

Minore(m) Pretium: Morphosyntactic Considerations for the Omission of Word-
final -m in Non-elite Latin Texts

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Phonetic and Textual Symbols and Formatting

The necessity to use both phonemic and orthographic scripts will require some explanation in format and style, as will the editorial marks used in the various texts. As is the standard in the written representation of narrow transcription, phonetic brackets (/ /) will be used, along with the standard IPA symbols. The most frequently appearing phonemes will be /a/ (for the Latin grapheme a), /e/ (for Latin e), and /u/ (for Latin u). Parentheses within the phonemic brackets will denote Latin long vowels (/a:/ for ā). Graphemes will be represented simply by the letters themselves, with dashes used to indicate initial (m-), medial (-m-), and final (-m) positions as necessary. A complete IPA chart is available at:

https://www.internationalphoneticassociation.org/sites/default/files/IPA_Kiel_2015.pdf

Editorial marks are used consistently throughout the Latin texts. The marks used are:

... or [...] : indicate missing or damaged text. Open brackets indicate damage on one side of the text, for example:]vius.

() : indicate the resolution of a missing word or letter.

[] : indicate an addition by the editor of a word or letter.

[[]] : indicate an erasure from the text.

< > : indicate a spelling substitution for a non-standard or incorrect spelling. The capital letter is the letter which appears in the original text, and the lower-case letter is the emendation to the standard spelling. Ex: *h<O=u>nc*.

{ } : indicate letters or words which the editor feels should be removed.

(!) : indicates a nonstandard or inexplicable spelling.

? : indicates a form about which an editor is unsure.

. (under a letter) : indicates a letter which not entirely discernable.

Abbreviations

AE = *l'Année Epigraphique*. Paris, 1888-Present.

CEL = *Corpus Epistularum Latinarum*. Firenze, 1992.

CIL = *Corpus Inscriptionum Latinarum*

PIE = Proto-Indo-European

Section I

Introduction, History, and Linguistic Information

Introduction: What Can Inconsistent Spelling Reveal about a Linguistic Pattern?

The goal of this research is to demonstrate that what is often considered merely a non-standard spelling or inconsistent spelling, a mistake by an uneducated author, is more likely a pattern-based feature of the Latin language. When non-elite authors across the Roman empire were aware of a standard spelling, and still regularly neglected its usage in certain environments, the evidence suggests a pattern that cannot be attributed solely to the haphazard use of spelling conventions. Instead, as this paper proposes, authors often omitted the letter -m in final position when (a) the vowel preceding -m was acceptable in final position according to non-elite orthographic standards, and (b) when other components of a sentence, such as word order or the presence of another similar morpheme, rendered the letter redundant or unnecessary within a phrase.

As a so-called corpus language, with a complete absence of native speakers, our understanding of Latin is based entirely on written evidence. The standards and features of literary Latin, particularly Classical Latin, are well attested by evidence and commentaries. For other usages of the language, including its features in different registers, dialects, and sociolects, evidence is considerably more scarce. Elite, literary authors and grammarians commented on the different styles and usages of the language in several works, often derisively. The primary

evidence for the variations in Latin, however, come from the thousands of extant texts produced for purposes which were not literary, or were not held to the standards of Rome's educated elite.

These texts offer insight into the features and patterns in Latin which were not present in Classical, literary texts: pronunciation, diachronic trends, morphosyntactic patterns, etc. In essence, the deviations from classical usages in texts are gifts for understanding the non-literary qualities of Latin, particularly in the absence of the observation of speakers. The misspellings and other 'mistakes' in non-literary texts are in many cases the only evidence available for the ways in which people used and understood Latin in everyday life.¹

What can the simple omission of a single letter at the end of a word reveal about the Latin language, and the way that authors and speakers understood it? When a letter is omitted with great frequency in writing, and its omission is mentioned in literary texts as being a feature of speech, the phenomenon must be considered more than a simple misspelling. Furthermore, when authors are aware of the final -m grapheme, yet choose to omit it and include it in the same texts, one must consider whether the circumstances of such choices are pattern-based. This research will examine evidence for morphosyntactic patterns which potentially contribute to an author's willingness to omit the final -m grapheme, specifically evidence related to an author's understanding of word-final morphemes, and in what syntactic positions they are represented orthographically.

The goal is to demonstrate how authors of non-elite Latin texts based their inclusion or omission of final -m upon their understanding of which word-final vowels were orthographically

¹ Often, features of Latin are deemed mistakes when compared to prescriptive classical standards, but were regular features of language in various speech communities.

acceptable, and upon the presence of syntactic markers which permitted omission without corresponding morphosyntactic ambiguity.

Non-Literary and Non-Elite Latin: Terminology and Methodology

Until relatively recently in the study of Classics, the term “vulgar Latin” has dominated nearly every study of the Latin language which is concerned with non-literary texts. The term is based upon the Latin *sermo vulgaris*, in several examples used to describe a speech register not appropriate for use in official, public life.² In the early 19th century, *sermo vulgaris* was adopted into academic literature on non-classical Latin and Romance linguistics, and it became ‘vulgar Latin’ in English, *Vulgärlateins* in German, and *Latin vulgaire* in French. Despite the pejorative connotations of ‘vulgar’, both in ancient and modern usages, these terms would be used to describe any speech register, dialect, and sociolect which did not adhere to classical standards or were not employed by the educated elite. Herman (2000), writing in the mid-20th century, admits that the term ‘vulgar Latin’ has its flaws and is often employed inconsistently, but that it is serviceable in the absence of a term which can be used so generally to describe so many common linguistic phenomena.³

More recently, the field of sociolinguistics has introduced less pejorative, and more accurate, terminology into the study of Latin. This change has only drawn more attention to the difficulties and inconsistencies with attempting to find a working definition of the term ‘vulgar

² *Rhetorica ad Herennium* IV.69: ...ut oratorie plane loquaris, nec nuda atque inornata inventio vulgari sermone efferatur. The term also is found in Cicero, *Academica* I.5, and *Pro Plancio* 57 as *vox vulgaris*.

³ For the history and adoption of the term, see Herman (1967): p. 4-5. For a discussion on the lack of a better term, see Herman (1967): p. 6-7. Despite his somewhat vague use of the term ‘vulgar Latin’, Herman’s scholarship on the technical aspects of non-elite Latin linguistics is sound. Vaananen and Loftstedt share Herman’s sentiments, and continue to use ‘vulgar Latin’, for lack of a better general term.

Latin’.⁴ The inroad of sociolinguistics has also revealed that studies of vulgar Latin often fail to distinguish between orthographic features and features of the spoken language.⁵ For example, a ‘vulgarism’ of writing might well, and often does, represent a feature of the spoken language which is present among a variety of dialects and sociolects, including in elite speech.⁶

Here, the terms ‘non-literary Latin’ and ‘non-elite Latin’ will be used most commonly. However, the two terms are not interchangeable, and some clarification is necessary. Non-literary Latin describes the usage of the language, across all sociolects, in a colloquial, informal, casual way. Several elite, well-educated Romans describe the use of informal, casual language registers by themselves or people of similar status. Cicero implies that his friend Paetus uses a casual register, and that even he writes in a more casual manner in *Epist ad Fam.* IX.21.1: *verum tamen quid tibi ego videor in epistulis? nonne plebeio sermone agree tecum?...Epistulas vero cotidianis verbis texere solemus.*⁷ The scholar of language Quintilian also describes the use of non-literary Latin among the elite at XII.10.40: *sit cotidiano sermoni simillima, quo cum amicis coniugibus liberis servis loquamur.* The term *sermo cotidianus* (or some variety, such as *verba cotidiana*) is used to identify ‘everyday’ speech, “often in opposition to ‘literary, ornate’ speech”.⁸

⁴ See Wright (1982): p. 52-54, who has convincingly advocated for abandoning the term altogether. Numerous scholars, including Adams, Clackson, and Horrocks, have argued the same, with very limited exceptions.

⁵ Adams (2013): p. 11.

⁶ In such cases, the orthographic occurrence could be considered to be of a lower sociolect, although the general feature of speech which it represents could not.

⁷ Below (p. 8-9), Cicero mentions some embarrassments associated with speaking in a lower register.

⁸ Ferri and Probert (2010): p. 38.

Non-elite Latin is a term that perhaps more closely aligns with the dated ‘vulgar Latin’, though there are significant differences. Most importantly, it is an inaccurate representation of the socio-economic environment of the Roman Empire to identify all non-classical Latin as being produced by the ‘*vulgus*’.⁹ Rather, Latin was spoken and written by millions of people who were not a part of the urbane, elite speech and literary community in Rome itself, and who lived in a variety of sociolinguistic environments which cannot be reduced to a simple dualistic class distinction.¹⁰ The term ‘non-elite’ in this research will be used to describe linguistic features and Latin texts which were produced independently of the elite speech community in the literary cultural spheres at Rome, and for non-literary purposes. These texts were—more so than literary texts—written without the influence of the formal, stylistic standards of the educated elite in Rome, by authors who have “escaped the normative pressure to use Classical Latin for all writing”.¹¹

Commonly, texts of this type are practical in value, such as contracts, letters, and inventories, while others are more recreational in nature, such as graffiti. Non-elite Latin texts were produced in every part of the empire, and through the entire timeline of Roman orthographic history. While the texts are not uniform in nature (despite the similarities in formulaic and procedural language in many), certain features are so geographically widespread

⁹ To be sure, lower sociolects specific to socio-economic groups did exist, but should not be considered a homogenous group only to be contrasted with literary, elite Latin (Adams [2013]: p. 10).

¹⁰ Clackson and Horrocks (2007): p. 230-232. For example, consider the wealthy provincials who learned Latin as a second language, and whose faculty with the language was sufficient for their purposes.

¹¹ Clackson and Horrocks (2007): p. 234.

and diachronically persistent that they must be considered to reflect linguistic patterns.¹² To support the notion that a common morphosyntactic pattern contributed to the omission of final -m, rather than one isolated to a specific sociolect or period of time, this research will present non-elite texts from across the empire, from a variety of sociolinguistic environments, and ranging chronologically from the Late Republic through the fourth century CE.¹³

Unlike many of the studies of non-elite (so-called vulgar) Latin, the primary concern with this research is the orthographic representation of morphosyntax rather than the phonological, morphological, and lexical trends in speech.¹⁴ The texts, then, rather than being used to evidence phonological and morphological features of the spoken language, are used as evidence for the authors' understanding of morphosyntax as it should appear in written media.

Final /m/: History, Pronunciation, and Status of the Phoneme in Latin

It is unclear at what point in the history of Latin that word-final /m/ ceased to be pronounced as the bilabial nasal represented by the letter m and by phonetic transcription /m/. The grapheme itself is often omitted from many of the earliest surviving Latin texts, perhaps an indication that a phonetic change was underway at an early period.¹⁵ For lack of commentary,

¹² On the types, functions, and linguistic environments of non-elite documents, see Adams (2013): p. 18-19, and Clackson and Horrocks (2007): p. 31-34. See Adams (2013): p. 33 for the drawing of conclusions about linguistic patterns from the texts.

¹³ The significance of this time frame will be discussed below (See p. 24, 'Vowel Mergers and Diachronic Change').

¹⁴ As Herman (1967: p. 7) notes, his working definition of vulgar Latin, like many others, focuses on trends which were "particularly but not exclusively spoken".

¹⁵ Clackson and Horrocks (2007): p. 96-97.

and given the much smaller body of textual data, the best source for the weakened phonetic status of final /m/ in Early Latin is its traditional elision in poetry. In verse, when word final /m/ was followed by a vowel, the letter was elided, with the phonological result being a glide between the vowels before and after the letter, and the articulation of a single syllable.¹⁶ This does not, however, indicate the sound produced when final -m was followed by a consonant or when it was used in non-poetic speech.

Many omissions in Early Latin occur on texts produced by the wealthy elite, for example on the epitaph of Lucius Cornelius Scipio Barbatus of the third century BCE. The text used here is taken from Baldi (2002):

CORNELIVS LVCIVS SCIPIO BARBATVS GNAIVOD PATRE
 PROGNAVTVS FORTIS VIR SAPIENSQVE—QVOIVS FORMA
 VIRTVTEI PARISVMA | FVIT—CONSOL CENSOR AIDILIS QVEI
 FVIT APVD VOS—TAVRASIA(M) CISAVNA(M) SAMNIO CEPIT— SVBIGIT
 OMNE(M) LOVCANA(M) OPSIDESQVE ABDOVCIT¹⁷

Likewise, the letter is omitted entirely on the epitaph of Scipio Barbatus' son, Lucius Cornelius Scipio (also from the third century BCE), in words such as *oino(m)*, *optumo(m)*...*viro(m)*, *urbe(m)*, and *aide(m)*.¹⁸ The status of pronunciation at the time cannot be determined, yet the frequency of omission, even in elite texts, suggests at least some weakening.

More evidence from earlier Latin can possibly be found in Quintilian's mention of spelling irregularities in the Elder Cato's writing, and in a later codex which also mentions Cato's orthography specifically. In his *Institutio Oratoria*, Quintilian mentions that Cato omits

¹⁶ Sihler (1995): p. 228.

¹⁷ Baldi (2002): p. 206.

¹⁸ Clackson and Horrocks (2007): p. 140.

final -m in his writings, and cites the first-person verbs *dice* and *facie* as examples.¹⁹ Similar omission in verbal forms is described in the Farnesian Codex of Festus, which mentions Cato's writing *recipie*.²⁰ The omissions still leave doubt about the production of the sound, but they again suggest a reluctance to use the grapheme -m to represent a sound which was not typically associated with the letter.

In the Classical period, there is considerably more information about the phonetic qualities of final -m. Both non-elite and elite texts from the Classical period provide evidence about the phonetic status of the letter. The greater body of non-elite inscriptions, containing phonetic spellings, presents evidence that the letter was not pronounced in final position in non-elite speech, or at the very least could not be represented phonetically by the grapheme -m.²¹ Scholars who have commented on the pronunciation differences in elite and non-elite speech agree nearly unanimously that in most environments the letter was likely very weakly pronounced, or more likely not pronounced at all in lower sociolects.²²

In elite speech, however, the evidence suggests that some sound, though not a bilabial nasal, was still articulated for final -m.²³ The articulations appear to have been different in certain environments. After an uninflected 'grammatical' word or a monosyllabic word, the

¹⁹ *Inst. Orat.* I.7.23 and IX.4.39. Some manuscripts read *dicae* and *faciae*. See Churchill (2000) for the manuscript tradition, and arguments in favor of reading *dice* and *facie*.

²⁰ Churchill (2000): p. 282. Other scholars have ascribed the spellings to a sideways M, meant to reflect an altered pronunciation of the letter, though Churchill (2000) convincingly argues against the interpretations.

²¹ A number of examples will be presented in Section II below. Several others are available in Diehl (1899): p. 243-287.

²² See Sihler (1995): p. 228; Herman (2000): p. 39-40; and Adams (2013): p. 129.

²³ Clackson and Horrocks (2007), p. 97, suggest that during the standardization of elite, classical forms, the complete loss of final -m in speech was somewhat reversed.

sound seems to have been assimilated by a following consonant with nasalization.²⁴ Cicero on two occasions described how this assimilation could result in language that sounds inappropriate.

First, in *Orator*:

Quid, illud non olet unde sit, quod dicitur cum illis, cum autem nobis non dicitur, sed nobiscum? Quia si ita diceretur, obscaenius concurrerent litterae, ut etiam modo, nisi autem interposuisssem, concurrissent. Ex eo est mecum et tecum, non cum me et cum te, ut esset simile illis nobiscum atque vobiscum.²⁵

Cicero here described why at times the preposition *cum* is prenominal, and why it is a postnominal compound (*mecum*, *tecum*, etc.) with specific personal pronouns. Cicero indicated that when the final /m/ in *cum* was assimilated to the following nasal of *nobis*, the result could sound obscene, presumably phonetically similar to the dative or ablative forms of the slang *cunnus*. While Cicero's etymology for the compounded forms is tenuous, his description of the phonological production of final /m/ is useful.²⁶

Elsewhere, in *Epistulae ad Familiares*, Cicero reiterated that the process of assimilation can be mistaken for obscenities. In a letter to Paetus, chiefly concerned with inappropriate speech, Cicero again described the assimilation of final -m to initial n-: *Quid, quod vulgo dicitur, "cum nos te voluimus convenire," num obscenum est?*²⁷ The concern again here is that the sound

²⁴ Adams (2013): p. 129.

²⁵ *Orator ad Brutum* 154. "Why is it, if it is not already obvious, that *cum illis* is said, but not *cum nobis*, using *nobiscum* instead? Because if it were spoken as such, the letters running together would be obscene, as they would have here, except I placed *autem* between them. From this come *mecum* and *tecum* instead of *cum me* and *cum te*, to be consistent with *nobiscum* and *vobiscum*."

²⁶ See Adams (2013): p. 130 for the relationship of the speech sounds to slang terms. Sihler (1995): p. 228 calls the etymology "more tantalizing than informative".

²⁷ *Epistulae ad Familiares*: IX.22.2. "Why is 'when we wanted to meet you', which is spoken commonly, an obscenity?"

could resemble *cunnus*, this time the accusative plural.²⁸ In his next sentence, Cicero described his own use of a more complex phonological assimilation, namely that final /m/ perhaps became a velar nasal /n/ before another alveolar (/d/): *eloqui: "hanc culpam maiorem an illam dicam?" potuit obscenius?*²⁹ The implication here is that the nasalization of final -m as a velar produced a sound similar to *landicam* (the accusative of the slang *landica*, for clitoris).³⁰ What is unclear based upon Cicero's remarks is whether or not articulation of final -m differed based upon whether or not a word was inflected, or whether or not it was polysyllabic.

Over a century after Cicero, Quintilian described the inadequacy of the Latin alphabet to convey the articulation of final -m before vowels, and that the sound is that of a 'new letter':

Atqui eadem illa littera, quotiens ultima est et vocalem verbi sequentis ita contingit ut in eam transire possit, etiam si scribitur, tamen parum exprimitur, ut 'multum ille' et 'quantum erat', adeo ut paene cuiusdam novae litterae sonum reddat. Neque enim eximitur sed obscuratur.³¹

It is clear that Quintilian does not consider final -m before a vowel to be pronounced in accordance with the phonetic value, /m/, which the letter elsewhere represents in Latin. It is also clear that, contrary to the likely complete loss of a phoneme in non-elite Latin, some sound is

²⁸ Though more research is needed, it is possible that this sound pattern and its resemblance to *cunnus* was exploited for comedic value. Word-final -um followed by the nasal n- (followed by -o or -u) is present several times in the plays of Plautus, usually spoken by a slave or other character of low status, and often in sexually suggestive environments. Consider the slave girl Pardalisca in *Casina*, line 859: *Lubet Chalinum quid agat scire, nouom nuptum cum nouo marito*. Elsewhere, the slave Epidicus speaking of prostitutes: *tum meretricum numerus tantus...* (*Epidicus*, line 213).

²⁹ *Epistulae ad Familiares*: IX.22. "I said: 'Should I say that this or that is the greater fault?' Could it have been more obscene?"

³⁰ Adams (2013): p. 130.

³¹ *Institutio Oratoria*, IX.4.40. "And that same letter (m), in final position and thus touching a vowel of the following word, so that it can cross over to that word, even if it is written is still not pronounced; so, *multum ille* and *quantum erat* would almost express the sound of a new letter. It is not elided, but obscured (or weakened)."

still produced to represent final -m. The sound is not elided as in poetry, but the articulation is muffled or obscured. The examples here also indicate that the change in articulation was not limited to uninflected and monosyllabic forms, which were used exclusively in Cicero's examples.

Although Quintilian did not mention the sound of final -m when followed by a consonant, the sound in this environment was later described by Velius Longus in the second century CE:

nam quibusdam litteris deficiamus, quas tamen sonus enuntiationis arcessit, ut cum dicimus 'virtutem' et 'virum fortem consulem Scipionem', pervenisse fere ad aures peregrinam litteram invenies.³²

By Velius Longus' age, the altered pronunciation of final -m in elite speech was not limited to pre-vocalic environments. Though, given Cicero's remarks roughly 200 years earlier than Velius' writing, final -m was likely altered in its pronunciation before a consonant during Quintilian's time as well, though he did not mention it. Like in Quintilian's examples, the obscured pronunciation (the *peregrina littera*) is present in inflected, monosyllabic forms (unlike the examples used by Cicero).

Even with the comments by ancient authors on the articulation of final -m, it is difficult to determine what sounds were actually being produced. At any given point in Roman Imperial history, multiple articulations are likely, varying according to sociolect, phonological environment, and speech usage. There is evidence that the assimilation described by Cicero was

³² *De Orthographica* 54.13-15. "We are lacking certain letters which speech sounds call for, as when we say *virtutem* and *virum fortem consulem Scipionem*, you will find that a foreign letter has come to your ears".

active both in elite and non-elite speech. Adams (2013) cites inscriptional examples which display the process, such as *tan durum* CIL IV.1895.³³

Likewise, evidence suggests that alveolar nasalization of final -m was occurring in several speech communities in monosyllabic and uninflected forms. For example, several instances of *con* (for classical *cum*) and *tan* (for *tam*) are found in non-elite writings from across the empire.³⁴ The most convincing evidence for this nasalization, however, is the survival of the nasalized forms (phonetic /n/) in several Romance languages: *con* in Spanish and Italian (from *cum*), in French *rien* (from *rem*), and Romanian *cine* (from *quem*), among many others.³⁵

Reconstructions of the sound in elite speech require more phonetic analysis, and some speculation. Sihler (1995) writes that the “ablest analysis of the question pins down the phonetics of -m as a nasalized [w] in careful speech”.³⁶ The preceding vowel also appears to have been lengthened in combination with the articulation.³⁷ Such a lengthening, given the semivocalic quality of a nasalized /w/, is not difficult to imagine, nor is it a phonological difficulty.

The nasalized /w/ is in accordance with the evidence offered by Quintilian, and in accordance with the assimilation to the alveolar nasal /n/ described by Cicero and evidenced by inscriptions. Phonetic analysis will help to support the claim of a nasalized /w/. As a bilabial nasal, /m/ requires the closure of the lips and the flow of air through the nasal cavity. Quintilian’s

³³ p. 130. Instances of assimilation of this type will also appear in the texts analyzed in this research.

³⁴ Examples can be found in the Terentianus Letters (p. 27) and Bu Njem Ostraka (p. 50).

³⁵ Vaananen (1981): p. 67.

³⁶ p. 227.

³⁷ Clackson and Horrocks (2007): p. 97. Fink (1969) is one of the few to dispute the lengthening. His analysis, however, focuses almost exclusively on literary, poetic meter.

description of final -m as *obscuratur*, when taken with the alveolar nasalization described in Cicero, suggests a phonetic change not in the nasal feature, but in the bilabial feature of the sound. An ‘obscuring’ of the bilabial feature does not suggest a change in the place of articulation (the lips). Instead, the manner of labial articulation is changed from closed to open, with the least drastic of such phonetic changes being a labial rounding. In short, the bilabial feature of /m/ changed from a closed position to a rounded position, and the nasal and voiced features were retained, with the result being a voiced, nasalized /w/.³⁸ The nasalization was likely sufficient to distinguish the articulation of final -m from the already present, non-nasalized semi-vocalic /w/ (as in *venio*), hence the need for a *nova littera*.

The retained nasalization of /w/ would provide little resistance to assimilation to /n/, due to the shared nasal feature and the open, sonorant manner of articulation. Likewise, the open labial articulation would offer less resistance to assimilation of /w/ to alveolar consonants such as /d/ (in *tan durum*, for example). Furthermore, the semi-vocalic properties of a nasalized /w/ easily permit the glided elision in poetic pronunciation.

One more consideration must be given to the phoneme represented by final -m, namely the actual pronunciation of final -m as the bilabial nasal /m/. The pronunciation of final -m as /m/ was called *mytacismus* (in English, mytacism) by Latin grammarians, and its occurrence and status is still not well understood. The term is generally applied to non-native Latin speakers as a ‘barbarism’ of speech.³⁹ In addition to simply being a barbarism, mytacism posed the danger of

³⁸ See Gussenhoven and Jacobs (1998): p. 57-76 for an outline of distinctive phonetic features, such as nasalization.

³⁹ See Nyman (1977): p. 111 for a general description of the process and its presence in the texts of grammarians. Various spellings of the word exist, including *moetacismus* and *myotacismus*. See also Nyman (1977): p. 111-112 for the process as a ‘barbarism’.

causing genuine problems with spoken communication. Native, or fluent, Latin speakers were so unaccustomed to hearing the word-final phoneme /m/, that when it was pronounced, the phoneme was often attributed to being the initial phoneme of the following word. Nyman (1977) cites the phrase *hominem amicum* as an example, a phrase in which, if final -m were to be pronounced as /m/, the phrase would be understood as *homine manicum*.⁴⁰ Sihler (1995) cites another example in *partem agis* being understood as *parte magis* when final -m was articulated using the bilabial nasal.⁴¹ The potential communicative problems are evident, but the frequency of mytacism, and in which speech communities it occurred, remains a mystery.

Concluding the discussion of the articulation of final -m, with the exception of mytacism, two scenarios appear most likely based upon the evidence. The first is that the phonetic properties of nasalized /w/ convincingly support the commentaries by Cicero and Quintilian on the articulation of final -m in elite speech. In non-elite speech, assimilation is not out of the question in monosyllabic and uninflected forms, but final -m seems largely to have not been pronounced at all.

Orthographic Representation of Final -m

Several omissions of the final -m grapheme in Archaic Latin have already been presented above. In earlier Latin, according to Adams (2013), “there was a more relaxed attitude to

⁴⁰ Nyman (1977): p. 117 discusses both the interpretation of the sound patterns by listeners as well as the examples of misunderstandings.

⁴¹ p. 227.

spelling, and the phonetic spelling might not yet have been stigmatized”.⁴² These omissions took place prior to the adoption of the Classical standard to include final -m in written texts. The process of standardization by the urban elite marked omissions in writing, no matter their relevance to pronunciation, as archaisms and features of lower sociolects.⁴³ The texts analyzed in the present research were written after the standardization of classical forms, and thus the discussion of the final -m grapheme will focus on the same period of time.

Orthography and education are inextricably linked, particularly in an investigation of an orthographic phenomenon which is ubiquitous in certain sociolects, and absent in others. Access to education varied widely from region to region, and of course, especially in the advanced stages it was largely reserved for the children of wealthier families. The child of a poorer family would likely, if at all, attend school only for a few years to learn what are colloquially called “the basics”: rudimentary reading, writing, and arithmetic. The stark differences in duration and quality of education resulted in an environment in which Romans were very differently prepared to read, write, and utilize the Latin language. The extent to which morphology and syntax were taught likely varies according to factors such as location and the educational level of the instructors themselves, and the purposes of instruction.⁴⁴ Though it is difficult to define literacy,

⁴² p. 129.

⁴³ See Clackson and Horrocks (2007) p. 130-182 for a discussion of the standardization and crystallization of forms in literature and government texts leading up to the first century BCE, of which the inclusion of final -m was a part.

⁴⁴ See Fantham (1996): p. 23 for access to education at various levels, and p. 23-24 for the basic education of children from poor families. As noted on p. 24, the children of tradesmen might only attend school to learn basic bookkeeping or notational skills.

Christ (1984) notes that “no very optimistic assumptions about the prevalence of literacy would be justified”.⁴⁵

While general literacy rates likely still were quite low, such a statement does not always accurately reflect the ability of the residents of the empire to use Latin. A large number of inhabitants of the empire, for example, used Latin only as a second language, and their use was not as a primary method of communication.⁴⁶ Perhaps a better metric would be to evaluate the speakers and authors of non-elite Latin using some notion of ‘functional literacy’, or the ability to use language to adequately meet one’s daily needs.⁴⁷ In this context, the thousands of extant non-elite texts demonstrate that a practical, albeit limited, command of Latin was somewhat common as required in various socioeconomic spheres.

The evaluations of literacy and education on orthography are further complicated by the fact that many texts were produced with linguistic input from more than one source. In a variety of contexts, scribes were often employed for non-literary and non-elite documents. Military scribes and lower officers were widely used for the creation of a variety of texts, and many of whom, though certainly not all, appear to have been well-educated in Latin orthography.⁴⁸ Similarly, inscriptions often required the use of a stonecutter, whose spatial and linguistic input also factored into the creation of the text.⁴⁹ The omission of final -m and other nonstandard

⁴⁵ p. 104.

⁴⁶ Clackson and Horrocks (2007): p. 231-232.

⁴⁷ Collins and O’Brien (2003): p. 148. Every definition of functional literacy seems to be subject to some criticism, but the definition offered here is sufficient for our purpose.

⁴⁸ Adams (2013): p. 18. See the Terentianus Letters (p. 27) for examples of varying scribal competency.

⁴⁹ Edmonson (2007): p. 114.

spellings, then, could have been the product of the original author, the intermediary, or a combination of the two.⁵⁰

In the Classical Period and through the Imperial Period, the omission of final -m in writing was an indication of a lower sociolect, and was “a vulgarism of writing”.⁵¹ Omissions occur with great frequency. In many instances, omission occurs entirely in a single text, which is the best evidence available that an author of a text was not aware of the final -m grapheme at all—an indication of how widespread the lack of articulation was. Elsewhere, omission appears to be applied haphazardly, even to the same words in a single document, which perhaps suggests the lack of necessity for the grapheme in certain environments according to the author (*na* and *nam* being considered different spellings of the same word, for example).⁵² Finally, the grapheme is omitted in certain environments based upon an author’s understanding of spelling and morphosyntax, which are the occurrences most useful for the present research; in this case, an author was aware of the final -m grapheme, but his or her understanding of the text did not necessitate its inclusion under certain circumstances.

Nominal and Pronominal Morphology in Non-Elite Latin

Of central importance to this research is an author’s awareness of word-final morphophonemes, and the ways in which they are represented as graphemes. If the author of a non-elite text considers certain word-final vowels as commonly acceptable graphemes, and

⁵⁰ In instances of dictation to a scribe, the omission of the letter is perhaps more safely attributed to the scribe, as the speaker would not have pronounced the letter in normal speech.

⁵¹ Adams (2013): p. 132.

⁵² Examples occur in the Terentianus Letters (p. 27).

others not so, the author's written expression of Latin will reflect such an understanding. More specifically, an author's understanding of which word-final vowels are orthographically acceptable in inflected forms will determine his or her willingness to omit the final -m grapheme after such vowels.

It is important to remember that, as mentioned above, word-final -m was not pronounced in non-elite dialects and sociolects. The phonetic spellings, then, of the terminations of common accusative singulars would be -a (for -am), -e (for -em), and -u (for -um).⁵³ These spellings are very common in the large body of extant non-elite texts from the late Republic through the Imperial Period. This omission of the final -m grapheme (resulting in a phonetic spelling) does not occur proportionally after the three vowels, however, with omissions after -a and -e occurring at a rate much higher than after -u.⁵⁴

The question then becomes, why do omissions of final -m occur more frequently after certain vowels than others, even though the letter was not pronounced after any of those vowels? As mentioned before, several authors demonstrate an awareness of the final -m grapheme, and nevertheless follow the pattern of non-standard omission only after certain vowels. Two explanations have been put forth by scholars for omission after -a.⁵⁵

Lofstedt (1961) offered an explanation for omission after -a, noting that the accusative final -a of the neuter plural was adopted into a-stem accusative singulars by a process of

⁵³ Omission after -o is very rare in the imperial period.

⁵⁴ Evidence for this phenomenon is presented in a number of places, most thoroughly in Loftstedt (1961): p. 115-121. See also Adams (2013): p. 130-131, and Vaananen (1981): p. 66.

⁵⁵ The omissions after -a are the commonly occurring, a fact which perhaps attracted more attention for research.

paradigm levelling.⁵⁶ Lofstedt's explanation should not be excluded as a contributing factor for the acceptance for omission. However, it fails to account for the prevalence of omission after -e, which cannot be explained by a neuter morpheme. Compared to accusative singulars, accusative neuter plurals are also attested much more rarely in writing, and there is some difficulty accepting that a less-frequently occurring morpheme in a completely different class of noun stems would exert influence on a more commonly occurring morpheme. Perhaps another explanation—not operating entirely exclusively of Lofstedt's—exists, which does not limit the reason for omission to the lateral transfer of another accusative morpheme from a different set of stems.

Vaananen (1966) differently explained the omission after -a, based upon the phonetic similarities between the nominative and accusative singulars of a-stems, and the distinctness of the nominatives and accusatives of o-stems.⁵⁷ For example, *filia* in the nominative would be phonetically identical to *filiam*, leaving the context and positioning to determine between the two syntactic roles in writing. Likewise, as the quantitative vowel system declined, the ablative singular could be added to the nominative and accusative in similarity of articulation. Again, however, the third declension endings, omissions after -e, are unexplained by this.⁵⁸

It is necessary to expand the parameters of investigation to find a more inclusive explanation for the greater rates of omission after both -a and -e, one which is not as binary as those of Lofstedt (1961) and Vaananen (1966). The explanation lies in the similarity of

⁵⁶ p. 228.

⁵⁷ p. 76.

⁵⁸ Vaananen's (1966) explanation was limited in scope to the inscriptions of Pompeii, and it is worth noting that in his later work on 'Vulgar Latin' (1981), this explanation is not present.

pronunciation to more than simply the nominative and accusative cases. In the third-declension endings, the articulation of an accusative in non-elite Latin sounded identical to the ablative: consider *homine* and *hominem*.⁵⁹ We have already seen that the accusative singular a-stems sounded identical to the nominatives.⁶⁰ The ablative singular ending in -e and the nominative and ablative endings in -a are phonetically identical to the accusative pronunciations of the -em and -am terminations, respectively. A quick perusal of the *CIL* or any other corpus will reveal that in non-elite texts both final -a and -e are common.

However, the orthographic status of final -u cannot be explained so clearly. While the accusative in o-stems, *filium* for example, would have ended in the /u/ phoneme, the equivalent graphemic ending -u is considerably less common than its phonemic counterpart. Hence, -um for /u/ is used disproportionately more than -am for /a/ and -em for /e/. There is a likely morphological explanation for this, one which reflects a common feature of the inflectional system of non-elite Latin.

In elite Latin, word-final -u is an acceptable morpheme, being used in fourth declension nouns regularly (*versu*, *manu*, etc.). However, the situation is quite different in non-elite Latin, where the fourth declension was used rarely at best. With few exceptions, nouns of the fourth declension were absorbed by the second declension, with which they shared common inflections and gender; as a result, second declension inflectional morphemes were used for what in elite Latin were fourth-declension nouns.⁶¹ In the second declension inflections, no word-final -u

⁵⁹ Herman (2000): p. 52.

⁶⁰ Furthermore, the a-stem singular accusatives would have sounded identical to the ablative singular when vowel quantity was no longer pronounced in speech.

⁶¹ Herman (2000): p. 62. See also Palmer (1954): p. 162.

grapheme exists in standardized spelling. The following table illustrates the case endings in the non-elite morphological system which are represented by each relevant final vowel phoneme:

Final /a/	Final /e/	Final /u/
Nominative Sing. Accusative Sing. Ablative Sing.* *without vowel quantity	Accusative Sing. Ablative Sing.	(None)

Table 1. Case endings represented by the same phoneme in non-elite Latin.

A word should also be said about a specific syntactic occurrence in the usage of the ablative and accusative cases, which perhaps contributed to the further omission of the final -m grapheme after -a and -e (the sounds of which were already the same in non-elite speech). Case confusions were common in prepositional phrases in non-elite Latin, and the accusative was often used as the default prepositional case in place of the ablative.⁶² As has been noted, the ablative forms in the first and third declension inflections were often phonetically indistinct from the accusative forms. In o-stem nouns, however, the final /o:/ of the ablative was phonetically distinct from the final /u/ of the accusative, and the -o was retained as a grapheme. Hence, the phonetic similarities, combined with the increasing erosion of distinction between the functions of the ablative and accusative cases, decreased the need to distinguish between the written forms.

⁶² Herman (2000): p. 60-61. Several examples will be discussed in Section II.

The distinction between the phonemes /o:/ and /u/ of o-stems did not permit such syncretism (yet) in this class of nouns.⁶³

The result was that non-elite authors with some awareness of written final -m did not prefer the word-final -u grapheme.⁶⁴ Thus, the more standardized accusative, the “learned form” -um was retained as a regular feature of non-elite orthography, as the phonetic quality of final /u/, unlike /a/ and /e/, did not correspond to an inflectional grapheme in non-elite Latin, nor did it share phonetic similarity with forms from other cases.⁶⁵

Syntactic Considerations for Omission

The omission of final -m does not appear to be strictly limited to morphological factors. Omission tends to occur with greater frequency and consistency in specific syntactic environments. Evidence suggests that omission takes place most commonly in multi-word phrases, specifically prepositional phrases and accusative noun phrases with multiple objects. The implication is that omission is perhaps more likely to take place when another word in the phrase either carries the syntactic weight (as is the case in prepositional phrases) or, by the presence of an accusative morpheme, renders repeated accusatives syntactically unnecessary (as in lists of objects, or appositional phrases).

⁶³ See Herman (2000): p. 56 for the phonetic distinctness of /o:/ and /u/. Adams (1977): p. 24 discusses the merger of the phonemes /o:/ and /u/, which will also be discussed in the following section of this paper.

⁶⁴ With the exception of monosyllabic and uninflected forms such as *tu*.

⁶⁵ Adams (1977): p. 24.

Henceforth, and almost entirely in the discussion of the texts below, omissions within these environments (prepositional phrases and multi-word accusative noun phrases) will be referred to as phrase-internal omissions. Unless otherwise noted, phrase-internal will refer exclusively to these two syntactic environments.

The syntactic considerations for omission have been studied primarily in prepositional phrases, where the accusative began to encroach upon the territory of—and eventually absorb or syncretize with—the ablative.⁶⁶ As mentioned above, the accusative became somewhat of a ‘default’ prepositional case in non-elite Latin. The change corresponds to the very gradual loss of the synthetic inflectional system in favor of an analytic one, in which the prepositions themselves increasingly carried the semantic meaning of the phrase more so than the inflection.⁶⁷ The result is that omission of final -m in the default accusative case did not interfere with the semantic or syntactic value of the phrase.

Similar omissions, which do not affect the meaning of the phrase, occur frequently in two types of accusative noun phrases: appositives and lists. Omission in these environments appears to be more likely if one final -m morpheme is present in the phrase, suggesting that an author perhaps felt one morpheme sufficient to serve as a marker for a phrase, or that repetition was redundant.

⁶⁶ Vaananen (1981): p. 112. The merging of the accusative and ablative cases is difficult to definitively trace. For discussions of the merging (or absorbing) in Late Latin, see Clackson and Horrocks (2008) p. 276-278, and in less chronologically specific terms, Herman (2000) p. 56-57. For the purposes of this research, the distinction between merging and absorption is less important, given the dominance of the accusative case in prepositional phrases.

⁶⁷ Adams (2013): p. 258-259. The dominance of nonstandard analytic phrases, using nonstandard cases, is featured in Latin as early as the plays of Plautus, in the speeches assigned to non-elite speakers.

Omission in these environments has received less attention, particularly in studies of Latin during the imperial period (with which this research is largely concerned). Adams (1976) briefly mentioned the circumstances for omission in the accusative list in the discussion of a later Latin document (the second Chronicle of Anonymus Valesianus), noting that “the author apparently felt it sufficient to mark the case in the classical manner just once; in the rest of the series he would employ a spelling which better represented his pronunciation”.⁶⁸ The evidence in the texts below, however, will speak for itself.

One important change in the word order of noun phrases perhaps helped facilitate the omission of final -m in these environments. It was common in non-elite Latin to place the words of a noun phrase next to one another, contiguously.⁶⁹ This tendency differs from Literary and higher registers of Latin, in which the separation of phrase components was quite common (with a genitive, for example, between a noun and adjective). The contiguous placement of words in a phrase decreases ambiguity concerning syntactic roles, and creates a more spatially cohesive unit.⁷⁰ Placement, then, becomes an important element in syntax, and accusative noun phrases with one morphosyntactic marker could be interpreted as a cohesive unit by their spatial proximity to the morpheme.

To be sure, the syntactic tendencies to omit final -m in prepositional and multi-word accusative noun phrases and the morphological preferences to omit after -a and -e do not always operate exclusively of one another. As the evidence below will demonstrate, the morphological

⁶⁸ p. 52.

⁶⁹ Herman (2000): p. 83.

⁷⁰ For word order in noun phrases, see Herman (2000): p. 83. For the syntactic implications of contiguous word order, see p. 84. This tendency—although present from an early age—should be considered in the context of the gradual, slow shift toward a more fixed, analytic word order.

preference to include final -m after -u is still active in these syntactic environments, though the preference is less pervasive. On the other hand, omissions frequently occur outside of these syntactic environments, though less commonly.

Vowel Mergers and Diachronic Change

From the late Republic onward, several changes in the articulation of vowels took place in Latin, many of which were regional and would later be reflected in the differences in the Romance languages. A number of changes, however, seem to have taken place through all or the majority of the provinces. While classical, standard orthography was largely resistant to reflecting these changes, the phonetic spellings of non-elite texts provide a large body of evidence. It has already been mentioned that the gradual decline of the quantitative system contributed to the similarities in pronunciation between the accusative and ablative cases in a-stems.

There is one other change which is particularly relevant to the omission of final -m in writing, namely the merger of the phonemes short u (/u/) and long o (/o:/) into close o, phonetic /ɔ/, which was represented orthographically using o.⁷¹ Both phonemes, prior to the merger, took place in a similar place of articulation, as back close vowels with rounding. As a result of the merger, the omission of final -m in o-stem nouns no longer required the final -u grapheme; instead, final -o was increasingly used (*filio* for the classical *filium*, for example), which was an

⁷¹ Herman (2000): p. 31. It is also worth noting that this change, based upon evidence of the Romance languages, did not take place in Romania. The change resulted in the final -o singular morpheme in Italian and Spanish, for example, in words such as *amigo* and *cibo*.

already-familiar word-final grapheme of first person verbs, the ablative and dative cases, etc.⁷²

Adams (2013) assigns the merger to a very late period, the fifth century CE and later.⁷³ The chronology is especially important. One of the primary assertions of the present research is that authors included final -m after -u based upon the morphological notion that final -u was not part of the non-elite written inflectional system. With the arrival of the /u/-/o:/ merger, terminations in -o became phonetic spellings of accusative o-stems, and final -o was a well-established grapheme which did not seem as unusual as final -u. Thus, in order to analyze the linguistic environment in which final -u and -o still represented distinct phonemes, it is important to examine texts prior to the vowel merger. Hence, the texts examined here will not be dated later than the late fourth century CE.

The appearance of -o (classical -u) is also a feature of Old Latin, however, and it is necessary to distinguish between the two linguistic environments of the archaic spelling and the much later vowel merger. In final syllables in Latin, PIE /o/ became /u/ before a final consonant.⁷⁴ Old Latin texts often reflect orthographically the original -o of the PIE o-stem nouns, as in *donom* (classical *donum*), and the feature as an archaism of spelling continued for some time. The spelling was particularly persistent following another -u, as in *equos* (classical *equus*) and *servos* (classical *servus*).⁷⁵ Given the persistence of the archaic spellings, and the late arrival of the vowel merger, the appearance of -o in texts well into the imperial period should be

⁷² Gaeng (1977) offers several examples of the accusative final -o, as does Omeltchenko (1971).

⁷³ p. 66-67. Others are less specific with their estimates, but also attribute the merger to the Late Latin period.

⁷⁴ Sihler (1995): p. 66. There are certain exceptions in monosyllables, such as *quod*.

⁷⁵ For the duration of the archaic spelling, see Adams (2013): p. 63. See p. 63-66 for examples. For the pattern of writing the archaic -o after -u, see Baldi (2002): p. 257.

considered archaisms of spelling rather than phonetic reflections of the vowel system. At any rate, final -o for -um is comparatively rare in texts of the Imperial Period, and occurrences will be discussed in their individual contexts.⁷⁶

Section II

Analysis of Non-Elite Texts

Preliminary Notes

As mentioned in the previous section, consideration has been taken to present texts from the late Republic through the fourth century CE, and from geographically diverse locations. The body of texts attempts to reflect the linguistic environment of the empire, including samples from both native speakers and learners of Latin as a second language. The common sociolinguistic thread among the texts, according to the evidence available, is that they were produced independently of the elite, literary circles in Rome, and for non-literary purposes.

All of the texts omit final -m in some capacity, and the contexts will be discussed individually. Quantitative data will be presented when appropriate, particularly for texts which constitute a singular group (such as the body of letters in the Terentianus archive) or are comprised of many individual samples (such as graffiti). Not all texts will be reproduced in their entirety, especially if the bulk of the text does not relate to the omission or inclusion of final -m.

The Tiberianus Archive

⁷⁶ As a reflection of the vowel merger, final -o becomes commonplace in texts of the late 6th century and beyond.

The Tiberianus Archive was discovered at Karanis, a small Egyptian town near Alexandria, during excavations between 1924 and 1934.⁷⁷ The majority of the letters, 11 of the 16, are a correspondence between Claudius Tiberianus and Claudius Terentianus taking place in the early second century CE.⁷⁸ The relationship between Tiberianus and Terentianus is the subject of debate. Terentianus frequently addresses Tiberianus as *pater* or *pater et dominus*, and most scholars believe Tiberianus was either the biological or adoptive father of Terentianus; that Tiberianus was the adoptive father appears to be the dominant view.⁷⁹ A variety of topics are discussed in the letters, including requests for items for Terentianus and his mother, the health of Tiberianus, and Terentianus' life and efforts to advance in the military.⁸⁰

The letters provide insight into a great number of linguistic processes occurring in non-elite Latin. Both Tiberianus and Terentianus were likely Greek-speaking, Romanized Egyptians, who learned and used Latin either while serving the the military or as members of bilingual families.⁸¹ The Latin letters contain several examples of Greek interference in word order, style of greeting, and vocabulary, while Latin interference in the Greek letters is very rare.⁸² The Latin in the Archive thus provides not only evidence for phonological and morphosyntactic features of regional, non-literary Latin, but also features of Latin as a second language.

⁷⁷ Lehmann (1988): p. 11. The letters are produced in the Michigan Papyri Vol. VIII 467-481 and inv. 5395.

⁷⁸ Strassi (2008): p. 95. Strassi further argues for a period of time between 110-115 CE.

⁷⁹ See Strassi (2008) p. 113-123 and Adams (1977) p. 1-6 for a discussion of the familial relationship.

⁸⁰ For a thorough discussion of Terentianus' military life and difficulties, which occupy substantial portions of the letters, see Davies (1973).

⁸¹ Adams (1977): p. 3-4.

⁸² Adams (2003) describes the bilingual character of the documents in several places.

In the five letters of Claudius Terentianus composed in Latin in the Tiberianus Archive, final -m is included and omitted with varying consistency.⁸³ Indeed, the letters vary widely in many spelling features and orthographic styles. The variations, according to Halla-aho (2003), can be attributed to the employment of several different scribes. Two of the letters (470 and 471) were arguably written by the same scribe, while the remaining three (467-469) were written by different scribes.⁸⁴ Inv. 5395, a fragment, is likely a duplicate of Letter 468 and written by the same scribe.⁸⁵ Enough differences exist between 468 and 5395 that it should, for linguistic analysis, be considered alongside the other letters. There are likely, then, four scribes whose orthographic and spelling conventions appear in the series of letters. Despite the involvement of several scribes, there are semantic and syntactic consistencies in the letters which indicate that Terentianus was the sole author of the first five letters.⁸⁶

The scribal influence is more apparent in the orthographic conventions of the letters than in the syntax and vocabulary. Word order, syntax, and vocabulary would not have been subject to the same level of scribal interference as the transcription of phonemes into orthographic forms, given the greater phonetic distinction. On the other hand, the writing of morphemes with a low phoneme-grapheme correspondence, and orthographic conventions which were not produced phonetically, were subject to the knowledge of the scribe.⁸⁷ In every letter from Terentianus,

⁸³ Letters 467-471 in the Claudius Tiberianus Archive. Letter 472 was written in Latin, but by Tiberianus to Terentianus.

⁸⁴ Halla-aho (2003): p. 245. Doubts remain that the same scribe wrote 470 and 471, due to a number of orthographic inconsistencies. See Halla-aho (2003) p. 249 for these inconsistencies.

⁸⁵ Strassi (2008): p. 26.

⁸⁶ Adams (1977): p. 84. The author frequently uses *ille* and phrases such as *scias me*, for example.

⁸⁷ Consider an example of scribal influence in the accusative 'scriba(m)', which, in pronunciation would not have included the final bilabial nasal /m/. Scribal understanding of orthographic conventions, and not Terentianus' speech, would determine whether or not final -m appears in the text.

final -m is omitted in multiple instances and with varying degrees of consistency.⁸⁸ Final -m is omitted in particles on several occasions, as well as twice in verbs.⁸⁹ As Terentianus would not have pronounced final /m/, scribal knowledge of spelling determines its inclusion or omission in the letters.

Investigation into omission in nominal inflections, despite the apparent inconsistencies, provides evidence for linguistic patterns of omission under certain circumstances. Omissions in the Terentianus Letters occur most frequently in accusative nouns within both noun and prepositional phrases. While every scribe was aware of final -m and included it more frequently than omitting it, each omitted final -m at least twice. The letters present 160 known accusative singulars, 31 of which contain an omission of final -m.⁹⁰ In total, the data show that final -m was omitted from first-declension accusatives at a rate of about 50%, from third-declension and fifth-declension (-em) accusatives at about 33%, and from second-declension and fourth-declension (-um) accusatives at a much lower rate of about 14%.⁹¹ Of the accusative singular forms, those from the second declension appear the most frequently (88 times total), and have by far the lowest rate of omission of final -m.⁹²

⁸⁸ The letter from Tiberianus (472) does not omit final -m, and it exhibits a greater degree of linguistic competency. See Halla-aho (2003): p. 250.

⁸⁹ Omission in these environments is rare in comparison to omission in nominal inflections.

⁹⁰ Adams (2013): p. 130. Adams' numbers do not include Letter 5395, attributed after the publication of his study. I have calculated the occurrences of inclusion and omission from that letter and added them to Adams' total of 149 with 29 omissions.

⁹¹ See table 1. Adams (1977): p. 22-23. Only one known fourth-declension accusative is present in the archive: *acu* (471.11).

⁹² Adams (1977): p. 23. Again, my own additions from Letter 5395 are added to Adams' figures from the remaining letters (79 in Adams).

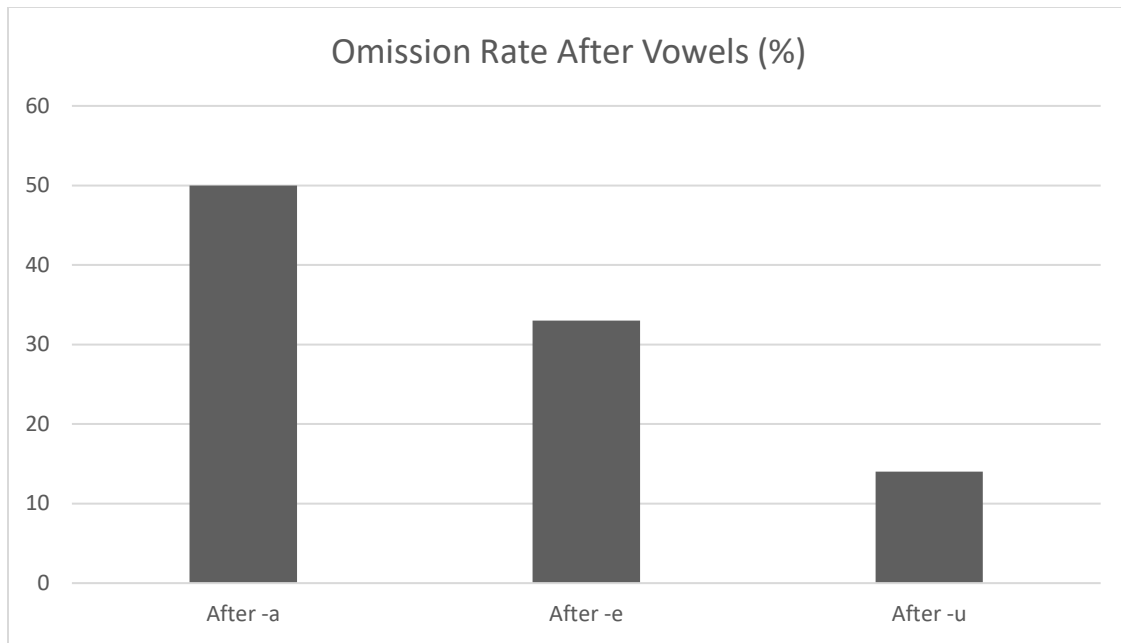


Table 2. Percentage of omission after vowels in the Terentianus Letters.

Closer examination of the omissions also reveals syntactic patterns. In accusative nouns outside of prepositional phrases, final -m is omitted more frequently in certain syntactic environments. In the Terentianus Letters, omission occurs most frequently phrase-internally, specifically in phrases with more than one accusative in which at least one accusative morpheme is written.⁹³ The omissions occur in both head nouns and modifiers. There also does not appear to be evidence that the omissions are phonologically conditioned, given that they occur before both nouns and consonants.⁹⁴

Letter 467 is considered to be, in terms of adherence to classical standards, the most correctly written, perhaps by a military scribe of higher rank or educational status.⁹⁵ Yet even in

⁹³ Either a singular or plural accusative morpheme seems to be sufficient to warrant omission in the other inflected words in the phrase.

⁹⁴ Adams (2013): p. 131.

⁹⁵ Halla-aho (2003): p. 248, based on orthographic and spelling conventions consistent with official military documents.

this letter, final -m is omitted in an accusative noun phrase, in the modifiers after an accusative plural: *mihi tibi amphoras II olivarum colymbade(m) una(m) et una(m) nigra(m)* (467.27-28).

With the exception of an omission in a prepositional phrase (to be discussed on p. 34), these are the only omissions in Letter 467; all of the omissions result in final -a or -e. Several lines above, final -m is included in a list of supplies in the accusative case, including in modifiers: *mittas mihi...gladium pugnatorium et lanceam et dolabram et coplam et lonchas duas...* (467.19-20).

The omission and inclusion in such an environment suggests not a preference for either, but a comfort level with both, even for a scribe who seems to have had a competent command of written Latin forms. Although the sample is limited, the scribe did not omit final -m before -u.

Omissions in the same morphosyntactic environment occur in several other letters in the Archive. Letter 468 is the most inconsistently and poorly written letter in the Archive, but for these reasons it is a valuable source for the study of phonetic and orthographic conventions in non-elite Latin.⁹⁶ Letter 468 contains a number of phrase-internal omissions of final -m: *accipias caveam gallinaria(m)* (468.16), *mi mittas dalabram ea(m) quam mi misisti* (468.27-28), *meliozem alia(m)* (467.29-30), *salutem tuam...bona(m) reacceptam* (468.32-33), *Saturninum scriba(m)* (468.51), *Capitonem centurione(m)* (468.52), *Frontone(m)* (468.56), *Severinu(m) et Marcellu(m) collega(m) tuum* (468.58-59), and *Serenum scriba(m)* (468.60). Of the 11 phrase-internal omissions listed here, eight occur in modifiers (*gallinaria*, *ea*, *scriba*, etc.), and three in head nouns, all of which happen to be proper nouns. Nine omissions occur after -a or -e, while two occur after -u (both in proper nouns).

Letters 468 and 5395 also contain a repeated phrase-internal omission, occurring five times in 468 and twice in 5395: *par unu(m)* (468.10-11, 468.17, 5395.3). The phrase occurs in a

⁹⁶ Halla-aho (2003): p. 248.

list of supplies which appears in both letters (with slight variation): *par unu(m) amictoria par unu(m) sabarna par unu(m) saccos par unu(m) et straglum linium...* (468.10-11).⁹⁷ The phrase is also written once in a list at 468.17-18, the equivalent of which (if it existed) is lost in 5395.⁹⁸

Letters 470 and 471, perhaps written by the same scribe, contain few omissions of final -m.⁹⁹ Each letter does contain one phrase-internal omission: *balteu(m) militare* (470.6), and *item acu(m) lentiaminaque mi mandavit* (471.11).¹⁰⁰ Both omissions occur after -u, and neither occurs in a modifier. While there is a strong preference to include final -m in 470 and 471, the omissions occur in the less frequent morphological environment after -u. However, like *par unu(m)* and *Severinu(m) et Marcellu(m)*, the omissions occur in the same syntactic environments: phrase-internal accusative singulars in lists.

Letter 469 contains one omission of final -m in an isolated first-declension accusative: *posso tibi epistula(m) scribere* (469.15). The letter also contains an omission of final -m in a second-declension adjective, but in a damaged section of the letter which renders impossible the identification of the syntactic environment:*caru(m) {en} eni habemus* (469.19-20). The most common omissions in Letter 469 occur in what are likely two examples of the so-called accusative of price.¹⁰¹ Asking Tiberianus to purchase items for him and his mother, the text reads: *merca minore(m) pretium rogo* (469.17). The phrase possibly appears earlier as well, in

⁹⁷ Much of the list is lost in 5395, but the legible section reads: *par unu et saccos par unu et straglum linium* (5395.3).

⁹⁸ *phialas quinarias par unu(m) et calices paria sex et chartas...*

⁹⁹ Letter 470 is considerably damaged, with several folds and holes. See Strassi (2008): p. 30.

¹⁰⁰ In *balteu(m) militare*, it cannot be ignored that the word following omission begins with an -m. While less common in letters, omission of final letters before a word beginning with the same letter is somewhat common in inscriptions. See p.

¹⁰¹ See Adams (2013): XIV.1 for a discussion of the construction, which appears early in Petronius as spoken by a freedman. Adams also convincingly argues against *minore* being an ablative.

vide si potes imbenire minore(m) pr[etium] merca (469.6-7), although the ending of *pretium* is unreadable.

There are three omissions of final -m in a noun in a prepositional phrase. One omission occurs with an a-stem noun: *ad Delta(m)* (467.30). Two omissions occur with third-declension nouns: *in classe(m)* (467.16), and *ad nave(m)* (471.26). In all three cases it is incorrect to assign the use of the ablative case to the objects of the prepositions, as each scribe utilizes the correct accusative forms with the prepositions elsewhere in the letters, notably including final -m before /u/ in every instance: *ad annum* (467.7) *in militiam* (467.22), *ad varoclum* (471.26). Likewise, the frequent preference for the accusative with prepositions is apparent in several other forms, such as *con culcitam* (468.12), *con tirones* (471.22), *con fratrem suum* (470.10), and *pro xylesphongium* (471.29). The evidence shows influence of the widespread weakening of distinction between the accusative and ablative cases as the objects of prepositions. In the Terentianus letters the accusative often inherits the function of the ablative, not vice versa. This pattern is consistent with the syncretism of cases in prepositional phrases in spoken and non-elite Latin.¹⁰²

After accounting for the omission of final -m in nominal inflections, there remain several omissions in other parts of speech in the Terentianus letters. Final -m is omitted in the particle *aute(m)* by two different scribes (468.12 and 471.18-19), but it is also included in the same word in the same letters. Letter 469 contains an omission in the preposition *sequendu(m)* (469.20). The most peculiar omissions occur in two side-by-side verbs in 468: *iacuisse(m)* (468.21) and *speraba(m)* (468.22). It is worth noting, but outside the scope of the present research to pursue,

¹⁰² For the dominance of the accusative over the ablative in prepositional phrases, see Adams (1977): p. 37. See Herman (2000) p. 52-55 for the general trend in non-elite Latin.

that the verbs are spelled phonetically, and that perhaps the tense markers -isse and -ba create sufficient distinction and render final -m unnecessary to the scribe of 468.

A number of conclusions can be drawn from the Archive regarding the omission of final -m. Terentianus' speech suggests that the accusative case was used with frequency as the 'prepositional case', a morphological trend which would show up more prominently in writing in subsequent centuries. Evidence of the archaic spelling -o for -u appears frequently in the letters (*con, salvom*, etc.), but infrequently in nominal forms, and it does not seem at all to have increased the omission of final -m in second-declension forms.

The employment by Terentianus of multiple scribes across several years indicates that omission was not an isolated phenomenon in the orthographic tendencies in the region. The strong preference to include final -m after /u/ is present in the letters, showing a much lower rate of omission than after /a/ and /e/. That the majority of omissions in nominals or adjectives are phrase-internal indicates that scribes felt more comfortable with omitting final -m in the presence of other accusatives, as part of lists or in nominal phrases in which final -m is included at least once (e.g. *caveam gallinaria, Serenum scriba*). The accusative of price expression (*minore pretium*) concisely demonstrates the preference to include final -m after /u/ and a willingness to omit it after -e. The letters of Terentianus support the present research. Although final -m is omitted in several parts of speech and across four nominal declensions, the preference is clearly to include it after -u.

The Contracts of Gaius Novius Eunus

Three wax tablets containing loan contracts for Gaius Novius Eunus were found at Murecine, near Pompeii, among the documents of the *Tabulae Pompeianae Sulpiciorum*. The *T.*

Sulp. record the financial and legal transactions of Gaius Sulpicius Faustus, his freedman Cinnamus, and Sulpicius Onirus, including loan terms, purchases, and requests to appear in court.¹⁰³ They are dated to the middle of the 1st century CE, and are among some of the earliest texts analyzed in the present research. The tablets contain loan details and promises for repayment written by Gaius Eunus himself, who was a recipient of loans from the businessmen.¹⁰⁴ Unlike the great majority of the other documents in the archive, Eunus' writings lack the practiced professionalism of scribes, and contain many phonetic spellings and errors, even in language which is largely formulaic.

In total, final -m is omitted in nominatives and accusatives nine times out of 27 in the Eunus tablets, at a rate of 33%. Final -m is omitted in the one a-stem accusative singular in the documents, *suma* (for *summam*) in 68.6. There are three omissions after -e, at a rate of 43%. Five omissions come after -u, at a rate of 29%. Twice final -m is omitted in *septe* (for *septem*), and although the word itself is uninflected, both times it is adjectival in an accusative phrase, modifying the noun *modium* in which final -m is included.¹⁰⁵ All of the omissions are phrase-internal in lists, in which the context and surrounding inflections make clear the syntactic role of the words.

The majority of omissions after -u, four of the five, appear in the form *nummu* (for *nummum*). Indeed, the form *nummum* is not found anywhere in Eunus' contracts. Likewise,

¹⁰³ Verboven (2000): p. 161.

¹⁰⁴ See Clackson and Horrocks (2011): p. 238 for the dating of the contracts. Also see p. 238-243 for a discussion of the content and linguistic features of the longest tablet (68), which also has a scribal copy attached to it for comparison.

¹⁰⁵ 52.18 and 51.15.

Eunus omits final -s from the accusative plural *nummo* (68.13).¹⁰⁶ The various inflected forms of *nummus* are often abbreviated elsewhere as *N* or *num*, similarly to *P* used in place of *pecunia*; perhaps with the quantifiers (*milia*, *centum*, etc.) taking precedence over the word for currency itself, Eunus felt comfortable taking greater liberties with the spelling of the word.¹⁰⁷

The prepositional phrase *per Iobe(m) Optumm Maxumu(m) et nume dibi Augusti et Genium C Cessarisi Augusti* in 68.9-10 contains two examples of omission of final -m, and a rarer omission of final -n. The phrase follows the pattern of greater likelihood of phrase-internal omission in which at least one accusative morpheme is present. Clackson and Horrocks (2011) suggest that perhaps Eunus was a speaker who still nasalized final -m, and that the final -m on *Optumm*, which also appears in the accusative *rediturm* (8), is an attempt to orthographically represent the sound.¹⁰⁸ Whether this is the case or not, the addition of final -m displays the use of an acceptable grapheme to represent an uncommonly written word-final phoneme.

While the formulaic constructions of the Eunus Tablets do not provide vocabularic or syntactic variation, they nevertheless exhibit tendencies to omit final -m in certain environments. The omissions are all phrase-internal and occur near words with an included accusative morpheme. There are several omissions after -u, but nearly all of them occur in one word (*nummu*), which is already prone to abbreviated spellings. The omissions after -a and -e, although the samples are limited, occur in higher percentages than after -u. The preference is to include final -m after -u (with the exception of *nummu*), and to more willingly omit it in lists and phrases with other accusative forms.

¹⁰⁶ *nummo* occurs once, resulting in an omission rate of 50%. At this stage, omission of final consonants other than -m occurs infrequently. See Adams (2013): p. 132-163.

¹⁰⁷ See T. Sulp. 48, 53, 117 for examples of abbreviations of words for currency.

¹⁰⁸ p. 240.

A Tablet from Vindolanda Concerning a Slave

The archive of documents from the Roman fort at Vindolanda in North England are well written when compared to the other corpora in the present research, particularly with regard to the inclusion of inflectional graphemes.¹⁰⁹ Final -m is overwhelmingly included in the generally linguistically uniform Vindolanda archive, which speaks perhaps to the level of scribal training among the soldiery and to the educational level of the wealthy inhabitants.¹¹⁰ The archive largely comprises military-related records and logs, but also a number of personal letters from both civilians and soldiers. Many of the residents were likely non-native Latin speakers, though the language appears to have been used very regularly at the fort, even in casual speech.¹¹¹

One document, still unpublished in the archive but analyzed elsewhere, is a damaged wooden tablet on which some type of legal agreement regarding a slave was written.¹¹² The text, as presented by Bowman and Tomlin (2005) reads:

5 ...Batauorum due meo Bello-
 uaco ser(u)um nomine Verecun-
 du(m) ciu(e) Ambianis et dedi per-
 missione(m) et uecturas ...
 triginta quinque et eum
 ser(u)um nutriui annos

¹⁰⁹ The documents display several examples of non-elite spelling and syntax, but with regard to nominal morphology, most adhere to classical standards.

¹¹⁰ Adams (2013): p. 18-19.

¹¹¹ See Bowman (1994) for a discussion of the content of the letters and the location in which they were found. See Clackson and Horrocks (2007): p. 244 for the linguistic environment at the fort.

¹¹² Bowman and Tomlin (2005): p. 11. There is debate about the purpose of the document, and whether it details the purchase of a slave or a manumission (p: 12-13). The missing portion and damage to the top of the document will perhaps never allow the matter to be convincingly settled.

dece(m) quinque¹¹³

The accusative *ser(u)um* in line two includes final -m, and in the following likely appositive descriptive phrase *nomine Verecundu(m) ciu(e)* the author feels it acceptable to omit the grapheme.¹¹⁴ In the following line, immediately following the verb *dedi*, the author omits final -m in *permissione(m)*. Lastly, while including final -m in *eum ser(u)um*, the author omits it in the accusative temporal phrase *annos dece(m) quinque*. Regarding the omission in *permissione(m)* and the inclusions in *eum ser(u)um*, the placement relative to the verbs should be noted; *permissione(m)* is omitted in postverbal position, while *eum ser(u)um* is preverbal. The damage to the tablet makes it difficult to determine much of the syntax, but the environments for omission are clearly phrases in which the syntactic values are made clear by other means (such as the presence of another final -m, or an accusative temporal phrase).

CEL 156: A Letter of Receipt

[...]rel[...] . [...]
[fateor me a]ççepisse . [...]sto[...]n[...]
[. . . redd]a(m) denarios [.]ngentos et [. c]entum
[.....] superari a[...]maur. [.]alicla(m)
5 [.....]purata(m) et [.] ! [...]e barbari. [. . .]. ei se patum
[. . . . [] m barbaricum [. . .]. miserat mi[hi] Cornelius
[G]ermanus procurator meus quas has res [i]ntra scrip-
tas meas salbas sanas recepisce scripsi Nonarum
Octobrium ad Pulvinos ad statione(m) liburnes fides
10 interveniente Minucium Plotianum triarchum
et Apuleium Nepotem scriba(m) actum Pulvinos
Nonis Octobris Imp(eratore) · Vero · ter(tio) · et Umidio Quadrato
consulatus

¹¹³ p. 12.

¹¹⁴ In the same appositive phrase, *ciu(e)* is a curious form, where one would expect the accusative *civem*.

Written at *Pulvinos*, the modern location of which is unknown, *CEL* 156 is a letter of receipt for several items, dated October 7, 167 CE.¹¹⁵ The top portion of the letter is significantly damaged, rendering the sender and recipient indeterminable. Based upon a Greek genitive construction, Greek genitive morphemes, and its location among several Greek and Greek-influenced documents, Adams suggests that the letter was written by a non-native—and likely Greek—Latin speaker.¹¹⁶ The author’s use of Latin here is clearly practical, and he exhibits competent communicative proficiency and orthographic conventions.¹¹⁷ There are, though, several phonetic spellings in the letter, most notably the consistent omission of final -m after -a.¹¹⁸

Final -m is omitted four out of twelve times in *CEL* 156. It is omitted after every accusative singular a-stem, of which there are three. Conversely, of the seven instances after -u, final -m is never omitted. There is one omission, and one inclusion, of final -m after -e. As one might expect in a letter of receipt, there are several accusative forms in lists. The majority of the omissions occur in these lists, and at least one occurs in an appositive noun phrase: *Apuleium Nopotem scriba(m)*. Another omission is phrase-internal in the prepositional phrase *ad statione(m)*. The two words surrounding the two other omissions are damaged, and thus it cannot be determined with certainty if the omissions are phrase-internal. However, the corrupted form

¹¹⁵ Text reproduced in *CEL* (1992): p. 169.

¹¹⁶ Adams (2003): p. 510. The author uses the genitive to indicate ‘time within which’, and also uses a Greek genitive form -es (for -ης).

¹¹⁷ See Adams (2003), p. 14-15, and other sections, for the non-literary impetus to use Latin.

¹¹⁸ *Umidio* (for *Humidio*) is another example of phonetic spelling, demonstrating the loss of the word-initial aspirate.

...purata (5) is interpreted in the *CEL* to mean *purpuratam*, and an adjectival form which would, unless used substantively, be a phrase-internal omission.¹¹⁹

The author seems well aware that *ad* governs the accusative, given the prepositional phrase preceding *ad statione(m)* being in the accusative plural; the letter here reads *ad Pulvinos ad statione(m)* (line 9). The identical pronunciation of the third-declension accusative and ablative singular cases, the weakening distinction between the two cases after prepositions, as well as the orthographically-common final -e, produced an environment in which the inclusion of final -m was unnecessary to convey the meaning of the prepositional phrase.

The omission of final -m completely after -a and at a rate of 50% after -e are noteworthy, particularly when contrasted with a rate of 100% inclusion of final -m after -u. Also consistent with the trends of non-literary Latin are the phrase-internal omissions, often in lists. *CEL* 156 ultimately displays the preference of a likely non-native Latin speaker to include the final -m grapheme after -u and to more comfortably omit it after other vowels.

Graffiti of Pompeii and Herculaneum

Thousands of lines of Latin graffiti from across the Roman empire provide evidence of non-elite linguistic features. The majority of extant graffiti were preserved in Pompeii and Herculaneum by the eruption of Mt. Vesuvius, but hundreds of examples exist in Rome, Ostia, and elsewhere. The graffiti were produced, often anonymously, by members of a variety of ethnic, socioeconomic, and linguistic groups, and for a number of different purposes including

¹¹⁹ Cugusi, *CEL* (1992).

campaign advertisements and notes to lovers.¹²⁰ Such a diverse population of authorship predictably produces examples of varying linguistic styles and competency. Many of the graffiti adhere to classically ‘literate’ standards, reflective of a time in which the creation of graffiti was not limited to the non-elite inhabitants of the empire. The majority of the thousands of graffiti, however, contain numerous spelling errors, phonetic spellings, and idiosyncrasies.¹²¹ Among these linguistic features is the frequent omission of final -m.

In the thousands of lines of graffiti, there are relatively few instances in which the final -m morpheme is appropriate at all, omitted or otherwise. Accusative singulars and verbal inflections ending in -m are rare, for example, compared to nominatives, accusative plurals, and other inflectional morphemes. Abbreviations for words in which a final -m would be appropriate, were they spelled completely, are also common.¹²² The communicative nature of graffiti is such that linguistic parameters and rules are often disobeyed for a number of reasons, for example to economize space or increase writing speed.¹²³ As a result, the study of inflectional morphemes in the graffiti can be obfuscated by the question of whether an author’s writing is truly representative of his or her understanding of the language, or if the circumstances of the particular graffiti necessitated such a spelling.

The graffiti present dozens of omissions of final -m across all parts of speech. There are many graffiti in which final -m is omitted entirely, after every vowel including -u. Similarly to

¹²⁰ See Lloris (2014) for an introduction to the purpose and content of Roman graffiti, among other forms of epigraphy. Keegan (2011) discusses the spatial organization of graffiti as a representation of meaning along with the texts themselves.

¹²¹ See Milnor (2014): p. 14 for the graffiti which adheres to classical standards, and p. 14-15 for the non-elite varieties.

¹²² The most common are the variation shortenings of *salutem*, such as *sa* and *sal*. See *CIL* IV 08627b and 08628 for two examples.

¹²³ Keegan (2014): Ch. 1.

the writings on the Bu Njem Ostraka and funerary inscriptions, the spellings on these graffiti seem to be entirely phonetic. It is difficult, then, to determine if the author's omission was due to a lack of knowledge of the final -m grapheme, or a linguistic preference for omission under certain circumstances. For example, *CIL* IV 06892 from Pompeii reads:

quisquis amat nigra(m) nigris carbonibus ardet
nigra(m) cum video, mora libenter aedeo.¹²⁴

The author omits final -m on the two known accusative singulars, two instances of *nigra*.¹²⁵ With both omissions being after -a, and there being no environments for omission after other phonemes, the author's awareness of final -m cannot be determined. Another example of multiple omissions after the same phoneme includes *CIL* IV 08203, which omits final -m after -a twice, *ad Faustilla(m)* and *usura(m) deduxit*, and contains no other environments for omission. There are numerous other examples in the corpus of graffiti, more than need to be listed here, of such omissions after only one phoneme.

Many graffiti omit final -m entirely after several different phonemes. In cases such as these, the evidence suggests that the author of the graffiti was not aware of the final -m grapheme at all, given the lack of the bilabial nasal phoneme and the orthographic omissions under several syntactic and phonological conditions. *CIL* IV 02013 of Pompeii is the longest example of such an instance:

Niycherate V=
ana succula
que amas
Felicione(m)

¹²⁴ See Varone (2002): p. 57-58 for a discussion of the inscription and several possible meanings.

¹²⁵ There are two arguments concerning *mora*: first, that it is an accusative singular with final -m omitted (meaning 'delay'), and second, that it is a neuter plural of *morum* (berries). Neither position affects the current research, and to avoid the conflict, *mora* will not definitely be considered an instance of omission. See Varone (2002): footnote 72 for explanations of the opposing views.

5 et at porta(m)
 deduces
 illuc
 tantu(m)
 in mente(m)
 10 abeto

The graffito omits final -m after -a (*porta*), -e (*Felicione* and *mente*), and -u (*tantu*).¹²⁶ There are no inclusions of final -m, and thus no evidence to suggest that the author had a preference to omit or include the grapheme in certain environments; rather the author simply wrote phonetically.¹²⁷

Likewise, *CIL* IV 10697 of Herculaneum reads:

Fortunatus amat Amplianda(m).
 Ianuarius amat Veneria(m).
 Rogamus damna Venus
 ut nos in mente(m) habias
 5 quod te modo introrgamus.

Final -m is omitted in every instance, after both -a (*Amplanda* and *Veneria*) and -e (*mente*). Again, the evidence in the text does not indicate the author's familiarity with the final -m grapheme, but it does suggest purely phonetic orthography.¹²⁸

There are, however, a number of graffiti in which final -m is both included and omitted. In these graffiti more can be discerned about the author's preferences to include the grapheme. Given that he or she indicates familiarity with the final -m grapheme, and still under circumstances chooses to omit it, the instances of omission are stylistic and not due to a lack of

¹²⁶ See Varone (2002): p. 114 for commentary on the graffito.

¹²⁷ The purely phonetic spelling is also evidenced by the lack of the aspirate in *abeto* (for *habeto*), and the voiceless /t/ in place of /d/ in *at* (for *ad*).

¹²⁸ For example, *habias* (for *habeas*) and *damna* (for *domina*).

awareness of the grapheme. According to the hypothesis of the present research, these omissions are more likely to occur phrase-internally after -a and -e, often in environments in which one final -m is included.

CIL IV 10575 (Pompeii) is an account of days on which bread was produced. It reads: *XI k pane(m) factum, III nonas pane(m) factum*. Here the author has twice omitted final -m after -e, and twice included it after -u. The accusative *pane(m)* appears again in *CIL* IV 08566b in a long list of goods, all of which are in the accusative.¹²⁹ Of interest here is that *pane* appears alongside several accusatives which include final -m, with all inclusions following -u (*vinum, casium, oleum*). Another list, *CIL* IV 10566 (Herculaneum), contains several omissions:¹³⁰

et lucubratoriu(m) unum
Lucerna(m) aenea(m)
Hamula(m) una(m)
Pelvi cum basim

Final -m is omitted four times after -a (*Lucerna aenea, Hamula una*), and once after -u (*lucubratoriu*). All of the omissions in the list are phrase-internal, and, in the phrase *lucubratoriu(m) unum*, a final -m grapheme is present.

The graffiti of Pompeii and Herculaneum contain a rate of omission consistent with the range in many of the texts in this research. Of the 1,117 Latin graffiti analyzed, there are about 38 omissions of final -m, compared to 95 inclusions.¹³¹ The general rate of omission is just under 29%. In nominal, pronominal, and adjectival forms, the rate of omission increases to 34%. In

¹²⁹ See Adams (2013) p. 254-255 for a discussion of the accusative used in lists, likely as the objects of implied verbs.

¹³⁰ All omissions occur in lines 8-11, and only those lines are presented here.

¹³¹ There are a number of uncertainties about nominal inflections, for example as in footnote 125 above. However, excluding the uncertain inflections from the quantitative data does not significantly alter the rate of omission.

graffiti which display an awareness of the final -m grapheme, the omissions occur entirely in lists.¹³²

After specific phonemes, the data display a preference to include final -m more frequently after -u. Final -m is omitted at a rate of about 45% after -a.¹³³ After -e, omission occurs at a rate of nearly 44%.¹³⁴ There is one inclusion after -o in *parvom*, the archaic use of -o for -u.¹³⁵ The great majority of inclusions after -u occur in the preposition *cum*.¹³⁶ In inflected words, final -m is included after -u 38 times, and omitted only eight times, for a rate of just above 17%. Finally, in graffiti which both include and omit final -m at least once in an inflected word, final -m is omitted after -a and -e four times more often than after -u.¹³⁷

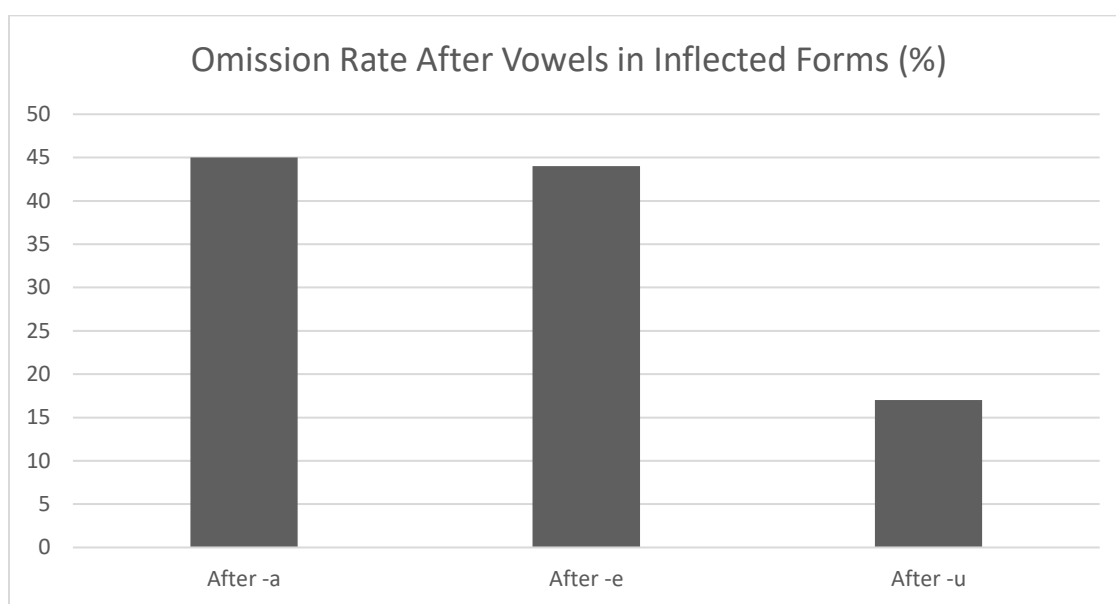


Table 3. Omission rate of final -m after vowels in inflected forms in the graffiti of Pompeii and Herculaneum.

¹³² Six in adjectival phrases, and two in participial phrases.

¹³³ Sixteen omissions to nineteen inclusions.

¹³⁴ Fourteen omissions to eighteen inclusions.

¹³⁵ *CIL* IV 04972. See above (p. 25) for the persistence of -o for classical -u. The archaic spelling here, as in several texts in this research, should not be confused with the merger between /u/ and /o/ which occurs centuries later.

¹³⁶ Twenty eight inclusions in *cum*, to one omission.

¹³⁷ Eight omissions after -a or -e, to two after -u.

For several of the graffiti, there is nothing to indicate that the authors cared to write the final -m grapheme at all, if they were aware of its proper usage (particularly as an inflectional morpheme). However, analysis reveals a clear preference to include final -m after -u in the corpus of graffiti at Pompeii and Herculaneum, and a willingness to omit it more freely after -a and -e. Furthermore, in a graffito in which final -m is both present and omitted, the omissions occur more frequently after -a and -e, as well as phrase-internally. While graffiti in which final -m is both included and omitted are not common, the results within the few texts are consistent with the hypothesis presented in the present research.

Latin Influence: Instances of Omission in Pompeian Oscan

It is likely that final /m/ was generally pronounced in Oscan, given the overwhelming prevalence of its inclusion even among the most phonetically spelled texts; the exception is in and around Pompeii, where final -m was omitted more than it was written in Oscan texts. It is possible that the sound was weakened in pronunciation, but there is little to suggest that the phoneme was completely lost.¹³⁸ The orthographic omission as a result of interaction with Latin and increasing bilingualism cannot be discounted, particularly in a bilingual text. By the time of the Social War, Latin and Oscan had been in linguistic interaction for generations, and the prestige (and likely dominant) language in the Oscan region was Latin.¹³⁹ Livy comments on

¹³⁸ See Buck (1904): p. 71 for the status of the grapheme and phoneme in Oscan texts in and around Pompeii.

¹³⁹ Adams (2003): p. 112-113.

how, in 180 BCE, the residents of Cumae asked to conduct business and speak Latin in public affairs.¹⁴⁰

There are several omissions in the famous Eituns Inscriptions of Pompeii. The five large inscriptions were likely created during the Social War, with the intention to direct soldiers and personnel in the event of a siege. The inscriptions were painted red in large letters, and were placed in high-traffic areas in the city.¹⁴¹ Final -m is both included and omitted several times in the inscriptions.¹⁴² Final -m is omitted six times, under syntactic circumstances similar to the trends of omission in Latin; three times in *anter tiurri(m)* (Latin *inter turrim/turrem*), and three times in two instances of the phrase *veru(m) Sarinu(m)* (Latin *portam Sarinam*).¹⁴³ All of the omissions are phrase-internal: four in prepositional phrases, and three in noun phrases containing adjectives. There are no inclusions of final -m.

A curse tablet likely from Cumae, written in both Latin and Oscan and dating perhaps to the time of Sulla, contains a likely example of interference from Latin to Oscan in the form of the omission of final -m a number of times.¹⁴⁴ The full text is given as produced by Mancini, transliterated to the Latin alphabet (2008):¹⁴⁵

l. harines. her. m^{aturi}
c. eburis

¹⁴⁰ 40.43.1: *Cumanis eo anno petentibus permissum ut publice Latine loquerentur et praeconibus Latine vendendi ius esset*. “In that year, the people of Cumae sought permission to use Latin in public affairs and as the language of commerce.”

¹⁴¹ See Henderson (2014): p. 99-100 for the purpose, dating, and placement of the inscriptions.

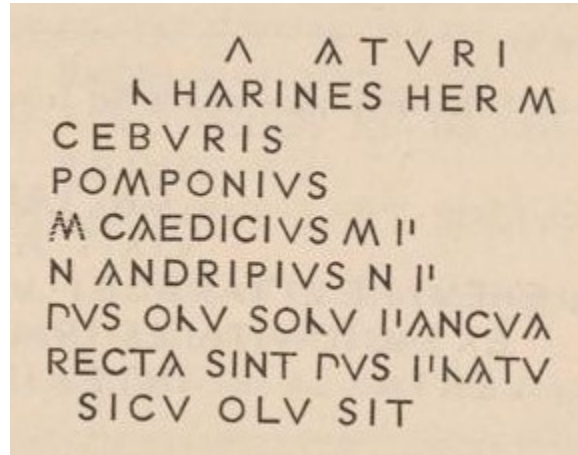
¹⁴² The text used here is Buck (1904) p. 242-243, in which the inscriptions are produced in Oscan and Latin.

¹⁴³ In one instance of the phrase, *veru* is abbreviated *ver*. Even so, *Sarinu* in the same phrase still presents an omission.

¹⁴⁴ The text is documented as *CIL* I2 1614. There is much debate about the dominant language of the tablet, and whether it should be considered primarily a Latin or Oscan document. See Adams (2003) p. 128-130 for the arguments.

¹⁴⁵ Mancini (1988): p. 203. See Table 3 for the text as it appears in the *CIL*.

5 pomponius
m. caedicius m. f.
n. andripius n. f.
pus. olu(m) solu(m). fancua
rectasint. pus. flatu
sicu. olu(m). sit.



Reproduction in *CIL* of the Oscan-Latin Curse Tablet.

Note the -aturi of Maturi as a superscript.

Omission occurs three times: *olu solu* (for *olum solum*), and again in *olu* (for *olum*); all three of the forms are genitive plurals. Due to the limited sample of the *defixio*, it cannot be established whether the author was regularly accustomed to writing final -m either in Latin or Oscan. Like in the Eituns Inscriptions, there are no inclusions, so the morphophonological environments of omission and inclusion are unclear.

The omission of final -m in Oscan in an area increasingly dominated by Latin, and not elsewhere in Oscan-speaking communities, is a noteworthy linguistic trend. Likewise, the omissions in the Eituns Inscriptions follow the syntactic pattern of phrase-internal omissions in Latin. The majority of the omissions, six of the nine, occur after the grapheme V. It is worth noting, however, that the grapheme V in Oscan represented the common word-final phonemes

/o/ and /u/, very similar in articulation.¹⁴⁶ The grapheme V in final position was used in the nominative singular for nouns of the first declension, and the nominative and accusative forms of second declension neuters.¹⁴⁷ Word-final -u was not, then, as unfamiliar to the Oscan language as it was to non-elite Latin language, particularly as an inflectional grapheme.

Bu Njem Ostraka

Bu Njem (called Golas in the Latin documents recovered there) was an oasis in North Africa in the province of Tripolitania, south of Lepcis Magna, and the site of a Roman frontier fort. During excavations at the fort from 1967 to 1976, writings in ink were discovered on over 150 ostraka. The majority of the identifiable writings are military records of several varieties including inventories, reports to commanding officers, and troop placement logs. The ostraka date to the middle of the 3rd century CE, about fifty years after the construction of the fort.¹⁴⁸

Several features of non-elite Latin are present in the ostraka, including non-standard and phonetic spellings, hypercorrections, and widespread usage of the accusative case in prepositional phrases which traditionally use the ablative. Orthographic and linguistic styles also suggest that there were many authors of the ostraka.¹⁴⁹ A number of factors suggest that the linguistic environment at Bu Njem was one in which Latin was a second language, of a colloquial variety, for the majority of occupants, and one which was used primarily for practical

¹⁴⁶ The grapheme O was lacking in the Oscan alphabet. O is included in the *defixio*, which relies heavily upon the Latin alphabet, but it is unclear the extent to which it represented a different phoneme than V. Buck (1904): p. 22-23. Likewise, the Oscan pronoun presented in the *defixio* as *olu* was typically spelled with the V grapheme elsewhere; consider the genitive forms *ulas* and *ulleis*. See Adams (2003) p. 129.

¹⁴⁷ Buck (1904): p. 113-116.

¹⁴⁸ For the location of the document, see Adams (1994): p. 87. See p. 88 for the excavations, findings, and dating of the ostraca.

¹⁴⁹ Marichal (1992): p. 19-21 for the orthographic styles, and p. 46-47 for varying linguistic features.

purposes, whether spoken or written.¹⁵⁰ Much of the vocabulary of the ostraka is repetitive and formulaic, which is not uncommon for inventories and reports.

Despite the repetition of vocabulary, there are several variations in morphology and syntax, among them the omission of final -m on several occasions. In all, there are 44 omissions of final -m, compared to 65 inclusions, an omission rate of about 40%.¹⁵¹ Omissions after -a occur at by far the most frequent rate, with 18 omissions to only three inclusions. Final -m is overwhelmingly included after -e at a rate of 25:4, a trend that is somewhat at odds with the present research. It is worth noting, however, that 22 of the inclusions occur in the formulaic *salutem*, a word which is commonly spelled correctly even in the most poorly written texts.¹⁵² Excluding *salutem*, final -m is omitted after -e at a rate of over 50%. After -u, final -m is omitted at a rate of almost 39%, with 35 inclusions to 22 omissions.

¹⁵⁰ Adams (1994): p. 111. See also Marichal (1992) for a thorough discussion of the demographics of the occupants of Bu Njem. Many names of soldiers are of Punic origin, a notion which is supported by the likely presence of several auxiliary troops at Bu Njem. Likewise, Adams (1994) outlines several possible instances of Punic interference in the Latin texts.

¹⁵¹ The texts used for analysis are those of Marichal (1992), the most comprehensive of the published editions of the ostraka.

¹⁵² There are several examples of the formulaic *salutem* in the present research, and it is likewise described in this instance by Adams (1994, p. 107) as being “so well established that it was correctly spelt”.

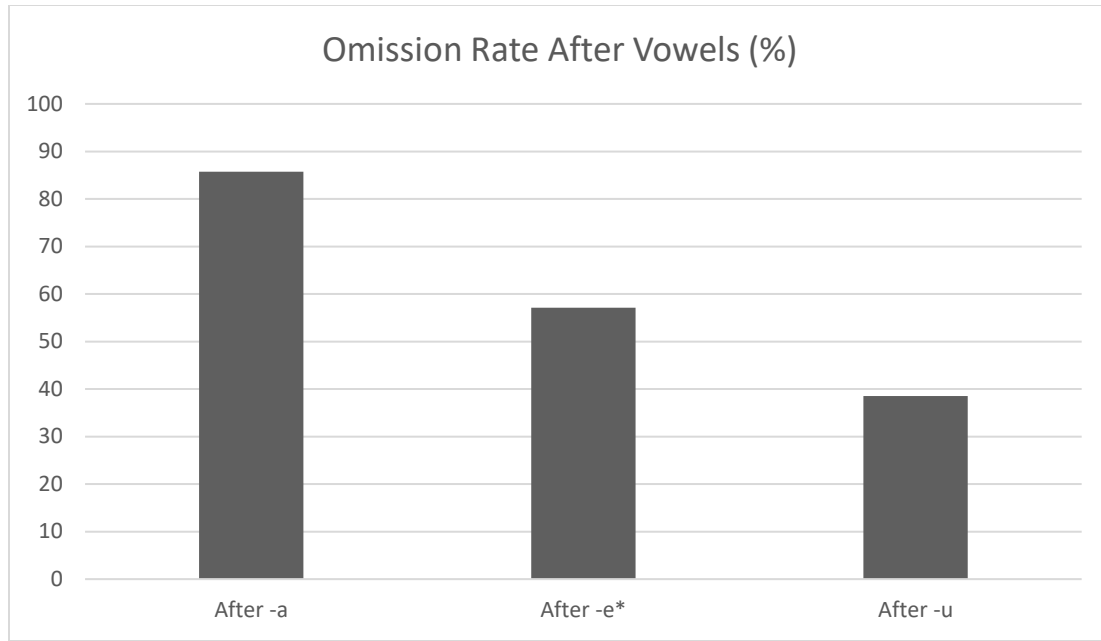


Table 4. Omission of final -m after vowels in the Bu Njem Ostraka.

*The omission rate after /e/ excludes the occurrences of *salutem*.

There is one clear syntactic environment in which omission takes place most frequently. The majority of omissions, 36 of 44 (82%), occur in prepositional phrases. All but two of the 36 omissions in prepositional phrases are objects of the preposition *ad* (*ad aqua*, *ad praepositu*, etc.).¹⁵³ This figure could be even higher, although the illegible condition of some of the ostraka inhibit interpretation. Prepositional phrases (with *ad*, specifically) occur very frequently in the ostraka, and thus provide ample opportunities for omission. Two omissions occur in itemized lists in uninflected numerical adjectives: *septe(m)* in Bu Njem 76, and *nove(m)* in 77. One appositive phrase, in a list of direct object accusatives, contains two omissions after /u/: *Gtasazeiheme Opter / servu(m) fugitiu(m)*.¹⁵⁴ Several of the syntactic environments of omission are indeterminable due to the conditions of the ostraka.

¹⁵³ See Ostrakon 13 for a noteworthy example, containing three omissions in prepositional phrases with *ad*: *ad aqua*, *ad porta*, and *ad praepositu*.

¹⁵⁴ Bu Njem 72.

While final -m is omitted frequently, it is much more rare that omissions and inclusions occur in the same text. It is thus difficult to determine whether or not the majority of the authors knew of the final -m grapheme at all, and consciously chose whether to omit it under certain circumstances. In over 150 ostraka, two texts exist containing at least one known omission and one known inclusion of final -m. The first is Bu Njem 19:

	jii Kal(endas) • Novemb(res) n(umerus) xlvj
 n(umerus) xl ...
	in his (sesquiplicarius) j ..
	proculcator j
5	opt[iō] j...
 jiii
	ad aqua(m) bal(nei) jiii
	ad Arnum j
	ad signas j
10	[d]e speclis j
	[.....].or.[¹⁵⁵

Line 7 contains an omission after -a, *ad aqua(m)*, which is a frequently occurring prepositional phrase throughout the ostraka. However, this author, unlike many others at Bu Njem, displayed an awareness of the accusative final -m in the next line with *ad Arnum*.¹⁵⁶ He has chosen to include the grapheme after -u, while omitting it after -a, even phrase-internally and in a list of prepositional phrases in which the syntactic roles are clear.¹⁵⁷ Although an example limited in scope, the author was clearly aware of final -m, and its omission was a linguistic choice.

¹⁵⁵ Marichal (1992): p. 137.

¹⁵⁶ It is less likely that *Arnum* should read *Ranum* or *Rinum* (Marichal 2012: p. 138). Nevertheless, the word includes final -m after /u/. See Mattingly (2003) for possible locations of other outposts in the province, including Arnum, which also likely along the frontier; certainly it is not the Arnum of Gaul.

¹⁵⁷ It is beyond the scope of the present research, but one cannot strictly rule out a phonetic spelling here. It is possible, given the other names of outposts listed in the ostraka (Boinag, Esuba, Hyeruzerian, Secedi), that Arnum was a Punic name, and thus one in which final /m/ was pronounced, especially by a native Punic speaker. See above (p. 13-14) for a discussion of mytacism.

A second example is found in Bu Njem 95, on which there are three separate writings by three different hands.¹⁵⁸ One of the authors wrote:

Pomponius Silvanus dec(urio) Iulio [[Ua]]
Uario eq(uiti) Coh(ortis) vjiii Fid(ae) • salutem • quere
ad tessera(m) in locum qui dicitur Secedi¹⁵⁹

Final -m is included in the formulaic *salutem* in line 2. Again, it is omitted in a prepositional phrase with *ad*, and after -a. The prepositional phrase following it contains an inclusion after -u in *locum*, an accusative used in place of the standard ablative to denote place where: “seek (to) the *tessera* in the place which is called Secedi”.¹⁶⁰ The accusative, here as elsewhere in the non-elite Latin of the empire, is often used as the default prepositional case. Similarly to Bu Njem 19, the author expressed awareness of the final -m grapheme of the accusative, but felt its omission to be acceptable after the more common word-final grapheme -a.¹⁶¹

The general tendency (see Table 4 above) in the Bu Njem Ostraka is to omit final -m with great frequency after -a, and to omit less frequently after -e and -u. There are numerous phonetic spellings, and none of them indicate that the merger of -u and -o was present. Hence, several authors wrote word-final -u to represent the phoneme, and for those authors there is nothing to indicate an awareness of the final -m grapheme. The authors of Bu Njem 19 and one part of 95, however, were aware of the final -m grapheme and chose to include it after -u. The frequency of prepositional phrases results in several omissions as objects of prepositions, and omissions likewise appear in numerical adjectives in lists. These two syntactic environments comprise the

¹⁵⁸ Marichal (1992): p. 202-203.

¹⁵⁹ Marichal (1992): p. 202.

¹⁶⁰ See Adams (1994) p. 91-92 for a discussion of the syntax, which likely contains Punic interference.

¹⁶¹ Unlike with *ad Arnum* in Bu Njem 19, there is no possibility that *locum* is a Punic name requiring the articulation of final /m/.

majority of interpretable omissions, and, when taken with the orthographic frequency of omission after -a and (to a lesser extent) -e, the data of the Bu Njem Ostraka support the present research.

***Defixiones* and Spell Tablets**

Curse tablets and spell tablets (*defixiones* or *tabellae defixionum*), often inscribed on lead or another metal alloy, have been found throughout the territories of the empire. Over 1,500 from antiquity have been found thus far, on a variety of surfaces and dated from the fifth century BCE to the fifth century CE. The tablets were deposited in places of particular importance, where the authors believed their commands would be given power, most frequently in graves.¹⁶² The tablets vary widely in orthographic and linguistic style and competency. It is likely that scribes, or professionals of some sort, were often employed to create the tablets; the phrases are often formulaic, specialized, and occur on multiple tablets, and the scripts are often elegant and of a higher register.¹⁶³ However, the present research will examine tablets from several locations across the empire, the majority of which appear to be written by unprofessional hands.

Misspellings and phonetic spellings abound in the tablets, including the frequent omission of final -m. Dozens of tablets omit final -m entirely, which indicates no knowledge (or concern) on behalf of the authors of the use of the grapheme. Omission in corpora of tablets from certain locations is uncommon, and elsewhere it is the norm.¹⁶⁴ Omissions often occur in the

¹⁶² See Gager (1999) for a thorough discussion of the general features and characteristics of the tablets, including materials used, composition, and content. See p. 19-20 specifically for the positioning of the tablets to enhance their power.

¹⁶³ Gager (1999): p. 4-5. In certain cities, like Bath in England, Gager describes writing *defixiones* as somewhat of a “cottage industry”.

¹⁶⁴ The language of the tablets is often formulaic, and the requirements that the spell be written very specifically and accurately perhaps result in stricter orthography. See the introduction of Gager (1999) for a discussion of the

same texts as inclusions, which is particularly useful for determining under what conditions an author felt comfortable with the phonetic spelling. The geographic distribution, timespan of the tablets' creation, and the variety of orthographic styles suggests that the linguistic features which appear often in the texts were not isolated phenomena.

A great number of tablets, over 300, have been discovered in England, and the language varies widely on them.¹⁶⁵ The majority of the tablets are curses and spells directed against those who have committed theft of some type. Uley 1, a two-sided tablet of lead found in Uley, Gloucestershire, invokes the god Mercury to punish the thief of an animal.¹⁶⁶ It contains two omissions and several inclusions of final -m. Sides (a) and (b) read:

- (a)
- deo Mercurio
Cenacus queritur
de Vitalino et Nata-
lino filio ipsius d[e]
5 iument[o] quod ei rap-
tum est e[t] rogat
deum Mercurium
ut nec ante sa-
nitatem
- (b)
- 10 habeant nissi
[[nissi]] repraes[n]-
taverint mihi [iu]-
mentum quod ra-
puerunt et deo
15 devotione(m) qua(m)
ipse ab his ex-
postulaverit¹⁶⁷

specificity of language. In places such as Bath, where writing curse tablets was often done by a professional (see p. 55 and n. 163), the language often adheres more closely to classical spelling standards.

¹⁶⁵ See Adams (2007) p. 652-653 for a list of the major sites from which the majority of the tablets come, and a discussion on certain regional characteristics of 'British Latin'.

¹⁶⁶ Tomlin (1993): p. 118. Mercury appears to be the preferred god on the tablets at Uley.

¹⁶⁷ Tomlin (1993): p. 118-119. Tomlin's editorial marks are retained here, using brackets rather than parentheses to indicate missing letters.

Side (a) contains no omissions of final -m, and inclusions after -e and -u, in both direct object accusatives (7) and an accusative object of the preposition *ante* (9). Despite being written by the same hand, side (b) omits final -m twice, even after -e, after which it was included on side (a). The omissions occur in line 15, *devotione(m) qua(m)*, in both the relative pronoun and its antecedent. An inclusion two lines above in *[iu]mentum* reveals an environment in which the author found it necessary to include final -m after -u, but found omission more acceptable after -a and -e. The syntactic environments and patterns of word order are nearly identical in both the case of inclusion and that of omission: dative indirect object + direct object + relative pronoun. Perhaps, then, the author's willingness to omit derives from the implicit nature of the accusative based upon the repetition of the previous construction. It cannot be determined whether the author would have omitted final -m after -u in the same position. However, what is clear is that final -m is included after -u in the first part of the construction, and omitted after -a and -e in the second, in an environment in which an accusative phrase is perhaps expected based upon a repetition of the syntactic pattern.

There is a second tablet at Uley in which both omission and inclusion take place. Uley 49, dating from the 2nd-4th centuries, contains a list of names in the accusative, likely those to be cursed. In full, it reads: *Aunillus / V[ica]riana / Covitius / Mini / (filius) dona[nt] / Varicillum / Minaura(m) / Atavacum*.¹⁶⁸ The author of this tablet felt it necessary to include final -m after -u twice, while omitting it after -a.

Another tablet, discovered at Ratcliffe-on-Soar in Nottinghamshire and dating from the 2nd-4th centuries CE, contains several omissions and one inclusion:

¹⁶⁸ Hassall and Tomlin (1995): p. 376-377. Here, Hassall and Tomlin use triangular brackets < > indicate letters to be removed.

annoto de duas
 ocias ascia(m) scal-
 pru(m) ma(n)ica(m) si m(ulier) au[t] si
 baro riantine duas
 partis deo ac ceum ¹⁶⁹

The author of this tablet omits final -m after both -a and -u, but includes it after -u in the final word of the tablet (*ceum*). While it is difficult to determine the syntactic role of *ceum*, the instances of omission of final -m in the lines above are clear. They are phrase-internal accusatives in a list, dependent upon the verbal construction *annoto de*.¹⁷⁰ Given its absence in the Latin lexicon, it cannot be ruled out that *ceum* is a foreign word, in which final -m was pronounced. If this is true, then there is no way to determine that the author was aware of the final -m grapheme as an accusative marker in Latin at all. However, the evidence suggests some awareness of final -m, and a willingness to omit it (or a lack of awareness to include it) phrase-internally in *scalpru(m)*.¹⁷¹

Italy also provides several curse tablets worthy of discussion. One example, *CIL* I.818, is a lead tablet of several lines dating to the late republic or early imperial period, and was found in a cemetery just outside of Rome. The tablet curses an ex-lover (presumably), Rhodine, to prevent her from being with a number of other men. Several features of pre-classical spelling are present in the tablet, as well as several phonetic spellings.¹⁷² The *CIL* text, edited by Garrucci and reproduced by Kropp reads:

¹⁶⁹ Hassall and Tomlin (2004): p. 337.

¹⁷⁰ The word *ceum* is uninterpretable by Tomlin and Hassall (1995).

¹⁷¹ It is also possible that, similarly to the practice in inscriptions (see ‘Inscriptions in Stone’, in particular p. 71-72), the author omitted the letter because the next word begins with m-. This appears to be a far less common practice in curse tablets, however.

¹⁷² For example, the archaic, substandard -ei is often written for classical -i to represent /i:/ (*tibei, quei, seic*). Likewise, the archaic -os is written for -us in the nominative singular (*mortuos*, twice). The date of the tablet is far too early for the -os orthography to reflect the later widespread phonetic -u/-o change, especially considering the

Quomodo mortu=Os qui istic / sepultus est nec loqui / nec sermonar*<i=E>* potest s{e}ic /
 Rhodine apud M(arcum) Licinium / Faustum mortua sit nec / loqui nec sermonar*<i=E>* possit /
 ita uti mortu=Os nec ad deos / nec ad homines acceptus est / s{e}ic Rhodine apud=T
 M(arcum) Licinium / accepta sit et tantum valeat / quantum ille mortu=Os qu{e}i istic
 sepultus est Dite Pater Rhodine(m) / tib{e}i commendo uti semper / odio sit M(arco) Licinio
 Fausto / item M(arcum) Hedum Amphionem / item C(aium) Popillium Apollonium / item
 Vennonia(m) Hermiona(m) / item Sergia(m) Glycinna(m)¹⁷³

The preference to include final -m after -u is apparent; no omissions occur after the letter. On the other hand, final -m is omitted entirely in the four a-stem accusatives, and once in the two third declension accusatives *Rhodine(m)* and *Amphionem*.¹⁷⁴ The use of the accusative with *item*, identifying the other recipients of the curse, is not an unusual construction in *defixiones*, and it follows the tendency to use the accusative to mark the objects of implied verbs.¹⁷⁵ The author's willingness to omit after -a is clear, and omission after -e, while a limited sample size, nevertheless is present. The omissions contrast with the complete lack of omission after -u. With the exception of *Rhodine(m)*, the omissions occur phrase-internally in the accusative list at the end of the tablet, as the objects of an implied verb.¹⁷⁶

In Hispania, the more recently discovered Carmona Defixio provides rather useful information. The small lead tablet dates to the second half of the 1st century BCE, and curses Luxia, daughter of Aulus Antestus. Several archaic and substandard spellings are present,

presence of the other archaic spelling conventions. Lastly, -e is written for -ī in final position of two passive infinitives, a reflection of the early stages of the -i/-e merger; See Adams (2013) p. 67.

¹⁷³ Kropp (2008): 1.4.4/3. *CIL* I.818.

¹⁷⁴ Final -m is included in the four appearances of *item*, an uninflected word. The omission in *Rhodine(m)*, although it takes place at the end of the line, does not appear to be due to a lack of space.

¹⁷⁵ Adams (2013): p. 249-250.

¹⁷⁶ One possible explanation which could apply to *Rhodine(m)* is that, often in curse tablets, there is a tendency to consider the nominative form the "essence" of the name, the consistent spelling of which could be of importance for the efficacy of the spell (Adams [2013]: p. 254).

including -ei to represent /i:/ (*utei* and *sei*), as well as several phonetic spellings such as omission of final -m. Several archaic orthographic features are also present, including ll for e and ʃ for l.¹⁷⁷ The text from Corell reads:

Dis inferis vos rogo utei recipiates nomen
Luxsia A(uli) Antesti filia caput cor co(n)s[i]lio(m) valetudine(m)
vita(m) membra omnia accedet morbo cotidie et
sei faciatis votum quod faccio solva(m) vostris meritis¹⁷⁸

Final -m is never included after -a or -e, even in the verbal inflection *solva(m)*.¹⁷⁹ After -u, in *votum*, final -m is included. The more convincing argument in the Carmona Defixio, however, comes in the form of the word *consilio(m)* (for *consilium*). Similarly to the tablet from Rome above, the archaic use of -o for -u in the nominative and accusative is present, reflecting the IE o-stem. The use of both -o and -u in *consilio(m)* and *votum*, respectively, is inconsistent (but not unusual).¹⁸⁰ It is telling, however, that the author was willing to omit final -m after the -o in *consilio(m)*, but felt it necessary to include the letter after the -u in *votum*, a contrast which illustrates the acceptance of final -o considerably more so than final -u.

Many curse tablets display features of the bilingualism so prevalent in the empire. Scribes and authors who spoke Latin competently were not necessarily familiar with Latin script and orthography, and instead used a script, namely Greek, with which they were familiar. On the

¹⁷⁷ Corell (1993): p. 262.

¹⁷⁸ Corell (1993): p. 262.

¹⁷⁹ The final phoneme /a/ was phonetically distinct from the other future forms, in which final consonants were pronounced, apparently sufficiently identifying the first-person singular inflection. One could make a case that final -m was omitted from *valetudine(m)* due to spatial limitations; it is the last word in the second-longest line of the text. However, the line directly below extends further, and casts doubt upon the notion.

¹⁸⁰ Corell (1993): p. 267. The inconsistency of -o and -u is one of several in the text, indeed in the same line: “Im Unterschied zu consilio und morbo, die das ursprüngliche -o des Themata bewahren, weist votum V auf. Eine weitere Inkohärenz existiert zwischen faccio mit Doppelkonsonant C und faciatis”.

other hand, the writing of Latin in Greek script was a somewhat common practice in certain locations and under certain circumstances, for example when the Greek script might enhance the character of the document or its author. The use of Greek, or generally non-Latin, characters in curse tablets perhaps enhanced their magical properties or further coded the writings in the belief of the authors.¹⁸¹

Several Latin tablets in Greek script survive from North Africa, where the linguistic environment was quite diverse. The tablets often exhibit the same phonetic spelling patterns as those written in Latin script, and the omission of final -m (-μ in Greek script) is no exception. A damaged tablet from Carthage, dating to the 2nd-3rd centuries CE, which begs the gods to make a woman fall in love with the author, displays both omission and inclusion of final -μ.¹⁸² Final -μ is omitted four times and included five times in the tablet. Two of the inclusions occur in the uninflected ιαμ (two instances), consistent with the greater likelihood to include the letter in monosyllabic uninflected words. There are no identifiable opportunities to omit -μ after -α in inflected forms.¹⁸³ After -ε, final -μ is omitted twice, in Μαρτιαλε(μ) and αμωρε(μ), and included once in κουεμ (*quem*).¹⁸⁴ Final -μ is included twice after -ου (Latin /u/), in κουωρουμ (*quorum*) and [δομ]ινουμ, and omitted once in πρε[πο]σιτου(μ) (*praepositum*). The omission in πρε[πο]σιτου(μ) is in a prepositional phrase, περ ουνχ πρε[πο]σιτου(μ) (*per hunc praepositum*), an environment in which omission seems to be more acceptable following any phoneme.

¹⁸¹ See Adams (2003) p. 40-44 for a discussion of the purpose of writing the tablets in Greek, and the use of Greek characters along with Latin to encode the tablets.

¹⁸² Audollent (1904): p. 304.

¹⁸³ All terminations in /a/ in known syntactic roles are either ablatives or nominatives.

¹⁸⁴ Greek kou is often written for Latin *qu*, and in general, -ou is written for Latin *-u* to represent the Latin phoneme /u/.

Curse tablets from across the empire and from different periods of time demonstrate that the omission of final -m, when authors were aware of the grapheme, was more likely to occur after -a and -e than after -u. Likewise, omission is more common phrase-internally after all three phonemes, particularly in lists, than otherwise. The tablets were a widely popular type of written expression in the Roman empire (indeed in classical antiquity as a whole), and as such they represent a variety of linguistic dialects, substrates, and diachronic trends. The significant variations in the tablets, however, only highlight the importance of the features which are consistently present in the tablets across space and time, including the circumstances of the omission of final -m.

Stone Inscriptions

Inscriptions in stone provide the largest body of evidence for the study of non-literary Latin. Inscribing in stone was a profitable industry in the Roman empire, and due to the required equipment, labor, and skill, professionals were often employed.¹⁸⁵ Similarly to the communicative relationship between an author of a letter and a scribe, the final product of the text was the result of linguistic input from multiple sources. Even if the purchaser had written the text independently of the stonecutter, it would be the job of the latter to organize the text with the

¹⁸⁵ See Edmonson (2015) for a discussion of the tools, specialist stonecutters, and the industry in general. While professionals were often employed, it was not unusual for the purchaser to also inscribe on the stone after purchasing it; the “home-made” inscriptions more often than not were noticeably amateurish. (Edmonson [2015]: p. 114-115).

necessary spatial considerations. Thus, the final product of text was subject to the author's linguistic conventions as well as those of the stonecutter, and sometimes with discrepancies.¹⁸⁶

Much of the language on the inscriptions is abbreviated or formulaic. Likewise, the grammatical structure of inscriptions was often simple, predictable, and succinct.¹⁸⁷ Such language can provide difficulties for determining an author's understanding of morphosyntax, however, due to the limits they impose most often on inflectional endings. Despite the abbreviations and formulaic phrasing, inscriptions often still display variations in orthographic conventions, caused by regional dialects, diachronic changes, or sociolinguistic substrata. Such inscriptions of the imperial era often display archaisms of spelling, phonetic spellings, and regional orthographic and lexical trends.¹⁸⁸

A persistent linguistic feature in all regions and periods is the omission of final -m. Diehl's research on final -m relied heavily on stone inscriptions in the *CIL*, revealing that omission is often the result of metrical elision, spatial limitation, line damage, misuse of agreement in case and number, and so on.¹⁸⁹ Complicating matters further, omission often appears haphazardly in the same text, being both omitted and included in the same words and syntactic environments. From the omissions which cannot be attributed to such factors,

¹⁸⁶ See Edmonson: (2015): p. 118-119 for the process of drafting and the linguistic interactions between author and scribe. Edmonson cites an example of an inscription from Latium, in which the scribe confused the letters E and F on the draft.

¹⁸⁷ Harvey (2004): p. 1.

¹⁸⁸ See Adams (2007) for a discussion of the regionalisms in inscriptions. Likewise, Omeltchenko (1977) discusses regionalisms as they relate to vowel shifts in provincial Latin. Inscriptions of a higher register are not immune to the regionalisms or archaisms of spelling. However, their morphology adheres much more closely to classical standards.

¹⁸⁹ Diehl (1899) p. 12-243 lists such examples which can be explained by spatial, metrical, and other non-morphosyntactic factors.

morphosyntactic patterns emerge in the inscriptional data which contain both omission and inclusion.¹⁹⁰

Compared to omissions after -a and -e in Diehl's survey, omissions after -u tend to be more limited in their morphosyntactic environments. Omissions after -u often appear in noun phrases in which another final -m is present. Examples from Diehl of such omissions include; p. 279, *CIL* VI.22819, *itum ambitu(m) sacrificium faciundum*; p. 279-280, *CIL* XI.5750, *Satreneu(m) Superum Vessium Verecundu(m)*; and p.282, *CIL* II.2285, *optimum praemiu(m)*.¹⁹¹ Omissions in genitive plurals also account for a great number of omissions after -u. Examples in Diehl's research include *CIL* VI.2821 (p. 279: *Viromanduoru*) and *CIL* VI.10351 (p. 280: *ex decretum decurionu*).¹⁹² Two of the most common genitive plurals in which omission takes place after -u are *annoru(m)* and *eoru(m)*.¹⁹³ Omission of final -m in genitive plurals perhaps indicates that, similar to omissions in verbal inflections, the partially spelled morphemes -*aru*, -*oru*, and -*u* (of consonant and i-stems) are sufficient as morphosyntactic markers on their own.

More recent research on stone inscriptions has analyzed omission quantitatively. Gaeng analyzed Christian funerary inscriptions from the late empire (the 3rd through 7th centuries) in Italy, Gaul, and Spain, and while his goal was to trace the development of Latin morpho-syntax to Romance, the findings from the 3rd and 4th centuries on the omission of final -m are still relevant.¹⁹⁴ Of the 104 accusative singulars from the 3rd and 4th centuries in Gaeng's research,

¹⁹⁰ Instances of omission and inclusion in the same text are comparatively rare. Most omissions occur in short texts, in which no inclusions are present.

¹⁹¹ Diehl (1899).

¹⁹² Diehl (1899).

¹⁹³ See Diehl (1899) p. 272-274 for an exhaustive list.

¹⁹⁴ Only data from central and southern Italy and Rome itself are provided for the 3rd and 4th centuries. Adams (2013: p. 68) cautions against relying purely on statistics, such as those that Gaeng has presented. In agreement

final -m is omitted 24 times. Most of Gaeng's data for the 3rd and 4th centuries comes from Rome, where 19 omissions occur (five after prepositions), compared to 53 inclusions.¹⁹⁵

Omission rates after specific vowels are as follows:

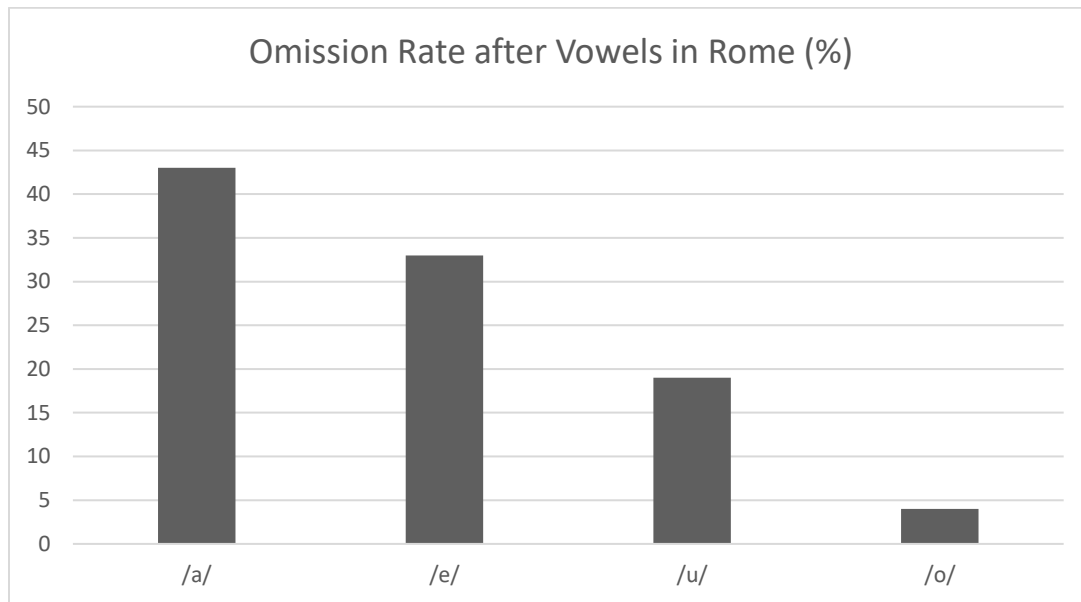


Table 5. Final -o appears twice for -um. The circumstances of the vowel change are unknown.

Although with limited contextual information, Gaeng's data demonstrate a general tendency for Christian funerary inscriptions at Rome to omit final -m after -a and -e more frequently than after -u. Data from the rest of Italy during the 3rd and 4th centuries are scarce in Gaeng's research; central Italy offers no omissions and 15 inclusions, and southern Italy 12 inclusions to five omissions.¹⁹⁶ Gaeng's research does not, however, offer evidence of an author's willingness to omit final -m in certain morpho-syntactic environments over others.

with Adams, the present research will not rely heavily on Gaeng's findings. They are, however, useful both for outlining previous research on the subject of final -m, and for demonstrating general linguistic trends in a specific type of inscription.

¹⁹⁵ Gaeng (1977): p. 218. Gaeng focuses solely on morphosyntax, and thus his research excludes omission in grammatical, uninflected forms.

¹⁹⁶ Gaeng (1977): p. 218. In southern Italy, there are no omissions and two inclusions after /a/, two omissions and three inclusions after /e/, and three omissions and seven inclusions after /u/.

To identify a linguistic pattern of inclusion and omission under certain circumstances, more qualitative analysis is required, and data must be taken from a wider geographic area. In accordance with the selection criteria of the research, the following inscriptions are from geographically diverse regions, have different functions (funerary, commercial, etc.), and range in date from the late republic to the end of the fourth century CE. In all of the inscriptions, final -m is both omitted and included at least once, a condition which is necessary for determining an author's awareness of the final consonant grapheme in general. Omissions in the inscriptions range from one to several. Special consideration has been taken to exclude inscriptions in which final -m is omitted due to a likely lack of space, or in which the letter is unidentifiable due to damage.¹⁹⁷

The first, *CIL* VI.9681, is a shop sign from Rome which dates to the first century CE. The shop was located in a tomb complex, and likely sold wares for festivals, funerary rituals, and refreshments to visitors.¹⁹⁸ The text is somewhat damaged on both its left and right sides, and reads as follows:

...US · ET · SOZON · NEGOTIANTES · VINARI · AEDEM · MEM(oriae)
 ...QUO·ET·TABERNA(M)·ET·HORTULUM·MACERIA·CINCTUM·IUGERA·P·M·DUA·VIVI
 ...QUE · ET · LIBERTIS · LIBERTABUSQUE · POSTERISQUE · EORUM¹⁹⁹

Final -m is omitted once in the inscription, after -a in *taberna*. It is included after -e and -u in every instance, even phrase-internally (*hortulum...cinctum*).

¹⁹⁷ Similarly to Diehl's (1999) explanation of omission on such grounds, which are unrelated to morphosyntax. These factors do not reflect the linguistic patterns in the author's understanding of Latin.

¹⁹⁸ Holleran (2012): p. 119. This type of shop seems to have been popular at least in the areas around Rome; see Holleran (2012) p. 119-120 for evidence of several other shops of this type.

¹⁹⁹ The text is that of Mommsen in *CIL* VI. The addition of (M) in TABERNA(M) is my own.

A funerary stele, AE 2005,1669, from Ammaedara in Africa Proconsularis contains several omissions and inclusions. It is one of a number of epitaphs from the same cemetery complex written in a rudimentary metrical form.²⁰⁰ The stele dates to the latter half of the 3rd century CE, and is dedicated by a mother to her child who died at age four:

[]IVS L F ARN
[]NATVS VIX ANI
IV [] S E
[]RN TENERIS PVER IACE
5 [] PONDERE MAGNO
ANIS VIX IV DVLCISVMVS
PARENT IN V ANVM SCE
NDES HIC ANIMA(**M**) POSVI CVI
PVERO MATER MAMA POSVIS
10 VIDERVS HVIC PVERO LAPIDE(**M**)
SVPREMVM REDIDIT IPSA²⁰¹

Misspellings and phonetic spellings are present throughout the epitaph. The medial -u before -m (*dulcisumus*) appears in line six, by the 3rd century CE long an archaism of spelling.

Degemination of consonants is present in several spellings (*ani*, *anis*, *anum*, *dulcisumus*), a common feature of non-elite Latin texts. An omission of final -t occurs in *iace* in line 4, which appears to be due to a lack of space.

The preference to include final -m after -u is clear, appearing after both *anum* and *supremum*. On the other hand, omission occurs after both -a and -e (in *anima* and *lapide*).²⁰² In the phrase *lapide(m) supremum*, the omission occurs only after -e, suggesting a reluctance to

²⁰⁰ Ben Abdallah, Carande, Fernández, Gómez Pallarès and Jorba (2005): p. 99. Several verses are written in hexameters, some metrically incorrect; others are unidentifiable, due to damage.

²⁰¹ AE 2005, 1669. Brackets in bold (**M**) are added for easier identification. The edited text reads:
[...]ius L(uci) f(ilius) Arn(ensi?) / [Fortu?]natus vix(it) an(n)i(s) / IV [h(ic)] s(itus) e(st) / [...]RN teneris(!) puer iace(t?)
/ [sub] pondere magno / an(n)is uix(i) IV dulcis(s)umus(!) / parent(ibus) in V an(n)um (a)sce/nde(n)s hic anima(m)
posui cui / puero mater mama posuis(se?) / viderus(!) huic puero lapide(m) / supremum redidit ipsa

²⁰² Despite *lapide* being at the end of a line, there appears to have been more than enough space to include the letter. The line is by far the shortest of the inscription.

omit after -u even phrase-internally. Omission in *anima(m)* occurs in an isolated accusative, the only one of the text. Neither of the omissions are followed by a word beginning with a vowel, which rules out the orthographic representation of metrical elision as a factor.

A funerary inscription, *CIL* XIII.11032, from Burdigala, Aquitania (modern day Bordeaux, France) from the late fourth century reads:

IC IACIT FLAINVS DE NVMERO MAT
TIACORVM SENIORVM QVI VIXST
ANNVS QVARAGINTA ET QVI
NQVE ET DISMISIT GRANDE(M)
5 CRVDELITE(M) VXSORI ET FILIS I VIS²⁰³

The text displays many features of substandard Latin, many of which by the late fourth century had become quite common. The initial aspirate had long been lost in lower speech registers, and the phonetic spelling *ic* (for *hic*) is present.²⁰⁴ Also, the use of *i* for *e* in *iacit* could represent not only the vowel merger, but the loss of quantitative distinction (*iacet* in classical Latin would not have been a long *e*). The other possibility for *iacit* is a lexical confusion between the intransitive *iaceo* and the transitive *iacio*.²⁰⁵ Among other misspellings, note also the common substandard use of *s* after *x* (*vixst* and *uxsori*).

Final -*m* appears after /*u*/ in both words in the genitive phrase *matiacorum seniorum*. It is omitted in both third-declension accusatives in the noun phrase *grande(m) crudelite(m)*, the post-verbal direct object of *dimisit*. The word order and syntactic roles might be the determining

²⁰³ *CIL* XIII.11032. Hoffman (1970) p. 89 dates the inscription to 364-377 CE, based upon the location of the *Mattiaci seniores* (an army unit) at the time. Brackets in bold are added for easy identification. The fully edited text reads:

(H)ic iac<e>t Fla(v)inus de numero Mat/tiacorum seniorum qui vixs(i)t(!) / annus(!) qua(d)raginta et qui/nque et dismisit(!) grande(m) / crudeli(ta)te(m) uxsori(!) et fili(i)s {l} (s)uis

²⁰⁴ Vaananen (1981): p. 55.

²⁰⁵ The confusion was somewhat common, and *iaceo* eventually gave way to a reflexive use of *collocare* in later and non-elite Latin. See Herman (2000) p. 98-99.

factors in omission here, given the clear SVO patterning, but the author is undoubtedly aware of the final -m grapheme, and felt it necessary to include it in both cases after -u.

Another fourth-century funerary inscription from Gallia Narbonensis, AE 1976, 0419, this one for a young girl, reads:

PAVLA SIV EVS
TATHIA QVI VI
XIT FIDELIS A
NNVM VNVM ET MEN
5 SIS SEPTE(M) ET DIES XXII²⁰⁶

While there is only one omission, its circumstances when compared to the inclusions are telling. Both the inclusions and the omission occur in the same verbal phrase in a string of accusatives, the statement of how long the girl lived. Final -m is included twice in the noun phrase *annum unum*. It is omitted in another noun phrase, *mensis septe(m)*. The inclusions and omission occur in words with the same syntactic roles and in the same temporal phrase.

The northeastern provinces provide several examples of omission and inclusion in the same text. The first, AE 1922, 00070, is a votive offering on an altar from Ulmetum in Moesia Inferior (modern Romania), dating to 191 CE. The altar is dedicated to Jupiter and Silvanus by a Flavius Augustales (Augustalis?), and reads as follows:

I O M
ET SANCTO SIL
VANO []RO SALV
TE INPERATORIS
5 ET SALVTE CON
SACRANORVM
FLA AVGVSTALES
DE SVO POSVIT A
RA(M) ET TABLA(M) MEMOR
10 IA SVA APRONIANO ET
BRADV(A) COS DIE NO

²⁰⁶ AE 1976, 0419. The bold bracket is added for easier identification of omission.

A number of non-classical spellings are present, including -n before the labial -p in *inperatoris* (where -m would be expected), and the syncopation of medial -u in *tabla(m)*. The classical spelling of the dedicator's *cognomen* was *Augustalis*, though the spelling *Augustales* likely reflects the phonetic merger of long e and short i, which was widespread in the late first century. Final -a is omitted in the ablative *Bradu(a)*, an indication that the author seemingly does not take issue with final -u as a grapheme.

Final -m is omitted three times in the text. Omission after /a/ occurs in the accusatives *ara(m)* and *tabla(m)*, the only a-stem accusatives in the text. Omission in *tabla(m)* could perhaps be due to the presence of initial m- in the following word, a practice not uncommon in inscriptions. The final word of the text, *iuniaro(m)*, is a curious one. Neither of the other genitive plurals in the text end in -o, instead ending in the standard -um. A lack of space at the end of the line does not appear to have been a problem. The chronology of the appearance is also initially problematic; 191 CE is somewhat late for the regular archaic usage of final -o (for -um), and at the same time it is too early for the back vowel merger. Based upon the religious subject matter of the inscription, a plausible explanation is the willingness of the author to seem 'old-fashioned', a notion which is also supported by the appearance of the syncopated form *tabla(m)*.²⁰⁸ Given the omission of final -a in *Bradu(a)*, the use of final -o in *iuniaro(m)* cannot convincingly be attributed to the author's discomfort with final -u.

²⁰⁷ AE 1922, 00070. Brackets in bold are added for easier identification. Note the I O M abbreviation for Jupiter Optimus Maximus. The full edited version reads:
I(ovi) O(ptimo) M(aximo) / et Sancto Sil/vano [p]ro salu/te Inperatoris(!) / et salute con/sacranorum / Fla(vius) Augustales(!) / de suo posuit a/ra(m) et tab(u)la(m) memor/ia sua Aproniano et / Bradu(a) co(n)s(ulibus) die No/narum Iuniaro(m)(!)

²⁰⁸ See Adams (2013) p. 64 for a discussion of the cooccurrence of -o for -u and syncopation in the Terentianus letters as an intentional archaism.

Omission, then, could be explained by syntactic context and word positioning. The verbal phrase *posuit ara(m)* is a very common and formulaic one in dedicatory inscriptions, appearing in a variety of abbreviated forms as well as in its complete form.²⁰⁹ As the clear direct object of *posuit*, *aram* is often written without final -m. Likewise, spelling liberties are also taken with other accusatives in lists with *aram*, and *tabla(m)* in this inscription should be considered in this context.²¹⁰ The omission in *iuniaro(m)* should also be considered in its own syntactic position, as the final word in a phrase of date. The determining factor, in light of *Bradua*, appears to be that omission is acceptable when the syntactic role is clear, no matter the final vowel.

The next inscription from the East is AE 1984, 0775, a votive offering on an altar from Moesia Superior (modern day Lipkovo, Macedonia) which dates to the 2nd-4th centuries. Perhaps an offering to Mithras (AE notes the connection of the *fanum magnum* to Mithras), the text reads:

FANO MA[]
O SEVERVS
ACERDOS VO
TVM POSVI
5 T VT ANTIQV
A(M) LEGE(M) AVG S
ERVEMVS²¹¹

The inscription largely adheres to classical standards of morpho-syntax, including the use of the subjunctive with *ut*. The absence of the initial s of (s)*acerdos* cannot be a phonetic spelling, and is potentially a space-saving technique employed by the stonecutter. Many

²⁰⁹ Among many examples, consider AE 1983, 0560—*pos(uit) ar(am)*; and AE 1971, 0427—*posui(t) ara(m)*.

²¹⁰ Among others, including AE 1916, 0045 in the main text below, consider AE 1949, 0159—*aram et podi(um)*.

²¹¹ Brackets in bold added for easy identification. The edited version reads:
Fano Ma[gn]/o Severus / (s)acerdos vo/tum posui/t ut antiqu/a(m) lege(m) Aug(usti?) s/ervemus

inscriptions, particularly in *scriptio continua*, omit a word-initial letter if the previous word ends in the same letter: here *Severus (s)acerdos*.²¹²

The preferences for inclusion and omission of final -m are clear. Omissions occur after both -a and -e in *antiqua(m) lege(m)*, both in the same noun phrase, the direct object of *servemus*. Final -m is included after -u in *votum*, as an isolated accusative and the direct object of *posuit* in what is a very common verbal phrase on votive offerings, often shorted and abbreviated in a manner similar to *aram posuit*.²¹³ Despite all of the shortenings of the phrase *votum posuit*, shortening to *votu* is comparatively rare, suggesting that many authors were less comfortable with final -u than with dropping the vowel stem entirely (*vot*) or shortening further (to *vo*).²¹⁴

Votum appears alongside an omission in *ara(m)* in *CIL* IX.2164, an offering to Silvanus found in Apulia near Caudium (modern Montesarchio). The text will not be reproduced in its entirety here. The last portion reads *votum solvi et ara(m) dedicavi*. Final -m is only omitted in *ara(m)*, and elsewhere in the inscription it is included in *pro salutem* (the common substandard variation of *pro salute*) and *suorum*.

A similar omission of final -m in *aram* is found on a votive inscription from Rome, *CIL* VI.36828, which dates from the 3rd to early fourth centuries. The text reads:

5 EVFROSY
 NVS POSVIT
 DONVM DEO
 ARA(M) ET DEV
 M²¹⁵

²¹² For such instances involving the letter s alone, see; AE 1984, 0250—*adventus (s)ui*; AE 1961, 0181—*fortunis (s)uis* and *vos (s)um(p)tis*; and *CIL* VI.37231—*castitatis (s)orori*.

²¹³ The phrase is often abbreviated simply as V P.

²¹⁴ Diehl (1899) found very few examples in the *CIL*, and AE provides only a handful, compared to hundreds of other shortened forms.

²¹⁵ *CIL* VI.36828.

Again, the formulaic *posuit ara(m)* is present with omission of final -m. However, the author has chosen to include the grapheme in *donum* and *deum*, even as clear direct objects in the verbal phrase.

Several examples of omission are present in other longer inscriptions, which will not be reproduced in their entirety. A milestone from Galatia (modern Turkey), AE 1985, 0812, which dates to 198 CE, contains the prepositional phrase *per Atticium Strabone(m) legatum*. Having written *Atticium...legatum*, the author was clearly aware that *per* governs the accusative, yet he omitted final -m phrase-internally after -e, surrounded by two accusatives with final -m after -u.

Another inscription, *CIL IX.1503*, commemorating a feast in Apulia in the late 2nd century CE funded by a local aristocrat, contains: *dedicatione(m) pag(i) epulum dedit*. The word *dedicatione(m)* is likely a shortening of the formulaic *ob dedicationem*, which is very common in inscriptions of this type.²¹⁶ A confusion of cases is possible here, with the author considering the ablative with *ob*, although it is somewhat more difficult to believe that a local aristocrat, particularly in Latin-speaking Italy, would make a mistake which is more common among provincial, substandard texts.

While inscriptions are the greatest quantitative source for examples of omission, the circumstances of omission are often more difficult to determine. Given the often formulaic and abbreviated text, caution must be exercised when attributing omission to morphosyntactic or phonetic patterns rather than to practical and spatial requirements, simple misspellings, or haphazard use of the grapheme. In the large number of texts that contain omissions due to lack of space, the question arises of whether or not the stonecutter accounted for the omission in the evaluation of space, or if it was an *ad hoc* necessity or convenience. For these reasons, data

²¹⁶ See, for example, AE 1974, 0329 & 0228; and AE 1989, 0127. Final -m is rarely omitted in the fully-written form, perhaps a result of this type of inscription being commissioned by wealthy buyers.

which is largely quantitative such as Gaeng's (1977) should not be relied upon heavily, but included as one method of presenting a large and diverse body of evidence.

With those difficulties and the findings of previous research in mind, the survey of inscriptions from the late to republic to fourth century CE conducted here nevertheless shows a linguistic tendency to omit final -m more frequently after -a and -e than after -u in texts which contain both omission and inclusion, by about a 2:1 margin. Omission occurs in several morphosyntactic environments, most commonly in accusative direct objects (about two thirds of omissions), and to a lesser extent prepositional phrases (about one quarter of omissions). The preferences for omission after -a and -e and inclusion after -u appear in inscriptions of a variety of types, and are widely distributed both geographically and chronologically.

Conclusions

The texts and data presented in Section II demonstrate that the omission of final -m in non-elite texts was an enduring, widespread linguistic feature. Furthermore, the morphosyntactic circumstances for omission were not strictly limited to the use of the Latin script or the Latin language. Omission occurs in Latin documents written in Greek characters, and the linguistic influence of Latin as the superstrate language resulted in omission in Oscan. Omission in writing was not limited to a regional dialect or specific period of time. Instead, omission appears to have been a ubiquitous feature of the writing of lower sociolects, in which the standardized forms of the higher writing registers were often absent. It is likewise not coincidental that omission takes place more frequently in the phonetic spellings of lower sociolects, where the letter had ceased to be articulated at all.

But, as has been shown, non-elite texts included final -m with some frequency as well, a fact which indicates that an author of a specific text was aware of the standardized orthography in some capacity. Analysis of texts of this type suggests that an author's omission was often pattern-based rather than haphazard, and that omission took place as a result of an author's understanding of written morphosyntactic features of Latin.²¹⁷

Inclusions of final -m in monosyllabic, uninflected forms are common, even in texts which otherwise omit the letter in final position. For example, words such as *tam* and *cum* are frequent, while omission from these words is quite rare.²¹⁸ Perhaps, then, authors learned to write these short words as complete forms, absent any inflectional morphemes to complicate their orthography. Further preventing the omission of final -m in these monosyllabic forms are the phonological processes of assimilation and alveolar nasalization, which produce written forms in final -n (*con*, for example). Monosyllabic inflected forms are more prone to omission, however, as in *qua* for *quam* and *que* for *quem*.

Evidence from the texts, supplemented by the research of Gaeng (1977) and Diehl (1899), reveals that final -m is more likely to be omitted after -a and -e than after -u, especially in texts in which the author is aware of the grapheme. Omission after -a takes more than twice as often as omission after -u, and omission after -e slightly less than twice as often. The authors were clearly more comfortable writing word-final -a or -e than word-final -u, which is in accordance with the lack of a final -u morpheme in non-elite Latin. On the other hand, final -a and -e were both established word-final inflectional graphemes.

²¹⁷ Haphazard usage of the grapheme does undoubtedly occur, but the general circumstances of omission indicate that it was not the norm.

²¹⁸ As found in the graffiti and Terentianus Archive.

The texts also supported the hypothesis that omission of final -m was more likely to take place in prepositional phrases and accusative, multi-word noun phrases. The great majority of omissions, roughly 75%, occur in these environments rather than in isolation. Furthermore, omissions in multi-word accusative phrases are frequent when another accusative morpheme is present phrase-internally.²¹⁹ Within these syntactic environments, the morphological tendencies to omit after -a and -e more frequently than after -u are still operative. This suggests two linguistic trends: a comfort level with omission due to the preposition carrying the syntactic meaning, and a comfort level with omission when the syntactic value of the phrase is clear despite the repeated use of identical morphemes.

In prepositional phrases, the argument that authors misuse the ablative for the accusative, which would explain the omission of final -m after -a and -e, is untenable. Authors are often clearly aware that an accusative follows the preposition, yet choose to omit nevertheless, often still following the preference to include final -m after -u: consider the Bu Njem Ostraka *ad aqua(m)* yet *ad Arnum*, and CEL 156 (the letter of receipt) *ad pulvinos ad statione(m)*, among many other examples.

In multi-word accusative phrases, the morphological preference to include final -m after -u is also dominant, though omissions after -u occur in this environment as well (more frequently than in others). The preference is most obvious in the numerous appositive phrases, such as in *Serenum scriba(m)* in the Terentianus Archive, and in the lists of names side by side, such as in the curse tablet CIL I.818: *Popillium Apollonium*, yet *Vennonia(m) Hermiona(m)*. Here, the

²¹⁹ This strongly suggests that Adams' (1976: p. 52) statement about omission in Late Latin texts in similar syntactic environments—that an author only felt it necessary to include the morpheme once—is true from an early period. See also 'Syntactic Considerations for Omission' (p.21).

trends for phrasal cohesion and word order seem to be, consistent with Herman (2000), taking precedent over the inflectional morphemes and rendering their repetition unnecessary.²²⁰

One finding which was unexpected in the research was the omission of final -m in longer inflected forms, such as the genitive plural morphemes (-*arum* and -*orum*) and in verbal tense markers (-*bam* and -*issem*). Further research is needed on omissions of this type, although they are rare compared to nominal, pronominal, and adjectival omissions. Perhaps the verbal infixes or the partial spelling of the genitive morphemes are sufficient to identify the syntactic and semantic values, with -*oru*, for example, an unambiguous indication of the genitive.²²¹ Likewise, the imperfect -*ba-*, with the omission of final -m, was sufficiently distinct from the other verbal inflections of the same tense.²²² Omission in such environments still must be investigated in greater detail elsewhere.

As a corpus language, Latin does not afford the opportunity to view or interact with speakers or authors. Furthermore, non-elite Latin texts are often excluded from the grammatical commentaries which provide evidence for the linguistic patterns in elite, literary language. In the absence of other tools for analysis, pattern-based features of non-elite texts become important indicators of language use. Based upon such evidence analyzed and presented here, the hypothesis that omissions of final -m in non-elite Latin were largely based upon two morphosyntactic patterns, final vowel morpheme awareness and internal phrase placement, appears to be supported by extant texts.

²²⁰ See 'Syntactic Considerations for Omission', p. 21.

²²¹ Genitive plural terminations without final -m survive in Italian *loro* and French *leur* (Classical *illorum*). Herman (2000): p. 68.

²²² Spanish has retained the first-person singular imperfect morpheme -*ba*.

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