

# **Greek-Coptic script-mixing in Egyptian personal names and toponyms of Greek documents**

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# GREEK-COPTIC SCRIPT-MIXING IN EGYPTIAN PERSONAL NAMES AND TOPONYMS OF GREEK DOCUMENTS

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This paper investigates the inclusion of “Coptic-only” letters in the spelling of Egyptian personal names and toponyms in otherwise Greek documents. A diachronic analysis of eighty documentary texts (4<sup>th</sup>-8<sup>th</sup> c. CE), primarily on papyrus, shows an increase of evidence in the sixth century, in line with recent literature on the evolution of documentary Coptic. As opposed to earlier papyri, which were mainly everyday texts with highly problematic Greek and interference from Egyptian, many later documents were of higher legal value, penned by bilingual scribes who were proficient in Greek, who could incorporate Coptic characters into their Greek writing, proving that script-mixing could be unrelated to poor linguistic competence. The phenomenon seems to have arisen from an unconscious cognitive process of *ad hoc* phoneme-to-grapheme conversion, which offered different spelling variants, and was triggered by the Egyptian origin of names, the special phonemes that certain Coptic graphemes represented, and the lack of inflection amidst the Greek text.

**Keywords:** script-mixing; name; spelling; digraphia; papyrology

## I. Introduction<sup>1</sup>

The long-standing dominance of Greek in the study of papyri, in spite of their multicultural and multilingual environment, has been recognized and criticized by many (e.g. Bagnall 2009, xix; van Minnen 1993, 14). This criticism has not gone unheard, as Coptic papyrology has gained significant ground over recent years. More careful examination of documents in Coptic contested widely held generalizations about its use and gave way to new observations and insights. The role of Coptic beyond private correspondence has often been underestimated in the field of documentary papyrology. In recent decades, an increasing number of researchers studied the position of Coptic in documentary papyri (Gardner and Choat 2004; MacCoull 1997, 2007; van der Vliet 2013), and more specifically in legal and administrative documents (e.g. Bagnall and Worp 2004; Delattre and Fournet 2018; Förster, Fournet, and Richter 2012; Fournet 2010; Garel 2020; MacCoull 2013; Richter 2013), proving that it is more noteworthy than previously assumed. Despite first making its appearance<sup>2</sup> in Greek literary sources of biblical content in the third century (Fournet 2020a, 6-9), Coptic would later enjoy more favorable circumstances for the widening of its use. The fourth and fifth centuries may be important for

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<sup>1</sup> This research was conducted as part of my PhD in the context of the ERC-project “Everyday Writing in Graeco-Roman and Late Antique Egypt (I – VIII AD): A Socio-Semiotic Study of Communicative Variation” (EVWRIT). This work was supported by the European Research Council (Horizon 2020 research and innovation programme, Starting Grant Nr. 756487). I express my gratitude to the two anonymous reviewers and the editor, as well as my supervisor Klaas Bentein, my co-supervisor Yasmine Amory, Joanne Vera Stolk, and Michael Zellmann-Rohrer for their suggestions and comments on an earlier version of the paper. Any remaining errors are my own. For granting me permission to publish the parts of the images of papyri found in this article, I would like to thank Andrea Jördens and Elena Obuhovich, and also Claudia Kreuzsaler, who also kindly brought to my attention one of the documents used for my corpus.

<sup>2</sup> Earlier, less standardized versions of the graphic (and for the most part also linguistic) variety referred to as “Coptic”, called “Old Coptic”, were used before the third century, and seem to have emerged from a Greek-based glossing system borrowing Demotic-derived signs for certain Egyptian sounds, possibly under the pressure of Roman rule and administration (for an overview of the evolution of the Coptic script, see Quack 2017).

the development of documentary Coptic, but surviving documents are mainly private or business letters<sup>3</sup> usually connected to monastic circles (Fournet 2020a, 9-14, 18). The sixth century is considered as the true turning point in the history of Coptic as a legal language. Papaconstantinou (2008, 84-86) lists several conditions that facilitated this development, from the power and prestige that monastic communities<sup>4</sup> and the Church had acquired at this point to the distancing of Egyptians from imperial law through the *Novels*, which resulted in the decline of Latin as a language of law, and through the availability of more “local” paths to justice (notably with arbitrations).

Fournet (2020a, 76-148) offers a detailed discussion of these developments, which created fertile ground for legal Coptic. He additionally demonstrates that, as opposed to the fourth and fifth centuries, sixth-century documents show that the Egyptian language surpassed the rural and monastic milieus and was also used by urban elites. Furthermore, he observes that the phenomenon appears to be exclusive to the south of Egypt.<sup>5</sup> He proceeds to provide a geographical interpretation of this exclusivity (remoteness from Alexandria, the monastic character of the Thebaid, and the influential figure of Shenute), but also a chronological political explanation for the increase of Coptic documents during the decades 600-610 (political turbulence and instability), and 620-630 (Sassanian conquest and detachment from Byzantine authority). Advances in the legal and judicial system seem to have operated for the benefit of Coptic, bringing justice closer to the Egyptian population, and cultivating the legal aspects of their native tongue. The fact that the years 550-642 offer a larger number of Coptic documents in general is considered indicative of a “change in the linguistic-cultural paradigm” (Fournet 2020a, 97), which, even if incapable of completely depriving Greek of its well-established prestige, reduced its area of influence, to the advantage of the language of the natives.

While Coptic legal acts before the Arab conquest are far from numerous, and of a temporary, non-binding character, the first “genuine” ones seem to have been drawn up by “truly bilingual people – more specifically, digraphs” (Fournet 2020a, 82). This observation is important, because it shifts, or rather broadens, the perspective of the origins and evolution of documentary and legal Coptic from the Egyptian language to Coptic writing, and from its speakers to its writers. The study of papyri has most often taken writing into consideration, with the treatment of paleographic aspects or the investigation of literacy levels of authors. More recently, this important aspect of the study of language has been enhanced with more linguistics-oriented approaches, dealing with topics such as orthography (e.g. Stolk 2020). Script use and choice, another relevant area of study, is increasingly gaining ground, usually connected to multilingualism and language contact. Cromwell (2010; 2017), for instance, who brings together concepts and insights from bilingualism and paleography, introduces the term *graphic bilingualism* for the description of the scribe Aristophanes’ choice of visually differentiating between his “Greek” (“administrative”) and “Coptic” (“standard”) hands. These efforts are in line with Sebba (2012, 12, 17), who calls for more substantial research on written multilingual

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<sup>3</sup> Fournet (2020a, 18-20) points to *P.Kellis* VII 123, a loan receipt in Coptic written in letter form, as the sole exception to this trend.

<sup>4</sup> For a more detailed discussion of the role of monasticism and the Church in the development of Coptic for legal purposes see Fournet 2020a, 112-148.

<sup>5</sup> Cf. Papaconstantinou 2008, 82: “dans la partie sud du pays, entre Syène et Hermopolis”. Some of these points are also mentioned in Richter 2013.

phenomena, where the “complete text, taken as a visual and linguistic whole” is analyzed, and literacy practices surrounding its composition are taken into account.

Adopting the view that both script choices and paleographic features are crucial for the study of bilingual or bicultural phenomena in papyrological sources, this paper investigates whether a parallel to the historical developments in documentary Coptic, i.e. the increase in number, (legal) prestige, and areas of use from the sixth century onwards, can be found in Greek writing, especially in script choices. To answer this question while maintaining the focus on script rather than language choice, a special bilingual phenomenon was examined, which combines a “minimum” change of language (at the word level, if considered a change at all) with a simultaneous “minimum” change in script (at the grapheme level), namely the appearance of Egyptian personal names and toponyms in documents otherwise written in Greek, e.g. Πιῶζ (Copt. πιαζ “the field”), used in the composition of a placename, in the Greek document *P.Cair.Masp.* II 67128.

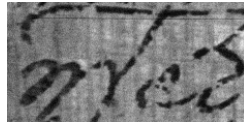


Figure 1. Detail from *P.Cair.Masp.* II 67128 (Aphrodito, 547),<sup>6</sup> r<sup>o</sup>, l. 28: Πιῶζ (© Photographic Archive of Papyri in the Cairo Museum, CG67128; JE40884; SR2212).

After summarizing existing discussions, as well as problems impeding the systematic study of this phenomenon (2), an overview and general description of the corpus is provided (3). To make diachronic observations clearer, the relevant texts are divided into periods, “early” (fourth and fifth centuries CE) (4) and “late” (sixth to eighth centuries CE) (5). Following the above observations, it will be necessary to examine the paleographic features of these proper names, more generally the writing of the document in which they appear, and the linguistic skills of the writer. In this way, the paper seeks to answer whether patterns and changes or differences in a) language skills and linguistic background of writers (Greek competence, bilingualism, Egyptian interference), as well as orthographic variation (5.1), b) paleography (linearity, superlinear strokes, ligatures) (esp. 5.2), and c) document types (private/official) can be detected and associated with existing findings. The study closes with an attempt to explain why Coptic letters appear exclusively in names (6), followed by conclusions and future directions (7).

## 2. *State of the art and difficulties*

This is not the first time Greek-Coptic script-mixing in names has been noticed in Greek Byzantine papyri. An early discussion of the use of Coptic letters in Egyptian placenames and personal names by notaries in Byzantine Aphrodito can be found in Keenan (1988, 162-163). He mentions the example of Πιῶζ, and notes the presence of *shai*, *hori*, and *djandja* in account documents, assuming it might be connected to the local Coptic dialect. A couple of decades later, Richter (2010, 204) observed the same phenomenon (with the addition of *kjima*) in Greek *merismos* accounts of the early eighth century. Continuing with papyri from Aphrodito, Marthot

<sup>6</sup> More detailed information about the dating of the papyri of the corpus can be found in the Appendix.

and Vanderheyden (2016, 224-225), as part of their investigation of the *bilinguisme toponymique* in the area, refer to the occasional addition of *hori* in Greek texts to Egyptian names of fields and other micro-toponyms formed with Πια-. Quack (2017, 66) makes a general mention of the phenomenon, advocating a less strict distinction between the Greek and Coptic alphabets.

As expected, the notes in papyrus editions with names written in this way may also include relevant comments (especially the ones with many occurrences, such as *P.Cair.Masp.* or *P.Lond.* IV). The extent of these comments varies, but there are some considerable contributions among them. What is interesting about editions, however, is not just their notes, but also the editorial practice they follow. In some, the whole name is printed as Coptic. For example, in her preliminary edition of *P.Lond.Herm.* 1, MacCoull (1987, 101) prefers 6εc to 6εc. The fact that Crum uses a Coptic font only for the individual letters in his earlier notes on the same document in *P.Lond.Copt.* I 1075 (cf. the list of names, pp. 448-450) is remarkable, as it gives the impression of a conscious editorial choice employed by MacCoull (1987). The same happens in the case of *T.Varie* 10, where the scribe uses a clearly quadrilinear writing style with long ascending and descending strokes extending beyond two imaginary lines for the whole text; notwithstanding the fact that this writing style is maintained, the two names πετρωx and κατωxει (ll. 3, 15) are fully rendered in Coptic font by Pintaudi and Sijpesteijn.<sup>7</sup>

A different practice was followed by other authors and editors, who, rather than graphic “homogeneity” in the transcription or language-script correspondence, seem to have prioritized accurately conveying paleography even at the word level. Similar considerations must have made Gascou (1983, 226) correct the name in *CPR* V 26, ll. 395, 635 to Π6αλε; the *kjima* grapheme had initially been read as *kappa*, possibly influenced by the Greek environment of the word, though *kappas* throughout the papyrus do not resemble the second letter of this name enough to support this reading. This earlier reading may be attributed to the Greek transliteration/variant of the Egyptian name, where *kappa* indeed corresponds to the Coptic *kjima*, as attested in other documents, even within the same one (cf. §4). The practice of only rendering the Coptic letter of names with this writing can already be found in the three editions of Maspero (e.g. *P.Cair.Masp.* I 67058, col. 7, l. 20: Kαxιβ), and was once again more extensively applied by Gascou (1994) in his edition of the lengthy *P.Sorb.* II 69. An important contribution to the matter is that of Bagnall, Keenan, and MacCoull (2011), where the edition of *P.Lond.Herm.* 1 not only embraces the same editorial strategy, but also describes some of the different practices followed in the past, and, perhaps for the first time, briefly but explicitly reflects on the subject (Bagnall, Keenan, and MacCoull 2011, 16).

The fact that a consistent line in terms of editorial practice regarding the writing of Egyptian names with Coptic characters has not been followed, in combination with the fact that these Coptic letters have sometimes been overlooked and transcribed as Greek, makes their collection and study even more challenging. Moreover, even when the phenomenon is noticed, existing research seems to be restricted to relatively minor comments, and it mostly focuses on documents from Aphrodito from the sixth and the eighth centuries. These limitations do not help with forming a clear image of the dissemination and evolution of this writing practice, and indicate the need for a systematic study.

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<sup>7</sup> See printed illustration of papyrus image in *T.Varie*, Tav. XII.

### 3. Collection of Egyptian names with Coptic letters

While data collection on the topic is not an easy task and has justifiably discouraged further research, it is nevertheless possible. Documentary papyrological sources in Greek from the third century (after the appearance of Coptic) onwards were examined to detect as many Egyptian words as possible that contain graphemes only present in the Coptic alphabet. This investigation took place using three techniques, in a complementary manner. In the frame of the database of the project *Everyday Writing in Graeco-Roman and Late Antique Egypt: A Socio-Semiotic Study of Communicative Variation* (EVWRIT), a special character recognition tool was created. This tool assigns a script value (in this case, “Greek” and “Coptic”) to every character in a transcribed text. It then calculates and provides information about the number and consequent percentage of characters of each script in every text. This allowed searching for Greek texts with low percentages of Coptic letters (compared to those of Greek), and these documents were considered potential candidates for displaying this writing phenomenon. A second method involved looking for previously discovered spellings, and similar ones, in papyrological search engines such as the Papyrological Navigator.<sup>8</sup> Another technique was to seek, in editions or other relevant literature, notes and references pointing to certain writings or the same phenomenon elsewhere. A resulting problem, primarily with the first two methods, is their direct dependence on transcriptions. These were commonly problematic and inaccurate, and sometimes came with codification issues which made Coptic letters untraceable. Due to issues like these, it is imperative to acknowledge that data collection was by no means exhaustive. In any case, to account for such pitfalls, it was essential to confirm the writing of the existing data set on (the image of) the original document.

This process resulted in a corpus of eighty texts (see Appendix), the majority of which were written on papyrus, a few on ostraca or parchment, and one on a wooden tablet. Their timeframe extends from the fourth to the eighth centuries CE. Figure 2 illustrates the distribution of the corpus across these centuries. For minimum loss of information, documents whose date is uncertain are equally distributed between the centuries to which they have been assigned in the graph, e.g. from the three documents dated to either the fifth or sixth century, one and a half is added to fifth-century documents and the remaining one and a half to the sixth-century ones (cf. Van Beek and Depauw 2013).

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<sup>8</sup> The website can be accessed through <http://papyri.info/>.

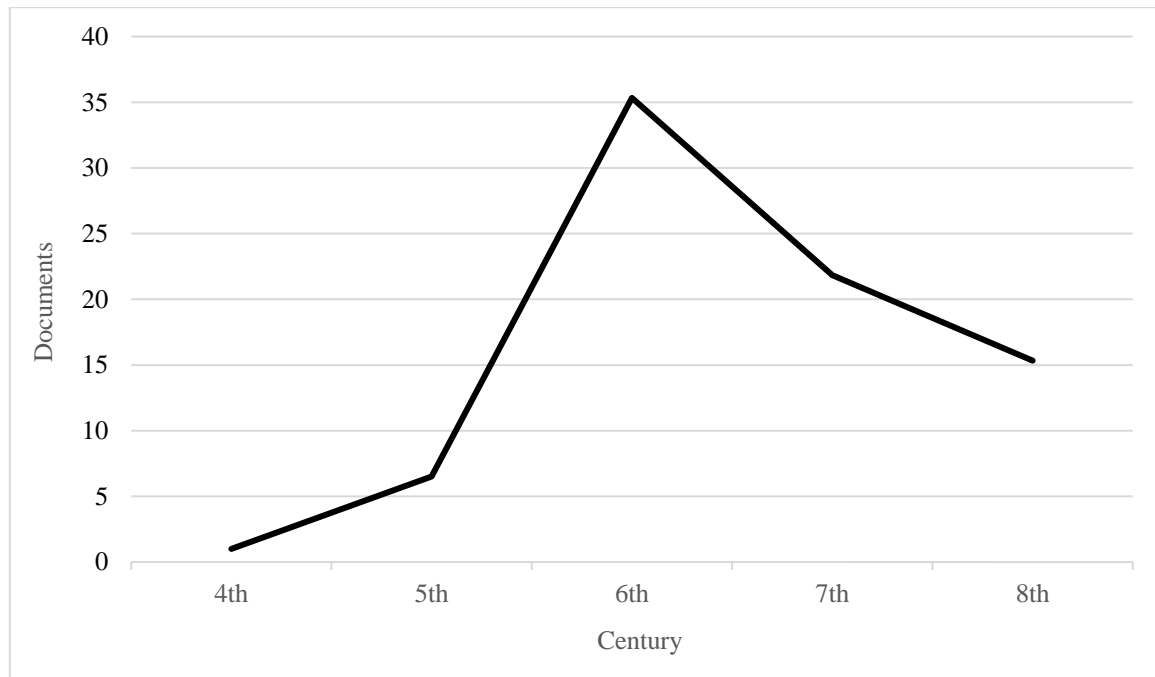


Figure 2. Chronological distribution of corpus.

It is evident that earlier centuries offer fewer occurrences of the phenomenon, as it appears in only one document from the fourth century, five from the fifth, and another three which are dated to either the fifth or the sixth century. There is a clear rise in the number of these texts in the sixth century (thirty documents, plus seven dated to the sixth or the seventh century). A decline in our findings starts in the seventh century, which nevertheless offers a substantial amount of evidence (seventeen certainly dated documents), and continues in the eighth century, from which it was still possible to find fourteen documents.

These texts contain Egyptian<sup>9</sup> names of either people or places, which are written in Greek, but with one or two Coptic letters. The Coptic characters found are *hori* (Ζ) (most commonly, found in more than half of the texts, mainly in Πιαζ), *djandja* (Ξ), *shai* (Ϡ), *kjima* (Ϟ), and *fai* (Ϝ) (in just a couple of texts). As for places of origin, Aphrodito (the Dioskoros and Basilios archives) is the most common, followed by the Hermopolite nome, and fewer instances from several other places (e.g. the Apollonopolite nome). Regarding the types of documents found, most consist of accounts/registers, but we also find other types of lists, a considerable number of contracts, and a few letters, petitions, receipts, and others. Beyond this general image obtained from an overview of the corpus, it is useful to divide texts into two groups, “early” (fourth and fifth centuries) (4) and “late” (sixth to eighth centuries) (5), in order to examine their content, language, and paleography in more detail, and observe any diachronic changes.

#### 4. The early documents (4<sup>th</sup>-5<sup>th</sup> c.)

<sup>9</sup> There are a handful of names that do not have an Egyptian origin, such as biblical/Hebrew or Arabic personal names: *P.Bad.* IV 93 (Hermopolite, 7<sup>th</sup> c.), r<sup>o</sup>, l. 56: Δαρετ, *P.Lond.Herm.* 1 (Hermopolis, 546-547?), e.g. 5r<sup>o</sup>, l. 11: Νωζε, *P.Sorb.Copt.* 44 (Middle Egypt?, end of 6<sup>th</sup>-7<sup>th</sup> c.), l. 2: Αβραζα[μ], and *P.Sorb.Copt.* 45 (Middle Egypt?, 7<sup>th</sup>-8<sup>th</sup> c.), l. 2: Παωιτ.

Among the earliest of our attestations, it should first be noted that no Greek texts with names containing Coptic letters were found in documentary material dating to the third century. This means that our sources begin in the fourth century, where we nevertheless find only one instance, and start becoming more numerous in the fifth century.

It is worth taking a closer look at the single document from the fourth century, constituting the earliest documentary evidence of this writing phenomenon for Greek and Coptic scripts. It is *P.Neph.* 12 (Omboi?, 4<sup>th</sup> c., after 352), a private letter from the Nephros archive, sent by the monk Serapion, who was on a journey and had ended up in Omboi in Upper Egypt, to his brethren and some of his superiors (including Nephros) at the monastery of Hathor. The monk's Greek is highly problematic, especially his case inflection. He writes, for example, objects in the nominative case (e.g. l. 10: ἀσπάζομαι Παπνοῦτις ἀδελφὸς Ἀνουβίων (l. ἀσπάζομαι Παπνοῦτιν ἀδελφὸν Ἀνουβίωνος) "I greet Papnoutis, my brother, son of Anoubion"), avoiding the declension of personal names through the use of apostrophe in place of Greek endings, or neglecting case agreement (e.g. l. 1: τῷ ἀγαπητῷ μου πατρὶ ἅπα Πετεχῶν (l. Πετεχῶντι) ὁ πατήρ (l. τῷ πατρί) τῆς μονῆς "to my beloved father Apa Petechon, the father of the monastery"). Other errors pertain to grammatical gender (e.g. l. 16: ἐν τῇ (l. τῷ) μοναστηρίῳ "at the monastery"), and spelling (e.g. l. 20: κυμυτήρι[ον], l. κοιμητήριον "cemetery"). Outside of greetings and formulaic phrasing, problems become even more common.<sup>10</sup>

A few of the particularities described above may be perceived as traces of grammatical or syntactic interference from Coptic, yet there are others, especially on the lexical level, that may point to the Egyptian language in a more straightforward way. It is in this context that *hori* first appears in the spelling of the Herakleopolite village Taamorou in l. 11. There, we read the sentence ἀσπάζομαι Ὡρ πα Ταζμουρω.<sup>11</sup> The word following the name of the person whom Serapion greets, πα, is the Coptic possessive prefix denoting his origin (ⲡⲁ). This is a common way to indicate origin in Fayum and wider Middle Egypt (cf. Richter 2008, 242). Therefore, we can translate the phrase as "I greet Hor, *the one from* Tahmouro".<sup>12</sup> A writing of the place with the addition of *hori* appears a second time in l. 17, though this time the name ends in *omicron-upsilon* instead of *omega*: ἀσπάζομαι Σεραπίων ἀ[ ] Ταζμ[ο]υρου. Some letters preceding the toponym in this second instance have unfortunately been lost, and the possibility of the same Coptic prefix cannot be confirmed. What makes these choices even more interesting is the fact that, apart from the entirely Coptic spelling ταζμογρω, "fully Greek" versions of the toponym have also been attested, in earlier (second and third), but also in some fourth-century documents: Τααμορου, Τααμωρου, Ταμωρω, Ταμμωρω, Ταμούρω,<sup>13</sup> and Ταακμωρο[ῦ].<sup>14</sup> Nonetheless, the author of the letter prefers a "hybrid" Greek-Coptic spelling for the name of the village each time that he mentions it. It seems tempting to attribute this choice to the Coptic ⲡⲁ, which could have triggered the use of the Egyptian (and not the Greek) version of the name, and, consequently, the writing of *hori*. This hypothesis is strengthened by the fact that the name

<sup>10</sup> This was already pointed out in the edition of the text in *P.Neph.*, p.74: "Wo er sich über reine Grußformeln hinauswagt, macht er noch mehr Fehler".

<sup>11</sup> The improved reading Ταζμουρω can be found in *BL IX* 174.

<sup>12</sup> Cf. Heuser 1929, 65 for this formation of Coptic names.

<sup>13</sup> Cf. *P.Neph.*, p.76, n. on l. 11, where these spellings and the documents in which they appear are listed.

<sup>14</sup> This final spelling is found in *SB XX* 14391 (Taamorou?, ca. 192-193), l. 1. See also Cauderlier 1988 on this document, esp. pp. 318, 320-321 for Taamorou, and *TM Geo* 3053 on Trismegistos (TM Places) for different spelling variants and their attestations.



Hor, appearing in the same phrase, but preceding πα, is spelled without the Coptic letter, despite being a plausible candidate for a spelling with *hori*.<sup>15</sup>

The paleography of the papyrus also attests to Coptic influence on Serapion's writing. The hand is uneven and irregular, with scattered Coptic letter forms used for the representation of Greek letters. A closer look at the two writings of Taamorou (Fig. 3, 4), which are found only six lines apart, illustrates this observation.

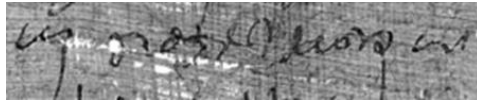


Figure 3. Detail from *P.Neph.* 12, l. 11: “Ωρ πα Ταμουρω” (Foto: Elke Fuchs; © Institut für Papyrologie, Universität Heidelberg, P.Heid. Inv. G 2146).



Figure 4. Detail from *P.Neph.* 12, l. 17: “Ταμ[ο]υρω” Foto: Elke Fuchs; © Institut für Papyrologie, Universität Heidelberg, P.Heid. Inv. G 2146).

There are some inconsistencies between the two writings. For example, we can see both the taller, curved “Coptic-like” (Fig. 3) letter form for *upsilon*, and the shorter “Greek-like” form (Fig. 4). In the case of the first name, the bilinearity of the Coptic style is respected. The writing of the second name, apart from not following the bilinear style as faithfully, is also characterized by a more fluid and ligatured *ductus*, consistent with the style of Greek handwriting current at the time. The Coptic-only characters are clearly written and unligatured in both occurrences. As seen in the language, the writing too seems to be affected by Coptic. In combination with the problematic language and the lexical traces of Coptic, this evidence indicates that Serapion's mother tongue must have been Egyptian, and his main written language Coptic, while his skills in Greek were limited.

In the five documents from the fifth century (*P.Gron.* 6,<sup>16</sup> *PSI* IV 304, *P.Oxy.* XVI 2036, *P.Herm.* 62, *CPR* V 26), the picture is not drastically different. Spelling and/or case interchanges can be spotted in the Greek of all these texts. Some exhibit clearer traces of influence from Coptic, making the assumption of an Egyptian background for their writers more plausible. In *P.Gron.* 6, r<sup>o</sup>1, l. 16, we meet the Coptic letter within the same environment found in *P.Neph.* 12, namely Παμμεξε (“the one from Oxyrhynchus”). The author of *P.Oxy.* XVI 2036 seems to use a Greek transliteration of Coptic τζιμεν (“the wife of”), θιμεν, in l. 9, while his unpracticed hand also shows better familiarity with Coptic compared to Greek writing. Meanwhile, the writer of *CPR* V 26 not only uses another curious transliteration of an Egyptian word (ll. 918, 933: ταμσορεμ), but also uses both the “hybrid” writing of the Egyptian version and the “Greek” version of a name in his text: Πααλε in ll. 395, 635, and Πκαλης in ll. 448, 449,

<sup>15</sup> Cf. examples like the one in the stela ÄMUL inv. 5142 = *O.Lips.Copt.* I 55, ll. 1-3: εἰς θεὸς ὁ βοηθὸς | ζωρ Ἰωάννης | ὁ ἅγιος Μιχαήλ.

<sup>16</sup> *P.Gron.* 6 is tentatively dated to the fifth century.

529.<sup>17</sup> In addition, he renders the /ps/ of Tapsois not with the grapheme <ψ> as expected, but with <πσ> (l. 500: Ταπσόις) (cf. Gascou 1983, 226). Stolk, Mihálykó, and Grassien (forthcoming) observe the same phenomenon concerning the writing of Greek digraphs ξ and ψ in the Greek of Egyptian monks from Western Thebes, viewing it as a Coptic orthographic tendency. In all five texts, Coptic letters remain unligatured. Overall, both the language and writing/paleography of fifth-century documents create the impression of authors with problematic Greek, who were more familiar with the Egyptian language, its rules, and its writing.<sup>18</sup>

Regarding the nature of the documents, the majority consists of lists with names, sometimes connected to payments (*P.Gron.* 6, *P.Oxy.* XVI 2036, *CPR* V 26), other times of less clear purpose (*PSI* IV 304). *P.Herm.* 62, a contract of division of property or joint lease, can be seen as an exception to this trend, though the same kind of linguistic errors are present, and the writing is irregular.

There are certain patterns of recurring errors in the language of these texts, which can be detected and categorized as follows:

- a) On the phonological level, there are particular difficulties in choosing the right spelling for vowels and diphthongs with similar phonetic values, especially when it comes to <ο, ω>, <ι, ει>, <ι, οι>, <ε, αι>, but also for double consonants (simplification) (e.g. *P.Oxy.* XVI 2036: ἐπικίου, l. ἐποικίου (“hamlet”); μίζον, l. μείζων (“elder”)). There is also confusion between certain pairs of Greek phonemes, especially between <δ, τ> or <κ, γ>, showing trouble with distinguishing between voiced-voiceless stops (e.g. *CPR* V 26, l. 631: Γενάτιος, l. Γεννάδιος). A different pattern is the orthography of digraphs such as <ψ>, which are spelled with two consonantal graphemes (Greek or even a combination of Greek and Coptic): cf. the example of Ταπσόις instead of Ταψόις above.
- b) On the morphological and syntactic levels, declension creates many problems. The main difficulties include choosing the right case endings, selecting the correct case depending on the syntactic role of the word, and following agreement rules, with increasing problems when it comes to oblique cases, e.g. nominative instead of genitive for patronymics, prepositions (notably διά “through, by”) plus nominative or an incorrect oblique case (e.g. *PSI* IV 304, l. 6: εις Ναγώγεως “in Nagogis”). To these we may add errors in choices of grammatical gender or gender agreement, such as the use of feminine or masculine instead of the Greek neuter gender (like ἐν τῇ (l. τῷ) μοναστηρίῳ in *P.Neph.* 12 as mentioned above).

These types of errors are comparable to the ones collected and analyzed by Stolk, Mihálykó, and Grassien (forthcoming),<sup>19</sup> as part of their research on non-standard orthographic choices in

<sup>17</sup> All writings are used for the same individual except for the final instance (l. 529), which seems to refer to another person.

<sup>18</sup> Three texts in our corpus which are dated to either the fifth or the sixth century, *CPR* IX 63, *P.Jena* II 19, and *SB* XX 14709, were not included in the discussion of fifth- or sixth-century documents because of their uncertain dating.

<sup>19</sup> Stolk, Mihálykó, and Grassien (forthcoming) also observe the use of *hori* in the spelling of Greek, again most commonly in names, although, as expected from the nature of their corpus, not in Egyptian, but primarily in religious names (e.g. Ἰωζαννης in *P.Mon.Epiph.* 601, l. 3).

liturgical texts composed by monks in Thebes. Aiming at going beyond attributing divergent spellings to poor education, they use a cognitive model to elucidate pronunciation and perception of the writers' Greek. Their material starts slightly later, coming from the last decade of the sixth to the first half of the eighth centuries. Even if, due to the literary and liturgical character of the texts, different issues come into play (transmission, writing from what is heard in the liturgy, etc.), their linguistic analysis is useful for the interpretation of several errors found in both corpora. Frequency appears to be a plausible factor in spelling choices, especially when it comes to vowels. There seems to be a preference for more frequent spellings (or "high contingency" spellings, as Stolk, Mihálykó, and Grassien call them). This preference might lead writers to choices such as *iota* (<ι>), and less commonly *omicron-iota* (<οι>), even in cases where the latter would fit the correct spelling of a word, for the representation of the phoneme /i/. Frequency of spellings could also facilitate the understanding of cases where errors increase in less formulaic parts of texts and thus rarer constructions, as we saw, for example, in the case of *P.Neph.* 12, and as often happens in Coptic letters, where the opening is more standardized than the body of the letter. At the same time, certain spelling choices may stem from features of the Egyptian language, and its differences from Greek. One of them might be the absence of a distinction between voiceless and voiced stops in Egyptian, which could result in confusion between *tau* (<τ>) and *delta* (<δ>) or *kappa* (<κ>) and *gamma* (<γ>), as we noted above (Dahlgren 2017, 58; Layton 2000, 31, 33). Additionally, problems with the neuter grammatical gender and gender agreement involving it could be associated with its absence in Egyptian. Spellings of digraphs such as <ψ> with two consonants, e.g. <πσ> for this example, may be attributed to orthographic rules in Coptic. To put it briefly, although some of the difficulties in the correct use of language could be made by any contemporary writer of Greek irrespective of background (e.g. certain vowel spelling errors), most of them illustrate better familiarity with the Egyptian language, especially when Egyptian lexical items are present.

### 5. *Later documents (6<sup>th</sup>-8<sup>th</sup> c.)*

The sixth century seems to mark the beginning of an important period for the writing phenomenon in question. Documents from this century form a significant part of the corpus, accounting for thirty of the eighty texts (see Appendix), nineteen of which are from the archive of Flavius Dioskoros of Aphroditos. Names with Coptic letters are found in seventeen documents from the seventh century, while fourteen tax registers from the archive of the pagarch Basilios constitute our sources from the eighth century.

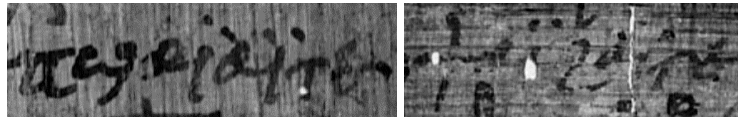
Apart from numerical superiority, one of the most noticeable differences of later texts compared to earlier ones is the type of documents that host these hybrid writings. Next to private documents, there are more documents of official character or higher legal value. Indicatively, the sixth century offers nine contracts, two petitions, one document of legal proceedings, and one debt acknowledgment, and the seventh another four contracts. The corpus of the eighth century is admittedly not very diverse, since it belongs to the same environment, the pagarch's office, but still has an official character.

In terms of language, one meets largely the same problems faced by writers in the fourth and fifth centuries. This does not diminish the fact that changes do take place in the linguistic competence of writers during this period. Alongside authors whose Greek language skills are poor and heavily affected by their native tongue, we now find writers with (nearly) flawless

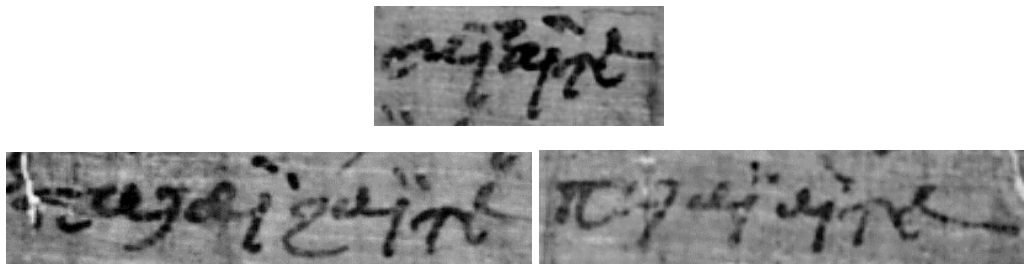
Greek, who seem capable of composing longer and at times less formulaic and abbreviated texts without serious problems. We furthermore have access to hybrid spellings of Egyptian names from some known writers in documents from this century, like Flavius Dioskoros, who has often been recognized as an educated bilingual and digraph (Papaconstantinou 2008).

### 5.1 Spelling variation

As the sixth, seventh, and eighth centuries offer a larger number of documents, it is easier to observe the orthographic variation of Egyptian names, not only in the writing of different authors, but also within that of the same author. To begin with intra-writer variation, it is found that the same writer offers occurrences of different spellings of the same name, either within the same text or across different documents. A case in point is the variety of spellings, four in total, for the name Pshaihaite by the hand of Flavius Dioskoros from Aphrodito, as illustrated in two documents of private accounts below (Fig. 5-9):



Figures 5, 6. Details from *P.Cair.Masp.* II 67143 (Aphrodito, 6<sup>th</sup> c.), r°, l. 18: Πωαῖαῖτε (left) – v°, l. 8: Ψαῖζαῖτε (right) (© Photographic Archive of Papyri in the Cairo Museum, CG67143; JE40887; SR2222).



Figures 7-9. Details from *P.Cair.Masp.* II 67144 (Aphrodito, 6<sup>th</sup> c.), ll. 3, 4, 8: Σαῖαῖτε (top) – Πωαῖαῖτε (left) – Πωαῖζαῖτε (right) (© Photographic Archive of Papyri in the Cairo Museum, CG67144; JE40888; SR2223).

Different spellings include the following:

- a. Πωαῖαῖτε (*P.Cair.Masp.* II 67143, r°, l. 18; *P.Cair.Masp.* II 67144, l. 8)
- b. Ψαῖζαῖτε (*P.Cair.Masp.* II 67143, v, l. 8)
- c. Σαῖαῖτε (*P.Cair.Masp.* II 67144, l. 3)
- d. Πωαῖζαῖτε (*P.Cair.Masp.* II 67144, l. 4)

Orthographic variation is primarily triggered by the presence of /ps/ in the name, typically represented by the digraph <ψ> in Greek writing, which is uncommon in Coptic, where we usually find <πσ>.<sup>20</sup> Dioskoros uses such a spelling once (b). In two other occurrences of Pshaihaite (a, d), the digraph is replaced by a Greek *pi* and a Coptic *shai*. This seems to indicate that the phonetic value of Greek *psi* and this hybrid combination must have been perceived as very similar if not identical by Dioskoros, both constituting plausible spelling options.

<sup>20</sup> Cf. the spelling errors of Egyptian writers in §4. a.

Conversely, a spelling with *shai* could potentially contribute to a more accurate representation of the sound of the name in Egyptian, where we meet the writing πωαιζαιτε (Heuser 1929, 28, 44, 124).<sup>21</sup> In any case, the spelling with <ψ> for an Egyptian name shows the attempt of Dioskoros to comply with Greek orthographic rules. A different spelling is found in the third example (c), where /ps/ is simplified to merely /s/ with the use of *sigma*. To add to the richness of orthographic variation, *hori*, which is part of the original Coptic spelling, is spotted twice (b, d) between the two pairs of *alpha-iota* in the name, while it is absent in the two remaining occurrences (a, c), even if the writing of the first one includes a Coptic letter. It therefore cannot be postulated that Dioskoros was consistently making Egyptian names more or less “Greek” by spelling interventions. It rather looks like he was drawing parallels between Greek and Coptic writing when such names appeared, using the spelling rules and conventions of the two, since both were familiar to him. At times these orthographic conventions were conflicting, resulting in what looks like an *ad hoc* production of new spellings of the same names.

Intra-writer orthographic variation regarding Egyptian names goes even further, enhanced by Greek or “Grecised” forms. In *CPR* IX 46 (Hermopolite, 639-644/658-664) among other Greek-Coptic spellings of names, we find the writing Πεθωω (v<sup>o</sup>, l. 10) (Crum 1939a, 65d: “the Ethiopian/Nubian”) (fig. 10).<sup>22</sup>

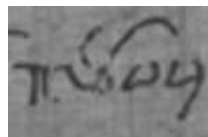


Figure 10. Detail from *CPR* IX 46 (Hermopolite, 639-644/658-664), v<sup>o</sup>, l. 10: Πεθωω (© Austrian National Library, Collection of Papyri, P.Vindob. G 1281).

Preceding (v<sup>o</sup>, ll. 4, 8) and following (v<sup>o</sup>, l. 14) this Greek-Coptic spelling, we find the Greek form Πεκυσίου (Fig. 11).

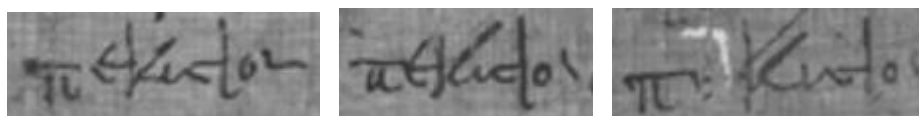


Figure 11. Details from *CPR* IX 46 (Hermopolite, 639-644/658-664), v<sup>o</sup>, ll. 4, 8, 14: Πεκυσίου (© Austrian National Library, Collection of Papyri, P.Vindob. G 1281).

This variant, clearly written by the same scribe, is the Greek equivalent of the aforementioned Egyptian name, frequently found in papyri as Πεκῦσις (or Πεκύσιος). There are many attestations of the form Πεκυσίου used for the genitive case (most from the sixth to the eighth centuries), as happens in this document. It is interesting that the writer was aware of both the Egyptian and the Greek versions of the name, and that he could use an inflected form for the latter as dictated by the syntax of its environment (e.g. v<sup>o</sup>, l. 8: Παχυμίου Πεκυσίου συντελ(είας)

<sup>21</sup> This name is a combination (“Doppelname”) of the two names πωαι and ζαιτε (Heuser 1929, 123-124).

<sup>22</sup> The spelling Πεθωω is also found in *P.Bal.* II 392 (Apa Apollo Monastery, 6<sup>th</sup>-8<sup>th</sup> c.), l. 5 and *P.Lond.* IV 1419 (Aphrodito, 716-717), l. 961.

ἀρου(ρῶν) α δ' “tax contribution of Pachumis son of Pekysios for 1 1/4 *arouras* of land”). This late document is noteworthy in that it combines some Coptic features (e.g. the ending –ε of the name Μαπτῦρε in v<sup>o</sup>, l. 2 or the prefix T- at the beginning of names (cf. Heuser 1929, 10f, 90) like Τκῶκ in *CPR* IX 45 –part of same codex– v<sup>o</sup>, l. 6) with an otherwise good competence in Greek language, and professional handwriting. This evidence points once again to an Egyptian who has received decent training in the Greek language and writing system. Apart from different orthographies, we can simultaneously spot the same spellings in documents drawn up by the same person. For example, in two contracts of the late sixth century from Pathyris, *SPP* III 129, l. 7 and *SPP* III 130, l. 5, where the same handwriting can be identified, we find an identical spelling of the name Αματεπωοῖ. This could be viewed as the outcome of following the same cognitive path for the conversion of graphemes to phonemes.

As for inter-writer orthographic variation, it is not surprising that the names of places and people receive different spellings from different writers. For instance, Piah Se, commonly attested in Aphrodito documents, may be written in Greek letters with Πια- finished off with a *hori*, as happens with many other toponyms: Πιαζ Σε.<sup>23</sup> Another hybrid spelling is Πιζαωε, with two Coptic characters, in *P.Ross.Georg.* III 41 (6<sup>th</sup> c.), l. 2. Finally, in seven other Aphrodito documents, the spelling Πια Σε, with exclusively Greek letters, is preferred.<sup>24</sup> What is perhaps more intriguing is the fact that different writers may use the same Greek-Coptic grapheme combinations for the same name. This is already evident by the example of Piah Se, as the identical spelling Πιαζ Σε is found in documents composed by different writers, for example in *P.Cair.Masp.* II 67128 by the *nomikos* Pilatos, and in *P.Lond.* V 1686 by Flavius Dioskoros.

One might claim that this is not very remarkable, given that most of the documents in which this spelling is found come from the same place and archive. There are several occurrences that weaken this argument. The spelling Πεβωω in *CPR* IX 46 (Hermopolite, 639-644/658-664) (Fig.10) can be detected in two more documents: *P.Bal.* II 392 (Apa Apollo Monastery, 6<sup>th</sup>-8<sup>th</sup> c.), l. 5 and *P.Lond.* IV 1419 (Aphrodito, 716-717), l. 961. This spelling follows the standard Coptic writing of the name, πεβωω, as in, for example, the Coptic letter *CPR* II 236 (Arsinoite, 8<sup>th</sup> c.), l. 8. In general, the spelling Πιαζ is used for the naming of different places in at least sixteen documents from various centuries, regions, and hands.<sup>25</sup> These attestations prove that sometimes the same orthographic variant could be produced not only by different writers within a certain environment, who could have received the same training, but also by scribes in different areas and periods. The image evoked here is hence a rich orthographic variation, including hybrid and Greek alternatives, both on the intra- and inter-writer levels, and a dissemination of certain spellings within the same scribal milieu and beyond. While some

<sup>23</sup> *P.Cair.Masp.* II 67128 (547), l. 28; *P.Cair.Masp.* III 67329 (May-June 524), col.1, ll. 10, 12, 15, 17; *P.Lond.* V 1686 (565), l. 28; *P.Ross.Georg.* IV 24 (early 8<sup>th</sup> c.), l. 21, a peculiar case discussed in 5.2.3.

<sup>24</sup> *P.Cair.Masp.* II 67134 (547/548 according to *BL* VIII 72), r<sup>o</sup>, l. 4; *P.Cair.Masp.* III 67325 (Aphrodito, 554/555-559/560), fol.1, v, l. 20; *P.Cair.Masp.* III 67326 (538/539? according to *BL* XIII 57), l. 9; *P.Cair.Masp.* III 67327 (540 according to *BL* VIII 74), ll. 9, 16, 24, 33, 39; *P.Lond.* V 1689 (527), l. 13; *P.Lond.* V 1702 (542/543 according to Fournet 2008, 331), l. 3; *PSI* VIII 935 (538/539? according to *BL* VIII 403), l. 3.

<sup>25</sup> *CPR* XXX 1 (Hermopolite, ca. 643-644), *P.Amh.* II 154 (Hermopolite, ca. 630-650), *P.Apoll.* 63 (Apollonopolite, 2<sup>nd</sup> half of 7<sup>th</sup> c.), *P.Apoll.* 73 (Apollonopolis, 2<sup>nd</sup> half of 7<sup>th</sup> c.), *P.Apoll.* 98 (Apollonopolis, 2<sup>nd</sup> half of 7<sup>th</sup> c.), *P.Cair.Masp.* III 67128 (Aphrodito, 547), *P.Cair.Masp.* III 67319 r<sup>o</sup> (Aphrodito?, 552/553 or 567/568), *P.Lond.* IV 1481 (Aphrodito, early 8<sup>th</sup> c.), *P.Lond.* V 1686 (Aphrodito, 565), *P.Lond.* V 1692a (Aphrodito, 554), *P.Mich.* XIII 671 (Aphrodito, 547-559), *P.Michael* 41 (Aphrodito, 554), *P.Ross.Georg.* IV 24 (Aphrodito, early 8<sup>th</sup> c.), *SB* XX 14669 (Aphrodito, 524, before the summer), *SB* XX 14705 (Aphrodito?, 6<sup>th</sup>-7<sup>th</sup> c.), *ChLA* XLI 1194 = *P.Cair.Masp.* III 67329 (Aphrodito, May-June 524).

writers might have adopted the original Coptic spellings of names, adjusting them to their Greek environment, a more general explanation for identical spellings could be simply that scribes converted phonemes to graphemes *ad hoc*, and this process could at times lead to the same orthographic outcome. This does not exclude the possibility that certain spellings with more abundant attestations, like the ones with Πιαζ, eventually spread and were adopted without a distinct phoneme-to-grapheme conversion process by each writer each time.

## 5.2 Paleography

The sixth century also proves interesting for the study of names with Coptic characters from the perspective of paleography, as new paleographic features associated with writing the names in question can henceforth be found. Although more can be said on the matter, we will first focus on the features of superlinear strokes (5.2.1) and ligatures (5.2.2), followed by some remarks on linearity and individual letter shapes (5.2.3).

### 5.2.1 Superlinear strokes

Superlinear strokes constitute the first such element, and may be spotted in twelve documents, mostly sixth-century ones – the majority of which come from Aphrodito and the archive of Flavius Dioskoros, whereas others originate in the Hermopolite – and a couple in the seventh century.<sup>26</sup> These horizontal strokes are found almost entirely above place names, with the exception of two names that refer to people (in *P.Laur.* II 29, l.10 and *P.Herm.* 34, r<sup>o</sup>, l.20). The stroke may cover the full or almost full name (e.g. Fig. 12), as happens most commonly. A case of an individual Coptic letter appearing overlined is also worth discussing (Fig. 13).

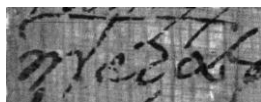


Figure 12. Detail from *P.Cair.Masp.* II 67128 (Aphrodito, 547), r<sup>o</sup>, l. 28 : Πταζ Σε (© Photographic Archive of Papyri in the Cairo Museum, CG67128; JE40884; SR2212).



Figure 13. Detail from *P.Cair.Masp.* III 67325 (Aphrodito, 554/555-559/560), fol. I, r<sup>o</sup>, l. 21: Φαμζ αι (© Photographic Archive of Papyri in the Cairo Museum, CG67325; JE40475; SR2329).

As Fournet (2020b, 155-157) explains, this diacritic sign can be used for clarifying purposes (“fonction anti-amphibolique”) or serve a deictic function in the text (“fonction déictique”),

<sup>26</sup>*P.Amh.* II 154 (Hermopolite, ca. 630-650), *P.Cair.Masp.* II 67128 (Aphrodito, 547), *P.Cair.Masp.* II 67170 (Zmin, 565), *P.Cair.Masp.* III 67325 (Aphrodito, 554/555-559/560), *P.Herm.* 34 (Hermopolis, 7<sup>th</sup> c.), *P.Lond.* V 1677 (Antinoopolis, ca. 568-570/573), *P.Lond.* V 1692a (Aphrodito, 554), *P.Lond.* V 1695 (Aphrodito, 531?), *P.Laur.* II 29 (Hermopolis, 6<sup>th</sup> c.), *P.Michael* 41 (Aphrodito, 554), *P.Ross.Georg.* III 41 (Aphrodito, 6<sup>th</sup> c.), *ChLA* XLI 1194 = *P.Cair.Masp.* III 67329 (Aphrodito, May-June 524).

signaling Egyptian names that lack Greek inflection, and might disorientate the reader.<sup>27</sup> To avoid such confusion, it may additionally indicate the beginning and end of a name, as seems to be the case for superlinear strokes such as the one in Fig. 12. Keenan (1988, 162) also observes that Aphrodito notaries used these signs to help readers identify the Egyptian components of toponyms more easily. It is tempting to say that this argument applies characteristically to the example of the placename Φαμχαῖ (Fig. 13), in the sense that only the Coptic grapheme of the word, a graphemic “intruder” within the Greek text and writing surrounding it, appears overlined.<sup>28</sup>

Even though most superlinear strokes are drawn by sixth-century Aphrodito scribes, their writers do not seem to follow a very consistent method regarding their inclusion or absence. Some use them only to highlight hybrid writings of Egyptian toponyms, those not “Grecised”/fully Greek in their writing (e.g. the *nomikos* Hermauos in *P.Lond.* V 1692a, l.11 for a toponym with Πιαζ, and not, for example, for the village Ψινάβλα in ll. 7, 8, 21).<sup>29</sup> But things are not always this straightforward, as the example of Dioskoros shows. More specifically, the archive’s protagonist indicates the part of the Egyptian toponym which combines Greek and Coptic letters in the contract *P.Cair.Masp.* II 67170, l. 20 (Χινη) in the same way; yet a closer look at the surviving text reveals that there are no other uninflected toponyms, even without Coptic letters, which he could have chosen to highlight (or not). This is what we see him doing in *P.Cair.Masp.* III 67325, where, apart from the *djandja* of Φαμχαῖ in l.21 (Fig. 13), he overlines Egyptian uninflected placenames fully written in Greek at least three times (fol. I, r<sup>o</sup>, l. 11: Παπκουκ; fol. I, v<sup>o</sup>, l. 20: Πιασε; fol. II, r<sup>o</sup>, l. 11: Φερκο). To make things even more complicated, in the short fragment of *P.Cair.Masp.* II 67144, Dioskoros adds this mark only above (uninflected) Egyptian personal names in Greek letters (ll. 5, 6, 12: Παφες, Πικαν, Παθλπε), but avoids it when it comes to names of hybrid spelling (ll. 4, 7, 8: Παταρωιν and Πααῖζαῖτε, Παταρωιν, Πααῖαῖτε), as if their “foreignness” were sufficiently conveyed visually/graphically through the use of Coptic letters.<sup>30</sup>

It appears that, in the case of Dioskoros, taking the type of document into account does not help us significantly in understanding when superlinear strokes are used for Egyptian names; nevertheless, if we focus on the twelve documents with occurrences of superlinear strokes for hybrid spellings of Egyptian names, a relationship between this paleographic feature and the official nature of texts becomes clearer. To be precise, official documents comprise the majority of these papyri, as six of them (50%) are contracts (*P.Cair.Masp.* II 67170, *P.Herm.* 34, *P.Laur.* II 29, *P.Lond.* V 1692a, *P.Lond.* V 1695, *P.Michael* 41), mainly of lease, and among the rest we also find one petition (*P.Lond.* V 1677), one debt acknowledgment/land rental agreement (*P.Cair.Masp.* II 67128), one document of legal proceedings (*P.Cair.Masp.* III 67329), and one letter concerning a hospital (*P.Amh.* II 154). There seems, then, to be a more conscious attempt to make these writings stand out in legal/official documents, isolating them from their Greek environment, and directing readers’ attention to them, either to help them with spotting them or

<sup>27</sup> It is also used to mark proper names and toponyms in Coptic documents, e.g. extensively by the skilled scribe of the record of arbitration hearings known as *P.Budge* (P.Col. inv. 600).

<sup>28</sup> Apart from its aforementioned uses, the superlinear stroke is commonly used as a signal related to syllabic formation in Coptic (Layton 2000: 30-32, 34), which is not the case for the *djandja* in Φαμχαῖ, and thus a graphic purpose such as directing the attention of readers to the Egyptian toponym remains more likely.

<sup>29</sup> It should be noted that, in this and other documents, superlinear strokes are also used for other purposes, mainly above numerals, but the present investigation focuses on names.

<sup>30</sup> Cf. Pedone 2022, 183 for a similar assumption about the toponym Piah Se in *P.Cair.Masp.* III 67329.



to facilitate their reading. These mixed spellings might have been considered as more exact renderings of the names of the people and places involved that needed to be easily traceable in legal documents in the possibility of later disagreement.

### 5.2.2 Ligatures

As another aspect of the paleography of names, it has been observed that, from the sixth century, several scribes started connecting Coptic letters with Greek letters, at times reaching the point of forming ligatures involving Greek and Coptic letters.<sup>31</sup> Most of these examples belong to documents of the sixth century, from Aphrodito and the Hermopolite nome, and consist of a Greek grapheme (<α>, <ε>, <υ>, <ι>, <τ>), usually in a preceding position, and a Coptic grapheme (ϣ, ϛ, ω, ϡ), usually following. *P.Cair.Masp.* II 67142 offers two such examples (Fig. 14, 15), where *upsilon* and *hori*, in the name Παμουϣλϣ (l.11), and *alpha* and *kjima*, in the name Παπααλϡβηϣ (l.19), appear in ligatures.

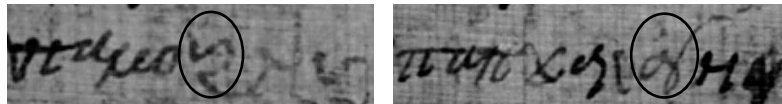


Figure 14, 15. Details from *P.Cair.Masp.* II 67142 (Aphrodito?, 547/548), col. 1, ll. 11, 19: Παμουϣλϣ, Παπααλϡβηϣ (© Photographic Archive of Papyri in the Cairo Museum, CG67142; JE40886; SR2221). (Ligatures involving Coptic letters appear circled.)

A third example, with a ligature of *alpha* and *djandja*, this time written by Flavius Dioskoros, is found in *P.Cair.Masp.* II 67141 (Fig. 16).



Figure 16. Detail from *P.Cair.Masp.* II 67141 (Aphrodito, before 547/548), fol. 5, r°, l. 8: Καα[ιβ] (© Photographic Archive of Papyri in the Cairo Museum, CG67141; JE40885; SR2220).

These instances show that these scribes had reached an advanced level of digraphia which allowed them to write and combine both Greek and Coptic letters in a confident hand. Interestingly, they were able to incorporate Coptic letters into their Greek writing in this way, making them look less “foreign” in their Greek environment.

<sup>31</sup> Occurrences are found in the following (connected/ligatured letters appear in italics): *CPR* IX 45 (Hermopolite, 639-644/658-664), v°, l. 12: Παπκουιϣτο; *CPR* XXX I (Hermopolite, ca. 643-644), r°, col. 3, l. 45: Πευρεϣ; *P.Amh.* II 154 (Hermopolite, ca. 630-650), r°, l. 3: Πιαϣοθ; *P.Cair.Masp.* II 67138 (Aphrodito, 541-546), fol. 2, r°, l. 7: Παραω; *P.Cair.Masp.* II 67141 (Aphrodito, before 547/548), fol. 5, r°, l. 8: Καα[ιβ]; *P.Cair.Masp.* II 67142 (Aphrodito?, 547/548), col. 1, ll. 11, 19: Παμουϣλϣ, Παπααλϡβηϣ; *P.Cair.Masp.* II 67288 (Aphrodito, 6<sup>th</sup> c.), col. 3, r°, l. 5: Παβιλη; *P.Lond.* IV 1471 (Aphrodito, early 8<sup>th</sup> c.): Καϣ Ψικες; *P.Lond.* IV 1481 (Aphrodito, early 8<sup>th</sup> c.): Πιαϣ Βηλει, Πιαϣ Παυελ; *P.Lond.* V 1673 [Ibion?, 6<sup>th</sup> c.], fol. 1, ll. 37, 51: Βεβουβου (twice); *P.Lond.* V 1695 (Aphrodito, 531?), r°, l. 7: Πιαϣ Πετο.

### 5.2.3 Different levels of digraphia: Writing Greek and Coptic

Alongside ligatures involving Coptic graphemes, in some cases, scribes could even adjust the writing of the Coptic characters themselves when they appeared within a Greek environment. Coptic writing is typically distinguished from Greek because it is characterized by bilinearity, which means that letters are of similar size and confined between two imaginary horizontal lines, whereas some Greek letters may extend to up to four lines, with ascending or descending strokes (Boud'hors 2020, 628-629). This difference becomes visible in our corpus through comparing the writing of Coptic letters in Greek and Coptic documents of the same writer. Once again we turn to the example of Dioskoros, juxtaposing the form of *djandja* in *P.Cair.Masp.* II 67141 (Fig. 17) and, for instance, *P.Lond.* V 1709 (Aphrodito, 566/567), written by his hand.<sup>32</sup> In the second document, an arbitration in Coptic (recto), *djandja* graphemes follow the bilinear writing of the rest of the text. For the writing of the name Κᾶξ[ιβ] in *P.Cair.Masp.* II 67141, fol. 5, r<sup>o</sup>, l. 8 (Fig. 16), however, Dioskoros seems to follow a quadrilinear, or at least not strictly bilinear, style for *djandja* (along with its ligature to the preceding *alpha*), which better fits the Greek writing of the word and document. This indicates that some of the digraph scribes of these hybrid spellings displayed high levels of flexibility in their writing, as they were able to adjust the paleography of Coptic letters according to the norms of Greek writing when necessary.

Obviously, not all late antique scribes had mastered both Greek and Coptic writing like Dioskoros. A curious occurrence of a ligature in an Egyptian name is worth mentioning here. In two documents from the Basilios archive, composed by the same scribe, namely *P.Ross.Georg.* IV 23 and 24 (Aphrodito, early 8<sup>th</sup> c.), the Greek ligature for *epsilon-iota* is used to represent the Coptic *hori*. In *P.Ross.Georg.* IV 23, l. 4, we find it in the *topos* Πιαζ Τζακουλ, a hybrid writing of which can also be traced in *P.Lond.* IV 1419 (Aphrodito, 716-717), fol. 3, l. 59 ([Πι]αζ χακουλ). Two lines below (l. 6), we see the same ligature a second time in the writing of Πιαζ Θολε, which receives an additional “Greek” spelling within the same document, Πια Θολε (l. 2). The *epsilon-iota* ligature is used two more times in *P.Ross.Georg.* IV 24 for the same toponym, as Πιαζ Θολε (ll. 7, 23; for the latter see Fig. 17), which is also written once as Πια Εθολε (l. 19) with a clear *epsilon* in place of the ligature. Moreover, the ligature is present in the writing of Πιαζ Τζαλιου (l. 10) and Πιαζ Σε (l. 21). At the same time, the scribe uses it elsewhere for its original purpose, denoting *epsilon-iota* (e.g. *P.Ross.Georg.* IV 23, l. 9 in Νοειλιου).

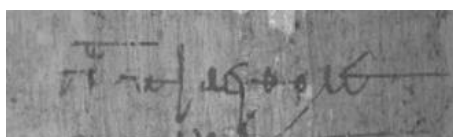


Figure 17. Detail from *P.Ross.Georg.* IV 24 (Aphrodito, early 8<sup>th</sup> c.), l. 23: τόπ(ου) Πιαζ Θολε (© The State Hermitage Museum, DB-13323 a-f).

In the notes to the edition of *P.Ross.Georg.* IV 23 (note on l. 6, p. 76), Jernstedt postulates that preferring the Greek ligature over the Coptic letter could be attributed to the fact that scribes frowned on Coptic writing. Richter (2010, 204), however, suggests that the writer was most

<sup>32</sup> Images of *P.Lond.* V 1709 are available at [http://bipab.aphrodito.info/pages\\_html/P\\_Lond\\_V\\_1709.html](http://bipab.aphrodito.info/pages_html/P_Lond_V_1709.html).

likely unable to write Coptic. This explanation seems more plausible for several reasons. To begin with, avoiding Coptic letters could simply be achieved by writing Πια, without the addition of *hori* at its end, as happens elsewhere in these and other documents. There would be no reason to add the Greek ligature on Jernstedt's explanation. Besides, scribes of the same archive use Coptic characters for the spelling of names in twelve other documents.<sup>33</sup> It seems that the scribe of *P.Ross.Georg.* IV 23 and 24 must have seen the relatively widespread spelling Πιαζ, which he then tried to reproduce. In his eyes, *hori* likely resembled the Greek *epsilon-iota* ligature visually, as he was more familiar with Greek than with Coptic writing.<sup>34</sup> The fact that he repeatedly failed to spell πιαζ correctly further supports a low competence in Coptic orthography.

There are more papyri in our corpus in which the complexity of script choice becomes evident. In the mainly Coptic *P.Lond.* IV 1573 (Aphrodito, 709-710), we may meet a hybrid writing in the short Greek part of the text (l. 33), yet the writing of the Coptic part preceding it can offer notable insights too.



Figure 18. Detail from *P.Lond.* IV 1573 (Aphrodito, 709-710), l.16: ἀνοκ ψίβε πων νημακαριος (My drawing, based on the consultation of British Library Or 6208 in the Asian and African Collection at the British Library on October 22, 2021).

In l. 16, where ἀνοκ ψίβε πων νημακαριος βικτορ “I Psike, son of the blessed Victor” can be read (Fig. 18), we find two different forms for the letter *pi* (circled in the figure): first, the one-stroke Coptic form resembling a Latin lowercase “n”, met in the rest of the Coptic text, and second, the Greek *pi* form with the “w”-like base and the horizontal crossbar on top (cf. Cromwell 2010, 228), a characteristic shape of the stylized chancery script from the Arabic period (Cavallo 2009, 136). The second is not used elsewhere in the Coptic part, but only in the Greek one. It is tempting to presume that this alternation of *pi* forms within such a small phrase can be associated with the fact that, in the first case, *pi* is attached to the Coptic term for “son”, whereas in the second, it is followed by the Greek *makarios* “blessed/deceased”, which could have triggered the writing of the Greek letter form. Unfortunately, the papyrus does not provide more evidence to further examine this hypothesis. It could as well be that the scribe unintentionally alternated between the Coptic and Greek letter forms. Another explanation has to do with the mechanics of the *ductus*. In the first *pi* (π), the writer continues the crossbar of *epsilon* (ε) and makes a down-stroke to finish the leg of *pi*, as is most economical, but in the second (ϖ), it makes more sense to stay at the topline after finishing the upward stroke of *nu*

<sup>33</sup> *P.Lond.* IV 1419 (Aphrodito, 716-717), *P.Lond.* IV 1420 (Aphrodito, 706), *P.Lond.* IV 1421 (Aphrodito, 705), *P.Lond.* IV 1422 (Aphrodito, 707-708), *P.Lond.* IV 1425 (Aphrodito, early 8<sup>th</sup> c.), *P.Lond.* IV 1431 (Aphrodito, 706-707), *P.Lond.* IV 1435 (Aphrodito, 716), *P.Lond.* IV 1449 (Aphrodito, 711), *P.Lond.* IV 1471 (Aphrodito, early 8<sup>th</sup> c.), *P.Lond.* IV 1474 (Aphrodito, early 8<sup>th</sup> c.), *P.Lond.* IV 1481 (Aphrodito, early 8<sup>th</sup> c.), [*P.Lond.* IV 1573 (Aphrodito, 709-710): a mainly Coptic document].

<sup>34</sup> Cf. Crum 1939b for the replacement of Coptic letters with Greek combinations in a number of eighth-century Coptic documents written in a Greek hand.

(N). What is certain is that the scribe was familiar with both forms and could alternate between them.

It should be mentioned that other scribes, contemporary to the ones who composed Greek-Coptic spellings of names, clearly distinguished between their Greek and Coptic handwriting. One example already analyzed is that of Aristophanes son of Johannes. Active in the eighth century, he differentiated between his Greek (or “administrative”) and Coptic (or “standard”) hands, following a different school of training, as Cromwell (2017) explains.<sup>35</sup> A more appropriate example could be that of *P.Worp*. 28, where we find two names in ll. 14 and 15. Despite the fact that the rest of the document is clearly written in a Greek style, the scribe seems to switch to a bilinear writing just for these two names (l. 14:  $\rho\chi\omicron\varsigma\iota$ , l. 15:  $\chi\epsilon\tau\eta$ ). Even in documents with hybrid writings, it is sometimes possible to find such short and abrupt changes. In *SB XX 14282* (Apollonopolis, 7<sup>th</sup> c.), v<sup>o</sup>, col. 2, l. 59 may be read as  $\delta(\iota\alpha) \text{ Ἀνθεμίου } \text{νωϥ}$ <sup>36</sup> ( $\kappa\epsilon\rho\alpha\tau\acute{\iota}\omicron\upsilon$ )  $\delta'$  “through Anthemios the great(?) 3/4 *keration*”. The contrast between the cursive and ligatured quadrilinear writing of  $\text{Ἀνθεμίου}$  and the upright bilinear writing of  $\text{νωϥ}$  is striking.<sup>37</sup>

All in all, it appears that the scribes of the hybrid writings of names, from the sixth century (if not earlier), displayed traces of Greek-Coptic bilingualism. In certain cases we can see that some of them had at least superficial knowledge of other languages and scripts, more specifically Latin in the case of legal proceedings (*P.Cair.Masp.* III 67329; cf. Pedone 2022), and Arabic in the eighth century (e.g. *P.Lond.* IV 1435). Whether this is enough to characterize them as trilingual or trigraph depends on which definition one follows.

## 6. Script choice in names

It must be clarified that the examination of Coptic-Greek spellings was not executed with an *a priori* aim of finding toponyms and personal names so written; the fact that the survey led to the collection of such names was rather the result. This could be a topic for further investigation in its own right. In his study on how Egyptian personal names were conveyed in Greek in early Ptolemaic Egypt, Muhs (2010) divides the strategies that he found into two main categories, which, as also happens in our corpus, are not mutually exclusive: translation and transliteration. He argues that translation is linked to higher competence and education in Greek, and transliteration to ignorance of the correct (translated into Greek) forms of the names. Some of the documents in this study attest to the possibility that not all scribes who transliterated Egyptian names (with or without individual Coptic characters) were unaware of their Greek counterparts or incapable of using them. Interference might still be a relevant factor for such occurrences, but it does not necessarily presuppose ignorance, especially in later centuries.

Compared to common nouns, where, in this case, Greek equivalents could be used, proper nouns are also characterized by a lower degree of translatability, which potentially encourages their transliteration. It is true that many scholars treat names as a particular lexical category and try to view their special behavior in light of language contact. Adams (2013, 211-213), for

<sup>35</sup> A similar example of a digraph able to follow and distinguish between both legal Greek and Coptic conventions in his documents is Daniel son of Heracleides (Fournet 2020a, 84-86).

<sup>36</sup> Perhaps Coptic for “great, strong” (cf. *SB XX*, p.156, n. on l.59; Worp 1990, 110).

<sup>37</sup> The image can be viewed at <https://dpul.princeton.edu/papyri/catalog/m039k824g>.

example, notices that, in inflecting languages, names might become “fossilized” in a case which is used more often, such as the nominative, and is perceived as hosting “the essence of the name” (cf. Stolk 2015, 56). Specifically for the use of Coptic letters within these uninflected, transliterated forms, a number of assumptions can be made. Concerning the “fixed” character of names, it seems possible that the lack of inflection which contrasted with the surrounding Greek text, together with the “Egyptianness”<sup>38</sup> of most of these names, triggered the use of Coptic by these scribes, whose mother tongue was Egyptian. As the rest of the letters were common in the Greek and Coptic alphabets, there was no pressing need (or conscious motivation) to switch fully to a Coptic style just for the writing of these names. It has already been recognized that, when there is significant coincidence in graphemes between two alphabets, an “overlap zone” is created (Woolard 1999, 3). This overlap between the letter-inventories of different alphabets facilitates script-mixing, which happens accidentally, as the outcome of a writer’s disorientation in a linguistic and orthographic sense (Angermeyer 2012, 263, 269). The same could apply to the inclusion of Coptic characters in otherwise (graphemically) Greek names. The likelihood of this hypothesis is strengthened by the observation that these letters appear in transliterated/uninflected, and not “Grecised”/inflected, versions of the names. This lack of inflection seems to give rise to an unconscious cognitive process, during which writers partly switch to the Coptic graphemic inventory for the representation of certain Egyptian phonemes (cf. Stolk 2021). Spelling variation functions as witness to the *ad hoc* character of this phoneme-to-grapheme conversion procedure.

The special phonetic value of Coptic-only letters could also play a role, as certain phonemes of the Egyptian language could not be accurately represented by Greek graphemes. This phonetic precision would have additional value when it comes to names, since one of their main functions is identification (Morpurgo Davies 2000, 19-20). The great majority of the types of texts that we meet in our corpus would justify such a need for accuracy in naming people and places. In tax registers, for instance, names of taxpayers constitute one of the key elements of the document. As word formation in Egyptian relied heavily on consonantal roots (Dahlgren 2017, 163), it would make sense that the Egyptian speakers who composed these texts would perceive them as a key element of names, thus resorting to Coptic consonantal graphemes for a more accurate and recognizable outcome.

At any rate, it seems difficult (or even unnecessary) to make stronger claims about the intentionality behind the inclusion of Coptic characters in the spelling of Egyptian names based on the available evidence, as happens in other cases of non-standard script choices.<sup>39</sup> This does not exclude the possibility of different interpretations, and perhaps more conscious orthographic choice, when it comes to names that appear in other types of texts. In Greek magical papyri, for example, we find spellings of magical names with Coptic letters, which could add to the mystical and encrypted nature of the texts.<sup>40</sup> This does not imply that factors like precision are not relevant in these texts, as in cases where the names of people and other creatures with a central role in the text are written in Coptic.<sup>41</sup>

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<sup>38</sup> This is not meant ethnically, as a sign of identity, but rather linguistically.

<sup>39</sup> One such example is the case of late antique Greek notarial signatures in Latin script, where Latin letters are clearly used intentionally for their legal prestige and association with Roman law (cf. Apostolakou 2020).

<sup>40</sup> An example is Thortchophanō with a *djandja* in *PGM VII 511*, for which see Betz 1986, 132 and Pachoumi 2017, 16. I thank Sofía Torallas Tovar for bringing this text to my attention.

<sup>41</sup> Some examples include the name of a race-horse (Βελζμου) to be cursed in *P.Oxy. LXXIX 5205* (Oxyrhynchus, 4<sup>th</sup>/5<sup>th</sup> c.), l. 3 or the name of the bearer (ΕΠΙΜΑΧΕ ΠΩΗΡΕ [*matronym/patronym*]) of the amulet in *P.Oxy. LXV*

What is certain for our case is that the considerable amount of collected evidence shows that Greek-Coptic script-mixing was a legitimate orthographic option in late antique documentary papyri, irrespective of the private or official character of the material. Previously described historical advances must have encouraged this spelling practice, in the sense that they provided the necessary space for the “unapologetic” use of Egyptian *vis-a-vis* the gradual decrease of Greek in documentation.

## 7. Conclusions and suggestions for future research

The systematic study of Egyptian personal names and toponyms spelled with Greek and Coptic letters in documentary sources is challenging, but valuable for better understanding the complexity of the writing of bilingual scribes in late antique Egypt. Examining the phenomenon diachronically allows us to understand its direct relationship with historical developments concerning the use of the Coptic language in documents, and more specifically in more official or legal sources. As more legally binding papyri were written in the Egyptian language, especially from the sixth century, the Coptic script also began to permeate more formal texts, including those still written in Greek. The scarce evidence from the previous two centuries is not sufficient to refute the image of Egyptian writers who, in the environment of less significant texts, turned to their native tongue and its script due to interference from Coptic, and poor education and training in Greek. Nevertheless, later centuries also brought professional, bilingual, digraph scribes who were better trained in the writing of Greek and Coptic official documents. Not only were these individuals able to pen more refined Greek, both in terms of language and paleography, but their digraphia was at times so advanced that they could make use of their different graphemic inventories, combining the two scripts within one name, and adjusting the style of Coptic letters to fit the Greek writing style of the text (with respect, for example, to ligatures and linearity). The alternation of hybrid spellings of Egyptian names and inflected Greek versions of the same names further proves that the former were not always the outcome of ignoring the Greek equivalent, and characteristically demonstrates this cognitive play between the different languages and scripts of the scribes. These Greek-Coptic spellings seem to have constituted a valid orthographic option for writing names for a considerable number of centuries, resulting in many different spelling variants. At the same time, some scribes were led to the same orthographic outcome, which occasionally managed to spread, and ended up being used by many different writers in different places (cf. Πιαζ). Writing names in this way seems to have been more popular in Aphrodito and the Hermopolite, a finding that matches the description of the south as a more welcoming ground for Coptic legal documents (Fournet 2020, 89-94). There, they could sometimes be highlighted in primarily official documents with the use of superlinear strokes, as was true for other indigenous names that were fully transliterated into Greek.

In view of the special behavior of names, and the bilingual and digraph background of scribes, the fact that these scripts are only mixed when uninflected Egyptian name forms appear does not seem coincidental. This lack of inflection, which contrasts with the surrounding Greek text, as well as the wide graphemic overlap between Greek and Coptic, might have disoriented

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4469 (Oxyrhynchus, 5<sup>th</sup> c.), ll. 21-24. (The use of Coptic in the transcription of lines 21-25 is preferred by Maltomini “in the interests of continuity”; cf. the relevant note on p.128). I thank Michael Zellmann-Rohrer for pointing me to the second text.

scribes,<sup>42</sup> and in any case created space for this script-mixing to emerge. Scribes would thus convert the phonemes of uninflected Egyptian names into the graphemes that seemed like the best fit, whether these belonged to the Greek or the Coptic graphemic inventory. Considering the distinctive phonetic values of Egyptian that Coptic-only graphemes represented, using them could also have been perceived as the most accurate way of conveying the sound of these names, with which writers were undoubtedly familiar. These processes could result in identical orthographies, but also novel spellings and variation. There are no significant reasons to argue that Coptic letters occurred as part of an attempt of Egyptian authors to stress their ethnic identity (or that of the individuals behind the names) or that this started as a conscious spelling choice in any other way. The impression created is rather that of a writing practice that emerged from the coexistence of the two alphabets in a bilingual society, which was disseminated as time went by and conditions became more auspicious for Coptic.

Some of the limitations of this research have already been touched upon. As data collection could not be exhaustive, and it is difficult to estimate the extent to which script choice is rendered faithfully in transcriptions of papyrological sources, it is possible that more data (for example, a higher number of earlier examples) may alter some of the observations. The difficulty of characterizing some of the words as names with certainty should also be kept in mind, especially when it comes to personal names. Some lexical items found in names were also meaningful as common nouns and epithets (e.g. professional titles, physical characteristics), and could be described more broadly as words used for the identification of people.

The approach followed in this paper could function as a starting point for a more detailed investigation of specific archives or digraph writers, comparing their Greek and Coptic hands in the Greek and Coptic documents that they authored, examining whether they use Greek variants of names or hybrid spellings in different types of documents, among other considerations. It would be crucial to include a wider variety of text types, such as magical or literary/liturgical, where such Greek-Coptic spellings are also found, to gain a more complete view of this writing phenomenon, and the different motivations behind it. Likewise, a thorough phonological examination (e.g. an analysis of Greek-Coptic letter correspondences or the implications of graphemic choices for phonetic perception) could shed new light on the matter.

The good knowledge of Greek language and writing that late antique scribes attained evidently did not exclude the use of Coptic letters in their Greek texts. Non-standard script choices are not always connected to low competence in the second language, or interference from the first, nor is the deliberate use of native scripts the only option left for the interpretation of these phenomena. Digraph individuals have access to a set of graphemes, which, even if belonging to different scripts, can be selected according to the needs and circumstances of what is being written. It is therefore critical to study script choice in relation to bilingualism and digraphia, with attention to paleography, as well as the surrounding socio-historical context in which scribes acted, to acquire insights into the complex mechanisms behind writing phenomena such as script-mixing. The fact that similar practices may differ from desired

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<sup>42</sup> In a different light, a scenario involving scribes trying to account for the possible disorientation of readers (occasionally supported by the addition of superlinear strokes to names with these spellings) is also noteworthy, as it points to the expectation of biscriptal reading skills.



contemporary writing standards, but have nevertheless survived to this day, makes their study even more relevant and worthwhile.

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## Appendix

### Overview of corpus in chronological order

Document	Place	Date (CE)	Type
<i>P.Neph.</i> 12	Omboi?	4 <sup>th</sup> c., after 352 ( <i>BL IX</i> 173)	Letter (private)
<i>P.Gron.</i> 6	Uncertain	5 <sup>th</sup> c.?	List (payments)
<i>P.Herm.</i> 62	Uncertain	5 <sup>th</sup> c.	Contract (division of property/joint lease?)
<i>PSI IV</i> 304	Hermopolis	5 <sup>th</sup> c.	List of names (uncertain)
<i>CPR V</i> 26	Skar (Hermopolite)	2 <sup>nd</sup> half of 5 <sup>th</sup> c. ( <i>BL IX</i> 65)	Register/List (tax)
<i>P.Oxy.</i> XVI 2036	Oxyrhynchus	Late 5 <sup>th</sup> c.	List (payments)
<i>CPR IX</i> 63	Hermopolite	5 <sup>th</sup> -6 <sup>th</sup> c.	List of names (uncertain)
<i>P.Jena II</i> 19	Uncertain	5 <sup>th</sup> -6 <sup>th</sup> c.	List (calculation of land areas)
<i>SB XX</i> 14709	Hermopolite	5 <sup>th</sup> -6 <sup>th</sup> c.	Account (agricultural work)
<i>SB XX</i> 14669 = <i>P.Freer</i> 1&2	Aphrodito	524, before the summer ( <i>BL XIII</i> 222)	Register (land)
<i>ChLA XLI</i> 1194 = <i>P.Cair.Masp.</i> III 67329	Aphrodito	524, May-June ( <i>BL XIII</i> 57)	Legal proceedings
<i>P.Lond.</i> V 1695	Aphrodito	531? (Fournet 2008, 331)	Contract (lease of land)
<i>P.Lond.</i> III 1000 = <i>Chrest. Mitt.</i> 73	Hermopolis	538 ( <i>BL VII</i> 88: 28.11.538)	Petition (loan repayment)

<i>P.Cair.Masp. I</i> 67058 (col. 7-8)	Aphrodito	538, after May 10 (Zuckerman 2004, 44)	Account (expenses)
<i>P.Cair.Masp. II</i> 67143	Aphrodito	6 <sup>th</sup> c.	Accounts (private, land)
<i>P.Cair.Masp. II</i> 67138 (fol. II)	Aphrodito	541-546 ( <i>BL IX</i> 43)	Account (expenses)
<i>P.Cair.Masp. II</i> 67139	Aphrodito	541-546 ( <i>BL IX</i> 43)	Account (expenses)
<i>P.Cair.Masp. III</i> 67330	Aphrodito	545-546 ( <i>BL</i> XIII 57)	Account (expenses)
<i>P.Lond.Herm. 1</i>	Hermopolis	546-547?	Account/register (tax)
<i>P.Cair.Masp. II</i> 67141	Aphrodito	Before 547/548 (Fournet 2008, 318)	Account (administration of private land)
<i>P.Cair.Masp. II</i> 67128	Aphrodito	547	Acknowledgment of debt?
<i>P.Cair.Masp. II</i> 67142	Aphrodito?	547/548 ( <i>BL XIII</i> 55)	Account (receipts)
<i>P.Mich. XIII 671</i>	Aphrodito	547-559 (Fournet 2016, 129)	Contract (deposit)
<i>P.Cair.Masp. III</i> 67319 r <sup>o</sup>	Aphrodito?	552/553 or 567/568 (Fournet 2008, 324)	List (pasture lands)
<i>P.Michael 41</i>	Aphrodito	554 (Fournet 2016, 129)	Contract (cession of church land)
<i>P.Lond. V 1692 (a)</i>	Aphrodito	554 ( <i>BL III</i> 98)	Contract (lease of land)
<i>P.Cair.Masp. III</i> 67325	Aphrodito	554/555-559/560 (Fournet 2020c, 145)	Accounts (administration of agricultural estate)
<i>P.Cair.Masp. II</i> 67170	Zmin (Panopolite)	565 ( <i>BL III</i> 35)	Contract (lease of land)
<i>P.Lond. V 1686</i>	Aphrodito	565	Contract (sale of land)
<i>P.Lond. V 1677</i>	Antinoopolis	ca. 568-570/573 (Fournet 2008, 330)	Petition (about misdeeds of pagarch; to official of ducal <i>taxis</i> )
<i>P.Ant. II 109</i>	Antinoopolis (found)	6 <sup>th</sup> c.	Account (contributions)
<i>P.Cair.Masp. II</i> 67144	Aphrodito	6 <sup>th</sup> c.	Account (private, uncertain)
<i>P.Cair.Masp. III</i> 67288	Aphrodito	6 <sup>th</sup> c.	List (taxpayers)
<i>P.Laur. II 29</i>	Hermopolis	6 <sup>th</sup> c. ( <i>BL IX</i> 121)	Contract (lease of vineyard)

<i>P.Lond.</i> V 1673	Ibion (Hermopolite)? written ( <i>BL</i> V 59)	6 <sup>th</sup> c.	Account (expenses?)
<i>P.Ross.Georg.</i> III 41	Aphrodito	6 <sup>th</sup> c.	Receipt (lease of land)
<i>P.L.Bat.</i> XL 63	Hermopolite	2 <sup>nd</sup> half of 6 <sup>th</sup> c.	List (payments)
<i>SPP</i> III 129 = <i>BGU</i> III 795	Pathyris	Last quarter of 6 <sup>th</sup> c. ( <i>BL</i> VIII 34)	Contract (loan)
<i>SPP</i> III 130 = <i>BGU</i> III 796	Pathyris	Last quarter of 6 <sup>th</sup> c. ( <i>BL</i> VIII 34)	Contract (loan)
<i>BGU</i> XVII 2723	Hermopolite	Late 6 <sup>th</sup> -early 7 <sup>th</sup> c. (by Gascoü & Gonis in Delattre et al. 2020, 368)	Register (tax)
<i>P.Amst.</i> I 85	Tarrouthis (Hermopolite)	6 <sup>th</sup> -7 <sup>th</sup> c.	List (payments)
<i>P.Ant.</i> III 189	Antinoopolis	6 <sup>th</sup> -7 <sup>th</sup> c.	List (“wanted” persons)
<i>P.Louvre</i> II 125	Uncertain	6 <sup>th</sup> -7 <sup>th</sup> c.	Account/list (estate administration)
<i>SB</i> XX 8	Aphrodito? (Fournet 2008, 339)	6 <sup>th</sup> -7 <sup>th</sup> c.	List (various services, goods, payments)
<i>SB</i> XXVIII 17220	Akoris (Hermopolite)	6 <sup>th</sup> -7 <sup>th</sup> c.	Uncertain
<i>P.Sorb.Copt.</i> 44	Middle Egypt?	End of 6 <sup>th</sup> -7 <sup>th</sup> c.	Receipt (delivery of oil)
<i>P.Sorb.</i> II 69	Hermopolis	618-619 ( <i>BL</i> XII 258)	Register (tax)
<i>P.Amh.</i> II 154	Hermopolite	ca. 630-650 ( <i>CPR</i> XXV, 190)	Letter (concerning a hospital)
<i>SB</i> XVI 12492 (l.10: Correction to δαμογλ [δαμουλ] by Kreuzsaler [2019: 257])	Hermopolite	638, March 18	Contract (sale, wine)
<i>CPR</i> IX 45+46	Hermopolite	639-644/658-664 (Gascoü 2013, 675)	List (tax)
<i>CPR</i> XXX 1	Hermopolite	ca. 643-644	List (delivery/requisition of building materials)
<i>CPR</i> IX 51(perhaps same codex as <i>CPR</i> IX 45+46)	Hermopolite	641-644/658-664 ( <i>BL</i> VIII 116)	List (tax)
[ <i>CPR</i> IV 35 (mainly Coptic)]	Hermopolite	7 <sup>th</sup> c.	Contract (sale of jars)]
<i>CPR</i> XIX 34	Hermopolite	7 <sup>th</sup> c.	Account (income, estate?)

<i>P.Bad.</i> IV 93	Hermopolite	7 <sup>th</sup> c.	List ( <i>BL</i> XII 7: workers)
<i>P.Herm.</i> 34	Hermopolis	7 <sup>th</sup> c.	Contract (lease of land)
<i>P.Leid.Inst.</i> 79 = <i>P.Lugd. Bat.</i> XXV 79	Uncertain ( <i>BL</i> X 116: Hermopolis/Antinoopolis?)	7 <sup>th</sup> c.	List (expenses)
<i>SB</i> XX 14282	Apollonopolis (Edfu)	7 <sup>th</sup> c.	List (payments)
<i>T.Varie</i> 10	Thousbou Serapamonos (Oxyrhynchite)?	7 <sup>th</sup> c.	Contract (sale of seeds)
<i>P.Apoll.</i> 63	Apollonopolite	2 <sup>nd</sup> half of 7 <sup>th</sup> c. ( <i>BL</i> VIII 10)	Letter (business?)
<i>P.Apoll.</i> 73	Apollonopolis (Edfu)	2 <sup>nd</sup> half of 7 <sup>th</sup> c. ( <i>BL</i> VIII 10)	Report (land survey)
<i>P.Apoll.</i> 87	Apollonopolis (Edfu)	2 <sup>nd</sup> half of 7 <sup>th</sup> c. ( <i>BL</i> VIII 10)	Account (requisitions, expenses; draft)
<i>P.Apoll.</i> 98	Apollonopolis (Edfu)	2 <sup>nd</sup> half of 7 <sup>th</sup> c. ( <i>BL</i> VIII 10)	Account (private, costs)
<i>P.Bal.</i> II 392	Apa Apollo Monastery	6 <sup>th</sup> -8 <sup>th</sup> c.	List (names)
<i>SB</i> I 5950 v <sup>o</sup>	Uncertain	7 <sup>th</sup> -8 <sup>th</sup> c. ( <i>BL</i> XI 198)	List (names, money)
<i>P.Sorb.Copt.</i> 45	Middle Egypt?	7 <sup>th</sup> -8 <sup>th</sup> c.	Receipt (delivery of bread)
<i>P.Lond.</i> IV 1421	Aphrodito	705 ( <i>BL</i> VIII 190)	Account/register (taxes)
<i>P.Lond.</i> IV 1420	Aphrodito	706	Account/register (taxes)
<i>P.Lond.</i> IV 1431	Aphrodito	706-707	Account/register (taxes)
<i>P.Lond.</i> IV 1422	Aphrodito	707-708 ( <i>BL</i> VIII 190)	Account/register (taxes)
[ <i>P.Lond.</i> IV 1573 (mainly Coptic)]	Aphrodito	709-710	Petition (petitionary declaration) (in Coptic) and <i>diastalmos</i> tax list (in Greek)]
<i>P.Lond.</i> IV 1449	Aphrodito	711 ( <i>BL</i> XI 112)	Account/register (taxes)
<i>P.Lond.</i> IV 1435	Aphrodito	716 (Worp 1985, 111-112)	Account/register (taxes)
<i>P.Lond.</i> IV 1419	Aphrodito	716-717 ( <i>BL</i> V 56)	Account/register (taxes)
<i>P.Ross.Georg.</i> IV 23 (Greek εἰ ligature for <i>hori</i> )	Aphrodito	early 8 <sup>th</sup> c.	Account/register (taxes)
<i>P.Ross.Georg.</i> IV 24 (Greek εἰ ligature for <i>hori</i> )	Aphrodito	early 8 <sup>th</sup> c.	Account/register (taxes)

<i>P.Lond.</i> IV 1425	Aphrodito	early 8 <sup>th</sup> c.	Account/register (taxes)
<i>P.Lond.</i> IV 1471	Aphrodito	early 8 <sup>th</sup> c.	Account/register (taxes)
<i>P.Lond.</i> IV 1474	Aphrodito	early 8 <sup>th</sup> c.	Account/register (taxes)
<i>P.Lond.</i> IV 1481	Aphrodito	early 8 <sup>th</sup> c.	Account/register (taxes)