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**A PRELIMINARY INVESTIGATION ON THE <AE>/<E> GRAPH-
PHEMIC OSCILLATION IN LATIN INSCRIPTIONS FROM
ROME: THE RELATIONSHIP BETWEEN VOWEL ALTERNA-
TIONS, LEXICAL STRESS AND SYLLABIC STRUCTURE¹**

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Abstract: This paper is aimed at supplementing the results obtained in Papini 2019. In particular, I will consider the position of the investigated <ae>/<ē> and <ae>/<ē> graphemic oscillations with respect to both 1) lexical stress (distinguishing between misspellings occurring in stressed and unstressed position) and 2) syllabic structure (i.e., open vs closed syllables). The aim of the present paper is to verify whether the relationship between the investigated spelling variations and these two variables might be regarded as simply due to chance.

Keywords: <ae>/<e> graphemic oscillation; Latin inscriptions; lexical stress; syllabic structure

Framing the problem

The use of the grapheme <e> to indicate the Classical Latin (henceforward CL) /ae/ diphthong is attested in inscriptional evidence from (mainly) outside Rome as early as the Republican age. These *e*-spellings arose because, at least in some dialectal varieties of Latin, /ae/ had monophthongised to an *e* that was both long and open (viz. [ɛ:]) as early as the mid-2nd cent. BC. The monophthongisation *ae* > *e* is referred to as a typical ‘rustic’ feature in Varro, who reports that *haedus*, ‘young goat-buck’, and some other words were pronounced with the diphthong intact in Rome but with the resulting monophthong in the countryside (*Ling.* 5, 97). Along the same lines, Lucilius “does not want” the urban *praetor* C. Caecilius Metellus Caprarius to become a ‘*pretor rusticus*’, “whereby his *rusticitas* is ‘exemplified’

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through the forms *Cecilius* and *pretor*² (Lucil. 1130). In other words, [e:] must have been perceived as a well-known ‘rustic variant’ of *ae* as early as the time of Lucilius and Varro.³

However, inscriptional and other non-literary evidence from the early Empire cohere in showing that *ae* > *e* was generalised in Latin as early as the 1st cent. AD. As Adams points out, <*e*> for <*ae*> is attested with such regularity in corpora like the so-called ‘archive of the Sulpicii’ from Pompeii, the Bu Njem ostraca from Africa or in Pompeian Graffiti, that “monophthongisation must have been widespread across the Empire”. Similarly, it might be assumed that the monophthongised pronunciation of /aɛ/ had become common by this time even at Rome, at least “at the social and educational levels represented in the...corpora from outside the city”⁴ (see below).

The long and open *e* deriving from /aɛ/ is usually assumed to have caused some ‘disturbance’ within the vowel system of CL, since this ‘new’ phoneme (i.e., /ɛ:/) would have contrasted with the usual long/short (and phonetically closed/open) pairs.⁵

It is indeed true that some inscriptional (and literary) evidence concerning the monophthongisation of /aɛ/ does not seem to cohere entirely with the narrative that is usually thought to describe the vowel system of CL. For, not only is the digraph <*ae*> hypercorrectly used in inscriptions to render the CL long (and close) /ē/, but this same digraph can also be employed to represent the CL short (and open) /ĕ/. To give some examples, the only hypercorrection of this kind which can be found in the aforementioned ‘archive of the Sulpicii’ precisely regards a short /ĕ/ (*petiaerit* for *petiĕrit*), while also in Pompeian Graffiti <*ae*> for /ĕ/ is much more common than <*ae*> for /ē/.⁶

According to the traditional view, this kind of evidence would suggest that the long and open vowel deriving from /aɛ/ (viz. /ɛ:/) eventually merged with the CL short (and open) /ĕ/ (viz. [ɛ]). More precisely, the use of <*ae*> for /ē/ is thought to testify to the (only temporary) existence of this ‘new’ (long and open) phoneme within the phonemic inventory of CL, while the use of this same digraph to represent the CL short /ĕ/ is thought to indicate that “symmetry was restored by the shortening of the new long open *e*, such that it merged with the CL short *e*”.⁷ Since the latter hypercorrection (i.e. <*ae*> for /ĕ/) occurs from very early in non-literary documents from the Empire (the ‘archive of the Sulpicii’

² Galdi 2011, 567.

³ Sturtevant 1977, 125.

⁴ Adams 2013, 75.

⁵ Adams 2013, 78.

⁶ Cf. respectively: Adams 2013, 73, 78 and Väänänen 1966, 24–25.

⁷ Adams 2013, 78.

can be dated to ca. the 37 AD),⁸ the monophthongisation described above (viz. /ae/ > /ɛ:/ > /ĕ/) is generally regarded as having taken place in Latin as early as the mid-1st cent. AD.⁹ Likewise, the fact that <ae> is used to render the CL short (and open) /ĕ/ much more often than the corresponding long (and close) vowel in inscriptions from the (late) Empire is usually explained by asserting that “ĕ was altogether much more frequent” in Latin “than ē”.¹⁰

In Papini 2019, I have tried to advocate an alternative explanation for this spelling variation, by investigating the relative frequency of the aforementioned <ae>/<e> graphemic oscillations in three groups of both synchronic and syntopic – but diaphasically (and diastratically) different – inscriptions from the city of Rome (according to the method proposed by M. Mancini):¹¹ 1) funerary and honorary inscriptions referring to the highest classes of the Roman society, which are published in the *pars octava* of *CIL*, VI (*Titulos imperatorum domusque eorum* and *Titulos magistratuum populi romani*); 2) common funerary inscriptions ranging from *CIL*, VI 8399 to *CIL*, VI 9400;¹² 3) ‘Graffiti del Palatino’.¹³ Moreover, I also considered other relevant misspellings published in the *Computerized Historical Linguistic Database of Latin Inscriptions of the Imperial Age* (henceforward LLDB).

All the inscriptions considered in this previous study were composed between ca. the mid-1st and ca. the mid-3rd cent. AD.

The results – which should be considered preliminary – of this former study can be summarised as follows:

- 1) <E> for /ae/ turns up in common funerary inscriptions from Rome (viz. group 2) as early as the 1st cent. AD, while similar *e*-spellings could not be listed before the mid-3rd cent. AD within formal texts.
- 2) These same ‘misspellings’ seem to be more common in informal than in formal inscriptions.
- 3) Most importantly, the uneven distribution of the <ae>/<ē> and <ae>/<ĕ> graphemic oscillations does not seem to depend entirely on the level of literacy of the writers (or, in other words, on the higher frequency of /ĕ/ in Latin as respect to /ē/; cf. *supra*). On the contrary, considering the fact that the

⁸ Cf. Adams 2013, 78.

⁹ See, for instance, Adams, 2013, 78–79 and Herman 2000, 31. In the eyes of other scholars (e.g. Coleman 1971, 191–93), however, this merger would have occurred only at a later period.

¹⁰ Loporcaro 2015, 52. In this section, I have summarised the more detailed introduction provided in Papini 2019, 95–100.

¹¹ Cf. Mancini 2014.

¹² Cf. Herman 1971.

¹³ Cf. Solin, Itkonen-Kaila 1966; Castren, Lilius 1970.

short /ĕ/ phoneme is about 3 times more frequent in Latin than the corresponding long vowel (in both stressed and unstressed syllables),¹⁴ the digraph <ae> appeared to render the CL short (and open) /ĕ/ with less than chance frequency in the context of formal texts (group 1), but more often than would be expected given a random distribution within the common funerary inscriptions of group 2. Along the same lines, the only hypercorrection found within the ‘Graffiti del Palatino’ (viz. the most informal inscriptional corpus) precisely regards a short /ĕ/ (*cupiditatae* for *cupiditatĕ*: Abl.Sg.).

Evidence in 1 and 2 might suggest that, not only had [ɛ:] reached Rome as early as the (mid) 1st cent. AD, but also that, by the first three centuries of the Empire, the monophthongised pronunciation of *ae* had become progressively more common in the casual speech of a sufficient number of educated speakers (among whom we should allegedly count the authors of the ‘Graffiti del Palatino’).¹⁵ On the other hand, it is possible that the diphthong was retained in formal speech for a longer period of time (or, at least, that writers still tried to use <ae> in more ‘formal’ contexts).

Conversely, evidence in 3 might point to the fact that the phonemes /ĕ/ ([ɛ]) and /ɛ:/ (< /ae/) could be freely associated on the basis of their similar quality (regardless of their difference in length), above all within inscriptions adhering to the diaphasically (and diastratically) lowest varieties of the Latin language. Therefore, an early ‘weakening’ of the CL vowel length (henceforward VL) contrast might be possibly assumed, at least as far as those varieties are concerned.¹⁶

I have already had the occasion to stress the fact that the results achieved in Papini 2019 should be regarded as merely indicative. For, not only was this study based on a very limited survey of inscriptions, but the three inscriptional subcorpora that I investigated there also contain significantly different quantities of those tokens that are relevant to the present paper (e.g., there are only 3 cases of the <ae>/<ĕ> and <ae>/<ĕ> graphemic oscillation in group 1, while there are 63 in group 2).¹⁷ Therefore, I intend to validate these results through a larger survey in a future contribution.

In the present paper, my aim is merely to supplement the results obtained in Papini 2019 by studying the position of the aforementioned <ae>/<ĕ> and <ae>/<ĕ> graphemic oscillations with respect to both 1) lexical stress (distinguishing between misspellings occurring in stressed and unstressed position) and

¹⁴ Herman 1968, 197.

¹⁵ Cf. also Mancini 2014, 39.

¹⁶ Cf. Vineis 1984; Marotta 2017.

¹⁷ For further details and bibliographical references, cf. Papini 2019, 102–104, 108–11.

2) syllabic structure (i.e., open vs closed syllables). These two variables are usually thought to have played an important role within the so-called ‘Latin-Romance’ transition. For: 1) CL contrastive VL is commonly believed to have been lost in unstressed syllables before it was lost in stressed syllables and 2) this dephonologization is usually thought to have been generalised through the lengthening of all originally short vowels in the context of stressed, open syllables (this rule will be henceforward referred as *OSL*, which stands for *open syllable lengthening*).¹⁸ In particular, the aim of the present paper is to verify whether the relationship between the investigated spelling variations and these two variables might be regarded as simply due to chance.

To accomplish this aim, I will consider the graphemic oscillations between <ae> and /ē/ and <ae> and /ě/ which were already listed above, in the context of the common funerary inscriptions from Rome (viz. inscriptions of group 2), the only group that contains a quantitatively adequate number of tokens. Nevertheless, where possible, I will also try to make comparisons with inscriptions from groups 1 and 3. To conclude, a quantitative analysis of the tokens (sections 3.1 and 3.2) will follow a detailed qualitative study of the misspellings listed in this particular subcorpus (section 2).

Qualitative analysis

In Papini 2019, I could list 55 cases of <ae> for /ě/ vs only 8 cases of <ae> for /ē/ in the context of the common funerary texts of group 2 (that is, inscriptions ranging from CIL, VI 8399 to CIL, VI 9400, to which I added other relevant misspellings published in the LLDB database). Nonetheless, in order to maximise the results of this analysis, I will rule out from the present study all the misspellings that (after an even more detailed qualitative analysis) might be thought to have an explanation that is not merely phonological. Moreover, some dubious cases will be investigated in detail.

To give some examples, I will not consider in this study the two cognomina *Argaeus* (for *Argēus*) and *Philaetus* (for *Philētus*) which are attested in two funerary inscriptions dating back, respectively, to the 126 AD (*CIL*, VI 8744) and between the mid-1st and the mid-2nd cent. AD (*CIL*, VI 4856).

That the form *Argēus* (along with the spelling variant *Argēus*; cf. Gk. Ἀργεῖος) was much more common in Latin than the ‘corresponding’ diphthongised form

¹⁸ For the first point see Herman 1982; 2000, 34. The acronym *OSL* to describe this particular phenomenon is due to Loporcaro 2011, 52. See also Loporcaro 2015, 24.

is extensively demonstrated by several literary *testimonia*.¹⁹ Nevertheless, this name might derive from the toponym *Argaeus*, which indicated a mountain in Cappadocia.²⁰ The orthography *Argaeus* in *CIL*, VI 8744 might hence reflect the Gk. spelling Ἀργαῖος and cannot therefore be considered as a sure case of hypercorrection.²¹

Philaetus for *Philētus* might also be a special case: this particular *cognomen* comes from Gk. φιλητός, and the spelling <ae> is therefore likely to have been used here to represent not a Latin /ē/ but a Greek η, which was also phonetically realised as [ɛ:]. This same vowel (i.e., η) is usually rendered with Latin /ē/ in learned loanwords (e.g. *apothēca* < Gk. ἀποθήκη). Yet we also know that, in popular speech, this same phoneme was more often rendered with <ae>, as the two vowels shared the same quality (e.g. *scaena* < Gk. σκηνή).²² Since it is not impossible to hypothesise that this might actually be the case in our inscription (the gravestone of six freedmen, all of them bearing Greek *cognomina*), this particular form will be excluded from the present investigation.

As far as <ae> for /ě/ is concerned, I will not take into consideration the form *Praepusa* for *Prēpusa*. This particular misspelling is attested in two different funerary inscriptions, which were composed, respectively, during the 2nd cent. (*CIL*, 20621) and as early as the late 1st cent. AD (*CIL*, VI 24922). That the *e* in *Prēpusa* was a short one can be ascertained from the comparison with Gk. πρέπουσα (Part. Praes. Fem. < πρέπω). However, inscriptional evidence from the late Empire might suggest that a special effort was made by the writers to preserve the correct spelling of the CL /æ/ diphthong in the prefix *prae-*: the hypercorrect use of <ae> for the CL short /ě/ is particularly common in this context even in curse tablets, while in other texts <ae> predominates over <e> (nearly) only in this specific position. It is therefore not inconceivable that the spelling *Praepusa* might also reflect the application of a ‘mechanical’ rule in writing, which prescribed to always use of <ae> after <pr->.²³

The hypercorrection *Aegnatia* for *Egnatia* (*CIL*, VI 2550 and *CIL*, VI 17127) requires special attention, as the quantity of the relevant vowel cannot be easily ascertained. On the one hand, the first vowel of the name is usually rendered with <E> in Greek transcriptions and in literary works: Ἐγνατία ὁδός (*Egnatia via*)

¹⁹ See, for instance, Varro *ling.* 5, 45: *Argeos dictos putant a principibus, qui cum Hercule Argivo venerunt Romam* (cf. *TLL* v.2.514.45-54, s.v. *Argēi*). See also the comment of E. Diehl at *TLL* v.2.513.40, s.v. *Argaeus*: “*Argaeus, -ī, Ἀργαῖος, in libris fere semper Argeus*”.

²⁰ Cf. Plin. *nat.* 6, 8: *sub monte Argaeo Mazacum*.

²¹ Cf. *TLL* v.2.513, 40-70 and Perin, Forcellini 1913, s.v. *Argaeus*.

²² Ciancaglini, Keidan 2018, v.2, 263.

²³ Adams 2013, 79–80. The technical term ‘πρέπων’ is sometimes found in ‘Classical’ authors. E.g. Cic. *orat.* 70: πρέπων *appellant hoc Graeci, nos dicamus sane decorum*.

is, for instance, quoted in Strab. 7. 322, while a Ἐγνατία Βρσηήζ is remembered as the wife (σύμβιος) of the Ephesian physician *Lucius Fonteius Fortis* (transliterated as Λουκίω Φοντείω Φόρτι) in IGUR 3, 1355 (late 2nd – early 3rd cent. AD).²⁴ This kind of evidence could point to the fact that the *e* in *Egnatia* was a short one. On the other hand, Latin vowels are usually believed to be regularly long before the consonant cluster <gn> (= [ɲn]). Nevertheless, this belief seems to rest upon a single passage in Priscian, asserting that the Latin endings *-gnus*, *-gna* and *-gnum* were always preceded by a long vowel (cf. GL.2.82.7: *'gnus' quoque vel 'gna' vel 'gnum' terminantia longam habent vocalem paenultimam...*). The above statement is highly questionable for several reasons. First, the passage itself is very likely to be an interpolation, as is suggested by the abrupt shift to a focus on nouns in a chapter exclusively concerned with the discussion of adjectives (*De Possessivis*). Second, several Latin lexemes show a short vowel before <gn> at all periods (e.g. PIE **deǵ̑-no-* > Lat. *dīgnus* > It. *degno*).²⁵ It is therefore very likely that the ‘lengthening’ rule described above was not general in Latin,²⁶ and that the form *Aegnatia* for *Egnatia* should therefore be regarded as a case of <ae> for /ě/ (as also seems to be confirmed by both inscriptional and literary evidence).

A similar statement could also apply to the spelling *Aerychiana* (*CIL*, VI 25372; 2nd cent. AD). Even if the name is used here as a *nomen* and not as a *cognomen* (the inscription refers to the grave set up by a certain *Titus Rasidius Paulinus* and by an *Aerychiana Antiochis*), it is in fact very likely that the form represents a deviant writing for *Eruciana*.²⁷ If this interpretation is correct, this particular form would also represent a sure case of <ae> for /ě/. The *cognomen* *Erucianus* is in fact formed from the *nomen* *Ērūcīus*, which is very likely to derive in turn from the toponym of the well-known Sicilian city of *Ēryx* (Gk. Ἐρυξ).²⁸

The writing *aeius* for *ēius* in *CIL*, VI 8523 is problematic because of the peculiar context in which the misspelling occurs. The inscription (mid-1st – mid 2nd

²⁴ Cf. Perin, Forcellini 1913, s.v. *Egnātius*.

²⁵ According to some scholars, evidence from the Romance Languages pointing to a short vowel in Latin (as for *dīgnus*), would only imply that the lengthening rule stated above (i.e. V → V:/ ɲn) would not have applied in ‘Vulgar’ Latin (cf. Meiser 2006, 79).

²⁶ For a detailed discussion of the aforementioned passage in Priscian and for its implications cf. Allen 1978, 73–75.

²⁷ Cf. EDR114555, 26/01/2017 (C. Ferro). Moreover, *Erucianus* is often used as a gentle-name (and not as a *cognomen*) within Latin inscriptions from Rome.

²⁸ Cf. Perin, Forcellini 1913, s.v. *Ērūcīus* and Kajanto 1965, 146. This scholar, in particular, indicates *Aerocanius* (with the same use of <ae> for /ě/) as a misspelling for *Erucianus* (cf. *ibidem*). The derivation of the gentle-name *Erucius* from *Eryx* is not accepted in Schulze 1904, 112, according to whom even this name would have had an Etruscan origin.

cent. AD) represents the grave of two imperial slaves: *Eutyches*, a *pedisequus stationis castrensis* and *Faustus*, who is indicated as a colleague of him.

D(is) M(anibus) / Eutyches, Cae(saris) n(ostri) s(ervus), pedisequ(us) / stationi **casstrese** (!), fec(it) / matri pientissimae et / Faustus **colleg(a) aei**us (!) / fecerunt sibi utriusque / suorum et **possterisque** (!) / eorum. (CIL, VI 8523)

The hypercorrection immediately follows the shortened form of the word *collega*, which would present a final *-a*. It might not be inconceivable, therefore, to interpret this particular mistake as due to an incorrect use of the abbreviation by the writer, who would have erroneously engraved a punctuation mark before the actual end of the word he was carving (that is, *collega*). Had this occurred, the inscription would not present an error in this particular respect, as the actual reading of line 5 would be: *Faustus, collega eius*. Nevertheless, several clues seem to point in the opposite direction. First, while some other misspellings (that might indicate the use of a sub-standard variety of Latin by the engraver) actually occur in the text (cf. *casstrese* for *castrensi*), the inscription shows an overall good *ordinatio* and all the other abbreviations and punctuation marks appear to be correctly used. Second, both the abbreviation *colleg(a)* for *collega* (and its variants) and the misspelling *aeius* for *ēius* are fairly common in Latin inscriptions from Rome.²⁹ The form is therefore very likely to be regarded as a genuine case of hypercorrection.

As a result of this detailed analysis, I will consider in this study only 48 manifest instances of <ae> for /ĕ/ and 6 manifest instances of <ae> for /ē/. In particular, 23 cases of the first hypercorrection, along with 3 cases of the second have been extracted from the LLDB database.³⁰ It seems therefore possible to confirm the (preliminary) results obtained in Papini 2019: since the CL short /ĕ/ phoneme is about three times more frequent in Latin than the corresponding long vowel (cf. *supra*), the digraph <ae> seems to be used to represent /ĕ/ instead of /ē/ with more than chance frequency within the common funerary inscriptions of group 2. More precisely, we can find in this particular subcorpus a ratio of 8 between

²⁹ For the use of this particular abbreviation see, for instance CIL, VI 8771 (2nd cent. AD): *D(is) M(anibus) / P(ubli) Aeli Aug(usti) lib(erti)...Parthenopaeus...et Epiterpes / colleg(ae) b(ene) m(erenti) f(ecerunt)*. For the form *aeius* for *ēius*, cf. *infra*. See also Coleman 1971, 188.

³⁰ As for <ae> for /ē/, I only excluded the forms *Argaeus* and *Philaetus* discussed above. In the case of <ae> for /ĕ/, I ruled out the two instances of the form *Praepusa* (cf. *supra*) and all the other cases (considered in Papini 2019) in which the reading or the interpretation of the inscription itself was not sure, along with all the other errors committed during the filing. Therefore, the present analysis is also aimed at correcting the figures given in Papini 2019.

the use of <ae> for /ē/ and the use of <ae> for /ē/, whereas a ratio of ca. 3 would be expected.³¹

Before the quantitative analysis (sections 3.1 and 3.2), the evidence concerning both <ae> for /ē/ and <ae> for /ē/ will be set up in detail. Interestingly, the word classes affected by both of the two hypercorrections are approximately the same.

Of the overall number of the collected instances of <ae> for /ē/ (6 cases in total), two of them pertain to the genitive singular of the anaphoric pronoun *is, ea, id* (namely, *aeius* for *ēius*: *CIL*, VI 8523; 9201).³² Two other cases regard the writing of the common nouns *mausoleum* (*mausolaei* for *mausolēi*: *CIL*, VI 8686) and *dies* (*diae* for *diē*: *CIL*, VI 25106).³³ The two remaining instances concern the spelling of the personal name *Clemens* (*Claemens* for *Clēmens*: *CIL*, VI 21850) and of the past participle *evocatus* (*aevocatus* for *ēvocatus*: *CIL*, VI 2547).

As far as <ae> for /ē/ is concerned, 10 out of the 48 manifest cases regarding this particular hypercorrection pertain to the form *aeorum* for *ēōrum*, while 12 of them pertain to the last vowel of the enclitic conjunction *que* (i.e. *quae* for *quē*).³⁴ This particular hypercorrection is also found in common nouns (6 cases),³⁵ the numeral *quinque* (i.e. *quinquae* for *quinqūē*: *CIL*, VI 8455) and in the form *maerenti* for *mērenti* (*CIL*, VI 9377). Yet, the most affected word class is personal names, of which 18 sure cases can be listed, including the theonym *Venaeri* for *Venēri* (Dat.Sg.) in *CIL*, VI 17050.³⁶ This fact is not surprising. First, because

³¹ An exact binomial test confirmed that the observed proportion of the <ae>/<ē> graphemic oscillations in our sample (.11) was actually lower than the expected .22, $p = .049$.

³² *Aeius* for *eius* could be considered as a ‘special case’. The form comes from PIE **esjo-s* and the trochaic scansion *ēiūs*, which is very common in (pre) Classical poetry might only be due to the reduplication of /j/ (cf. Meiser 2006, 117, 160; Clackson 2011, 111; *TLL* v.7.2.457, 14–20). The first vowel of the word might therefore be – at least etymologically – short, with the corresponding syllable being heavy ‘by position’ (i.e., *ěj-jus*). Nevertheless, this vowel is generally regarded as long in CL, while the spelling *aeius* might also reflect [e:-us] (with *ei* > *ē*; cf. Lewis – Short 1962, s.v. *is, ēa, id* and Coleman 1971, 188). For this reason, this misspelling will be considered as a case of <ae> for /ē/ in this paper. Nevertheless, we propose to address the problem in detail in a future contribution.

³³ The long /ē/ in *mausolēum* comes from stressed Gk. εἰ in hiatus position (cf. Μᾶσσωλεῖον). Yet, this particular word had become of common use in Latin to indicate particularly luxurious graves, while the quantity of the vowel is certain. Cf. Coleman 1971, 189.

³⁴ For the form *aeorum*, see *CIL*, VI 8606; 8685; 8716; 8875; 9035; 18095; 18550; 20137; 20878; 27857. For *quae*: *CIL*, VI 8505; 8520 (two times); 8676; 8875; 9138 (two times); 18781; 21097; 24037 (two times); 26477.

³⁵ *Quaerella* for *quērela* (Abl.Sg.: *CIL*, VI 8518; 8789; 27268); *pedissaequo* for *pedisēquo* (Dat.Sg.: *CIL*, VI 8764); *puaerorum* for *puērōrum* (Gen.Plur: 8974); *funaere* for *funēre* (Abl.Sg.: *CIL*, VI 17050).

³⁶ *Gaenaes* for *Caenēs* (Dat.Sg.: *CIL*, VI 8838); *Diadumaenus* for *Diadumēnus* (*CIL*, VI 8520); *Aegnatia* for *Egnatia* (cf. *supra*); *Aephebo* for *Ēphebo* (Dat.Sg.: *CIL*, VI 17198); *Aephaesius* and *Aerasmo* for *Ēphēsīus* and *Ērasmo* (Dat.Sg.: *CIL*, VI 8640); *Aephire* for *Ēphire* (*CIL*, VI

personal names are very common in Latin inscriptions (above all within funerary texts like the ones of group 2). Second, because stonemasons often provided particular effort in the attempt of correctly writing them.³⁷ Therefore, hypercorrection phenomena like the one investigated here are very likely to affect this particular word class.

Quantitative analysis

The next two sections will be devoted to a quantitative analysis of the data. In particular, I will take into account the position of the aforementioned hypercorrections with respect to both syllabic structure (distinguishing between misspellings occurring in closed and open syllables) and lexical stress (that is, stressed vs unstressed position).

Syllabic structure

On the basis of our data, both <ae> for /ě/ and for /ē/ appear to be attested more often in open than in closed syllables within the common funerary inscriptions of group 2 (Tab. 1). For 46 out of 48 tokens regarding the first hypercorrection (ca. 95.8%) and all the cases pertaining to the second occur in this particular context. More precisely, the only two cases in which <ae> for /ě/ clusters in a checked syllable are represented by the two instances of the form *Aegnatia* for *Egnatia* (cf. *supra*).³⁸

	<ae> for /ē/ and for /ě/: open vs. closed syllables					
	Open syllables		Closed syllables		Total	
	Tokens	% ca.	Tokens	% ca.	Tokens	% ca.
<ae> for /ē/	6	100	0	0	6	100
<ae> for /ě/	46	95.8	2	4.2	48	100
Kiss 1971	/	53	/	47	/	100

Table 1

20603); *Aepicharis* for *Ēpicharis* (*CIL*, VI 17891); *Aerychiana* for *Ēruciana*: (cf. *supra*); *Piaeridi* for *Piēridi* (Dat.Sg.: 24178); *Saecundae/o* for *Sēcundae/o* (Dat.Sg.: *CIL*, VI 17891; 18199); *Saeverianae* for *Sēverianae* (*CIL*, VI 26477); *Taeodora* for *Thēodora* (*CIL*, VI 2547); *Traebelli* for *Trēbelli* (Gen.Sg.: *CIL*, VI 2522).

³⁷ Adams 2013, 74–75.

³⁸ The same occurs also within ‘official’ texts of group 1 and in the “Graffiti del Palatino”. For all the hypercorrections listed in these two subcorpora also occur in open syllables. Cf. group1: *Craet(ae) for Crētae*; *Aeques for ēques* and *aeorum for ēorum*; “Graffiti del Palatino”: *cupiditatae for cupiditāē*.

The picture described above is very unlikely to be only due to the fact that open syllables are more common in Latin than closed ones.

According to the count in Kiss,³⁹ open and closed syllables are attested in an average Latin text with a ratio of about 53:47. In other words, open syllables represent in Latin just slightly more than half of the total. As a result, both <ae> for /ē/ and <ae> for /ĕ/ seem to occur in open (instead of closed) syllables with more than chance frequency in our sample.⁴⁰

That a similar situation occurs in the case of <ae> for /ē/ is not surprising. As Kiss points out “la combinaison voyelle longue + groupe de consonnes (ou géminée) (viz. V:CC) est...mal intégrée à la structure syllabique latine”.⁴¹ The difference between ‘heavy’ (viz. V:C or VCC) and ‘superheavy’ (viz. V:CC) syllables was not relevant in Latin for metre or stress assignment and the opposition V:CC vs VCC was only marginally distinctive (e.g. *lūstrum* ‘expiatory offering’ vs *lūstrum* ‘morass’).⁴² Furthermore, several processes (like the degemination of -ss- after a long vowel or diphthong as in *cāsus* and *causa*) demonstrate that a tendency leading to the progressive elimination of the former pattern (namely, V:CC) was active from the very (pre) history of Latin.⁴³ As a result, this particular pattern occurs very seldom in CL, where ‘superheavy’ syllables represents only ca. 7.6% of the total.⁴⁴ In other words, the uneven distribution of the <ae>/<ē> graphemic oscillations in our sample (with all the cases of <ae> for /ē/ occurring in open syllables) might only depend on the fact that a long vowel like /ē/ is very unlikely to occur in Latin in the context of checked syllables.⁴⁵

The same assumption does not apply to <ae> for /ĕ/, as short vowels are even more common in Latin in closed than in open syllables (ca. 39.3% vs only ca. 31.5% of the total in, respectively, the former and the latter case).⁴⁶

Were <ae> for /ĕ/ also mainly attested in stressed position, our data would show that the *OSL* rule described above was already at work during the first three

³⁹ Kiss 1971, 13–15.

⁴⁰ Even in this case, the exact binomial test confirmed that the observed proportions for both <ae> for /ē/ and for /ĕ/ in our sample (respectively, 1 and .95) were actually higher than the expected .53, $p = .03$ (<ae> for /ē/) and $<.001$ (<ae> for /ĕ/). The same is true also when we exclude the form *aeius* from the count (cf. *supra*), as all the other investigated cases of <ae> for /ē/ cluster in open syllables.

⁴¹ Kiss 1971, 14.

⁴² Kiss 1971, 14.

⁴³ Loporcaro 2011, 51–52; 2015, 11–12.

⁴⁴ Kiss 1971, 14. Cf. also Loporcaro 2015, 12 and Marotta 2017, 68.

⁴⁵ As Marotta 2017, 68 points out, Latin VL in closed syllables can be ascertained only indirectly (e.g. thanks to the evidence in Romance). Therefore, counts like the one in Kiss 1971 should be regarded as merely indicative.

⁴⁶ Kiss 1971, 14.

centuries of the Empire (and not starting from ca. the 4th–5th cent. AD, as is commonly assumed).⁴⁷ But this is not the case in our sample, as this particular hypercorrection seems to occur overwhelmingly in the context of unstressed syllables within the common funerary inscriptions of group 2 (see below). Therefore, an early rise of the *OSL* cannot be assumed on the basis of our data.

A merely partial explanation for the fact that <ae> for /ē/ appears to occur more often in open than in closed syllables in our corpus might be attempted by considering the word classes that are affected most by this particular spelling variation. As we have seen, of the collected instances of <ae> for /ē/ (48 cases in total), 12 concern the form *quae* (for *quē*), and 10 pertain to the form *aeorum* for *ēorum*. In other words, almost half of the tokens for this particular hypercorrection are provided by these two lexical items, i.e. in a context in which there is always an open syllable. Since both the words *que* and *eorum* are extremely common in Latin epigraphy (above all within common funerary inscriptions like those of group 2), because of the formula ‘(*fecit*)... *libertis...posterisque eorum*’ (and its variants), the uneven distribution of the <ae>/<ē> graphemic oscillations registered in our sample (with most of the cases of <ae> for /ē/ clustering in the context of open syllables) might be (at least partially) due to the repetitiveness which characterises our inscriptions.

Nevertheless, this does not explain why the same fact occurs also in the case of other word classes (e.g. proper or common nouns). Therefore, I intend to address this particular problem in detail in a future contribution.

Lexical stress

A notably different picture emerges when addressing the position of the investigated <ae>/<ē> and <ae>/<ĕ> graphemic oscillations with respect to lexical stress. For, the two hypercorrections show a remarkably different behaviour concerning this particular variable (Tab. 2).

Of the overall number of the collected instances of <ae> for /ē/ (6 cases in total), 4 of them occur in the context of stressed syllables, while only 2 are attested in unstressed position.⁴⁸

⁴⁷ Loporcaro 2015, 58.

⁴⁸ Cf. Stressed: *āeiūs* (*CIL*, VI 9201; 8523), *mausolāei* (*CIL*, VI 8686) and *Clāemēns* (*CIL*, VI 21850) vs unstressed: *aevocātus* (*CIL*, VI 2547) and *dīae* (*CIL*, VI 25106).

The reverse occurs in the case of <ae> for /ē/, as the great majority of the cases pertaining to this particular hypercorrection (45 out of 48 tokens = ca. 93.7%) occur in the context of unstressed syllables.⁴⁹

The uneven distribution of the <ae>/<ē> and <ae>/<ě> graphemic oscillations with respect to lexical stress in our sample is very unlikely to depend entirely on chance.

According to the calculation in Herman “sur l’ensemble des voyelles, 37.2% sont accentuées et 62.8% sont inaccentuées”. In other words, the proportion of stressed and unstressed syllables in an average Latin text is likely to be ca. 37:63.⁵⁰

This expected distribution hardly fits our data; for <ae> for /ē/ appears to occur in the context of stressed syllables with more than chance frequency, while <ae> for /ě/ seems to cluster in unstressed position more often than would be expected given a random distribution (Tab. 2).

	<ae> for /ē/ and for /ě/: stressed vs unstressed syllables					
	Stressed syllables		Unstressed syllables		Total	
	Tokens	% ca.	Tokens	% ca.	Tokens	% ca.
<ae> for /ē/	4	66.7	2	33.3	6	100
<ae> for /ě/	3	6.25	45	93.75	48	100
Herman 1968	/	37.2	/	62.8	/	100

Table 2

This impression is further confirmed when addressing the ratio between the use of <ae> for /ě/ and the use of <ae> for /ē/ in both stressed and unstressed syllables (Tab. 3).

As pointed out by Herman, while /ě/ is generally more frequent in Latin than /ē/ (see also above), the relative frequency of the two phonemes is remarkably different in stressed and unstressed position. More precisely, the short /ě/ phoneme is ca. only two times more frequent than the corresponding long vowel in the context of stressed syllables, while the proportion concerning the use of /ě/ and /ē/ reaches a value of ca. 7:1 in unstressed position.⁵¹

Even in this case, the data from our sample hardly fit these expected proportions. Since we could list 4 cases of <ae> for /ē/ vs only 3 cases of <ae> for /ě/ in the context of stressed syllables (see above), the former hypercorrection occurs

⁴⁹ In particular, the only 3 cases where <ae> for /ě/ occurs in stressed position are represented by the personal names *Aephâesius* (CIL, VI 8640), *Áephyrae* (Dat.Sg.: CIL, VI 20603) and *Piâeridi* (Dat.Sg.: CIL, VI 24178). See above (section 2) for the other collected instances.

⁵⁰ Herman 1968, 197.

⁵¹ Herman 1968, 197–98.

even more often than the latter in this particular prosodic context. On the contrary, we can find in unstressed position a ratio of ca. 22 between the use of <ae> for /ĕ/ and the use of <ae> for /ē/ (cf. 45 tokens regarding the first hypercorrection vs only 2 instances pertaining to the second), whereas a ratio of ca. 7 would be expected (Tab. 3).

Ratio between the use of <ae> for /ĕ/ and the use of <ae> for /ē/ (as respect to chance frequency)		
Stressed syllables	Ratio (Herman 1968)	Observed ratio
	Ca. 1.7	0.75
Unstressed syllables	Ratio (Herman 1968)	Observed ratio
	Ca. 6.6	22.5

Table 3

In other words, our data might show that the long and open vowel deriving from /ae/ (viz. /e:/) was likely to be confused with the CL short (and open) /ĕ/ and not with the CL long (and close) /ē/, with less than chance frequency in the context of stressed syllables, but more often than would be expected given a random distribution in unstressed position.

These results appear in line with the picture usually assumed to describe the dephonologization of contrastive VL within the so-called ‘Latin-Romance’ transition.

As is well known, several shortening processes occurring throughout the entire history of Latin (like, for instance, the systematic abbreviation of all long-final vowels preceding consonants other than -s) dramatically reduced the functional load of CL contrastive VL in unstressed (especially final) position. As a result, the phonological opposition between long and short vowels was mainly confined to stressed syllables by the ‘Classical’ period.⁵²

This fact is further confirmed by Herman’s study concerning errors in versification in three corpora of metrical inscriptions – two contemporary (ca. 1st – ca. 4th cent. AD) and one later (ca. 5th – ca. 6th cent. AD) – from, respectively, Rome and Africa.

In particular, Herman could notice that, within the earlier corpus from Rome (i.e. 1st – 4th cent. AD), deviations from the CL norm clustered in unstressed syllables with more than chance frequency (i.e. 91.4% of the registered deviations vs an expected figure of ca. 63%: cf. *supra*).⁵³

If the hypothesis advocated in Papini 2019 is correct (cf. *supra*), our results would be in line with those in Herman 1982. More precisely, the uneven distribution of the <ae>/<ē> and <ae>/<ĕ> graphemic oscillations in our corpus (with

⁵² Loporcaro 2011, 51; 2015, 9–10. See also Marotta 2017, 67.

⁵³ Herman 1982, 225; cf. also Loporcaro 2015, 42.

<ae> for /ě/ clustering with more than chance frequency in the context of unstressed syllables and the reverse occurring for <ae> for /ē/), might confirm the thesis that, by the first three centuries of the Empire – at least in Rome, and at least at the social and educational levels represented by the common funerary inscriptions of group 2 (cf. *supra*) – the CL vowel quantity contrast was already ‘endangered’ in the context of unstressed syllables, but “much better preserved under stress”;⁵⁴ a result which is also in line with the long-term tendency described above.⁵⁵

Some preliminary conclusions

The analysis conducted so far allows some preliminary considerations regarding the position of the investigated <ae>/<ē> and <ae>/<ě> graphemic oscillations with respect to both syllabic structure and lexical stress.

First, we may notice that both <ae> for /ē/ and <ae> for /ě/ cluster in open (instead of closed) syllables with more than chance frequency. Yet, as we have seen, this pattern might (at least partially) be due to the fact that: 1) long vowels like /ē/ are very unlikely to occur in Latin in the context of closed (mainly stressed) syllables and 2) almost half of the tokens of <ae> for /ě/ occurs for the lexical items *quě* and *ěorum*, i.e. in a context in which there is always an open syllable. These results are hence likely to (mainly) depend on ‘external’ factors and might then say nothing about the dephonologization of CL contrastive VL within the so-called ‘Latin-Romance’ transition.

On the contrary, the results pertaining to lexical stress are perhaps significant. As we have observed, the digraph <ae> seems to be used to render the CL short (and open) /ě/, instead of the CL long (and close) /ē/ with less than chance frequency in the context of stressed syllables, but more often than would be expected given a random distribution in unstressed position. This might suggest that the confusion between the both long and open vowel deriving from /aɛ/ (viz. [ɛ:]) and the CL inherited short /ě/ (= [ɛ]) was likely to occur above all in this particular prosodic context (the reverse occurring under stress). Since this confusion was based on the similar quality (and regardless of the difference in quantity) of the two vowels (namely, /ɛ:/ and /ě/), the pattern emerging from our sample might confirm that, by

⁵⁴ Loporcaro 2015, 42.

⁵⁵ For a detailed discussion of Herman 1982 results, see now Loporcaro 2015, 41–42. According to Herman 1965, 22–24, however, even the original distinctions of quality (and not only contrastive VL) would have been better preserved under stress. Cf. also Adamik 2017. The picture described above would change significantly with the exclusion of the form *aeius* (cf. *supra*), as the ratio between the use of <ae> for /ě/ and the use of <ae> for /ē/ in stressed position would reach a value of ca. 1.5 (closely approaching randomness).

the first three centuries of the Empire, the CL vowel length contrast was (at least in Rome) still well preserved under stress, but already ‘endangered’ in unstressed position,⁵⁶ as already proposed by scholars like J. Herman (cf. 1968; 1982; 2000) and, more recently, M. Loporcaro (2011; 2015).

Nevertheless, I must highlight the fact that the results achieved in this paper should be regarded as merely indicative, since our survey is based on a very limited number of inscriptions (cf. *supra*). As a result, they need to be validated through a larger (and statistically more significant) sample, as I propose to do in a future contribution.⁵⁷

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⁵⁶ Cf. also Loporcaro 2015, 42.

⁵⁷ In particular, the exact binomial test that I performed to validate the results concerning the distribution of the <ae>/<ē> and <ae>/<ĕ> graphemic oscillations as respect to lexical stress (expected proportion = .13, observed proportion = .04) had p = .08. In other words, our results cannot still be regarded as significant on statistical grounds.

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