

Morphological constraints and diachrony: the Latin *-men* suffix

Davide Bertocci - Greta Mozzato

ABSTRACT

In this paper we discuss the long history of the Latin affix *-men*, paying attention to its uncommon increase in productivity from the first attestations (a bunch of archaic words that demonstrate the Indo-European legacy of *-men*) to its outcomes in the Romance varieties. Our claim is that in the long diachronic path from Pre-Latin to Late Latin, two relevant morphological processes interested *-men*, leading to both its formal and semantic evolution: (i) the rise of the thematic pattern, that is related to the success of *-men* in the classical stage; (ii) a reanalysis process, that isolated it from other nominalization affixes, and made it possible to apply it also to nouns and adjectives. Both changes resulted in the acquisition of more complex semantic values, still observed in dialectal data. An interesting point of our hypothesis is that the structural options we outlined were already active in the most ancient phases but developed as morphological tendencies only in later stages of Latin.

1. INTRODUCTION

The derivational process from V(/Adj/N) to N involving the Latin suffix *-men* (PIE and PIT **-m̥n̥*) provides an interesting case of how some properties of the morphological system changed in the history of Latin¹.

¹ The first version of this study was presented at the 23rd *International Colloquium on Latin Linguistics* held at the University of Udine (Italy), 9-13 June 2025. We would like to thank the Organizers of the *Colloquium*, especially Renato Oniga and the audience. Many thanks to András Cser who pointed out relevant points during the discussion. We share the responsibility of the contents of this paper; in detail, Greta Mozzato has written §§1-2, Davide Bertocci §3 and the *Conclusion*.

Unlike other more frequent Latin nominalizing suffixes (cf. for instance *-tiō* and *-tūs* with phonological variants, and the less productive *-tūra*)², *-men* changed its morphological properties and gradually increased its productivity. Starting from Perrot (1961)'s seminal study on the reconstruction of the entire evolution of *-men* in Latin, in §2 we collect data from Latin inscriptions, literary, and non-literary texts. We focus on *-men* formations in a long-diachronic perspective, that embraces its development from the archaic stage to the evolution towards the Romance varieties. Our purpose is to give a comprehensive overview on the changes affecting the morphological rules deriving *-men* nouns. We divide this long period into three major sub-periods. We will start from the earliest stage, i.e. Archaic Latin from early attestations to the end of the 2nd century BCE (§2.2), with a brief previous look at some Indo-European and Italic data (§2.1). Then we move on to the Classical Period (i.e. from the 1st century BCE to Augustan period, §2.3), and conclude with the post-classical period, with Augustan and Late Empire data (§2.4). Some examples taken from Romance Languages will also be presented (§2.5).

As will be clear later, these steps are linguistically motivated, i.e. our periodization is grounded on the reconstruction of how the morphological and semantic constraints that ruled the derivation of *-men* nouns in archaic stages gradually weakened. Although this change is attested since the classical period, it is fully achieved only during the post-classical stage. Later, in section §3 we propose an analysis of the development of *-men* formations following a nanosyntactic framework based on Caha (2019) and Caha et alii (2024). Specifically, we observe the constraints that affected both the root and thematic formations (§3.2). Our analysis demonstrates that the increased productivity of *-men* was not simply the result of an analogical extension or a semantic drift – as

² For a general account on nominalization in Latin, with a focus on how the suffixes *-tio* and *-tus* derived verbal nouns (also called deverbatives) from verb stems, see, among others, the recent works of Pultrová (2011), Garzón Fontalvo (2018; 2020), and Snevák (2022).

suggested in Perrot (1961) and in Rainer (2018) – but rather the consequence of complex morphological changes affecting the core properties of Latin verbal morphology. The data demonstrate that the core change, involving the thematicization of the derivational base, was in fact a latent feature in Early Latin (§2.2), and that it became completely successful over the centuries, up to Late Latin and Romance.

2. *-MEN* ATTESTATIONS ACROSS PERIODS

In the following section, we present Latin *-men* attestations, dividing them into three major periods to provide data for the following theoretical assumptions. Examples are from epigraphical materials, especially for Italic varieties and Archaic Latin, while literary corpora have been used for the ancient, classical, and postclassical periods³. The Romance examples discussed below are from Rainer (2018).

2.1. Indo-European and Italic derivatives from the **-m̥n̥* suffix

Latin *-men* is related to other derivational suffixes attested in some Indo-European Languages such as Skt. *-man* and Gr. *-μα* (cf. Perrot 1961: 13-16; Leumann 1977: 370). Both *-man* and *-μα* derive nouns from verbal roots. The semantics of the derived nouns denote the result or the effects produced by the action expressed by the verbal root. As we will see later, this value is also attested for Latin *-men* derivatives. In addition, *-men* has been related to Gr. *-μενος* and Skt. *-māna/-āna* (cf. Perrot 1961: 14-18. 239) for semantic reasons (see §2.2 for ‘medial’ meaning of *-men* derivations attested in Archaic Latin). Although these suffixes exhibit similar semantics, *-μενος* and *-māna/-āna* are supposed to be derived from a PIE suffix **-mh₁nos*. Even Pultrová (2011: 120)

³ As mentioned in §1, for the purpose of our study we gathered data from Perrot (1961), with following specific checks on CIL, LiLa, LLT, and ThLL for Latin attestations, on EDL, Imlt, Pellegrini – Prosdociami (1967), Poccetti (1979), ST, and WOU for Italics.

suggested a relation between *-men* and *-mentum*⁴ on one hand, and the medial participle suffix **-mno-* on the other. Nevertheless, the hypothesis that *-men* could be related to **-mh₁nos* is not generally accepted – for instance, there is no mention in Rix’s (1992: 236) reconstruction of the Greek medio-passive suffix. The relation between *-men* and **-mh₁nos* derived forms could be debated for several phonological and morphological reasons (cf. Szemerényi 1996: 321; Meier Brügger 2003: 186). Moreover, differently than **-mh₁nos*, *-men* formed deverbal nouns in Latin and not verbal adjectives, thus a more cautious reconstruction of *-men* from PIE **-m_ṇ* is prevalent in the literature (cf. Leumann 1977: 370, Weiss 2009: 313-314). We prefer, then, to keep the relationship between the outcomes of **-mh₁nos* and **-m_ṇ* apart and just recall that **-m_ṇ* is also attested in Italic Languages⁵, as part of a common IE inheritance (cf. Leumann 1977: 370). Cognate words with the outcomes of this suffix in Indo-European Languages are for instance Goth. *nama* “name” < **h₁neh₃-m_ṇ-*, Gr. *ónōma* “name” < **h₁no-m_ṇ-*, Sk. *brahma* “expansion, growth” < **b^hérgh^h-m_ṇ-*, Lith. *sémens* < **seh₁-m_ṇ-* “seed”. As for Italic Languages, *-m_ṇ* is reconstructed in Oscan *teremenniú* (CA A 15, n.-acc. pl.) and Venetic *termon* (Pa 14) < **termn-* “boundary” (cf. EDL: 615), Oscan *numneis* (Ve 141/Sa 17 gen. s.), and Umbrian *numem* (TI Ib 17, n.-acc. s.) “name” < PIIt **nōm-n-* < PIE **h₃nh₃-men-* (cf. EDL: 412-413, but see Perrot 1961: 12. 153. 185 for a different derivation, and Pultrová 2011: 118). An interesting form is u. *pelmner* (TI Vb 12,17, gen. s.) “meat” that could be derived from a nominal stem (cf. EDL: 497-498 PIIt. < **pelp-ā-*, **pelp-m(e)n-*; WOU: < **pelp-men-*).

⁴ This suffix will not be discussed in our study; we will return to the doublets of *-men* and *-mentum* derivatives in future works.

⁵ For a general account on the varieties included in the Italic branch of Indo-European family see Weiss (2022) among others. See also Marinetti (2020) and Poccetti (2020) for Venetic and Sabellian languages respectively.

Some innovations seem to have taken place within the Proto-Italic domain, yet, since the functions of *-men* differ from those of **-m̥n-*: the semantic patterns exhibited by *-men* are more specialized, and its morphological distribution is different from that of cognate forms in other IE languages.

However, a thorough discussion of the pre-Latin history of *-men*, is beyond the scope of this study; starting from the specific conditions of the Latin-Italic domain, we just focus on the way *-men* became productive in the morphological inventory of Latin, as the result of a larger process of re-organization.

2.2. Earliest attestations in Latin

-men derivatives appear quite early in the history of Latin, as they can be found both in ancient inscriptions (1a-c) and in the language of the *veteres* (2a-c). Since most of these instances, as said above for Italic data, have IE cognates, they are considered as directly inherited from the PIE suffix *-m̥n-*.

- (1)
 - a. *cognomen* “surname” (*Lex Repetundarum*, CIL I² .583 .14 bis., 123 BCE)
 - b. *limen* “doorstep” (CIL I² .698 .10, 105 BCE)
 - c. *termen* “boundary” (*Sententia Minuciorum*, CIL I² .584, 117 BCE)

- (2)
 - a. *agmen* derived from the verb *ago* “to bring, lead” already attested in Ennius to denote a riverbed, i.e. “that which lead” (*Annalium fragmenta*, LLA 117, 2nd century BCE); it is also used in military vocabulary to denote a parade, a multitude of men or animals in motion, i.e. ‘those which are lead’ (see TLL *agmen* 1:1339)
 - b. *fulmen* “lightning” derived from *fulgō*(*fulgeō*) “to shine brightly” attested in Cnaeus Naevius (*Tragoediarum fragmenta*, LLA 116, 3rd century BCE)

- c. *lūmen* “light” from PIt < **lousmen* < **le/ouk-s-mn* (EDL: 355-356; but derived from *lūceo* according to Perrot 1961: 237 vs. *luere* according to TLL 7, 1: 1810) attested in Ennius (*Annalium fragmenta*, LLA 117, 2nd century BCE)⁶

A first look at these archaic attestations suggests that, in its first stage, *-men* could select roots of intransitive verbs (consider *fulgo* in the examples above) or roots of transitive verbs with passive meaning (consider *ago* in the example above) to form deverbal nouns by which the undergoer of the phrase is itself affected by the action or state expressed by the meaning of the verb. In other words, the verb conveys a kind of middle voice (cf. Perrot 1961: 237; Pultrová 2011: 117). As in Ennius’ *Annalium fragmenta* verse *quod per amoenam urbem leni fluit agmine flumen* (LLA 117, liber: 5, versus: 173, 2nd century BCE), the term *flumen* means “that which flows, river”. The derived noun involves the actions itself, referring to something that participates in the event, without controlling or causing the action expressed by the verb *fluo* “to flow”⁷.

However, the semantics of deverbal nouns in *-men* can convey more specific configurations already in the Archaic stage. For instance, *regimen* indicates “that which directs, government” and so it was perceived as having an agentive meaning. The derived nouns can also function as the result of the action expressed by the verb, as in (3) and in *certāmen*, attested, for instance, in T. M. Plautus’ verse *nunc specimen specitur, nunc certāmen cernitur* (*Casina*, LLA 127, versus: 515, 185 BCE) with the meaning “debate”. An instrumental role can also be expressed, as

⁶ Some attestations seem to be derived from the verbal root with an *-s-* extension (cf. Perrot 184, 189-90 in general, EDL: 356 for *lumen*); we discuss some phonological constraints in §3.1.

⁷ The PIt reconstructed stem is **flow-e/o-* (EDL: 228), thus *-u* pertains to the root and it is not to be considered a proper thematic formation.

attested for *propāgmen* in the expression *ūtae propāgmen* “prolongation of the life”⁸ in Ennius (*Annalium fragmenta*, LLA 117, 2nd century BCE) or for *sūmen* (see T.M. Plautus, *Curculio*, 2nd century BCE) indicating an udder, i.e. part of the body (of animals) used to suck milk.

We notice that some thematic formations in which the suffix is preceded by morphological material not belonging to the root (see §3.1 for the explanation of the phenomenon) – already appear in this first stage, as in the example provided in (3):

- (3) *foro* “to pierce” deriving *forāmen* “that which is pierced” so a “hole” attested in M. P. Cato (*De agri cultura*, LLA 162, 2nd century BCE)

Moreover, in Archaic Latin only three words are attested in which *-men* follows a thematic stem belonging to the third verbal class⁹, suggesting a tendency for preferring *-āmen* and *-īmen* forms that will be confirmed in classical and Late Latin (see below). These words are *columen*, *regimen*, and *specimen*.

⁸ Notably, the construction with the genitive suggests that these forms have nominal properties in contrast to nominal forms of the verb (cf. Spevak 2022). The genitive is then related to the expression of the undergoer (see below, §3.3).

⁹ According to Perrot (1961: 191-195), this could be an early innovation, involving a syntagmatic alternation of thematic patterns with the third conjugation root as well as patterns without it in derivational processes using different suffixes (ex. *documen* with *-u-men* but see *ductus* < **duct-tus* involving a past participle stem, consequentially without thematic formation). This rule became less productive, probably due to the weakness of the short vowel.

2.3. Classical developments of *-men*

Between the end of the 2nd century BCE and the Augustan period, *-men* slightly decreased its productivity (ca. 30 new formations, according to Perrot 1961: 88) compared to the Archaic stage (ca. 40 new formations beside those clearly inherited from PIE, *ibidem*)¹⁰, though new formations appeared especially in the verse¹¹. Most attestations consist of thematic formations (two third of the total amount) even if radical derivations remained in the lexicon as relics (4a-c). The latter were used both in poetry, because of the literary prestige acquired, and in some epigraphic inscriptions:

- (4) a. *augmen* “addition” derived from *augeo* “to increase” attested in Lucretius (*De rerum natura*, LLA 218, 1st century BCE)
 b. *nomen* “name” (*Lex de Gallia Cisalpina*, CIL I2 .592 .23, 49-42 BCE)
 c. *semen* “seed” (CIL I² .1215 .5, 50-1 BCE)

¹⁰ As pointed out by a reviewer, we can not refer to mere quantitative considerations for claiming a reduction in productivity, rather (following Perrot 1961) we consider qualitative properties, specifically the structural options observed. In this perspective, what is lost since the Late Republican period is the availability of root formations; ancient root nouns are still kept in the lexicon, but new formations with *-men*, crucially, are almost only thematic. The rise of new *-men* forms is typically constrained to the I class. That is, it is not easy to distinguish a real productivity of *-men* from the underlying productivity of *-ā* verbs as we will see below.

¹¹ It must be stressed that this is mostly due to the high number of types in a few authors like Lucretius.

Thematic formations are predominantly derivatives in *-āmen* (5) while *-īmen*, *-īmen*, *-ūmen*, and *-ūmen*¹² gave a small number of new formations (6a-c)¹³:

- (5) *aequāmen* derived from *aequo* “to make level” / “to make even”, attested in Varro (ThLL 1:1004, Varro. Quaest Plaut. 2, 1st century BCE) referring to an instrument used for levelling
- (6) a. *mōlīmen* “effort, force” derived from *mōlio* “to struggle” which appears, for instance, in Lucretius (ThLL 8: 1356)
 b. *documen* derived from *doceo* “to tell, inform, teach” also used in Lucretius (ThLL, 5,1:1803 Locr. 6, 392, 1st century BCE) to indicate a warning, caution, or a teaching
 c. *volūmen* derived from *volvo* “to (cause) round, roll” with the meaning of “thing that is rolled up” in Propertius (*Elegiae*, LLA 227, 1st century BCE)

¹² While in words like *volumen* or *flumen* the *-ū* is easily accounted for as a part of the root (thus these forms are consistent with the initial preference for root formations), the same does not hold for cases like *documen*, in which *-ū* seems to act like a thematic element properly (i.e., a secondary derivation, not a part of the root, cf. Leumann 1977: 370). We cannot address the issue here; it is to be noticed, however, that the reanalysis of a root-final *-ū* as a thematic element gave rise to a striking innovation in the Italo- and Gallo-Romance languages, that have past participle formations (generally from verbs of the II Latin class) with *-u* as a thematic vowel, e.g. Italian *veduto*, *voluto*, *vissuto*.

¹³ **-ēmen/-ēmen* derivatives are not attested in the corpus, neither for II conjugation verbs nor for III conjugation ones. Expectedly, Perrot (1961: 146) listed 23 new *-āmen* formations for this period, against only 4 attestations for the second group. More precisely, *-āmen* appears with I conjugation verbs, *-īmen* with some III conjugation verbs, and *-ūmen* with some IV conjugation ones, as expected. Only a few verbs of the II and III conjugations accept *-ūmen* and *-ūmen* derivation. As we will suggest later (§§3.1-3.2), the increasing variance of productivity between *-āmen* and the other group suggests that thematic vowels other than *-ā* gradually fell back due to the relation between *-ā* and agentive meaning (cf. Bertocci – Pinzin 2020; Bertocci 2024). Notably, the latter spread out in *-āmen* derivatives starting from the classical period, see above and §3.2.

Active and resultative became the most frequent meanings attested at the end of the Republican period, which in turn gave rise to an increasing use of *-men* with abstract nouns (ex. *augmen corporis*, *De rerum natura*, Lucretius) according to Perrot (1961: 253).

2.4. Post-classical and Late Latin

During the Augustan period and in general in the Imperial stage, some Authors contributed to spread new *-men* formations through their literary works. Moreover, this stage is characterized by a high percentage of new *-men* formations (ca. 163 new derivatives if we sum up periods 3 to 6 in Perrot's 1961 work) included in non-literary lexicon, which indicates an increasing fortune of this suffix among any (socio)linguistic level. Some of these appeared in technical contexts such as in farming and in culinary vocabularies, or in other specific texts (7a-e):

- (7) a. *creāmen* “creation” (ThLL 4:1113 Prvd. Ham. 505, 3rd-4th century CE)
 b. *laetāmen* “fertilizer” (ThLL 7,2:872 Serv. georg, 4th-5th century CE; Palladius Rutilius Taurus Aemilianus, *Opus agriculturae*, LLA 603, 5th century CE)
 c. *nūtrīmen* “nourishment” in Ovidius (*Metamorphoses*, LLA 230, 1st century CE)
 d. *lenīmen* “that is mitigated” in Ovidius (*Metamorphoses*, LLA 230, 1st century CE)
 e. *frūmen* “porridge” in Arnobius (*Aduersus nationes*, LLA 569, 4th century CE) used with this meaning in religious contexts, especially in relation to sacrifice practices, but see also Donato (*Commentum Terentii: Adelphoe*, LLA 527.4, 4th century CE) who used it with the meaning “throat”

In this period *-āmen* derivatives are still the most productive (ca. 130 according to Perrot's 1961 data)¹⁴ while *-īmen* and *-ūmen* are less represented, especially *-ūmen*. Very interesting are new *-men* formations that selected adjectival stems (8a-c) instead of root or thematic ones:

- (8) a. *crassāmen* “sediment” derived from *crassus* “thick, dense” attested from the 1st century CE in, for example, Columella's *Res rustica* (LLA 329, 1st century CE)
 b. *albūmen* (or *albāmen*) “white (of an egg)” derived from *albus* “white” attested from the 4th century CE (Theodorus Priscianus, *Euporiston libri III*, LLA 607.2)
 c. *pinguāmen* “fat” (n.) derived from *pinguis* “fat” (adj.) (*Mulo-medicina Chrironis*, LLA, 4th century BCE; ThLL 10,1: 2160)

2.5. The Development in Romance Languages

In Proto-Romance and Romance varieties both *-men* derivatives from Latin (9a-c) and new formations (10a-e) are registered. The suffix spread differently in each variety (cf. Rainer 2018):

- (9) a. Dialects:
 b. Italian: *pollame* “poultry” from Latin *pullāmen* (4th century CE), *agrume* “citrus” from a reconstructed form **acrūmen*
 c. Friulian: *levá* or *levam* (*levan* in GDBIF) “yeast” (fig. “increase”) from Latin *levāmen* “relief” already attested in Catullus' *Carmina* (1st century BCE), *foram* “hole” (*foran* “hole, cave” and similar in GDBIF) from Latin *foramen* (see above)
 d. Occitan: *noirim* “nourishment” from Latin *nūtrīmen*

¹⁴ As said above, the overwhelming productivity of the I class correlates with the prevalence of *-amen* formations.

- (10) a. Romanian Dialects: *rob* “slave” and *robime* “group of slaves”
 b. Italian: *mangiare* “to eat” and *mangime* “animal feed”
 c. Sicilian: *lurdu* “dirty” and *lurdimi* “dirtiness”
 d. Friulian: *dolz* “sweet” and *dolzum* “treats”
 e. Corsican: *ortu* “garden” and *ortame* “vegetables”

The examples in (10) show that the tendency emerged in the Imperial stage to derivate *-men* nouns from nominal stems rather than verbal ones became even more frequent (see Sicilian *lurdimi* from an adjective or Corsican *ortame* from a noun). Rainer (2018: 398), following Meyer-Lübke’s (1894) suggestions, accepts the hypothesis that a semantic shift from deverbal result nouns to denominal collective nouns occurred through the history of *-men* from Latin to Romance.

3. INTERPRETING THE EVOLUTION

In the previous sections it was shown how *-men* is characterized by variation both in its morphological behaviour and in its semantics, and in both cases, we have observed that from the II cent. AD onwards the constraints that ruled its application and its functions relaxed in some way. The next step then is to demonstrate that the two diachronic paths can be connected, considering them as the output of a single morphological trigger, i.e. the structural change from root formations (still documented in the Archaic stages, even if relics), to thematic stems (ancient as well, but the only possible formations since the Classical period). In this light, it will be relevant to consider the contrast with other nominalization suffixes like *-tiō*, *tūra*, *-tūs*.

3.1. *The framework, and the archaic pattern*

Before moving on, let us briefly introduce some theoretical instruments: we follow here the basic principles of Nanosyntax (Caha 2020; Caha *et alii* 2024), according to which:

- affixes are phonological units that, unlike ‘classical’ morphemes, do not bear intrinsic semantic value, since they are thought of as ‘treelets’ of syntactic structure, selected to realize morpho-syntactic configurations;
- they are associated not to semantic features but to chunks of syntactic structure;
- they compete to lexicalize cyclically¹⁵ the functional layers of the target morpho-syntactic structure.

For instance, the affix *-men* lexicalizes a noun phrase in the context of a derivation from a verb as in (11)¹⁶:

$$(11) /men/ \Leftrightarrow_{nP} [+n \ v[]]$$

whereas the exponent */fac/* of the root of *facere* is associated to a constituent, made by the level root and an abstract verbalizer *v*, as in (12)

$$(12) /fac/ \Leftrightarrow_v [+v [\sqrt{\quad}]]$$

It is crucial to point out that in Nanosyntax, as well as in Distributed Morphology, roots are unspecified morphological objects, namely they receive class information via the specific categorizing level they are embedded in (Halle – Marantz 1993). However, many recent studies in DM share with NS¹⁷ the idea that the syntactic position of root is associated to phonological exponents with different structural complexity,

¹⁵ This means that at any functional level of the morpho-syntactic structure, the system seeks for an exponent that can realize it.

¹⁶ As both reviewers pointed out, this formulation is not standard in Nanosyntax, where contextual specification is generally absent. We speak of ‘context’ and/or ‘selection’ just for brevity, meaning that */men/* is associated only to the node *nP* footed on a *v*-phrase, but (in these derivations) it wins the competition with other nominalizing affixes since it is the most specific (it does not refer to other pieces of syntactic structure).

¹⁷ For further discussion see Caha – De Clercq – Vanden Wyngaerd (2021).

as we will see below for Latin. Another major feature to be considered is that some lexical items can also contain (Bobaljik 2012) the immediately lower constituent, as it happens for instance to the perfective ending /ī/, that can realize both agreement information and past tense features, as in (13). In such cases, ‘larger’ lexical items can be also selected for spelling-out the lower morphological level, according to the Superset principle (as stated within the nano-syntactic tradition, see Caha 2020, Caha 2009, Starke 2009 a.o.).

$$(13) /ī/ \Leftrightarrow_{\text{AgrP}} [+1s \text{ TP}[+perf]]$$

Let us now consider the most archaic pattern for *-men*, attested only in archaic lexical relics. In words like *flumen* etc., *-men* applies directly to the root, and the only functional level involved is the verbalizer *v*. In this condition, since the root bears a not caused process, the derived nominal, expectedly, can only be intended as an undergoer of the verbal event, that is with a medial value (§2.2). Therefore, resultative or agentive meanings are excluded. This leads us to associate *-men* to the abstract representation in (14), in which no functional levels intervene between the root and the affix¹⁸.

$$(14) /men/ \Leftrightarrow_{\text{nP}} [+n \text{ v}[]]$$

¹⁸ With the exception of *v*, that we will clarify below (§3.2). However, as suggested by a reviewer, the preference for ‘medial’ meanings in the early stage of *-men* could be related not just to generic roots, but specifically to roots merged in the structure into the ProcessP, in Ramchand (2008)’s terms, where dynamic, agentless predications are built. As a matter of fact, data are not fully consistent with this hypothesis, since we find nouns like *sēmen* ‘seed’ from the root of *serĕre*, or *specimen* < *spec-* (*inspicere* ‘to look at’) which seem to have an accomplishment reading, or *lūmen* ‘lamp’ from the stative root of *lucĕre*. We leave the question open to further research.

A direct link between *-men* and the root is also evident when considering a strong phonological constraint that allowed *-men* to apply only to roots ending with either a sonorant or a voiced velar stop¹⁹. This is relevant since the fact that phonology could operate similar restrictions and block marked sequences, indicates that the root and the affix were structurally adjacent: in particular, **-gmen* sometimes seems to require some kind of resolution (**fulg-men* > *fulmen*, **iougmenta* > *iouksmenta/iūmenta*, Leumann 1977: 370), perhaps due to its being phonologically marked (Cser 2020: 55; 114 fn. 222, notices that *-gm* was the only sequence obstruent+sonorant admitted in medial context).

In the ‘classical’ stage, instead, new formations show *-men* only with stems formed by the root with a thematic element (*-ā*, *-ī*, *-ū*, but not *-ē*, marginally *-ĩ* and *-ũ*, cf. §2.3). Given the markedness of the sequence *gm*, the reason could be phonological, but unlike in the case of *-mentum* (cf. *alimentum*), the insertion of *-ĩ* (the default repair strategy in Latin) is not frequent before *-men*, which addresses us to a morphological explanation.

Intuitively, then, *-men* applies to a more articulated morphological structure, realized by the Th(eme)V(owel)s: our claim is that it includes the functional head of Voice, that is, the structural level in which external agents are introduced (Kratzer 1996). It is this feature, that forces the interpretation of *-men* nouns as involving actions, result components and proper objects, since, once an external argument (whether a causer, an actor, an initiator properly) is licensed, the entire predicate acquires a more complex semantic-syntactic structure, and admits new options for nominalization.

¹⁹ We thank András Cser for having pointed out to us this insightful detail, which is generally unnoticed in most of the literature. *-men* appears also after long vowels (e.g. *sēmen* < *serō*) and after *-k* (e.g. *segmen* < *secō*), but in both cases roots ending with a laryngeal are normally reconstructed (**seh_l-*, **sekh_l-*, cf. EDL: 557, 550), which confirms that originally the affix was restricted to back obstruents.

We describe this condition in (15), where *-men* attaches to the Voice phrase.

$$(15) /men/ \Leftrightarrow {}_{nP}[+n] / {}_{_VoiceP}[+voice] {}_v[+v]$$

3.2. From roots to stems: a morphological change

The requirement for a thematised form of the root, however, is still in need to an explanation.

Our hypothesis is that this has to do with an independent major change in the morphological structure of Latin, namely, the loss of functional content of the roots, and the consequent rise in productivity of stem-based word formation (Bertocci – Pinzin 2020).

Therefore, we focus now on the properties of roots. In the ancient IE languages, especially in archaic grammatical domains, ‘root formation’, that is the strategy in which a root can host inflectional or derivational affixes without being overtly categorized, is familiar. The most ancient lexical relics of Latin offer good examples of this option (16): for instance, in synthetic compounds like *pontifex*, the root of *facere* is able not only to head the noun phrase *pontem*, as an object, but also to get an agentive value, without needing affixation, the same holds for the noun *dux* in (16b). Root formation is also attested in verbs, cf. *es-t*, *dic-u-nt* (16c,d²⁰) where the endings apply without derivation affixes or verbalizers.

- (16) a. [[ponti-]_{NP} [fɛc]_√]-s (cf. Bertocci – Pinzin 2020; Oniga 2020)
 b. [duc]_√-Ø-s
 c. [es]_√-t
 d. [[dic]_√ -u]_{THV} -nt

²⁰ Please note that we assume that the thematic vowel *-u/-e/-i* of the III conjugation is inserted at the inflectional level, differently from *-ā*, *-ē* and *-ī* that are more closely related to roots (Bertocci 2024).

We follow the hypothesis, largely adopted in Nano-syntactic studies, that roots can store smaller or larger portions of morpho-syntactic structure, as any other vocabulary items (Caha 2020 a.o.). Therefore, our proposal is that some roots lexicalize only the level root properly, whereas other are associated not only to the lexical unit but also to the verbalizer node above it. This is the case of III conj. verbs, that expectedly are the only ones in Latin permitting root agentive nouns, like *pontifex* or *dux*, or root presents like *est* or *dicunt*. Nouns like *flumen*, then, belong to this pattern: *-men* attaches directly to the root because the root also lexicalizes the entire constituent up to the level *v*, as in (14) above. In this condition, as showed above, with roots that bear intrinsic inchoative semantics like *flu-* of *fluere*, the syntactic functions related to agents or affected objects are not contained in the root complex at all. Therefore *-men* nominalizations can only lexicalize the event itself or its internal argument. This yields the medial meanings of the most archaic *-men* derivatives we mentioned above (§2.2).

All the root types in (16), however, were no longer productive after the archaic period²¹. Roots ‘shrunked’ to bare lexical indexes, no longer able to lexicalize the verbalizer; the consequence was that *-men* could not apply to the root anymore, given that the syntactic sub-tree it is associated to (cf. 14) has to have a node *v* realized.

The ThVs *-ā* and *-ī* represent then, intuitively, a morphological strategy for repairing the unavailability of the roots to *-men*.

Our hypothesis is that they realize a complex morpho-syntactic structure²², associated with the category of Voice defined as above, that is as the syntactic operator that allows inserting agentive subjects. In particular, *-ā* is associated with a complex phrase (17) that does not only realize voice but also contains the constituent *v* and can lexicalize it for the Superset principle recalled above (cf. Caha *et alii* 2024).

²¹ Cf. Oniga (2020) and Re (2020) for compounds; Leumann (1977: 259) for the type *dux*, and (1977: 532) for root presents.

²² *Contra* Embick – Halle (2005), Calabrese (2023) a.o., the Latin ThVs are not just empty morphs like those of the Romance languages (cf. Bertocci 2017; 2024).

$$(17) /ā/ \Leftrightarrow \text{VoiceP}[+\text{voice } v[+v]]$$

Thus, in order to lexicalise the constituent v , in the absence of a specific morph, the lexical items $-ā$ and $-ī$ can be selected, yielding the formation of thematic stems, the only productive strategy in Latin after the archaic stage.

The association of $-ā$ and $-ī$ with the category of Voice explains, in turn, why in late Republican Latin $-men$ formations no longer nominalize undergoers, but the result of the predicate or the action itself, or instruments like *piamen*, *libamen*, *firmamen* etc (§2.3). This is due to the presence of the ThVs, that confer the root a more complex functional structure, in which external arguments are also involved²³.

3.3. The latest stage: morphological neutralization

There remains to explain the increasing fortune of $-men$ in post-Augustean Latin and in the Romance varieties. As pointed out in §2.4, in post II cent. Latin its selection constraints changed, since it also applies to nouns and adjectives, as represented intuitively in (18), which describes the fact that the distinction between verbs, nouns and adjectives was neutralized before $-men$.

$$(18) /men/ \Leftrightarrow \text{nP}[+n/ _ [n/a/v]$$

In parallel, we have observed (§2.4) new meanings, namely a semantic bleaching of the suffix, (cf. Rainer 2018) that lost its nominalizing function.

23 Our proposal, then, does not predict that $-men$ selects for thematic stems *exclusively* from the classical stage onwards (which would be also false for Italic, cf. u. *pelmner*, §2.1). On the contrary, it admits the possibility of selecting $-ā/-ī$ stems since the beginning of Latinity, when a voice layer was required, but explains with the Superset principle the productivity of thematic stems in historical Latin, when the ThVs are inserted since they also cover the verbalizing function.

Intuitively, the neutralization in (18) seems due to a some sort of re-analysis, if one conceives the structural change as a reinterpretation of the complexes made by the root and the thematic vowels as nominal objects, as in (19)

$$(19) [\text{root}+\text{ThV}]_v \rightarrow [\text{root}+\text{ThV}]_n$$

In order to account in a more principled way for this reinterpretation, it is necessary to reconsider the contrast between *-men* and the other nominalizations, that is nouns like *actio*, *actus*, *scriptura* (action or result nouns), or *imperator*, *scriptor* (agent nouns). The hypothesis is that the relevant differences between ‘canonical’²⁴ nominalizations and those formed with *-men* triggered the process of reinterpretation, leading to the evolution outlined above.

Canonical nominalizations in Latin²⁵ require an allomorph of the root that overlaps with the form of the perfect participle or overtly shows the *-t* of the perfect participle (20)²⁶:

- (20) a. *invās-iō* ← *invās-us*
 b. *impera-t-or* ← *impera-t-us*

We claim that in this class of nouns the participial morphology is due to the fact that perfectivity is really a part of the semantics of nominalization (cf. Alexiadou – Schäfer 2010 a.o.), since it makes the event bounded, suitable for being quantified and associated to an entity. This means that, e.g., an *invasio* has to be conceived as an invasion of something in a closed point of time, not as a generic possibility. The perfective nuance, in fact, is not always required in the derivations with *-men*:

²⁴ We label ‘canonical’ those nominalizations that preserve their formal structure as well as their semantic functions also in Late Latin and in the Romance languages.

²⁵ Cf. Garzon Fontalvo (2020); Calabrese (2020); Maiden (2018).

²⁶ We do not consider the possibility to reconstruct the sequence *-tor* as a single morpheme from the PIE agentive **-tor* (cf. Leumann 1977; Pultrova 2007; Magni 2016) as our argumentation is strictly synchronic in this passage.

in some cases, mostly from the oldest stage, it seems that proper verbal semantics entailing boundedness of the event are active, as in (21a):

- (21) a. *idem hic annus censurae initium fuit, rei a parva origine ortae, quae deinde tanto incremento aucta est, ut morum disciplinae que Romanae penes eam regimen, in senatu equitum que centuriis decoris dedecoris que discrimen sub ditione eius magistratus, ius publicorum privatorum que locorum, vectigalia populi Romani sub nutu atque arbitrio essent* (Liv. 4, 8, 2)
 b. *non difficile erit certamen cum his competitoribus* (Q. Cic. pet. 12)

Here *regimen* and *discrimen* are proper verbal nouns that head internal complements in the genitive case, *morum disciplinae*que, and *decoris dedecoris* (cf. Spevak 2022). Similarly, in (21b) *certamen* expresses its verbal function on the complement introduced by *cum*.

However, many instances, especially after the II cent., can be considered as generic events, dispositions, qualities; boundedness is not always involved, since the event does not affect arguments or license agents properly. If *-men* denotes an entity, its complement in the genitive case are frequently substances or possessors.

- (22) a. *inventae sunt in scuto foramina tot* (Caes. civ. 3, 53, 4)
 b. *Noegeum quidam amiculi genus praetextum purpura; quidam candidum ac perlucidum, quasi a nauco, quod putamen quorundam pomorum est tenuissimum non sine candore* (Fest. p. 182, 18)

Thus, in (22a), *foramina* is just a hole, and in (22b) *putamen* does not refer to something that has been trimmed, but the mere entity of a peel.

This potentiality is probably the consequence of spontaneous processes of semantic weakening, that, as claimed by Rainer (2018), led *-men* to develop more abstract or collective meanings. However, we do not expect that isolated semantic shifts could be sufficient, *per se*, for

triggering the structural change²⁷ that affected *-men*, notably the neutralization of its selection constraints. In order to explain this, we need to go back to morphology.

A crucial point is that, in the Latin verb, only perfective aspect involves overt morphological marking, whereas imperfective aspect is encoded by the ‘present stem’ endings or merged with *Aktionsart* affixes²⁸. Therefore, whereas canonical nominalizations are aspectually marked with the *-t* affix and its allomorphs, and reflect perfective nuances, deverbal nouns with *-men* are underspecified. In a word like *putāmen* (that, being a noun, lacks personal endings) neither *-t*, nor imperfective affixes like *-sc*, *-j*, *-n* are inserted. Words like these, then, are not only aspectually opaque from the semantic point of view, but also as regards their morphology. Therefore, the thematic stems they are built from are perceived as unmarked, and the verbal feature associated to them was no longer detectable. Under these circumstances, reanalysis could take place: once a stem like *forā-* was no longer identified as verbal, due to underspecification, *-men* started to select also for nouns or adjectives. This, in turn, gave structural ground to the semantic tendencies already operating, making *-men* nouns an innovative and successful category up to the Romance dialects.²⁹

²⁷ The increase in productivity, the availability of adjectives as bases, and the collective meanings are massively shared up to Medieval Latin (Stotz 2000) and in most Romance varieties, notably in dialects: this indicates that the innovations we are dealing with have to be thought as systemic.

²⁸ Cf. Bertocci (2025); with different principles, Calabrese (2023).

²⁹ We can add a more formal, complementary explanation, that concerns the structural role of the ThV in stems like *forā-*. The ThVs ‘intervene’ between the layer *v* and the nominal suffix, making the lexical unit and the suffix *-men* no longer ‘local’, that is, within the same domain. The constraint that limits *-men* to *v* fails to apply, which yields the neutralization described in (18).

4. CONCLUSION

In a diachronic perspective from the older stages of Latin to the Romance varieties, we have shown that the increase in productivity of *-men* is not related (only) to literary models, semantic creativity, or to the overlap/competition with the suffix *-mentum*. On the contrary, the triggers of the processes we have identified are morphological, i.e. long-term structural changes that, in turn, fed both categorial and semantic innovations.

In particular, we have proposed that the crucial factor was the tendency, already observable in proto-Latin, towards the impoverishment of the functional capability of the roots, that surfaced with the decay of root formations and the thematization, conceived as a repair strategy for verbalizing the roots. It is important to stress that these processes have not to be represented as a sharp chronological sequence: we are dealing with structural options that competed for a long time in the Latin grammar, as the Italic data confirm.

In this light, normal semantic shifts led some *-men* nouns to develop new semantics; isolated lexical innovations became systemic, and resilient in diachrony, due to the morphological properties. In absence of aspectual marks in the thematic stems of ‘classical’ *-men* nouns, they have been reanalysed as unmarked, with two consequence: the possibility of applying *-men* to any lexical category, i.e. also to nouns and adjectives, and that of developing in more systematic way innovative meanings like those that became successful in the transition to Proto-Romance.

Remarkably, all these processes are coherent with independent major tendencies that characterized the history of Latin morphology and anticipated the Proto-Romance evolution.

Università degli Studi di Padova
Dipartimento di Studi Linguistici e Letterari
davide.bertocci@unipd.it
greta.mozzato@phd.unipd.it

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GBDIF

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