THE COPYIST AT WORK :
SCRIBAL PRACTICE IN DUPLICATE DOCUMENTS

Rachel Yuen-Collingridge / Malcolm Choat

The close study of scribal behaviour has been conducted mainly through the study of literary texts for the purpose of explaining the manuscript tradition. This situation prevails despite the fact that documentary texts offer a better opportunity to identify the conditions under which texts were produced, as well as the practice by which copies were made. Within the documentary record, the category of duplicate copies presents a rare opportunity to observe the mechanics of scribal practice.

The construction of a typology of scribal features relevant to the copying of documentary texts is a key desideratum in our understanding of the scribe at work. This ought to be independent of presuppositions about scribal modes of production, which are often framed in terms of a dichotomy between visual copying and dictation[1]. It must in the first instance describe the visible phenomena of the manuscript without recourse to assumptions about priority or causation. From such a basis, one might be able to comment in the future on whether the practices behind the production of documentary copies differed from those used for literary texts, and on what this might say about the scribal profession and the relationship between these two spheres of textual production.

Examining orthographic features has been the principle means for determining the process of textual transmission employed by scribes[2]. Against an imagined orthodoxy, it is the perception of orthographic deviance which dominates. These deviant elements have often been taken as evidence for scribal incompetence[3]. Scribal behaviour is thus frequently characterised as « inconsistent » and « idiosyncratic ». This characterisation is without a doubt an inescapable aspect of both documentary and literary texts. Yet patterns inherent in the distribution of orthographic features remain largely unidentified or ignored outside the narrow confines of linguistic research. Beyond broader linguistic trends, the persistence or variation of particular spellings between multiple copies of a text may help to illustrate the mechanics of scribal practice. The persistence of a non-standard spelling in two copies does not in itself and in isolation offer a useful datum[4]. However, as will be discussed below, should the same word be spelt in a number of different ways in a single document, the identical sequence of these variations in a copy is of more significance, suggesting as it does that factors beyond the merely phonological are in operation.

It is our contention that beneath the general conception of a wildly varying and undifferentiated mass of scribal phenomena stand trends which represent the aspirations underpinning and regulating scribal production. Moreover, these phenomena ought to be conceived of as encompassing more than mere orthographic variation : they include all aspects of the visual encoding of text[5]. Against the pervasive perception of the irregularity of scribal behaviour, we would like to track and emphasise the modes, areas, and degree of consistency evident in documentary texts. Close quantitative studies of finely differentiated features have already yielded surprising results in the study of the production of literary rolls and educational texts[6]. An inclusive and detailed typology of these symptoms

---

[1]   See Dain (1975) 16–55, esp. 20–22 and 41–46 ; Skeat (1956).
[2]   See Skeat (1956) 15–29 ; Harmon (1934) 156–157 ; Bucking (2007) 231–232.
[3]   See Caragounis (2004) 514–515.
[4]   *E.g.* P.Harr. I 68 A/B, 8 : ὑπο{c}χείριόc ; 14 : φροντίc<ε>ι.
[5]   For a discussion of some of these issues raised here in the context of medieval copies on parchment of earlier papyri, see Radiciotti (2009).
[6]   Literary rolls : Johnson (2004) ; educational texts : Cribiore (1996).

of scribal behaviour drawn from the particular circumstance of duplicate documents may provide a valuable counterpoint to these literary and paraliterary contexts.

Within the corpus of duplicate documents, texts which are too fragmentary for meaningful comparison have been eliminated from the core sample from which we will derive a typology of features to investigate : to be useful for this purpose, duplicates must be well-preserved in both copies, and preferably of substantial length[7]. We have chosen to focus on texts for which we have two copies written by a single scribe, and certainly or probably written on a single sheet of papyrus ; that is, copies made side by side on the same roll. These limitations are an attempt to isolate as far as possible duplicate documents which have the best chance of reflecting a physically and temporally proximate moment of copying. This selection in part allows for a manageable corpus, but it also removes the possibility that both copies were produced simultaneously from dictation ; whether they were produced *seriatim* from dictation is a possibility which must be assessed over the course of our analysis. In order to begin to identify potentially significant scribal features, we have chosen from the catalogue of duplicate papyri published by Nielsen (2000) a sample of three sets of duplicates, all from the fourth-century Hermopolite.

We should in the first instance ask what should register as a « duplicate document ». Nielsen excluded certain items such as private letters written in two copies, or contracts made in successive years with substantially identical wording[8]. In so far as these might shed light on copying practice, however, they are worth considering in a later phase of this study. As to what constitutes a « copy », we should distinguish two categories. The first consists of documents which the government required to be submitted in two copies, or of which contracting parties retained duplicates. So far as possible, these should be true duplicates, that is, aspirationally literal copies, except in cases where a clause has been added to indicate that one of these texts is a copy of the other. Documents such as these should be distinguished from successive drafts of a single document – found frequently in the case of petitions – which, while sharing much or nearly all of their wording, are not true « duplicates » *per se*. In these there is not a simple variation in wording or phrasing, but it is evident that someone has gone over one of the texts and inserted corrections above the line or in the margin, which were then incorporated into subsequent copies. This distinction between successive drafts and duplicates is often difficult to establish with confidence from the surviving evidence, and some cases will remain ambiguous.

Scattered literary passages and artistic depictions have tended to form the basis of the understanding of copying norms in Antiquity. Of the texts which have been taken for allusions to dictation, the majority seem to be references to dictation during composition, itself rightly recognised as different from the reproduction of manuscripts[9]. Iconographic evidence has been used to argue for the physical impossibility of visual copying[10] ; in fact, it suggests the opposite. Even if many scribes of the Graeco-Roman period adopted the same pose as their Dynastic Egyptian predecessors, with roll on knee and the non-writing hand to steady it (leaving no means of easily holding a copy), this does not mean that the use of desks for writing belongs to the medieval rather than classical world. An oft-reproduced relief from Ostia shows two scribes writing on wooden codices, which rest on

---

[7]   A further limitation at this stage of the study has been availability of images of papyri : thus potentially useful cases such as P.Harr. I 68 A/B (a duplicate of P.Diog. 18) and P.Amh. II 81 (the duplicate of P.Heid. IV 324) have not been assessed here, although they will certainly be the object of close study in the future.

[8]   See Nielsen (2000) 187.

[9]   Starr (1991) discusses the broad semantic range of *lector* ; Skeat (1956, repr. 2004) 4 the ambiguity of their role in Nepos, *Life of Atticus* 13. On composition by dictation, see Horsfall (1995) 50–51. Quintilian *Inst.* 1, 1, 28 and 10, 3, 18–22 provides a critical perspective ; see also McDonnell (1996) 470–476.

[10]   See Skeat (1956, repr. 2004) 7–9, citing earlier scholars in support.

low desks[11]. The figure standing between them may be a rhetor or a teacher (and the scribal activity would thus be tachygraphic)[12]. Alternatively, the relief was a bookseller's shop-sign, and represents the activity taking place inside[13]. In either case (and the presence of the crowd – apparently arguing – in the background would make us incline to the former), the point is surely that desks existed in the Roman world, and could easily have been used to facilitate visual copying.

Like the literary environment, the documentary sphere also provides evidence for the process of composing documents through dictation (ὑπαγορεύειν) : such will of course have been the norm, but it is noted explicitly – though still relatively infrequently – in texts such as wills, contracts, and court proceedings[14]. The method by which such documents were further reproduced, however, must largely be inferred[15]. Dynastic iconography again shows seated scribes taking dictation in documentary contexts[16]. Yet one of the few attempts to argue for the regular copying of official documents by dictation falls well short of proving this practice was the norm, or indeed that copies were always made simultaneously[17].

Intuitive assessments of the relative efficiency of dictation over visual copying in the mass production of literary texts have contributed models of manuscript reproduction, often without decisive evidential support[18]. In the case of documentary texts, the presumed efficiency of dictation need not be a factor when only one or two copies, if any, were required. The same might also be said of some esoteric literary or paraliterary texts.

Dictation has been traditionally detected by orthographic features which were allegedly explicable only in terms of having misheard a word[19]. Most discussions of the mechanics of and means to detect dictation have taken place with reference to literary texts, and in particular the New Testament. The classic treatment in this connection is that of Skeat (1956), the main focus of which was to suggest that the Codex Sinaiticus was produced by dictation. More recent work on the New Testament text has problematised Skeat's position : Royse argued that both Codex Sinaiticus and six New Testament papyri he examined were copied visually, with the scribe reading aloud and producing errors by « mishearing his own words »[20] ; Jongkind has emphasised how theories of manuscript production must take into account issues such as format and codicology, not merely orthography[21].

---

[11] Museo Ostiense inv. 130, assigned various dates from the second to the fifth century ; see Turner (1968) pl. VI ; White (2009) 281, fig. 11.2.

[12] Christian or philosophical : compare Turner (1968) 189 with Rizzi (2002) 59.

[13] See White (2009) 280–281, with n. 39.

[14] On epistolary contexts, P.Wash.Univ. II 107 is a rare explicit testimony. Wills : *e.g.* P.Cair.Masp. III 67312, 21–22 (AD 567) ; P.Lond. I 77, 12–13 (c. AD 610) ; P.Oxy. VI 907, 1–2 (AD 276) ; P.Princ. II 38, 3 (c. AD 264). Contracts : see P.Mich. V 322, 38 (AD 46), specified as having been dictated ; CPR XVIIb 11, 37 (AD 217/218). Among the many property contracts which use the word when specifying adjoining properties are a number in which it is noted that these are « dictated by mouth » (cτόματι ὑπαγορεύειν) ; *e.g.* P.Bodl. I 45, 14 (c. AD 610), P.Grenf. I 60, 29 (AD 582 ?), and a number in P.Münch. I, namely 9 and 11–13 (between AD 585 and 594). In numerous others, a gloss such as « enumerate » may be more appropriate. Court proceedings are used when the presiding official is dictating the judgment, which is then « read word for word » (ἀνεγνώcθη κατὰ λέξιν) : *e.g.* BGU II 592, ii, 3–5 (c. AD 160) ; P.Oxy. VIII 1102, 5 (c. AD 146). See Coles (1966) 51–52.

[15] See Harmon (1934) 153–157 ; Bucking (2007) 238, with n. 44.

[16] The most frequently cited are those in Birt (1907) 12.

[17] See Harmon (1934) 153–157 (and 136 on copies always made simultaneously). Occurrences of triplicate documents by different scribes do not automatically suggest dictation, as implied by Harmon (1934) 155 : see Choat / Yuen-Collingridge (2009) 113–116.

[18] See *e.g.* Putnam (1894) 22 : « It seems probable that in no other way would it have been practicable to produce with sufficient speed and economy the editions required. »

[19] See, for example, Crawford / Reynolds (1979) 164, despite Dain (1975) 21.

[20] See Royse (2008) 83–90, noting the model of copying outlined by Desrousseaux and endorsed by Dain (1975) 41 and 44–46.

[21] See Jongkind (2006) 123 and 135.

In an educational context, Cribiore has pointed to the undue haste with which dictation is sometimes detected in school exercise situations[22]. In T.Louvre MND 552 L, K, I, H, a wax-wooden codex from the early fourth century used by Aurelius Papnouthion for educational exercises, the survival of a teacher's model and the student's copy side by side shows that visual copying did not eliminate the intrusion of non-standard orthography in the copying process[23]. Papnouthion's copy shows some attempt to imitate the lettering of the model : his *alphas* in one section resemble the angular formation of his teacher more than the rounder form he used elsewhere[24]. The independent orthography of this student persists throughout the codex, and is not necessarily due to dictation : letters which disturb the meaning in his copy of the acrostic distiches are best accounted for as false starts produced by a mistaken reading of similarly shaped letters[25]. The loss of the final letter or syllable in many of the verses suggests a *Vorlage* with a damaged right-hand side. The dictation of such a model would have surely ameliorated these disturbances. At the outset of a scribal career, then, we can be certain that we are frequently observing visual copying. While writing from dictation formed part of the curriculum, the forms of letters could only be learnt by copying from a model. Visual copying is thus represented at both the lowest and highest stages of literacy, although its role in the documentary sphere is still undefined.

A sophisticated understanding of ancient copying techniques paradoxically weakens our ability to differentiate between dictation and visual copying. As has been noted in relation both to the New Testament and educational texts, the practice of scribes sounding out phrases they have read as they copy them out has the potential to produce errors which may appear to be produced by dictation. If accepted, this might suggest that there is no true « visual copying », and that we always deal with some form of dictation. Yet the mechanics of this type of copying are distinct from true dictation, that is, dictation involving one person reading out the text and another individual writing it down. Copying produced by a single individual may allow the script and physical format of the exemplar to influence the manuscript in a way not possible in the case of true dictation. While evidence traditionally explained as a sign of dictation may thus reflect a hybrid situation in which the possibility of visual copying cannot be decisively eliminated, errors which may only be caused by visual copying would seem to rule out dictation completely : a visual error which produces a sensible reading is unlikely to be identified as an error rather than a true variant. Presumably an obvious visual error producing a nonsense reading in a *Vorlage* would attract attention and resolution in a subsequent dictation. Signs of visual assimilation, however, are more difficult to determine, and may simply reflect an individual's style of writing particular syllables or words[26].

How then might we classify aspects of the copying process, and construct a typology which will allow us to detect modes of copying, and perhaps also aid us in detecting which of the copies we have is the original (or at least the more original) ? In what follows, we will draw out some features which might provide us with a diagnostic in this connection.

In order to begin identifying features that may be useful for a typology of scribal behaviour, we have examined closely three well-preserved fourth-century duplicates from the Hermopolite nome. We have chosen documents from a diverse selection of genres :

[22]   See Cribiore (1996) 92–93.
[23]   See the editions by Boyaval (1975) and (1977). Papnouthion's orthography differs from his teacher's model on four occasions in MND 552 L, face 1, 12–13.
[24]   See Boyaval (1975) pl. VII.
[25]   MND 552, L, face 2, which Cribiore (1996) 93, n. 174 argues were produced by dictation. See 18 : εθλημον ; 24 : η παρθενοι and λευτρα.
[26]   The case of P.Harr. I 68 A/B / P. Diog. 18, which survives in triplicate, seems to offer a unique opportunity to observe these two distinct modes of copying enacted over a single text ; however, the lack of images of the Harris texts means we have not been able to include this here.

P.Cair.Preis. 2 and 3, a petition to the *riparii* from AD 362 ; P.Cair.Preis 18 and 19, a proposal for liturgies from 340 ; and CPR XVIIA 17a and b, a contract for the sale of land from 321. The latter two sets of duplicates belong to the papers of Aurelius Adelphius and his son Asclepiades.

In his study of scribes and scholars of Oxyrhynchus, Turner suggested that the literary texts he identified as scholars' manuscripts, were « copied visually from an exemplar, not multiplied by dictation »[27]. As evidence for this he adduced the visual appearance of some of the texts, which seemed to show the scribes squeezing in letters at the ends of some lines, and spacing them out in others, as though following and preserving the stichometry of the exemplar. If this analysis is not unpersuasive, spot-checking among the documentary duplicates has not allowed us to find any instance where the stichometry is identical[28].

One need not presume stichometry was unimportant to documentary scribes, or to those who paid them : the section of the *Edict on Maximum Prices* on scribes confirms that the notaries (*tabellaniones*) who wrote petitions or legal documents (*libelli vel tabulae*) were paid by the line[29]. This would seem to conflict with the tendency of documentary duplicate copies to have dissimilar stichometry[30]. In the three copies which we examined in depth, there is a slight but noticeable variation in the density of letters per line and average number of lines written over a height of five centimeters. In every case, one copy appears to have been written in a more condensed style. It seems possible that – in the case of duplicates – the number of lines, by which the cost of the text was calculated, was based on the first copy of the text and not on a calculation of the number of lines for each copy independently. How this might effect the identification of the first copy, or even the circumstances which might influence additions or omissions from the text, cannot as yet be determined.

To what extent might the way in which letters and clusters of letters are formed in the exemplar influence the way they appear in the copy ? If such formations are dissimilar, what does this tell us and what degree of dissimilarity is significant ? We may compare the formation of the *chi* of Πεχώνϲιοϲ in P.Cair.Preis. 18, 4 and 19, 4 with that used by the scribe elsewhere[31]. This variation, whereby the final stroke of the letter extends below the regular lower limit established by the previous letters, is consistent between the two copies in this case, and different from the more bilinear formation the scribe uses at other points. As the name Pechonsis is very rare in the documentary record, it is perhaps unlikely that the scribe had developed his own characteristic way of producing this name at variance with his usual formation of the letter *chi*. Is this sort of variation too subtle to suggest that one copy has had a visual influence on the scribe's production of the second ?

Elsewhere the scribe of these documents switches the form of *nu* from a three-stroke to a more cursive form from one copy to the next. The alternation between the forms is consistent in both copies in almost all circumstances. In two instances of the highly common word νομοῦ, the copies diverge in the formation of *nu* chosen by the scribe[32]. The choice between the two forms of *nu* does not seem to be influenced by the position of the

---

[27]   See Turner (1956) 145.

[28]   A similar lack of concern for the stichometry of the original is evident in the copies of Aurelius Papnouthion in T.Louvre MND 552, L, face 1 – though there he had to work round an existing column of numbers – and face 2 ; see Boyaval (1974).

[29]   Ten *denarii* per 100 lines ; see *Edict* 7, 41. The *tabelliones* (the more usual form, see Lauffer [1971] note *ad loc.*) are called ἀγοραῖοι in the Greek version.

[30]   See *e.g.* P.Sakaon 45 / 45a (Theadelphia, AD 334) ; P.Amh. II 81 / P.Heid. IV 324 (Hermopolite nome, AD 247) and P.Oxy. XXXIII 2673 A/B/C (Oxyrhynchite, AD 304).

[31]   *E.g.* in κώμαρχοι (P.Cair.Preis. 18, 6 ; 19, 7) ; χαίρειν (P.Cair.Preis. 18, 7) ; ἐνχειριϲθεῖϲαν (P.Cair.Preis. 18, 10).

[32]   P.Cair.Preis. 18, 2 and 7 feature the cursive *nu*, while at the same places in the text in P.Cair.Preis.19, 2 and 8 the scribe uses the three-stroke form.

letter within the word, as the cursive form appears in medial, initial and final positions ; nor does it appear to be determined absolutely by the nature of the syllable. A single word, like ἰνδικτίωνος, may display both forms of the letter[33]. It is unclear whether the scribe has been influenced in the deployment of these two forms of *nu* by idiosyncratic ways of writing particular words or by visual assimilation to the exemplar. Both possibilities are made problematic by the inconsistent rendering of νομοῦ. However, the overall pattern is one of remarkable consistency in variation.

We might also give attention to the manner in which scribes begin or end words. In P.Cair.Preis. 3, δέμονος (for δαίμονος), stands at the end of line 11 ; the *sigma* has, as customary, been extended with a long flourish to the right-hand extension of the line above. In the duplicate P.Cair.Preis 2, 12, although the word δέμονος appears in the middle of the line, the scribe has reproduced the same long flourish of the *sigma* which he then wrote over with the following words. A similar phenomenon can be observed in P.Cair. Masp. II 67151. This copy by another scribe of P.Cair.Masp. II 67152 (written by Dioscorus) reproduces in three places (40, 45, 185), in the middle of these lines, the supralinear stroke abbreviating *nu* which Dioscorus correctly used at the end of a line[34]. In these cases at least, we can be almost certain that the exemplar is visually influencing the copy.

How much can we tell from the formation of other types of abbreviation ? In CPR XVIIA 17a and b, the scribe inconsistently applies abbreviation. In some cases the abbreviated form stands in the first copy, in others the second. In the first line, copy B abbreviates the term μη(τρός) where copy A writes it out in full. The position of this word, appearing at the beginning of the first line, provides no physical imperative for its abbreviation in B and not A. However copy A features a symbol for ἀρούρα and cipher for the number 7 (line 2), both of which B writes out in full (3 : ἀρουρῶν ἑπτά).

The regular distribution of non-standard orthography in duplicate documents complicates the assumption that such a feature is a sign of dictation[35]. P.Cair.Preis. 2 and 3 read the word γυνή three times : in the first instance (2, 8 ; 3, 8) both copies read γυναικεί for γυναικί ; in the second (2, 6 ; 3, 6), both read γυναῖκαν for γυναῖκα ; in the third (2, 11 ; 3, 11), both read γυναικός. The scribe has reproduced his phonetic and grammatical deviations consistently over the copies with this term, and also in almost all other aspects of the text. This may be contrasted with CPR XVIIA 17a and b, where there are divergences in the treatment of *epsilon* and *iota* between the texts.

Where we have textual differences between copies, at times they admit of multiple interpretations : the scribe of P.Cair.Preis. 2 adds τά above the line in the phrase καὶ τὰ ἐξ ἔθους διδόμενα (7), and we find it correctly in place in P.Cair.Preis 3, 7. Is this a correction in 2 after revision against 3, or a correction which has been subsequently incorporated into a more finished text in 3 ? Similar issues arise elsewhere in the same document :

P.Cair.Preis. 2, 8–15 :

8   ἐξετέλεσα καὶ
        τὸ συνῆθες τῶν γάμων, καὶ τρία ἔτη ἐποίησα
10   συνβιοῦν αὐτῇ. ἡ δὲ μήτηρ τῆς ἐνγεγραμμένης
        συνέπεξέν (l. -παιξεν) με ὡς τῆς γυναικός μου πῖραν (l. πεῖραν) λαβοῦ-
        σαν δέμονος (l. δαίμονος). ἐμοῦ οὖν ἀποδημήσας (l. -σαντος) εἰς τὸ ἴδιον
        ἔργον, ὅπως εὐρῶ ἐξυπερετῆσαι (l. ἐξυπηρετῆσαι ?) τὸν βίον, ἑτέρῳ

[33]   P.Cair.Preis. 18, 5 ; 19, 5. The forms τῶν πάντων in P.Cair.Preis. 18, 1 and πάντων τῶν in P.Cair.Preis. 19, 11, both use the cursive *nu* medially in πάντων and the three-stroke form at the end of τῶν.
[34]   We thank Jean-Luc Fournet for this reference.
[35]   Aurelius Papnouthion's copy of his teacher's model in T.Louvre MND 552 L, face 1, deviates at times from his teacher's orthography, but also carries over some non-standard forms.

ἀνδρὶ ἐξέδωκεν τὴν αὐτὴν cύμβιον ὀνόματι Πεεῦτι
15   ἀπὸ κώμηc Ἀχιλλεὺc (l. -έωc) τοῦ αὐτοῦ Ἑρμοπολείτου.

P.Cair.Preis. 3, 8–15 :
8   ἐ[ξ]ετέλε-
[cα καὶ τὸ cυ]νῆθεc τῶν γάμων, καὶ τρία ἔτη cυγ[ε]βί[ο]υν
10   [αὐτῇ. ἡ δὲ] μήτηρ τῆc ἐνγεγραμμένηc ἐνέπεξέν (l. -παιξεν) με
[ὡc τῆc γυ]ναικόc μου πῖραν (l. πεῖραν) λαβοῦcαν δέμονοc (l. δαίμονοc).
[ἐμοῦ οὖν ἀ]ποδημήcαc (l. -cαντοc) εἰc τὸ ἴ[δ]ι[ο]ν ἔργον, ὅπωc
[εὑρῶ ἐξυ]περετῆcαι (l. ἐξυπηρετῆcαι?) τὸν βίον, ἑτέρῳ ἀνδρὶ χωρ[ὶ]c
[. . . . .] ἐ[ξέ]δωκε[ν] τὴν αὐτὴν cύμ[β]ιον [ὀ]νό-
15   [ματι Πεεῦτι ἀπὸ κώμηc Ἀχιλλεὺc (l. Ἀχιλλέωc) τοῦ αὐτοῦ Ἑρμο]πολεί[του.]

When P.Cair.Preis. 2, 11 reads cυνέπεξέν where 3, 10 has the synonym ἐνέπεξέν, has the scribe in 2 been influenced by the cυν- of cυνεβιοῦν above in 3 ? Or the instances of cυν- in the lines above 2 ? Or has the verb genuinely been revised between the copies ? An additional stage of drafting might explain the change of phraseology from ἐποίηcα | cυνβιοῦν in 2, 9–10 to cυγεβίουν in 3, 9 ; and the apparent removal in 2 or addition in 3 of a phrase beginning with χωρίc which appears in 3, 13–15.

In documents which represent successive stages of drafts, as P.Cair.Preis 2 and 3 might, such differences are to be expected. In the case of the two copies of the contract given to Adelphios in CPR XVIIIA 17a and b, one expects closer alignment ; yet the copies feature some notable textual differences. One mistake catches our attention, where 17b reads ἀπὸ τοῦ, 17a reads ατου[36]. This seems likely to be the result of a misreading of the exemplar, a slip of the eye either by the copyist or by someone dictating the text. Elsewhere, features such as the enlargement of initial letters that appear in 17b do not appear in 17a[37]. The relationship between the two copies is thus difficult to determine. They may both be independent copies of the version « deposited in the official archives » by Paesis. The differences between them may be the result of two imperfect copies made *seriatim*, or may accurately reflect slight differences in wording as a result of the drafting of two original copies.

This survey of three sets of duplicates has allowed us to identify a number of potentially significant features to be tracked in a wider corpus, and which deserve a place in a provisional typology. First among these are the visual elements of the script itself, such as any affinity in the formation of particular sequences of letters, for example the enlargement of a specific letter, the deployment of spacing, the use of flourishes to separate words or phrases, the distribution of alternate forms of letters and the appearance of abbreviations or punctuation. Second are the orthographic irregularities and the delibe-rate or accidental alterations of the text. Finally, the physical characteristics of the docu-ment itself also deserve consideration. These should include the density of the written text, as well as the dimensions and format of the document. This typology can be developed and augmented by examination of the corpus of papyri best suited to providing the greatest amount of data in a controlled setting ; that is, duplicates where both copies survive sub-stantially and are written in the same hand. Of particular interest will be those where the priority of the copies may be determined on the basis of one copy bearing a signature[38].

---

[36]   CPR XVIIA 17b, 2 : ὁμολογῶ πεπρακέναι cοι ἀπὸ τοῦ νῦν (…).
[37]   Compare for example the phrase οὕτωc ὀρθῶc in 17a, 12 and 17b, 13.
[38]   P.Harr. I 68 A/B (Philadelphia, AD 225) ; P.Sakaon 45 / 45a (Theadelphia, AD 334) ; P.Amh. II 81 / P.Heid. IV 324 (Hermopolite nome, AD 247). One cannot, of course, always determine which is the original on the basis of a signature : the three copies (in three different hands) of P.Oxy. XXXIII 2673 all bear the

This last group will provide a vital control on the relationship between original and copy as revealed in scribal features. By mapping elements such as we have observed here quantitatively over individual copies, and then also against genre, date, and provenance, we hope to nuance our picture of the documentary scribe in action. Such data might enable us to determine more accurately the relationship between idiosyncratic practice and scribal culture. From these mundane and familiar features patterns may be derived which are instructive for the study of scribes and their habits in Graeco-Roman Egypt.

Bibliography

Birt, T. (1907), *Die Buchrolle in der Kunst* (Leipzig).
Boyaval, B. (1974), « La tablette scolaire Pack² 1619 », *ZPE* 14, 241–247.
Boyaval, B. (1975), « Le cahier scolaire d'Aurelius Papnouthion », *ZPE* 17, 215–230.
Boyaval, B. (1977), « Le cahier de Papnouthion et les autres cahiers scolaires grecs », *Revue Archéologique* 215–230.
Bucking, S. (2007), « On the Training of Documentary Scribes in Roman, Byzantine, and Early Islamic Egypt : A Contextualized Assessment of the Greek Evidence », *ZPE* 159, 229–247.
Caragounis, C.C. (2004), *The Development of Greek and the New Testament* (Tübingen).
Choat, M. / Yuen-Collingridge, R. (2009), « A Church with No Books and a Reader Who Cannot Write. The Strange Case of P.Oxy. 33.2673 », *BASP* 46, 109–138.
Coles R.A. (1966), *Reports of Proceedings in Papyri* (*Pap. Brux.* 4, Bruxelles).
Crawford, M.H. / Reynolds, J.M. (1979), « The Aezani Copy of the *Prices Edict* », *ZPE* 34, 163–210.
Cribiore, R. (1996), *Writing, Teachers and Students in Graeco-Roman Egypt* (Atlanta).
Dain, A. (1975), *Les manuscrits* (3rd ed., Paris).
Harmon A.M. (1934), « Egyptian Property Returns », *YCS* 4, 133–234.
Horsfall, N. (1995), « Rome without Spectacles », *G&R*, 2nd ser., 42, 49–56.
Johnson, W.A. (2004), *Bookrolls and Scribes in Oxyrhynchus* (Toronto).
Jongkind, D. (2006), « One Codex, Three Scribes, and Many Books : Struggles with Space in Codex Sinaiticus », *in* Kraus T.J. / Nicklas, T., (ed.), *New Testament Manuscripts. Their Texts and Their World* (Leiden) 121–135.
Lauffer, S. (1971), *Diokletians Preisedikt* (Berlin).
Rizzi, M. (ed.) (2002), *Gregorio il Taumaturgo (?), Encomio di Origene* (Milano).
McDonnell, M. (1996), « Writing, Copying and Autograph Manuscripts in Ancient Rome », *CQ* 46, 469–491.
Nielsen, B. (2000), « A Catalog of Duplicate Papyri », *ZPE* 129, 187–214.
Putnam, G.H. (1894), *Authors and their Public in Ancient Times* (New York).
Radiciotti, P. (2009), « Copie da papiro nel medioevo romano (con un documento di S. Maria in Trastevere) », *Scripta* 2, 159–167.
Royse, J.R. (2008), *Scribal Habits in Early Greek New Testament Papyri* (Leiden).
Skeat, T.C. (1956), « The Use of Dictation in Ancient Book-Production », *Proceedings of the British Academy* 42, 179–208 [reprinted by Elliott, J.K. (ed.), *The Collected Biblical Writings of T.C. Skeat* (Leiden 2004) 3–32, which is used here for pagination].
Starr, R. (1991), « Reading Aloud : *Lectores* and Roman Reading », *CJ* 86, 337–343.
Turner, E.G. (1956), « Scribes and Scholars of Oxyrhynchus », *in Akten des VIII. Internationalen Kongresses für Papyrologie, Wien 1955* (Wien) 141–146.
Turner, E.G. (1968), *Greek papyri : An Introduction* (1st ed., Oxford).
White, P. (2009), « Bookshops in the Literary Culture of Rome », *in* Johnson, W.A. / Parker, H.N. (ed.), *Ancient Literacies. The Culture of Reading in Greece and Rome* (Oxford) 268–287.

signature of the person signing for the *anagnostes* making the declaration ; in this case, priority can be determined only by observation of scribal features in the body of the text : see Choat / Yuen-Collingridge (2009) 113–115.