



Code-switching, loanwords, and script in Pliny's *Letters*

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Abstract

This article examines code-switching and script choice in the *Letters* of Pliny the Younger, simultaneously demonstrating textual criticism's broader relevance to the study of Roman code-switching. It argues first, through a systematic reappraisal of the evidence, that the manuscript tradition allows us to trace the use of Greek script to antiquity. This is particularly true for Books 1–9, while dependence on less reliable early printed editions complicates any attempt to evaluate alphabet choice in Book 10. Second, by reevaluating numerous proposed switches in the Plinian corpus, the paper shows that many of the code-switches in Latin script identified by previous scholars are better classed as loanwords, while Greek script is used for the most securely classed switches in the *Letters* and exclusively for phrases longer than a single word, verbs, adjectives, and quotations. Together, these two facts suggest that script is more relevant than previously thought for distinguishing code-switches from borrowings in the *Epistulae*.*

Keywords

multilingualism – code-switching – loanwords – manuscripts – textual criticism – Pliny the Younger

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Pliny the Younger frequently celebrates Greek and Latin bilingualism in his *Letters*, at one point baroquely comparing his friend Arrius Antoninus' sweet speech to that of Homer's Nestor (4.3.3). In a final flourish that is not without a tinge of humor, Pliny declares the Roman Arrius to be more Attic than Athens (4.3.5). Pliny not only praises bilingualism but often engages in what linguists term code-switching, defined by Gardner-Chloros (2009: 11) as "the alternation of two languages in conversation".¹ A crucial problem in studying Pliny's code-switching is determining whether any given word is really a code-switch rather than a loanword. When speakers code-switch, they switch into their other language briefly to do so, whereas loanwords are more common and used by monolingual speakers of the borrowing language too.² Because Pliny's corpus is purely written, it is impossible to determine definitively to what degree Greek words were intended to be pronounced with Greek phonology as opposed to that of the surrounding Latin. This is unfortunate, since phonology, along with the bilingualism of the speaker, has been one criterion used for separating borrowing from code-switching.³ On the other hand, Pliny's *Letters* offer additional data not available in studies of spoken language through the alternating use of Greek and Latin script.

Much caution must be exercised, however, in putting this graphemic data to use. Greek lettering in a modern edition does not necessarily reflect what the manuscripts preserve, and these often disagree with each other and may not reflect what an ancient author intended. Whitton expresses the *communis opinio* when he states that "it is hard to know how far the manuscripts can be trusted over the choice of alphabet" (2019: 103 n. 153). However, the vagueness of appealing to "the manuscripts" in general is limiting. Rather, authors need to be evaluated with attention to the individual and specific ways that their works were transmitted. To evaluate the role played by script in Pliny's corpus therefore requires a deeper engagement with Pliny's manuscript tradition

- 1 Code-switching is a normal part of language contact and frequent in many multilingual situations. For example, code-switching between Standard Chinese (Mandarin) and Taiwanese Hokkien (Southern Min) is common in Taiwan (Chiu 2012, Su 2009), and code-switching has also been practiced between Classical Arabic, Wolof, Hausa, Fula, Mandinka, Swahili, Amharic, Tigrigna, French, and Berber for centuries in what is now Senegal (Ngom 2002; 2018).
- 2 The distinction is slippery but nonetheless important. As Dickey (2018: 8) puts it, an English speaker who uses the French loanword *chair* in a sentence is doing nothing notable, but a sentence containing *selle* would be something special. For a detailed and sensitive discussion of problems with the term "code-switching" and what exactly it covers, see Gardner-Chloros 2009: 11–13.
- 3 On phonology in code-switching, see Dickey 2018: 11, Haugen 1956, Poplack and Sankoff 1984, and Poplack 1988.

than that undertaken by previous scholarship on code-switching in Pliny's *Letters*, to show to what degree we may be confident that the Greek letters in the received text reflect ancient usage.

Still, it is not enough to show through a careful examination of the manuscripts that the alternation between the Latin and Greek alphabets in Pliny's corpus has a reasonable claim to antiquity; it must also be shown to be meaningful. After all, in their study of code-switching in Pliny's *Letters*, Elder and Mullen, while acknowledging a role for script, propose 54 examples of Latin-script code-switching in the *Letters* out of a total of 142 identified switches.⁴ However, a reevaluation of their proposed Latin-script code-switches shows that most are better reclassified as loanwords, with some exceptions being, at best, questionable code-switches. When this is considered, a very different picture of alphabet choice in Pliny's corpus emerges, in which there is a strong graphemic distinction between Latin and Greek. This distinction is further compounded when the Latin script 'code-switches' are compared against those in the Greek script, which would mostly be unambiguous as code-switches even if they were written in Roman letters. Overall, the manuscript evidence and qualitative differences between proposed code-switches in Latin versus Greek script together reveal a graphemic distinction that holds throughout the *Letters*, whether this is the result of Pliny's own habits and intentions or those of some early scribe.

1 Plinian code-switching and script choice

Pliny's use of Greek words has been studied since before the development of the linguistic concept of code-switching.⁵ However, most of the initial work on Roman code-switching that emerged in the 1990s ignored Pliny to focus on Cicero's *Letters*, due to their perceived closeness to spoken Latin and the view that code-switching was a largely oral phenomenon.⁶ Code-switching in Pliny

4 The proportion is much reduced (27 % rather than 38 %) if we only count the first nine books and much increased (76 %) in Book 10. Data are taken from Elder and Mullen's online database: <https://csrl.classics.cam.ac.uk>. See Elder and Mullen 2019: 72, 120–124 for their approach to script.

5 Such were the studies by Deane (1918a; 1918b), Venini (1952), and Niemirska-Pliszczyńska (1955).

6 For the focus on orality in initial research on code-switching, see foundational work by linguists such as Poplack (1980; 1988), Myers-Scotton (1993a; 1993b), and Gumperz (1982), as well as much of what has followed (e.g. Halmari 1997, Jacobson 1998; 2001, Nivens 2002). For an excellent review of linguistic literature on code-switching up to 2009, see Gardner-Chloros 2009: 14. For Cicero's use of Greek, see Adams 2003:

was mostly ignored, with the exception of Rochette's (2013: 474–478) short treatment.⁷ This changed when Elder and Mullen conducted the first comparison of the phenomenon across Cicero, Pliny, Suetonius, and Fronto. The authors created a database of all switches in these four authors. They assigned each one to a set of functions that they developed based on studies about code-switching in (mostly) contemporary literature.⁸ This allowed Elder and Mullen to test various hypotheses that had been based on anecdotal data and to supplement their close readings of individual passages with a comprehensive view of code-switching in Latin letter-writing and literary code-switching in general. Elder and Mullen thus transformed what we know about code-switching in Roman literature, but their book also needs supplementing, particularly in the case of Pliny's *Letters*. Unlike Cicero, Fronto, or Suetonius, Pliny does not receive his own chapter.⁹ This study aims to partially fill this gap, based on an independent reading of Pliny's corpus, cross-referenced with Elder and Mullen's database and categorizations wherever relevant. This survey found that Elder and Mullen did not miss any code-switches in Pliny's corpus but that they did class some examples as code-switches that would be better identified as loanwords. These misidentifications are important because they conceal the relationship between script and code-switching in Pliny's *Letters*.

The question of the interrelation between loanwords, code-switching, and the use of Greek script also occurs in other Roman authors. Evidence from antiquity includes a range of writing practices, including Greek texts in Latin script and texts that switch between the two scripts when they code-switch.¹⁰ There is frequent use of Latin script to represent Greek code-switching in Petronius'

308–346, Aubert-Baillet 2021, Baldwin 1992, Dubuisson 2005, Dunkel 2000, Elder and Mullen 2019, Jackson 2014, Mäkilähde and Rissanen 2016, Rollinger 2015, Rose 1921, Steele 1900, Swain 2002, O'Sullivan 2017, and Wenskus 1998. On the supposed contrast between Ciceronian authenticity and Plinian artificiality, see Rochette 2010: 289. For a convincing argument against the distinction, see Elder and Mullen 2019: 40–93. On Roman code-switching more broadly, see Adams 2003, Babusiaux 2014, Biville 2000; 2002, Dubuisson 2000; 2002, Mullen 2015, Rochette 1997; 2010, Swain 2004, Wenskus 1993; 1995a; 1995b; 1996; 2003. On code-switching in Roman Comedy, see Gaertner and Hausburg 2023 and Jocelyn 1999.

7 See also Zehnacker 2015, which examines Greek words more generally, including loanwords.

8 Elder and Mullen use a framework derived from Callahan 2004, Jonsson 2010, McClure 1998, and Montes-Alcalá 2012; 2015, but the scholarship on written code-switching is now extensive and varied. See e.g. Barassa 2016, Mbodj-Pouye and Van Den Avenne 2012, Nurmi and Pahta 2012, and Sebba 2012.

9 For Cicero, Fronto, and Suetonius, see Elder and Mullen 2019: 111–174, 175–219, and 220–270, respectively.

10 For examples of alphabet-switching, see *IGUR* 298, 397, 460, 501, 634, 638, 707, 972, and 974. *IGUR* 308 transcribes Greek words into the Latin alphabet.

Satyricon, such as when the character Hermeros says that his wife Fortunata is "Trimalchio's *Alles*" (*Trimalchionis topanta*, 37.4).¹¹ Relevant too is Plautus, medieval manuscripts of whose plays use both the Greek and Latin alphabets for Greek code-switches, although editors tend to print them in Greek letters.¹² Elder and Mullen's (2019: 71, 120–124) careful remarks make abundantly clear that Greek words written in Latin script can also be code-switching. Nevertheless, they cautiously accept the relevance of script in some places, stating of Suetonius' corpus that "script choices are not just the abstract and technical problems of the modern textual critic" (2019: 233). Likewise, O'Sullivan (2018; 2020) has argued for deliberate patterns in the use of the Greek and Latin scripts in Cicero's *Letters*, and Dickey (2018) accepts the relevance of script in distinguishing between code-switches and Latin loanwords in Greek authors.¹³ Thus, while whether a particular word was written in the Greek or Latin alphabet is not necessarily decisive in evaluating whether it is a code-switch broadly speaking, comparative evidence suggests that in some corpora the script used is an important data point. The question of whether this is true of the *Letters* depends on the strength of the specific manuscript evidence and, if this is sufficient, on whether any pattern emerges in the use of script.

2 The manuscript tradition

To explain the manuscript evidence for Greek script in Pliny's corpus, it is necessary first to briefly sketch the *Letters*' textual history. The dating and publication of the *Epistulae* have been much debated, but it is clear that Books 1–9 had been published before Pliny departed for his governorship of Bithynia-Pontus in 109, 110, or 111.¹⁴ Arguments about whether the first nine books were

11 See also the rest of Petron. 37.2–7, 58.7, and Boyce 1991. This and all other translations are my own unless otherwise stated.

12 See discussion, with numerous examples, in Gaertner and Hausburg 2023: 22 fn. 2.

13 On script-switching, see also Zeichmann 2017 and Love 2021.

14 These are the dates proposed by Sherwin-White (1966: 80–81), Syme (1985: 185), and Mommsen (1869; 1906: 4.393), respectively. For a summary of their views regarding the dating of Pliny's departure for Bithynia and of each book, see Zehnacker 2009: xxiv–xxix. On Pliny's plans to publish Book 10, see Williams 1990: 13. On Pliny's life and the date of his death, see, among others, Birley 2000: 1–17, with extensive references to primary and secondary sources. For timelines of Pliny's life, see Gibson and Morello 2012: 265–273, Griffin 1999: 157–158, and Lefèvre 2009: 20–21. On inscriptional evidence for Pliny's life, including the Great Comum Inscription, see Alföldy 1999, Eck 2001, and Kriekhaus 2006: 44–47, 216.

intended as a single collection must remain somewhat speculative.¹⁵ On the other hand, Book 10, which contains Pliny's correspondence with Trajan, is generally held to have been published after he died in office and is often treated as a separate work due to its many differences from the other books.¹⁶ Keil (1870) first divided manuscripts of the *Letters* into three groups: the nine-book (containing Books 1–9), eight-book (containing Books 1–7 and 9), and ten-book families. Stout labeled these families X, Y, and Z, respectively, and argued that X and Y derive from a common ancestor containing only Pliny's private correspondence, which Stout labeled W, with Z descending from a manuscript appending the official correspondence with Trajan to the first nine books.¹⁷ While the editor Mynors (1963: 3) groups X and Y together in his stemma, both he and Zehnacker (2009) retain a tripartite schema for constituting their text for Books 1–9.¹⁸

Most scholars believe that the archetype goes back to antiquity. It must at least predate 500 CE, because this is the approximate age of *II*, our earliest witness to the ten-book tradition, from which a mere six leaves survive but which is the apparent ancestor of the β discussed below (see Fig. 1).¹⁹ Less secure factors suggest an even earlier date, such as the fact that it would be easier for the eighth book to have been lost in its entirety from Y when the books traveled as separate papyrus scrolls.²⁰ With their general nature and

- 15 On the first nine books as a collection see among others Bodel 2015, Gibson and Morello 2012: 234–264, Gibson 2015, Murgia 1985, and Stout 1954: 1–5.
- 16 See Bodel 2015: 20 and Zehnacker and Méthy 2017: vii–xix.
- 17 See Stout 1924; 1954. As Bodel (2015: 22) puts it: “There is no telling precisely when or how the communications with Trajan became attached to the nine volumes of private letters.” For some theories and relevant bibliography, see Bodel 2015: 22 n. 23. Stout (1958; 1962: 16–17) thought that the coupling was related to the reawakening of interest in Pliny connected to the Gallo-Roman Sidonius Apollinaris (430–480), who used Pliny as a model for his own letters. Stout's theory gained general acceptance before being refuted by Cameron (1965; 1967). Nevertheless, Reynolds (1983: 317), in a similar theory to Stout's, argued that the tenth book was added to the other nine when Pliny's work was being transferred from papyrus rolls into a codex, likely in the fourth century CE.
- 18 Mynors (1963: v) reports receiving Stout's 1962 edition of the *Letters* while working on his own. While Stout's exposition of textual questions in *Scribe and Critic* remains indispensable, Mynors' edition is the better one. On Pliny's manuscript tradition, see, besides Stout, most of all Mynors 1963: v–xxii, Reynolds 1983: 316–322, and Zehnacker 2009: xxix–xxxv. See also Carlson 1922, Guillemin 1925, Johnson 1912, Merrill 1922; 1903, Rand 1923; 1924; 1925, Schuster 1931a; 1931b; 1931c; 1931d; 1933.
- 19 The fragment contains *Ep.* 2.20.13–3.5.4. For an edition of *II* see Lowe and Rand 1922.
- 20 Alternatively, a quire that happened to contain exactly Book 8 disappeared from a codex. See Bodel 2015: 21–22 for a careful discussion of this and other evidence that the eight- and nine-book traditions diverged when the *Letters* were still on papyrus scrolls. Stout (1954: 2–5; 1962: 5) argued that W was as old as the second century CE.

relationship to each other having been outlined, it remains to show whether the manuscripts of the *Epistulae* provide reliable evidence for the use of Greek script, which requires more explicit and systematic demonstration than it has previously received.²¹

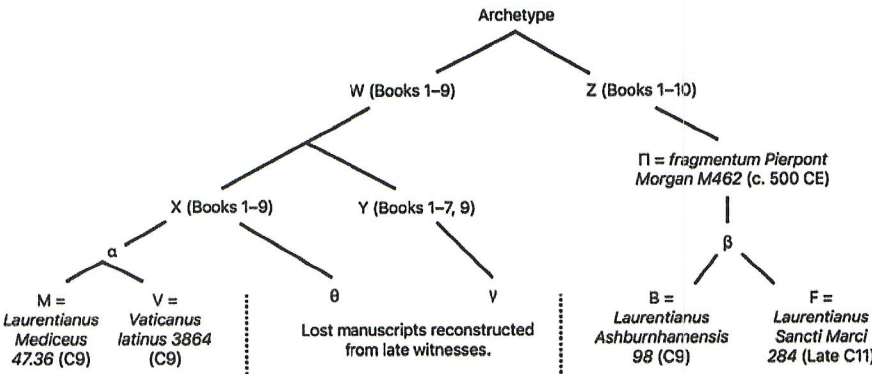


FIGURE 1: *Stemma codicum* for the *Letters* after Mynors (1963: 3) with terminology from Stout. Mynors follows the description in Stout 1954 except with respect to θ , which Stout assigns to Y. The disagreement is mostly irrelevant to the current discussion because words in Greek script were omitted from θ . See Stout 1954: 50.

2.1 *The evidence for the use of Greek script in Books 1–9*

The best evidence for the use of Greek script comes in the form of manuscripts from before the reintroduction of Greek into the Latin West began in earnest after 1397.²² Because knowledge of Greek was largely nonexistent, we can be confident that such manuscripts contain Greek letters because that is what their ancestors had, which copyists did their best to preserve despite some difficulty. Such are the one eleventh-century and three ninth-century manuscripts of the *Letters* that belong to two cognate pairs, α and β , α per-

21 Mynors (1963) and Zehnacker (2009; 2011; 2012) imply the reliability of Pliny's *Graeca* through their editorial decisions and *apparatus critici*, but they do little or nothing to explain the logic behind their decisions. Mynors (1963: xxii) devotes only a couple of sentences to the antiquity of Pliny's *Graeca* in the introduction to his edition and Zehnacker says nothing at all. Stout is primarily concerned with the text of Pliny's many Greek quotations (1954: 49–51) and with showing that the manuscript on which the early printed editions of Book 10 was based did not contain *Graeca* but “left lacunae in its text where the Greek belonged” (1954: 64–69).

22 In 1397 Manuel Chrysolaras arrived in Florence and became the first to offer regular instruction in Greek in Italy. See Reynolds and Wilson 2013: 147–150. The principle of *recentiores non deteriores* ‘the more recent (witnesses) are not (necessarily) worse’ does not apply here for reasons that will become quite apparent.

taining to W and β to Z (see Fig. 1). In these manuscripts, the density of variants and omissions clustering around what Stout (1954: 49) calls Pliny's "Greek tags" illustrate medieval copyists' efforts to preserve Greek script despite a knowledge of Greek that was at best limited to the alphabet.²³ Also relevant is that the Greek letters copied in this era are of an old-fashioned uncial variety instead of the minuscule script already taking off in the Greek-speaking world, which the Italian humanists later learned from the Byzantines during the Renaissance.²⁴ At least one of these four manuscripts bears direct witness to the use of Greek letters for 75 of the 80 total examples of Greek script printed by modern editors in Books 1–9.²⁵

In four of the remaining five cases, Greek script is attested only in later manuscripts. These occur after *Ep.* 5.6, where sources are thinner. Therefore, we are at times dependent on the children of γ , a Veronese manuscript lost sometime after 1419 but known from its descendants.²⁶ However, even these later sources, whose Greek is written in minuscule and thus likely by Greek-literate scribes, may provide reliable evidence for Greek script in their parent through the confusion of letters whose uncial forms resemble each other much more greatly than their minuscule ones. For example, at *Ep.* 6.22.2, γ has a reading where Λ has been substituted for A and at *Ep.* 7.32.2 a garbling of A

23 As Pelttari (2011) has noted, knowledge of Greek, especially the Greek alphabet, was more extensive in the Medieval West than is sometimes thought. Still, as Dickey (2016) and Rollo (2016) have shown, he overstates his case. At best, knowledge of Greek was an extremely rare achievement, there were no lasting schools, and ignorance of the language hindered work even in spheres as essential as diplomacy (Reynolds and Wilson 2013: 120–122).

24 For the uncial Greek of Pliny's *Letters* see Stout 1954: 50–51 and Mynors 1963: xxii. For examples from α and β see the digitized *Laurentianus Mediceus* 47.36 and *Laurentianus S. Marci* 284, respectively, available online through the Laurentian library (<https://tecabml.contentdm.oclc.org>). On the adoption of minuscule throughout the Byzantine world see Reynolds and Wilson 2013: 60–61.

25 *Ep.* 1.2.1, 1.2.4, 1.5.15, 1.7.1, 1.7.5, 1.9.6, 1.12.10, 1.18.2, 1.18.4 (two instances), 1.20.9, 1.20.15, 1.20.17, 1.20.18 (two instances), 1.20.18–19, 1.20.22 (three instances), 2.2.1, 2.3.3, 2.3.4, 2.3.8, 2.3.10 (two instances), 2.11.17, 2.11.23, 2.12.1, 2.14.5 (two instances), 2.20.12, 3.7.8, 3.7.15, 3.9.8, 4.7.3, 4.7.6, 4.9.23, 4.11.9, 4.11.12, 4.25.5, 4.27.6, 5.8.11, 5.17.2, 5.19.2, 5.20.8, 6.8.3, 6.31.12, 7.30.5, 9.1.3, 9.13.21, 9.23.5, 9.26.4, 9.26.6 (three instances), 9.26.8 (four instances), 9.26.9 (ten instances), 9.26.11 (three instances), 9.26.12 (three instances).

26 For the sources pertinent to each book and letter see Mynors 1963: 4. On γ see Stout 1924, Mynors 1963: ix–xiv, and Reynolds 1983: 320–321. For γ it is helpful to consult the digitization of *Codex Dresdensis D 166*, available via the website *Handschriftenportal* (<https://handschriftenportal.de>) courtesy of the Sächsische Landesbibliothek and the Staats- und Universitätsbibliothek Dresden.

for Δ.²⁷ In a single case, editors print Greek letters without any manuscript evidence at all. This is the quotation of *Il.* 9.319 at *Ep.* 8.2.8 that Aldus supplied in his 1508 edition and Catanaeus adopted in his second edition in 1519. While it is understandable that editors print the quotation for lack of anything better, it has unfortunately managed to make its way into Elder and Mullen's database and thus affects their overall statistics for Roman code-switching.²⁸ Nevertheless, the quotation at *Ep.* 8.2.8 is the exception. As a rule, the Greek script in printed editions of the first nine books of Pliny's *Letters* springs from manuscripts whose age helped them escape meddling.

It is likewise reassuring that disagreements between manuscripts concerning alphabet choice are very rare in the first nine books. Of the proposed code-switches in Latin script from Elder and Mullen's database, there is not a single example where the manuscripts provide any evidence for the use of Greek script.²⁹ Also relevant is the fact that θ, which as Stout (1954: 50) deduced omitted anything written in Greek, nowhere provides Romanized variants for what is in Greek script elsewhere. As for terms printed in Greek, in only one case (ζήλω 'with zeal' at *Ep.* 1.2.1) do manuscripts prior to the fifteenth century record Greek and Latin script variants for the same term. That case is not the clearest example of a disagreement. ΖΗΛΩ can be found only in the margins of a single manuscript (B), with the text of the oldest manuscripts providing rather *stilo* (α and B *in textu*) and *libro* (F).³⁰ While in no place do the fifteenth-century descendants of γ provide a reading in Greek script where older manuscripts have Latin, they have Latin script in four places where other manuscripts have Greek. Still, in only one of these cases does the reading in γ not imply an earlier source written in Greek script through some form of corruption.³¹ Were the Hellenization of Latin terms by copy-

27 Mynors (1963: xxii) notes the following common confusions: ΑΔΔ; ΑΛ, ΛΑ *et* Μ; Γ *et* Τ, ΛΙ *et* Ν, Ο *et* C, ΤΙ *et* Π. For other examples of confusions of this type, including where we also have other manuscript evidence, see the readings of γ at *Ep.* 5.8.11 5.17.2 5.19.2, 5.20.8, 6.31.12 6.32.11, 7.12.2, 7.30.5, and 7.32.2.

28 Elder and Mullen (n.d.): <https://csrl.classics.cam.ac.uk/detail.php?id=1314>. On the passage see Stout 1954: 50.

29 *Ep.* 1.15.2, 1.18.6, 2.14.6, 2.17.6, 2.17.10 (two switches), 2.17.11 (three switches), 2.17.12, 2.17.20, 2.17.21, 2.17.22, 2.17.23 (two switches), 2.20.3, 3.5.17, 5.6.25 (three switches), 5.6.27 (two switches), 5.10.2, 5.13.8, 6.31.14, 7.27.5, 9.17.3, 9.36.4, 9.40.2.

30 The manuscripts of γ provide *zelo*. On the textual problem see Stout 1962: 9.

31 The one exception is *musion* for μουσεῖον at *Ep.* 1.9.6. At *Ep.* 5.17.2, γ has *tacte pigmon* for what must have been [KA]TACTEPICMΩN 'On the stars'. At *Ep.* 1.20.15, where editors print πάντα denique λίθον κινῶ 'ich lasse, in the end, nichts unversucht', γ has *panta deniq.* followed by a lacuna. The true reading survived in both α and β. At *Ep.* 5.8.11, γ has *item asintanagonisma* for κτῆμα sit an ἀγώνισμα. The same passage came down as HHHMA sit an ΑΤΩNIEM in M.

ists commonplace, it would likely have led to more real script disagreement among the manuscripts. Otherwise, the scribal introduction of Greek script, already *prima facie* unlikely due to demonstrably low knowledge of Greek, would have to have taken place multiple times independently and in parallel. Indeed, the presence of a few Romanized forms in γ that are in Greek letters in earlier manuscripts suggests that just the opposite process might have been at work, a slow Romanization of Greek forms over time.

Also relevant to the authenticity of Greek script in the manuscript tradition is the preservation of spellings resulting from the pronunciation of Greek during the Roman period. Since medieval scribes did not know Greek, they would not have been influenced in the same way. Take MEIKPAITIOC, the reading found across the manuscript tradition for what editors print as $\mu\iota\kappa\rho\alpha\iota\tau\iota\omicron\varsigma$ ('petulant') at *Ep.* 2.2.1. The spelling reflects the common confusion of $\epsilon\iota$ and ι , as both were by Pliny's time pronounced /i/.³² Notably, MEIKPAITIOC could not easily result from a re-Hellenization of a Romanized form, which would have begun *micr*-. Another example of the confusion of $\epsilon\iota$ and ι is KEINΩ for $\kappa\iota\omega$ 'move', found in both α and β at *Ep.* 1.20.15. Two other examples involve orthographical differences between α and β . The first example occurs within a quotation of Eupolis at *Ep.* 1.20.17, where β has ENKATEΛIΠE and α has ENKATEΛEIPIE for $\epsilon\gamma\kappa\alpha\tau\acute{\epsilon}\lambda\epsilon\iota\pi\epsilon$ 'left behind'.³³ The second is APXAITYION (β) and APXETYION (α) for $\acute{\alpha}\rho\chi\acute{\epsilon}\tau\upsilon\pi\omicron\nu$ 'model' (1.20.9), which reflects the common confusion between $\alpha\iota$ and ϵ resulting from the merger of /e/ /a:i/ and /ai/.³⁴ The last two examples provide additional evidence that the ultimate sources of α and β , W and Z, split off quite early, while scribes still knew Greek well enough for pronunciation to impact their spelling. All four spellings suggest that the use of Greek script in Books 1–9 goes back to antiquity.

2.2 The evidence for the use of Greek script in Book 10

Overall, the evidence for the early use of Greek script in Books 1–9 is strong. The situation in Book 10 is very different. The loss of earlier sources leaves us primarily dependent on early printed editions such as those of Avantius (1502), Aldus (1508), Beroaldus (1503), and Catanaeus (1506).³⁵ Another source is a composite copy owned by Budaeus (Guillaume Budé). This book com-

32 See Horrocks 2014: 166–170.

33 Also note the spelling $\epsilon\gamma\gamma$ - for $\epsilon\gamma\gamma$ - that is commonly attested in epigraphical and papyrological sources, e.g. $\epsilon\gamma\gamma\iota\sigma\tau\alpha$ in *AE* 1939, 0110 and $\epsilon\gamma\gamma\rho\acute{\alpha}\pi[\tau\omicron\upsilon]$ in *PMich.* 1330, on which see Sells 2022.

34 On the merger, see Horrocks 2014: 166–167.

35 See Reynolds 1983: 319–320.

bined a copy of Beroaldus' 1498 edition of most of Books 1–9, a copy of Avantius' 1498 edition of Book 10, and Iucundus' handwritten supplement for parts missing from those editions, most notably *Ep.* 10.4–40.³⁶ Behind them all lies a lost Parisian manuscript, P, a descendent like β of Π.³⁷ The danger of taking these later editions at their word concerning the use of Greek script is evident from an examination of Pliny's description of a *platanon opacissimus* ('most shady grove of plane trees') as part of his praise of Caninius Rufus' villa at Comum (*Ep.* 1.3.1).³⁸ Both Pliny's most recent editors, Mynors (1963: 6) and Zehnacker (2009: 3), print *platanon* 'grove of plane trees' in Latin script, the shared reading of α and β. However, were we to lack earlier sources, editors might have been tempted to print πλατανῶν as in Aldus Manutius' 1508 edition, one of the principal sources for Mynors' text of Book 10.³⁹

These difficulties aside, there is still some indirect evidence for earlier Greek script in a few places. Namely, P had lacunae wherever its copyist encountered Greek letters, probably with the intention that they be filled by a later copyist who never came.⁴⁰ These holes are reflected in Iucundus' transcription, our earliest source for *Letters* 10.4–40, and sometimes in Avantius' early edition. For instance, where editors now print ὑπὲρ Μαλέαν 'beyond Cape Malea' (*Ep.* 10.15), Iucundus has a lacuna. To this example should be added νομοῦ Μεμφίτου 'of the Memphite nome' at *Ep.* 10.10.1, if Stout (1954: 64) is right that νομοῦ μεμφίτου is a later addition by Budé himself and not in Iucundus' own hand. Likewise, where editors now print θρεπτούς 'enslaved foundlings' (10.65), our earliest source, Avantius, has a lacuna, which Catanaeus tried to fill based on sense with ἐκθέτους 'exposed children' in his first edition (1506). Aldus (1508) then improved the reading by providing the correct technical term, θρεπτούς.⁴¹ Where there are no lacunae in Avantius, he could easily have filled holes in his source using context.⁴² Finally, the Greek script in *speciem* διανομῆς 'type *der Verteilung*' (*Ep.* 10.116.2, 10.117) originates in a marginal annotation by

36 See Merrill 1907. This copy is now in the Bodleian Library as Auct. L 4.3. Iucundus is the Latin name of Fra Giovanni Giocondo.

37 On P, see Stout 1954: 55–80.

38 The loanword *platanon* is reasonably broadly attested across Latin literature (cf. Petron. *Sat.* 126.12, 131.1, Seneca *Ep.* 55.6, Vitruvius *De arch.* 5.11.4, Mart. 3.19, 12.50). The term shows the way a loanword can function like a code-switch in communicating a strong connection to the Greek cultural sphere, since *platanon* still evokes the plane tree featured in Plato's *Phaedrus* as well as Cicero's *De oratore*.

39 See Mynors' *elenchus testium* (1963: 4).

40 See Stout 1954: 64–69.

41 Budé then used Aldus to emend his own copy while acknowledging Catanaeus by writing *al.* ἐκθέτους in the margin. See Stout 1954: 68.

42 These are ἐράνους ('societies for mutual help') in Pliny's letter to Trajan at *Ep.* 10.92 and εἰσήλασαν / εἰσήλασεν 'they / he made a triumphal entrance' (*Ep.* 10.118–119).

Budé. The other sources all have *diamones*. What seems most likely here is that *dianomes* suffered metathesis into the nonsensical yet vaguely diabolical *diamones* before being recognized for its true self by Budé.⁴³ Thus, there is some evidence for the use of Greek script in Book 10, but it is of very poor quality, and it is confined to showing us that there likely was Greek script in Book 10 at some point in the past, not what it may have read, which remains largely a matter of conjecture, albeit in some cases relatively secure conjecture.

A closer examination of the manuscript tradition shows both the strength of our evidence, including the pre-Renaissance and consistent nature of our witnesses, as well as its unevenness and limitations. In addition to the problems with Book 10, after *Ep.* 5.6 we lack reliable sources for the ten-book tradition. This dearth of witnesses means that a Romanization in W alone would be sufficient to hide the use of Greek script from modern eyes. However, this is a reason for caution in assuming that we can know everything that was written in Greek script in the archetype, rather than a reason to doubt the antiquity of what *is* attested in Greek script. Despite caveats, the manuscript tradition generally allows us to be reasonably confident in the antiquity of the use of Greek script for most of the *Letters*. This being true, it is necessary to demonstrate that this graphemic distinction is not only present but systematic and meaningful, in this case through showing its relationship to the distinction between code-switching and Greek loanwords.

3 Reevaluating Latin-script code-switches in the *Epistulae*

It can be hard to distinguish code-switches from borrowing, particularly in the case of single-word switches, by far the most common type in Pliny. Whereas code-switches are restricted to bilingual speakers, loanwords have a more central place in the lexicon.⁴⁴ According to one widely accepted framework, the difference between code-switches and loanwords is thought to rest on integration and frequency.⁴⁵ Integration can take many forms, but here we will

43 It must have been in Latin script when it was transcribed, but was possibly in Greek script at some earlier point before being Romanized like some of the examples from γ.

44 As Dickey (2018: 9) puts it, a code-switch “often alternates with a native term that would normally be used for the same idea”.

45 For this framework see e.g. Dickey 2018: 8–9 and Clyne 2003: 73, 142–152. On distinguishing between the two in a written corpus see also Callahan 2004: 7–9. Many scholars, such as Campbell (2013: 56–64), Gardner-Chloros (2009: 20–41), Myers-Scotton (1992), and Thomason (2001), see borrowing and code-switching as inhabiting a diachronic continuum. That is, as Gardner-Chloros (2009: 12) puts it, “loans start off as code-switches and then gradually become established as loans”.

look primarily at morphological accommodation (when a word is used with the morphology of the borrowing language), semantic accommodation (when a word's meaning is different in the source and borrowing languages), and stability (including whether a word "has a specific, consistent place in the lexicon").⁴⁶ While frequency can be partially assessed by examining whether a term appears in other classical authors, absence of evidence is not evidence of absence. Not all Greek words in Pliny's *Letters* can be definitively identified as code-switching or as borrowing. Nevertheless, applying the standards of frequency and integration to the Latin-script code-switches proposed by Elder and Mullen shows that, as a group, they lie closer to the borrowing end of the continuum than do the Greek-script code-switches, and that many of them are in fact unambiguous loanwords. Their inclusion in Elder and Mullen's database makes sense given the fuzzy line between loanword and code-switch, but it has the unfortunate byproduct of effacing the strong graphemic distinction that is otherwise evident in the corpus.

3.1 'Code-switches' in the villa letters

Perhaps no part of Pliny's *Letters* presents more issues with identifying code-switching than the famous villa letters to Clusinius Gallus (2.17) and Domitius Apollinaris (5.6).⁴⁷ Elder and Mullen (2019: 72–74) identify the following code-switches in these two letters: *andron* 'passageway' (2.17.22), *apodyterium* 'undressing room' (5.6.25, 5.6.27), *baptisterium* 'plunge-bath' (2.17.11, 5.6.27), *hapsis* 'half-circle' (2.17.6), *heliocaminus* 'sun-room' (2.17.20), *hypocauston* 'hypocaust' (2.17.11, 2.17.23, 5.6.25), *procoeton* 'bedroom antechamber' (2.17.10 (twice), 2.17.23), *propnigaeon* 'sweating-room' (2.17.11), *sphaeristerium*

46 Dickey (2018: 8–9) discusses these elements in her article on distinguishing between Latin loanwords and code-switches in Greek, where she also lists graphemic accommodation, which has been excluded here since not to do so would be circular. Also relevant is the degree of integration, as some words may be only partially integrated. With respect to morphological accommodation, compare the framework used by Gaertner and Hausburg (2023: 22–23, 44–53), who confine their analysis of code-switches in Plautus' comedies to "purely Greek expressions", to which belong all those that "have not been adjusted to Latin morphology". Gaertner and Hausburg's (2023: 22–23) distinction between loanwords with orthographically apparent phonological adaptation "(e.g. *balineae* < βαλανεῖον)" in addition to merely morphological accommodation "(e.g. *arrabo* < ἀρραβών, -ώνος)" is important, but such phonological adaptation is less common in borrowings from later periods due to the increasing bilingualism of Latin speakers (Clackson and Horrocks 2011: 190).

47 On the identity of the first addressee, see Whitton 2013: 222–223. On Pliny's villas, see Chinn 2007, Bergmann 1995, Braconi and Uroz Sáez 2008, and Riggsby 2003. Gibson and Morello (2012: 306–307) provide further bibliography on the villa letters.

'ball court' (2.17.12, 5.6.27), and *zotheca* 'alcove' (2.17.21).⁴⁸ All these architectural terms have been unambiguously transmitted in Roman script, comprising 17 of the 47 Latin-script Plinian code-switches proposed by Elder and Mullen.⁴⁹

Many of these terms show signs of accommodation to Latin. For instance, Pliny does not use *andron* in its Greek meaning of '(men's) dining room' or 'men's quarters' but rather to mean 'passageway'.⁵⁰ Such semantic accommodation suggests a loan instead of a code-switch. Morphological accommodation can be seen in the ablative ending used with *procoeton* in *cum procoetone* 'with a bedroom antechamber' (*Ep.* 2.17.10) and the addition of the Latin diminutive to *zotheca* 'niche' to create *zothecula* 'little alcove' (*Ep.* 5.6.38). This *zothecula* may be contrasted with Pliny's use of the Greek diminutive in the code-switch λιτούργιον ('little public service', *Ep.* 2.11.23, 2.12.1).⁵¹ A less notable type of morphological accommodation involves the Latinate suffix *-um* in *apodyterium* 'undressing room' (*Ep.* 5.6.27), *baptisterium* 'plunge-bath' (5.6.27), and *sphaeristerium* 'ball court' (2.17.12, 5.6.27). Another similarly light morphological accommodation is the *-us* in *heliocaminus* ('sun room'). In sum, the degree of accommodation to Latin invites suspicion not just of *andron* but of *procoeton*, *zotheca* and, to a lesser degree, *apodyterium*, *baptisterium*, *sphaeristerium*, and *heliocaminus*.

Another issue is whether words like *sphaeristerium* and *baptisterium* had a specific and stable place in the lexicon and did not alternate with Latin equivalents. If so, this suggests classing them as loanwords rather than code-switches. The terminology of Roman architecture and baths overflows with borrowings from Greek.⁵² For instance, *propnigeon* also occurs in Vitruvius' *De architectura* (5.11.2), where it appears in the Latinized form *propnigeum*. Varro includes *procoeton* and *apodyterium* (as *apodyterion*) in a list with a long set

48 *Propnigeon* denotes a bath chamber of uncertain use, possibly 'sweating room'. The term *zotheca* also appears with the diminutive as *zothecula* at *Ep.* 5.6.38, but Elder and Mullen wisely did not add it to their database of code-switches.

49 While Elder and Mullen (2019: 73) choose to class all these as code-switches, they acknowledge that at least some of these could easily be classed as borrowings.

50 See Elder and Mullen 2019: 72, n. 73. On the distinction, see Vitruvius (*De arch.* 6.7.5), who notes what "we" Romans call *andrones* versus what the Greeks call *andrones*. See also Callebaut 2013.

51 Elder and Mullen (2019: 11–12), without noting their predecessors, follow Whitton (2013: 182) and Venini (1952: 268) in taking λιτούργιον as a reference to Greek λιτός 'paltry' and a play on the neighboring Latin *non leve*. They appear unaware of Rochette (2013: 477) who follows Reekman (1969) in reading λιπούργιον, which may be superior to λιτούργιον paleographically. Rochette and Reekman understand λιπούργιον as a medical reference meaning 'little tumor', but it could also be translated etymologically as 'little remaining task', from λ(ε)πω 'leave' and ἔργον 'work'.

52 See Cordier 2005.

of Greek terms used to describe parts of villas, many of which are unambiguous loanwords such as *palaestra* ('place for exercise'). We should be cautious in applying the evidence from other authors to Pliny, because, as Aikhenvald (2002: 197) notes, "what appears to be a nonce borrowing, or an occasional code-switch, for one speaker, could be an established morpheme for another speaker". Nevertheless, terms used as loanwords in contemporary or earlier authors and filling a distinct place in the lexicon should be considered borrowings in the absence of other factors suggesting that Pliny is using a word as a code-switch.

Moreover, when Elder and Mullen (2019: 73) point out that Pliny's villa terms are infrequently attested in Latin circa 100 CE, this may merely show that they are unlikely to appear in literary authors. The terms are often better attested epigraphically. For instance, *hypocauston* ('hypocaust', a system of hot air channels for heating), while not common in literary sources, occurring only in Statius' *Silvae* (1.5.59) and (admittedly much later) in Ulpian (*Dig.* 17.1.16), appears more frequently in inscriptions (e.g. *CIL* 2.5181.21, *AE* 1945, 00124). Some villa terms are just as badly attested in Greek literary sources as in Latin, again perhaps because they are not the types of words likely to occur in literature. So ὑπόκαυστον first appears in the fourth-century CE writings of Epiphanius (*Panarion* 2.312, 313). Notable also is *heliocaminus*. While the word is poorly attested in Latin literary sources (only at *Ep.* 2.17.20 and at Ulpian *Dig.* 8.2.17), this is matched by no attestation at all in Greek literary sources, though it does appear in at least one Greek inscription (*IGRom.* 4.1431.43). In such circumstances, low attestation in our sources has little to say about whether a term is a loanword or a code-switch. Overall, a closer inspection of the villa terms' attestation elsewhere only adds to the suspicion that some of them are loanwords, while in other cases it cannot help either way. In no case does it suggest that one of these words must be regarded as a code-switch rather than a loanword.

While most do not, a few words in the villa letters feature Greek inflections. In the case of *andron* and *procoeteon*, the retention of *-ōn* (-ων) instead of *-ō* is a normal variant and unremarkable (compare *platanon* above). The retention of the neuter ending *-on* (-ον) in *hypocauston* and *propnigeon* is a bit more complicated. The ending *-on* is very uncommon in formal prose, which prefers the more Latinized *-um*. However, the ending did not cause Elder and Mullen to declare *hyperbaton* a code-switch at *Ep.* 8.7.2.⁵³ In poetry, which has different rules, *-on* appears frequently, especially with proper names (e.g. *Ilion* alongside *Ilium*). It also appears in the *Historia Naturalis* of Pliny's uncle Pliny

53 In the *De re orthographica* of Terentius Scaurus, a grammarian under Trajan and Hadrian, the author lists *hyperbaton* alongside *hymnus* and *hyacinthus* as Greek words that have been admitted into Latin (25.15).

the Elder (e.g. *isocinnamon* '[an odiferous shrub] resembling cinnamon' 12.98, *sesamon* 'sesame' 1.15a, 15.25). The use of *-on* in *hypocauston* and *propnigeon* might result from the less formal epistolary register, without necessarily rising to the level of a code-switch.⁵⁴ In sum, their endings alone provide no reason to take *andron* and *procoeteon* as code-switches, and little to take *hypocauston* and *propnigeon* as such.

More striking is *hapsida* 'half-circle' at *Ep.* 2.17.8.⁵⁵ Elder and Mullen (2019: 73) note, following Whitton (2013: 233), the uniqueness of the aspiration and the declension "*à la grecque*". The aspiration is indeed notable, as this is the only extant example of the aspiration of this term in Latin. The retention of the third declension singular accusative Greek case ending is again uncharacteristic of formal prose, but it is not uncommon in poetry (cf. *heroa* 'hero'), nor is the use of the Greek accusative for this specific word unique to Pliny the Younger. The Elder Pliny uses the Greek accusative plural of the term (*apsidas*) in the *Natural History* when he describes the orbits of the stars.⁵⁶ Still, the unusually Greek form of the word seems likely to have given as much pause to ancient readers as modern ones, and its difficulty is reflected in the presence of variants in the manuscripts.⁵⁷ Thus *hapsida*, the best candidate among the villa terms, is quite possibly a code-switch, but still not a certain one.

Elder and Mullen (2019: 73) argue that using Roman letters for the villa terms simultaneously displays "the exoticism and opulence of the villas and how Greek ways of living have been annexed and controlled by Rome".⁵⁸ However, just because a word retains Greek cultural associations does not mean it is a code-switch. In their study of Greek words in Roman comedy, Gaertner and Hausburg (2023: 53–56) show that loanwords can produce the same

54 In Quintilian's *Institutio oratoria* (1.5.59–64), he opines that it is best to avoid using Greek endings in Latin, preferring *Aenea* for *Aeneas* and *Plato* for *Platon*, and expresses disapproval of the ostensibly trendy practice of using Greek endings with loanwords. He does not mention neuter singular *-on* versus *-um*, but the same rule would presumably apply, though Quintilian breaks it by making frequent use of the term *hyperbaton* 'hyperbaton' (*Inst.* 8.6.62, 9.3.23, 9.3.91, 9.4.26). Likewise, Quintilian's complaint that those who use these endings are not speaking Latin is clearly normative and should not be taken at face value (*Inst.* 1.64). Such prescriptive attitudes usually indicate that there are many speakers doing exactly what has been complained about.

55 More precisely: *annectitur angulo cubiculum in hapsida curuatum* 'adjoining the nook is a room [with one of the walls] curved into a bay' (*Ep.* 2.17.8).

56 Plin. *HN* 2.63, 2.73. He also uses the (lightly) Latin genitive (*apsidum*) at *HN* 2.72, 2.73.

57 α has our *hapsida* while β provides the reading *haspida* [sic] 'shield', and γ has a lacuna. Speculatively, one wonders whether the lacuna in γ suggests a tradition in which the term was written in Greek letters.

58 Compare Varro's statement that Romans do not think that they own a villa 'unless it rings with lots of Greek appellations' (*si non multis uocabulis retinniat Graecis*, 2 praef. 2).

exoticizing effect and have the same associations with the Greek world as code-switches. It is helpful to expand on Dickey's (2018: 8) contrast between French loanwords and code-switches in English, which she makes quite stark by comparing words like *chair* with completely French words like *selle* 'chair'. Not all French loanwords in English are so utterly ordinary and devoid of French associations as *chair* or *garage*. English also has French loanwords that retain an association with France, such as *chic*.⁵⁹ Thus, Elder and Mullen are only partly right to assign the villa 'switches' to the functional category of "Greek Cultural Sphere: Architecture". The words may indeed, as Elder and Mullen (2019: 26) say, "evoke the cultural associations of the Greek term". Nevertheless, they are mostly or wholly loanwords rather than switches.⁶⁰

3.2 Other Latin-script 'code-switches'

Most of the proposed code-switches using Latin script outside the villa letters are similarly suspect.⁶¹ Again, many show one or multiple signs of accommodation to Latin. For example, in *Ep.* 1.18, Pliny tells Suetonius that he will attempt to find a 'trick' (*stropham*) to delay a trial. While Elder and Mullen (2019: 271–278) do not mention *stropham* in their thoughtful discussion of the letter in their book, they do include it in their online database. The term displays both morphological and semantic accommodation. First, there is the Latinized *-am* ending. Second, the term is in the singular, as commonly across many different Latin authors (e.g. Petr. 60.1, Mart. 3.7.6). In contrast, Greek *στροφή* is always plural when it means 'trick' (e.g. Aesch. *Supp.* 623, Ar. *Plut.* 1154, *Ran.* 775). *Stropham* should thus clearly be classed as a loanword rather than a

59 First attested in English in 1832, borrowed via French from Southern German *Schick* 'tact, skill, know-how' (cf. *Oxford English Dictionary* s.v. "Chic, Adj. & n." (2023)).

60 According to Elder and Mullen's categories, "Greek Cultural Sphere" (GCS) code-switches form the single largest category within the letters. They comprise 46.6% of code-switches identified by these authors. The only other category that comes close in quantity of switches is quotations, at 44.5%. Together, these two categories account for over 92 % of Pliny's switches (Elder and Mullen 2019: 85). In comparison, GCS makes up 22.3% of switches in Cicero's *Ad Atticum*, 37.4% of those in *Ad Familiares*, and 62 % of those in Fronto's correspondence (Elder and Mullen 2019: 291–299).

61 These are *lyristes* 'lyrist' (*Ep.* 1.15.2, 9.17.3, 9.36.4, 9.40.2), *strophā* 'trick' (1.18.6), *mesochorus* 'chorus leader' (2.14.6), *climactericus* 'climacteric' or 'critical' (2.20.3), *opisthographus* 'written on the back' (3.5.17), *scazontes* 'scazons' (5.11.2), *xenia* '(guest) gifts' (5.13.8, 6.31.14), *idolon* 'apparition' (7.27.5), *iatriapla* 'ointment-doctor' (10.6.1, 10.10.7, 10.10.1), *buleutae* 'councilmen' (10.39.5, 10.110.1, 10.112.1), *psephisma* 'decree of the assembly' (10.43.1, 10.43.2, 10.44), *aposphragisma* 'figure on a signet ring' (10.74.3), *bule* 'council' (10.81.1, 10.110.1, 10.112.1, 10.116.1), *eranus* 'society for mutual help' (10.93), *protopraxia* 'right of first payment as creditor' (10.108.1), *ecdicus* 'legal representative' (10.110.1), *ecclesia* 'assembly' (10.110.1), and *iselasticus* 'of a triumphal entrance' (10.118.1, 10.118.2, 10.119).

code-switch. Another miscategorized loanword is *xenium* '(guest) gift', which appears with Latin morphology as the ablative plural *xeniis* (*Ep.* 6.13).⁶² The term is also used (with a Latin genitive as *xeniorum*) by Martial (13.3.1) and in the diminutive form *xeniolum* by Apuleius (*Met.* 2.11).

Morphological accommodation occurs in many of the other terms, some showing a more significant adjustment from Greek than others, such as *mesochorus* 'chorus leader' (*Ep.* 2.14.6), *climactericum* 'climacteric' or 'critical' (2.20.3), *opisthographos* 'written on the back' (3.5.17), *lyristae* 'lyrist' (dative singular, 9.140.2), *cum psephismate* 'with a decree of the assembly' (10.43.1), *iatriplatae* 'ointment doctor' (dative singular, 10.6.1, 10.7, 10.10.1), *eranium* 'society for mutual help' (10.9), *protopraxiam* 'right of first payment as creditor' (10.108.1), and *eccidicus* 'legal representative' (10.110.1).⁶³ So too *iselasticis* (ablative plural, 10.118.1), *iselastici* (genitive singular, 10.118.2), *iselasticus* (10.118.2), and *iselasticum* (10.119), 'of triumphal entrance'.⁶⁴ In all, morphological accommodation is present in thirteen of the eighteen terms identified by Elder and Mullen as Latin-script code-switches beyond the villa letters.

62 Elder and Mullen explain the use of the ablative case in *xeniis* as an example of the tendency in code-switching for the matrix language (here Latin) to give case endings to the embedded language (here Greek) but acknowledge "that some readers well might place *xeniis* ... at the borrowing end of the continuum" (2019: 72). The terminology "matrix language" and "embedded language" comes from the "Matrix Frame Language" theory developed by Myers-Scotton. According to Myers-Scotton and Jake, "almost without exception, EL elements receive the expected ML case marker" (2009: 347). However, Myers-Scotton and Jake use examples that are not analogous to the Greek / Latin situation, for instance considering the use of English as an embedded language in Russian. In Russian, it makes sense to give English switches Russian case endings because English lacks anything like the requisite morphology demanded by the matrix language. In the case of Greek switches in Latin, Latin speakers can and did use the Greek cases most analogous to the Latin ones. They did this even when Greek lacked a corresponding case, for instance using the Greek dative to represent the ablative (Adams 2003: 500–501). For other applications of the MLF in classical studies, see Elder and Mullen 2019: 63–81, Mullen 2015: 13–14, Swain 2002, and Wenskus 1998: 5–8, 2003: 305. Swain and Wenskus use an earlier version of the MLF model (Myers-Scotton 1993a). For the weaknesses of the MLF theory, see Elder and Mullen 2019: 64–65 and Gardner-Chloros 2009.

63 The uses of *iatriplatae* at *Ep.* 10.7 and of *eranium* at 10.9 are by Trajan not Pliny. Though Mynors (1963: 343) and Zehnacker and Hubert (2017: 52) both print *protopraxian*, our earliest source, Avantius' edition, has *protopraxiam*. Aldus may then have made the term a bit more Greek, being followed by Budé in a process reminiscent of that seen with *θρεπτοῦς* above. Compare also Aldus' rendering of *Arpocras* as *Harpocras* in *Ep.* 10.5, 10.6, 10.7, and 10.10. On the term see Sherwin-White 1966: 717 and Zehnacker and Hubert 2017: 135–136.

64 That is, 'relating to *isastica certamina*' or 'iselastic games' or substantively of the victor(s) in such contests. The use of *iselasticum* at 10.119 is by Trajan.

Only two words from beyond the villa letters use Greek morphology. Both cases involve endings borrowed from the Greek first declension. In the first example, the Greek nominative and accusative singular forms *lyristes* 'lyre player' (*Ep.* 1.15.2) and *lyristen* (9.17.3, 9.36.4) alternate with the Latin dative singular *lyristae* (9.140.2). In the second example, we only have the nominative singular *bule* (*Ep.* 10.81.1, 10.110.1) and accusative singular *bulen* (10.112.1, 10.116.1). The Greek forms are inconsistent with formal usage and can, in the case of *lyristes*, be contrasted to forms such as *citharista* 'cithara player' (*Cic. Div.* 2.133) and *citharistam* (*Cic. Verr.* 2.1.53).⁶⁵ However, the Greek *-es* and *-en* are not uncommonly found in proper nouns of Greek origin, even in very formal Latin prose, and they appear more broadly in less formal genres.⁶⁶ Overall, these endings may weigh the scale toward code-switching but are not so uncommon in Latin as to ensure these are not borrowings.

Some of the 'switches' outside the villa letters appear as loanwords in the works of other authors. Some of these works belong to genres in which code-switches are generally impermissible. These attestations suggest but do not necessarily prove that these terms are also loanwords in the *Letters*.⁶⁷ For instance, the morphological status of the metrical term *scazontes* 'limping iambs' (*Ep.* 5.10.2) is ambiguous due to the alphabet used, as it depends on whether we should read *scazontēs* or *-es*. However, it appears twice in Martial (1.96.1, 7.26.1), where it is an apparent loanword just like the *hendecasyllabi* 'verses of eleven syllables' that Pliny mentions a few words earlier in *Ep.* 5.10. So *psephisma* which, in addition to taking the ablative ending *-e* at *Ep.* 10.43.1, is attested in Cicero's forensic oratory (*Flacc.* 15.4, 17.10, 19.4, 23.12, 75.2), a genre in which code-switching is usually not permitted.⁶⁸ Thus, these two terms are also more likely loanwords than code-switches.

Reminiscent of the architectural 'code-switches' in the villa letters are a whole set of terms in Book 10 that Elder and Mullen assign to the "Greek Cul-

65 But the form *citharisten* appears in Pomponius (2.77).

66 For instance, Tacitus uses *-es* and *-en* for a great number of proper nouns (e.g. *Tigranes* at *Ann.* 2.3, 6.40, 14.26, 15.1, 15.5, *Tiridaten* at *Ann.* 6.32, and *Mithridaten* at *Ann.* 6.32) but only once with a common noun: *acinacen* '(Parthian) scimitar' (*Ann.* 12.51). In the less formal genre of epistolography, Cicero (*Fam.* 13.77.3) refers to *meam bibliothecan* 'my library', which Elder and Mullen do not classify as a code-switch. See also the accusative *-en* seen in the names of various Greek arts such as *musicen* 'music' (*Nep. Epam.* 1.2), *poeticen* 'poetry' (*Nep. Att.* 18.5), and *historicen* 'history' (*Quint. Inst.* 1.9).

67 Code-switching in Latin literature tends to be restricted to less formal genres, such as letters and comedy (Elder and Mullen 2019: 6). This is also true cross-linguistically (Callahan 2004: 69).

68 It should be noted, however, that Cicero seeks to associate the word with a negative picture of Greek political customs throughout the speech. See e.g. *Flacc.* 23.12.

tural Sphere" category under the subcategory "Politics / Law". These include *psephisma* 'decree of the assembly', *protopraxia* 'right of first payment as creditor', and *bule* 'council', discussed above, along with *buleutae* 'councilmen', *ecclesia* 'assembly', and *ecdicus* 'legal representative'. While poorly attested in Latin literary sources, the terms are often well attested elsewhere. For example, *protopraxia* appears in Latin literary authors only in Pliny's *Letters*, but it also occurs in the *Tabulae Sulpiciorum* from Pompeii (AE 1984, 224, 57 CE). Likewise, *bule*, *buleutae*, and *ecclesia* appear in numerous inscriptions from Pliny's time and earlier. The terms even occur in bilingual inscriptions as Latin translations for their Greek equivalents, such as *bule* for βουλή (AE 2005, 1562, a second-century CE bilingual inscription from Palmyra) and *ecclesia* for ἐκκλησία (CIL 3.14195.4, a 104 CE bilingual inscription from Ephesus). *Buleutae* regularly appears in inscriptions with Latin morphology as *buleuta* (nominative singular) and *buleutae* (dative singular).⁶⁹ Nevertheless, because these inscriptions occur in the Greek East, they may reflect a different variety of Latin than that spoken by Pliny. More important is the specific place in the lexicon these terms would occupy for Pliny or any other Roman involved in provincial administration. For example, *bule* describes a specific type of council for which *senatus* '(Roman) senate' would not do, though *senatus* might be used for γερουσία 'council of elders', as it was for the γερουσία of Sparta (Nep. *Them.* 7.4), or to describe a body like the Athenian Areopagus (Cic. *Off.* 1.75). These political and legal terms may have been code-switches when they first entered the lexicon, but there is no reason to think that they were in Pliny's day. Like architectural terms, they were most likely borrowed long before to fill a hole in the Latin lexicon.

At this point, there are only three proposed switches in the Roman alphabet yet to be discussed. The first is *aposphragisma* 'figure on a signet ring' (*Ep.* 10.74.3). Its morphology is of no help, being totally consistent with either Greek or Latin. Likewise, its first attestation in Latin outside of this letter occurs in the sixth century CE, at which point it is clearly a loanword, but this borrowing could theoretically have happened after Pliny's time.⁷⁰ More speculatively, however, it would be most natural for this term to be a borrowing because it fills a specific place in the Latin lexicon for something that Pliny is not alone or first in using. When a specific word was demanded in such a case, we have seen that it was normal for Latin to borrow an available Greek one. The second example is *idolon* 'apparition' (*Ep.* 7.27.5). In addition to its *-on* ending, the term is almost unattested in Latin until it takes on a rather

69 See e.g. CIL 3.7429, 3.7543.

70 The other Latin attestations are Novat. 4.37.17 (sixth century CE) and *Not. Tir.* 99.58 (Carolingian?). It is attested in Greek, among other places, at Ath. 13.585d.

different meaning in a Christian context. Its use in Latin authors predating Pliny usually involves code-switching and is connected to Epicurean philosophy.⁷¹ Thus, perhaps *idolon* is a code-switch. In any case, as either a loanword or a code-switch, it does a good job fitting its context, the story of an Athenian haunted house. The third example is *dianomes*. While Elder and Mullen follow editors in printing διανομῆς, the manuscript used by Avantius probably had Roman letters, as discussed above. The term appears with a Greek genitive ending and appears to be a real code-switch. Given the paucity of our evidence, it is possible that it was, at some point earlier in the manuscript tradition, written in Greek and later Romanized, as we saw in several cases in γ, but this must remain very speculative. Overall, while *aphosphragisma* is a dubious code-switch, *idolon* and *dianomes* are more promising.

A thorough review of Elder and Mullen's proposed code-switches in Roman letters shows that they are largely misassigned. Two of the three best examples among them, *hapsida* and *idolon*, are likely but not assured code-switches. On the other hand, most of the Latin-script code-switches are better classed as loanwords. Many of these 'switches' show clear accommodation to Latin, a few semantically and many morphologically. Many also belong to areas where Latin borrowed terminology wholesale from Greek. It must be admitted that these terms probably entered the lexicon at one point via code-switching. However, it is not fitting to compare Cicero's use of Greek philosophical terms like εἶδωλον with Pliny's use of terms, frequently accommodated to Latin, to describe architectural features long part of the Latin-speaking world or Greek political terms that had likely been borrowed into Latin before his time. This reclassification of Latin-script 'switches' is important because when the proper exclusions are made, a graphemic distinction becomes clearer: the Roman alphabet is generally used for loanwords, not code-switches.

3.3 *The pattern of script use in Pliny's Letters*

This distinction in usage is also evident from a comparison of Latin-script 'switches' with code-switches written using the Greek alphabet. Almost all the least ambiguous instances of Greek in the *Letters* were apparently written in Greek script in the archetype, though, of course, the distinction is clearer in Books 1–9. All multiple-word expressions, as well as quotations, verbal forms, and adjectives, are written in Greek script. There is some overlap in these categories. For instance, most sequences of two or more Greek words in the *Letters* are also quotations, though some of these are closely integrated with the

71 It appears twice in Greek letters in Cicero's *Ad familiares* 15.16 and as a likely code-switch in Latin script in a fragment of Lucilius (fr. 753 M.).

surrounding Latin, such as when Pliny ends a letter to Catus Lepidus attacking his favorite punching bag Marcus Regulus with a request (4.7.8):⁷²

Habesne quo tali epistulae parem gratiam referas? Habes, si scripseris num aliquis in municipio vestro ex sodalibus meis, num ipse tu hunc luctuosum Reguli librum ut circulator in foro legeris, ἐπάρας scilicet, ut ait Demosthenes, τὴν φωνὴν καὶ γεγηθῶς καὶ λαρυγγίζων.

Do you have anything to repay thanks equal to such a letter? Yes, you do, if you will have written whether someone of my friends in your town or you yourself have read this mournful text of Regulus, clearly, like a peddler in the forum, *en vociferant*, as Demosthenes says, *sur un ton joyeux et tonitruant*.⁷³

Not only are Greek and Latin words intertwined here, but the Greek participial clause is subordinate within the Latin sentence. Arguably also quotation-al are the speech titles κατὰ Μειδίου ‘*Against Meidias*’ (*Ep.* 7.30.5) and ὑπὲρ Κτησιφώντος ‘*On the crown*’ (6.33.11). Greek script is used for single-word quotations of Greek texts just as for longer ones. These are ληκύθους (here probably ‘paint pots’ i.e. ‘rhetorical bombast’, 1.2.4), πειθῶ ‘persuasion’ and ἐκήλει ‘charmed’ (1.20.18), ἀμετροεπῇ ‘unbridled of tongue’ (1.20.22), λαμπροφωνότατος ‘most sonorous’ (2.3.10), κτήμα ‘possession [for all time]’ and ἀγώνισμα ‘show-piece [for the moment]’ (5.8.11), and the univerbiated καταστερισμῶν ‘*On the stars*’ (5.17.2).⁷⁴

Among non-quotational multiple-word expressions, the most textual-ly secure is ἀπὸ τοῦ σοφῶς καὶ καλεῖσθαι ‘from *sophos* [‘bravo’] and *kaleisthai* [‘getting invited (to dinner)’]’ (*Ep.* 2.14.5), used to explain the punning name ‘Sopho-cleses’ (Σοφοκλεῖς), given by some people to paid audience members.⁷⁵

72 In the *Letters*, Regulus functions not just as an anti-Pliny but represents everything a senator should not be. Regulus was a successful *delator* (‘informer’) under Nerva and Domitian. Pliny criticizes his style of oratory (*Ep.* 1.20.14, 4.7, 6.2), his unstable character (2.11.22), his legacy-hunting (2.20), and his extravagant mourning for his son (4.2, 4.7; see Henderson 2002: 30–32). His death is reported in 6.2. See Birley 2000: 37–38, Gibson and Morello 2012: 68–73, Hoffer 1999: 55–91, Lefèvre 2009: 50–60, Marchiesi 2018, Méthy 2007: 141–151, and Whitton 2012: 353–359. On Pliny’s literary quotations, see Schwerdtner 2015.

73 French from the translation by Nicole Méthy in Zehnacker 2011: 8.

74 While λήκυθος is a very common word, that Pliny says these are the λήκυθοι ‘of our Marcus [Tullius Cicero]’ (*nostri Marci*) suggests that this is an allusion to Cicero’s use of the term at *Att.* 1.14.3.

75 Catanaeus wrongly deleted ἀπὸ τοῦ σοφῶς καὶ καλεῖσθαι as a marginal gloss, and so does Zehnacker (2009: 56). Elder and Mullen (2019: 44) argue for the deletion too, follow-

Also non-quotational, but attested only in γ , are κατὰ κεφάλαιον 'limited to the essential' (6.22.2) and ὑμεῖς γὰρ οἱ εὖζήλοι *optima quaeque detrahitis* 'car vous, les puristes purge all the best stuff' (7.12.12).⁷⁶ Though these phrases appear only in γ , in the absence of evidence to the contrary, it is simpler to assume they were transmitted rather than invented to fill lacunae. The last two apparent non-quotational examples have worse textual difficulties. As discussed above, νομοῦ Μεμφίτου 'of the Memphite nome' (10.10.1) and ὑπὲρ Μαλέαν 'beyond Cape Malea' (10.15.1) are likely Renaissance-era conjectures.⁷⁷

Likewise, verbal forms are probably always in Greek script. Examples are λογισάμενος 'having reckoned' (*Ep.* 1.18.4), κέκρικα 'I've decided' (1.12.10), ἐπιστήσατε 'pay attention' (6.31.12), εἰσήλασαν 'they made a triumphal entrance' (10.118.1), εἰσήλασεν 'he made a triumphal entrance' (10.119). These forms all show distinctly Greek inflections. It should be noted that the last two are likely conjectures, since they come from Book 10, but if so they are quite logical conjectures since they fill holes requiring a Greek verb meaning 'make a triumphal entrance [as a victor in *iselastica certamina*]'. It should also be noted that κέκρικα and ἐπιστήσατε are things Pliny reports his friend Corellius Rufus and Trajan said, respectively, and the final εἰσήλασεν is from a letter by Trajan.⁷⁸ Nevertheless, the speaker is likely unimportant for graphemic distinction in the *Letters*. The writer, rather than the quoted speaker, chooses the script.

Greek script is similarly dominant for adjectives.⁷⁹ The three apparent counterexamples, *climactericus* 'critical', *opisthographus* 'written on the back', and

ing Whitton (2013: 206) and Sherwin-White (1966: 182). See also Deufert 2008: 70–71. Nevertheless, as Mynors (1963: 54) likely saw when he decided to print the Greek phrase, the choice of language would be quite perplexing for an explanatory gloss on a Latin author, and any interpolation would have had to be quite early given the universal attestation of the phrase in α , β , and γ . Arguing for the retention of the phrase, see also Barwick 1936: 441–443 and Stout 1954: 154–155.

76 French from translation by Nicole Méthy in Zehnacker 2012: 14. The title ὑπὲρ Κτησιφώντος 'On the crown' (6.33.11) is likewise only attested in γ .

77 See Elder and Mullen 2019: 45–46 for a helpful table of non-literary-quotational multiple-word switches, though they do not warn readers that some members of the list are not textually secure.

78 κέκρικα is from the story of Pliny's pain-wracked friend, Corellius Rufus. Rufus was determined to outlive Domitian (1.12.6–8, cf. also 1.18.3), and he succeeded (Gibson and Morrello 2012: 24). Because κέκρικα here is a complete utterance, it is both a one-word and inter-sentential (or at least inter-clausal) code-switch at the same time. The phrase finds echoes in Cicero's letters in *Att.* 13.31.3, where the term is used instead in a political context, referring to a letter of Caesar.

79 On the borrowing hierarchy as described by de Melo (2023: 187), adjectives and verbs are considered generally more difficult to borrow than nouns. While the borrowing hierarchy is a useful tool, it should be kept in mind that it describes tendencies rather than rules. See also Thomason 2001: 70–71.

iselasticus 'of a public entrance', are evidently borrowings based on their morphology, as discussed above. In contrast, in Greek script, we have δυσκαθαίρετον 'hard to topple' (*Ep.* 1.5.15), ἀμετροεπῇ 'unbridled of tongue' (1.20.22, a quotation of *Il.* 2.12), μικραίτιος 'petulant' (2.2.1), ἀφιλόκαλον 'crass' (2.3.8), λαμπροφωνότατος 'most sonorous' (2.3.10), φιλόκαλος 'beauty-loving' (3.7.8), and ἀκοινονόητον 'selfish' (3.9.8).⁸⁰ In their online database, Elder and Mullen suggest that ἀφιλόκαλον might be a quotation from the Athenian comedian Eupolis and ἀκοινονόητον one from Cicero, but both attributions are doubtful.⁸¹ The two terms seem instead to be examples of euphemistic code-switching, a category that is well established in previous scholarship but which Elder and Mullen avoid in their own analysis of Roman code-switching.⁸² The single Greek adverb attested in the corpus outside of a longer phrase, σεμνῶς 'with gravitas', is also in Greek script (2.11.1). Overall, therefore, the manuscript evidence for Pliny's *Letters* shows the Greek alphabet used systematically for Greek words

80 After Pliny's time, φιλόκαλος was borrowed into Latin and acquired the meaning 'attentive' or 'faithful' in veterinary discourse. See Pelagonius' fourth-century *Ars Veterinaria* 470 and Adams 1990. ἀκοινονόητον is the form that appears in F and should be preferred over the editorially printed ἀκοινώνητον, taken from γ.

81 Elder and Mullen attribute the term to Eupolis based on Pliny's use of two Greek terms, drawn from Eupolis, together with a Latin term at *Ep.* 1.20.18. Those terms, however, are identifiable as quotations only because they are drawn from an immediately preceding longer quotation, which is explicitly flagged (*Ep.* 1.20.17). φιλόκαλος is attested in both Pliny (*Ep.* 3.7.8) and Cicero (*Fam.* 15.19.3), and Pliny was familiar enough with Greek that he could surely form the antonym. Likewise, nothing in *Ep.* 3.9 indicates that ἀκοινονόητον is a direct quotation of Cicero, who also uses the term at *Att.* 6.1.7 and 6.3.7.

82 In the case of euphemism, the code-switch serves to blunt the impact of something unpleasant. Take the English/Yiddish example, said of dead children, that "one is already *gestorben*" (Thomason 2001: 132). Adams (2003: 330) notes several euphemistic code-switches in Cicero and adds to them a more general tendency to use Greek code-switching when a distancing effect is required. The function appears already in Plautus. See Gaertner and Hausburg 2023: 52–53 on Plaut. *Trin.* 419–421. The euphemistic nature of ἀφιλόκαλον is clear from its context in 2.3, where the author makes a plea to his friend Metilius Nepos to come see the professional Greek orator Isaеus (2.3.8): ἀφιλόκαλον *inlitteratum iners ac paene etiam turpe est, non putare tanti cognitionem qua nulla est iucundior, nulla pulchrior, nulla denique humanior*. 'It is *grob*, uncultured, crude, almost even shameful not to think it worthwhile meeting such a man when nothing could be more pleasant, nothing more beautiful, nothing, in short, more humane.' Likewise with ἀκοινονόητον, more literally 'lacking a sense of the communal', which in *Ep.* 3.9 describes the normal tendency to be selfish when pursuing oratorical glory, which Pliny claims to have overcome to work cooperatively with Lucceius Albinus. Elder and Mullen (2019: 158, 207–208, 266) acknowledge the distancing function of some code-switches in Cicero and Fronto, while rejecting Adams's use of distancing as an explanation for some examples of code-switching by Suetonius. However, Elder and Mullen (2019: 126) consider distancing to be a higher-level function and do not use it as a functional category in their database.

in situations where Roman letters are not: for passages of two or more words, for quotations, and for verbs and adjectives, with the only possible examples of Latin-script code-switches in the letters all being single nouns.

Of course, not all uses of Greek script fit into the above categories. Many, for instance, are also for single nouns, though none of these show hints of morphological or semantic accommodation to Latin, and in general they are very clearly code-switches instead of borrowings.⁸³ Two switches, however, involve Greek words that seem to have already been borrowed into Latin by Pliny's time: ἀρχέτυπον 'model' (1.20.9) and ἐνθυμήματα 'enthymeme' (2.3.3). Both terms are well and clearly attested in Greek script in all branches of the manuscript tradition. Likewise, both terms occur frequently in authors roughly contemporary with Pliny, in which contexts they take Latin case endings.⁸⁴ Thus, were the manuscript tradition to have preserved *archetypum* or *enthymemata* for us instead, we might be tempted to take these terms as borrowings. This is not to argue that we should. Just because a Greek term had already been borrowed into Latin does not mean that it could not also serve as a code-switch. Nevertheless, without any additional reason to take it as Greek, it is equally implausible to do so. If, however, based on the arguments made here, we accept script as a factor in distinguishing between code-switching and borrowing in Pliny's corpus, then script choice can fulfill the role of marking these as switches rather than a borrowings.

4 Conclusion

The *Epistulae* provide an instructive locus to illustrate the porous boundaries separating code-switching from borrowing. In the absence of other factors, script may take on a larger role in distinguishing between borrowing and code-switching in a written corpus such as Pliny's, which necessitates care-

83 Single-word Greek-script switches that do not fit into the previously discussed categories are securely μουσεῖον 'temple of the Muses' (*Ep.* 1.9.6), ἀρχέτυπον 'model' (1.20.9), ἐνθυμήματα 'enthymeme' (2.3.3), ἔξιν (2.3.4), λιτούργιον 'little liturgy' or λιπούργιον 'little remaining task' (2.11.23, 2.12.1), πρόδρομον 'precursor [i.e. foretaste]' (4.9.23), and παράβολα 'risks' (9.26.4). Suspect for various reasons discussed above are ζήλω 'with zeal' (1.2.1), θρεπτούς 'enslaved foundlings' (10.65), ἐράνου 'society for mutual help' (10.92), and διανομῆς 'of distribution' (10.116.2, 10.117). On λιτούργιον versus λιπούργιον, see footnote 51 above.

84 ἀρχέτυπον: *archetypum* (Mart. 8.34.1, 8.34.2, 14.93.1), in forms with case endings not distinguishable from Greek (Mart. 14.93.1, Plin. *Ep.* 5.15.1). ἐνθυμήματα: *enthymemate* (Quint. *Inst.* 1.10.38), *enthymematum* (Quint. *Inst.* 4.14.27), *enthymematis* (dat. pl., Quint. *Inst.* 8.5.9).

ful attention to the manuscript tradition. Still, it is imperative to be cautious about over-interpreting the relevance of alphabet choice, given the well-attested use of Latin letters to write Greek words in other authors and the inability to know with certainty whether the choice of script comes down to Pliny, an enslaved scribe writing for him, or a later but still ancient copyist. Nevertheless, a close examination of the *Letters*' manuscript tradition reveals that, as far as can be reconstructed, the archetype of our manuscripts, itself likely from before late antiquity, made clear and consistent use of Greek script. With some exceptions, the norm is to distinguish code-switches from borrowings using Greek script. Where Latin letters are used, it is often doubtful whether the word is a code-switch or a loanword. No matter who introduced this practice into the text, it bears witness to one pattern that Roman code-switchers might use in writing.

The point is not to critique Elder and Mullen, whose work heralds a new era in the study of Roman code-switching. While the current study has at times allowed itself the luxury of classing words merely as "likely" borrowings or code-switches, the creation of an online database required a binary choice to include or exclude a particular term. Indeed, in creating a dataset for their book, there were risks from throwing too narrow a net as well as too wide one. Most important to the present study is that Elder and Mullen's inclusion of many borrowings and likely borrowings as code-switches is problematic for evaluating the use of Greek script in Pliny's *Letters*. A reevaluation allows a much clearer vision of the role script plays in distinguishing between borrowing and code-switching in the corpus. Still, the reevaluation of Elder and Mullen's proposed code-switches has consequences beyond merely clarifying a pattern of script use. Because most of the Latin-script code-switches belong to Elder and Mullen's "Greek Cultural Sphere" category, the removal of many or most of them from the body of code-switches in the *Letters* would reduce the preponderance of that category overall, making the most common category instead "Quotation".

The conclusions of this paper rest not just on the reevaluation of many of Elder and Mullen's Latin-script 'switches' as borrowings but also from a thorough consideration of the manuscript tradition. While Elder and Mullen are careful to note variant readings in Pliny's manuscripts, they tend to treat them all as possible options without regard to paleographical considerations and the histories of the relevant manuscripts and manuscript families.⁸⁵ But not all variants are equal as witnesses to antiquity, nor do all disagreements between manuscripts put in doubt the script in which a term was written. On

85 See e.g. Elder and Mullen's (2019: 12) discussion of λιτούργιον.

the contrary, where witnesses consist exclusively of early printed editions, even a universally attested Greek term may be best regarded with suspicion. A difficulty for broad surveys of code-switching in Roman literature is that manuscript traditions differ and thus require much individual consideration. However, the present study shows the general importance of script and therefore textual criticism to the study of code-switching in literary authors. Moreover, from the opposite angle, the theoretical framework of code-switching also allows us to make better sense of the use of Greek script evidenced by the manuscript tradition, at least in the case of Pliny's *Letters*.

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