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ON THE GRAPHEMIC ALTERNANCE ⟨E⟩ ~ ⟨I⟩ AND ⟨O⟩ ~ ⟨U⟩ IN LATIN PAPYRI AND OSTRACA: SOME NEW REMARKS

Summary: This paper intends to provide some data about the occurrence of ⟨e⟩ and ⟨o⟩ for Classical Latin (= CL) /i/ and /ū/ in Latin papyri and ostraca. In order to carry out a study of the incidence of some grapho-phonological phenomena within documentary texts and to examine to what extent they could be related with parameters of sociolinguistic variation, the examined texts have been collected in a *corpus* which has been tagged for both linguistic and extralinguistic aspects. This *corpus* is available in the Database *CLaSSES* (<http://classes-latin-linguistics.fileli.unipi.it>), created at the FILELI Department of the University of Pisa (§ 1). The study will focus in particular on the analysis of this graphemic alternance in the Bu Njem ostraca (§ 2.1); then, it will dwell on the qualitative analysis of three lexemes in Egyptian papyri and ostraca in which a proto-Romance merger between /i/ and /ē/ in /e/ and /ū/ and /ō/ in /o/ in tonic position might be documented. Particular attention is paid to interference phenomena with Greek (§ 2.2).

Key words: Vulgar Latin, Greek and Latin contact, inscriptions, papyri, ostraca, phonology

1. INTRODUCTION

This paper aims at providing additional data to the framework outlined by J. N. Adams¹ for the occurrence of ⟨e⟩ and ⟨o⟩ for Classical Latin (= CL) /i/ and /ū/ in Latin papyri and ostraca. Many studies have already been carried out on this orthographic variation, especially on epigraphic texts.² Indeed, the question may be related to the

¹ ADAMS, J. N.: *Social Variation and the Latin Language*. Cambridge 2013, 37–70.

² See e.g. GAENG, P. A.: *An Inquiry into Local Variations in Vulgar Latin, as Reflected in the Vocalism of Christian Inscriptions*. Chapel Hill 1968; OMELTCHENKO, W.: *A Quantitative and Comparative Study of the Vocalism of the Latin Inscriptions of North Africa, Britain, Dalmatia, and the Balkans*. Chapel Hill 1977; HERMAN, J.: *Témoignages des inscriptions latines et préhistoire des langues romanes: le cas de la Sardaigne*. In HERMAN, J.: *Du latin aux langues romanes: études de linguistique historique*. Tübingen 1990, 183–194.

rise of the pan-Romance vowel system, with the loss of the phonological value of CL vowel length and the merger between /ī/ and /ē/ in /e/ and /ū/ and /ō/ in /o/.

According to a well-established doctrine, in Latin vowel system the feature [±TENSE] was related allophonically with vowel length; therefore, a long vowel had the tendency to be tense and close, whereas a short vowel had the tendency to be relaxed and open.³ For this reason, CL /ī/ and /ū/, probably pronounced [i] and [u], are often written ⟨e⟩ and ⟨o⟩ since early inscriptions.⁴ According to some scholars, such as E. Pulgram,⁵ E. Vineis⁶ and G. Marotta,⁷ the use of the graphemes ⟨e⟩ and ⟨o⟩ for CL /ī/ and /ū/ would be a clue of the feature [±TENSE] phonologization – and subsequently of a timbre opposition – in some substandard varieties since the 3rd century BC. This phenomenon would be related to the dephonologization of vowel quantity and the emersion (in tonic position) of the pan-Romance vowel system, within a general process of drift which leads to syllabic isochrony and involves other phonological and morphoprosodic processes such as consonant gemination, super-heavy syllables reduction and vowel shortening in final position.⁸ On the other hand, J. Herman⁹ and M. Loporcaro,¹⁰ among others, date the dephonologization of CL vowel length not earlier than the 5th century AD.

This is not of course the place to deal with such a complex debate. Nevertheless, the forms which will be discussed reveal in our opinion a proto-Romance merger between /ī/ and /ē/ in /e/ and /ū/ and /ō/ in /o/ in tonic position in texts dated between the 1st and the 2nd century AD. The probable phonetic spellings emerge in contexts of graphemic instability and interference, providing clues of some submerged forms.

The analyzed *corpus* has been tagged for both meta-linguistic¹¹ and extra-linguistic aspects. In comparison with the *corpus* – available on the database *CLaSSES*¹² –

¹³ On the feature [±TENSE] cf. MAROTTA, G.: Tra fonologia e sociofonetica: il tratto di lunghezza in latino. In MAROTTA, G. – STRIK LIEVERS, F.: *Strutture linguistiche e dati empirici in diacronia e sincronia*. Pisa 2017, 57–81.

¹⁴ Cf. ALLEN, S.: *Vox Latina*. Cambridge 1968, 47–50. See e.g. ⟨TEMPESTATEBUS⟩ (*CIL* I² 9; 230–150 BC), the use of Greek ⟨ε⟩ to transliterate Latin /ī/ (e.g. ⟨Τεβέπιος⟩ in *IG* II² 1031); ⟨POCOLO(M)⟩ for *poculum* in many Republican inscriptions (e.g. *ILLRP* 239).

¹⁵ PULGRAM, E.: *Latin-Romance Phonology: Prosodics and Metrics*. Munich 1975.

¹⁶ VINEIS, E.: Problemi di ricostruzione della fonologia del latino volgare. In VINEIS, E. (ed.): *Latino volgare, latino medioevale, lingue romanze*. Pisa 1984, 45–62. VINEIS, E.: Preliminari per una storia (e una grammatica) del latino parlato. In STOLZ, F. – DEBRUNNER, A. – SCHMID, W. P. (eds): *Storia della lingua latina*. Bologna 1993, xxxvii–lviii.

¹⁷ MAROTTA, G.: Talking Stones. Phonology in Latin Inscriptions? *SSL* 53.2 (2015) 39–63.

¹⁸ Cf. MAROTTA: Tra fonologia (n. 3) 66–75. For consonant gemination, see GIANNINI, S. – MAROTTA, G.: *Fra grammatica e pragmatica. La geminazione consonantica in latino*. Pisa 1989.

¹⁹ HERMAN, J.: La chronologie de la transition: un essai. In HERMAN, J. – MONDIN, L. (eds): *La transizione dal latino alle lingue romanze*. Tübingen 1998, 5–25.

²⁰ LOPORCARO, M.: *Vowel Length from Latin to Romance*. Oxford 2015; LOPORCARO, M.: Phonological processes. In MAIDEN, M. – SMITH, J. C. – LEDGEWAY, A. (eds): *The Cambridge History of the Romance Languages*. Vol. 1. Cambridge 2011, 110–141.

²¹ For the linguistic annotation, cf. DE FELICE, I. – DONATI, M. – MAROTTA, G.: *CLaSSES: A New Digital Resource for Latin Epigraphy*. *IJCoL* 1 (2015) 119–130; and DONATI, M.: Variazione e tipologia testuale nel corpus epigrafico *CLaSSES I*. *SSL* 53.2 (2015) 21–38.

²² <http://classes-latin-linguistics.fileli.unipi.it>. For the description of the database *CLaSSES*, cf. DE FELICE – DONATI – MAROTTA (n. 11). MAROTTA, G.: Sociolinguistica storica ed epigrafia latina. *Il*

which has been already described elsewhere,¹³ and limited to Cugusi's *CEL*,¹⁴ further data have been added: namely all the Bu Njem ostraca (*O. Bu Njem*), edited by R. Marichal,¹⁵ and eight Latin letters among the ostraca of Didyme (*O. Did.*), edited by H. Cuvigny.¹⁶ The *corpus* amounts to 348 documents, with 11.351 tokens total. The definition of the textual typologies – which are shown in Table 1 – has been provided following mainly the classification put forward by P. Cugusi,¹⁷ who subdivides letters into three macro-categories: private letters, letters between private and public, and public letters. These documentary typologies have been afterwards arranged along a *continuum* based on the parameter of immediacy, ranging from texts characterized by spontaneity and thematic freedom (viz. private letters), to more formal texts, characterized by a greater communicative separation (viz. official letters).¹⁸ Private letters, which belong to the so-called “ego-documents”,¹⁹ constitute the closest evidence to spoken language, and provide useful information for the analysis in a (socio)graphic and hopefully (socio)phonetic sense.²⁰

TEXTUAL TYPOLOGIES	N. DOCUMENTS
PRIVATE LETTERS	47
LETTERS OF COMMENDATION	8
OFFICIAL LETTERS	21
MILITARY DOCUMENTS	208
RECEIPTS	13
UNCERTAIN DOCUMENTS	51
TOTAL	348

Table 1. Textual typologies within the corpus

corpus CLaSSES I. In DI GIOVINE, P. – GASBARRA, V. (eds): *Dinamiche sociolinguistiche in aree di influenza greca: mutamento, variazione e contatto: atti del convegno internazionale, Roma, 22-24 settembre 2014* [Linguarum Varietas 5]. Pisa-Roma 2016, 145–159.

¹³ BARCHI, S.: Varianti grafo-fonologiche della preposizione *ad* nelle epistole documentarie. In COSTAMAGNA, L. ET AL. (eds): *Mutamento linguistico e biodiversità. Atti del XLI Convegno della Società Italiana di Glottologia, Perugia 1-3 dicembre 2016*. Roma 2018, 209–214.

¹⁴ CUGUSI, P.: *Corpus Epistularum Latinarum, papyris tabulis et ostracis servatarum*. Voll. I–III. Firenze 1992–2002.

¹⁵ MARICHAL, R.: *Les ostraca de Bu Njem*. Tripoli 1992.

¹⁶ CUVIGNY, H.: *Didymoi. Une garnison romaine dans le désert Oriental d'Égypte*. Vol. II. Cairo 2012.

¹⁷ CUGUSI (n. 14) I 9–19 and II 9–12. For further details on epistolary types, cf. CUGUSI, P.: *Evoluzione e forme dell'epistolografia Latina nella tarda Repubblica e nei primi due secoli dell'Impero*. Roma 1983, 105–135.

¹⁸ In this regard, cf. FEDRIANI, C. – RAMAT, P.: Ordini OV e VO in latino: per una rilettura sociolinguistica. In MOLINELLI, P. – PUTZU, I. (eds): *Modelli epistemologici, metodologie della ricerca e qualità del dato. Dalla linguistica storica alla sociolinguistica storica*. Milano 2015, 69–92.

¹⁹ ELSPASS, S.: The Use of Private Letters and Diaries in Sociolinguistics Investigations. In CONDE-SILVESTRE, J. C. – HERNANDEZ-CAMPOY, J. M.: *The Handbook of Historical Sociolinguistics*. London 2012, 156–169.

²⁰ Many studies have been carried out on Latin private letters. Cf. above all HALLA-AHO, H.: *The Non-literary Latin Letters. A Study on Their Syntax and Pragmatics*. Helsinki 2009; MOLINELLI, P.: Tra oralità e scrittura: *rogo* nelle lettere private in latino. In LAZZERONI, R. ET AL.: *Diachronica et synchronica. Studi in onore di Anna Giacalone Ramat*. Pisa 2008, 365–378.

2. ANALYSIS

This section focuses on the analysis of the texts dated from the 1st century BC to the 3rd century AD.²¹ The data of the texts coming from Africa and Egypt are analyzed separately, since Latin – as it is known – had a different use in the linguistic repertoire of the two provinces. While in Africa Latin was a vehicular language and probably developed into a Romance variety,²² in the eastern province of Egypt the vehicular language was mainly the Egyptian Koine²³ and Latin was used as a super-high variety.²⁴ However, recent studies on Latinisms in Egyptian Koine suggest that Latin was more widespread in everyday life than is generally supposed.²⁵

Some preliminary remarks are necessary before the analysis of data. The study of the grapho-phonological dimension requires a thorough evaluation of the relationship existing between the graphematic and phonetic level. Two considerations should be taken into account: (a) the graphematic level is comparable with a filter, since possible variations on the (socio)phonetic level could have been normalized by the scribe, depending on his level of literacy;²⁶ (b) some aberrant spellings could be due to an archaizing style rather than representing a phonetic spelling.²⁷ As regards point (a), it could be generally stated that the laxer is the orthographic norm (due for example to graphematic interference or poor literacy), the easier phonetic spellings emerge.²⁸ As to point (b), it could be asserted that the possibility of discerning whether a form is due to a phonetic spelling or to a stylistic feature depends on the consideration of the textual typology, the modality of execution of the text and its paleographical characteristics.

2.1. *The Bu Njem ostraca*

The Bu Njem ostraca represent a very interesting documentary niche, to which many scholars paid attention.²⁹ It is a coherent *corpus* composed of 151 ostraca, dated to

²¹ This section consists of 237 documents (6.620 words).

²² For what concerns the *testimonia* of African Latin, cf. ADAMS, J. N.: *The Regional Diversification of Latin, 200 BC – AD 600*. Cambridge 2007, 259–275 and 516–576. As regards *Romania perduta* and the Romance language of Africa, cf. LORENZETTI, L. – SCHIRRU, G.: Un indizio della conservazione di /k/ dinanzi a vocale anteriore nell'epigrafia cristiana di Tripolitania. In TANTILLO, I. – BIGI, F. (eds): *Leptis Magna. Una città e le sue iscrizioni in età tardo romana*. Cassino 2010, 303–311.

²³ For the characteristics of Egyptian Koine, cf. BUBENIK, V.: *Hellenistic and Roman Greece as a Sociolinguistic Area*. Amsterdam–Philadelphia 1989, 214–227.

²⁴ ADAMS, J. N.: *Bilingualism and the Latin language*. Cambridge 2003, 609–617.

²⁵ SCHIRRU, G.: Latinismi nel greco d'Egitto. In LORENZETTI, L. – MANCINI, M. (eds): *Le lingue del Mediterraneo antico. Culture, mutamenti, contatti*. Roma 2013, 301–332.

²⁶ For instance, the well-known case of the omission of final *-m* is to be related to poor literacy – as highlighted by ADAMS: *Social Variation* (n. 1) 129 – rather than phonetic habits.

²⁷ ADAMS: *Social Variation* (n. 1) 37.

²⁸ The private letters which come from Egypt are richer of errors than those coming from the Western provinces: the scribes in the Greek East of the Empire were probably less literate than the Western ones. On this subject, see CLACKSON, J. – HORROCKS, G.: *The Blackwell History of the Latin Language*. Oxford 2007, 249.

²⁹ Cf. MARICHAL, R.: Les ostraca de Bu Njem. *Comptes rendus des séances de l'Académie des Inscriptions et Belles Lettres* 123.3 (1979) 436–452. MARICHAL (n. 15). ADAMS, J. N.: Latin and Punic

AD 253–260, in which a situation of contact between Latin and Punic emerges. The textual typologies represented are letters (both private and official) and military documents (especially lists of soldiers). The analysis of these texts shows an overall low level of literacy,³⁰ since the occurrence of misspellings is widespread in all the textual typologies.³¹

It has been generally pointed out that within the Bu Njem ostraca attestations of the graphemic alternance ⟨e⟩ ~ ⟨i⟩ and ⟨o⟩ ~ ⟨u⟩ cannot be found.³² This aspect might be related to the African Latin vowel system, in which there would have been presumably a merger between long and short vowels.³³ This might therefore explain the absence of graphemic clues of the merger between /ĩ/ and /ē/ in /e/ and /ũ/ and /ō/ in /o/. Indeed, Table 2 clearly shows the absence of the allographs ⟨e⟩ and ⟨o⟩ for CL /ĩ/ and /ũ/.

GRAPHEME	/ĩ/ (NON-TONIC)	/ũ/ (TONIC)	GRAPHEME	/ĩ/ (NON-TONIC)	/ĩ/ (TONIC)
	TOKENS	TOKENS		TOKENS	TOKENS
⟨u⟩	226	58	⟨i⟩	101	24
⟨o⟩	0	0	⟨e⟩	0	0
TOTAL	226	58	TOTAL	101	24

Table 2. Graphemic realization of CL /ĩ/ and /ũ/ in the Bu Njem ostraca

This notwithstanding, some uncertain forms in which ⟨o⟩ for CL /ũ/ might be attested require a further analysis. The form ⟨fornus⟩ for CL *fūrnus*, which is attested in two texts,³⁴ is not to be taken into account, since it is a special case.³⁵ Even if one cannot rule out the hypothesis that ⟨fornus⟩ attests a merger between /ũ/ and /ō/ in /o/ in tonic position, it is more likely that this form is due to lexical juxtaposition with *formus* and *formax*.³⁶ Two forms in which ⟨o⟩ for CL /ũ/ in final syllable might be attested require a particular attention. The first example is ⟨per kamellarios⟩ (*O. Bu Njem* 76).

in contact? The case of the Bu Njem ostraca. *JRS* 84 (1994) 87–112. ADAMS: The Regional Diversification (n. 22) 562–565.

³⁰ ADAMS: Latin and Punic (n. 29) 103.

³¹ More precisely, the occurrence of misspellings is 24% in private letters, 11% in military documents, 14.5% in official letters.

³² ADAMS: Social Variation (n. 1) 68–69 and CLACKSON–HORROCKS (n. 28) 257.

³³ FANCIULLO, F.: Un capitolo della ‘Romania submersa’: il latino africano. In KREMER, D. (ed.): *Actes du XVIII Congrès International de Linguistique et de Philologie Romane*. I. Tubinga 1992, 162–167.

³⁴ The form ⟨furnus⟩ is attested 17 times, whereas ⟨fornus⟩ is attested in *O. Bu Njem* 7 and 49. See also ⟨fornarius⟩ (*O. Bu Njem* 8, 10, 25).

³⁵ ADAMS: Latin and Punic (n. 29) 104.

³⁶ See Varro’s statement (ap. Non. p. 531, 24): *fornum et fornaces dicuntur a formo, quod est calido*. Actually, the coexistence of the forms *formus* and *furnus* is ancient (see *TLL*, vol. VI 1, p. 1622, lin. 3 – p. 1622, lin. 75). The variant *formus* is the etymological one (< PIE *g^{wh}r-no-), with the subsequent raising of pre-consonantal -ōr-; see LEUMANN, M.: *Lateinische Laut- und Formenlehre*. I. München 1977, 48 and DE VAAN, M.: *Etymological Dictionary of Latin and the other Italic Languages*. Leiden–Boston 2008, 235.

The form ⟨kamellarios⟩ might be interpreted as a nominative singular³⁷ rather than an accusative plural,³⁸ in accordance with the construction *per* + *kamellarius*, well documented in these texts.³⁹ The second one – which is generally neglected – is ⟨per Pano fr(umentarium)⟩ (*O. Bu Njem* 95). This form is interpreted by Marichal⁴⁰ as an abbreviation of the genitive plural *Pan(n)o(nium)*. P. Cugusi⁴¹ provides a more interesting interpretation: ⟨Pano⟩ is to be interpreted as an accusative singular (*Panum*), resulting from the loss of final ⟨m⟩ and the confusion between /ū/ and /o/ in final position (such as in many Egyptian letters⁴²). In fact, the name *Panus* (attested in Latin only in *AE* 2007, 1103 as a freedman's name) is documented in Egyptian papyri of the same period as well (Greek Πάνοϋς and Coptic ΠΑΝΟΥ⁴³).

2.2. Letters from Roman Egypt

For reasons of brevity, it is not possible to carry out a complete analysis of the forms with ⟨e⟩ and ⟨o⟩ for CL /ī/ e /ū/ in Egyptian letters. The analysis will be therefore limited to some remarkable forms in which a possible merger between /ū/ and /ō/ in /o/ and /ī/ and /ē/ in /e/ in tonic position might be attested.

2.2.1. ⟨Σεκόνδοϋς⟩ (*P. Vindob. Lat.* 135 = *CEL* 13)

The first noteworthy form is attested in *P. Vindob. Lat.* 135.⁴⁴ It is a Latin letter with Greek *subscriptio*, dated 25 August AD 27. The Latin text is written in *capitalis romana rustica*, and it is characterized by constant punctuation. It deals with an act in which the soldier L. Caecilius Secundus certifies that he has contracted a debt with the soldier C. Pompeius. It is probable that L. Caecilius Secundus was not literate in Latin, so he had to turn to a scribe.⁴⁵ In the letter some substandard elements from a morphosyntactic point of view emerge, such as mistakes in gender agreement.⁴⁶ these could be ascribed either to Caecilius' dictation (meaning that he did actually speak Latin but he was not literate) or to the scribe himself. The *subscriptio*, written directly by Caecilius, is in Greek language and script: although the text is not easily

³⁷ CUGUSI (n. 14) III 258.

³⁸ ADAMS: Latin and Punic (n. 29) 92.

³⁹ See *O. Bu Njem* 76, 77, 78. The construction *transmisi at te per* is probably a formula in a model-letter. The writer, filling out this model, wrote the name in the nominative case. Cf. ADAMS: Latin and Punic (n. 29) 92–93.

⁴⁰ MARICHAL (n. 15) 303.

⁴¹ CUGUSI (n. 14) II 269.

⁴² See e.g. ⟨vino⟩ for *vinum* in *O. Did.* 334.

⁴³ See e.g. *P. Genova* 2, 77 and *O. Waqfa* 77.

⁴⁴ Cf. HARRAUER, H. – SEIDER, R.: Ein neuer lateinischer Schuldschein: *P. Vindob. L.* 135. *ZPE* 36 (1979) 109–120 and *CEL* 13.

⁴⁵ This aspect could be deduced by ll. 15–16, in which it could be read, according to Harrauer' and Seider's integration: *pro illis [-]scripsi · quod · litteras | se [scire negant]*. For similar formulas, cf. HARRAUER–SEIDER (n. 44) 116 and CUGUSI (n. 14) II 291.

⁴⁶ See *eorum* referred to *drachmae* (l. 6) and *argenteum* referred to *vaginam* (l. 10).

interpretable, due to the conditions of the lower part of the papyrus, the name Κα[ι]κ[ι]λιος Σεκόνδος can be traced.

It is worth paying attention to the spelling ⟨Σεκόνδος⟩. It is well known that Latin ⟨u⟩ (both /ū/ and /ũ/) was usually transliterated via the digraph ⟨ου⟩ in Greek texts.⁴⁷ Nevertheless, the use of Greek ⟨ο⟩ for transliterating Latin ⟨u⟩ (/ũ/) is not unusual at all, and it is not generally considered as an evidence of the lowering of Latin /ū/, since Greek vowel system had not /ū/, and ⟨ο⟩, which represented /ō/, was the only grapheme which could have been used to transliterate a short vowel.⁴⁸ Furthermore, the use of Greek ⟨ο⟩ in order to transliterate Latin ⟨u⟩ (/ũ/) is attested especially in names in which Latin /ũ/ is followed by a consonant cluster.⁴⁹ This notwithstanding, it cannot be excluded that in the spelling ⟨Σεκόνδος⟩ the use of ⟨ο⟩ could be interpreted as a clue of a proto-Romance merger between /ū/ and /ō/ in /o/ in tonic position (see it. [se'kondo]). As F. Rovai highlights,⁵⁰ since Hellenistic Greek vowel system distinguished between /o/ (⟨ο⟩ / ⟨ω⟩) and /u/ (⟨ου⟩) from a qualitative and not quantitative point of view, the use of Greek ⟨ο⟩ to represent Latin ⟨u⟩ (/ũ/) could mean that Latin /ũ/ was open enough to be perceived by a Greek speaker as /o/.

It is remarkable that the probable phonetic spellings of this personal name are documented earlier in Greek rather than Latin. The form attested in this letter is one of the most ancient, together with Σεκονδίων (1st century BC)⁵¹ and Σεκόνδα (1st century AD),⁵² whereas Latin documents in which the form with ⟨ο⟩ is attested are dated not previously than the 2nd century AD.

From a quantitative point of view, the spelling with ⟨ο⟩ is attested more in Greek documents than in Latin ones, as it can be seen in Table 3, which refers to all the attestations of the Latin lexeme SECUND- in Latin and Greek inscriptions and papyri. The percentage of presumably phonetic spellings is much higher in Greek documents (82%) compared to Latin (18%). As a matter of fact, the adoption of a different script can bring out, as it is known, phonetic phenomena the orthographic norm would otherwise conceal.

LANGUAGE	⟨Secund-⟩ / ⟨Σεκουνδ-⟩		⟨Second-⟩ / ⟨Σεκονδ-⟩	
	TOKENS	%	TOKENS	%
LATIN	2563	83.5%	11	18%
GREEK	505	16.5%	50	82%
TOTAL	3068	100%	61	100%

Table 3. Attestations of the Latin lexeme SECUND- in documentary texts

⁴⁷ See ROVAI, F.: Notes on the Inscriptions of Delos: The Greek Transliteration of Latin Names. *SSL* 53.2 (2015) 177. A check on Greek inscriptions and papyri shows that the Latin lexeme SECUND- is transliterated ⟨Σεκουνδ⟩ 505 times, whereas ⟨Σεκονδ-⟩ 50 times.

⁴⁸ See ALLEN, S.: *Vox Latina: A Guide to Pronunciation of Classical Latin*. Cambridge 1978², 49; STURTEVANT, E. H.: *The pronunciation of Greek and Latin*. Westport 1977², 117–118; ROVAI (n. 47) 177.

⁴⁹ See THREATTE, L.: *The Grammar of Attic inscriptions*. Berlin 1980, 220–223.

⁵⁰ See ROVAI (n. 47) 177.

⁵¹ See SEG 51, 1417 (from Strongoli).

⁵² See *I.Napoli* II 162 (from Naples); SEG 33, 1477 and SEG 16, 878 (from Cyrenaica).

For this reason, in a context in which Greek and Latin interfere on the linguistic and graphematic sphere, the probable vulgar spelling of the Latin name *Secundus* has previously emerged and in a more conspicuous manner in Greek texts. In the examined letter this aspect is particularly evident: in the Latin text, written by a scribe with a good literacy, the name is written according to the standard orthography (<Secundus>), whereas in the *scriptio*, written by Caecilius himself, who writes his own name in Greek adaptation and script, the phonetic spelling emerges.

2.2.2. <sopera> (*P. Mich.* VIII 471) and <esopera> (*O. Did.* 417)

The forms <sopera> and <esopera> can be analyzed together. The first one, already known, is attested in a letter of the well-studied archive of Claudius Tiberianus (*P. Mich.* VIII 471), the second one, which has been generally neglected, is documented in a Latin letter of the ostraca of Didyme (*O. Did.* 417).

These texts are almost contemporary, respectively dated AD 100-125 and AD 120-125. The forms <sopera> and <esopera> can be related to CL *sūprā*, therefore it may be assumed that they attest the phonetic spelling of CL /ū/ as [o] in tonic position (see it. ['so:pra], ['so:vra]).

Nevertheless, the presence of /e/ in <sopera> raised a problem of interpretation. On the one hand, the editors Youtie and Winter⁵³ interpreted it as a clue of the archaizing spelling of the non-syncopated ancient form (*sūpērā* > *sūprā*).⁵⁴ On the other, J. N. Adams argues that it is possible that <sopera> represents a phonetic spelling,⁵⁵ and assumes that the presence of /e/ could be due to a contamination with *super*.⁵⁶ Further considerations to confirm this hypothesis can be done.

First, it is to be noticed that the form with /e/ is widespread: within the *corpus* taken into account, the CL form *sūprā* is never recorded, whereas Terentianus' <sopera> finds parallel not only with the mentioned <esopera> of the ostraca of Didyme,⁵⁷ but also with <supera> of *CEL* 157, a private letter coming from Egypt and dated AD 167. It would therefore appear that in Substandard Latin, around the 2nd century AD, it was spread the preposition *supera*, probably pronounced ['sopera], with an epenthetic /e/. This insertion could be due both to a heterosyllabic treatment of the *muta cum liquida* cluster – as it clearly emerges in *O. Did.* 417⁵⁸ – and the contamination with *super*.

⁵³ YOUTIE, H. C. – WINTER, J. G.: *Michigan Papyri VIII: Papyri and Ostraca from Karanis*. Ann Arbor 1951.

⁵⁴ See e.g. Livius Adronicus' verse *Mea puera quid uerbi ex tuo ore supera fugit?* (Liv. Andr. 3).

⁵⁵ ADAMS, J. N.: *The Vulgar Latin of the Letters of Claudius Terentianus* (*P. Mich.* VIII 467–72). Manchester 1977, 10–11.

⁵⁶ The same opinion is expressed by PIGHI, G. B.: *Lettere latine d'un soldato di Traiano* (*P. Mich.* 467–472). Bologna 1964, 70; see also CUGUSI (n. 14) II 172.

⁵⁷ In this form it should be noticed the vowel prothesis, which is probably due to an intense pronunciation of the initial fricative ([s:]). See, concerning the same lexeme, *issup(r)ass(cripta)* in *T. Alb.* 8. In this letter, a similar example of vowel prothesis is <esabario> (maybe *sa(m)barium*), cf. BÜLOW-JACOBSEN, A.: Private letters. In CUVIGNY (n. 16) 417.

⁵⁸ In this letter a systematic tendency to the insertion of an epenthesis within the *muta cum liquida* cluster is evident (see e.g. <Demeteru>, <Cerescenti>, <frateri>, <magisteri>, <scribe>).

Secondly, the substandard (and phonetic) character of the spellings ⟨sopera⟩ and ⟨esopera⟩ could be inferred on the one hand by the multitude of misspellings in these texts and, on the other hand, by the function of these prepositions. Actually, both ⟨sopera⟩ and ⟨esopera⟩ introduce the topic.⁵⁹ The use of *super* (and consequently of *supra*) to introduce the topic was generally considered a typical element of the *sermo familiaris* (Cicero uses it only in private letters).⁶⁰ Furthermore, Sextus Pompeius Festus, who was almost contemporary to these letters, claims that the use of *super* to introduce the topic is due to Greek influence,⁶¹ and the examined texts are clearly representative of a situation of contact between Latin and Greek.

In such a context, it is therefore conceivable that ⟨sopera⟩ and ⟨esopera⟩ are phonetic spellings, in which the merger between /ū/ and /ō/ in /o/ in tonic position might emerge. It is remarkable that ⟨sopera⟩ and ⟨esopera⟩ are the first attestations of the merger in this lexeme: other examples come from onomastic material in later inscriptions.⁶²

2.2.3. ⟨entro⟩ (CEL 74)

The form ⟨entro⟩ is attested in a letter of the well-known archive of Rustius Barbarus, dated to the half of the 1st century AD.⁶³ According to J. N. Adams,⁶⁴ the presence of ⟨e⟩ is due to the interference with Greek ἐν-. Nonetheless, it is more likely that the spelling ⟨entro⟩ may represent a proto-Romance merger between /ĩ/ and /ē/ in /e/ in tonic position (see it. ['entro]), as E. Campanile had already highlighted.⁶⁵ Further considerations can be done to support the hypothesis that ⟨entro⟩ represents a phonetic spelling. Note that in this letter the use of *intro* as a static adverb instead of *intus* is attested (ll. 13-14 *chiloma entro / ha[b]et*). Since, during the same period, Quintilianus condemns this use as a *soloecismus*,⁶⁶ it is therefore plausible that ⟨entro⟩ represents a trace of spoken Latin.

⁵⁹ It is remarkable that in Terentianus' letter it is attested the first use of *super/supra* + accus. to introduce the topic (*sopera vestimenta mea*). It cannot be excluded that the same phenomenon is attested in *O. Did.* 417 as well: the form *esopera contubernio* could be interpreted as *esopera contubernium* (see in the same letter *contubernio* and *esabario*, which are accus. sing.).

⁶⁰ See ERNOUT, A. – MEILLET, A.: *Dictionnaire étymologique de la langue Latine*. Paris 2001, 667–668.

⁶¹ See Fest. 350. 5: *Sed per se super significat quidem supra, ut cum dicimus: 'super illum cedit'. Verum ponitur etiam pro de, Graeca consuetudine, ut illi dicunt ἐπὶ.*

⁶² ⟨EXSOPERANTIA⟩ (*CIL* XIII 382; 4th–8th c. AD) and ⟨SOPERANTI⟩ (*ICUR* VIII 20174; 390–425 AD). For further examples, see SCHUCHARDT, H.: *Der Vokalismus des Vulgärlateins*. 3 Bde. Leipzig 1866–1868, II 158.

⁶³ See e.g. CUGUSI, P.: Gli ostraca latini dello Wādi Fawākhir: per la storia del latino. In *Letterature comparate, problemi e metodo: studi in onore di Ettore Paratore*. Bologna 1981, 719–753 and CUGUSI: *Corpus* (n. 14) II 57.

⁶⁴ ADAMS: *Social Variation* (n. 1) 55.

⁶⁵ Cf. CAMPANILE, E.: Due studi sul latino volgare. *L'Italia Dialettale* 34 (1971) 52.

⁶⁶ Quint. *inst.* I 5. 50: 'intro' et 'intus' loci adverbialia, 'eo' tamen 'intus' et 'intro sum' soloecismi sunt. See ADAMS: *Social Variation* (n. 1) 332–333 and references therein.

3. CONCLUSIONS

The analysis – both quantitative and qualitative – aimed at highlighting the relation existing between the emersion of substandard forms, which might have a Romance continuation, and contexts which interfere with Greek. This is the case of the forms discussed in § 2.2, in which the merger between /ĩ/ and /ē/ in /e/ and /ũ/ and /ō/ in /o/ in tonic position is attested in documents dated to the 1st and the 2nd century AD. These are only few remarkable data from a quantitative point of view; nonetheless the quality of the documentation and the internal coherence of the texts of the *corpus* allowed us to capture some rather significant details. For this reason, it cannot be excluded that the examined texts, full of substandard elements, show, as far as the investigated phenomenon, a tendency to the proto-Romance merger in a particular portion of the lexicon. On the other hand, it is necessary in our opinion to be cautious about the interpretation of the absence of graphemic clues of vowel merger in the Bu Njem ostraca as an indicator of the African Latin vowel system. An attentive analysis of the texts shows in fact the presence of some uncertain forms (especially ⟨per Pano⟩).

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