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# Word-final *-s* in Ennius' *Annales*: a sociolinguistic approach

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**Abstract:** In Ennius' *Annales*, as in other Roman poetry of the third, second, and to some extent first centuries BC, a word-final syllable consisting of a short vowel followed by *-s* can scan as light even when followed by a word beginning with a consonant. In the *Annales*, light scansion is the norm in the second part of the foot (thesis), but heavy scansion is found four times. I argue that attempts to emend away these instances of heavy scansion are not founded on strong arguments. Rather, the infrequency of final *-s* making position in thesis can be put down to the sociolinguistic situation of the time, in which deletion or weakening of final *-s* co-existed with its presence, with the latter being characteristic of more formal speech.

**Keywords:** Ennius; final *-s*; formal language; metre; Republican poetry

## 1 Introduction

One of the features of the language of the Roman poets of the third, second, and to some extent first centuries BC is that a word-final syllable consisting of a short vowel followed by *-s* can scan as light even when followed by a word beginning with a consonant,<sup>1</sup> as in the line below.

Ennius, *Annales* 8<sup>2</sup>

oua parire solet *genus* pennis condecoratum

In the *Annales*, all examples where *-s* does not make position occur in the second part of the foot (henceforth the 'thesis').<sup>3</sup> In the first part of the foot, syllables of this type

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1 When such a final syllable was followed by a word beginning with a vowel, *-s* acted like any other consonant in preventing elision.

2 All examples from the *Annales* are taken from Skutsch (1985), though with the initial letter of each line decapitalised. Relevant syllables ending in *-s* before another consonant are given in italics.

3 Other terms for the second half of the foot include the 'fall' and 'biceps'.

scan as heavy – perforce, since in a hexameter all syllables in the first part of the foot (henceforth the ‘arsis’) must do so.<sup>4</sup> The restriction of the light scansion to the thesis and the infrequency of heavy scansion in the thesis have led some scholars to argue that some or all apparent examples of heavy scansion in the thesis should be emended away, or explained in other ways, with the effect that heavy scansion is restricted to certain categories of words or indeed declared to be non-existent. Thus, Havet (1891: 315–318) maintained that Ennius never used -s to make position in thesis, although this led him to the circular position that the presence of -s making position in thesis was on its own reason to doubt the validity of verses containing this feature.

Skutsch (1948: 95 = 1968: 32–33, 45 fn. 3), while accepting Havet’s position to some extent, accepted two instances of -s making position, and claimed that Ennius restricted its use only to proper names.

Nussbaum (1973), relying on Havet’s arguments against -s making position,<sup>5</sup> suggested that the vowel in the final syllable of *Laurentis* in *Annales* 30 below was long by nature.

*Annales* 30

quos homines quondam *Laurentis* terra recepit

Following this, Skutsch changed his view, and, in his edition and commentary of the *Annales*, states that “[i]n the fall final -s after short vowels is regularly dropped before consonants [...] The only certain exception is 305 *Cethegūs Marcus*, where the difficulty of accommodating the names may be held responsible” (Skutsch 1985: 56).<sup>6</sup>

These scholars writing on Ennius appear to share a belief (implicit in the case of Skutsch [1985], explicit in the case of Havet and Nussbaum) that the infrequency of (good) examples of heavy scansion in the thesis in the *Annales* should lead to suspicion of all examples, and the attempt to find alternative explanations for the heavy scansion, whether by emending them away, by restricting them to a

<sup>4</sup> The first part of the foot is also known as the ‘rise’ and the ‘princeps’.

<sup>5</sup> Although without committing himself wholeheartedly: “[i]f [...] it would be overstating the case to say that each and every example of -s# in thesis making position has incontrovertibly been shown to be invalid, it has, it is hoped, been convincingly indicated that all the cases mentioned thus far are at least vulnerable in one way or another. Returning to the form *Laurentis* with this in mind, and noting that this is the only example of the retention of final -s in thesis which is, as far as anyone has been able to demonstrate, textually indisputable, we are in a position to deny a priori that the length of the last syllable of *Laurentis* has anything whatever to do with the presence of -s# before the initial t- of *terra*” (Nussbaum 1973: 15).

<sup>6</sup> Although at Skutsch (1985: 109) he leaves open the possibility that final -s made position in thesis only in proper names.

particular category (e.g. proper names in general, a name otherwise difficult to fit into the hexameter), or by claiming that their vowel was in fact long.<sup>7</sup>

In the first part of this article I will first show that the supplementary arguments adduced by these scholars to explain away instances of heavy scansion in thesis are extremely weak, and that ultimately the argument against each one relies on the circular claim that there are no other examples in the *Annales*. In the second, I will point out a number of parallels, both within the *Annales* and in works by other poets, for a poetic feature being used at least as infrequently as heavy scansion in thesis. In the third, I will propose a reason for the infrequency of heavy scansion in thesis that is based on the sociolinguistic status of final -s in Latin at the time that Ennius was writing.

## 2 The material

The complex and fragmentary nature of the transmission of Ennius' verses means that they rest, to varying degrees, on editorial decisions and judgements of likelihood. It is usually possible that a given line may have become irredeemably warped in the process. I accept the statement of Skutsch (1985: 56, 380, 609) that lines 213 and 452 of the *Annales* are not to be considered to contain examples of heavy scansion of originally light final syllables ending in -s.<sup>8</sup> Nonetheless, there remain four examples which have often been considered highly plausible.<sup>9</sup> These are:

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7 Skutsch's tendency to "establish rigid norms on prosody, metre or grammar, to which Ennius will have adhered [...] and then to eliminate the 'exceptions' by conjecture" is deprecated by Timpanaro (1988: 4); see also Timpanaro (1970: 361).

8 In *quantis consiliis quantumque potesset in armis* (213) the supposed case of -s making position was due to a manuscript misreading (*qualis* for *quantis*). The transmitted text of 452 is *isque dies post aut marcus quam regna recepit*. Ilberg's conjecture *postquam Ancus Marcius* for *post aut marcus quam* was accepted as "probable" by Skutsch (1948: 95 = 1968: 32), but considered "quite uncertain" at Skutsch (1985: 56; see also 608).

9 Line 209 is quoted in a very difficult passage by Cicero, as I will discuss below. In the case of 315, it comes from a discussion by Nonius (217.7), who quotes two examples from Ennius to show that he often treats it as feminine. These are *iamque fere puluis ad caeli uasta uidetur* (264, with *caeli* emended from *caelum*) and *iamque fere puluis fulua uolat* (315). Skutsch (1985) notes that *iamque fere* is assumed "to have intruded from the first quotation (Hug). It is probable but not altogether certain that the line began with *puluis*" (Skutsch 1985: 494). If *iamque fere* does also belong here, the heavy final syllable of *puluis* would be in arsis. Line 30, by comparison, is quoted as printed by Priscian (2.337) as evidence for the existence of the form *Laurentis* rather than *Laurens*, and there is no other reason to doubt it. Line 305 is quoted by Cicero (*Brutus* 57) along with 304 and the beginning of 306. Again, there is no reason to doubt its correctness, although the word order is strange (on which see Skutsch 1985: 482). Apart from minor spelling variation, lines 30, 305 and 315

quos homines quondam *Laurentis* terra recepit (30)  
 nec dicti studiosus [quisquam erat] ante hunc ... (209)  
 ore Cethegus Marcus Tuditano collega (305)  
 pulvis fulua uolat ... (315)

## 2.1 *Laurentis* terra (30)

Nussbaum (1973) approaches *Laurentis* from the perspective of the Latin participle, which does not distinguish in the nominative singular between masculine and feminine (or neuter). He argues for the claim that the feminine participle would originally have had a separate ending from the masculine, of the form  $*-i < *-ih_2$ ,<sup>10</sup> which would subsequently have had the frequent nom. sg. ending *-s* added to give  $*-is$ , whereupon it was wholly incorporated into the *i*-stem declension and remade to *-is*. The process of feminines in  $*-i$  being remodelled to *i*-stems is already established, in particular by *neptis* ‘niece, granddaughter’ beside Vedic *napī-*, and, *mutatis mutandis*, *socrus* ‘mother-in-law’ beside Vedic *śvaśrū-*. In the case of the participle ending in  $*-ntis$ , it would then have undergone the same loss of the vowel in the final syllable in the sequence of sonorant plus  $*-tis$  seen in forms like *gens* ‘family’  $< *gentis$ .

The evidence, according to Nussbaum, for the existence of an intermediate nominative of the feminine participle with the ending  $*-is$  is precisely *Laurentis* in this line of the *Annales*. Although not a participle, *Laurentis* is, like the participles, an *nt*-stem adjective, so that if the final syllable of *Laurentis* is long by nature rather than by position, this could provide evidence for the nominative singular of the feminine participle. However, the length of the vowel in the final syllable is established by Nussbaum only on the basis that there are no other good examples of final *-s* making position in thesis.

Even if Nussbaum were right about the origin of the ending of *Laurentis*, *Laurentis* would have to be a fairly extreme archaism in the *Annales*. It is certainly not the case that Ennius could have been using a licence that was available in the spoken language of the time or in recent literary predecessors. This is because, in

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are the same in the editions of Vahlen (1903, lines 34, 304, 315, respectively) and Flores et al. (2000–2009, lines 32, 324, 336, respectively).

<sup>10</sup> Although Nussbaum does not say so, this must have been the *vṛkī-* suffix, which is the suffix which forms the feminine *napī-* from *nāpāt-* ‘nephew’ in Vedic (Gotō 2017–2018: 347–348). Another suffix which would have given nominative  $*-i$  in Latin is the *devī-* type, but outside the nominative it showed ablaut, and endings like gen. sg.  $*-yeh_2-s > *-yās$  seem likely to have encouraged the inclusion of the feminine participle in the first declension rather than the third.

order for \**Laurentis* to have undergone the same change of \*-ntis > -ns as *gens*, *mens*, etc., it must already have been analogically remodelled to *Laurentīs*, with a short vowel. Since we know that the \*-ntis > -ns change has already taken place by the time of Plautus (albeit conceivably with some speakers not having undergone the change yet), the change of \**Laurentis* to *Laurentis* must have occurred before that.

This explanation of *Laurentis* is by no means the only possible one. Skutsch (1985: 189) notes that *Laurentis* could originally have been an *i*-stem rather than a consonant stem, and that instances of the nominative of *i*-stems in -is exist in both Ennius (*mentis* for *mens*, *Varia* 51 and 53 in Vahlen [1903]) and Plautus (*sortis* for *sors*, *Casina* 380).<sup>11</sup> Skutsch attributes these forms to analogy with nouns in -tis which did not lose the vowel in the final syllable. It is also possible, in the absence of a clear dating of the change \*-ntis > -ns, that it took place in the later third century, and that forms like *mentis* represent archaisms, or even that there was still variation among speakers of Latin, such that forms like *mentis* were maintained by some speakers. In any case, the explanation of the ending of *Laurentis* as coming from \*-ī is not the only – or even the most likely – possibility.

## 2.2 *Studiosus [quisquam erat] (209)*

Line 209 above is the least certain example of -s making position, though the balance of probability is in favour of it. It is part of the following Ennian text quoted at Cicero *Brutus* 71: *quos olim Fauni uatesque canebant cum neque Musarum scopulos nec dicti studiosus quisquam erat ante hunc*. The key is how to separate the words preserved by Cicero into verses. It is clear that Cicero has omitted some words, and combined more than one verse, but it is also evident that *nec dicti studiosus quisquam erat* belong together as a sense unit. Vahlen (1903) gives the relevant lines as:

213 ... scripsere alii rem  
 214 uersibus quos olim Faunei uatesque canebant,  
 215 cum neque musarum scopulos ...  
 216 ... nec dicti studiosus quisquam erat ante hunc  
 217 nos ausi reserare ...

Havet (1891: 316–317) removes the required heavy final syllable of *studiosus* by putting it at the end of a line, with *quisquam erat* starting the following line. But this has the disadvantage of leaving a gap of two half lines between *neque*

<sup>11</sup> See also examples from Priscian given by Nussbaum (1973: 210).

*Musarum scopulos* and *nec dicti* ..., which is excessive given only a verb and a subject seem to be lacking.<sup>12</sup>

Skutsch (1948: 94–96 = 1968: 30–34, 1985: 373) maintains that *cum* and *ante hunc* are incompatible,<sup>13</sup> and that splitting off *ante hunc* into another line is appealing. However, he prefers a more radical solution, arguing that Cicero not only omitted words but also replaced them. According to him, *cum* and *quisquam erat* are replacements, and *neque Musarum scopulos* etc. does not follow on directly from *canebant*.<sup>14</sup>

The text according to Skutsch is therefore as follows:

206 ... scripsere alii rem  
 207 uorsibus quos olim Faunei uatesque canebant  
 ....  
 208 [cum] neque Musarum scopulos ...  
 209 nec dicti studiosus [quisquam erat] ante hunc ...  
 210 nos ausi reserare ...

Skutsch provides another supposed example of Cicero ‘patching’ like this, as he calls it, but notes that

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12 Such a division across lines was also maintained by Reggiani (1979: 63–68), who appears not to have noticed that it was previously suggested by Havet. Once again, the only reason put forward for such an analysis is the making position of final -s in thesis. Reggiani’s approach is criticised by Jocelyn (1981) on the ground that “nothing is gained by replacing one oddity (final s making position in an even element) with two others (enclitic *quisquam* at the beginning of a verse and monosyllabic *hunc* forming a fourth element)” (Jocelyn 1981: 18). At least Jocelyn’s second objection does not seem very strong: a search on the *Pede Certo* ([www.pedecerto.eu](http://www.pedecerto.eu); accessed 20 June 2020) website finds 25 instances of monosyllabic thesis in the second foot in the *Annales*, as *hunc* would be.

13 “[W]ould any man in his sound senses say: ‘At the time when nobody had done this before me?’” (Skutsch 1948: 95 = 1968: 32).

14 “Beide mich lassen skeptisch”, according to Timpanaro (1952: 202), drawing the approval of Suerbaum (1968: 346), but providing no further argument. Elsewhere, he brings up this line as an example of Skutsch’s over-valuation of metrical regularity, observing rightly that “certo il passo a cui questo frammento appartiene è citato da Cicerone saltuariamente, ma che le parole *quisquam erat*, così bene rispondenti al contesto, appartengano a Cicerone e non ad Ennio, non è in alcun modo dimostrabile: cfr. *nec quisquam* in ann. 218, appartenente, come ha ben ribadito lo Skutsch, allo stesso proemio polemico del lib. VII” (Timpanaro 1970: 362). Flores gives 208–209 (his 225–226) as *quom neque Musarum scopulos <quisquam scandebat>, /nec <calamo> dicti studiosus quisquam erat ante hunc*, and denies Skutsch’s contention that -s making position is problematic (Flores et al. 2000–2009: 2.188), as part of a long discussion of the beginning of Book 7, which he sees very differently from Skutsch. Goldberg and Manuwald (2018: 217, Book VII, fragment 1b) separate *cum* (in a line on its own) from *neque Musarum scopulos*, but seem to accept Skutsch’s [*quisquam erat*].

[i]n principle, it entitles us to question the accuracy of any brief quotation in Cicero. This principle must not be abused. The vast majority of Cicero's quotations are in fact accurate. But we shall feel bound to fall back on this explanation when a quotation offers difficulties which can only be resolved in this way, and we shall do so without hesitation where the metrical technique of a fragment is inconsistent with Ennius' practice. (Skutsch 1948: 94 = 1968: 31)

On the following page, he goes on to say that “*studiosus quisquam* cannot be what Ennius wrote” because Ennius did not allow -s to make position in thesis except in proper names (or, as of 1985, except in line 305). The key argument – without which one should not posit ‘patching’ – in favour of Skutsch's removal of *studiosus quisquam* is therefore explicitly said to be the issue of final -s.<sup>15</sup> If line 209 requires change at all, the much more straightforward separation of *ante hunc* imposes itself.

### 2.3 *Cethegus Marcus* (305)

The heavy final syllable of *Cethegus* is the only instance of final -s making position accepted by Skutsch. Havet, of course, wishes to emend, partly because of this feature, and partly because the line is the only one in the fragments of the *Annales* which has a feminine caesura in the third foot, and a second foot which is spondaic, without caesura, and whose end corresponds to the end of a word.

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<sup>15</sup> Skutsch further adds: “[i]t seems to me an important gain that Ennius now proclaims his merits as a pioneer in independent clauses. His pride in his achievement, his claim to be the first worthy of the name of *poeta*, the statement of the qualifications which nobody before him could claim – should all this be packed into a cramped *cum* clause? If this argument appears subjective I hope the following will be found more convincing: we now understand why Cicero omitted the verb governing *scopulos* and why he patched the following line. Ennius, if my suggestion is correct, used the perfect tense; Cicero in his *cum* clause required the pluperfect and imperfect. Editors of the *Brutus* should therefore print: *quid? nostri veteres versus ubi sunt 'quos olim Fauni vatesque canebant', cum 'neque Musarum scopulos .... nec dicti studiosus' quisquam erat, 'ante hunc' ait ipse de se*. This alters not a jot of the manuscript reading and does justice to both Ennius and Cicero” (Skutsch 1948: 96 = 1968: 33–34). I agree that the first part of this claim is so subjective as to be worthless; and the second part – that Cicero required a change of tense – follows from the premise that patching occurred, rather than providing independent evidence for it. I fail to understand why Skutsch (1968: 120) further thinks that Ennius cannot have been referring to Naevius when he speaks of *uorsibus quos olim Faunei uatesque canebant*, and that therefore, *cum*, which must refer back to *olim*, must be an insertion by Cicero. It seems to me that the following translation makes perfect sense: ‘others wrote about this matter [i.e. Naevius, on the First Punic War], in the verses which once Fauns and seers used to sing, when neither ... the rocks of the muses, nor was there any *philologus* ...’. Although strictly speaking Ennius is saying that there was no *philologus* such as him in the time of Fauns and *uates*, the continued use of the Saturnian by Naevius implies that this time in fact stretched as far as Naevius, and he was no *philologus* either.

While it is true that this is the only line that fulfils the very specific environment described by Havet, it is reasonable to doubt that this is particularly meaningful: it is a side effect of Ennius' reluctance to use the feminine caesura at all: it is found in the third foot only in 10.6% of lines, and without being accompanied by trithimemeral caesura in only 3.3% of lines (Skutsch 1985: 46). Indeed, if one instead searches for lines with feminine caesura in the third foot and a dactylic second foot without a caesura and with foot boundary at word boundary, the *Pede Certo* website ([pedecerto.eu](http://pedecerto.eu)) only finds three.<sup>16</sup> Given their rarity, the fact that of the four lines of this particular shape attested in the *Annales*, only one has a spondaic second foot cannot be taken to be probative of anything in particular.

It is striking that both heavy -s and this particular line shape occur in this same line. But this is hardly reason to emend.<sup>17</sup> It is rather to be explained, with Skutsch, by the difficulties in fitting the shape of the personal name into the verse.

## 2.4 *Puluis fulua* (315)

Havet did not mention *puluis*, but Skutsch (1948: 32–33 = 1968: 30–31, 1971, 1985: 56, 494) claims that the vowel in the final syllable was long at the time of Ennius. However, the fact that the final syllable of *puluis* scans heavy at *Annales* 264 and Virgil, *Aeneid* 1.478 tells us nothing, since both Ennius and Virgil can lengthen a light word-final syllable where convenient.<sup>18</sup>

Skutsch (1971: 143) states that since non-neuter s-stems show ablaut between nom. sg. -ēs or -ōs and oblique \*-es- or \*-os-, we would expect to find in is-stems a

<sup>16</sup> These are *uires uitaque corpus meum nunc deserit omne* (37), *dono – ducite – doque – uolentibus cum magnis dis* (190), and *celso pectore; saepe iubam quassat simul altam* (538). Accessed 20 June 2020.

<sup>17</sup> Havet (1891: 317) refers to an earlier article of his in which he demonstrated “diverses raisons” to correct line 305. But this line is addressed there only as one of three examples of final -s making position, with the additional comment that it is “un vers fabriqué *inuita Minerua*” (Havet 1890: 25). Lines 304–306 are also described by him elsewhere as “aussi prosaïques et aussi gauches, aussi dignes de réprimande, s'ils étaient d'un collégien et non de l'Homère ressuscité” (Havet 1885: 114). But in neither case is there any real justification for emendation.

<sup>18</sup> Two other examples, both ending in -s, where the final vowel was not etymologically long are found in Ennius: *populus* (82), *horridius* (258); also future perfect *fuert* (119), if not considered a separate analogical lengthening on the basis of perfect subjunctive *fuert* > *fuert* (Skutsch 1985: 58). Against Skutsch's restriction of lengthening to tribrachs, see Timpanaro (1970: 361 and, in particular, 1994: 172–183). For the 55 examples in Virgil, see Thompson and Zair (2020).



nom. sg. \*-īs, oblique \*-is-. But Proto-Indo-European simply did not have *is*-stems that paralleled the ablaut pattern of other *s*-stems in this way,<sup>19</sup> and the occasional instances of *is*-stems instead reflect the addition of an *s*-suffix to an old *i*-stem.<sup>20</sup> There is no comparative evidence for an *is*-stem corresponding to Latin *pulvis*, but given the somewhat similar semantics, it is possible that *pulvis* may have been analogically remodelled on *cinis* (thus De Vaan 2008: 498), which is (apart from the comparative suffix in *-ior*) the one example of an *is*-stem with some claim to antiquity, on the basis of \**ken-is-* > Latin *cinis*, *-eris*,<sup>21</sup> \**kon-is-ya* > Greek κοῦῖα ‘dust, ashes’, \**kon-is-ye/o-* > Greek κοῦῖω ‘make dusty’ (De Vaan 2008: 115; Meissner 2006: 51).<sup>22</sup> But even here, the variation in the vowel in the first syllable implies separate derivations from an old ablauting *i*-stem \**kon-i-/ken-i-*,<sup>23</sup> which is actually attested in Greek (κόνις ‘dust’, from Homer onwards).<sup>24</sup>

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**19** Skutsch refers to Wackernagel and Debrunner (1954: 366), but they have little to say about *is*-stems in Indo-European, other than listing some cases of apparent *is*-stems in Sanskrit and Iranian, and noting the existence of Latin *cinis* and *pulvis*. They also observe that at least some examples may be secondary derivations from *i*-stems. Note that Nussbaum carefully avoids endorsing Skutsch's Indo-European derivation: he states only that “for whatever reason, *pulvis* has a long *i* [sic] as far as Ennius is concerned” (Nussbaum 1973: 211 fn. 15), basing this on the heavy final syllable at *Ann.* 264.

Rau (2014: 338–340) discusses the derivation of *is*-stems within the chain of derivational processes known as the Caland system starting from “property concept” adjectives (which encode concepts such as dimension, physical property, colour, speed, age, value and physical or psychological state). He argues that the Latin comparative in *-ior* reflects an animate *s*-stem with amphikinetic ablaut (i.e. with strong stem \**CeC-yos-* and weak stem \**CC-is-*). It is possible that *cinis*, discussed directly below, could have generalised the *e*-grade of the root and the zero grade of the suffix. But there is no evidence that the root \**ken-* was originally part of the Caland system, and amphikinetic ablaut cannot explain the *o*-grade in Greek.

**20** Timpanaro (1970: 361) declares Skutsch's attempt to prove a long vowel in *pulvis* “disperato”, although he subsequently accepts that it has some points in its favour (Timpanaro 1994: 179). Tomasco (Flores et al. 2000–2009: 4.114) provides a brief and inconclusive discussion of *pulvis* which is sceptical of a long *i* in the final syllable.

**21** By the sound change whereby \**e* becomes *i* when followed by an *i* in another syllable (on which see Fries [2019], although I do not think his (re)formulation of the rule is correct). Fries argues that *cinis* is not an example of the sound change but rather a loanword from a Semitic language, which seems highly implausible to me.

**22** The Tocharian evidence adduced by De Vaan probably does not belong here (Fries 2019: 74–75).

**23** I would have thought that the marginally and mostly late-attested Latin form *cinus* was secondary, rather than the origin of the spread of the *s*-stem suffix in Latin, *contra* Meissner.

**24** Skutsch argues that nom. sg. κόνις (once in Aeschylus) and acc. κόνιν (twice in Aeschylus) reflect the original *s*-stem nom. sg. \**kon-īs*. But short *ι* in the nominative and accusative singular is attested in Homer, and the Aeschylian forms are probably influenced by the long vowel in κοῦῖα.

Consequently, apart from the claim that *-s* does not make position in thesis, there is no reason to suppose that the final syllable of *puluis* scanned heavy by nature in Ennius' time.<sup>25</sup>

### 3 Patterns and parallels

So far we have seen that there are four instances of *-s* making position in thesis for which no substantive argument exists that the vowel in the final syllable was long by nature, or that the line requires emendation – other than the desire to minimise or eradicate the number of instances of heavy *-s* in thesis.

Why, then, should such a desire have taken hold? Presumably, it is largely the apparently overwhelming disparity between cases of *-s* not making position in thesis and these four instances where it does. According to Skutsch (1985: 56) there are 112. I actually count 113 in Skutsch's edition, but two of these are in restorations,<sup>26</sup> and one other is the form *noenu'*:

*noenu'* decet mussare bonos qui facta labore (435)

*Noenu'* and *noenum* both exist in early Latin with the sense of *nōn* (Glare 2012: 1303 s.v. *noenum*), and are generally supposed to be its origin (Walde and Hofmann 1938–1954: 2.174–175), by means of an irregular loss of the final syllable (and an unexpected development of *-oe- > ō*).<sup>27</sup> They apparently reflect univerbation of *\*ne oinos*, *-m* 'not one'. As far as I can tell, *noenu'* is never actually attested as *noenus*, so the total loss of *-s* may reflect the start of the irregular reduction of the final syllable rather than reflecting the weakness of final *-s* in other words.<sup>28</sup>

Thus, we get a total of 110 instances of *-s* which does not make position. However, the skew is in practice significantly less than this implies, since 71 of

<sup>25</sup> This is not to say that one could not come up with a reconstruction for *puluis* which implied an originally heavy final syllable. For example, Balles (1999: 3) reconstructs an original feminine *\*polw-ih<sub>2</sub>* > *\*pulwī* (recte *\*pol-Vw-ih<sub>2</sub>*, because *\*-lw-* gives *-ll-* in Latin) whence one could – for example – assume the same development as in *\*neptī* → *neptis* to give nom. sg. *puluis*, gen. sg. *\*puluis* with subsequent further analogical influence from *cinis*, *-eris* to end up with *puluis*, *-eris*. But the last stage has already taken place in Ennius (note *puluere*, line 612), so the nominative must be *-īs*. And in any case, a remodelling of *\*pol-Vw-* directly to an *i*-stem *\*pulw-i-s* is equally likely.

<sup>26</sup> *pugnandi fieret aut duri <finis> laboris* (Ann. 328) and *inuictus ca<nis nare sagax et uī>ribus fretus* (Ann. 547).

<sup>27</sup> Although Fries (2020: 76–98) argues that both the development of the vowel in the initial syllable and the loss of *-um* are in fact regular.

<sup>28</sup> Another possibility is that *noenu'* in fact is an intermediate stage between *noenum* and *nōn*, and that there was never a *\*noenus*. Fries (2020: 76) treats it as a variant of *noenum*.

these instances have a light penultimate syllable, meaning that the final syllable could not appear in thesis unless it scanned heavy. So the relationship that matters is that between our 4 heavy final syllables and the remaining 39 instances in which the final syllable could have scanned heavy instead of light.

This still seems a fairly large disparity (although nowhere near as large as from 110 to 4). Our next step is to work out whether it is an unexpectedly large disparity, i.e. whether it is statistically significant. This we can do by establishing the frequency of the two metrical shapes that we are dealing with in Ennius' verses as a whole. A search on the *Pede Certo* website identifies 409 instances of words whose last two syllables form a trochee (so that they occupy the arsis and the first syllable of the thesis, with word-end forming a feminine caesura). This compares with 159 words whose last two syllables form a spondee, with the penultimate syllable in arsis, and final in thesis, with word end at foot end.<sup>29</sup>

So, we can now compare the distribution of words whose penult is heavy and with final -s not making position and making position in thesis with the general distribution of words of this metrical shape in the *Annales*, as laid out in Table 1.

**Table 1:** Words in the *Annales* with light and heavy final syllables in thesis.

	Light final syllable in thesis	Heavy final syllable in thesis
All words	409	159
Words in final -s	39	4

On this basis, if words with final -s were distributed at the same ratio as all words, we would expect their final syllable to be light around 72% of the time,<sup>30</sup> and heavy 28% of the time.<sup>31</sup> In fact, the distribution is quite different, with a light syllable 91% of the time,<sup>32</sup> and a heavy syllable 9% of the time.<sup>33</sup> This difference is

<sup>29</sup> Accessed 20 June 2020. One can search for these sequences at any position in the line, but in the output of such a search, the website only highlights the first instance in any line, making it difficult to count all cases. Consequently, I searched for these sequences separately by foot. The breakdown for words ending in a trochee is 1st foot: 53, 2nd foot: 67, 3rd foot: 57, 4th foot: 24, 5th foot: 208 = 409. The breakdown for words ending in a spondee is 1st foot: 74, 2nd foot: 8, 3rd foot: 2, 4th foot: 75, 5th foot: 0 = 159. *Pede Certo* does not include highly fragmentary lines of Ennius, but this should not make much difference to the overall proportion.

<sup>30</sup>  $(409/568) \cdot 100 = 72\%$  (to two significant figures).

<sup>31</sup>  $(159/568) \cdot 100 = 28\%$  (to two significant figures).

<sup>32</sup>  $(39/43) \cdot 100 = 91\%$  (to two significant figures).

<sup>33</sup>  $(4/43) \cdot 100 = 9\%$  (to two significant figures).

significant:<sup>34</sup> we can conclude that it is highly unlikely that the low number of instances of final -s making position in thesis is solely due to the general tendency for heavy final syllables to be more uncommon than light ones in thesis in the *Annales* (although we would anyway expect to find final -s making position roughly once for every three instances of it not making position).

It follows that the small number of instances of final -s making position in thesis requires a different explanation. But this does not mean that the explanations so far proposed (i.e. emendation of all or some instances; identification of the vowel in the final syllable as naturally long) must be accepted.

After all, there are only four examples of the disyllabic genitive singular of the first declension in -*āī* in Virgil's *Aeneid*, but I know of no serious attempts to emend these lines on the basis that there are a mere four, as opposed to what must be hundreds, if not thousands, of instances of -*ae*. Of course, the text of the *Aeneid* is far better established than that of the *Annales* (and this particular usage was also commented on by Quintilian, *Institutio* 1.7.18), but the point is that it is quite possible for a poet to use some feature extremely sparingly.<sup>35</sup>

Likewise in Virgil, we could consider the question of the heavy scansion of a final syllable containing a short vowel ('irrational lengthening'). In the *Aeneid*, there are 38 examples appearing in 9,896 lines, meaning one case in every 260 lines. Compare that to the 4 instances of -s making position in thesis in 623 lines in Skutsch's edition of the *Annales*, which gives one instance in every 156 lines. If we only had some 600 lines of the *Aeneid*, the chances are that we would have only as many or fewer cases of irrational lengthening as we have of -s making position in the *Annales* – but we would be making an error if we tried to explain or emend them away. Of course, it is possible that our fragmentary preservation of the *Annales* happens to have saved for us every possible instance of -s making position in thesis – but it seems much more likely that if we had the whole poem we would find dozens of examples.

Returning closer to home, let us consider another feature of Ennius' verse which shares some characteristics in common with final -s, and which shows

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<sup>34</sup> The binomial theorem gives us a measure of the likelihood that the observed distribution could arise if the probability of the final syllable of a word ending in -s being heavy is the same as for other words (McDonald 2014: 29–39). If this likelihood, *p*, is lower than 0.05, we consider it statistically unlikely. As it transpires, the *p*-value is 0.005698.

<sup>35</sup> Of course, another example of such sparing usage of a poetic feature is the single use of final -s not making position in Catullus at 116.8. By the first century BC, this was an archaism, and its use is assumed to be parodic (Butterfield 2008: 188 fn. 2).

that Ennius had no objection to using a 'licence' that put heavy syllables in thesis.<sup>36</sup>

The feature I mean is the variation in quantity of word-final syllables in a number of words discussed by Skutsch (1985: 58–59). Historically, this variation has a number of different origins; the one that has taken place in the majority of the words involved is the shortening of long vowels in final syllables of polysyllabic words before all consonants except -s. This change took place around the start of the second century BC, and all these syllables scan as heavy in Plautus (Questa 2007: 17–19; Weiss 2009: 128). In Ennius (as in Terence; Questa 2007: 19), the final syllable of words with original long vowels in this context can scan heavy or light; in arsis they naturally always scan heavy (20 examples), and in thesis they can scan either heavy (4 examples) or light (10 examples where the penultimate syllable is heavy, 5 where it is light).<sup>37</sup>

In addition to these examples, we also have a small number of cases ending in -s arising from original final geminate -ss; again, syllables ending in this sequence all scan as heavy in Plautus (Questa 2007: 19–20). In Ennius, we have one example of heavy scansion in arsis and 3 instances of light scansion in thesis (but after a light penult).

As we shall see, the parallels with the case of final -s are clear: here we have recent sound changes which allowed the poet a choice of heavy or light variants in the final syllable; their use is partly driven by metrical necessity (in the case of words whose penult is light), but is otherwise free (in the case of words whose penult is heavy). Since he does not avoid a heavy final syllable in thesis with this group of words, why should he avoid it with final -s?<sup>38</sup>

**36** Although neither Havet nor Skutsch says as much, part of the reason for wanting to minimise the instances of -s making position in thesis may have been a notion similar to that formulated for Greek metre by West (1982), that “a syllable whose length is at all equivocal is more readily accommodated” in arsis than in thesis (West 1982: 20, 38–39). Pezzini (2015a: 204–205) raises the possibility that the greater ability of the arsis to host heavy syllables is due to the metrical ictus, but, apart from the likelihood that there was no such thing as a metrical ictus (Fortson 2011: 99–104), this ignores the fact that arsis has to hold a heavy syllable. Thompson and Zair (2020) have demonstrated that the preponderance of ‘irrational’ lengthening and of maintenance of hiatus involving long vowels in arsis relative to thesis in Virgil is not statistically significant; it is a function of the restricted opportunity for heavy syllables at word end in thesis in general in the Virgilian hexameter.

**37** For all the examples, see Skutsch (1985: 58–59). In addition to these polysyllabic words, there are also two examples in arsis of *it* ‘goes’ scanning as heavy, reflecting historical *it* < \**eiti*.

**38** Skutsch (1985: 58) distinguishes between the variation in final syllable weight created by the vowel shortening and s-degeminatio rules, and heavy scansion of final syllables with originally short vowels, of which he identifies two examples of ending in a consonant (*populus* 82, *horridius* 158) as well as two possible instances ending in a vowel. One could add future perfect *fuert* (119), which Skutsch attributes instead to analogy with perfect subjunctive *fuert*, which originally had a long vowel in the final syllable. Skutsch observes that this ‘lengthening’ takes place only in arsis, but the numbers are too small to claim that there was any restriction.

Another parallel comes from that other second century author Lucilius, whose practise regarding final -s is extremely similar to that of Ennius. According to Skutsch (1985: 56) Lucilius has 240 cases where it does not make position, and only 9 where it does (with one or two successfully emended by Havet).<sup>39</sup> If Lucilius used final -s to make position only seldom, there is no obvious reason why we should not simply accept the same thing for Ennius.<sup>40</sup>

## 4 The sociolinguistics of final -s in the time of Ennius

I have argued that we should take seriously the cases where -s seems to make position in thesis in Ennius' *Annales*. Nonetheless the disparity between these 4 instances and the 39 words with a heavy penultimate syllable (plus 71 with a light penultimate syllable) is highly statistically significant: their rarity does require explanation.

This 'licence' seems to have entered the poetic armoury from Roman speech of the time, although the details remain contested. Latin inscriptions from the third (and to some extent) the second centuries BC frequently omit final -s, suggesting that in at least some contexts it was lost or at least articulatorily weakened so that the use of <s> in the spelling was not felt to be appropriate.<sup>41</sup> For example, a collection of bronze rostra which were found underwater near the Egadi islands off Sicily are datable to no more than a couple of decades prior to 241 BC (Prag 2014,

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**39** Skutsch (1948: 95 fn. 2 = 1968: 45 fn. 3) had earlier been less sanguine about the numbers in Lucilius, counting five certain instances of final -s making position (243; 332; 563; 1,060; 1,067) and three uncertain (1,194; 1,342; 1,368). The remaining line he counts in 1985 I take to be 1,193. On the basis of these lines, Lucilius follows Ennius in having -s make position in all of the first four feet, although unlike Ennius he seems to prefer to use it in spondaic words which make up a foot by themselves (eight out of nine instances), for which *pulvis* in Ennius would of course provide an example.

**40** This point has already been made by Suerbaum (1968: 346).

**41** The exact context and time of the loss of -s is not completely clear. It is often stated that it took place only before consonants and after short vowels (e.g. Coleman 1999: 33–34), but exceptions to both these criteria can be found (Leumann 1977: 227–228). Since final -s was eventually restored, it must have been retained in some phonetic and/or sociolinguistic contexts. Most of the evidence concerns nominatives in -ios, so there may be something special about this category rather than about final -s *per se* (Pezzini 2015a: 197–198, 255–264). For bibliography on this topic, see Pezzini (2015b: 989 fn. 2) and Butterfield (2008: 188 fn. 4). An intriguing alternative view is that of Kostakis (2017), who argues that final -s was (phonologically) extrametrical in Latin rather than being deleted. Regardless of the details of his particular theory, he makes the excellent suggestion that variation in whether word final -s makes position can be seen as due to the extent that poets allow word boundaries to apply within the line, since word-internal s in the syllable coda does make position.

2017). They record the names of the quaestors who approved them in the nominative, all of which are without final -s: *Quinctio* (Egadi 8, Egadi 10), *Populicio* (Egadi 4, Egadi 6, Egadi 11) *Paperio* (Egadi 4, Egadi 6), *Papeirio* (Egadi 11), *Sestio*, *Salonio* (Egadi 1).

This epigraphic habit disappears by the first century BC, and it seems clear from the writings of Cicero and other authors that by then absence of final -s was dying out, and was socially deprecated (Adams 2013: 132–135, 162–163). It is to be presumed that final -s was never completely lost in certain phonetic contexts or registers, and that it was reintroduced both in writing and speech as a prestige variant.

Ennius was not the first poet in whom -s did not always make position (though he was of course the first to use it in the hexameter). In both Plautus and Terence, a word-final syllable ending in -s and containing a short vowel can scan as heavy or light,<sup>42</sup> and subsequently to Ennius, Lucilius, as we have seen, also has it in the hexameter. Into the first century, Cicero in his *Aratea* also used this feature, and Lucretius is the last poet to have -s not make position, though even in his poetry it occurs much less frequently than in that of Ennius and Lucilius.<sup>43</sup>

At the time when Ennius was writing, the exact status of final -s in speech is unclear, although there is some evidence that its absence was more common in less formal speech styles. Drexler (1973: 132) found that absence of -s in a corpus of old Latin inscriptions formed a spectrum, with -s most commonly absent in funerary inscriptions, then in votive and sacral inscriptions, with only a single example in laws and decrees. Wallace (1982, 1984) examined the cases of final -s in the Plautine corpus, where the quantity of the final syllable could be identified by the scansion. He claims that deletion of final -s was a sound change in progress at the time of Plautus, diffusing through the lexicon. He finds it to be more common in more frequent words and in spoken rather than sung portions (i.e. in less formal register).

Both of these studies have come under criticism, however. Drexler's methodology was admittedly inexact, and that of Wallace is criticised by Adams (2013: 134). Furthermore, it has been claimed that the use by both Plautus and Terence of -s not making position may have been exaggerated: many of the examples are to be found in words whose last two syllables, if -s did make position, would have formed an iamb, and were thus subject to iambic shortening. Otherwise, final -s seems not to make position predominantly when followed by part of the verb 'to be' beginning with s- (Harsh 1952: 274–275; Pezzini 2015a: 205–234, 265–316). This phenomenon is also true of Lucretius (Butterfield 2008).

<sup>42</sup> “Per la caduta di -s non si possono dare regole precise” (Questa 2007: 33), but see below and Pezzini (2015a: 205–234).

<sup>43</sup> And with a different distribution from that of Ennius and Lucilius (Butterfield 2008).

Recently, Marotta and Tamponi (2019) have reviewed the evidence of masculine nominative singulars of the second declension in epigraphic texts dating from 350 BC to 50 AD. They demonstrate that between 350 and 250 BC, around two-thirds of instances omit final *-s*; while between 250 and 50 BC, three-quarters of instances write final *-s*. Furthermore, while the distribution of absence and presence of final *-s* is similar in Rome and outside in the range 350–250 BC, in the 250–50 BC bracket only 6.1% of examples from Rome omit *-s*, while 18.7% of those from outside Rome omit it. They also demonstrate that areas further from Rome have more examples of omission of *-s* in this period. By looking at the type of inscription they find greater omission of *-s* in less formal epigraphic contexts. From this evidence the authors conclude that presence of final *-s* became a prestige variant characteristic of more formal, higher register texts, between 250 and 50 BC, starting in, and spreading from, Rome.

Although there are also criticisms that could be made of the methodology of this paper,<sup>44</sup> overall it seems to support the picture of absence of final *-s* being characteristic of less formal contexts that was claimed by both Drexler and Wallace. However, Wallace and Marotta and Tamponi draw opposite conclusions from their data. For Wallace, the collocation of absence of final *-s* in Plautus with less formal register is evidence for a sound change (loss/reduction of *-s*) in progress, which has not yet reached more formal levels of the language. For Marotta and Tamponi, the collocation of absence of final *-s* in inscriptions with less formal register is evidence for the spread of a prestige variant starting in Rome and being located initially in more formal contexts.

These situations could, in principle, coexist: the deletion of final *-s* in certain phonetic contexts could have been nearly complete for Plautus, born in the second half of the third century BC, while at the same time or shortly afterwards forms with final *-s* were beginning to be seen as more prestigious, eventually ousting forms without it by 50 BC. But the variation in Plautus could also be explained by supposing that loss of final *-s* had completed prior to the time of Plautus, and the variation found in his poetry reflects the reintroduction of *-s* as per Marotta and

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**44** For example, no tests of statistical significance are carried out on the data, so it is hard to tell whether the variations observed are meaningful. This is particularly problematic since the number of instances differ quite widely between the bands 350–250 BC (24 tokens) and 250–50 BC (506 tokens). As the data is broken down in a number of ways, the numbers in each category can get very low, which again makes the proportions difficult to trust. For example, I believe the CLASSES corpus (<http://classes-latin-linguistics.fileli.unipi.it/en>; accessed 7 August 2020) used in the article does not include the Egadi inscriptions mentioned above. If we assume the text was composed in Rome, they would increase the number of tokens showing nominative singular in *-o* on non-domestic instruments between 250 and 50 BC (Marotta and Tamponi 2019: 90, table 6) from 8 (5.5%) to 19 (12%).



Tamponi. The evidence collected by Pezzini (2015a: 197–198, 255–264) suggests that absence of -s in epigraphy is far more common in the third century than the second. This might disfavour Wallace's idea that loss of -s was still a change in progress at the time of Plautus around the end of the third/start of the second, but is not conclusive.

As for Ennius, he was born around the same time as Plautus, but wrote the *Annales* a generation or so after Plautus' death; he came from Rudiae, far to the south of Rome, but was connected to the highest echelons of Roman society. It is difficult to be sure exactly how his grammar treated final -s, although under either model it might be probable that instances of final -s making position in the *Annales* – where not determined by the metre – would be in particularly formal or high register contexts. Of course, there was no choice about using it in arsis, since otherwise words ending in a short vowel followed by -s could have their final syllable in arsis only when followed by a word beginning with two consonants. But in thesis it was dispreferred, being used only infrequently.

It is possible that Ennius may have simply used final -s to make position even where it was not metrically required because it suited the high register of the first Latin hexameter epic; compare the use of irrational lengthening in Virgil: “[i]t is impossible to find any dramatic purpose in Virgil's practise (there is none discernible in Homer's) and unnecessary to look for technical explanations [...] Virgil's purpose is literary, not dramatic, suggestion” (Fordyce 1977: 97). It should be borne in mind that we have only a small fraction of Ennius' total writings; the number of instances of -s making position would surely have been considerably higher if we had all of the *Annales*, and therefore perhaps less striking.

However, it is also possible that -s making position in thesis was at times used when the content of a line matched its archaic or high register tone. For *Laurentis terra* the heavy scansion might be appropriate for a formal context (Skutsch speculates that the line might have appeared “in Aeneas' address to Latinus, or else in a prophecy of Anchises, or in a pronouncement of Jupiter” [Skutsch 1985: 188]), and/or in a form which was itself felt to be archaic (-ntis in place of -ns). In the case of *studiosus*, again, an old-fashioned feature might be appropriate in the context of the time of *Faunei* and *uates*. In the case of *Cethegus*, Skutsch (1985) notes that Ennius is “stressing the remoteness of a generation not much older than himself”, and observes “the archaic solemnity” of line 307 *qui tum uiuebant homines atque aeuom agitabant*, which describes the men of Cethegus' time (Skutsch 1985: 482 and 484).<sup>45</sup> Of course, the convenience in fitting the name into the metre may also have been relevant. For *puluis* the context is too fragmentary to speculate.

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<sup>45</sup> Albeit that Skutsch considers the effect to be “accidental rather than deliberate” (Skutsch 1985: 484).

## 5 Conclusions

We find four reasonably good instances where *-s* seems to make position in thesis in Ennius' *Annales*. Of course, we are at liberty to seek other explanations for them, whether through emendation, as in the case of *studiosus* and *Cethegus*, or by supposing that the vowel in the final syllable of the word could be treated as long in Ennius' time, as for *Laurentis* (possible but not probable), or for *puluis* (highly improbable). But without any other substantive argument, using the rarity of final *-s* which makes position as a reason to remove examples of this phenomenon is circular. The existence of final *-s* making position is supported by the existence of parallel instances of rarity of poetic features (irrational lengthening in the *Aeneid*, 'lengthening' in arsis in Ennius, and final *-s* making position in Lucilius).

The statistically significant infrequency of final *-s* making position in thesis can be put down to the sociolinguistic situation of the time, in which deletion or weakening of final *-s* co-existed with its presence, with the former being characteristic of lower register speech and the latter of more formal speech.

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