge of Demotic writing required to devise the Demotic-based additional letters.

Bagnall's idea that glossing was due to the obscurity of hieratic as such<sup>244</sup> must be called into question or at least nuanced. While the few hieratic manuscripts with glosses stand out sharply also for the non-Egyptologist, the basic fact is that until deep into the second century AD, we have huge amounts of hieratic manuscripts being produced,<sup>245</sup> of which by far the greater part dispense with any form of glossing. Besides, the glosses in the late Demotic magical papyri as well as the Demotic name-list in Munich and the single gloss in pLouvre E 10488 + pBerlin P 15499 should warn us not to give too much weight to the issue of hieratic. We even have now two cases where a Demotic and an 'Old Coptic' version of the same composition, or at least a free variant thereof, are positively attested.

Furthermore, at least the Old Coptic Horoscope and the Michigan papyrus with the divinatory treatise are very much texts of communication, not simply texts which function efficaciously by way of sound,<sup>246</sup> and even the letter to Thot preserved on the Schmidt papyrus, while it might have been used with a performative reading, was not the kind of text where exact duplication of traditional invocations was important.

One final question should at least be posed, even if it is difficult to answer: How might things have evolved without Christianity? As I have shown, fully functional writing systems close to what later became standard Coptic writing were in place without any influence from Christianity.<sup>247</sup> It is certain that the Christians contributed to the ultimate downfall of the more traditional writing systems. Still, we might ask ourselves if, even in the framework of a functioning polytheistic system, hieratic and Demotic writing might not gradually have eroded away in favor of a writing system mainly based on Greek traditions.

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<sup>244</sup> Bagnall, in: Gabra (ed.), *Christianity and Monasticism*, 17.

<sup>245</sup> Ryholt, in: Lippert & Schentuleit (eds.), *Tebytnis und Soknopaiou Nesos*, 142, indicates about 100 hieratic manuscripts for Tebtunis alone, and that number is rather likely to rise in the future since the hieratic papyri from Tebtunis have thus far been less intensely studied than the Demotic ones.

<sup>246</sup> This shows that the position of Frankfurter, *Religion*, 250–252 concerning the ritual function of Old Coptic is too extreme, and that Bagnall, in: Gabra (ed.), *Christianity and Monasticism*, 16f. is wrong to claim that the Old Coptic texts (with the exception of the Kellis ostraca) do not form a system of communication. Modern scholars are too inclined to consider divinatory treatises as 'arcane' subjects closely affiliated to magic (see recently Naether & Ross, in: Depauw & Broux (eds.), *Acts International Conference of Demotists Leuven*, especially 202–205), and tend not to understand that from the perspective of ancient users they were very much scientific treatises (see on this Quack, in: Imhausen & Pommerening (eds.), *Writings of Early Scholars*).

<sup>247</sup> This is in keeping with the fact (to which Andrea Jördens has drawn my attention) that there is no tradition of a Christian inventor of the Coptic script (in contrast to e.g. Mesrop Maštoc' for Armenian, Wulfilas for Gothic and Cyril for Old Church Slavonic).

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