# The Addressee in the present imperative in Latin

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**Abstract**. In this paper we adduce morphological support for the activation of a Speech Act layer, more in particular an Addressee layer, in the syntax of Latin present imperatives (see Isac 2015 and Zanuttini 2008 for similar proposals). Evidence comes from a comparison between present and future imperatives. While the regular  $\phi$ -morphology is generally absent and substituted for a different set of endings in these paradigms, it does resurface when the subject and Addressee of the imperative do not correspond, as is the case for the third person forms of the future imperative. We argue that this suggests that the  $\phi$ -morphology, dedicated to the lexicalisation of the subject needs to be distinguished from the Addressee morphology in Latin, and that, accordingly, they must also be distinguished in syntax. We provide an analysis, couched in Nanosyntax (Starke 2009 et seq.) for the present imperative forms of the first verb class following *amāre* ('love').

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#### 1 Introduction

In this paper, we investigate the imperative in Classical Latin (1st century BCE - 3rd century CE). We focus, in particular, on what looks like the agreement morphology of this mood, because it is markedly different from that of the indicative and the subjunctive. The table in (1) illustrates these differences by means of the present tense forms of the first class verb, *amāre* ('love'). The focus is on the second person singular and plural, because these are the only forms available for the present imperative in Latin. The relevant endings are marked in bold.<sup>1</sup>

		PRES.IMP	PRES.IND	PRES.SBJV
(1)	2sg	am-ā-ø	am-ā- <b>s</b>	am-ē- <b>s</b>
	2PL	am-ā- <b>te</b>	am-ā- <b>tis</b>	am-ē- <b>tis</b>

As we can see from the data in (1), the singular imperative only consists of the root am-, and the theme vowel  $-\bar{a}$ , whereas the other singular forms mark more grammatical information about person/number ( $\phi$  for short) by the ending -s. And while the plural imperative does have an ending, -te, that could pass for  $\phi$ , it still only bears a slight resemblance to the ending, -tis, of the other plural forms. So, this brief comparison between the moods in the present tense seems to indicate that the indicative and subjunctive share the same endings, whereas the imperative seems to have its own unique set.

To show that the indicative and subjunctive pairing of  $\phi$ -endings is not characteristic of the present tense, and that these endings could therefore be viewed as the 'regular' ones, in opposition to the imperative ones, we provide table 1. The table gives an overview of all the available active verb forms in both moods. As we can see, the singular ending -s and plural ending -tis are omnipresent, (except for the PRF.IND.2SG, -ti, but see Baldi (2002) for a discussion on this) and we cannot find another zero ending or -te anywhere else.

<sup>&</sup>lt;sup>1</sup>The table in (1) only illustrates the active verb forms. The reason for this is that passive and deponent imperatives are exceptionally rare, despite being attested (Pinkster 2015: 512; 520-512). This is most probably because passivity and controllability are conflicting properties. We thus do not opt to include them in the current discussion, rendering comparisons with other passive present tense forms irrelevant. In addition, we will only account for the first verb class for now. The other verb classes largely exhibit the same imperative morphology, so the analysis we propose is expected to be transferable.

	PST.IND	FUT.IND	PRF.IND	PLUPRF.IND	FUT.PRF
2sg	amā-bā- <b>s</b>	amā-bi- <b>s</b>	amā-v-is- <b>tī</b>	amā-v-erā- <b>s</b>	amā-v-eri- <b>s</b>
2PL	amā-bā- <b>tis</b>	amā-bi- <b>tis</b>	amā-v-is- <b>tis</b>	amā-v-erā- <b>tis</b>	amā-v-eri- <b>tis</b>
	PST.SBJV		PRF.SBJV	PLUPRF.SBJV	
2sg	amā-rē- <b>s</b>		amā-v-eri- <b>s</b>	amā-vi-ssē- <b>s</b>	
2 <sub>PL</sub>	amā-rē- <b>tis</b>		amā-v-eri- <b>tis</b>	amā-vi-ssē- <b>tis</b>	

Table 1

The question which arises from these observations is why such a morphological split should exist in Latin between the endings of the indicative/subjunctive and the imperative. This is, as far as we know, an unaddressed question in the literature, as the verb endings have mainly been described from a diachronic point of view, often with the goal of reconstructing their origins and developments.

With regards to the singular forms, for instance, Baldi (2002) notes that the imperatives of thematic verbs (i.e. verbs which put a vowel between the stem and the personal ending) already lacked endings in PIE, and that the -s we now see uniformly in the indicative and subjunctive, originally stems from two different endings, \*-si and \*-s respectively. With regards to the plural forms, Baldi (2002) and W.Fortson IV (2011) note that both endings -te and -tis are derived from the indicative PIE ending, \*-te. The final -s of -tis emerged most probably through analogy with the regular first person plural -mus.

Now, while these reconstructions may be able to tell us something about how the 'current' forms came about, they do not really shed light on the reason why the imperative endings turned out differently from the indicative and subjunctive ones. In this paper we aim to provide an account which explains the distinction between the endings. Building on the well-established idea that the imperative does not only differ morphologically from indicatives and subjunctives, but also structurally (see for instance Isac 2015, Romanello & Repetti 2014, Zhang 1990, and Zanuttini 1994, 1997 amongst others), we will show on the one hand that the Latin imperative lacks certain features that are present in the other moods, and on the other hand that there is evidence to assume that imperatives contain an Addressee-laver (Zanuttini 2008) which is absent in the other moods. In a nutshell, we will argue that the fact that there are two sets of endings is a direct reflection of the different underlying structures. The analysis which we propose is couched in Nanosyntax (Starke 2009 et seq.).

The structure of the paper is as follows: In section 2, we first explore the contrast that is most relevant to the current discussion, namely the  $\phi$ -distinction between the imperative and the indicative and subjunct-

ive that was addressed above. For this, we will draw on a comparison of the present imperative and future imperative. Through this comparison, we adduce support for a special Addressee layer in the syntax of the imperative which is absent in the other moods. On the basis of this discussion, we propose a first structure for the present imperative endings. After that, in section 3, we move on to discussing how the imperative also differs from the other moods in that it is impoverished for both tense and  $\phi$ . We propose the functional sequence for present imperatives and demonstrate how it deviates at least from the structure of the indicative. A comparison with the subjunctive is postponed till future research. Finally, in section 4, we provide some necessary prerequisites about Nanosyntax, and proceed with a detailed nanosyntactic derivation of the singular and plural present imperative forms. In the Conclusion, we summarise and conclude the findings of this paper.

## 2 Evidence for a speaker-addressee split

So far, we have assumed that the endings of the imperative, i.e. the  $\emptyset$  in the singular and -te in the plural, correspond to  $\phi$ . In comparison with the indicative and subjunctive, which had -s and -tis in the same positions (cf. (1)), this seemed a logical assumption. However, Latin also has a future imperative paradigm, shown alongside the present one in (2), which seems to call this hypothesis into question because of its ordering of morphemes.<sup>2</sup>

		pres.imp	fut.imp
	2sg	am- <b>ā</b>	am- <b>ā-tō</b>
(2)	2pl	am-ā- <b>te</b>	am-ā- <b>tō-te</b>
	3sg		am-ā- <b>tō</b>
	3pl		am-a- <b>n-tō</b>

Firstly, note that the future imperative is marked throughout by the morpheme *-to*. This morpheme has been identified as a tense marker (Pinkster 2015: 515).<sup>3</sup>. Secondly, note that the endings in the second person, which again resemble  $\phi$ -endings, are identical to those of the

<sup>&</sup>lt;sup>2</sup>The use of the future imperative forms is restricted to certain genres (e.g. plays, legal/didactic texts). Usually, however, these imperatives refer to a time further away than the present time, or to a time when a certain condition is met. For that reason, they often co-occur with time adverbs which further specify the time frame within which the command applies (see Allen & Greenough 1903, Barrios-Lech 2017, Decorte 2016, Pinkster 2015, and Rosén 1999 for more details on the future imperative).

<sup>&</sup>lt;sup>3</sup>Originally, this morpheme stems from an archaic ablative of a demonstrative pronoun \*-tod. An imperative like *amātō* would thus have meant something like 'love, from

present imperative: no marker follows *-to* in the singular, but *-te* follows *-to* in the plural. These two facts are still within expectations. If we recall, for instance, the future indicative forms  $am\bar{a}$ -bi-s and  $am\bar{a}$ -bi-tis in table 1, we also found the same order of morphemes: stem > fut.tense  $> \phi$ . What complicates the picture, however, is the third person of the future imperative.

Unlike the second person imperative, the third person is a type of imperative in which the subject and the person or people addressed by the command do not necessarily overlap (Pinkster 2015: 512). As is illustrated in (3), the sentence in (3a) is uttered in a kind of letter-correspondence, and in the one in (3b) it is clear that the verb form would be used in a legislative text. In both circumstances, the command is directed to a certain target audience (e.g. the person receiving the letter, or the people listening/reading the law), which does not overlap with the person or people which are affected by the command (e.g. the wife, or the people to whom the law applies).

- (3) a. Uxor mea heres < ne > es-to ... wife my heir NEG be.IMP.FUT.3SG

  'Let my wife not be my heir . . .'

  (Sen. Con. 2.7.9)
  - b. Primum verbi genus hoc "conserva-nto," quo firstly of-word form this preserve.IMP.FUT.3PL which magis in legibus quam in foederibus uti rather in laws than in treaties use.INF solemus, imperantis est, non be-used-to.IND.PRES.1PL order.PART.PRES AUX.3SG NEG precantis. ask.PART.PRES

'In the first place, this form of words, "Let them uphold," which we are in the habit of using in laws rather than in treaties, implies a command, not an entreaty.'

(Cic, Pro Balbo, 36)

Crucially, the third person forms also show two morphological twists: the singular form seems syncretic with the second person singular, and the plural has an unexpected morpheme -n preceding the tense marker -to. However, it has been argued by Szexnerényi (1953) that the traditional segmentation in (3) of these forms is incorrect. Instead of  $am\bar{a}$ -tō and ama-ntō, these third person forms are rather degeminated

that point on' in the spatial sense (cf. Barrios-Lech 2017, de Melo 2007, W.Fortson IV 2011).

forms whose underlying form corresponds to  $am\bar{a}$ -t- $t\bar{o}$  and ama-nt- $t\bar{o}$ . In these original forms, we can clearly recognise the regular third person  $\phi$ -morphemes -t and -nt that are found throughout the active verbal paradigm, as can be verified in table 2 below.

	PRES.IND	PST.IND	FUT.IND	PRF.IND	PLUPRF.IND	FUT.PRF
2sg	ama-t	amā-ba- <b>t</b>	amā-bi- <b>t</b>	amā-v-i- <b>t</b>	amā-v-era- <b>t</b>	amā-v-eri- <b>t</b>
2PL	ama- <b>nt</b>	amā-ba- <b>nt</b>	amā-bu- <b>nt</b>	amā-v-ēru- <b>nt</b>	amā-v-era- <b>nt</b>	amā-v-eri- <b>nt</b>
	PRES.SBJV	PST.SBJV		PRF.SBJV	PLUPRF.SBJV	
2sg	am-e-t	amā-re- <b>t</b>		amā-v-eri- <b>t</b>	amā-vi-sse- <b>t</b>	
2PL	am-e- <b>nt</b>	amā-re- <b>nt</b>		amā-v-eru- <b>nt</b>	amā-vi-sse- <b>nt</b>	

Table 2

If correct, it would thus seem that the 3sG is actually not syncretic with the 2sG, because it has an additional  $\phi$  morpheme -t, and that the morpheme -n is a residue of the  $\phi$ -morpheme, -nt. With this in mind, we can see that the regular  $\phi$ -markers precede the future tense imperative marker -to in the third person, whereas the special morpheme of the second person, -te, follows it. This suggests that what we assumed to be  $\phi$  in the second person imperatives, i.e. the zero marking in the singular and -te in the plural, is likely marking something else. If -te had really been a  $\phi$ -morpheme, then any other piece of  $\phi$ -morphology should have followed -to as well. This means that we would have expected to encounter forms like \*to ama-to-to or \*to ama-to-to for the third person. Contrary to fact. Similarly, we can also wonder whether -to is only a future tense marker, like for instance to in the indicative. If it was, then we would also have expected all to-morphology to follow it, but this is also not the case, given to ama-to-to

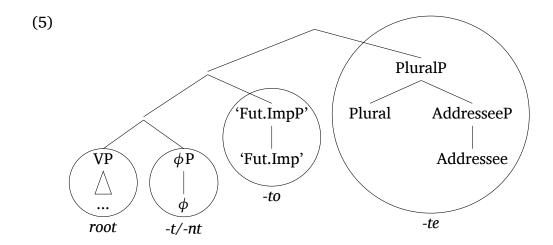
If our reasoning is on the right track, then we are now one step closer to understanding the hierarchy of special imperative markers in Latin. While the future imperative morpheme -to can be stacked on top of the regular  $\phi$ -endings, represented by -n(t)-, the indicative tense morphemes, like the future indicative bi/bu, sit below them. In addition, the second person plural -te (and the second person singular  $\emptyset$ ) can be stacked on top of the future imperative morpheme. This leads us to the hierarchy in (4), which confirms the intuition that the endings we see in the present (and future) imperative are not regular  $\phi$ -endings.

(4) tense 
$$> -n(t)- > \text{fut.imp} > \text{te/}\emptyset$$

Furthermore, we already noted that the special 2SG and 2PL imperative endings, ø and -te respectively, are completely absent anywhere else (cf.

table 1), but now, we see that the situation for 3SG and 3PL is rather the opposite; any dedicated imperative ending is absent, and the regular  $\phi$ -endings appear instead. This is an interesting difference, because it tells us something about the morphosyntax of two pragmatically different situations. A second person imperative is used in a situation in which the subject of the event, i.e. the one who is executing a particular action, and the Addressee, i.e. the person addressed by the command, at least partially overlap. A comparable example in English would be a command as 'Go to school, boys!" in which the boys are also the ones who need to go to school. In a third person imperative this requirement of overlap between Subject and Addressee seems absent. The type of situation we are dealing with is typically one in which the person executing the event is different from the Addressee to whom the command is uttered. There is no straightforward way to express this is in English, but consider a command such as "Let her go to bed by 8pm!" in which the person going to bed is not the person who needs to make sure she does.

The morphology of the imperatives in Latin thus shows that a distinction should be made between the morphology used to refer to the subject of an event (cf. the regular  $\phi$  markers), and the morphology used to refer to the Addressee, i.e. to the one who is meant to act upon the command they receive (cf. the special *-te* in IMP.PRES.2PL). To put it in more technical terms, the morphology of both imperatives in Latin suggests that a Speech Act layer (Ross 1970, Speas & Tenny 2003, Haegeman & Hill 2013) may get activated in the imperative when the subject of the event and Addressee overlap, an idea also proposed by Zanuttini (2008) and Isac (2015). The tree in (5) informally shows how the various morphemes of the future imperative would maximally lexicalise all the parts of the structure.



To summarise, what the morphology of the future imperative clearly shows is that there are Speech Act features, which sit higher in the structure than the features of regular  $\phi$ , and that they are activated when the subject and the Addressee necessarily overlap, a situation that arises solely in the second person imperative. When the subject and the Addressee deviate, only regular  $\phi$  morphemes are present. While not as morphologically conspicuous, we will propose that this Speech Act layer, which sits high in the left periphery, also gets activated in the second person forms of the present imperative. In 2PL this Speech Act layer will be lexicalised by -te, while in 2SG a zero morpheme will lexicalise this layer - or as is common in Nanosyntax, the theme vowel will lexicalise this layer thanks to phrasal lexicalisation.

Before we work out the details for our proposal, we will first discuss the remainder of the structure of present imperatives in the next section.

## 3 The structure of the FSEQ in present imperatives

From our detour to the future imperative in section 2, we deduced the structural hierarchy in (4), here repeated in the table in (6) with the corresponding morphemes.

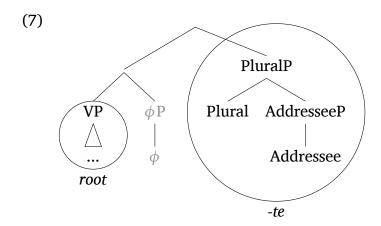
		VP	$\phi$	'Fut'	Addr
	2sg	amā	Ø	-to	Ø
(6)	2pl	amā amā	Ø	-tō	-te
	3sg	amā	-t	-tō	Ø
	3pl	amā amā	-nt	-tō	Ø

From the overall picture in (6), we concluded that the future imperative shows that the endings of the second person imperatives, i.e.  $-\emptyset$  and -te, cannot be treated as regular  $\phi$ -morphology, since they sit in a different position from the third person  $\phi$ -morphology, i.e. -t and -nt. We subsequently argued that  $-\emptyset$  and -te are lexicalising a Speech Act layer, in particular an Addressee layer.

However, another important point which the table in (6) shows is that the realisation of this Speect Act layer and  $\phi$  are in complementary distribution: when the subject and the addressee of the imperative overlap, which is the case for the second person, the Speech Act layer can be lexicalised but not the  $\phi$ -layer, and when the subject and the addressee do not overlap, the  $\phi$ -layer can be lexicalised but not the Speech Act layer.

This point brings us to another important ingredient of our proposal of the present imperative, namely impoverishment. What we seem to be able to conclude from the complementary distribution is that, when the subject and addressee overlap - which is the default situation for the present imperatives - the features realising  $\phi$  are absent from the imperative structure, i.e. they will not be merged in syntax. This idea is not so far-fetched in that it stays with the rather long-standing intuition that so-called 'true' imperatives, i.e. unique verb forms that are specifically used to express commands, are morphologically defective or impoverished (see for instance Zanuttini 1991, 1994, 1997, Romanello & Repetti 2014, Isac 2015).

Considering present imperatives do not contain the future imperative morpheme *-to*, the structure in (5) is thus updated as follows, (7). The absent feature is marked in light grey.



However, in accordance with the literature, we also follow the claim that these 'true' imperatives are impoverished for Tense (see for instance Zanuttini 1991, 1994, Platzack & Rosengren 1998), because imperatives in general do not have a temporal (past) interpretation. The time of evaluation in imperatives is the speech time, as is illustrated by the example in (8).<sup>4</sup>

<sup>&</sup>lt;sup>4</sup>It is debatable whether this general claim holds for future imperatives, even though they could technically be considered as 'true' imperatives, following (Romanello & Repetti 2014)'s criteria. While a near future interpretation is intrinsic in all imperatives, the future imperative interprets the command as having to be met in the further future, hence really adding a temporal interpretation to the command. We would like to argue that the future imperative does not lack Tense, and hence differs from the prototypical present imperative in this sense. This, however, may raise some questions with respect to the nature of *-to*. For if we assume that Tense sits below  $\phi$ , as in other tensed forms as the third person future ama-bi-t or past ama-ba-t, then it seems unlikely that *-to* is the morpheme which will lexicalise Tense, seeing it sits higher than  $\phi$  (cf. ama-t-to). A way out of this issue may be to consider *-to* the lexicalisation of some type of modal

(8) a. Do try this! b. \*Did try this! (Isac 2015: 51)

The idea that present imperative structures in Latin do not contain a Tense feature is also supported by the behaviour of negation when it interacts with the imperative. To begin with, the standard negator *non* cannot be combined with the present imperative, as is shown in (9). Since many languages have negative markers that sit in a position above tense, and for which it has been argued that its position is parasitic on the TP it selects (Zanuttini 1991, 1994), the absence of Tense could easily explain the concomitant absence of the standard negator.

(9) 2SG : (\*nōn) amā! 2PL : (\*nōn) amāte!

Additionally, the standard negator is compatible with the present indicative, (10a), giving rise to 'neutral' sentential negation, and with the present subjunctive, (10b), giving rise to modal negation such as negative potentialis constructions or counterfactuals. This again points to the fact that the present imperative lacks Tense, whereas the other moods do not, thus enabling the negator to select them, but not the imperative.

(10) a. Leporem et gallinam et anserem gustare fas hare and hen and goose taste divine-law **non putant** 

NEG consider.PRES.3PL

'The tasting of hare, hen and goose they do not consider the law.'

(Caes, Gall. 5.12)

b. Hunc tu **non ames?**this you NEG love.SUBJ.PRES.2SG
'Would you not love such a man?'
(Cic. Att. 4.19)

Another important point to mention here is that the other Latin negator,  $n\bar{e}$ , which has been identified as a modal negator (cf. Lakey 2015, Baunaz & Lander 2023), is also incompatible with the present imperative, (11).

necessity, as was pointed out to us by an anonymous reviewer. We hope to return to this issue in future research.

(11) 2sG : (\*nē) amā! 2PL : (\*nē) amāte!

However, this negator is mainly used to form prohibitive constructions, with the subjunctive (in either the present or the perfect tense) not with the imperative, as is illustrated in (12). Just as with  $n\bar{o}n$ , this indicates the presence of a Tense feature in the subjunctive, which is absent from the present imperative.

- (12) a. Quam ob rem . . . solem alterum **nē metueritis**. what to thing . . . sun second NEG fear.SUBJ.PERF.2PL 'For which reason ... do not fear the second sun' (Cic. Rep. 1.32, in Pinkster 2015: 501)
  - b. Hanc pete: **ne metuās** fastus this search NEG fear.SUBJ.PRES.2SG arrogance limenque superbum threshold = and haughty

    'Do not fear arrogance and a haughty threshold!'

    (Mart. Ep. 1.70.13)

Moreover, the future imperative is compatible with  $n\bar{e}$ , unlike the present imperative, (13).<sup>5</sup>

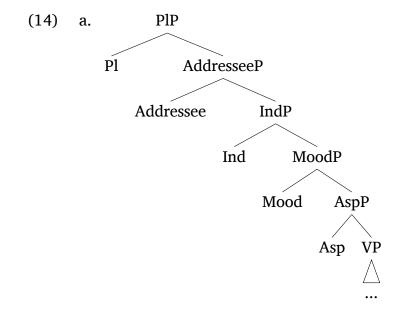
(13) Boreā flante, **nē arātō**, north-wind blow.PART.PRES.ABLE NEG plough.IMP.FUT.2SG sēmen **nē iacitō** seed NEG sow.IMP.FUT.2SG 'When the north wind blows, plough not nor sow your seed.' (Plin. H. N. 18.334)

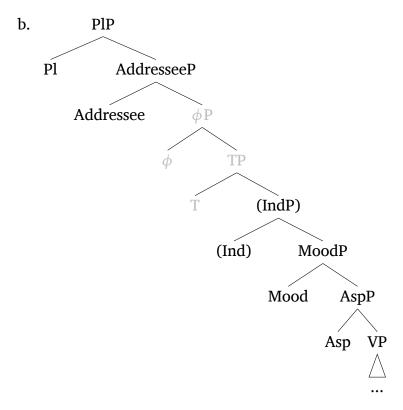
What the data in this section thus underline is that there is a fundamental structural difference between the present imperative and the indicative/subjunctive on the one hand, but also between the present and future imperative. This difference is interpreted in terms of deficiency: present imperatives are morphologically deficient in such a way that (i)

 $<sup>^5</sup>$ It should be pointed out that the standard negator  $n\bar{o}n$  is also incompatible with the future imperative, even though we assume this is a tensed imperative form. The reason for this incompatibility is still unclear at the moment, but we assume it must be due to the presence or absence of at least one other feature which disrupts the selection between the negator and the verb. A more fine-grained analysis of both elements is required to solve this issue, but since the main focus of this article is neither on the future imperative nor on negation, we leave this to future research.

they cannot lexicalise  $\phi$ -features and (ii) that neither of the negators is compatible with them because of a lack of Tense, i.e.  $\phi$  and Tense features are not merged, and there is no space for a NEGP in the inflectional or discourse related part of the clausal structure. Other moods and the future imperative clearly can project both.

In accordance with this discussion, we propose that the final functional sequence for the present imperative is as in (14a). The structure in (14b) shows the layers, again in light gray, that we assume to be present in the indicative and the subjunctive, but which are missing from the imperative. However, there is not only impoverishment in the imperative. There is also enrichment, as the Speech Act layer gets activated (i.e. Addressee with an additional, privative plural), a layer that is absent in indicatives or subjunctives. Note that, following the verbal structures in Starke & Cortiula (2021), we have added a few features which have not been mentioned previously: default Aspect, default Mood and Ind(icative). In line with their proposal, we also consider the indicative feature to be the element which minimally distinguishes the indicative mood from the subjunctive mood (hence why it is put between brackets in 14b).





Now that we have introduced the main elements which separate present imperatives from present indicatives/subjunctives, i.e. the addition of the Speech Act layer and the omission of  $\phi$  and Tense, we proceed in section 4 with the derivation of the 2sg and 2pl of the present imperative within the Nanosyntactic framework.

## 4 Analysis

### 4.1 Nanosyntax

In this section, we will present a Nanosyntactic analysis (cf. Caha 2009, Starke 2009) for the present imperative forms of the first class verb *amāre*. Before we proceed to the derivations, we need to briefly say something about Nanosyntax, the theoretical framework we are using.

Nanosyntax is a Late-Insertion theory, which lexicalises syntactic structures after each step of merge by means of Phrasal Lexicalisation. After each merge, syntax interfaces with the lexicon to check whether the merged structure can be matched against an item in the lexicon. The lexicon contains lexical items that consist of a lexical tree structure, phonological and conceptual information. If there is a lexical item in the lexicon that matches the syntactic structure, then lexicalisation is successful and syntax proceeds to merge other features. If lexicalisation

is unsuccessful, syntax has to perform some rescue operations, which are referred to as lexicalisation-driven movements. These movements happen in a specific order, according to an algorithm. We rely on Starke (2018)'s definition of the algorithm, reproduced here in (15).

#### (15) Merge-F and

- a. Spell out FP
- b. If (a) fails, move the spec of the complement of F, and retry (a)
- c. If (b) fails, undo spec movement, move the complement of F, and retry (a)
- d. If (c) also fails, attempt backtracking to the previous cycle and try next option for that cycle.
- e. If merge-F has failed to spell out (even after backtracking), try to spawn a new derivation providing feature X and merge that with the current derivation, projecting feature X to the top node.

The matching between the lexical structure and the syntax happens in one of two ways: either there is a 1:1 relationship between the syntactic and lexical structure, or the match occurs in accordance with two principles, the Superset Principe, (16) and the Elsewhere Principle, (17) Baunaz & Lander (2018).

#### (16) Superset Principle

A lexical tree L can match a syntactic tree S if L is a superset (proper or not) of S. L matches S if L contains a node that is identical to a node in S and all the nodes below are also identical

#### (17) Elsewhere Principle

If more than one L- tree can lexicalize the same S- tree (by the Superset Principle), then the L- tree with the least amount of superfluous material is chosen.

To put it informally, the Superset Principle in (16) states that a lexical structure forms a match with a syntactic structure as long as the latter is a subpart of it. However, this principle on its own is not sufficiently constrained for situations where multiple lexical items of varying sizes 'compete' to lexicalise the same tree. For this purpose, the Elsewhere Principle in (17) exists. It states that when there are several candidates for lexicalisation, the smallest one will take precedence over the others.

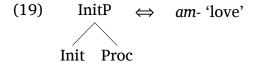
With these basics about Nanosyntax in mind, we can move on to a more detailed derivation of the present imperative forms, in which the Nanosyntactic principles discussed here will be illustrated.

#### 4.2 Analysis of the present imperative

#### 4.2.1 Lexical items

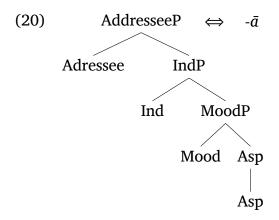
If we recall the present imperative paradigm, (18), there are essentially three morphemes involved: the root am-, the theme vowel  $-\bar{a}$ , and the plural Addressee morpheme -te.

Starting with the lexical structure of the root of the verb *amāre*, we assume that it has the shape in (19).<sup>6</sup> For the features of the verbal root, we adopt Ramchand (2008)'s decomposition of verbal predicates into INIT (Initiation), i.e. the causation event, PROC (Process), i.e. the event or process itself, and RES (Result), i.e. the result state of the event. As can be seen in (19), we assume that the root *am*- lexicalises PROC and INIT, but not RES.



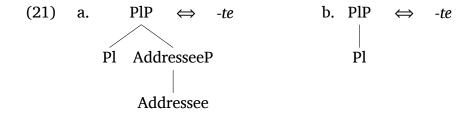
Following the root am- is the theme vowel of the first verb class, i.e.  $-\bar{a}$ . We propose that it has a lexical structure as in (20), and is capable of phrasally lexicalising the default viewpoint Aspect feature (ASP), the default Mood feature (MOOD), the Indicative feature (IND) and the Speech Act related feature, ADDRESSEE (Ross 1970, Speas & Tenny 2003, Hill 2013, Haegeman & Hill 2013). This way we can already account for 2SG am- $\bar{a}$ .

<sup>&</sup>lt;sup>6</sup>As mentioned before, lexical items in Nanosyntax are stored with their phonology, conceptual information and lexical structure. In this paper we represent the lexical structure and the corresponding orthography. We leave out conceptual information and phonological representations.



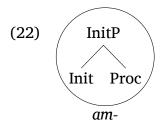
The lexical structure of the theme vowel  $-\bar{a}$  as it is drawn in (20), seems to suggest that we claim that the indicative is contained in the imperative. This may sound like a controversial claim because imperatives are usually considered to be a different Mood, hence making it unlikely that the indicative mood is a feature of the imperative mood. However, in line with McGinn (1977), we would like to argue that the core of imperatives and indicatives is the same. The way in which they are distinct is that indicatives always need a Tense layer and a  $\phi$  layer, while true imperatives do not have such a requirement. For this reason, the INDIC-ATIVE feature, taken from Starke & Cortiula (2021), should actually be viewed as a placeholder for a component of the indicative mood rather than a sole feature constituting it. The indicative is thus a mood realised by several features amongst which we need at least default Mood, Indicative, and default Tense. Since this Tense layer is absent in the structure of the present imperative, the indicative mood will not arise, and vice versa. The present imperative requires the features illustrated for the theme vowel in (20): default Mood, Indicative, and Addressee.

The last lexical item we need to determine the structure of is the plural morpheme -te. In theory, there are two options regarding its lexical structure: it can either have either have the structure in (21a) or the one in (21b). However, given that Plural distinguishes a singular Addressee from a plural one, we will assume that Plural and Addressee are lexicalised together by the same morpheme, and adopt the structure in (21a).

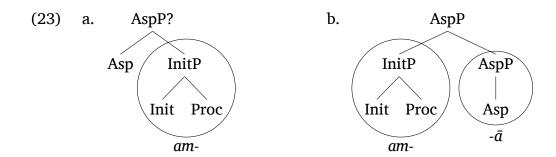


#### 4.2.2 Derivation

Turning now to the derivation, syntax will start by merging the features relevant for the verbal lexical structure, i.e. INIT and PROC (Ramchand (2008)). At the level of INITP, the lexicon will have many possible candidates to be inserted, and as we are dealing with  $am\bar{a}re$  ('love'), the item am- will be chosen, (22). From then on, this is the root that will be maintained in line with the principles of Free Choice and Faithfulness discussed in Caha, De Clercq & Vanden Wyngaerd (2019). The principle of Free Choice allows for free selection of one particular lexical item for insertion when a lot of different items are in competition to lexicalise a particular node, as is the case for roots. The principle of Faithfulness imposes to stay faithful to that choice (i.e. override with another conceptually unrelated lexical item is disallowed) until a movement happens and a new lexical item needs to be inserted.

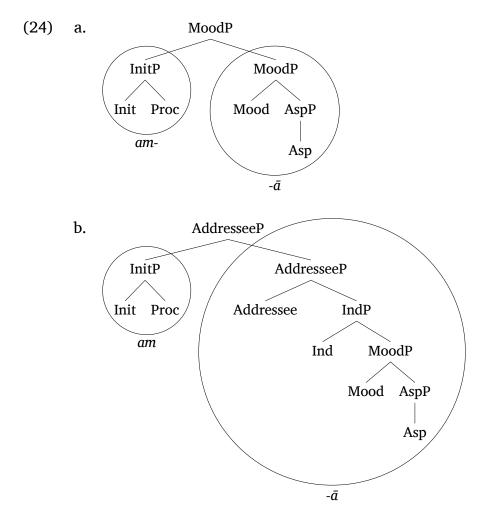


In a next step, syntax will merge default ASPECT, ASP, (23a). Since the root has the lexical structure in (19), it cannot lexicalise the structure syntax has constructed, compelling syntax to execute rescue movements in the order that is prescribed by the algorithm (cf. (15)). As there is no specifier yet, (cf. the first movement step in the algorithm), the complement will be moved out, and ASP will be lexicalised by the theme vowel, as shown in (23b).



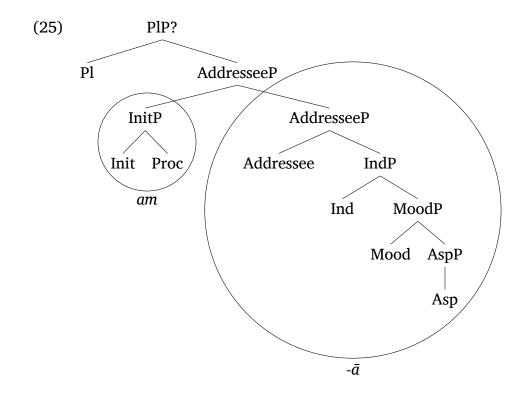
The next feature in line, default MOOD, will then be merged, resulting again in the lexicalisation (and override) of the theme vowel after performing spec movement (15b), (24a). After MOOD, the INDICATIVE fea-

ture will be merged and the same rescue operation will lead to the lexicalisation by means of -a. When syntax derives a present imperative, the feature following the Indicative will not be Tense, but will be ADDRESSEE. By merging this feature, the Tense and  $\phi$  (and negation) layers are thus skipped, as was illustrated in (14b). ADDRESSEE can be realised by the same lexical item in (20), leading to the output  $am\bar{a}$  for 2sG and to the structure in (24b). One important thing to mention here is that thanks to phrasal lexicalisation, there is no need not adopt a  $\phi$ -ending for the 2sG imperative as we have done so far for illustrative purposes: the lexical item of the theme vowel can be argued to take care of lexicalising ADDRESSEE.

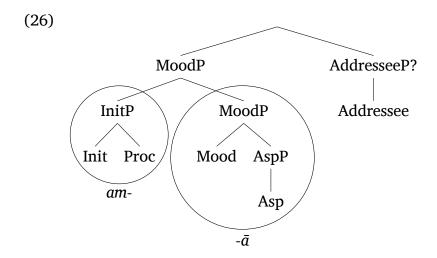


In order to lexicalise the plural imperative, which contains the plural Addressee feature, the derivation will involve a procedure called backtracking (cf. Starke 2018). This step is mentioned in step (15d) of the algorithm which we introduced in section 4.1. At the point when the structure in (24b) is merged, syntax will continue merging the feature

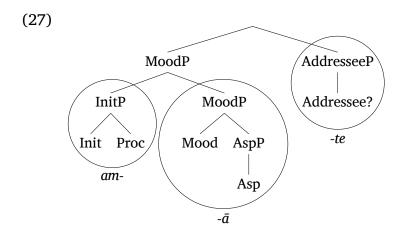
PLURAL, when a plural addressee is aimed for, leading to the derivation in (25).



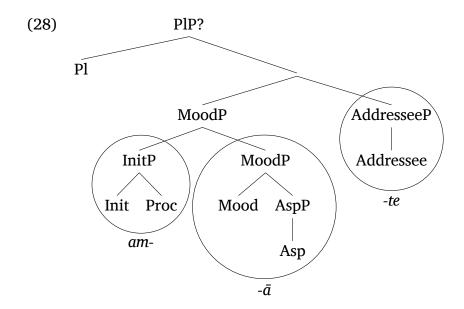
However, at this point, no lexical item will be found that can lexicalise the derived structure, which means that different movements must be tried again. Yet, neither spec movement, (15b) nor complement movement, (15c) will lead to a successful lexicalisation. The next step in the algorithm is backtracking, (15d). By backtracking the last merge of Plural and the previous lexicalisation of ADDRESSEE with the theme vowel are undone first, upon which a different step in the algorithm is tried for ADDRESSEE. Since the realisation of am- $\bar{a}$  involved spec movement, this time complement movement will be tried, leading to the structure in (26).



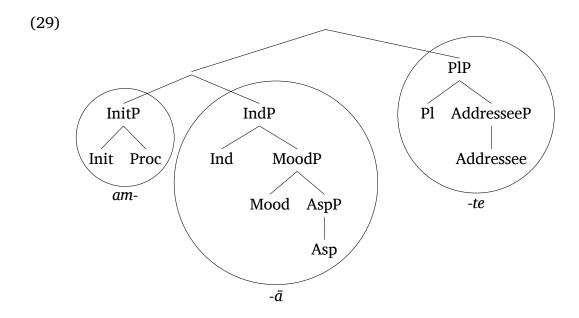
For the current structure, only (21a) is a possible candidate for lexicalisation of ADDRESSEE, (27).



Now that Addressee is lexicalised, the next feature in line, Plural, is merged again. The structure looks as in (28).



PLURAL cannot be lexicalised in this position. Spec movement is tried, leading to the structure in (29). PLURAL can now be lexicalised together with ADDRESSEE by means of the lexical item in (21a), yielding the output *am-ā-te*, the second person plural of the present imperative.



We have now shown how we can derive both the singular and the plural form of the imperative within Nanosyntax.

#### 5 Conclusion

In this paper we had a closer look at the present imperative endings, *-te*, and  $\emptyset$  in Latin. On the basis of a comparison with the future imperative, we argued that the dedicated imperative endings are in a different position from the regular  $\phi$ -morphology, and that they only show up when the subject of the event and the Addressee overlap. We proposed that the present imperative in Latin is structurally impoverished in lacking  $\phi$  and Tense layers, but enriched in projecting a Speech Act layer, Addressee (and Plural). We provided Nanosyntactic derivations for the 2SG and 2PL of the present imperative of the first verb class  $am\bar{a}re$ .

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