

TEMI E TESTI

248

“GRAPHIC SYMBOLS, WRITTEN WORDS”

SERIES DIRECTED BY ANTONELLA GHIGNOLI

MANI E SCRITTURE
SIMBOLI E TESTI

RICERCHE SU FONTI DOCUMENTARIE
ED EPIGRAFICHE TARDOANTICHE

a cura di

MARIA BOCCUZZI



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GRAPHIC SYMBOLS, WRITTEN WORDS

The Series aims to publish research on pragmatic literacy and the written culture of Late Antiquity and the Early Middle Ages. It is focused in particular on palaeographical and critical analyses of written records that consider both texts and graphic symbols as interrelated facets of written culture in this period.

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NINA SIETIS

ABBREVIATIONS IN GREEK DOCUMENTARY TEXTS

THE CASE OF THE APIONS' ARCHIVE

This paper presents the preliminary results of a work in progress over one of the less researched features of Greek handwriting, that is 'abbreviations' and 'shortening techniques'¹. With these terms I refer to the practice of shortening words by eliminating one or more letters that compose them, which is believed to respond to the double need of brevity and economy when transcribing a text².

This phenomenon has been studied only from a practical perspective and there is no complete and up-to-date discussion on the origins and history of Greek abbreviations³. The historiography divided papyrological evidence into two categories: literary and documentary papyri⁴. Scholars usually published a number of lists of abbreviations, as they were mostly interested in offering reference manuals to editors of Ancient and Medieval works⁵. Research on documentary texts – written both on soft and hard materials – has mainly focussed on the first centuries of Greek handwriting⁶. The last attempt of theoretical systematization of this specific topic from palae-

A special thanks goes to the colleagues who read this work or followed its composition in various forms.

¹ GONIS 2009 is the more recent and comprehensive papyrological contribution on this topic, whilst in the field of Greek palaeography some notions can be read in BIANCONI – CRISCI – DEGNI 2021, pp. 175-181, with previous bibliography.

² BELL 1951; BLANCHARD 1974; GONIS 2009; PETRA 2011-2012 for examples in papyri, and DEGNI 1999; BIANCONI – CRISCI – DEGNI 2021, pp. 175-188 for a palaeographic approach. See also PLUTA 2020, p. 10 for abbreviations in Latin context.

³ BIANCONI – CRISCI – DEGNI 2021, p. 187 underline the lack of new research on this crucial aspect of Greek handwriting.

⁴ Abbreviation practices in literary evidence are for example analysed in MCNAMEE 1981 and 1985, BASTIANINI 1992 and RICCIARDETTO 2019.

⁵ See the bibliography quoted in RICCIARDETTO 2019 to which should be added ALLEN 1889 and ČERETELI 1896.

⁶ See the bibliography quoted in DEGNI 1999 and GONIS 2009.

ographic perspective was made by Paola Degni, but her work stops with the 4th century⁷. The issue was lastly addressed by Nikolaos Gonis, who published a useful chapter about the use of abbreviations and symbols in Greek papyri – both literary and documentary⁸ –, and by Elissavet Petra, who focussed on the direct analysis and presentation of shortening techniques in the documents written during the Arabic period (640-800)⁹.

A large part of the picture is still missing and scholars still do not have an unanimous and unambiguous terminology at their disposal¹⁰. This is a very complex topic, which would require a deeper analysis: for this paper, the partitions offered by Degni will be generally followed, sometimes borrowing some remarks relevant to the field of Latin palaeography and abbreviations in Latin script(s) mainly made by Giorgio Cencetti and Nicoletta Giovè Marchioli¹¹.

1. *Research object.*

The starting point for this work was to expand the analysis of abbreviations in Greek handwriting to their features in documentary texts written after the 4th century: the choice fell on the study of abbreviation patterns in the documents belonging to the so-called Apions' archive¹². This choice stems from the need to work on a well-defined *corpus* of documents, written on soft material and in a well-defined place: this archive comprises a significant number of documents written on papyrus (378 pieces), produced over a long period of time in the same Egyptian region and characterised by a wide variety of document types from a diplomatistic point of view.

So far, 378 documents have been identified by researchers as connected to the well-known ἑνδοξος οἶκος, most of them belonging to its archive¹³. These documents date from the second quarter of 5th century to the first decades of 7th and relate to the Apions' family, and especially to its four main members, the Flavii Apioni, namely Flavios Apion I (489-524/532), who

⁷ DEGNI 1999.

⁸ GONIS 2009.

⁹ PETRA 2011-2012.

¹⁰ See DEGNI 1999.

¹¹ CENCETTI 1954; GIOVÈ MARCHIOLI 1993 and 2016.

¹² TM Arch 15: on which fundamental is MAZZA 2001.

¹³ And others will hopefully be added: the base for this research was TM Arch 15 (last consulted 01/2023), as continuous new editions have left MAZZA 2001 obsolete. See for example BENAÏSSA 2020; CALABRETTO 2020; PUTELLI 2020. For the difference between archive and dossier see MAZZA 2001, pp. 13-18. The complete list of the analysed documents is provided in the appendix.

fought the Persians at Amida in 503 and was head of the praetorian prefecture of the East under Justin I (518); his son Flavios Strategios II (489-542), who was one of Justinian's closest collaborators; Flavios Apion II (539-577/579), one of the last ordinary consuls of the Empire; and last but not least Apion III (586/587-620/621), who married Eusebia, the daughter of Boetius' nephew: thanks to this marriage, the family could expand their properties in the surroundings of Rome and in Sicily¹⁴.

These documents were for the great majority written and/or preserved in the Oxyrhynchite *nomos*, more specifically in its capital: it is indeed very likely that Oxhyrhynchus was the administrative centre of the family, as a member of the imperial élite¹⁵.

As far as regards diplomatistic aspects, this archive consists of business letters, orders, payment receipts, petitions, accounts, contracts, but also private letters, thus making the Apions' archive very rich in information of various nature¹⁶.

A premise is needed: for obvious reasons of representativeness the most fragmentary papyri were excluded (18), leaving a core of 360 papyri to be examined. From this core it was necessary to detract some other documents, mostly because no image of them is available (17) or because they are still inedited (5): the number of documents analysed for this paper is thus 338¹⁷.

2. *Systems and categories of abbreviations.*

In approaching this documentation, I first examined what Degni called 'abbreviation systems' – «il modo costante e uniforme, seguito in un determinato periodo di tempo per abbreviare le parole, come ad esempio il troncamento»¹⁸. For the time being, in the absence of a more detailed contribution, it is sufficient to say that it is generally acknowledged that Greek handwriting envisaged especially two ways of shortening words, namely *suspension* and *symbols*¹⁹.

Symbols can be defined as alphabetic or non-alphabetic «segni grafici (...), i quali di per sé rappresentano una parola»²⁰. For this research, I decid-

¹⁴ Information on this family can be found, other than in MAZZA 2001, in HARDY 1931, pp. 25-38; HICKEY 2012; AZZARELLO 2007 and 2010.

¹⁵ See MAZZA 2001 and HICKEY 2012.

¹⁶ See at least MAZZA 2001, pp. 20-38.

¹⁷ All the lists were also excluded at a certain point of the analysis, leaving a total of 258 documents: see *infra* and the chart in the Appendix.

¹⁸ DEGNI 1999, p. 73 n. 32.

¹⁹ It should be stressed that this and the following distinctions are purely functional to modern analysis.

²⁰ BASTIANINI 1992, p. 278, who only allows for the possibility that these symbols are composed of non-alphabetic elements.

ed not to focus on symbols. It is sufficient to say that it has been said that only *plain symbols*, namely symbols without any morphological connotation, were used for texts of pragmatic (*i.e.* documentary) nature²¹: the documents analysed for this paper do not seem to contradict this statement. Moreover, as far as it was possible to check, they seem to be used only in some particular cases, namely in documents of fiscal nature or regarding commercial transactions without a complex scheme, such as P.Wisc. II 66 (584). But this aspect will be deepened in another paper.

As far as regards *suspensions*, namely the omission of the last letter(s) of a word²², they are generally divided into many *categories*²³: they are what can be named the (a) *simple suspension* – *e.g.* λαμπρ/ = λαμπρ(οτάτου) – (b) the *sigla* – the use of just the first letter of one or more words, for example μ = μ(όνος) – (c) the *double suspension* – which regards compound words and consists of the shortening of both the semantic units, *e.g.* τοπγρ = τοπ(ο)γγρ(αμματεύς), βφ = β(ενε)φ(ικιάριος) – and (d) the *irregular suspension*. With irregular suspension I here refer to the «suspension à thème discontinu» – expression coined by Alain Blanchard and recently embraced by Gonis, too²⁴: it consists in tracing only the first and some internal letter(s) of a word, usually the consonants, as they bear the semantic meaning – for example επερ^θ = ἐπερ(ωτη)θ(είς). This last type, the irregular suspension, can be traced in a small percentage of documents – only fifteen in the *corpus* examined for this study. Of these, ten bear a date, from 587 to 621: P.Oxy. XVIII 2196 (587), P.Oxy. LXXXIII 5393 (591), P.Oxy. LXXXIII 5396 (595), P.Oxy. XVI 2045 (612), P.Amh. Gr. II 158 (612), P.Oxy. LXXXIII 5399 (612), P.Oxy. LXX 4801 (617), P.Oxy. XVI 2010 (618), P.Oxy. I 153 (618), P.Oxy. LXXXIII 5400 (621); two of them, P.Oxy. LIX 4006 and P.Oxy. XVI 1855, were written in the first quarter of the 7th century, whilst P.Merton II 98 is generically referred to the 7th century. In the end, only documents written from the last quarter of the 6th century onwards show the use of this category of suspension. Therefore, the presence of irregular suspension could be a clue for narrowing the chronological range of documents that lost their date – for example P.Oxy. XVI 1830, a letter concerning the rise of the Nile, and PSI V 474, a receipt for the payment of wine,

²¹ *Ibidem*, pp. 278-279.

²² GONIS 2009, p. 171.

²³ DEGNI 1999, p. 73 n. 32 talks about ‘class(es)’.

²⁴ See respectively BLANCHARD 1974, pp. 12-13 and GONIS 2009, pp. 173-174. In the field of Latin palaeography, no difference is made between irregular suspension and contraction (see DE ROBERTIS 1993, p. 167).

both generically assigned to the 6th century. This theory is underpinned by Harold I. Bell's statement that «contraction did not become really common till toward the end of the Byzantine age»²⁵; nor does this contradict what Blanchard remarked about the *suspension à thème discontinu*: the only examples prior to the end of the 6th century he shows in his study concern words of Latin origin and expressing Latin concepts, whose shortening – as stated by the author – may therefore have been influenced by Latin abbreviation practices²⁶. Of course this theory needs to be proved by the analysis of a higher number of documents: but this is an interesting starting point²⁷.

In the category of irregular suspension, we can also include (d.1) *contraction*, a particular type of suspension, which only retains the first and the last letter(s) of a word – as for the *nomina sacra*²⁸. This technique is quite rare in Greek handwriting, but some contractions can be found even in a few documents of the Apions' archive, even though limited to Christian words, such as θεός – SB XII 11231 (549), PSI I 81 (595), P.Oxy. LVIII 3958 (614) – or κύριος – P.Oxy. LXXXIII 5394 (592) –, or to the name of Egyptian months, as Φαμενωθ – PSI V 474 (6th century, second half). P.Oxy. LIX 4006 (600-625) makes an exception, as it bears the word οἰκέτιος abbreviated οἰκ(εἰ)ω.

3. *The simple suspension and its marks.*

The most fecund category of abbreviation that can be tracked down in the Apions' archive is the simple suspension²⁹. It is not surprising: this was the more immediate way of shortening a word and one the most prolific even in later Byzantium³⁰. Before examining the simple suspensions in detail, it is necessary to briefly discuss how they were formed.

Firstly, it has to be noted that the suspensions examined for this paper are for the major part highlighted, namely that some kind of device is used

²⁵ BELL 1951, pp. 430-431.

²⁶ BLANCHARD 1974, pp. 12-13.

²⁷ The scarcity of the double suspensions has been recently confirmed by I. Marthot-Santaniello, who gave a presentation on quantitative analysis of abbreviations during a workshop in Oxford organised by Jonathan Prag and Robert Crellin (Oxford, 18th-19th of April 2023). As a result, the importance of a comprehensive analysis of both the graphic aspect of a writing and the shortening practices of a scribe is emphasised.

²⁸ About contraction in documentary papyri: BELL 1951, pp. 430-433; about contraction in literary papyri: McNAMEE 1981, pp. XIII, 120-121. For the symbolic and visual implications of *nomina sacra*, see HURTADO 1998 and BARKER 2007; still useful PAAP 1959, but see BLANCHARD 1974, pp. 18-19, who suggests the possibility of an origin from cryptography.

²⁹ According to Byzantine uses: BELL 1951, pp. 430-431.

³⁰ Some remarks about abbreviations in Byzantine texts can be read in SIETIS 2019.

to emphasise a portion of the text, because of its particular situation, that the reader has to pay attention to³¹. In the Apions' archive the so-called *unmarked abbreviations*³² are indeed really rare – for example in P.Col. XI 297, l. 3 διακόν(ου) (5th/6th century), and the practice of shortening for simple suspension is usually marked in some way or another. As a consequence, in shortened words two parts can be distinguished: a *semantic element* – namely the alphabetic part – and a *symbolic element* – that is the artificial component for saying that there is an abbreviation³³. Scribes usually pointed out the presence of an abbreviation in two different ways: with the *superscription* of typically the last letter(s) kept of the abbreviated word – or, as palaeographers prefer to say, of the first letter of the abbreviated part of the word itself –, for example in P.Mich. XIV 682, l. 1 ἐδο^θ(ησαν) (496) and in P.Oxy. I 138, l. 32 λαμπρ^ο(τάτοις) (610) – or using *paragramphematic signs* or *abbreviation marks*. There are some cases in which the abbreviation is highlighted by these two distinctive features combined together – for example in P.Oxy. XVI 1989, l. 25, προγεγραμμ^ε(νος), with the *epsilon* written above the *mi*, and a sinusoid which starts from the consonant (590), or in P.Oxy. LXVI 4537, l. 3, πρ^ε(σβύτερον), with the *epsilon* written above the *rho*, which has a slash on its vertical stroke (6th/7th century).

In this phase of Greek handwriting, abbreviation marks were just of the so-called *general type*: only in later times the combination of superscription and cursivity led to the development of marks of *specific type*, generally used for syllabic endings: the configuration and placement of these marks were indeed relevant for their meaning and they could thus be unravelled in a single and unique way³⁴. It is still debated whether these graphic signs have an alphabetic root or not³⁵ and if their use still allows to talk about suspension and not rather about brachygraphy³⁶.

³¹ CENCETTI 1954, p. 441; DE ROBERTIS 1993, p. 173.

³² GONIS 2009, p. 171.

³³ CENCETTI 1954, p. 441.

³⁴ CENCETTI 1954 speaks about marks with general meaning and marks with specific meaning. See DE ROBERTIS 1993, p. 173.

³⁵ *Ibidem*, p. 164.

³⁶ Another problem concerns nomenclature: these marks of specific type, common in manuscripts written in Greek minuscule, are usually known as *tachygraphy* or *tachigraphic marks* – following the work of Oskar Lehmann (LEHMANN 1880; PERRIA 1999, pp. 98-99 and 2011, pp. 171-172; CRISCI – DEGNI 2011, p. 283; BIANCONI – CRISCI – DEGNI 2021, p. 179) – thus causing a communication problem with other areas and specialists of 'manuscriptology', in particular papyrology and Latin palaeography, where tachygraphy has its own well-established framework and consolidated tradition of studies (among papyrological wor-

Coming back to the topic of this paper, the most common abbreviation marks of general type used in the Apionic documentation are³⁷: (1) the *slash*, or oblique, usually drawn over the letter, crossing it – e.g. P.Oxy. XVI 1856, l. 8 ἔνδοξ(ον) (5th/6th century); and (2) what Gonis called *sinusoid*, a kind of serpentine added next to the shortened word – e.g. P.Oxy. XVI 1898, l. 3 Φλ(αβίου) (587) – or, in some cases, drawn in continuity with its last letter – e.g. P.Oxy. XVI 1870, l. 32, ὄντ(ων) (554); of course, cursivity may modify the sinusoid's shape, so that it becomes a simple curved stroke, especially in the case of highly sloped, cursive scripts – see for example P.Oxy. LXX 4787, l. 10 Ὀξυρυγγ(ίτου) (564) and P.Oxy. I 134, l. 1 εὐσεβ(εστάτου) (569). The adoption of other abbreviation marks is sporadic, in accordance with Gonis' statement about the frequency of this kind of markers³⁸. They are: (3) a *superscript horizontal stroke*, that can be found for example to indicate the abbreviation of the word σχοινί(ων) in SB XVIII 14063, l. 4 (556) or for the word μη(νός) in PSI III 191, l. 2 (565), and again in P.Oxy. LVIII 3959, l. 1 (620), above the *nomen sacrum* κ(υρίο)υ. As far as I was able to verify, this abbreviation mark appears in the documentation analysed for this paper only from the second half of 6th century. This is also the case of another mark or maybe – more correctly – a different use of (4) the *oblique*, when drafted smaller and next to the abbreviation: there are a few cases in which this *short slash* – which was very common in the documents prior to 4th century and most probably of Latin origin³⁹ – is preferred to other signs. For example, it is used for the word Φλ(αβίου), in P.Eirene II 12, l. 4 (492) – but the same shortened word is elsewhere marked with a sinusoid: see l. 2; the same variation can be found in three tax receipts for money taxes made by Pamouthios *pronoētēs* in 535 (P.Oxy. I 143, l. 1); this mark is also employed to underline every shortened word in Pap.Congr. XXIV, pp. 415-425, nr. 3, an account of wine ascribed to the 6th/7th century, which is written in a rather elegant although cursive majuscule script.

ks see at least MILNE 1934; BOGE 1974; MENCİ 1992 and 2019; as for Latin tachygraphy, see GANZ 1990 and HELLMANN 2000 and 2023). This aspect, together with the presence of tachygraphy in some documents of the 6th-century Oxyrhynchite as formal and outward expression of the legal and administrative practice (see CENCETTI 1954, p. 383), will be the object of another work (see MENCİ 2019, p. 230: «i papiri tachigrafici dovrebbero essere più propriamente definiti semiografici»).

³⁷ In accordance with the Byzantine use: BELL 1951, p. 427.

³⁸ GONIS 2009, pp. 173-174.

³⁹ BLANCHARD 1974, pp. 8-11.

Apart from these few cases, the totality of abbreviation marks is represented by the slash and the sinusoid. This circumstance allows us to make a consideration about their use. A particular trend can indeed be observed in the nearly 3000 abbreviations that I analysed for this paper: the slash is used when the last letter before of the shortening ends with a stroke drawn from top to bottom⁴⁰, so that the scribe lifts the writing instrument and then traces the slash with a movement from the left to the right, from bottom to top, or draws a knot that allows him (or her) to change direction. On the contrary, when the last stroke of the last letter of the shortened word is drawn horizontally or with a movement that goes from bottom to top, the natural direction of the abbreviation mark would be the opposite: this is when the sinusoid and its variations are used. The sinusoid is also generally employed when the sign is drawn on the baseline, right next to the shortened word, but without touching it (fig. 1).

This conclusion could imply that the shortening of words had to meet some conventions. This means that abbreviations could also comply with some constant scribal techniques and characteristics, making them a complex graphic and cultural phenomenon, as Armando Petrucci stated⁴¹, with its orthographical (mandatory?) criteria: if this theory is correct, we have to admit that the use of abbreviations was not exactly – or not only – a pure mechanism of saving space or time⁴², as it had to adapt to some standards that created a kind of new written alphabet⁴³.

4. *Abbreviations in context.*

In order to verify the existence of regular patterns and to demonstrate the assumption above stated, I examined in detail the following aspects: (1) first, the grammatical categories of the shortened words – nouns, verbs, adverbs, and so on –, their frequency, and which particular terms and expressions were commonly shortened⁴⁴; (2) secondly, if the position of the word in the document itself influenced the possibility of shortening it or not, *i.e.* the variation of the percentage of abbreviations in relation to the different parts of a document – prescripts, body of the text, subscription(s); (3) thirdly, if the frequency of abbreviations changed according to the type of documents in which they were employed, namely if there were variations among letters and contracts or lists, etc.

⁴⁰ See GONIS 2009, p. 174.

⁴¹ PETRUCCI 1993, pp. 9-10.

⁴² As stated for example by BELL 1951.

⁴³ DE ROBERTIS 1993, pp. 161-162.

⁴⁴ See CENTENARI – IORI 2010.

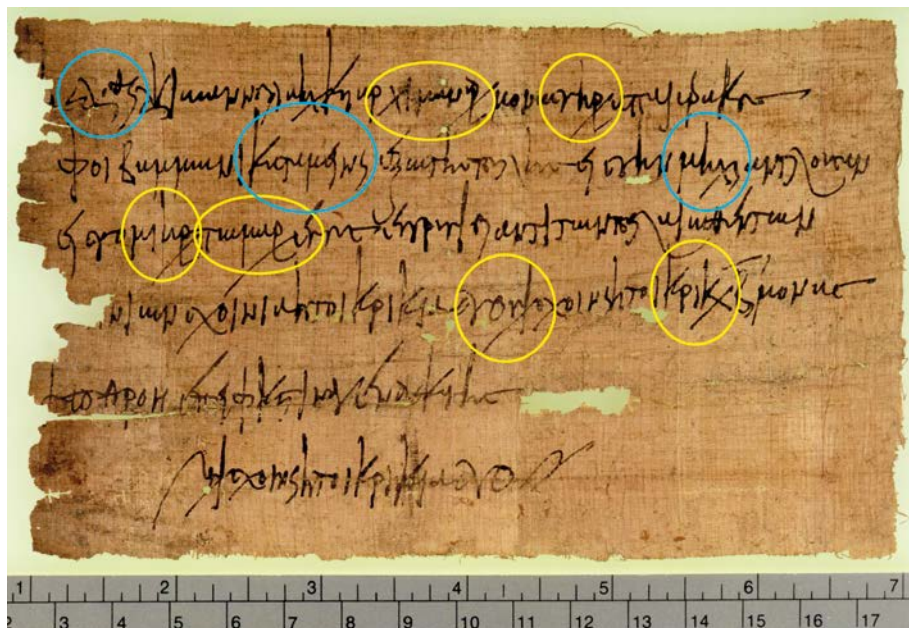


Fig. 1. P.Oxy. LI 3640: receipt for ropes.

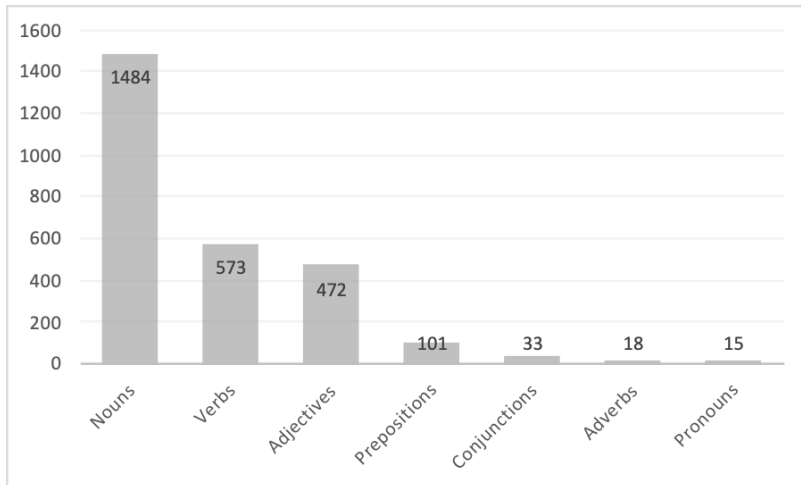
It is commonly acknowledged that the answer to the last question is affirmative⁴⁵. It has already been noted that abbreviations are not often used in private letters⁴⁶ – no abbreviations can be found for example in P.Harris I 154 (5th/6th century), P.Merton II 96 (6th century), P.Oxy. I 156 (6th century), P.Oxy. I 157 (6th century), P.Oxy. XVI 1840 (6th century); whilst accounts and lists, especially regarding tax collection or economic transactions, are without any doubt the category that presents the highest percentage of abbreviations on the total of the words they are made of. In an almost complete account of 542 AD, P.Oxy. XVI 1918, the word νο(μίσματα) is shortened 94 times, the word κερ(άρια) 35 times, whilst the shortened form of π(αρά), consisting of a *pi* cut by a slash, occurs 55 times. The large number of abbreviations used in this type of document led to the exclusion of accounts and lists from the further stages of research: such high numbers could in fact have compromised the following evaluations.

At this point, it is worth considering the grammatical categories of shortened words and their percentages, which can be seen in tab. 1. *Nouns* are the

⁴⁵ BELL 1951, p. 429.

⁴⁶ *Ibidem*.

category with the highest rate of abbreviations: they alone represent about the 55% of the total of shortened words in this group of texts. *Verbs* and *adjectives* are more or less at the same level, representing the 21 and the 17% of the total of abbreviations. The use of shortened particles, namely *prepositions* and, less commonly, *conjunctions* – or rather conjunction, as *καί* is the only one that is shortened – represent together the 5%: 33 are the occurrences of the shortened *καί*, mostly abbreviated in the sinusoidal form and just once realized with a *kappa* accompanied by a small stroke towards the bottom, that can be seen in what remains of a protocol of 533, namely SB XXII 15581. The number of other shortened categories is totally negligible: adverbs or pronouns start to appear very sporadically and only in documentation from the second half of 6th century onwards.



Tab. 1. Grammatical categories of shortened words and their percentages.

It may be of some interest noting that shortened prepositions occur more commonly in commercial transactions, as *διά* and *παρά* represent almost the total of shortened particles. These results lead to the following question: which are the semantic categories of nouns, verbs and adjectives that are usually shortened? As Margherita Centenari and Luca Iori have already noticed for Greek medical papyri⁴⁷, the most shortened nouns are the words

⁴⁷ CENTENARI – IORI 2010.

indicating dates or quantities – namely, of course, *ινδικτιών* (181 occurrences), *μήν* (34 occurrences) and *ἔτος* (31 occurrences), *νόμισμα* (35 occurrences) and *κεράτιον* (24). Interestingly enough, the other nouns that are more frequently abbreviated concern the addressee of a document or its issuer, such as honorific titles – like *μεγαλοπρέπεια* (12 occurrences) or *λαμπρότης* (5 occurrences) – and roles – for example *δεσπότης* (53 occurrences) or *οἰνοχειριστής* (12 occurrences); another word which is always shortened is *Φλαύιος* (63 occurrences), the honorific title used for emperors in the dating formulas and for the members of the Apions' family. The same phenomenon occurs among verbs: only some forms typical of the technical language of the document – among which we can find *ἐπερωτηθείς*, *-εῖσα* (57 occurrences), *γραφείς*, *-εῖσα*, *-έν* (48 occurrences) or *πρόκειται* (41 occurrences) – are shortened. There are not only the most frequently used words, but also those most typical of a given context⁴⁸.

It has to be pointed out that there is a general tendency to fix the abbreviations of some words in a stable form: for example, the abbreviation for *κεράτια* is always cut after the *rho*, and always marked with a slash that crosses its vertical stroke (22 times), except in two cases, where only the last letter is omitted: in P.Oxy. LXXXIII 5399, l. 3 (612), where *κεράτι(α)* appears, with a slash on *iota*, and in P.Oxy. LXXV 5070, l. 10 (605-606 or 620-621), *κερατίω(ν)*, which is one of the first documentary occurrences of a *ni* written in form of a small horizontal stroke; *χειρογραφία* appears 10 times shortened after the *phi* and four times abbreviated from the *alpha*. The word *ινδικτιών* is usually abbreviated with a slash on the *delta*, and only 4 times just after the *ni* – in this case of course, the type of mark changes too, from a slash on *delta*, to a sinusoid just next to *ni* like in BGU I 305, l. 2 (556) or a slash on *iota* and the superscription of *ni*, as in PSI I 81, ll. 8 and 15 (595). The shortened form of *πρόκειται* is realized 39 times with a slash on *kappa*, erasing the rest, and only twice cutting the last syllable. The verb *ἐπερωτηθείς* is usually cut right after the *rho* (51 times), whilst just in four cases it is written almost completely, leaving aside the ending – for example in P.Oxy. I 135, l. 30 (579) and in the above-mentioned P.Oxy. LXXV 5070, end of l. 17 – and only once it is shortened irregularly, cutting the word after the *rho* but restoring the *theta* for a best comprehension of the term – P.Oxy. LXXXIII 5396, l. 20 (595).

Lastly, the position in the document itself was considered, namely whether this influenced the possibility of shortening a word or not: the answer is affir-

⁴⁸ See PLUTA 2020, p. 12, who states that in Latin script the most shortened words are those most frequently used.

mative only when we consider complex documents, which follow a schematic and standardized pattern, the *cheirographa*, very common in the Byzantine era. As it is already known, a *cheirographon* is composed of different parts: it opens with an eventual *invocation formula*, then there are the *dating formula* and the *address formula*, which ends with the word *χαίρειν*, ‘greetings’; then the *corpus* of the deed follows, closed by the *kyria-clause* and validated by the stipulation and the subscription by the issuer. There could be the signature(s) of witness(es) and after it the *confirmation signature* by the notary⁴⁹.

In the *cheirographon*, the words composing the dating and the address formula such as the agreement clause are usually shortened. At the beginning of the document we find indeed the words pertaining to the chronological placement of the deed – *ἔτος, ἰνδικτιών* – and the name of the emperor of the moment, with his honorific titles – *εὐσεβέστατος, δεσπότης, εὐεργέτης, Φλαύιος, αὐτοκράτωρ* – with his titles and eventually the invocation of God with the *nomina sacra* – *Χριστός, θεός, κύριος*: as we saw, these are the mostly shortened categories of words. Equally, the *kyria-clause* followed by the stipulation of the deed, in the form ‘this deed, written in a single copy is valid’ – *κυρία ἡ ὁμολογία ἀπλή γραφεῖσα* – ‘and in answer to the formal question I have given my consent’ – *ἐπερωτηθεὶς ὡμολόγησα* – are nearly always abbreviated. This practice is followed in the entire documentation examined; examples can be found in P.Eirene II 12 (492), P.Oxy. XXXVI 2779 (530) P.Oxy. LXX 4788 (566), P.Oxy. LXVI 4536 (612).

5. Conclusions.

What has been observed so far would seem to imply that the theory that abbreviation practices required certain spelling conventions to be followed is not too far from the truth. These conclusions emerge from the analysis of a sufficiently representative case study, covering rather broad documentary types and chronological periods, but still too small. Therefore, to assume general validity, they need to be verified on a larger survey sample.

In this respect, it is interesting to consider the fact that the use by a scribe of the shortened variant of a word does not seem to be necessarily linked to his or her having high-level graphical skills⁵⁰. This feature needs to be deepened: here it will be enough to quote a couple of cases. The first one is a very interesting document, a deed of surety dated 582, signed by the monk

⁴⁹ See for example YIFTACH-FIRANKO 2014.

⁵⁰ As DEGNI 2002, pp. 149-150 observes for another place and another time: the witness subscriptions of documents written in the Norman Palermo.

Petros in Oxyrhynchos (P.Oxy. LXXXIII 5382) with a very faltering and irregular majuscule, which even struggles to respect the baseline: Petros can easily be included in the category of *ὀλιγογράμματοι* or *βραδέως γράφοντες*⁵¹. He writes the following sentence, «Πέτρος μονάζ(ων) υἱὸς Ἰωάννου στοιχεῖ μοι αὐτῆ [ἡ ἐ]γγύη ὡς πρόκ(εῖται)», and shortens two words, namely the participle *μονάζων*, which refers to his qualification, his 'job title', and the form *πρόκειται*, that has already been mentioned among the technical verbs, pertaining to the specialized language of the legal documentation. The technique he uses, even in an unexperienced way, typical of a scarcely literate person, is the one showed by all the documents examined for this survey: Petros cuts the two words with a slash written right above their last letters, and, as regards *πρόκειται*, he only writes the letters that appear to be written in all the other cases of shortening of this word⁵².

This is not the only case: there are some other *subscriptions* written by *βραδέως γράφοντες* in other documents, that show exactly the same situation. First of all, PSI I 45, a payment order from Hermopolite, generically assigned to the 5th century, written in a handwriting slightly inclined to the left, by a hand that mixes minuscule and majuscule forms without great competence; the abbreviations found there are three: *γί(νονται)*, (*ἀρτάβαι*) and *ἰνδι(κτιώνος)*. The second hand that intervenes in PSI III 176 (5th century) to confirm his satisfaction with the stipulation of a land lease in the Oxyrhynchite *nomos* belongs to a slow writer, as it employs a sloppy handwriting, unstable on the line, with irregular forms; the skills of this scribe, Flavios Menas, are poor from an orthographic point of view, too: there are several itacism errors, as *στυχί* instead of *στοιχεῖ*, *πρόκιτ(αι)* instead of *πρόκειτ(αι)*; nevertheless, Menas realises two suspensions, the first concerning *Φλ(αύιος)*, his title, the second *πρόκιτ(αι)*, employing a sinusoid next to the *lambda* for the first word and a double slash on the *tau* for the verb. The last case I intend to present is perhaps the most intriguing, since the writer is a woman: the payment receipt contained in PSI III 183 is validated by a certain Flavia Karteria from Herakleopolites, who abbreviates her 'title', *θυγάτηρ*, by placing a horizontal stroke on the first three letters of the noun and omitting the others.

⁵¹ On this category, see YOUTIE 1971b; KRAUS 1999a; 1999b; 2000 and 2007.

⁵² In this case, the issue of the way of writing – whether under dictation, following a model already prepared by others or as an extemporaneous drafting – is a false problem. Even though he wrote by copying pre-arranged abbreviations, the function of this particular text, namely a subscription, shows that these abbreviations were recognised and had significant expressive value.

It is not easy to completely explain this practice: as we have already seen, abbreviation is normally assumed to be an economical form of writing, the privilege of writers with an intensive familiarity with the written word. But such an interpretation is not entirely satisfactory in the case of *ὀλιγογράμματοι*: from the current perspective, the ability to shorten a word would thus presuppose an excellent knowledge not only of the alphabet, but also of the technical language, such as to *decide* when and how to shorten a word, with the main purpose of saving time and space. But, while certainly on particular occasions spur of the moment has played a role, it would be misleading to reduce the abbreviation practices of all acts and situations of writing to this unique reason.

Moreover, if on the one hand it is all to be proven that *ὀλιγογράμματοι* had the tools to decide how and when to abbreviate on the basis of personal needs, on the other hand, the documentation examined so far would rather seem to testify that there were some particular conventions that regulated the shortening practices and guided the writers: in short, as has been argued, the difficulties did not lie in the mechanics of abbreviating – which have been seen to be rather simple – but in the limits that such conventions imposed on the theoretical freedom to intervene, or in the knowledge of particular shortening practices in relation to special lexical contexts⁵³.

In other words, it is only in the context of cursive writing that the use of abbreviations can also be linked with the need to preserve the rapidity of the writing itself. In the situation outlined here, it is rather to be imagined that the use of shortened words was useful because it allowed an immediate, concise recognition of certain textual portions⁵⁴. This interpretation would not contradict Cencetti's statement that:

la lettura, specie quando si tratti di argomenti familiari al lettore, è 'globale' e non fonetica: l'occhio percepisce sensorialmente le sole lettere più caratteristiche e l'insieme di ciascuna parola, non i segni che la compongono, uno per uno, distintamente e progressivamente⁵⁵.

With all likelihood, as the percentages seem to demonstrate, the use of abbreviations was recommended for a number of documents, for specific parts of a document, and for specific words: in this way, the abbreviative principles were placed on the same level as the orthographic rules. Those

⁵³ DE ROBERTIS 1993.

⁵⁴ Another aspect to check is the relationship of this to reading silently or aloud (see *ibidem*, p. 163).

⁵⁵ CENCETTI 1954, p. 354.

who learnt to write also learnt how and when to shorten when writing a particular text⁵⁶.

In this sense alone, it can be said that knowledge of the abbreviative system was directly proportional to school level⁵⁷, and therefore writers could use their assumed proficiency in the application of shortening techniques in order to show that they belonged to the category of literate people. This could be the case for a very popular character, Petaus, the village scribe of Ptolemaïs Hormou studied by Herbert Youtie: this *κωμογραμματοεύς*, who lived in the second half of the 2nd century, in spite of his role, was merely able to sign his documents with a fixed formula⁵⁸. Among the various texts in which he was recognised, one of the most interesting is a writing exercise in which Petaus tries to improve his signature, P.Petaus 121 (182-187): in doing this, he also tries to trace an awkward serpentine next to the *rho*, in order to shorten the word *κωμογρα(αμματοεύς)*: this is how he escaped being judged an *ἀγράμματος*.

In summary, the advantage for the writer who used abbreviations most probably was to be perceived as a member of that élite of literate people, who were able to write correctly; whilst brevity, conciseness and speed when using abbreviations were mostly prerogative of cursive scripts and writers. The reason for the use of abbreviations is likely to be found in some functionality also for the reader, rather than only for the writer⁵⁹, that is to say that abbreviations were probably also used to speed up reading and make it less ambiguous: in this perspective, it is not impossible that shortened words were a meaningful part of the visual construction of a text, a sort of symbol, a marker. As Giovè Marchioli stated for Latin script, when employing abbreviations, scribes created a sort of ‘premium-character’, that was immediately recognizable to the reader⁶⁰.

⁵⁶ See also the example of T.Pizarras 161, on which BOCCUZZI 2021, p. 31.

⁵⁷ DE ROBERTIS 1993, p. 164.

⁵⁸ YOUTIE 1966; 1971a and 1971b.

⁵⁹ As it has been stated for the field of Latin palaeography (GIOVÈ MARCHIOLI 1993, pp. 111-112; DE ROBERTIS 1993).

⁶⁰ GIOVÈ MARCHIOLI 1993, p. 114 uses the word «supercarattere».

APPENDIX

Papyri examined for this research

Nr.	TM Number	Publication	Status	Type	Date	Nr. Mazza 2001
1	TM 22152	P.Oxy. LXIII 4389	certain	receipt: order	AD 439 Mar 9	Mazza 1
2	TM 20012	PSI III 165	certain	receipt: order	AD 441 Aug 29-442 Aug 28	Mazza 3
3	TM 34776	P.Oxy. L.3584	certain	petition	AD 400-499	Mazza 5
4	TM 21113	P.Heid. Gr. IV 331	certain	contract	AD 465 Oct 16	Mazza 8
5	TM 22153	P.Oxy. LXIII 4390	certain	contract: lease	AD 469 Dec 14	Mazza 9
6	TM 22154	P.Oxy. LXIII 4391	certain	receipt: order	AD 471 Jan 15	Mazza 10
7	TM 19366	P.Flor. III 325	certain	contract: lease	AD 489 May 20	Mazza 11
8	TM 15711	P.Mich. XIV 682	certain	receipt	AD 496 May 22	Mazza 12
9	TM 48930	P.Oxy. LXVII 4614	certain	petition	AD 475-499	Mazza 13
10	TM 22077	P.Oxy. XVI 1982	certain	receipt	AD 497 Oct 1	Mazza 14
11	TM 35112	P.Wash. Univ. II 102	certain	list	AD 400-599 (year Indictio 11)	Mazza 15
12	TM 35603	P.Oxy. XVI 1886	certain	petition	AD 472?	Mazza 17
13	TM 48931	P.Oxy. LXVII 4615	certain	contract: lease	AD 505 Sep 3	Mazza 20
14	TM 16272	SB XVI 12608	certain	receipt	AD 511 Jul 11	Mazza 21
15	TM 48932	P.Oxy. LXVII 4616	certain	receipt	AD 525 Sep 30	Mazza 23
16	TM 16568	P.Oxy. XXXVI 2779	certain	receipt	AD 530 Dec 30	Mazza 24
17	TM 15363	P.Oxy. LI 3640	certain	receipt	AD 533 Jul 20	Mazza 25

18	TM 22050	SB XXII 15581	certain	judicial: protocol	AD 533 Oct 5	Mazza 26
19	TM 20781	P.Oxy. I 142	certain	receipt: taxes	AD 534 Nov 15	Mazza 27
20	TM 20782	P.Oxy. I 143	certain	receipt: taxes	AD 535 Jan 10 / AD 535 Mar 12 / AD 535 Aug 3	Mazza 28
21	TM 20806	SB XXII 15367	certain	receipt	AD 535 Jan 17	Mazza 29
22	TM 22686	SB XXII 15366	certain	receipt	AD 535 Feb 18	Mazza 30
23	TM 22078	P.Oxy. XVI 1983	certain	receipt	AD 535 Jul 28	Mazza 31
24	TM 22046	P.Oxy. XVI 1918	certain	receipt	AD 542 after	Mazza 33
25	TM 37884	P.Oxy. XVI 1932	certain	letter	AD 542- 544 / AD 527-529?	Mazza 34
26	TM 22158	P.Oxy. LXIII 4396	certain	contract	AD 542 Feb 18	Mazza 35
27	TM 22080	P.Oxy. LXX 1985 (pp. 133-134)	certain	receipt	AD 543 Oct 9	Mazza 36
28	TM 15364	P.Oxy. LI 3641	certain	contract	AD 544 Feb 7	Mazza 37
29	TM 22159	P.Oxy. LXIII 4397	certain	contract	AD 545 Mar 17	Mazza 38
30	TM 37836	P.Oxy. VIII 1131	certain	promissory note	AD 500- 599 (year Indictio 1, (Jun 3))	Mazza 39
31	TM 20771	P.Oxy. I 130	certain	petition	AD 548 Aug 29-549 Aug 28?	Mazza 41
32	TM 16402	SB XII 11231	certain	receipt	AD 549 Oct 29	Mazza 42
33	TM 20772	P.Oxy. I 133	certain	receipt: payment	AD 550 Oct 19	Mazza 43
34	TM 22098	P.Oxy. XVI 2013	certain	receipt	AD 551 Jul 25	Mazza 44
35	TM 22099	ZPE CLX (2007), S. 217-219, nr. 2	certain	receipt	AD 551 May 25	Mazza 45

36	TM 20786	P.Oxy. I 145	certain	receipt	AD 552 Mar 15	Mazza 46
37	TM 22683	P.Lond. III pp. 278-279, nr. 776	certain	receipt	AD 552 Sep 13	Mazza 48
38	TM 22068	P.Oxy. XVI 1970	certain	contract: loan	AD 554 Jun 8	Mazza 49
39	TM 20787	Stud.Pal. III 280	certain	receipt	AD 555 Nov 15	Mazza 52
40	TM 18397	SB XVIII 14062	certain	receipt	AD 556 Mar 7	Mazza 55
41	TM 20788	P.Oxy. I 147	uncertain	receipt	AD 556 Apr 7	Mazza 56
42	TM 20789	P.Oxy. I 148	certain	receipt	AD 556 Apr 12	Mazza 57
43	TM 18398	SB XVIII 14063	certain	receipt	AD 556 Jun 19	Mazza 58
44	TM 22100	P.Oxy. XVI 2015	certain	receipt	AD 555 Aug 30-556 Aug 28	Mazza 59
45	TM 22173	P.Oxy. XVIII 2204	certain	receipt	AD 565 Aug 29-566 Aug 28 about?	Mazza 69
46	TM 20026	PSI III 193	certain	receipt: delivery	AD 565 Sep 28	Mazza 72
47	TM 20024	PSI III 191	certain	receipt: delivery	AD 565 Oct 5	Mazza 73
48	TM 20025	PSI III 192	certain	receipt: delivery	AD 565 Oct 27	Mazza 74
49	TM 22682	P.Lond. III pp. 279, nr. 775	certain	receipt: delivery	AD 567 Sep 12	Mazza 77
50	TM 22685	P.Lond. III pp. 279- 280, nr. 778	certain	contract surety	AD 568 Jul 28	Mazza 78
51	TM 20133	PSI I 58	certain	contract	AD 566-568	Mazza 79
52	TM 20773	P.Oxy. I 134	certain	contract	AD 569 Jun 9	Mazza 81
53	TM 20379	P.Oxy. VI 915	certain	receipt	AD 572 Oct 17	Mazza 83
54	TM 15704	P.Turner 50	certain	receipt	AD 572 about	Mazza 84
55	TM 15705	P.Turner 51	certain	receipt	AD 572 about	Mazza 85

56	TM 15706	P.Turner 52	certain	receipt	AD 572 about	Mazza 86
57	TM 15707	P.Turner 53	certain	receipt	AD 572 about	Mazza 87
58	TM 37309	P.Laur. IV 178	certain	receipt: order	AD 550- 599 (year Indictio 6, Thoth 20 [Sep 17])	Mazza 88
59	TM 21649	P.Oxy. LXII 4350	certain	administra- tion	AD 576 Jul 22	Mazza 89
60	TM 22031	P.Oxy. XVI 1896	certain	contract	AD 577 May 17	Mazza 90
61	TM 22007	P.Oxy. XVI 1829	certain	letter	AD 577 May-583 Dec about	Mazza 92
62	TM 20338	P.Oxy. VII 1043	certain	receipt	AD 578 Mar 15	Mazza 93
63	TM 20774	P.Oxy. I 135	certain	contract surety	AD 579 Mar 21	Mazza 94
64	TM 20785	P.Oxy. I 144	certain	receipt	AD 580 Nov 22	Mazza 95
65	TM 20186	P.Iand. III 48	certain	declaration	AD 582 May 29	Mazza 96
66	TM 20187	P.Iand. III 48a	certain	contract	AD 582 about	Mazza 97
67	TM 22684	P.Lond. III p. 281, nr. 777	certain	letter	AD 582 Oct 11	Mazza 99
68	TM 22681	P.Lond. III pp. 280- 281, nr. 774	certain	receipt	AD 582 Oct 11	Mazza 100
69	TM 22073	P.Oxy. XVI 1976	certain	contract: loan	AD 582 Nov 23	Mazza 101
70	TM 20775	P.Oxy. I 136	certain	contract	AD 583 May 24	Mazza 102
71	TM 37149	P.Oxy. I 194 descr.	certain	contract: loan	AD 500-599	Mazza 103
72	TM 20776	P.Oxy. I 137	certain	receipt	AD 584 Jan 11	Mazza 104
73	TM 15901	P.Wisc. II 66	certain	receipt	AD 584 Jul 15	Mazza 105
74	TM 22081	P.Oxy. LXX 1987 (pp. 135-136)	certain	receipt	AD 587 Feb 17	Mazza 107

75	TM 22087	P.Oxy. LXX 1993 (pp. 144-146)	certain	receipt	AD 587 Mar 9	Mazza 108
76	TM 22032	P.Oxy. XVI 1898	certain	receipt	AD 587 Mar 13	Mazza 109
77	TM 22082	P.Oxy. LXX 1988 (pp. 137-138)	certain	receipt	AD 587 Dec 29	Mazza 110
78	TM 22170	P.Oxy. XVIII 2196	certain	account	AD 587 after (year Indictio 5)	Mazza 111
79	TM 22097	P.Oxy. XVI 2012	certain	letter	AD 590 Sep 30	Mazza 112
80	TM 20791	P.Oxy. I 150	certain	receipt	AD 590 Oct 7	Mazza 113
81	TM 22083	P.Oxy. LXX 1989 (pp. 139-140)	certain	receipt	AD 590 Nov 3	Mazza 115
82	TM 22084	P.Oxy. LXX 1990 (pp. 140-142)	certain	receipt	AD 591 Jan 12	Mazza 116
83	TM 37943	P.Oxy. XIX 2243 b	certain	list	AD 500-599	Mazza 118
84	TM 20146	PSI I 81	certain	receipt: payment	AD 595 Aug 1	Mazza 121
85	TM 20135	PSI I 60	certain	receipt	AD 595 Oct 8	Mazza 122
86	TM 17012	P.Oxy. XXVII 2478	certain	deed of surety	AD 595 Nov 27	Mazza 123
87	TM 16211	P.Wash. Univ. I 26	certain	contract surety	AD 596 Oct 1	Mazza 124
88	TM 20134	PSI I 59	certain	contract	AD 596 Nov 3	Mazza 125
89	TM 37133	P.Oxy. VI 922	certain	account	AD 575-625	Mazza 126
90	TM 37894	P.Oxy. XVI 1952	certain	letter	AD 564 May 21	Mazza 127
91	TM 136002	P.Oxy. XXXVI 2799	certain	petition	AD 500-525	Mazza 128
92	TM 37122	P.land. III 51	uncertain	account	AD 500-599	Mazza 129
93	TM 37511	P.Amh.Gr. II 149	certain	contract: loan	AD 525-575	Mazza 131
94	TM 36094	P.Princ. III 158	certain	list	AD 500- 599 (year Indictio 2)	Mazza 132

95	TM 36257	SB XIV 11618	certain	receipt: payment	AD 575- 625 (year Indictio 11, (Aug 21))	Mazza 133
96	TM 36853	PSI V 474	certain	receipt: payment	AD 500-599 (year Indictio 10, (Feb 27 or 28))	Mazza 135
97	TM 37843	P.Oxy. XVI 1830	certain	letter	AD 500- 599 (year Indictio 1)	Mazza 136
98	TM 37140	P.Oxy. I 128	certain	resignation of a secretary	AD 500-699	Mazza 139
99	TM 37847	P.Oxy. XVI 1840	uncertain	letter	AD 500-599	Mazza 141
100	TM 35940	P.Wisc. II 67	certain	petition	AD 500-599	Mazza 143
101	TM 35951	SB XII 10944	certain	contract surety	AD 500-599	Mazza 145
102	TM 37145	P.Oxy. I 156	certain	letter	AD 500-599	Mazza 146
103	TM 37146	P.Oxy. I 157	certain	letter	AD 500-599	Mazza 147
104	TM 37147	P.Oxy. I 158	certain	letter	AD 600-625	Mazza 148
105	TM 36175	P.Col. VIII 246	certain	account	AD 602 Aug 29-603 Aug 29?	Mazza 156
106	TM 36070	P.Oxy. XXVII 2479	certain	petition	AD 500-599	Mazza 157
107	TM 37144	P.Oxy. I 155	certain	letter	AD 500-599	Mazza 158
108	TM 37498	P.Oxy. LXII 4351	certain	contract	AD 575-599 (year Indi- ctio 8 and 9)	Mazza 160
109	TM 37899	SB XXVI 16722	certain	contract: lease	AD 575-599	Mazza 164
110	TM 37867	P.Oxy. XVI 1861	certain	letter	AD 500-699	Mazza 166
111	TM 37870	P.Oxy. XVI 1868	certain	letter	AD 500-699	Mazza 167
112	TM 37874	P.Oxy. XVI 1897	certain	promissory note	AD 575-599 (year Indi- ctio 10)	Mazza 168
113	TM 49663	P.Oxy. LXVI 4537	certain	list	AD 500- 699 (year Indictio 3)	Mazza 171
114	TM 36849	P.Oxy. LIX 4006	certain	letter	AD 600-625	Mazza 175

115	TM 44691	P.Oxy. LXVI 4535	certain	contract: loan	AD 600 Jan 14?	Mazza 176
116	TM 21395	P.Mich. XV 743	certain	receipt: payment	AD 622 Dec 6-15?	Mazza 179
117	TM 17920	P.Oxy. LVIII 3939	certain	contract	AD 601 Jul 25	Mazza 181
118	TM 21630	P.Oxy. LXI 4131	certain	contract: donation	AD 600 Sep 18?	Mazza 182
119	TM 20015	PSI III 179	certain	receipt	AD 602 Dec 25? or AD 601 Dec 25?	Mazza 183
120	TM 17922	P.Oxy. LVIII 3941	certain	contract	AD 604 Dec 27-605 Jan 25	Mazza 184
121	TM 20151	PSI I 89	certain	receipt	AD 605 Jul 25-Aug 23	Mazza 185
122	TM 17923	P.Oxy. LVIII 3942	certain	contract: work	AD 606 Feb 22	Mazza 186
123	TM 17926	P.Oxy. LVIII 3945	certain	contract: loan	AD 606 Nov 16	Mazza 189
124	TM 17927	P.Oxy. LVIII 3946	certain	contract: loan	AD 606 Nov 18	Mazza 190
125	TM 17928	P.Oxy. LVIII 3947	certain	contract: loan	AD 606 Oct 28-Nov 26	Mazza 191
126	TM 20136	PSI I 61	certain	contract surety	AD 609 May 8	Mazza 192
127	TM 17931	P.Oxy. LVIII 3950	certain	contract	AD 610 Jun 25	Mazza 193
128	TM 17933	P.Oxy. LVIII 3952	certain	contract: work	AD 610 Aug 29 before	Mazza 195
129	TM 17934	P.Oxy. LVIII 3953	certain	contract	AD 610 Sep 23?	Mazza 196
130	TM 20777	P.Oxy. I 138	certain	contract	AD 610 Dec 10	Mazza 197
131	TM 17935	P.Oxy. LVIII 3954	certain	receipt	AD 611 Feb 12	Mazza 198
132	TM 17937	P.Oxy. LVIII 3956	certain	contract	AD 611 Oct 1	Mazza 199
133	TM 17938	P.Oxy. LVIII 3957	certain	contract	AD 611 Feb 20? or AD 612 Feb 21?	Mazza 200
134	TM 20792	P.Oxy. I 151	certain	receipt	AD 612 Sep 28-Oct 27	Mazza 201
135	TM 21711	P.Amh.Gr. II 157	certain	receipt	AD 612 Sep 28-Oct 27	Mazza 202

136	TM 21712	P.Amh.Gr. II 158	certain	receipt	AD 612 Sep 28-Oct 27	Mazza 203
137	TM 22076	P.Oxy. XVI 1981 descr.	certain	declaration	AD 612 Oct 25	Mazza 204
138	TM 20778	P.Oxy. I 139	certain	declaration	AD 612 Oct 26	Mazza 205
139	TM 44692	P.Oxy. LXVI 4536	certain	declaration	AD 612 Oct 27	Mazza 206
140	TM 22105	P.Oxy. XVI 2045	certain	list	AD 612 Dec 17? or AD 612 Nov 17?	Mazza 207
141	TM 20137	PSI I 62	certain	contract surety	AD 613 Sep 27	Mazza 208
142	TM 16932	P.Oxy. XXIV 2420	certain	contract surety	AD 614 Feb 25-Mar 26	Mazza 209
143	TM 17940	P.Oxy. LVIII 3958	certain	contract: work	AD 614 Apr 26-May 25	Mazza 210
144	TM 22074	SB XXVIII 17002	certain	contract surety	AD 614 Aug 19	Mazza 211
145	TM 20793	P.Oxy. I 152	certain	receipt	AD 618 Mar 1	Mazza 215
146	TM 22095	P.Oxy. XVI 2010	certain	receipt	AD 618 Mar 14	Mazza 216
147	TM 22096	P.Oxy. XVI 2011	certain	receipt	AD 618 Feb 25-Mar 26	Mazza 218
148	TM 20794	P.Oxy. I 153	certain	receipt	AD 618 May 20	Mazza 219
149	TM 15326	P.Haun. III 60	certain	?	AD 618 Oct 28	Mazza 220
150	TM 20188	P.Iand. III 49	certain	contract	AD 619 Jul 5	Mazza 221
151	TM 17941	P.Oxy. LVIII 3959	certain	contract surety	AD 620 Jan 12	Mazza 222
152	TM 37850	P.Oxy. XVI 1844	certain	letter	AD 600-625	Mazza 227
153	TM 37852	P.Oxy. XVI 1846	certain	letter	AD 600-625	Mazza 228
154	TM 37860	P.Oxy. XVI 1854	certain	letter	AD 600-625	Mazza 229
155	TM 37853	P.Oxy. XVI 1847	certain	letter	AD 600-625	Mazza 230
156	TM 37859	P.Oxy. XVI 1853	certain	letter	AD 600-625	Mazza 231
157	TM 37851	P.Oxy. XVI 1845	certain	letter	AD 600-625	Mazza 232
158	TM 37854	P.Oxy. XVI 1848	certain	letter	AD 600-625	Mazza 233

159	TM 37889	P.Oxy. XVI 1937	certain	letter	AD 600-625	Mazza 234
160	TM 37857	P.Oxy. XVI 1851	certain	letter	AD 600-625	Mazza 237
161	TM 37858	P.Oxy. XVI 1852	certain	letter	AD 600-625	Mazza 238
162	TM 37861	P.Oxy. XVI 1855	certain	letter	AD 600-625	Mazza 239
163	TM 37862	P.Oxy. XVI 1856	certain	letter	AD 600-625	Mazza 240
164	TM 37866	P.Oxy. XVI 1860	certain	letter	AD 600-625	Mazza 241
165	TM 37892	P.Oxy. XVI 1940	certain	letter	AD 600-625	Mazza 242
166	TM 37888	P.Oxy. XVI 1936	certain	letter	AD 600-625	Mazza 243
167	TM 35285	PSI III 180	certain	contract surety	AD 575-625	Mazza 244
168	TM 36022	P.Daris 42	certain	receipt	AD 601 Jan 24?	Mazza 247
169	TM 37863	P.Oxy. XVI 1857	certain	letter	AD 600-699	Mazza 250
170	TM 37864	P.Oxy. XVI 1858	certain	letter	AD 600-699	Mazza 251
171	TM 37865	P.Oxy. XVI 1859	certain	letter	AD 600-699	Mazza 252
172	TM 41056	BGU I 305	uncertain	contract: lease	AD 556 Jun 13	Mazza 254
173	TM 18386	P.Eirene II 12	certain	contract surety	AD 492 Jun 17	Mazza 258
174	TM 18746	Stud.Pal. XX 129	certain	petition	AD 497 Feb 4	Mazza 259
175	TM 35405	P.Harris I 154	certain	private letter	AD 400-599 (year Indictio 10, Phaophi (Sep-Oct))	Mazza 270
176	TM 35407	P.Harris I 157	certain	private letter	AD 400-599	Mazza 271
177	TM 35936	CPR VII 27	uncertain	judicial: protocol	AD 500-699	Mazza 273
178	TM 244027	AnalPap XXIII- XXIV (2011-2012), pp. 138-140, nr. 1	uncertain	order of payment	AD 500-599	

179	TM 244028	AnalPap XXIII- XXIV (2011-2012), pp. 141-142, nr. 2	uncertain	order of payment	AD 500- 599 (year Indictio 4, Mesore 7 (Jul 31))
180	TM 381318	APFLX (2014), pp. 223-226, nr. 1	certain	receipt	AD 500-599
181	TM 874409	BASP LVII (2020), pp. 367-374	certain	receipt: delivery	AD 507 Feb 25-Mar 26
182	TM 140520	PSI Com VIII (2009), pp. 83-85, nr. 14	uncertain	order for delivery of meat	AD 485 Aug 5
183	TM 35729	P.Col. XI 297	uncertain	list	AD 400-599
184	TM 112494	P.Köln Gr. XI 459	certain	contratto di divisione	AD 436? (or 431 (?))
185	TM 37317	P.Merton II 96	certain	letter	AD 500-599
186	TM 39286	P.Merton II 98	certain	contract surety	AD 600-699
187	TM 37931	P.Oxy. XVI 2055	certain	administra- tion	AD 500-599
188	TM 17944	P.Oxy. LVIII 3962	uncertain	writing exercise	AD 631 Aug 30-632 Aug 28 about
189	TM 78659	P.Oxy. LXVII 4620	certain	list	AD 475-550 (year Indi- ctio 9)
190	TM 22085	P.Oxy. LXX 1991 (pp. 142-144)	certain	receipt	AD 601 Sep 18
191	TM 92173	P.Oxy. LXX 4781	certain	receipt: delivery	AD 525 Nov 10
192	TM 92176	P.Oxy. LXX 4784	certain	receipt: delivery	AD 530 Sep 23
193	TM 92177	P.Oxy. LXX 4785	certain	receipt: delivery	AD 530 Oct 19
194	TM 92178	P.Oxy. LXX 4786	certain	contract: work	AD 551 Jul 27
195	TM 92179	P.Oxy. LXX 4787	certain	contract surety	AD 564 Mar 12

196	TM 92180	P.Oxy. LXX 4788	certain	receipt: delivery	AD 566 Oct 15
197	TM 92181	P.Oxy. LXX 4789	certain	receipt: delivery	AD 576 Feb 20
198	TM 92182	P.Oxy. LXX 4790	certain	deed of surety	AD 578 Jan 11
199	TM 92183	P.Oxy. LXX 4791	certain	deed of surety	AD 578 Mar 25
200	TM 92184	P.Oxy. LXX 4792	certain	contract	AD 579 Jan 19
201	TM 92185	P.Oxy. LXX 4793	certain	receipt: delivery	AD 579?
202	TM 92186	P.Oxy. LXX 4794	certain	contract surety	AD 580 Feb 28
203	TM 92187	P.Oxy. LXX 4795	certain	contract	AD 582 Nov 25
204	TM 92189	P.Oxy. LXX 4797	certain	receipt: delivery	AD 583 Oct 8
205	TM 92190	P.Oxy. LXX 4798	certain	receipt: delivery	AD 586 Sep 26?
206	TM 92191	P.Oxy. LXX 4799	certain	receipt: delivery	AD 586 Oct 5
207	TM 92192	P.Oxy. LXX 4800	certain	receipt: delivery	AD 611 Nov 19?
208	TM 92193	P.Oxy. LXX 4801	certain	receipt: delivery	AD 617 Oct 22?
209	TM 92194	P.Oxy. LXX 4802	certain	contract surety	AD 600-625
210	TM 112450	P.Oxy. LXXI 4835	certain	contract: loan	AD 574 Mar 21
211	TM 114304	P.Oxy. LXXII 4923	certain	receipt	AD 550 Sep 7
212	TM 114306	P.Oxy. LXXII 4925	certain	receipt	AD 552 Mar 8
213	TM 114307	P.Oxy. LXXII 4926	certain	receipt: order	AD 564 May 21
214	TM 114308	P.Oxy. LXXII 4927	certain	receipt: delivery	AD 564 May 23
215	TM 114309	P.Oxy. LXXII 4928	certain	receipt: order	AD 564 May 16-24
216	TM 114310	P.Oxy. LXXII 4929	certain	receipt: order	AD 564 May 27
217	TM 114311	P.Oxy. LXXII 4930	certain	contract: loan	AD 614 Aug 29-Nov 21

218	TM 128907	P.Oxy. LXXV 5066	certain	other: uncertain	AD 460 Aug 29-461 Aug 28
219	TM 128911	P.Oxy. LXXV 5070	certain	?	AD 605 Aug 29-606 Aug 28? / AD 620 Aug 29-621 Aug 28?
220	TM 140189	P.Oxy. LXXVII 5123	certain	contract	AD 555 Apr 29
221	TM 786139	P.Oxy. LXXXIII 5365	certain	receipt	AD 526 Dec 31
222	TM 786140	P.Oxy. LXXXIII 5366	certain	account	AD 530- 542 about
223	TM 786141	P.Oxy. LXXXIII 5367	certain	contract: lease	AD 537?
224	TM 786142	P.Oxy. LXXXIII 5368	certain	acknowle- dgement of debt	AD 530-539?
225	TM 786143	P.Oxy. LXXXIII 5369	certain	contract	AD 548 Apr 26
226	TM 786144	P.Oxy. LXXXIII 5370	certain	contract: lease	AD 525-575
227	TM 786146	P.Oxy. LXXXIII 5372	certain	deed of surety	AD 552 Jan 27
228	TM 786147	P.Oxy. LXXXIII 5373	certain	deed of surety	AD 552 Aug 24
229	TM 786148	P.Oxy. LXXXIII 5374	certain	contract: lease	AD 552- 553 (year Indictio 1, [] 14)
230	TM 786149	P.Oxy. LXXXIII 5375	certain	deed of surety	AD 557 Jun 18
231	TM 786150	P.Oxy. LXXXIII 5376	certain	receipt	AD 560-561

232	TM 786151	P.Oxy. LXXXIII 5377	certain	deed of surety	AD 565- 566? / AD 580-581?
233	TM 786152	P.Oxy. LXXXIII 5378	certain	deed of surety	AD 571-578 about
234	TM 786153	P.Oxy. LXXXIII 5379	certain	deed of surety	AD 570-579?
235	TM 786154	P.Oxy. LXXXIII 5380	certain	contract: lease	AD 578 Nov 5
236	TM 786156	P.Oxy. LXXXIII 5382	certain	deed of surety	AD 582
237	TM 786157	P.Oxy. LXXXIII 5383	certain	contract: lease	AD 583 Sep 24
238	TM 786158	P.Oxy. LXXXIII 5384	certain	deed of surety	AD 584 Aug 29-Nov 17 about
239	TM 786159	P.Oxy. LXXXIII 5385	certain	receipt	AD 584 Nov 18
240	TM 786160	P.Oxy. LXXXIII 5386	certain	receipt	AD 585 Nov 24
241	TM 786161	P.Oxy. LXXXIII 5387	certain	receipt	AD 586 Sep 24
242	TM 786162	P.Oxy. LXXXIII 5388	certain	receipt	AD 586 Nov 6-15?
243	TM 786163	P.Oxy. LXXXIII 5389	certain	receipt	AD 588 Mar 10
244	TM 786164	P.Oxy. LXXXIII 5390	certain	deed of surety	AD 588 Oct 21
245	TM 786167	P.Oxy. LXXXIII 5393	certain	receipt	AD 591 Jan 9
246	TM 786168	P.Oxy. LXXXIII 5394	certain	receipt	AD 592 Nov 14

247	TM 786169	P.Oxy. LXXXIII 5395	certain	deed of surety	AD 592-602
248	TM 786170	P.Oxy. LXXXIII 5396	certain	deed of surety	AD 595 Oct 22
249	TM 786171	P.Oxy. LXXXIII 5397	certain	deed of surety	AD 570-610
250	TM 786172	P.Oxy. LXXXIII 5398	certain	receipt: payment	AD 598 Sep 1
251	TM 786173	P.Oxy. LXXXIII 5399	certain	receipt	AD 612 Sep 28-Oct 27
252	TM 832263	P.Oxy. LXXXIV 5473	certain	contract: work	AD 561 Jan 5
253	TM 832264	P.Oxy. LXXXIV 5474	certain	contract: work	AD 617-618
254	TM 957531	P.Oxy. LXXXV 5521	certain	contract	AD 569 Feb 17
255	TM 140547	Pap.Congr. XXIV (Hel- sinki 2004), pp. 415- 425, nr. 3	uncertain	account wine	AD 500-699
256	TM 36001	SB XVI 12485	uncertain	letter	AD 500-599
257	TM 34883	SB XVI 12554	uncertain	petition	AD 475-550
258	TM 79059	SB XXII 15487	certain	receipt: payment	AD 598 Aug 28

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