REMARKS TO SYMBOLS AND ABBREVIATIONS IN NON - LITERARY GREEK PAPYRI OF THE EARLY ARABIC PERIOD (640-800 A.D.)

Many references have been made to the abbreviations and symbols that Greek writers and scribes used, in order to save time and space while writing on the papyrus. However, little work has been done to the abbreviations of the Arabic period. The purpose of this article is to shed light on the symbols and the abbreviations of this period.

For the papyrological abbreviations used in this article, see the Checklist of Greek, Latin, Demotic and Coptic Papyri, Ostraca and Tablets (see bibli-

ography).

During the early Arabic period of Egypt, scribes used to abbreviate the words in various ways. These ways subject to the judjement of each scribe. The abbreviations can be divided into categories, based on how scribes used to abbreviate the words. In this article, the material is divided into eight sections, which correspond to the eight main categories of the abbreviations of this era.

Abbreviation by placing the last written letter above and right of the previous one (Suspension):

An old way of abbreviation is the last written letter to be placed above and right of the previous one, in a size smaller than that (suspension), while the rest letters are intentionally omitted. Examples:

In the Byzantine the indictio (ἐνδιχτιών) was used for dating. Therefore, the presence of this word in the papyri is quite common. The most common abbreviation of this word is the writing of the first three letters (ινδ) and the omission of the others, while the letter "δ" must be placed above and right of the previous one (ν). Example:



=μόν(ου) τῆς (αὐτῆς) β ἐνδ(ικτιῶνος), P.Bad. VI 173, 4 (6th-

7th century1).

As we will see later, there are more abbreviations of this word.

• Many scribes abbreviate the adverb $\delta\mu ol\omega_{\varsigma}$ (similarly) by writing the first two letters $(o\mu)$ and placing the third and last one (o) above and right of the letter " μ ". As we can see the letter "o" is much smaller than the other letters. Example:

 $= \delta \mu o(i\omega \varsigma)$, P.Oxy. XVI 2054, 7 (7th c.).

Sometimes, the graph of the letter "o" looks like an apostrophe $(o\mu')^2$, because of the fast writing. In the next section, the adverb is abbreviated in another way according to which scribes write only the first letter with a diagonal line³.

A most common abbreviation of this one is the writing of the first two letters of our of with the diagonal.

• A characteristic example of this kind of abbreviation is the proper name $\Phi o\iota \beta \acute{a}\mu\mu\omega\nu$. Most scribes write the name until the letter " β " and they place the last one " α " above and at the right 6. Example:



= Φοιβά(μμων), P.Oxy. XVI 2056, 15 (7th c.).

The word is abbreviated in other ways, to which reference is made below.

However, there are many words, where the last written letter is put exactly above the previous one. Examples:

^{1.} See BL VII, p. 9.

^{2:} P.Lond. IV 1446, 7 (8th c.).

^{3.} CPR XXII 38, 3 (8th c.).

P.Oxy. XVI 2057, 11 (612). For the dating, see ZPE 66, 1986, p.113, 115 and ZPE 150, 2004, p. 199.

^{5.} P.Oxy. XVI 1925, 11 (7th c.).

^{6.} In the example below, it is worth noticing the form of the letter " α ", which is very different in this period. The circle of the letter is not very obvious, while its horizontal extension is too long. This line is a sign of abbreviation and it is commonly used in the previous centuries. It is worthwhile observing the form of the letter " β ", too. Since the Roman period, the Greek letter " β " is similar to the English one "U". Later, in the 6th century and particularly over to a script more similar to the miniscule writing, the letter " β " looks like the English miniscule "u", a form which prevails in the early Arabic period, too. In the example below, the second vertical line of the letter "u" is extended so far that the letter looks like the Greek minuscule "u".

 Scribes could abbreviate the indefinite pronoun by writing the first three letters (av⁻) and replacing the third one above and right of the previous one (mainly, when it is in nominative⁷) or exactly above it (as usually). Example:

 $= \alpha \dot{v} \tau(\tilde{\omega} v)$, P.Köln VII 321, 7 (Arabic period⁸).

As we will see later, there are other abbreviations of this pronoun.

In their daily vocabulary, people used many polysyllabic words, which
were considered as necessary in texts related to trading. The frequent
use of these words led scribes to abbreviate them.

The most representative example of this section is the word νομίσματα (solidus) or rarely νομισμάτια9. In the Arabic period, most scribes choose

to write the first letter (N) and the second one (o) above it one scribes choose the size of the letter "o" to be in proportion to the "N"

and some others prefer the first one to be smaller $^{(1)}$. Sometimes, the word seems to have been abbreviated throughout by a symbol, because of the way according to which the letter "o" is connected with the letter "v", as the first one is written above the second. Example:

 $= \delta(\iota \dot{\alpha}) \ vo(\mu\iota\sigma\mu\dot{\alpha}\tau\omega v) \ \theta$, CPR XXII 28, r.2, 5 (8th c.?). In the fourth section, reference is made to other abbreviations of this word.

• There are few words whose last syllable is totally abbreviated. The word $\gamma\nu\bar{\omega}\sigma\iota\varsigma$ (list) is abbreviated by writing the consonant letters " $\gamma\nu$ " and placing the letter " ω " above them (or exactly above the letter " ν "). The analysis of the letters is secure, as the word belongs to a title or text or it has the meaning of a "catalogue" (list). Example:

 $= \gamma \nu \tilde{\omega}(\sigma \iota \varsigma)$, P.Oxy. XVI 2056, 1 (7th c.).

Other ways according to which the word is abbreviated are the simple omission of

^{7.} CPR XXII 16, 7 (8th c.).

^{8.} See BL XI, p. 105.

^{9.} F. Morelli, *CPR* XXII: "Νόμισμα invece di νομισμάτιον, come normale nel periodo arabo", p. 73.

^{10.} CPR XXII 60, 6 (7th-8th c.).

^{11.} P.Oxy. XVI 2033, 2 (7th c.).

the last two letters of nominative or the omission of the last one and the writing of the diagonal line: $\gamma \nu \omega \sigma(\iota \zeta)^{12}$, $\gamma \nu \omega \sigma \iota_{\iota}(\varsigma)^{13}$.

• A similar example is the word $\mu\eta\nu$ (month). From the first two letters, the reader is able to understand the word, since the name of a month will always follow (ex. Choiak, Mecheir, etc.). In this case we can also see that the letter " η " is written above the " μ ", showing that there is an abbreviation. Example:



 $= \mu \eta(\nu i)$, P.Oxy. XVI 2009, 5 (7th c.).

Later, we will see that there are some variations in the way that this word is abbreviated.

• In most of the papyri, scribes choose to abbreviate the passive past participles by omitting the ending $-\epsilon\nu\tau\sigma\varsigma$ or $-\epsilon\nu\tau\omega\nu$ (in the genitive of singular or plural number, respectively) and replacing the last written letter " θ ", above and right or exactly above the previous letter (χ) . The last written letter is the letter " θ ", as it indicates the (passive) voice and the (past) time of the participle:



= ἐνεχθ(έντων), P.Oxy. XVI 2054, 1 (7th c.).

Of course, there are many versions. For example, many scribes choose to write the word until the letter " ϵ ", before the consonant letters " $\nu \tau$ " (while others choose the omission of the characteristic " θ " (see below). In another section, there is another example of how the passive past participles can be abbreviated in a different way.

The placement of two written letters above the previous one is scarce:



 $= τ\tilde{\omega}(v)$ παραχ(ωμάτων), CPR XXII 45, 5 (8th c.?).

Many times, scribes use to place a symbol above at the right or exactly above the last mentioned name:

^{12.} CPR XIV 41, 1 (6th -7th c.).

^{13.} P.Lips. I 103, 14 (7th -8th c.).

^{14.} ἀνυσθέ(ντος) CPR XXII 17, 11-16 (789/790).

a) a diagonal line, small or large (rarely):

A typical example is the abbreviation of the preposition $\pi a \varrho \acute{a}$. After the writing of the letter " π ", many scribes place a line similar to an acute accent at the right. Many times, this "acute accent" looks like a cross, as we can see, for example, in the abbreviation of the word $\mu \eta \nu \acute{b}\varsigma^{15}$.

b) a horizontal line, similar to a dash:

This way of abbreviation is quite frequent in this period. This horizontal line appears mostly in words, in which the first letter that is omitted is one of the letters " α ", " υ " or " τ ". This means that, initially, scribes used to place the last written letter (α) above the previous one. Over the years, due to the pace of writing, the usual graph of the letter " α " turned into a horizontal line (-)¹⁶. Here are three examples of words that are abbreviated by the dash:

i) Above we saw the proper name $\mathcal{P}o\iota\beta\acute{a}\mu\mu\omega\nu$ to be abbreviated by the same omission of the letters. Here the word is abbreviated differently. Specifically, the name is written until the letter " β " and the horizontal line is put above and right this. Example:

= Φοιβ(άμμωνος), CPR XXII 18, 15 (761?).

The name, however, is abbreviated in many other ways: $\Phi_{oi\beta}a\mu\mu_{\varsigma}^{17}$, $\Phi_{oi\beta}a\mu\mu^{oi8}$, $\Phi_{oi}/^{19}$, $\Phi_{oi\beta}a\mu\mu\omega_{o}^{20}$, $\Phi_{oi}/^{21}$.

ii) The pronoun $a\partial \tau \delta \varsigma$, to which extensive reference is made in the last section, has been abbreviated in this way too. More analytically, the scribe writes the first letter (α) and places the letter " υ " (of which the graph looks like a dash) above and at the right $(\alpha^{-})^{22}$. Either he writes the first two letters and places the third one above and at the right $(av^{\tau})^{23}$ or he omits the letter " υ " and places the letter " τ " above and right of the letter

^{15.} CPR XXII 11, 5 (7th-8th c.).

^{16.} H.I.Bell, "Abberviations in documentary papyri", pp. 424-433.

^{17.} P.Prag. I 85, 3 (7th c.).

^{18.} P.Lond IV 1432, 23 (8th c.).

^{19.} P.Lond V 1776, 2 (6^{th} - 7^{th} c.).

^{20.} CPR XXII 31, 25 (8th c.?).

^{21.} P.Princ. II 92, 4 (7th-8th c.), see ZPE 131, 2000, p. 150, note 6.

^{22.} CPR XXII 45, 5 (8th c.?).

^{23.} P.Lond. IV 1419, 732 (716/717).

" α " ($a^{\rm r}$). ²⁴ Later, the graph of the " τ ", turned into a dash: av^{-25} . While few scribes prefer to write only the first letter: a^{26} .

iii) The adverb $o\tilde{v}\tau\omega\varsigma$ is difficult to be categorized. This happens because of the fact that all the abbreviations of this word are used in the same frequency, from the 6^{th} to the 8^{th} century. One of the ways according to which the word can be abbreviated is by writing the letter "o", placing the "v" (of which the graph looks like as a dash) above and at the right and omitting the rest letters. It is worth saying that many times the letter "o" is too small and as it is connected with the letter "v", the whole result looks like a straight horizontal line. Later, this new graph was established as a new way of abbreviation. Example:

= $o\vec{v}(\tau\omega\varsigma)$, P.Oxy. XVI 1925, 3 (7th c.). Other abbreviations of the word are the following ones: $ov\tau^{\omega 2} \times xx_1 ov\tau^{2\omega}$.

However, there are many words of which the first omitted letter is not one from the letters " α ", " ν " or " τ ". This means that this way of abbreviation was established generally in other words, too. Here are two examples:

i) In this period, the abbreviation of some letters of the last syllable and not of the whole syllable is quite usual. Specifically, the first letter (of the last syllable) is written and the rest letters are omitted. The reasons of such an abbreviation are many. Perhaps, because the whole word may be written in the beginning of the text (so the analysis of the abbreviation can be assumed) or because the whole abbreviation of the last syllable of the word might confuse the reader. Such an example is the word χάρις in accusative. In the picture below, we can see the first syllable and the first letter of the second syllable to be written and the rest letters to be omitted with a horizontal line above and right of the letter "ρ". The analysis of the abbreviation can be assumed from the previous (ἐλθόντος) or the following words (the reason for which the subject of the participle has come) and generally from the content of the text. Then, in the same papyrus, we can see the repetition of the phrase ἐλθόντος χάριν. Example:

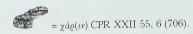
^{24.} P.Lond. IV 1419, 10 (716/717).

^{25.} P.Lond. IV 1412, 21 (705), see BL V, p. 56.

^{26.} SPP X 54, 12 (8th c.).

^{27.} CPR XXII 30, 10 (8th c.).

^{28.} P. Lond. IV 1414, 44 (8th c.).



ii) We saw above the word $\mu \hat{\eta} \nu$ to be abbreviated by placing the last written letter (η) above the letter " μ ". Other times, the scribes choose to write the word by writing the first two letters and placing the dash above and right of the letter " η ". The connection of the first vertical line of the letter " η " (similar to the English one "h") with the dash forms a cross. Example:

 $= \mu \eta(v \dot{\rho}_S) \ Xoi \dot{\alpha} \varkappa$, P.Oxy. XVI 2033, 18 (7th c.). Usual is the abbreviation of the word by writing only the letter "μ" and omitting the rest ones. In this case, which belongs to the second section of the abbreviations, the diagonal line (see below) is connected with the first vertical line of the letter "μ", forming a letter similar to the "χ".

There are some times, where the penultimate written letter is repeated with whatever there is above it (letter or symbol), to declare that the abbreviated word is in plural number. This phenomenon occurs mainly in the 8^{th} century. Examples:

- The word $\delta\eta\mu\delta\sigma\iota a$ is used a lot in this period, while the ways according to which the word is abbreviated are many 31 . Here, reference is made in the abbreviation of the word with the repetition of the last two written consonant letters. Specifically, the word in singular number (and in plural- rarely) is abbreviated by writing the letter " μ " and placing the "o" exactly above it $(\delta\eta\mu)$. In the genitive of plural number, the scribes double the letter " μ " with the letter "o" exactly above it $(\delta\eta\mu)^{32}$.
- Reference was made to the word $\mu \acute{\eta} \nu$ which can be abbreviated by writing the letter " μ " and placing a small line (similar to an acute accent) above and at the right (μ). The abbreviation of the word in genitive of plural number can be achieved by doubling this form:



^{29.} CPR XXII 46, 2 (8th c.).

^{30.} P.Ross.Georg. IV 2, 20 (710), see *BL* VI, p. 121. There are more abbreviations of this word in the *Studien zur Palaeographie und Papyruskunde*, especially in the eighth volume (*SPP* VIII, p. 231).

^{31.} See CPR XXII, p. 313.

^{32.} CPR XXII 17, 11-16 (789/790).

As we can see both words $(\varkappa \alpha \varrho \acute{a} \beta \omega v - \mu \eta v \widetilde{\omega} v)$ are abbreviated in this way.

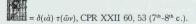
- When the word ἡμέρα (day) is in plural may be abbreviated (rarely) in this way, too (η'η')³³.
 As we will see later, reference is made in other abbreviations of this word.
- Later, this method was used in words that were not in plural number.
 An example of such an abbreviation is the name Iωάν°ν°(v)³⁴.

2. Abbreviation with a diagonal line:

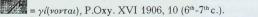
One of the most usual ways of abbreviating is the omission of the last part of the word and the writing of a diagonal line (/) at the base of the last written letter. Examples:

• The preposition $\delta \iota \acute{a}$ is used and abbreviated by the most of the scribes. The first letter and the diagonal line are only needed for the abbreviation of the word 35. Examples:

= $\delta(\iota\dot{\alpha})$, P.Oxy. XVI 2033, 1 (7th c.) & P.Oxy. XVI 2059, 7 (7th c.). However, in many paperi we can see this abbreviation with the letter " τ " above it. This letter is the abbreviation of the article that follows in any case and number. Example:



We can find the verb γίνομαι (become) in many papyri. The most usual
form of it is the first syllable with the diagonal line. In the example
below, we see the letter "ι", apparently bigger than the letter "γ", to be
connected with this diagonal. Example:



Other abbreviations of this word is the mere writing of the first two letters $(\gamma\iota)^{36}$

^{33.} CPR XXII 19, 5 (second half of the 8^{th} c.).

^{34.} CPR XXII 17, 3 (789/790).

^{35.} It should be noted that in this period, the horizontal line of the letter " δ " descends to the right wavely, forming a diagonal line. The latter as intersects with this diagonal forms a " χ ".

^{36.} SPP VIII 1046, 1 (7th c.).

or three $(\gamma w)^{37}$ or the writing of the first two with two diagonal lines at the base of the letter "v" $(\gamma v_n)^{38}$.

 The city name Ἀλεξάνδοεια is abbreviated in this way, that is, by writing some letters with the diagonal and omitting the rest ones. The number of the omitted letters differs from scribe to scribe. As we can see in the second example, the scribe can use different abbreviations:



= 'Αλεξ(άνδοεια), P.Oxy. XVI 2033, 6 (7th c.).



 $\dot{\ell}$ $\dot{\ell}$ = $\dot{\epsilon}\pi\dot{\epsilon}\mu\varphi\theta(\eta)$ $\dot{\epsilon}v$ ' $\dot{\epsilon}$ 'Αλεξανδοεί $\dot{\epsilon}(q)$ ' $\dot{\epsilon}$ 'Αλεξ(αν-

δρείας),

P.Oxy. XVI 1906, 22 (6th-7th c.).

Different abbreviations of this word is the writing of the first two letters ³⁹ or three $(A\lambda^2)^{40}$ without the diagonal line and the omission of the rest ones.

• The preposition εἰς is one of the words that are abbreviated in the same way. Specifically, the middle letter (ι) is written with the diagonal and the last one is omitted. In the example below, the diagonal is at the end of the letter "ι". It should be noted here that in some papyri the letter "ι" does not follow the letter "ε", but it is written exactly above it, "cutting" it or as it seems, "deleting" it. Example:



 $=\varepsilon l(\varsigma)$, CPR XXII 35, 1 (750 – 769?).

However, in many papyri we meet this abbreviation accompanied with the letter " τ " above and at the right. This letter, as we saw above in the preposition $\delta\iota\dot{a}$, is the abbreviation of the article in any case and in any number. Example:



 $= \varepsilon \hat{i}(\varsigma) \ \tau(\hat{\eta}\nu), \text{ CPR XXII 41, 5 (8th c.?)}.$

When the diagonal line accompanies the first letter of the word, the whole result looks like as a deletion. Examples:

• The word $\eta \mu \acute{\epsilon} \varrho a$, which we met above, is mainly abbreviated by writing

^{37.} SPP X 222, 3 (8th c.), see ZPE 137, 2001, p. 228.

^{38.} SPP VIII 865, 4 (7th c.).

^{39.} SB XVIII 13173, 109 (644 ή 629), see CSBE2, p. 296.

^{40.} SPP VIII 829, 2 (7th c.).

the first letter with the diagonal, and omitting the rest ones. After writing the first letter " η ", the scribes connect it with the diagonal for to abbreviate it. Example:



= $\hat{\eta}(\mu \hat{\epsilon} \varrho q)$, CPR XXII 23, 4 (787/8?).

It should be noted that another (rare) abbreviation of this word is the writing of the first two letters with a horizontal line above and right of the second written letter $(\eta \mu)^{41}$. And if the word is in plural, it can be abbreviated by writing the first two letters and placing the third one above and right of the second one $(\eta \mu^s)^{42}$.

• The word $\sigma \tilde{\imath} \tau o \varsigma$ is abbreviated in the same way, while the word that usually follows is the genitive $\dot{\varrho} v \pi a \varrho o \tilde{v}$. In the example below, the scribe writes the first syllable of the word with the diagonal line at the base of it and he omits the rest letters. The genitive $\dot{\varrho} v \pi a \varrho o \tilde{v}$ is abbreviated by placing the second letter above and right of the first one⁴³.



 $= \sigma i(\tau o v) \ \delta v(\pi a \varrho o \tilde{v}), \text{ P.Oxy. XVI } 1906, \ 10 \ (6^{\text{th}} - 7^{\text{th}} \text{ c.}).$

Many scribes abbreviate the first genitive $(\sigma(trov))$ in this way, too. That is, they write the letter " τ " above and right of the letter " ι " above searcly above it '5. Another method is the mere writing of the first syllable $(\sigma\iota)^{46}$, while there are few cases where only the last letter is omitted $(\sigma\iota\tau)^{47}$.

• One of the prepositions that are used a lot in this period is the preposition $\pi a \varrho \acute{a}$. Either in the beginning of the text⁴⁸ or in the middle of it, the word is abbreviated by writing the first letter (π) and omitting the rest ones. After writing the letter " π ", which sometimes looks like as an "M" (since the horizontal line of the letter bends downwards), the scribe adds the diagonal line and omits the other letters of the word. In this way, the word seems deleted. Examples:

^{41.} P.Lond. IV 1436, 10 (719), see Aegyptus 65, 1985, p. 112.

^{42.} P.Lond. IV 1394, 5 (708/709), see BL VI, p. 64.

^{43.} It is worth seeing the form of the letter " ρ ", in this era. As we see in the example below, the vertical line of the letter creates a miniscule " γ " at the base of the letter " ρ ".

^{44.} CPR XXII 25, 3 (742/743?).

^{45.} CPR XXII 26, 4 (8th c.?).

^{46.} SPP X 1, 9 (8th), see BL XI, p. 262.

^{47.} P.Oxy. XVI 1910, 1 (6th -7th c.).

^{48.} A. Papathomas, CPR XXV, pp. 40-41, note 1.

(ἀχτος) = τοῦ νο(μίσματος) α π(αρὰ) ς (ἀρταβῶν) &

 $= \pi(\alpha o \dot{\alpha}), \text{ P.Oxy. XVI } 2033, 4 (7^{\text{th}} \text{ c.}).$

This preposition is not abbreviated only in one way. Another method is the omission of the last letter49 or the omission of the whole last syllable, by writing the diagonal at the base of the letter " π " and placing the first letter " α ", above and at the right 50 . Simpler and rarer is the placement of the first vowel (α) above and right of the letter " π " and the omission of the rest ones⁵¹.

The adverb $\delta\mu o\tilde{v}$ is mostly abbreviated by writing the initial letter and omitting the last syllable. As we can see in the example below, the scribe chooses this kind of abbreviation. Since the first syllable consists of one letter only, it is written with the diagonal line. The word is abbreviated, though it seems deleted. In fact, in this example, we do not have one diagonal but two. This one diagonal is used for the abbreviation of the adverb δμοίως, too. In the example below, the second diagonal (which sometimes is omitted) is at the base of the letter:

 $= \gamma i (νονται) \delta(μοῦ)$, P.Oxy. XVI 1906, 19 (6th-7th c.).

Certainly, there are many abbreviations of this word: Sometimes these two diagonals are at the right of the letter⁵² and other times they do not exist at all⁵³.

3. Suspension and use of diagonal line:

Quite common is the combination of the writing of the penultimate letter with the diagonal line and the placement of the last letter above this diagonal. That is, the combination of the first and the second section. There are many words that are abbreviated in this way. Examples:

• In the second section, reference is made in the abbreviation of the preposition $\pi ao \acute{a}$ with the omission of the second /last syllable and the writing of the letter " α "⁵⁴, above and right of the letter " π " with the diagonal at its base:

^{49.} P.Ness. 79, 2 (in the beginning of the 7th c.).

^{50.} See the third section.

^{51.} SPP VIII 1054, 2 (7th-8th c.).

^{52.} CPR XXII 46, 16 (8th c.).

^{53.} CPR XXII 32, 1-4 (8th c.?).

^{54.} It should be noted that here the graph of the letter "α" looks like as the modern Greek " θ ", of which the horizontal line has been extended at the right.



= $\pi \alpha(\varrho \dot{\alpha}) \ \sigma o \tilde{v}$, P.Oxy. XVI 2009, 2 (7th c.).

• Above we met the word $iv\delta\iota\iota\iota\iota\iota\iota\iota$. The abbreviation that follows is not the commonest abbreviation of the word but it is worth to be mentioned. This word can be abbreviated by writing the initial letter (ι) with the diagonal line and placing the third one (δ) above and at the right. Perhaps, this diagonal is an indication that the letter " ι " is omitted, while the writing of the letter " δ " above is an indication that the word has been abbreviated. Of course, some scribes choose to write the second letter too $(\iota\iota\iota)^{\delta}$. That shows that the double indication of abbreviation is not for a particular reason. The mention of the other letters after the " δ " is not necessary, unless the scribe wishes to declare that the word is in genitive $(\iota\iota\iota)^{\delta}$. Example:



= $\tilde{\iota}(v)\delta(\iota κτι\tilde{\omega}vo\varsigma)$, P.Ross.Georg. IV 2, 18 (710).

A different abbreviation is the writing of the diagonal at the first and last letter: ι_i^{58} .

• Some words are abbreviated by writing only the first letter and omitting the rest ones. Above, we met three of such words $(\delta\iota\dot{a},\pi a\varrho\dot{a},\delta\mu o\bar{\nu})$. The reader of the text can analyze the abbreviation, either from the previous words or from the following ones. For example, when there is a name of a city, the word $\pi\delta\iota\iota_{\varsigma}$ that follows is abbreviated, because it can easily be assumed. In the example that follows, the word $H\varrho\alpha\varkappa\lambda\dot{\epsilon}ov_{\varsigma}$ is written until the letter " ι " with the diagonal and the letter " ι " of the word $\pi\delta\iota\epsilon\omega_{\varsigma}$ is put above it. Example:



='Hρακλ(έους) π(όλεως), P.Köln VII 319, 5 (7th-8th c.).

Of course, there are many versions. Specifically, when the word $m\delta\lambda\iota\varsigma$ follows the word $H\varrho\alpha\varkappa\lambda\dot{\epsilon}o\nu\varsigma$, then we can have many abbreviations of this phrase: $H\varrho(\alpha\varkappa\lambda\dot{\epsilon}o\nu\varsigma)$

^{55.} CPR XXII 12, 3 (7th-8th c.).

^{56.} H.J. Bell, "Abbreviations in documentary papyri", p. 431.

^{57.} CPR XXII 17, 11 (789/790).

^{58.} P.Lond. IV 1346, 2 (710), see RecPap 4, 1967, p. 145. Generally, the word brθωτιών has been abbreviated in any of the ways referred in this article. In SPP VIII (pp. 230-231), there is a detailed list of the many methods according to which the word can be abbreviated.

 π όλε $(ω_{\varsigma})^{\rm id}$, $H_{\varrho}(ακλέου_{\varsigma})$ π (όλε $ω_{\varsigma}$), where the letter " π " is written above the letter " $\sigma^{\rm idd}$ ".

When the word pólic follows the word $E \rho \mu \sigma \bar{\nu}$, $(E \rho \mu \sigma \bar{\nu} \eta \delta \hbar \epsilon \omega \varsigma)$, then we can have: $\epsilon \rho \mu \sigma \bar{\nu}$, $(\delta \hbar \epsilon \omega \varsigma)^{61}$, $\epsilon \rho \mu \sigma \nu \sigma \delta'(\omega \varsigma)^{62}$, $\epsilon \rho \nu \sigma \delta'(\omega \varsigma)^{63}$, etc.

• As for the most superlative adjectives ending in $-\delta\tau\alpha\tau\sigma_{\zeta}$, the scribes choose to omit the last two syllables $(-\tau\alpha\tau\sigma_{\zeta})$ by writing the letter "o" (which precedes) above and right of the previous one and its diagonal line. Of course, there are many versions, where either the ending $(-\delta\tau\alpha\tau\sigma_{\zeta})$ is omitted 64 or the last syllable $[\lambda\sigma\gamma\iota\omega\tau^{z}(\tau\omega)]^{65}$. Important information is that the abbreviation remains the same in all cases of singular or plural (rarely). The case of each adjective can be analyzed from the previous or the following word. Here is an example of the adjective $\lambda\alpha\mu\tau\rho\delta_{\zeta}$ in superlative:



= λαμποό(τατος), P.Oxy. XVI 1869, 1 (6th-7th).

In this abbreviation the letter " σ " is obviously smaller than the previous ones and it is written above and right of the previous letter " ρ ", at the base of which we can see the diagonal line.

In the fourth section, there is another abbreviation of this word.

The placement of the last two written letters above the previous one and its diagonal line is rare:



= iνδ(ικτιῶν)ο(ς), CPR XXII 21, 1 (796/797?).

4. Abbreviation with the symbol "ς":

A different section is the abbreviation of a word with a symbol, similar to the Greek final sigma " ς ", at the place of the omitted letters. Its size and form vary from scribe to scribe. Examples:

• In the example below, the scribe abbreviates the infinitive $\pi \epsilon \mu \varphi \theta \tilde{\eta} \nu a \iota$, by

^{59.} SB XVI 12717, 3 (640-650).

^{60,} CPR XXII 14, 1 (7th-8th c.),

^{61.} P.Lond. V 1776, 1 (6th-7th c.).

^{62.} P.Lips. I 103, 1 (7th-8th c.).

^{63.} P.Lond. V 1783, 1 (7th c.).

^{64.} See the next section.

^{65.} P.Oxy. XVI 1919, 2 (7th c.).

writing the word until the letter " θ " and replacing the rest ones by the symbol " ς ". We can see that the scribe extends the bottom line of the symbol and almost "disappears" the top line, because of the fast writing. Example:

word Tiday

=ὥστε πεμφθ(ῆναι), P.Oxy. XVI 2059, 4 (7th c.).

• In the first section we met the word νομίσματα. In this section, reference is made to different ways according to which the word can be abbreviated. Specifically, some scribes choose to write the first three letters and omit the rest ones, either the word is νόμ(ισμα) or νομ(ισμάτιον), either is in singular or in plural. In this case, the letters that follow the letter "M" are replaced by the symbol "ς". In fact, in this example the symbol begins from the ending of the second vertical line of the letter "M" and looks like a parenthesis open to the left side. Example:



= χουσίου νομ(ισμάτιον), SPP III².2 164, 4 (635 or

 650^{66}).

However it is worth seeing the abbreviation of this word with the omission of some letters in the middle of the word:



= $\chi \varrho v(\sigma o \tilde{v}) \nu o \mu \iota \sigma \mu(\alpha) \tau(i o v)$, SPP III² 190, 2 (710).

The diagonal that is connected with the letter "v" of the word $\chi\varrho v(\sigma\sigma\bar{v})$ is an extension of a letter in the above line. Other abbreviations of the word are these: $vo\mu v'''(\alpha\tau\iota\sigma v)^{67}$, $vo\mu^{7}_{c}(\iota\sigma\mu\alpha\tau\iota\alpha)^{68}$. Quite rare is the replacement of the whole word by a full stop, in the preposition ensemble $\partial \sigma vo\mu\iota\sigma\mu\alpha\tau v (\alpha\sigma\dot{v})^{69}$.

Many words are abbreviated by omitting the last syllable, except for its first letter. The word σιρωτής is abbreviated in the same way and we meet it only in one papyrus, generally. The symbol "ς", which replaces the omitted letters is written after the letter "τ" and looks like as the modern Greek miniscule letter "ξ":



=εἰς σιρωτ(ήν), P.Bad. IV 97, 10 (7th-8th c.).

^{66.} For the dating see APF 53, 2007, p. 153, note 5.

^{67.} SB VIII 9771, 6 (7th-8th c.).

^{68.} P.Paramone 14, 4 (6th-7thc.).

^{69.} P.Lond. IV 1416A, 2ⁿ (1) (732/733), see BL VIII, p. 190.

• Above we met the adjective $\lambda a\mu\pi\varrho\delta\varsigma$, as an example of how the superlative adjectives are abbreviated. In this papyrus as in many others, the scribe omits the whole ending of the superlative $(-\sigma\tau\delta\tau\varphi)$. So, he writes the word until the letter " ρ " and he adds the symbol " ς " after that. Reference has already been made to the form of the letter " ρ " in this period, while its connection with the symbol happens imperceptibly by the fast writing:

Finally, I would like to make a reference to another scarce abbreviation of this section, where after the last written letter, which is put above the previous letter, the symbol " ς " follows. Example:

• In this example, the scribe writes the word (ἀνωψυχθέντος) until the letter "θ" (which is put exactly above the letter "χ") and he replaces the other letters by the symbol "ς", which is placed next to the letter "θ". The word looks like as being abbreviated in a double way. There is no possibility that this symbol may be the last letter of the word in genitive (ἀνωψυχθέντο-ς) as there is nothing like that in the whole Arabic period, generally 70. Example:



= ἀνωρυχθ(έντος), P.Oxy. LXVI 4537, 1 (6th-7th c.).

5. Contraction:

The contraction is the omission of some letters in the middle of the word. Rudberg 71 and Nachmanson 72 say that the Greek contraction led to the creation of the nomina sacra, while Bell says that this contraction was established much later of the appearance of the nomina sacra. He also says that the Greek contraction was used, especially, after the Byzantine era. Regardless of origin, in the early Arabic period, the contraction is not necessarily accompanied with the typical horizontal line, which is put above the word to connect the beginning and the ending of that word and help the reader

^{70.} Except for the abbreviation of the nomen sacrum $\pi a \tau \dot{\eta} \varrho$ (see the 6th section).

 $^{71.\} G.\ Rudberg,$ "Zur palaographischen Kontraktion auf griechischen Ostraka", pp. 71- 100.

 $^{72.\,}E.\,Nachmanson, "Die schriftliche Kontraktion auf den griechischen Inschriften", pp. 101- 144.$

to understand the intentioned omission of the intermediate letters. In fact, many times this horizontal line absents, as will see in the next section. The words that are abbreviated in this way are mainly the proper male names and the Egyptian names of months, while the abbreviation may be done with all the above ways. Examples:

• The month $\Phi a\mu \epsilon r \omega \theta$ is abbreviated by the omission of the intermediate letters $-\epsilon r \omega$ - and the writing of the rest ones. Usually, the scribe writes the letter " θ " exactly above the letter " μ ":

 $= \Phi \alpha \mu (\varepsilon \nu \dot{\omega}) \theta$, CPR XXII 57, 6 (8th c.).

The word can be abbreviated by writing the letter " μ " with the diagonal line⁷³ or the symbol " ς " and placing the letter " θ " above it.

- The month $Xo\iota\acute{a}\varkappa$ belongs to this section. The letters "X" and " \varkappa " are written and the intermediate ones are omitted: X^{\varkappa} "5. However, there are more abbreviations of this word: $Xo\iota^{\alpha}$ "6, $X^{\circ\iota}$ "7, $X^{\circ\iota}$ "8, $X^{\circ\varrho}$.
- When the word Φαρμοῦθι is not abbreviated per syllable (see below) may
 be abbreviated by omission of the intermediate letters and specifically of
 the diphthong "ου" (Φαρμ^{βι})⁸⁰.
- A similar case is the abbreviation of the word $\Pi a \chi \acute{\omega} r$, where the scribe writes the first and last letter and omits the rest ones. However, this does not happen often. On the contrary, the abbreviation per syllable is preferred, that is, the writing of the first letter of the first syllable (π) and the placement of the first letter of the second syllable (χ) above and at the right⁸¹. (This category is analyzed below).

Also, the word $\Pi(\alpha \tilde{v} v)\iota$ is abbreviated by contraction⁸².

^{73.} CPR XXII 46, 2 (8th c.).

^{74.} CPR XXII 49, 1 (8th c.).

^{75.} SPP XX 258, 4 (2nd half of the 7th c.), see CE 56, 1981, pp. 127-128, 131.

^{76.} P.Lond. IV 1437, 1 (718), see Aegyptus 65, 1985, p. 112.

^{77.} P.Princ. II 90, 5 (7th-8th c.).

^{78.} P.Lond. I 116A, 5 (645), see BL XII, p. 100.

^{79.} SPP XX 160, 5 (7th c.).

^{80.} SPP X 297, 1 (r.2) (7th-8th c.).

^{81.} SPP VIII 795, 4 (7th c.).

^{82.} SB I 5567, 3 (763).

As for the proper names, the genitives Παυλ^ο (Παύλου) ⁸³ και Ιωαν^ο (Ιωάννου) are indicative examples: , CPR XXII 24, 6 (8th c.). Of
course, there are different abbreviations of these words.

6. Nomina Sacra:

The holy names (nomina sacra) are a special section, not only because of the specific number of the names that are included (15), but because of the way that these names are abbreviated, too. Various theories have been said for the origin of the nomina sacra, as to whether they follow or precede the contraction s4. The interest in this study is focused on the abbreviation of these holy names in the non-literary papyri of the early Arabic period (640-800 A.D.). The way according to which these names are abbreviated is generally known. Specifically, the first letter (or more) of the beginning and the last one (or more) of the ending of the word are written and the intermediate ones are omitted. While, above this set of letters a horizontal line is put to indicate that the word is abbreviated and it is a nomen sacrum.

In this period, from the 15 nomina sacra, the name ${\it Toga\eta}\lambda$ does not appear else, the word ${\it overhoos}$ appears only once as a proper name 85 , while the words ${\it \mu\eta\tau\eta\varrho}$, ${\it ave}\omega{\it nos}$ and ${\it \Delta ave}i\delta$ (${\it \Delta avi}\delta/{\it \Delta a\beta}i\delta$) appear as non-nomina sacra. The word ${\it \sigma\tau ave}\delta{\it ss}$ appears only once as a holy name and not abbreviated (in accusative) 86 .

The word Θεός appears in many papyri either totally written or abbreviated. Usually, it appears in stereotypes or with a preposition. More specifically, the word God appears in these phrases: οὖκ ἔστιν θ(εὸ)ς εἶ μὴ ὁ θ(εὸ)ς μόνος⁸⁷, ἐν ὀνόματι τοῦ κυρίο(ν) καὶ δεσπ(ότον) Ἰησοῦ Χριστοῦ τοῦ

^{83.} CPR XXII 27, 13 (8th c.).

^{84.} See L. Traube, Versuch einer Geschichte der christlichen Kürzung, Munich 1907. G. Rudberg, "Zur palaographischen Kontraktion auf griechischen Ostraka", Eranos 10, 1910, pp. 71-100. E. Nachmanson, "Die schriftliche Kontraktion auf den griechischen Inschriften", Eranos 10, 1910, pp. 101-144. U.Wilcken, Grundzüge und Chrestomathie der Papyruskunde I.1, Leipzing - Berlin 1912, p. XLIVsq. Also, see A.H.R.E. Paap, Nomina Sacra in the Greek papyri of the first five centuries A.D. The sources and some deductions, Leiden 1959. See, also, J. O'Callaghan, Nomina sacra in papyris graecis saeculi III neotestamentariis, Rome 1970, etc.

^{85.} P.Lond. IV 1419, 1163 (716).

^{86.} CPR XIV 55, 2 (7th c.).

^{87.} SB III 7240, 4 (697), see BL VIII, pp. 326-327.

θεοῦ καὶ σωτῆρος ἡμῶν³³, Θεοῦ κελεύοντος δ³, Θεοῦ θέλοντος δ³, ὁμολογῶ <ν>πρός τε τοῦ θεοῦ τοῦ Παντοκρ(άτορος) (καὶ) τῆς σωτηρίας τῶν δεσπο(τῶν) ἡμῶν³¹, etc. While, in this era, the prepositions that accompany the word are mainly two: μετά and σύν 92 . Here are some examples of how the word is abbreviated by omitting the intermediate letters and placing the typical horizontal line above or how the word can be abbreviated by some of the above ways (the first example is in nominative, while the rest ones in genitive):

$$\overline{\Theta_{\varsigma}}^{93}$$
, $\Theta_{v/94}^{+}$, Θv^{95} , Θ^{ov}^{96} , $\Theta_{\varepsilon o}^{-97}$

This word appears, very often, in dative with the preposition $\sigma\acute{v}\nu$. Example:

 $=\sigma \dot{v}v$ $\theta(ε\tilde{\omega})$, P.Bad. VI 173, 6 (6th-7thc.).

As we can see the scribe writes the whole preposition and abbreviates the dative $\theta\epsilon\tilde{\omega}$. Specifically, he writes the letter " θ " above the letter " ν " and he omits the rest ones. These words together, as an abbreviation appear very often in this period.

Here are some different abbreviations:

$$\sigma^{\theta}$$
, σv^{θ} , $\sigma v v^{\theta} \varsigma$, σv^{θ} , etc⁹⁸.

When the word is accompanied with the preposition $\mu \epsilon \tau \acute{a}$, the scribe chooses to abbreviate the words by omitting some syllables: $\mu \epsilon (\tau \grave{a}) \theta(\epsilon \acute{o} \nu)^{99}$, $\mu \epsilon \tau (\grave{a}) \theta(\epsilon \acute{o}) \nu^{100}$, $\mu \epsilon (\tau \grave{a}) \theta(\epsilon \acute{o}) \nu^{101}$, etc. Example:

^{88.} BGU II 371, 1-3 (7th c.), see SPP III².2, p. 59.

^{89.} P.Apoll. 18, 1 (660-661 or 675-676?), see ZPE 49, 1982, p. 88.

^{90.} P.Apoll. 72, 1 (2nd half of 7th c.), see BL VIII, p. 10.

^{91.} P.Laur. III 112, 8-9 (7th-8th c.).

^{92.} Morelli CPR XXII, p. 53, note 2.

^{93.} P.Lond. IV 1462h, 4 (687-705), see BL V, p. 57.

^{94.} P.Lond. III 1060, 1 (7th c.).

^{95.} P.Lond. V 1783, 1 (7th c.).

^{96.} P.Lond. V 1784, 1 (7th c.).

^{97.} P.Lond. IV 1349, 6 (710), see RecPap 4, 1967, p. 145.

^{98.} See SPP VIII 1199, 1 (744 or 759, see ZPE 149, pp. 189-192), BGU II 683, 2 (7th-8th c.), SPP III ^2.2 198, 3 (6th-7th c.), P.Lond. IV 1413, 2 (723), respectively.

^{99.} P.Oxy. I 131, 1 (6th-7th c.).

^{100.} P.Oxv. XVI 1940, 6 (6th-7th c.).

^{101.} SB VI 9107, 6 (6th-7th c.).



 $=\mu(\varepsilon)\tau(\dot{\alpha})\ \theta(\varepsilon\dot{\alpha})\nu$, P.Gen. I² 14, 1 (6th-7th c.).

- The second holy name that appears in many papyri is the word χύριος. When the word is in dative or accusative is not a nomen sacrum, while in nominative (few times) the word is not abbreviated at all. On the contrary, the genitive χυρίου appears many times in the phrase that we saw: ἐν ὀνόματι τοῦ χυρίου καὶ δεσπότου Ἰησοῦ Χριστοῦ τοῦ θεοῦ καὶ σωτῆρος ἡμῶν. Here is one abbreviation of the world: κυ(ρίου)¹⁰².
- The holy name πνεῦμα appears only in genitive of singular and only in the phrase: ἐν ὀνόματι τῆς άγίας καὶ ζωοποιοῦ ὁμοονσίον τριάδος πατρὸς καὶ νίοῦ καὶ ἀγίο]ν πνεύματος ¹⁰³ οτ ἐν ὀνόματι τοῦ πατρός καὶ νίοῦ καὶ ἀγίον πνεύματος τῆς ἀγίας και ὁμοονσίον τριάδος ¹⁰⁴. The syllables that the scribes choose to omit are the following ones: πν(εύμ)α(τος) ¹⁰⁵, πνεύμ(ατος) ¹⁰⁶, πν(εύματο)ς ¹⁰⁷, πν(εύματος) ¹⁰⁸.
- The name $\pi a \tau \eta \varrho$ appears as nomen sacrum only in the genitive of singular, in the phrase we met above. Most of the times, the word is not abbreviated, while the abbreviation $\pi(a\tau)\varrho(\delta)\varsigma^{109}$ appears in some papyri.
- The word $T\epsilon\varrho\sigma\sigma\delta\lambda\nu\mu\alpha$ is found only once in accusative (totally written)¹¹⁰ and few times in genitive with abbreviation. $I\epsilon\varrho\sigma\sigma\sigma\lambda^{\circ}(\mu\omega\nu)^{111}$ and $I\epsilon\varrho^{\circ}(\sigma\sigma\lambda\dot{\nu}\mu\omega\nu)^{112}$ are the abbreviations of this word.
- The name $i\eta\sigma\sigma\tilde{v}_{S}$ $\chi_{Ql}\sigma\tau\dot{v}_{S}$ appears twice in nominative, totally written and many times in genitive in the phrase we saw above. The word is abbreviated only once (in the beginning of 7^{th} century) and this as nomen

^{102.} SB 1 4778, 1 (7th c.), see CE 56, 1981, pp. 128, 131.

^{103.} P.Strasb. V 310, 1a-3 (7th c.), see BL VII, p. 248 and CE 56, 1981, p. 125.

^{104.} P.Flor I 70, 1 (642 or 677), see BL VIII, p. 125 and JJP 37, 2007, p. 130-131.

^{105.} SB I 5555, 4 (750), see BL V, p. 96.

^{106.} SB I 5558, 2 (748 or 733), see BL V, p. 96.

^{107.} SB I 5587, 1 (748), see BL V, p. 96.

^{108.} SB I 5607, 2 (779), see BL V, p. 97.

^{109.} SB 1 5587, 1 (748).

^{110.} P.Ross.Georg. IV 4, 5 (710).

^{111.} P.Lond. IV 1414, 149 (8th c.).

^{112.} P.Lond. IV 1414, 218 (8th c.).

sacrum: $\stackrel{t}{\mathcal{D}} X_{v^{113}}$. The name $X_{\varrho\iota\sigma\tau\delta\varsigma}$ (without ${}^{i}I_{\eta\sigma\sigma\tilde{v}\varsigma}$) appears in accusative and dative with or without abbreviation, and only once in genitive with abbreviation: $X(\varrho\iota\sigma\tau\sigma)\bar{v}^{114}$.

- The name $vl\delta\varsigma$, as a holy one, appears few times in accusative totally written 115 and many times in genitive with abbreviation (in the phrase we saw above): $v(l)o\tilde{v}^{116}$, $(v)lo\tilde{v}^{117}$.
- In the phrase ἐν ὀνόματι τοῦ χυρίον καὶ δεσπότου Ἰησοῦ Χριστοῦ τοῦ θεοῦ καὶ σωτῆρος ἡμῶν, the genitive σωτῆρος is always totally written. An exception is the papyrus CPR XIV 15, 3 (641), where this genitive is abbreviated by the omission of the last two letters. Except for the genitive the name appears as nomen sacrum, once totally written in nominative and once in accusative 119.

7. Abbreviation per syllable (Binnenkürzungen):

This section includes many abbreviations. The way according to which the words are abbreviated may be one of the above. In this category, the words are abbreviated per syllable. Such an abbreviation, perhaps, began to be applied to polysyllable words or compouned ones and then passed in three-syllable and two - syllable ones, where it mainly remained. The scribes spent too much time and space, writing such big words. The letters that are omitted are mainly the vowels.

How the word would be abbreviated and which syllable should be omitted differs from papyrus to papyrus and from scribe to scribe. Examples:

Many proper names are abbreviated in this way. Most of them are Egyptian names of months. The way according to which the words are abbreviated is not the same. For example in the word Μεχείρ, we see that the scribes write the first letter of each syllable and omit the rest ones. More specifically, after writing the letter "μ" they place the letter "χ" above and at the right:

^{113.} CPR X 133, 2 (610-641), in the papyrus the passage over the genitive Xv is damaged.

^{114.} SB XX 14188, 2 (8th c.).

^{115,} SB XIV 12031, 2 (6th-7thc.).

^{116.} SB I 5559, 2 (758), see BL V, p. 96.

^{117.} SB I 5594, 1 (771), see BL V, p. 97.

^{118.} P.Haun. III 52, 15 (6th-7th c.).

^{119.} P.Köln. III 166, 5 (6th-7th c.).



= $M(\varepsilon)\chi(\varepsilon i\varrho)$, P.Eirene I 36, 5 (7th-8th c.).

• The preposition περί is abbreviated per syllable but instead of writing the letter "π" as the first one, and the letter "ρ" above or under it (as sometimes happens), the scribes firstly write the letter "ρ" and then they place the letter "π" exactly above it. This abbreviation is quite often in this period. Perhaps, this kind of abbreviation may have led the scribes to use and write only the letter "ρ"120. Example:



 $=\pi(\varepsilon)\varrho(i)$, P.Ross.Georg. IV 2, 21 (710).

• The word λόγος in dative is mainly abbreviated per syllable. As we see in the example below, the scribe abbreviates the word by writing the letter "λ" horizontally and the letter "γ" exactly above it. In this era, several words are abbreviated in this way. Also, it is worth seeing the form of the letter "Λ", which looks like the modern Greek minuscule "μ":



= $\lambda(\delta)\gamma(\omega)$, CPR XXII 44, 4 (8th c.).

The abbreviation of dative may be done in other methods. Specifically, by writing the first syllable and placing the letter " γ " under the letter " σ^{n+2l} or above and at the right¹²². The abbreviation may be done with the omission of the last vocal¹²³, while sometimes the nominative is abbreviated per syllable, like dative¹²⁴. A rare abbreviation of the word is the writing of the letter " σ " under the letter " λ " and the placement of the letter " γ " above and right of the letter " λ ", at the same time: $\lambda_{\gamma}^{\gamma}(\alpha_{\gamma})^{125}$. A different abbreviation is the writing of the letter " λ " and the dash, above and at the right $(\lambda_{\gamma})^{126}$.

One of the words that are abbreviated in this period is the pronoun καθέν. The scribes write the first letter "κ" with the diagonal and place the letter "θ" above and at the right. We could say that the word is ab-

^{120.} P.Lond. IV 1335, 1 (709), see RecPap 4, 1967, p. 142.

^{121.} P.Lond. IV 1401, 11 (709-714).

^{122.} P.Lond. IV 1408, 6 (709).

^{123.} SPP VIII 1208, 2 (7th-8th).

^{124.} P.Nessana 84, 1 (7th).

^{125.} P.Lond. V 1807, 1 (7th).

^{126.} SPP XX 238, 4 (7th).

breviated in a double way but the left vertical line before the letter " θ " is a scribe's "carelessness", since the phrase ($\dot{\epsilon}\sigma\tau\dot{\iota}~\tau\dot{\delta}~\kappa a\theta\dot{\epsilon}\nu$) appears elsewhere, too¹²⁷:



 $= \kappa(\alpha)\theta(\acute{\epsilon}\nu)$, CPR XXII 60, 37 (7th-8th c.).

Many three-syllable or polysyllable words are abbreviated "syllable per syllable". Perhaps this shows that the abbreviation per syllable should be replaced by something faster, with which scribes could gain much more time and space in the papyrus. Of course, later, the saving of space or time was not the reason of such an abbreviation, since the latter was depended on scribe's willingness. Examples:

• The word $\Phi a \tilde{\omega} \varphi_{\iota}$ has three syllables. The scribes choose to omit the first syllable, except for the first letter and the last one: ω^{128} . Of course, there are different abbreviations of this word. Quite common is the omission of the letters " α " and " ι " and the writing of the rest ones with the diagonal line 129. Rare abbreviations of this word are the following

ones: Φ^{α}_{130} , Φ^{-}_{131} , Φ_{α}^{-132} , Φ^{133} .

• The word $\Pi\alpha\bar{\nu}\nu$ is abbreviated in the same way but the middle syllable is not omitted. The most common abbreviation is the writing of the first letter (π) and the placement of the letter " ν " above it. In this abbreviation, if the word is abbreviated per syllable, somebody could wonder why the scribe separates the diphthong " $\alpha\nu$ " and writes only the letter " ν ". Perhaps, this shows that the diphthong has not become a monophthong yet or the abbreviation was formed when this diphthong was pronounced with "two sounds" and the scribes kept this abbreviation later. Otherwise they would place the consonant " ν " above (and right of) the letter " Π ", that is, the first letter of the second syllable, as usually. Example:

^{127.} SPP X 219, 1 (6th -7th).

^{128.} SPP X 217, 6 (7th-8th).

^{129.} P.Lond. V 1783, 5 (7th).

^{130.} P.Lond. IV 1412, 20 (705), see BL V, p. 56.

^{131.} P.Lond. IV 1367, 19 (710), see RecPap 4, 1967, p. 149.

^{132.} SPP XX 244, 21 (6th-7th c.).

^{133.} P.Rainer Cent. 121, 6 (719).



= $\Pi(\alpha)\tilde{v}(\nu\iota)$, SPP III².2 215, 5 (2nd half of 7th c.).

There were some cases, where the last given letter was not written exactly above the previous one, but much higher. Perhaps, this had to do with the scribe's handwriting, since as we can see in the example below the letter " η " of the previous word $\mu\eta(\eta)$ is written much higher of the letter " μ ".



 $= \mathring{\epsilon} \gamma \varrho \acute{a}(\varphi \eta) \ \mu \eta(\nu \grave{\iota}) \ \Pi(\alpha) \widecheck{v}(\nu \iota) \ \varkappa \gamma \ \mathring{\iota}(\nu) \delta(\iota \varkappa \tau \iota \widetilde{\omega} \nu \circ \varsigma) \ \theta,$

P.Ross.Georg. IV 2, 18 (710).

A rare abbreviation is the writing of the first letter and the placement of the second one above and at the right $(II^s)^{134}$.

However, the scribe may choose to omit any syllable that he wants, which generally happens in this period. Examples:

 The word Φαομοῦθι is abbreviated per syllable, but the last two syllables are the ones which are omitted. So, the first syllable as the first letter of the third one (θ) are written mandatory, to enable the analysis of the omitted letters. Example:



 $=\Phi a \rho(\mu o \tilde{v})\theta(\iota)$, CPR XXII 16, 4 (8th c.).

There are abbreviations with the omission, of the last letter $(\Phi a \varrho \mu o \vartheta^0)^{135}$, of the diphthong "oo" and the letter " ι^{n136} , of the last fourth letters ¹³⁷ and also an abbreviation per syllable: $\Phi(a) \varrho (\mu o \bar{\nu}) \theta(\iota)^{138}$.

8. Symbols:

Many words are totally abbreviated by a symbol. The symbols come from a previous abbreviation of the word, without being perceived how this word evolved into this symbol. ¹³⁹ In this section, reference is made to some words examples and in other ways according to which these words are abbreviated. Examples:

• Κεράτια: In this period, as earlier, this word went through various stag-

^{134.} SPP III 649, 1 (7th c.).

^{135.} CPR VIII 69, 11 (6th-7thc.). 136. SPP XX 276, 1 (7th-8thc.).

^{137.} SB XX 14302, 1 (6th-7th c.).

^{138.} P.Apoll.13, 8 (676).

^{139.} H.J. Bell, "Abberviations in documentary papyri", pp. 424-433.

es of abbreviation and for this reason it is difficult for the researchers to determine the evolution with accuracy. The κεράτια are sometimes whole abbreviated and sometimes only partially. Many scribes use the

symbol 40, which is similar to the Greek final sigma (c), saving time and space while writing on the papyrus. This symbol may came either from the fast writing of the letter "x", which looks like a "u" in this period or from the first letter of the Latin "siliqua". Because the scribes wrote this symbol extending far its below diagonal line, the symbol evolved (in the 7th-8th century) into a single 141 or a double 142 diagonal. In the 7th century many scribes abbreviate the word partially. Here are some different versions:

(a) $143 = \kappa \varepsilon o(\acute{\alpha}\tau \iota \alpha)$, (b) $= \kappa \varepsilon (o\acute{\alpha}\tau \iota \alpha)^{144}$, (c) In the first case (picture a), the scribe chooses to write $\varkappa \varepsilon \varrho$ with the diagonal. In the second one (picture b), the scribe writes only the first two letters, extending by far the middle horizontal line of the letter "E" (which is a sign of abbreviation). The result is the letter "E" to look like as the letter "A". Finally, in the third picture, the scribe keeps only the initial letter of the word (x) with the diagonal, which here connects the letter "K" with the letter (number) that follows. It should be noted that the last two pictures are from the same papyrus and have been written

Rare is the writing of chosen letters of the word $(\varkappa \varepsilon \rho_s^7)^{146}$ or only the writing of the initial letter $(\varkappa)^{147}$ or the omission of the last letter $(-\alpha)^{148}$.

by the same scribe. Of course, this may happen to ourselves, depending

 $A \rho \tau \alpha \beta \eta$: Most scribes choose the symbol $A \rho \tau \alpha \beta \eta$: Most scribes choose the symbol any of the cases. This symbol is known from the previous eras, even in the centuries B.C. A horizontal line above a small circle is the way according to

on the speed we write.

^{140.} P.Oxy.XVI 2054, 7 (7th c.).

^{141.} CPR XXII 60, 3-9 (7th-8th c.).

^{142.} P.Lond. IV 1442A, 35 (8th c.).

^{143.} P.Oxy. XVI 1919, 7 (7th c.).

^{144.} P.Oxy. XVI 2033, 5 (7th c.). 145. P.Oxy. XVI 2033, 17 (7th c.).

^{146.} SPP VIII 867, 5 (7th c.).

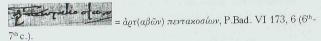
^{147.} P.Lond. IV 1419, 139-45 (716/717).

^{148.} SB I 4712, 18 (630-640), see Cowey- Kramer, Paramone, p. 177-178, note 14 149. P.Oxy. XVI 2033, 3 (7th c.).

which the word is abbreviated. In the Arabic period the symbol looks like the Greek minuscule " σ ", with the difference that is more "calligraphic". It should be noted that most of the scribes extended the straight horizontal line. There are many times where this symbol looks like as the letter " θ ":

11 150 or the letter "8": 7 151

Many times, the word $\dot{a}\varrho\tau\dot{a}\beta\eta$ is not totally abbreviated but partially. Sometimes only the first two letters are written and the rest ones are omitted $(a\varrho)^{152}$ and sometimes only the first three letters are written (see the example). Also, the scribers can omit only the last two letters of the word in nominative of plural number 153 , in accusative of singular $(a\varrho\tau a\beta')^{154}$ and in genitive of singular $(a\varrho\tau a\beta')^{155}$. However, the word is abbreviated by writing the second and the third letter above it $(\varrho')^{156}$. Example:



• $T\dot{\alpha}\lambda\alpha\nu\tau\alpha$: This word was one of the most abbreviated ones in any period. The symbol of the word appears few times in this period unlike in the previous centuries (when the word appears totally written or abbreviated in many papyri). Example:



• Most of the times the conjunction καί is totally abbreviated by a symbol. However, many times, the word is not abbreviated. In the first case, the symbol looks like the Greek final sigma "ς". In fact, this form prevailed in many manuscripts later. This symbol may came from the fast writing of the first letter "κ" (u) or of the Latin "q" (<que). It looks like the symbol of the word κεφάτια but it actually differs. Specifically, in the symbol of the word καί, the upper curve of the letter is in absolute symmetry with the bottom, in contrast to the "ς" of the κεφάτια, of which the curve</p>

^{150.} P.Oxy. XVI 2021, 4 (6th-7thc.).

^{151.} P.Oxy. XVI 2021, 7 (6th -7th c.).

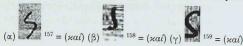
^{152.} CPR IX 69, 3 (6th-7th c.) .

^{153.} SPP III 271B, 6 (641-642).

^{154.} P.Lond. III 1324, 3 (6th-7thc.). 155. P.Lond. III 1324, 4 (6th-7thc.).

^{156.} P.Lond IV 1375, 18 (710), see BL VI, p. 64.

occupies much less space than the bottom one. The latter, in particular leads to a left diagonal line. Different forms of the symbol "c":

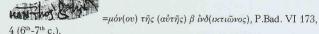


• Most of the times, the preposition $\delta n \dot{\epsilon} \varrho$ is totally abbreviated. The symbol that is used is similar to the letter " χ ". More analytically, the diagonal starting from the left and descending to the right, is not a straight line but a curved one. On the contrary, the other diagonal is a straight line.

The result is a calligraphic " χ " or a curved " ψ ": $(\psi)^n$: Perhaps we could say that the writing of the letter " ψ " with the diagonal gave this symbol.

Of course, some scribes choose to write the first letter 161 or the first two ones 162 and omit the rest ones.

• The pronouns are usually abbreviated partially and not completely. However, in some papyri the scribes choose to replace them by symbols, which clearly can be analyzed by the reader of the text. We have seen above the pronoun $\alpha \dot{v} \dot{\tau} \dot{c}_{\zeta}$ to be abbreviated partially. However, the whole word could be abbreviated by a symbol. As we can see in the example below, this symbol looks like the symbol of the word $\varkappa a \dot{a}$. The difference between them is the small "grave accent" above it. Between the middle of the 6^{th} century and the beginning of the 7^{th} century this symbol was rarely used, while between the ending of the 7^{th} century and the beginning of the 8^{th} century, the symbol was not used at all. It was used just before the 3^{rd} century and its use increased between the 5^{th} and the 6^{th} century. Example:



^{157.} P.Oxy. XVI 2033, 6 (7th c.).

^{158.} CPR XXII 55, 3 (706).

^{159.} P.Bad. VI 173, 6 (6th-7th c.).

^{160.} P.Oxy. XVI 2033, 2 (7th c.).

^{161.} P.Grenf. II 102, 2 (7th c.). 162. BGU III 840, 11 (6th-7thc.).

Another pronoun that is abbreviated by a symbol is the relative pronoun, mainly in genitive of plural. The symbol that is used is a straight line, similar to the circumflex. Perhaps it came from a fast writing of the

word " $\omega\nu$ " or only of the letter " ω ". Example: $163 = (\delta \nu)$. Most of the times, this pronoun appears accompanied with a preposition: $\xi\xi$ $\delta\nu$, $\delta\varphi$ $\delta\nu$, etc. These groups, few in number, came from the Roman era. In some papyri there is only the preposition with the diagonal line, which replaces the pronoun that follows. This shows that these two words were considered to be as one. In the example below, we see the letter " ξ " with the diagonal, the omission of the pronoun and the writing of the participle:

= εξ (δv) ενεχθέ(ντα), P.Oxy. XVI 2033, 11 (7^{th} c.).

The same happens with the preposition $\dot{\alpha}\pi\delta$. The scribe abbreviates the ensemble $\dot{\alpha}\varphi'$ ($\dot{\delta}v$), by writing and abbreviating only the preposition, without giving the pronoun ¹⁶⁴. Of course there are some other abbreviations of these: $\varepsilon\xi^w/$ ¹⁶⁵, αq^{m+66} .

In summary, the abbreviations of this period are many and various. The scribes do not abbreviate the words by following strict rules. Certainly, they were rules but the scribes felt free to variate and to apply them with flexibility and creativity. Of course, much work remains to be done. I hope that this article could make a contribution to this direction.

^{163.} P.Oxy. XVI 1910, 2 (6th -7th c.).

^{164.} SPP VIII 1032, 5 (7th c.).

^{165.} P.Harrauer 60, 9 (1st half of 7th c.).

^{166.} P.Lond. V 1763, 6 (7th-8th c.).

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