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Scribal revision in the process of text production: a linguistic typology of scribal corrections in four genres of Greek documentary papyri

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in the Graeco-Roman World

edited by
SONJA DAHLGREN, MARTTI LEIWO AND MARJA VIERROS

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2. Scribal Revision in the Process of Text Production. A Linguistic Typology of Scribal Corrections in Four Genres of Greek Documentary Papyri¹

JOANNE VERA STOLK

1 Introduction

Scribal revision gives us an opportunity to observe the scribe at work and obtain closer insights into the role of the scribe in the process of text production. Scribal corrections are usually noted in Greek papyrus editions by applying brackets in the text or comments in the *apparatus criticus*, but the phenomenon has not been studied comprehensively. Papyrologists often regard the presence of corrections as an reason to identify the text as a draft, as, for example, Sijpesteijn and Worp (1977: 91), who conclude about a papyrus from the Vienna collection: ‘The many deletions and interlinear additions indicate that we are dealing with a rough draft.’ A draft, in this sense, means ‘a preliminary sketch or rough form of a writing or document, from which the final or fair copy is made’.² While the presence of scribal revision might seem a good indication of drafting, this principle may not apply to all genres of documentary papyri in the same way, as Luiselli (2010: 73–4) remarks:

‘Evidence of extensive textual reworking is usually treated as an indicator of a draft, whether the text is a literary composition, a contract, a private letter, or a petition. But fair copies of letters are more likely than the vast majority of petitions to display a reasonable number of corrections, so that it may not be easy to distinguish a draft of a letter from a fair copy.’

¹ My research was funded by the Research Foundation – Flanders (FWO) and The Research Council of Norway (NFR COFUND) and carried out at Ghent University, KU Leuven and the University of Oslo.

² See ‘draft, n.’ s.v. 5 in the *Oxford English Dictionary Online*, Oxford University Press, March 2022, www.oed.com/view/Entry/57398. Accessed 4 May 2022.

Luiselli suggests here that final versions of letters are more likely to have corrections than final versions of petitions and that corrections can thus not straightforwardly be interpreted as an indicator of a draft in letters. This presence of corrections in final versions of letters is visible, for example, in the letters of the Zenon archive (TM ArchID 256). Many of them contain corrections, even though most of these papyri are final copies that have been sent to and received by the protagonist Zenon. Some of these corrections seem to have been produced during writing, as in $\pi\lambda\acute{\eta}\theta\epsilon\iota$ (ϵ *corr. ex* ι) in P.Col. 3, 8, 5, where the ϵ was written over the previous ι and the final ι added, while others may have been inserted even after the text was finished, such as the repeated insertion of the ϵ above the line in the phrase $\acute{\epsilon}\mu$ $\pi\acute{o}\lambda\lambda\epsilon/\iota$ in P.Cair.Zen. 3, 59301, 2 and 5 (see Stolk 2019).³ Corrections may thus be introduced in final versions of letters, but does this mean that corrections are also more commonly found in letters compared to other genres? Papatomas (2018) has shown that the corrections in papyrus letters may apply to different levels of language organization, like spelling, grammar or syntax. Can these different types of corrections be found in all genres in equal measures? Or could the linguistic level of the corrections perhaps also tell us something about the method and stage of composition of a document?

As scribal corrections in papyri have not been studied on a large scale before, I will first give an chronological overview of the presence of scribal corrections in several genres of documentary papyri (Section 2). Next, I will categorise the examples of scribal revision linguistically according to the linguistic unit the correction applies to and show the distribution of these different types of corrections across the genres (Section 3). These quantitative results are complemented by a qualitative study of corrections in several papyrus archives dating to the Roman and Byzantine periods in Egypt (Section 4), such as the archives of an Alexandrian scribal office (late first century BCE), the police chief of Euhemeria (first century CE), the scribal office in Tebtynis (first century CE),

³ Papyrus editions are cited according to the Checklist of Editions of Greek, Latin, Demotic and Coptic Papyri, Ostraca and Tablets, at www.papyri.info/docs/checklist. The Greek text and metadata are based on the digital edition available in the Papyrological Navigator (www.papyri.info) and checked against the *editio princeps*. The use of critical signs is in accordance with the so-called ‘Leidener Klammersystem’ (cf. Van Groningen 1932: 262–9). Scribal deletions are indicated by double square brackets \llbracket \rrbracket , scribal insertions by slashes $\backslash /$. Text between single square brackets $[]$ is not preserved on the papyrus, but supplemented by the modern editor; dots under letters signal uncertain readings by the editor. Notes from the critical apparatus are here inserted between brackets in the Greek text (*‘corr. ex.’* provides the form from which the text is corrected on the papyrus and *‘L.’* signals a regularization by the modern editor). Translations are my own, but they may be based on the translation of the edition, if available.

the governor Apollonios (second century CE), the village scribe Petaus (second century CE), Aurelius Ammon (fourth century CE), Dioscorus of Aphrodito (sixth century CE) and the Apion family (fifth to seventh centuries CE). Finally, I will reflect on the information that scribal corrections could provide about the method and stage of text production (Section 5).

2 Scribal corrections in different genres

The corpus for this study consists of all published documentary papyri with a digital edition in the Duke Databank of Documentary Papyri (DDbDP), which is accessible through the Papyrological Navigator (www.papyri.info). The Greek texts (state January 2014) were imported by Mark Depauw and editorial regularizations isolated from the texts (see Depauw and Stolk 2015).⁴ Similarly to the editorial regularizations, the corrections by ancient scribes are usually marked in the edition. Editors apply double square brackets ($\llbracket \alpha \rrbracket$) to indicate deletions, slashes ($\backslash \alpha /$) for text written above or below the lines and comments of the type ‘ α corr. ex β ’ in the *apparatus criticus* to indicate changes to the text made in antiquity. These types of scribal corrections have also been retrieved from the digital editions by Mark Depauw and have been annotated by the author of the present article within Trismegistos.

For this paper, corrections with an uncertain reading of the correction, the corrected form or the direct linguistic context as well as possible abbreviations of words (sometimes also indicated as insertions above the line) were removed from the corpus, resulting in a total of 20,717 corrections. In order to compare different types of documents, the genre or text type of every document was identified as belonging to one of the following groups: letters, contracts, declarations (including petitions), pronouncements, reports, receipts and lists. The general categorization was based on the information available in Trismegistos from previous studies, the subjects attached to each text in the *Heidelberger Gesamtverzeichnis der griechischen Papyrusurkunden Ägyptens (HGV)*, additional information provided in *Advanced Papyrological Information System (APIS)*, and the title of the original edition.⁵

⁴ The results of this are available at www.trismegistos.org/textirregularities.

⁵ A more detailed account of the categorization into text types (and subtypes) can be found in Stolk (2020). The resulting categorization is also accessible online through TM texts (www.trismegistos.org/tm/), see ‘type’.

Excluding semi-literary texts and fragmentary documents of which the genre could not be determined, 7,993 of the remaining 46,376 documentary papyri (17%) seem to contain at least one correction. Four main genres have been selected for comparison in the following sections: (1) contracts, (2) letters, (3) lists and accounts and (4) petitions. The first category includes all types of contracts and juridical agreements; the second category includes all types of letters used for official, business and private correspondence. The third category, lists and accounts, is limited to itemised collections of information from both private and official contexts, thus excluding abstracts of contracts or registers of official correspondence that rather take the form of a collection of shorter and longer texts. The fourth category, petitions, includes various types of requests and complaints directed to persons in a higher position, but excludes general notifications addressed to the authorities, such as census applications or notifications of birth and death. Figure 1 provides a chronological overview of the presence of scribal corrections for each genre.⁶

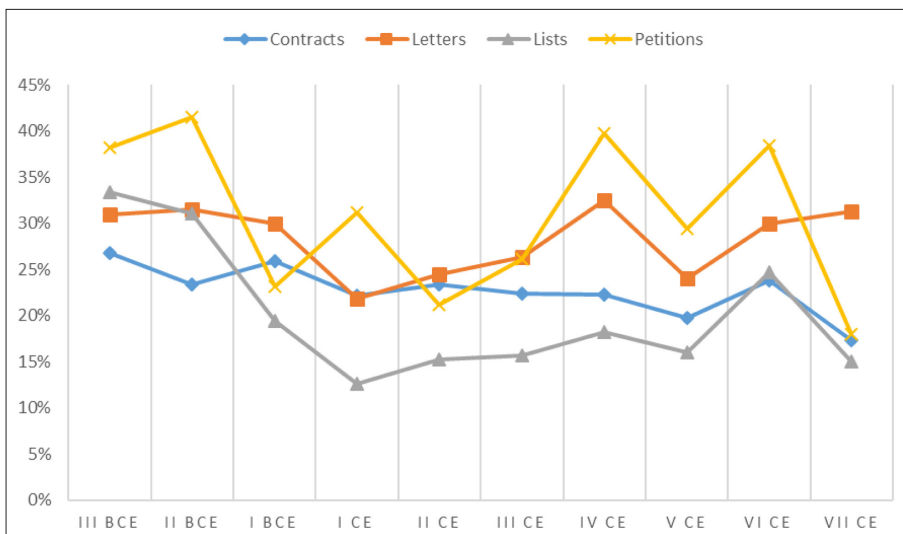


Figure 1. Percentage of texts with corrections in four different genres of papyrus documents from the third century BCE until the seventh century CE.

⁶ The chronological results in Figures 1 and 3 are weighted graphs in which papyri dated to more than one century are spread out over the time range they are dated to (cf. Van Beek and Depauw 2013). All results are based on published Greek papyri in the DDbDP (state January 2014) and the annotated database TM Text Irregularities (state March 2018).

The chronological distribution is partly dependent on the presence of archives preserving a group of documents produced under similar circumstances. For example, in the Zenon archive (TM ArchID 256), the archive of Menches and the village scribes of Kerkeosiris (TM ArchID 140) and the archive of the *Katochoi* of the Sarapieion (TM ArchID 119), the percentage of corrected lists is higher than in the remaining contemporary papyri. These results have an influence on the percentage of corrected lists in the third and second centuries BCE. Similarly, the lists in the archives of Apion (TM ArchID 15) and Dioscorus (TM ArchID 72) add slightly to the higher percentages for the sixth century. Petitions seems particularly vulnerable for the deviations posed by individual archives. For example, the higher percentage of scribal corrections for petitions in the second century BCE is mainly due to the archive of the *Katochoi* of the Sarapieion, while the peak in the sixth century CE is largely the result of frequent corrections in petitions of the Dioscorus archive. Furthermore, the archive called 'Petitions from Euhemeria' (TM ArchID 187) contributes to the peak in the first century CE and the petitions of the archive of Aurelius Ammon (TM ArchID 31) to the fourth century CE (see 4.2).

Leaving the chronological variation aside, some general differences between genres can be observed. On average, a lower percentage of corrected texts is found among the lists (19%) and contracts (22%), while corrections seem slightly more common in letters (28%) and petitions (32%).⁷ Figure 1, however, does not indicate the number of corrections per text. The identification of a text as a draft is often based on the evidence of more extensive revision rather than the presence of a single correction. Figure 2 shows the number of corrections per text for each of the four genres.⁸

⁷ I used Pearson's chi-squared test to determine whether there is indeed a significant difference between the results observed here and results that would have been generated by chance. Even though the differences between the genres are not enormous, the very low p-value shows that it is unlikely that the differences are caused by chance (chi-square = 281.53, 3 degrees of freedom, $p < 0.00001$). The standardised residuals of the chi-squared test show that the genres list, letter and petition contribute most to the chi-square value. The effect size of the results is small (Cramer's $V = 0.11$), which means that the factor 'presence of corrections' is probably not the best denominator of the differences between the genres. Overall, the differences are significant enough to suggest that these genres have some individual properties that would increase or decrease the likelihood of corrections appearing in the documents preserved to us.

⁸ The given estimates are likely to be lower than the real numbers of corrections, since corrections with uncertain readings are left out in this study.

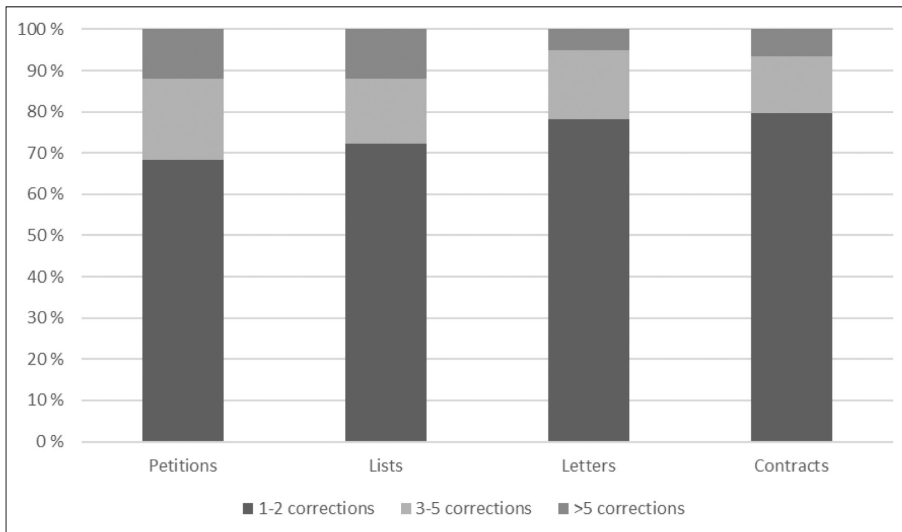


Figure 2. Percentage of texts with 1–2, 3–5 or more than 5 corrections per text in four different genres of papyrus documents from the third century BCE until the seventh century CE.

Figure 2 shows that corrections in petitions tend to come in higher numbers than in other genres. While almost 80% of the corrected letters and contracts contain only one or two corrections and even 95% contain no more than five, corrections in petitions and lists tend to be more numerous with more than 10% containing more than five and around 30% containing more than two.⁹ If the presence of corrections, especially in higher numbers per text, can be taken as an indicator of a draft, it is expected to find more drafts among petitions. These general differences between the genres will be examined in more detail in the following Section by distinguishing between different types of corrections.

3 Linguistic categorization of scribal corrections

Scribal revision involves a wide range of scribal activities: from extensive alterations to a document at an early stage in the process of composition to minor improvements to a finished text. The stage in the composition process is thus

⁹ The differences between the genres are significant (chi-square 87.59, 6 degrees of freedom, $p < 0.00001$), although the effect size is small (Cramer's $V = 0.09$). The standardised residuals show that the numbers of petitions, lists and letters with more than five corrections contribute most to the chi-square value.

also expected to have an impact on the type of scribal corrections. For example, the corrections by Dioscorus (TM ArchID 72) to the petitions P.Cair.Masp. 1, 67002 and P.Lond. 5, 1674 take the shape of superlinear insertions of words and short phrases, while his emendations to the petitions P.Cair.Masp. 1, 67006 and 67020 concern mostly orthographic issues (Stolk 2019). In the first case, the documents are preliminary drafts produced by Dioscorus himself during the process of composition, whereas the other two documents are complete texts that have been reproduced by someone else with minor corrections added later by Dioscorus. Phrasal revision seems characteristic of the preliminary stages of free composition in these documents, while orthographic corrections are added at a later stage and/or following a different production method. Hence, linguistic categorization of scribal corrections may be helpful to identify different methods and stages of production of documentary papyri. Various motivations (e.g. stylistic, rhetorical, practical) for corrections in papyrus letters from the fifth to the eighth century CE have been identified by Papathomas (2018), but in order to compare a large number of corrections in various text types, we first need to define the general levels of linguistic analysis to which every correction could be assigned, before looking into more detailed motivations for corrections at those levels. All corrections in Section 2 have been categorised by the author of the present article according to the linguistic unit each correction applies to. I have distinguished the following four basic linguistic levels:

- 1) The **grapheme** or **phoneme level** contains deletions, insertions and changes to a grapheme (smallest unit of writing, i.e. one letter) or digraph (two letters) corresponding to one phoneme (unit of sound) or a diphone (two phonemes expressed by one character, such as ψ and ξ) in Greek, including corrections of gemination, simplification and metathesis (for these phenomena, see examples in Gignac 1976: 154–65; 314–15). There can be more than one correction of a grapheme or phoneme per word, but only when these are not forming one unit of morphological or lexical meaning (see below).
- 2) The **morpheme level** includes deletions, insertions and changes to a morpheme (unit of grammatical meaning), such as a case or verb ending. Morphemes consisting of one phoneme have been annotated for both grapheme and morpheme levels, but are counted here only as morphemes in order to avoid making an ambiguous decision in each case.
- 3) The **lexeme level** applies to deletions, insertions and changes to a full lexeme (unit of lexical meaning) or part of a lexeme that cannot be explained at a phonological or morphological level (see above). These changes may be meaningful, although

the circumstances do not always allow complete understanding of the semantic or syntactic change involved. Corrections effecting numerals and symbols are annotated as subcategories to the lexical level.

- 4) The **phrasal level** contains all deletions, insertions and changes of two or more words.

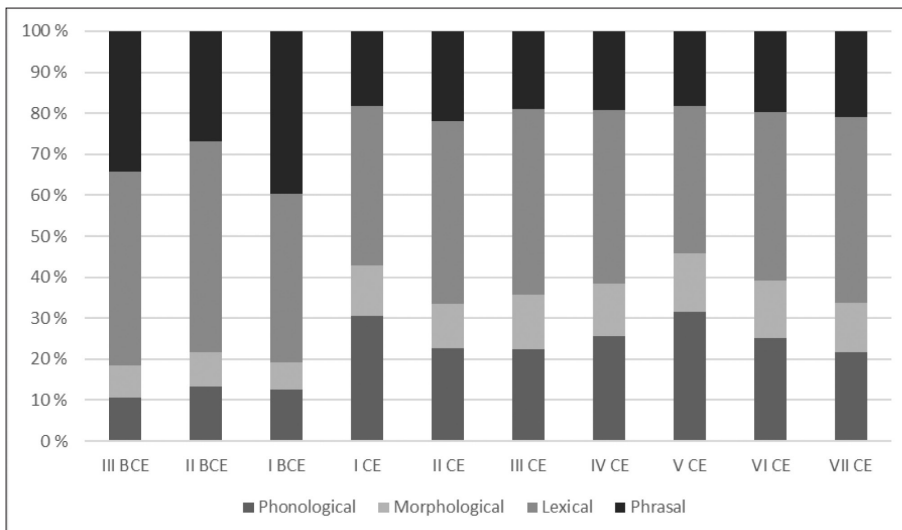


Figure 3. Proportional distribution of corrections according to their level of linguistic analysis from the third century BCE until the seventh century CE.

Figure 3 shows the distribution of the corrections according to the linguistic level for every century. A chronological difference needs to be pointed out first. While the first to seventh centuries CE show a similar pattern of around 20–30% corrections at the grapheme level, 10–15% at the morpheme level, 35–45% lexical and around 20% phrasal, the Ptolemaic period stands out with a generally lower level of grapheme and morpheme corrections, only 20% counted altogether, and a much higher proportion of phrasal revisions, around 30–40%.¹⁰ It is difficult

¹⁰ The differences between the Ptolemaic and Roman to Byzantine periods are significant (chi-square = 728.40, 3 degrees of freedom $p < 0.00001$), although the effect size is relatively small (Cramer's $V = 0.19$). The standardised residuals show that the numbers of grapheme and phrase corrections are contributing most to the chi-square value. This difference cannot be explained by a difference in the genres preserved from these periods: Ptolemaic contracts, letters, lists and petitions all contain a smaller portion of grapheme and morpheme corrections than the same genres in the Roman and Byzantine periods (apart from the percentage of morphological corrections in lists which is equally low for all periods). The chronological difference is most evident in contracts and

to point out a single factor explaining this change and any attempt to identify particular historical differences between these two periods will end up being speculative, lacking concrete (quantitative) evidence for it. One factor could be the phonological changes that start in the Ptolemaic period, but become much more extensive in the Roman and Byzantine periods, making the written language more difficult to spell. Spelling variation in general tends to be less frequent in documents from the Ptolemaic period in comparison to the Roman and Byzantine periods (Stolk 2020) and this may reflect on the felt need for corrections. It is likely, however, that there are several other factors involved as well, such as changes in the levels of education and literacy of the scribes involved or different attitudes towards spelling variation and corrections (Stolk 2019; see also Bucking 2007). In order not to let this chronological difference interfere too much with the other factors, the comparison of the linguistic levels of corrections across the genres in Figure 4 is only applied to documents from the Roman and Byzantine periods.

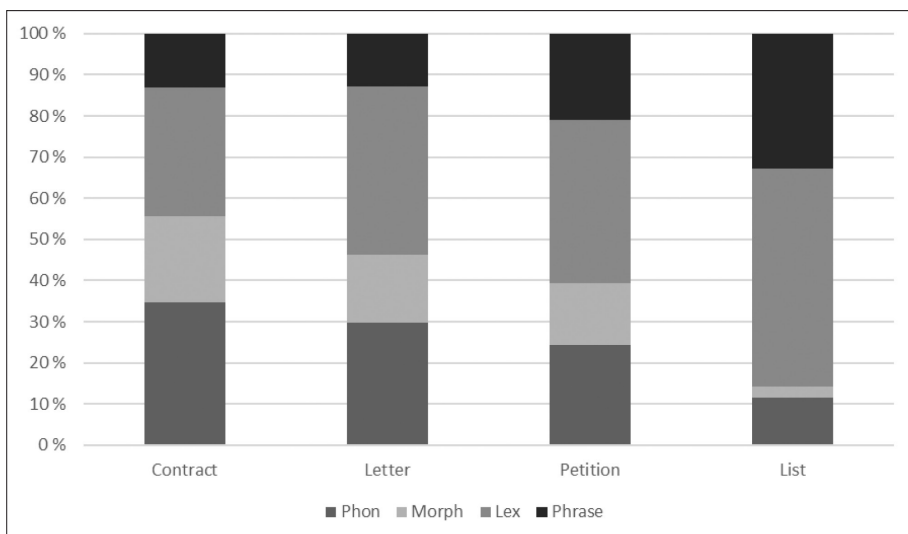


Figure 4. Proportional distribution of corrections according to their level of linguistic analysis within four different genres from the first until the seventh centuries CE.

There are clear differences between the genres with respect to the linguistic levels of the corrections. While the majority of the corrections in contracts affect

letters, where the percentage of grapheme and morpheme corrections in the Roman and Byzantine periods can be double or triple the amount in the Ptolemaic period.

graphemes or morphemes and only 13% affect phrases, 86% of the corrections in lists are phrasal or lexical and only 15% at the grapheme or morpheme levels.¹¹ Again, there are many possible reasons for this distribution. Linguistically, the relatively high percentage of grapheme and morpheme corrections in contracts and letters could be related to the complexity of inflection and (morpho)syntax in these genres, as opposed to lists which often involve references to single items lacking syntactic context and/or abbreviations omitting morphological information.

The absence or presence of corrections may also have been the result of the process and stage of composition of the documents that we have or the context of use. In order to elicit corrections, a particular difficulty to produce a form needs to coincide with a motivation to make emend. Very little is known about the acceptance or avoidance of mistakes or corrections in different genres. One could think that in documents meant for internal usage the presence of irregular forms was considered less important and corrections therefore less relevant. On the other hand, the presence of corrections itself could have been considered objectionable in more official documents, while the same corrections could have been regarded as acceptable or even desirable in more informal contexts. Other possible reasons for the differences between the number and type of corrections in these genres will be examined in more detail in individual texts from various archives in Section 4.

4 Scribal corrections in archives

The frequency of occurrence of nonstandard spellings in papyrus documents can differ according to the method and stage of composition. For example, the archive of the *Katochoi* of the Sarapieion (TM ArchID 119) contains various petitions and letters written in the hand of Apollonios, the younger brother of Ptolemaios (cf. UPZ 1). His petitions contain on average more nonstandard spellings than his letters, because the petitions are preliminary drafts while the letters are his copies of official letters written by others or final versions of his own private letters (Stolk 2020). These different methods of production (copying or drafting) and stages of composition (preliminary or final) are likely to have an impact on the presence, number and type of corrections as well. Knowledge

¹¹ The differences between the genres are significant (chi-square = 1310.64, with 9 degrees of freedom, $p < 0.00001$), although the effect size is relatively low (Cramer's $V = 0.22$). The standardised residuals show that the differences between contracts and lists contribute most to the high chi-square value.

about the production circumstances is more easily available and comparable in a group of related documents, such as a papyrus archive. In this Section, I will describe the background of writers and their methods of text production in more detail in order to study more closely the presence and distribution of different types of corrections in several private and official archives from the Roman and Byzantine periods.

4.1 Corrections in final versions of letters

Letters tend to contain corrections at all linguistic levels (see Figure 4), although in the far majority of the cases, we find only a limited number of them in one text (see Figure 2). The archive of the governor Apollonios (TM ArchID 19) contains more than two hundred administrative and personal documents collected during his time as the governor (*strategos*) of the district of Apollonopolites Heptakomias in Egypt (113–19 CE). The majority of these documents are letters, including a large number of private letters sent to him by his family in Hermopolis. Most of the letters, therefore, can be considered final versions received by him rather than personal drafts of outgoing documents. Still, about a third of these letters contain corrections, albeit in modest quantities: half of them have only one and none has more than five.

The corrections are found in letters by writers with various backgrounds: from beginners (cf. the alphabetic hand in P.Brem. 22) to more experienced scribes (cf. the chancery style in P.Brem. 5). The methods of revision also vary. When the correction concerns only one letter, the old letter could be adapted, such as the η changed into εἰ in εἰδώς (P.Giss. 1, 45, 7), or the new letter just written over the old one, as the υ written over the second ζ in ἐπιεζζης (P.Brem. 5, 12) and the first ρ in πρρασκεται changed into ι by applying a thick vertical stroke (P.Brem. 22, 9). The most common methods are deletion by stroke(s), insertions of words and letters above the line or a combination of both to indicate a replacement. A more sophisticated method is found in two letters sent by Epaphrodeitos, where the writer implicitly deletes a letter and word by placing other letter(s) above it, cf. the replacement of γράψειν ('to write') by γράψειλς/ ('you will write') and μοι ('me') by \αὐτῆ/ ('her') (P.Giss.Apoll. 22, 6–7 and 9). In the same way, he deletes letters by putting short diagonal strokes above each letter instead of any new letters, see e.g. the strokes above γνώμης σου ('your judgement') (P.Giss.Apoll. 22, 20) and τό (P.Giss.Apoll. 23, 4).

The examples of revision in the letters addressed to Apollonios concern mostly minor changes to graphemes, morphemes and short words. The changes

to graphemes are not caused by phonological merger only. For example, the first ρ in *πρπράσκειται* corrected to *πιπράσκειται* ('it has been sold') (P.Brem. 22, 9) could rather be explained by omission of the reduplication in anticipation of the next syllable. The spelling of <αι> instead of <ε> in *διεβ[[αι]]\ε/βαι|ωσαμ[ην]* ('I guaranteed') (P.Brem. 5, 10–11) does probably entail a phonologically motivated interchange (identical pronunciation of <ε> and <αι>), but in this particular context, it may also be enhanced by anticipation of the spelling <αι> in the following syllable. Regarding the morphemes, there are examples of paradigmatic merger as part of morphological changes, such as confusion between the first and second aorist endings (for the reasons behind morphological simplification of verb endings see Leiwo 2017) in *προσηλθα* corrected to *προσηλθον* ('I came') (P.Brem. 54, 4) and between the accusative singular of the i-stems and consonant stems (see more examples in Gignac 1981: 55–8) in *Εὐδαίμωνι* corrected to *Εὐδαιμονίδα* (P.Brem. 61, 21). A change of morphemes may also be motivated by a desire for reformulation. For example, the original ending of *πρὸ πάντ[ω]* corrected to *πρὸ παντ᾽* ('before all') (P.Brem. 61, 16) is morphologically perfectly fine, but the sender or writer wanted to introduce an alternative that (s)he deemed more suitable in this context. Reformulation is also an important motivation for changes to larger elements. The deletion, insertion and replacement of (part of) words and short phrases could be reactions to scribal errors, such as skipping *λάβη/* in *ὅπως παραλάβη/ παρ' ἐμοῦ* ('so that he takes over from me') (SB 10, 10278, 15), but in other contexts these larger revisions may indicate attempts to rethink or rephrase the content of the letter.

Changes, even those in formulation and content, can be made during and after the process of composition of the (final) letter. Diskas started a greeting formula with *[[ἀσπάζομαι σε]]* ('I greet you') (P.Brem. 16, 52), but then realised that he first wanted to say something else and removed the greeting. Also Kornelios changed his mind about what he wanted to tell Apollonios (P.Giss. 1, 65, 9–10). He started a new sentence with *ἀντέστη [δ'] ἐμοὶ ὁ τῆς [κώμης] | πράκτωρ [[φάσκων ο]]* 'the tax collector of the village(?) was set against me saying ...', but then he removed the introduction of the quote ('saying') and started a new sentence. Other corrections may have been made by the writer upon rereading previous sentence(s) or even after the whole letter was finished. The writer of P.Giss.Apoll. 37 thought that he had forgotten the infinitive *ἔχειν* ('to have') and added it above the line in l. 5, only then to realise that the infinitive was already present at the end of l. 4 and to remove the insertion again. The same letter could preserve evidence of changes made during and after writing. The writer of SB 10, 10278, 15, deleted a superfluous *σε* ('you') in l. 2 and inserted

λάβη/ in l. 15 (see above) probably after writing these sentences, but he also seems to have overwritten a mistaken start of a following word beginning with μ (probably μου) by the final ε of the vocative ending in κύριε ('lord') (l. 6) and to have changed ἀτ[ά] ('these things') into ἀτῶ ('him') by inserting an ω after the deleted α (l. 16). These last two corrections are more likely to have taken place during writing. In the same way, the ε is written above the αι in διεβ[αι]ε/βα[ω]σαμ[ην], while the υ is written over the ζ before continuing with the ξ in ἐπιζεζής (P.Brem. 5, 10–11 and 12). By far the majority of these corrections seem to have been undertaken by the same scribe who wrote the letter in the first place (see also Papathomas 2018: 163–6), although the initiative for the changes, especially those added later, could have been taken by someone else, such as the client or a supervisor. Occasionally, a second hand, possibly of the sender/author of the letter, is responsible for some final changes, such as perhaps the insertion of the enforcing adverb ἀεί ('always') in P.Giss.Apoll. 21, 10.

These minor corrections to final versions of letters testify of a fluid composition process. As (private) letters can be composed freely and preferably without wasting papyrus on numerous drafts, mistakes are easily made and stay visible to the addressee. People also tend to change their mind about the precise formulation or even contents of the message they want to convey during the process of composition. Spontaneous addition of extra lines in the margins of private letters attest of a similar phenomenon (see Homann 2012). Corrections added later show that many writers or authors may have reread their letters during or after writing to check for mistakes in orthography, morphology and syntax. Clearly, they cared about the language of the final product and a limited number of corrections was to be preferred above giving a wrong impression or leaving unintended linguistic irregularities.

4.2 Production of contracts

Contracts contain relatively few corrections (Fig. 2) and most of them seem to affect graphemes and morphemes (Fig. 4). This can also be observed from the corrections in contracts in the archive of the Apion family, dating to the sixth and seventh centuries CE (TM ArchID 15). The contracts are signed by the notary and have endorsements on the *verso*, so that we may safely assume they contain the final version of the document. The majority of the corrections affect graphemes and morphemes and there are no corrections at a phrasal level. For example, in P.Oxy. 16, 1970, 30, the last letter of Ἄνοῦπ was first written as α, perhaps in anticipation of the following patronymic Ἄνδρέου, with π written

over afterwards. The correction is found in the subscription written in a less formal style than the body of the contract. Another minor correction is found in the subscription by the agreeing party written in his own hand in P.Oxy. 24, 2420, 21. The names Παπνουθίου καὶ Ἄροθίου (genitive) seem to have been written in accusative (-ον) at first, perhaps modelled on the form in which they occur in the body of the document (l. 11). Corrections are also found in the more formal body of the contract. For example in P.Oxy. 1, 138, 28, the scribe started writing *παν*, before realizing the gender of the following noun and correcting it (probably immediately) into *πᾶσαν χρείαν* ('all needs').

As the contracts in the Apion archive illustrate, papyrus contracts are often final documents that have been kept by the parties in their (personal) archives. Changes to the formulation and contents are rare in these final copies and they may even have been unacceptable, since they could interfere with the legal validity of the product. Changes to phonemes and morphemes, however, do not seem to pose a major problem and are regularly found. Juridical phrases could be produced with the help of model formularies (Bucking 2007). The semantic and syntactic complexity of these precomposed phrases could have caused difficulties for scribes who may not have been able to compose a document like that without the help of models (see also the variation in the contracts from Pathyris in Vierros 2012a and 2012b). Uncertainty about the choice and spelling of morphological endings (see Leiwo 2017) seems to be the reason for most of the corrections in the Apion archive. In P.Oxy. 1, 135, the *ω*'s in *τω αὐτω κτήμα* ('the same building'), *εἰς ἕτερον τόπον* ('to another place') and *ἐπιζητούμενων | αὐτων* ('him being required') (ll. 20–22) had to be changed into *ο*'s to form the expected accusative single case endings. Since all of these corrections concern the same feature, it is likely that the mistake was only discovered after the text had been finished, possibly even by someone else. Nonstandard orthography is very common in contracts and most of the time variation seems to have passed unnoticed by the scribes (Bucking 2007; Stolk 2020). While standard spelling may not have had the highest priority in contracts, the numerous examples of orthographic and morphological corrections show that it was considered relevant, at least to some scribes and notaries, and that these types of corrections could be added without compromising the validity of the final product.

Although the quantitative results and the previous examples may give the impression that all contracts were produced based on fixed models without variation in textual composition and only minor variations in orthography and morphology, this was probably not the case. Relatively few drafts of contracts survive, but they do exist. The archive of the Alexandrian scribal office of a

legal specialist (TM ArchID 430) provides some examples of revised versions of contracts from the early years of the Roman period (Seidl 1973: 67 no. 2.1).¹² Most of the corrections are found at lexical (38%) and phrasal (49%) levels, such as the interchange of the order of the months Hathyr and Pachon in ἐν μὲν τῷ [[Παχλ[ὸν]] \Aθὺρ/ [(δραχμάς) σ, ἐν] δὲ τῷ [[Aθὺρ]] \Παχὸ(ν)/ ἄλλας (δραχμάς) σ ('in PachonHathyr 200 drachmas, and in HathyrPachon another 200 drachmas') (BGU 4, 1132, 34). Word order is a common topic for revision, see for example the change of the noun from pre- to postadjectival position in ἐκ τοῦ [[κλήρου]] Ἱεροξένο(ν) | κλήρου ('from the allotment of Hieroxenos') (BGU 4, 1167, 73–4). These revisions could be the result of copy mistakes (anticipation) or rethinking the formulation during writing and they are comparable to the continuous corrections and improvements found in drafts of petitions (see Section 4.3 below).¹³ The process of textual composition can be followed more closely in the case of hesitations by the scribe, such as the later insertion and subsequent deletion of the names \[[παρὰ Σα(ραπίωνος)]/ and \[[Μάρκου καὶ Ἰσιδώρας]/ (BGU 4, 1149, 13–14). Some changes seem to have been made immediately during writing, such as the anticipation of ἐκ, which is removed to insert τῷ Γαίῳ, in τῆς πρ(άξεως) γεινο(μένης) [[ἐκ]] | τῷ Γαίῳ ἐκ τε ἀμφ(οτέρων) ('the right of execution being with Gaius on both ...') (BGU 4, 1122, 27–8). Others seem to have been made at least after the phrase was written down, such as the fronting of ἐκ τοῦ ἰδίου in \ἐκ τοῦ ἰδίου/ [[ταυτὰ γένη] αὐτενία(τα) [[ἐκ τοῦ ἰδίου]] ('these crops for one year from your own' changed to 'from your own for one year') in a phrase added above the line (BGU 4, 1122, 23a).

According to the editor of BGU 4, 1160, the correction of Τειμοκράτης from the short form Τειμᾶς (l. 2) suggests that the scribe had the parties telling their names in front of him while he was drafting. Although it seems doubtful to conclude this practice from the correction of a name only, a similar procedure can be reconstructed from the (parts of) contracts in the archive of Kronion, the head of the scribal office of Tebtynis during the middle of the first century CE (TM ArchID 93). A first version of the contract seems to have been drawn up at the scribal office and signed by the contracting parties. The subscriptions

¹² Unfortunately, there are no images available for the majority of the documents from this archive. My observations are based on the corrections mentioned in the editions in BGU 4.

¹³ Fixed juridical formulas play an important role in the composition of contracts, but the revisions show that also juridical phraseology can be employed with minor variations, see e.g. the corrections around the *praxis* clause in BGU 4, 1175, 10–15. Confusion between variant formulations of juridical formulas may also lead to linguistic inconsistencies and corrections (see Vierros 2012b; Stolk 2015: 268–77).

by the parties were copied onto an empty sheet of papyrus, to which the final copy of the contract was added later and collected by the parties (Husselman, P.Mich. 5, pp. 3–11). P.Mich. 5, 340 contains the drafts of two contracts. The space for the physical characteristics of the parties has been left blank and the subscriptions by the parties are written by the same scribe as the body of the document. Changes in composition are made while drafting, such as deletion by encircling [ἐν προσφορᾷ κατὰ τὴν] | [[συγγρα]φὴν] ('as a gift in accordance with the contract') immediately followed by rephrasing as κατὰ τήνδε τὴν ὁμολογίαν ('in accordance with this agreement'), as well as later insertions above the line ὑπὲρ τῆς προγεγραμμένη(ς) Ἡρακλείας/ ('for the benefit of the aforesaid Herakleia') (P.Mich. 5, 340, 8–9 and 10). Just like other more complex documents, the contents of a contract needed to be discussed with the clients and the text composed by a scribe or notary before the final version could be produced and copied.

This process of composition is characterised by the presence of corrections at lexical and phrasal levels in the drafts of contracts in the archives of the scribal offices in Alexandria and Tebtynis, in contrast to the minor corrections to graphemes and morphemes in the final copies of contracts in the Apion archive. The archive of the notary Dioscorus preserves petitions at preliminary and later stages of composition, corresponding to corrections at different linguistic levels (see Section 3). The same phenomenon is found in his contracts. P.Cair.Masp. 2, 67151, containing a version of the testament of Flavius Phoibammon, has been copied by a scribe from a draft written by Dioscorus himself (P.Cair.Masp. 2, 67152). As a faithful copy (see P.Cair.Masp. 2, pp. 101–2), there is no need for any lexical or phrasal revisions at this stage. All corrections affect changes to graphemes, morphemes and occasional insertions of small words. On the other hand, on the *verso* of a marriage contract (P.Cair.Masp. 3, 67340), we find a draft of a donation contract with numerous interlinear insertions of words and phrases, which seem to have been added by Dioscorus himself (P.Cair.Masp. 3, p. 165). Obviously, his wills, donation and marriage contracts proceeded through various stages of composition, characterised by different types of corrections.

4.3 Petitions and drafts

The high number of corrections per text (Fig. 2), especially at lexical and phrasal levels (Fig. 4), could point towards the presence of drafts among petitions in the papyrological corpus. A good example of a draft are the petitions in the archive of Aurelius Ammon *scholasticus*, son of Petearbeschinis, dated to the fourth

century CE (TM ArchID 31; see also Luiselli 2010: 82).¹⁴ The archive preserves documents from a wealthy and educated family of Egyptian priests in Panopolis (cf. P.Ammon 2, pp. 21–2). Most of the petitions in the archive are related to one court case concerning the ownership of domestic slaves after the death of Ammon's brother Harpokration in 348 CE (P.Ammon 2, 32–46). At least eleven papyrus sheets have been used for drafts of Ammon's petition(s) addressed to the *katholikos* and the prefect of Egypt, in which he tries to prove that he is the rightful heir of his brother (see P.Ammon 2, pp. 11–21). The situation is introduced as follows in two successive drafts of the petition, written by Ammon himself:

(1) P.Ammon 2, 41, 16–19

πρ[ὸ] πολλοῦ τ[ι]νος χρόνου ἴδ[ε] ἀδελφός [τις ἐμὸς] ἴμου/ Ἄρποκρατίων
τοῦ[νομα] π[ε]ρὶ λόγους καὶ αὐτὸς ἐ[σ]πουδακῶς ἀποδημ[ί]αν ὑπερόριον
ἔξω τῆς | Αἰγύπτου τυγχάνει στείλαμενος. ἐντεῦθεν δὲ ἀποδημῶν ἀπὸ
τῆς λαμπρᾶς ταυτησὶ πόλεως | [κατέλειπεν ἀνδράποδα ἑαυτοῦ ἐνταυθὶ]
κατέλειπεν ἀνδράποδα π[α]ρ' ἐμ[ο]ῦ ἐνταυθοῖ τότε διατρίβ[ο]ντι

‘For some long time a brother of mine my brother, named Harpokration, who also studied rhetoric himself, was preparing a journey abroad outside of Egypt. When he departed then from this illustrious city here (i.e. Alexandria), he left his slaves here he left slaves at my place, because I then resided here.’

(2) P.Ammon 2, 45, 1–4

[πρὸ πολλοῦ] τ[ι]νος χρόνου οὗτο[ς] ὁ ἀδελφός] μ[ου] Ἄρποκρατίων τοῦνομα
περὶ λόγους | [καὶ αὐτὸς ἐσπουδακῶς ἀποδημ[ί]αν ἔξω τ[ῆς Αἰγύπτου]
τυγχάνει | στείλαμενος. ἐντεῦθεν δὲ ἀποδημῶν κατέλειπεν ἀνδράποδα
ἑαυτοῦ | ἐν τῇδε τῇ πόλει προδιατρίψα[ντι τότε] ἐμ[ο]ῦ

‘For some long time my brother, named Harpokration, who also studied rhetoric himself, was preparing a journey outside of Egypt. When he departed then, he left his slaves in this city (i.e. Alexandria), because I then resided here.’

P.Ammon 2, 45 is written in Ammon's formal hand and considered to be the last version of the drafts preserved (see P.Ammon 2, pp. 43–50), while P.Ammon 2, 41 is found on the *verso* and in the margins of the *recto* of P.Ammon 2, 30 and

¹⁴ Although the title *scholasticus* is often used by juridical experts, it does not refer to a profession as a notary or lawyer, strictly speaking, but rather to a generally high level of education in grammar, rhetoric, philosophy and literature, cf. P.Ammon 2, pp. 21–2, and references there.

written in Ammon's fast 'drafting hand' with numerous corrections. For example, ἀ]δελφός [τις ἐμὸς] ('a brother of mine') seems to have been replaced here by \ὀ/ ἀ]δελφός \μου/ ('my brother'), which is also adopted in later versions. The beginning of line 19 shows that changes in composition were often made during writing: the first words of the line [κατέλειπεν ἀνδράποδα ἑαυτοῦ ἐνταυθί] ('he left his slaves here') seem to have been deleted and replaced by the following κατέλειπεν ἀνδράποδα π[α]ρ' ἐμ[ο]ῖ ἐνταυθοῖ ('he left slaves at my place here'). Many additional changes without a precedent in the previous versions have found their way into 45, such as the omissions of the superfluous ὑ]περόριον ('abroad') and ἀπὸ τῆς λαμπρᾶς ταυτησὶ πόλεως ('from this illustrious city here'), and the changes to the construction at the end of the phrase. Of course, changes in composition do not always have to be indicated by deletions and insertions in the text itself, they can also have been introduced without explicit mention from one version into the other or in additional drafts that have not been preserved to us.

The revisions found in the fifteen (parts of) petitions published as P.Ammon 2, 32–46 concern predominantly changes in formulation, such as word choice and syntax (see examples 1–2 above). Most of Ammon's corrections, therefore, are deletions and insertions of words (45%) and short phrases (40%) rather than changes to graphemes or morphemes (15%). Especially in the parts casually penned down in the margins, Ammon is continuously searching for improvements in the formulation of the message, e.g. by rephrasing [[[καί]ερ οὔτε] πεποίηκεν ('although nor did he do') to \[ἀλλ]ὰ οὐδὲ τ[ο]ῦτο/ πεποίηκεν ('but also this he did not do') in 41, 68 and the replacement of [ἤδη] by \λουπὸν/ ('already') in 41, 70. These changes and additions to his own words are likely to have been made immediately after finishing the phrase or perhaps upon rereading a sentence or section. It would have been difficult to review the text as a whole, because by that time the different parts of 41 would have been spread out across the *verso* of the sheet and squeezed into the vertical and horizontal margins of another text on the *recto*. This type of extensive revision at a lexical and phrasal level during writing seems typical for the preliminary stages of the composition process commonly associated with drafts.

Although petitions may often preserve corrections as result of a drafting process, not all corrected petitions are drafts. While drafts of petitions are left behind in the (private) archives of scribes or thrown away, the final versions are sent off to the authorities in the district capitals and Alexandria. For example, the minor corrections in the petitions addressed to and received by Apollonios in his function as the governor of Apollonopolites Heptakomias are, in fact, very similar in nature to the ones identified in the final versions of (private) letters addressed

to him (see Section 4.1). A group of petitions from Euhemeria also seems to have arrived at the authorities and form part of an official archive (TM ArchID 187). All documents have the same measures and have been produced by four or five scribes between 28 and 42 CE (P.Ryl. 2, p. 117). Most of them are addressed to the chief of the police (*epistates phylakiton*) or the governor of the Arsinoite nome, but all are assumed to have been copied and forwarded to the police chief of the village (*archepodos*) of Euhemeria (see P.Ryl. 2, pp. 117–19; Sijpesteijn 1989; 1992).

The petitions found in the office of the police in Euhemeria are thus forwarded copies of the final submitted versions, probably produced by professional scribes. Still, a considerable number (20 out of 33) of them contains at least one correction.¹⁵ That these corrections are different from the ones in the drafts of petitions described above can be observed from their lower frequency (on average 2.4 per corrected text) and especially the linguistic level of the corrections. The absence of phrasal revisions in these copies is consistent with the production process. The composition of the text was already completed and the formulation did not need to be altered in any way during reproduction. Some of these corrections seem to remedy typical copy mistakes, such as Ὀρσεῦς corrected from Ὀρσενο mistaken for Ὀρσενοῦφης the line below (P.Ryl. 2, 149, 15), the ηρ of Ἡρᾶτος corrected from καί which happens to be the next word (P.Ryl. 2, 149, 16), and the anticipated δε corrected into ου in οὐσία[ς Δεκίμου] ('estate of Decimus') (SB 20, 15032, 5). The scribe of P.Ryl. 2, 142, 21 writes δεσχῶ(ν) instead of δεσμῶν ('bundles (of hay)'). The confusion between χ and μ seems difficult to explain phonologically or semantically, but could have been caused by visual copying (see also Yuen-Collingridge and Choat 2012). There are also various examples of words written in dittography in these petitions (without correction), e.g. τοῦ written both at the end of l. 6 and the beginning of l. 7 (P.Ryl. 2, 124), a double abbreviation for δραγμαί (P.Ryl. 2, 127, 30) and δημόσια written at the end of l. 19 and beginning of l. 20 (P.Ryl. 2, 149). Omission and repetition of words (especially at line breaks) are common features of copying from an exemplar. Although the copyists of these petitions may not have been extremely careful while copying, they did seem to consider it worthwhile to correct their mistakes.¹⁶ The corrections to the copies of petitions

¹⁵ Unfortunately, there are no images available for the majority of the petitions from this archive. My observations are based on the corrections as described by the editors in the editions of P.Ryl. 2, 124, 127, 142 and 149 and SB 20, 15032 (see Sijpesteijn 1989).

¹⁶ There are other orthographic variants that this group of petitions have in common, e.g. sixteen

from Euhemeria have not been made during the process of composition of the text, as the lexical and phrasal corrections in the drafts of Ammon, but they have been added during production of the copied version. Some of the copying errors were immediately corrected, when noticed, usually by adapting or writing over the letter(s), cf. e.g. SB 20, 15032, l. 5 with note (Sijpesteijn 1989: 196).

Copying with self-correction generally results in corrections of different kinds of linguistic features than the process of stylistic revision during the composition of a text. On the other hand, we should allow for some overlap between different production processes. Although phrasal corrections are rare in copied texts, copy mistakes of more than one word may occasionally occur. The drafting process itself is likely to involve some copying as well: from one draft to the other or from the draft to the final version. This could explain some of the immediate corrections affecting smaller elements in Ammon's drafts. For example, the correction of the ε into τ in ἔως δὲ [ε]ταύτην ἔτι ἐν χερσὶν εἶχον τὴν φροντί(δα) ('while I still had that concern in my hands') (P.Ammon 2, 41, 42) may at first seem to have been part of his stylistic revisions by introducing the demonstrative ταύτην to the phrase. It is more likely, however, that this is a correction of a copying mistake, since the demonstrative seems to have been present already in earlier versions of the petition (e.g. P.Ammon 2, 38, 28, and 39, c 9). The same phenomenon can be observed in τὴν [δεσ]τούτων δε[σποτ]ε[ί]αν ('the ownership of these (slaves)') (P.Ammon 2, 45, 22). Again, the sudden introduction of τούτων is most likely a reaction to accidentally skipping this word, which has already been used in previous versions in this phrase (e.g. P.Ammon 2, 32, 18; 36, 6; 40, 24; 41, 47). This shows that the type of correction may not only give an idea about the stage in the process of composition, but also about the method(s) of production of the text in question.

out of the thirty-three petitions write ἀξιῶ instead of ἀξιῶ. Hypercorrection of the ι adscript (see also Vierros 2012a: 121–36) in other words than ἀξιῶ seems particularly common in 131 and 139, e.g. κώμην for κώμην in 131, 14 and 139, 18, and these two texts happen to be written in the same 'stiff clear hand' according to the editor (P.Ryl. 2, pp. 127 and 136). Several other nonstandard spellings occur in smaller numbers of examples, such as ἑαυτοῦ for ἑαυτοῦ and ἀκθῆναι for ἀχθῆναι. Variant spellings could have been introduced accidentally or on purpose by the same copyist but could also have been present already in the exemplar unknown to us. P.Ryl. 2, 124 and 135 seem to have more problems involving the spelling and choice of morphemes than the other petitions in this archive, e.g. λιστρικὸν τρόπον εἰς ἃς γεωργίαν instead of ληστρικῶν τρόπων εἰς ἃς γεωργίαν ('in a thievish way to what I cultivate') (P.Ryl. 2, 135, 7–8) and τῆς γυναῖκος μου Ἀπλουνοῦ|τος καὶ ἡ (ἡ τῆς) ταύ|τ[ης] μητῆρ (ἡ μητρός) Θερ|τος ('my wife Aplounous and her mother Thermis(?)') (P.Ryl. 2, 124, 7–11). It seems unlikely that all of these forms have been introduced later through careless copying or in a false attempt by the copyist to improve the language of the exemplar.

4.4 Lists under composition

Corrections in lists are less common than in the other three genres (Fig. 2) and the far majority are found at lexical (53%) and phrasal (33%) levels (Fig. 4). The almost complete absence of corrections to morphemes (average 3%) may be caused by the repetitive nature and general lack of syntactic complexity in lists of names or items. In the lists and accounts of Dioscorus, half of the corrections are insertions of letters and words above the line. This type of insertions is also very common in drafts of petitions and contracts, but in some lists (short) phrasal insertions are more frequent than insertions of single words. In P.Cair.Masp. 2, 67143, an account of people to be accused and a list of stolen animals (see Ruffini 2008: 161–3), Dioscorus adds after an amount of oil also ἔραι(γμοῦ) φαῖ(ῶν) (ἀρτάβη), πριῖτ(ήρ)/ (‘an *artabe* of pounded lentils, a saw’) to the entry of the accused Hermaos (l. 18; see Youtie 1979: 96) and ἄλλο αἰγί(διον) α/ (‘one other kid’) to ‘three sheep that have been found’ in the list of stolen animals (l. 23). To the list of names on the *verso* he adds \(\kappa\alpha\iota\ \tau\omicron\upsilon\ \delta\iota\alpha\kappa(\acute{o}\nu\omicron\upsilon)\ \acute{\alpha}\pi\alpha\ \text{Μη}\nu\acute{\alpha}\)/ ‘and by the deacon Apa Menas’ (l. 12). Letters that have been forgotten are supplemented as well during the writing, such as the ε added above the line in Θερ\(\acute{\epsilon}\)/σο(υ) (l. 25). In order to produce such a list of people and stolen goods, Dioscorus may have been collecting names and items from elsewhere to organise them into the three separate lists on this papyrus. During this process, he could easily have come across some extra information about the same individual which needed to be added to one of the previous entries. The formulation as well as the slightly larger, more hastily written letters in a darker shade of ink suggest that the phrase ὁμοί(ως) αἰγί(δια) β το(ῦ) Μ[ακα]ρ(ίου) (‘similarly two kids by the same Makarios’) was also added at a later stage to the entry of Makarios (l. 25).

The process of composition is also reflected in the corrections in lists in the archive of Petaus, village scribe of Ptolemais Hormou and surrounding villages (TM ArchID 182). Deletions are particularly common in these lists. In a list of names of persons from the village of Syron (P.Petaus 100), whole entries have been crossed out (l. 44), encircled (ll. 39–40) or wiped out (ll. 21–2 and 28), some more successfully than others (cf. ll. 1–3, 23–4). New entries have been added in between the lines (ll. 10, 43, 45, 52). The deletion of [Ἄμμλης υἱὸς Πααῦ Κιασῶς] (‘Ammlēs, son of Paaus Kiasis’) (l. 44) and subsequent insertion of Τασώκιος ἐπ(ικαλούμενος) Ἄμλῆ (‘Tasokis, nicknamed Amle’) (l. 45) may have been prompted by a confusion of both persons named Amles (see *ed. pr.*, n. to ll. 43–5). Most of the remaining entries on the *recto* have been marked with an ‘x’ in the left margin. The deletions, insertions and marking of the entries on this

papyrus indicate stages in a selection process. P.Petaus 59 preserves several drafts and a copy of the final version of a list of individuals proposed for the liturgical function of *sitologos*. Deleted names in the first draft (f; between ll. 24–5, 32–3 and 33–4) are left out in the subsequent versions, while added metronymics (ll. 27–8) become included in later ones. The empty space meant for the prescript at the top of the later versions (a–d) betrays several failed attempts to move towards a more finalised version of the list, as the editors conclude ‘Alle Urkunden zusammen zeigen jedoch eindringlich, ein wie mühsames Geschäft es war, eine solche Vorschlagsliste aufzustellen.’ (P.Petaus, pp. 230–31). It is clear that the main aim of these lexical and phrasal corrections in lists is not the improvement of the language, but the improvement of the contents.

Just as the drafting process of petitions includes not only changes to the formulation and textual composition (see Section 4.3), the composition of a list also yields more than just changes to the content. As the multiple versions of P.Petaus 59 show, the process of composition in various stages means that copying between drafts, from draft(s) to final version and perhaps from final version to multiple copies can be part of the production of a list. The patronymic of Ψονθ(νεύς) Παθύνεως in the draft versions (a), (b) and (c) was copied into the draft version (d) as Ψαθύνεως (l. 53), while the copy of the final version erroneously duplicates the patronymic Ἀπύγ(χεως) of the line before in its place. The same error is made in ll. 36–7: the copy of the final version interchanges the order of the two entries and writes τοῦ Τεσενούφεως to both Ἡρώων and Φιλάμμ(ων) Νεσεῦτ(ος), while the previous drafts (a, b, d, e and f) give τοῦ Φιλάμμωνος as the grandfather of Philammon.¹⁷ Copy mistakes can also elicit corrections, when they are discovered during writing or afterwards. In a list of names arranged by families living in Ptolemais Hormou (P.Petaus 93), corrections are usually added immediately. For example, the patronymic Ἰσχυρίωνος was initially skipped in Κεφαλάς [[Κεφαλ]] Ἰσχυρίωνος τοῦ Κεφαλά ἀφῆλ(ιξ) (ll. 124–5), but the anticipated grandfather’s name Κεφαλά was encircled as soon as the mistake was discovered half-way through writing the λ. Similarly, the patronymic Ἰσχυρῶ was initially omitted in Ἰσχυρῶς Ἰσχυρῶ/ ἐπικαλού(μενος) Κορ[κό]δ[ιλο]ς (l. 75) and added as soon as the mistake was noticed, probably between writing ἐπικα and λού(μενος) causing a small space between the two parts of the word

¹⁷ The copy of the final version of 59 seems to have been produced hastily and contains multiple copy mistakes (cf. *ed. pr.*, p. 230), such as the nickname of Ἀπύγ(ις) Πασῦτ(ος) written as υἱὸς Τῖνος (l. 48) instead of Οὐιστίνος (a–b) or Οὐστίνος (d) for the Latin name Vestinus, perhaps caused by confusion with the previous entry of Ἀπύγ(ις) Παθ(ύνεως) (also Πασῦτ(ος) in a and d) ἐπικ(αλούμενος) υἱὸς Μούτ(ος) (l. 47).

(see *ed. pr.*, n. to l. 75). Comparable corrections of skipped letters and words are also found in the list of names in P.Petaus 100 (see also above). For example, the π (anticipating the patronymic) was immediately corrected into the υ of $\upsilon\acute{\iota}\acute{o}\varsigma$ in $\text{Πααῦ}\varsigma$ $\upsilon\acute{\iota}\acute{o}\varsigma$ $\text{Πετεμῆννι}\varsigma$ (l. 15), and cf. also the $\upsilon\acute{\iota}\acute{o}\varsigma$ skipped and added later by the same scribe in Ποτάμων $\backslash\upsilon\acute{\iota}\acute{o}\varsigma/$ $\text{Κολμοῦ}\varsigma$ (l. 26). These types of small scribal errors and copy mistakes are an intrinsic part of the production process of multiple versions of any document and lie also behind some of the corrections made in lists.

5 Conclusions

Scribal corrections commonly occur in documentary papyri. On average, they are more likely to be found in petitions (32%) and letters (28%) than in contracts (22%) and lists (19%). Corrections in petitions and lists tend to come in higher numbers per text and the majority of the corrections are concerned with words and phrases, while the majority of the corrections in contracts affect graphemes and morphemes. These differences between the genres could be related to the structural properties and function of the text as well as the production process of the document and the stage of composition that is preserved to us. Based on qualitative analysis of corrections in various archives, it is possible to distinguish two basic methods of composition (free composition and copying) and two main stages of production (preliminary and final version). Different methods may coincide at various stages in the production process.

The private letters in the archive of the governor Apollonios illustrated that final versions of letters may contain small numbers of corrections at various levels. Accidental scribal errors, nonstandard orthography and morphological endings are corrected immediately or upon rereading the text. Second thoughts on the formulation and/or content of the message may be responsible for lexical or phrasal revisions during writing. In letters, the preliminary and final stages of composition often coincide. Final versions of contracts attract similar corrections of graphemes and morphemes, but lack revision of formulation and contents, probably because extensive revision of semantics and syntax was legally unacceptable in final versions of juridical documents. The non-final versions of contracts in the archives of the Alexandrian office and the scribal office of Kronion, on the other hand, show that many contracts are at least partially composed by a scribe. These preliminary versions of contracts are characterised by changes at lexical and phrasal levels, just as the frequent deletions and insertions

of words and short phrases found in drafts of petitions. Documents produced through several stages of drafting usually involve copying as well. Copy mistakes may occur between drafts, from draft to final version or in copies of the final document, as visible in the series of drafts by Ammon and the lists produced in the office of Petaus. Lexical and phrasal corrections in drafts of lists usually reflect changes to the content rather than changes in formulation.

Since many documents contain a limited number of corrections, the presence or absence of corrections itself is usually not enough to distinguish between a preliminary and final version of a document. The linguistic level of the corrections seems to provide a more informative criterion. Scribal revisions in all four genres confirm that lexical and phrasal corrections are typically found in documents at preliminary stages of (free) composition, while corrections of graphemes, morphemes and (parts of) words are also encountered in final versions and as a result of copying. Although both methods of production can be applied at preliminary and final stages of composition, the types and linguistic levels of scribal corrections could provide a helpful tool for identifying scribal practices at different stages in the process of textual production.

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