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CLITIC PLACEMENT WITH INFINITIVES IN THE DIACHRONY OF FRENCH: FROM ENCLISIS TO PROCLISIS*

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ABSTRACT This article presents an analysis of the evolution of clitic placement with infinitives in French. Quantitative data taken from a corpus covering French from the mid-12th to the mid-19th century show that enclisis is found until the first half of the 14th century. From a formal standpoint, I provide evidence in favour of the hypothesis that this word order connects to V-movement of the infinitive to the IP-domain. I argue that this operation is driven by the richness of tense inflection, specifically the expression of the /r/ morpheme which is completely lost during the 14th century. The empirical picture further contributes to the debate on the locus of cliticisation, for which I propose a refined distinction between phonological and syntactic cliticisation. The last part of the paper presents evidence for a pronominal tripartition in Middle French, which shows a failed change. The article concludes on how morphophonology is a window to the acquisition of syntactic operations.

1 INTRODUCTION

This paper provides a diachronic and theoretical analysis of clitic placement in French infinitival clauses, for which I introduce novel data that show a shift from enclisis in Old French (1) to proclisis in Modern French (2).

(1) *tu* *mobliges* *a* *fere* ***le***.
you 1SG=force.PRS to do.INF=3SG
'you force me to do it.' (Grand Coutumier, Seq 283)

(2) *tu* *m'obliges* *à* ***le*** *faire.*
you 1SG=force.PRS to 3SG=do.INF

* I thank the reviewers of this article for their insightful comments. I am also grateful to the audience at DiGS23 (New York University, July 2022) for providing me with valuable feedback.

'you force me to do it.'

This shift is particularly interesting as most Italo- and Ibero-Romance varieties have conserved enclisis in this context, as illustrated with Italian in (3). Only Gallo-Romance (including Occitan), Brazilian Portuguese and Sardinian seem to have transitioned to proclisis (4).

(3) *Andrà a Parigi per veder**lo**.* (*Italian*)
go.FUT.3SG to Paris to see.INF=3SG
'S/he will go to Paris to see him.' (Olivier 2022b: 14)

(4) *Com essa expectativa de **me** encontrar.* (*Brazilian Portuguese*)
with this expectation of 1SG=meet.INF
'With this expectation to meet me.' (Davies 1996: 103)

The presence of enclisis with infinitives in Old French has been reported in previous empirical work (Moignet 1970, de Kok 1985, Pearce 1990, Olivier 2022b), but it has never been the focus of a theoretically-informed study. Furthermore, the proclisis/enclisis alternation with Romance infinitives has been investigated cross-linguistically on synchronic grounds (Kayne 1991, Roberts 2010), but it is yet to be analysed from a diachronic perspective. It is nonetheless the missing piece to the puzzle and an obstacle to reaching full comprehension of the phenomenon and of its microvariation.

Studies on clitic placement in the diachrony of French have largely focused on finite clauses (Hirschbühler & Labelle 2000, Labelle & Hirschbühler 2005, Culbertson & Legendre 2007, Culbertson 2009, Simonenko & Hirschbühler 2012, Salvesen 2013), with attention to (the evolution of) the Tobler-Mussafia law (Tobler 1875, Mussafia 1886), a constraint that bans proclisis from V1-clauses. In addition, there has been considerable attention to clitic climbing (5), a construction found in most modern Romance languages (Aissen & Perlmutter 1976, Rizzi 1982, Kayne 1989, Monachesi 1993, Davies 1995, Cinque 2001, 2004, Wurmbrand 2001, 2004, Solà 2002, Cardinaletti & Shlonsky 2004, de Andrade 2010, de Andrade & Bok-Bennema 2017, Paradís 2018), but lost in French during the 18th century (Foulet 1919, Martineau 1990, Roberts 1997, Iglesias 2015, Amatuzzi, Ayres-Bennett, Gerstenberg, Schosler & Skupien-Dekens 2020, Bekowies & McLaughlin 2020, Olivier 2022a, Olivier, Sevdali & Folli 2023).[1]

1 Clitic climbing is found in French with causative and perception verbs, and with compound tenses. I will not analyse the evolution of this construction but see Pearce (1990) for causatives in Old French, and Olivier (2022a) and Olivier et al. (2023) for a diachronic analysis of restructuring in French.

(5) *Mes ele ne **la** pot veoir.*
but she NEG=3SG=can see.INF
'But she cannot see her.' (Martineau 1990: 3)

Importantly, the focus on finite clauses has largely overshadowed the issue of clitic placement with infinitives in Old French, the analysis of which is well overdue.

In what follows I will present a syntactic analysis of change and of the proclisis/enclisis alternation on French infinitives. I adopt Kayne's (1991) view that clitic placement is an epiphenomenon of verb placement, which I will connect to a morphosyntactic analysis of infinitives. The discussion will focus on data collected primarily from the diachrony of French, and I will resort to secondary data taken from other varieties to illuminate cross-linguistic variation. The paper is organised as follows: section 2 introduces the database of the study and provides a descriptive and quantitative discussion of the findings. I present an analysis of clitic placement and cliticisation in section 3, which builds on the work of Kayne (1991), Biberauer & Roberts (2010), Roberts (2010) and Ledgeway & Lombardi (2005). The empirical evidence that supports the proposal is presented in section 4, where I discuss and illustrate the loss of infinitive movement in the diachrony of French. Specifically, this discussion connects to reanalysis during acquisition due to a set of converging factors that did not provide enough evidence for infinitive movement to remain in the grammar. The discussion extends to a subset of non-clitic pronouns in section 5, which I claim are evidence for Cardinaletti & Starke's (1999) tripartition. Section 6 concludes.

2 Distribution of enclisis and proclisis

I created a database to identify when and how the shift from enclisis to proclisis took place in the diachrony of French, and the data collected indicate a clear shift in the syntax of early 14th century French. In the following lines, I briefly discuss the pronominal forms and present the corpus before providing a quantitative view of the findings. I will then discuss and illustrate cases of enclisis and proclisis in Old French.

2.1 Pronominal forms in Old French

The pronominal paradigm of Old French and Middle French is given in Table 1. The morphology of proclisis is clearly distinct from that of strong forms, with the exception of 1PL and 2PL which are syncretic across the board. Enclitic forms can be split into two: what we can informally label the -oi forms

(1SG, 2SG, REFL) versus the l- forms (3SG, 3PL): whilst the -oi forms show syncretism with strong pronouns, the l- forms use the same morpheme as proclisis.

Person	Proclisis	Enclisis	Strong
1SG	me	moi/moy	moi/moy
2SG	te	toi/toy	toi/toy
3SG masc acc	le	le	lui/luy
3SG fem acc	la	la	li (Old F.) elle (Mid F.)
3SG dat	li (Old F.) lui/luy (Mid. F.)	li (Old F.) lui/luy (Mid. F.)	li (Old F.) lui/luy (Mid. F.)
1PL	nos	nos	nos
2PL	vos	vos	vos
3PL acc	les	les	eus/eux (masc) elles (fem)
3PL dat	lor/leur	lor/leur	eus/eux (masc) elles (fem)
REFL	se	soi/soy	soi/soy
PART	en	en	-
LOC	i (Old F.) y (Mid F.)	i (Old F.) y (Mid F.)	-

Table 1 Pronominal paradigm

This distinction remains in Modern French, as seen with the imperative: the enclitic l- forms are identical to their proclitic counterparts *donne-le* 'give it', whilst 1SG and 2SG retain the -oi morphology *appelle-moi* 'call me'. The two can form a clitic cluster, thus strongly suggesting that the -oi form is a clitic *donne-le-moi* 'give it to me' (or *donne-moi-le* for some speakers, which provides even better evidence for the clitic-analysis of postverbal *moi*).[2] Crucially, the enclitic -oi forms cannot be coordinated in either Old or Modern French, therefore they must be analysed as clitics (on the morphology of clitics and enclisis in V1 contexts in Old French, see Foulet 1919, Moignet 1965, de Kok 1985, Jacobs 1993, Hirschbühler & Labelle 2000, Labelle & Hirschbühler 2005 and Simonenko & Hirschbühler 2012).

2 Whilst it is clear that clitics do no have *inherent* stress, they can be stressed if their prosodic host's stress shifts, in particular in the case of enclitics (Ordóñez & Repetti 2006, Torres-Tamarit & Pons-Moll 2019, Pescarini 2018, 2021).

2.2 *Database of the study*

The corpus is mainly composed of legal texts from Normandy and covers seven centuries: the oldest text was written in 1150 and the last text in 1856 (Table 2).[3] A total of 3,549 sentences have been collected and analysed. The corpus is divided in three periods that follow the traditional periodisation (although see Smith 2002): Old French (which ends in 1300), Middle French (until the mid-17th century) and (early) Modern French. The text *Roman de Brut* is the only source written in verse, and it was added to the database to counter the otherwise low amount of clitics for the 12th century. The choice to focus on Norman texts stems from the easy access to these documents, as Normandy is one of the regions that started writing in French early and has conserved most of its legal texts.

It is undeniable that the written form of language differs from the spoken form (Koch & Oesterreicher 1985), and for that reason different types of material investigated will impact the findings of a study. We must therefore seek to minimise this gap where possible. The choice to investigate the legal register here stems from the purpose of such texts during the Middle Ages in France, as they were written in a style closer to the vernacular in order to be understood by all. This is explicitly mentioned by Guillaume Le Rouillé, a legal scholar from the 16th century: *Le grand Coustumier du pays et duche de Normendie tresutile et profittable a tous practiciens. Lequel est le texte diceluy en francoys proportiōne a lequipollent de la glose ordinaire et familiaire*, 'The great Customs of the country and duchy of Normandy are very useful and profitable to all professionals. The aforementioned text is in French, proportional to the equivalence of the ordinary and familiar language' (Olivier 2021: 25). Until then, laws and customs were effectively written in Latin, the meaning of which had become opaque to anyone who was not initiated to it. The novel and widespread use of the vernacular in this context ensured that society rested on an intelligible legal framework, and by 1539 French was enacted as the official language of the kingdom with the aim of strengthening the power of the monarchy.

Non-literary texts are important to the subfield of historical linguistics as they do not bear the stylistic effects found in literature, which in recent years encouraged authors to give them a renewed attention (Le Feuvre 2008, Diez Del Corral Areta 2011, Stolk 2015, Balon & Larrivée 2016). Kytö (2019) assesses the use of different text types to conduct research in historical lin-

3 The database investigated is available on the online repository *Historical corpus of French legal texts* (Olivier 2022c). Most of the texts investigated are searchable in the ConDÉ corpus (Larrivée & Goux 2021), which were supplemented with non-Latin texts from the SCRIPTA database, the Corpus Philippicum, the Actes Royaux du Poitou, and the Actes de Ferri III.

Text/Corpus	Period	Words	Clitics
Lois de Guillaume le Conquérant	1150	3,205	18
Roman de Brut	1155	15,637	55
SCRIPTA 1	1154-1189	2,580	8
SCRIPTA 2	1208-1265	2,669	7
Établissements et Coutume	1207-1270	23,718	101
Actes de Ferri III	1251-1303	166,807	349
Corpus Philippicum	1272-1299	29,026	53
SCRIPTA 3	1277-1294	15,228	24
Grand Coutumier	1300	60,507	427
Actes Royaux du Poitou	1302-1341	31,530	108
Mortemer	1320-1321	11,530	15
Actes Normands (Valois)	1328-1350	5,464	17
Lettres de rémission	1357-1360	19,901	80
Actes de la Chancellerie d'Henri VI	1422-1435	63,978	269
Rouillé	1539	54,599	289
Terrien	1578	57,067	270
Bérault	1614	62,245	363
Basnage	1678	58,990	350
Merville	1731	48,671	282
Pesnelle	1771	63,602	350
Pannier	1856	16,878	114

Table 2 Corpus

guistics and concludes that textual data primarily represent the genre of the source. By selecting legal texts, my study aims to explore a language less stylised, although the texts themselves cannot be claimed to truthfully represent language as it was naturally spoken on a day to day basis. Nevertheless, the database should represent constructions (and their frequencies) that are, all things being equal, as close as possible to the language as it was spoken.

This text type comes with a limitation that is necessary to highlight. Legal documents establish a standard according to which one must behave, and legal reports deal with parties involved in a dispute. For these reasons, third person clitics and the reflexive *se* are overwhelmingly more present than first and second person clitics in the database. It is a widely acknowledged fact that historical data are constrained by their text type, therefore the present contribution will have little to say regarding 1SG, 2SG, 1PL and 2PL.

2.3 *Overview of the findings*

All clitics that are the semantic object of an infinitive have been collected from the corpus.[4] The findings show that enclisis does not survive the Old French period, whilst proclisis co-exists with clitic climbing throughout Middle French and until the early Modern French period (Figure 1). From the late 18th century on, proclisis is the only ordering that is found with objects of infinitives. This bird's eye view of the findings sheds little light on enclisis, which may therefore explain why this ordering has been largely ignored in the past in favour to the more important change that sees the loss of clitic climbing.

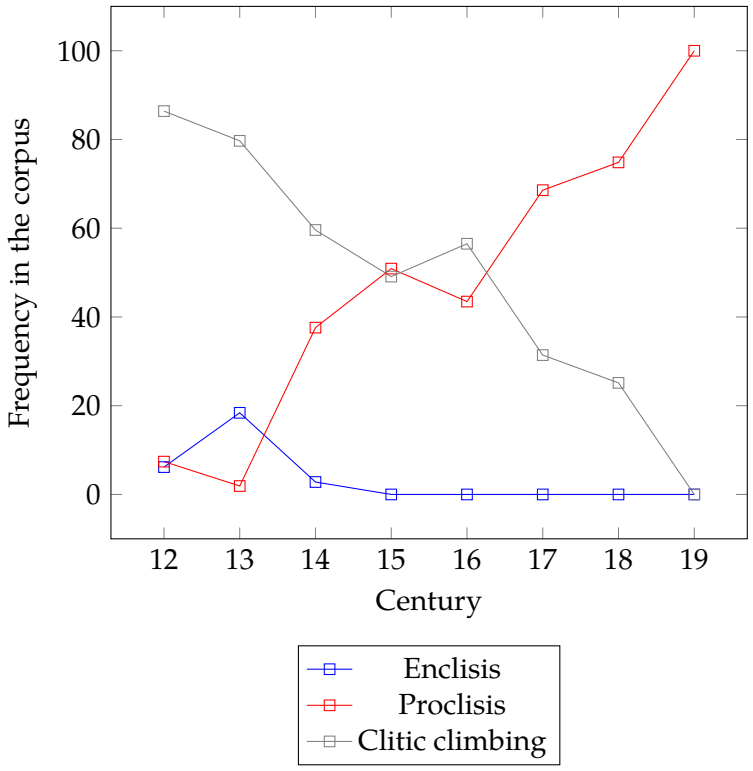


Figure 1 Distribution of all clitic complements of an infinitive

The diachronic path of the shift from enclisis to proclisis mentioned in the introduction is particularly salient once we take out restructuring clauses, that is when we exclude bare infinitives introduced by a matrix verb. Figure 2 reports on clitic placement with infinitives that are introduced by a preposition,

4 Clitic objects of causative verbs and perception verbs have not been collected. On this topic, I refer the reader to Pearce (1990).

a conjunction, a complementizer, or that are subject infinitives.

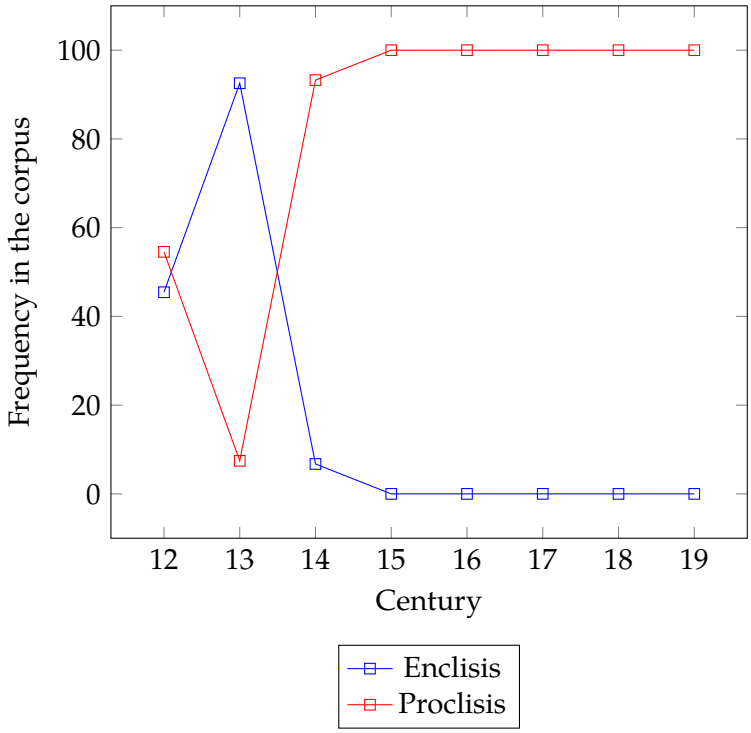


Figure 2 Distribution of clitics in non-restructuring clauses

The data available for the 12th century are not suitable for a quantitative discussion, as only 11 clitics were counted for non-restructuring clauses. Nevertheless, they foresee the shift that will be completed in the following hundred years or so. Enclisis represents 92.55% of clitic placement in non-restructuring clauses in the 13th century, a period which includes 195 clitics and is thus more representative of Old French. As a preliminary observation, this language was similar to other canonical Romance languages like Italian in having clitic climbing in restructuring clauses and enclisis where the clitic does not, or cannot, climb. The remaining 7.45% cases of proclisis for the 13th century foretell the grammar of Middle French and should be analysed as a competitive innovation. During the 14th century, enclisis drops down to 6.74% and it is not found anymore after 1350. As such, Old French is characterised by enclisis with infinitives.

In the remainder of this article, I will essentially focus on the change exposed in Figure 2, rather than the loss of clitic climbing (see Martineau 1990, Olivier 2022b and Olivier et al. 2023 for studies with both an empirical and

theoretical focus on clitic climbing and its loss in French, and Olivier, Sevdali & Folli forthcoming for an extension on clitic climbing with infinitive fronting). I follow the assumption that the loss of enclisis and the loss of clitic climbing are not directly connected, at least not in a causal way. Although the core of Romance languages has maintained enclisis and clitic climbing (Italian, Spanish, Catalan), whereas French and Brazilian Portuguese (Davies 1996) have lost both in favour of proclisis, Occitan (Alibèrt 1976), Franco-provençal (Horváth 2008) and Sardinian (Jones 1997) all have proclisis and clitic climbing, whilst Borgomanerese has enclisis and no clitic climbing (Tortora 2014). In light of this pan-Romance empirical view, clitic placement in Middle French should not be considered a mere transitional system, but a system where clitic climbing and proclisis co-exist in a stable way. Further, evidence for a parametric connection between clitic climbing and enclisis within one grammar has not been successfully put forward in the literature.

2.4 Enclisis

Enclisis is the main ordering in non-restructuring clauses until the early 14th century, that is in clauses where the infinitive is introduced by the complementizers *à* (6) and *de* (7), a preposition (8), or a conjunction (9). The distribution of enclisis in restructuring clauses is negligible (10). As we have seen above, clitic climbing is largely dominant in the latter environment.

(6) *tu mobliges a fere* ***le***.
you 1SG=force.PRS to do.INF=3SG
'You force me to do it.' (Grand Coutumier, Seq 283)

(7) *cil qui demande est prest de prover* ***le*** *par*
the-one who asks is begged to prove.INF=3SG by
lui ou par tesmoing.
himself or by witness
'The one who asks is begged to prove it himself or by a witness.'
(Établissements et Coutumes, p. 74)

(8) *Symon ala une foiz chiés ledit Roger por*
Symon go.PST.3SG one time at the-said Roger to
justicier ***le*** *de l'argent*
give.INF=3SG of the-money
'Symon thus went to the aforementioned Roger's place, to give him the money.' (Corpus Philippicum, J 1034, n50)

(9) *il doit conoistre le lignage ou noier* ***le.***
he must know.INF the lineage or deny.INF=3SG
'he must either acknowledge the lineage or deny it.' (Grand Coutumier, Seq 261-262)

(10) *il ne puet avoir* ***la.***
he not can.PRS.3SG have.INF=3SG
'he cannot have her.' (Etablissements et Coutumes, p.18)

I counted 182 occurrences of enclisis, which represents 90.1% of all clitics in non-restructuring clauses until 1300. The remaining 9.1% are cases of proclisis, which I show below becomes the prevalent ordering in this context during the early Middle French period (1300-1650).

2.5 Proclisis

Shortly after 1300, proclisis spreads to contexts where enclisis was previously found. This shift is completed swiftly, and after 1350 there are no instances of enclisis in the corpus anymore. From then on, proclisis accounts for 100% of clitic placement in non-restructuring infinitival clauses: when the infinitive is introduced by the complementizer *à* (11), the complementizer *de* (12), a preposition (13), or a conjunction (14). The presence of proclisis in restructuring clauses is again extremely rare in Middle French (15).

(11) *se il noffre a* ***la*** *soustenir.*
if he NEG=offer.PRS.3SG to 3SG=support.INF
'if he doesn't offer to support it.' (Rouillé, 3v)

(12) *qu'il leur promisist de* ***les leur*** *apporter.*
that-he 3SG=promise.PST.3SG to 3PL.ACC=3PL.DAT=bring.INF
'that he promised them to bring these to them.' (Actes de la Chancellerie d'Henri VI, JJ 172, n. 555, fol. 3o8 verso.)

(13) *et sans* ***la*** *batre...*
and without 3SG=beat.INF
'and without beating her...' (Actes de la Chancellerie d'Henri VI, JJ 173, n. 63, fol. 33 verso.)

(14) *... et* ***le*** *estrangler ou noyer.*
and 3SG=strangle.INF or drown.INF
'... and to either strangle him or drown him.' (Actes de la Chancellerie d'Henri VI, JJ 173, n. 104, fol. 52 recto.)

(15) *les iugeors desvoient **en** fere iugement*
the judges must.PST.3PL PART=make.INF judgment
'the judges had to make a judgment of it.' (Grand Coutumier, Seq 32)

Proclisis is found in higher frequencies in restructuring clauses from the mid-17th century on, when clitic climbing begins to decline. Importantly, in all other contexts, proclisis replaces enclisis rapidly and uniformly.

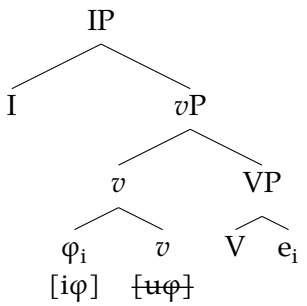
3 Theoretical proposal

The shift identified in the data connects to issues in clitic placement and cliticisation, two terms that I differentiate in my analysis. Whilst the former is concerned with the linear order in which the clitic is spelled out, the latter refers to the mechanism itself. First, I argue that clitic placement is inherently dependent on infinitive placement, and I then pursue on distinguishing two cliticisation mechanisms in UG. These theoretical assumptions account for cross-linguistic parametric variation, and they provide us with tools to analyse the shift from enclisis to proclisis introduced above.

3.1 Clitic placement and infinitive placement

Following Kayne's (1991) proposal, clitics are generated as the complement of their verb and target a constant functional projection that I take to be *v*. I assume that clitics are φ-heads (Dechaine & Wiltschko 2002), which, as Roberts (2010) argues, enter in a probe-goal relation with *v* to value its features (16). In turn, it must be the case that *v* possesses a set of uninterpretable φ-features valued by the clitic (on the following trees, valued features are struck through).

(16)



Upon Agree, the content of the goal (which is understood as a subset of the probe's features) is exhausted, which ensures that the clitic is spelled out on *v* (Roberts 2010). According to this view, cliticisation is a phenomenon of

morphosyntactic incorporation of the clitic into its host, or more precisely to its left-edge (Mavrogiorgos 2010). Note that at the syntactic level, cliticisation (at least in Romance languages) is necessarily a phenomenon of *pro*cliticisation (i.e. left adjunction on v), therefore enclisis must be accounted for. This conclusion is also reached by Pescarini (2021: 217), who argues that proclisis involves incorporation into the verb, unlike enclisis. I address this issue in the following lines.

Let us consider again the examples that introduced the paper, repeated here in (17) and (18), which show enclisis in Old French and proclisis in Modern French respectively.

(17) *tu* *mobliges* *a* *fere* ***le***.
you 1SG=force.PRS to do.INF=3SG
'you force me to do it.'

(18) *tu* *m'obliges* *à* ***le*** *faire*.
you 1SG=force.PRS to 3SG=do.INF
'you force me to do it.'

There is no particular motivation to assume that cliticisation underwent a change in French infinitival clauses. Instead, we find a connection between the alternation of enclisis and proclisis on the one hand, and the height of infinitive movement on the other (Kayne 1991, Benincà 1995).

Consider V-movement with French finite verbs, the analysis of which we will modify and apply to infinitives below. Roberts' (2010) mechanism of head-movement introduced above with respect to cliticisation also applies to V-to-T movement in Romance. In particular, Biberauer & Roberts (2010) argue that T possesses a T-feature and an unvalued V-feature, whereas V is its mirror image:[5]

(19) T: [iT], [uV]
V: [uT], [iV]

V-to-T movement with Modern French finite verbs is obligatory, given that V is a defective goal (thus aligning with the obligatoriness of clitic movement described above, as φ is also a defective goal). Crucially, Biberauer & Roberts (2010) claim that these features are realised morphologically as an inflection on the verb, and they convincingly argue that the richness of tense

5 Biberauer & Roberts (2010) argue that T is inherently verbal, therefore it must bear [uV]. Regarding V, they propose that the presence of tense morphology on finite verbs motivates the existence of [uT], whereas [iV] provides argument structure, which T lacks.

inflection (as opposed to agreement inflection) triggers V-to-T movement. To further motivate this point, they consider finite verbs (in Romance languages) to be compounds involving V and a fully specified T, which form at pre-syntactic word-formation level. Consequently, V-to-T movement is naturally triggered by the V+T compound.

We can apply this theory of head-movement to infinitives, which Biberauer & Roberts (2010) do not consider. In the following lines, I argue that their proposal can account for the shift from enclisis to proclisis in 14th-century French. Let's examine the case of enclisis first. Rather than assuming the V+T compound described above for finite verbs, I will refer to a V+Inf compound where Inf stands for the inflection of infinitives morphologically realised as the Romance ending /r/.[6] Instead of TP, I will refer to the functional projection above *v*P as IP, which corresponds to Roberts' (2010) InfP.

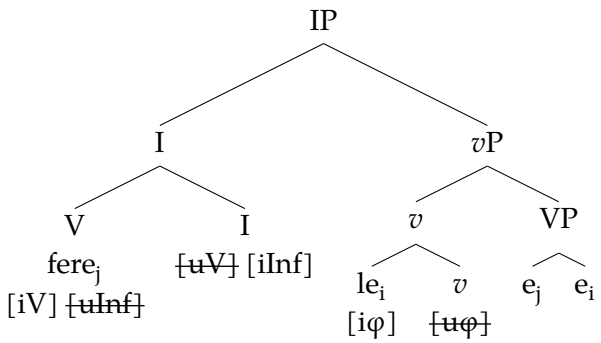
Given that Old French infinitives are structurally higher than the clitic (an empirical fact that I illustrate further in section 4.1), I possesses a probing V-feature in addition to the tense-related feature Inf (adapted from Biberauer & Roberts 2010 above):

(20) I: [iInf], [uV]
V: [uInf], [iV]

The structure of (17), our example with enclisis, is given in (21). We observe two instances of feature-valuation, namely cliticisation and V-to-I movement. Note that the infinitive crosses *v*, which appears to violate the HMC. Roberts (2010) offers two possible explanations for this, namely that infinitives represent a "neutralized category, not true verbs", and that the HMC does not exist. For the purpose of my analysis, I follow the latter assumption (see Roberts 2010: Chapter 5). In (21), the infinitive incorporates with a functional head structurally higher than the clitic, yielding enclisis at Spell Out.

6 The approach that rich inflection correlates with movement has been criticised (Bentzen 2004, Wiklund, Hrafnbjargarson, Bentzen & Hróarsdóttir 2007, Groothuis 2022), notably on the grounds that non-finite forms in Romance move high (except in French) despite lacking inflectional morphology (cf. Schifano 2018). Here, I take the suffix /r/ to be an inflection, therefore to contribute to 'richness'.

(21)

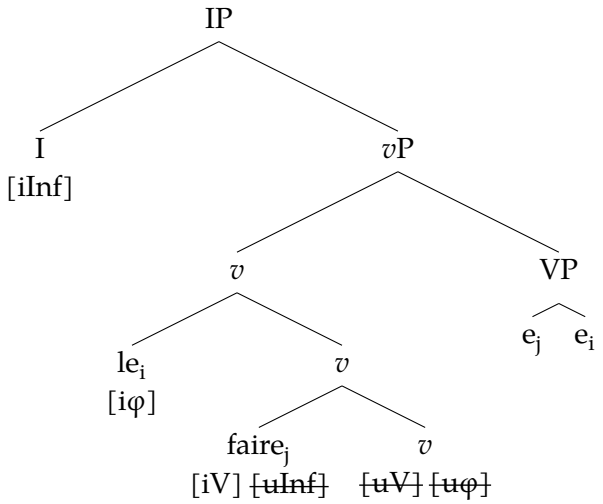


We are now in a position to address the shift to proclisis. Biberauer & Roberts (2010: 267) suggest that inflectional richness can play the role of a morphological cue for movement, which I will further develop in the remainder of the article. I hinted earlier to /r/ being an inflectional suffix, a crucial assumption for the hypothesis I present here. In Modern French, this suffix is phonologically absent from <er> verbs, the largest class of verbs (and importantly, I will show in section **??** that /r/ was only recently reintroduced on <ir> and <oir> infinitives). Specifically, I propose that the loss of /r/ (called *amuïssement* in the French literature) in the diachrony of the language connects to the rise of proclisis through the loss of V-to-I movement with infinitives. Put differently, the Inf-feature must be salient in the PLD for V-movement to be acquired, perhaps because its overt realisation acts as a trigger (see Roberts' 2019 definition),[7] and provides the 'richness' mentioned above that is necessary for V-movement. The loss of /r/ had the consequence of leaving acquirers without sufficient evidence to support the existence of a V+Inf compound, thus giving rise to an impoverished verbal form morphologically identical to past participles (at least with most verbs, I return to the case of irregular verbs in section 4.4) which do not vacate the v/VP-domain. In turn, I lost its ability to attract the infinitive, which formally translates as the loss of its V-feature. It follows that the poverty of inflection cannot initiate V-movement in this context (similarly to English, see Roberts 2010: 161-162 and Biberauer & Roberts 2010: 270-278). The structure of the Modern French example (18) is given in (22), with a feature-valuation operation analogous to Affix-Hopping. The latter being considered highly local, I assume that the infinitive values a V-feature on v in Modern French and agrees with I without triggering V-movement. Given that V's features do not form a subset of I's, incorporation is impossible. Another solution would be to assume that the Inf-feature has become inactive, or "inert" (see Roberts 2010: 86). In any

7 The idea that syntactic features are realised in the morphology is not new, see for instance Guasti & Rizzi (2002: 178): "if a feature is checked in the overt syntax, then it is expressed in the morphology".

case, Modern French infinitives are impoverished and adjoin to *v*.

(22)



To sum up, I hypothesise that V-to-I movement over *v* in Old French accounts for enclisis, whereas V-incorporation into *v* in Modern French explains why proclisis is necessarily adjacent, a claim that I develop in section 3.2 below.

V-to-*v* incorporation seems to have developed with finite verbs long before applying to infinitives. Whilst Archaic Latin had V-in-situ with finite verbs, V-to-*v* is attested in Classical Latin (Ledgeway 2012: 270, Wolfe 2021b: 100-101, 146). During the Old French period, finite verbs move to *v* on their way to the CP-domain, whereas I argued that infinitives cross *v* and target I. That infinitives do not incorporate into *v* in Old French may be accounted for with respect to the VO/OV alternation. The Germanic literature provides evidence that languages that allow both VO and OV may have optional V-to-*v* movement (Broekhuis 2022) or V in-situ (Wiklund et al. 2007, Wiklund 2010, Heycock & Wallenberg 2012), a claim that is tempting to connect to Old French, in speculating that *v*-incorporation was not necessary. Although OV_{inf} is predominant in Old French, it is found in competition with other orderings (Buridant 1987, Zaring 2010, 2011, Wolfe 2021b). Crucially, the shift from enclisis to proclisis identified here took place at the same time as the rigidification of $V_{inf}O$ in French, which may indicate a deeper change: the transition from a V-to-I grammar to V-to-*v* one.

3.2 Cliticisation: phonology vs. syntax

The controversy over the analysis of clitics in the phonological and syntactic literature is a long-standing point of contention (see notably Zwicky & Pul-

lum 1983: 511, Kayne 1984: 216 and Klavans 1985: 97). Given the analysis introduced above, enclisis is necessarily phonological.

Within a more contemporary framework, the issue regarding the locus of cliticisation has been addressed by Ledgeway & Lombardi (2005), who propose that UG is equipped with two cliticisation mechanisms: syntactic (before Spell-Out) and phonological (at Spell-Out). They illustrate phonological cliticisation with interpolation, which is characterised by the optional presence of an intervening element between the clitic and the verb, generally an adverb. Interpolation is found cross-linguistically with proclisis (23) and enclisis (24), in both finite and non-finite clauses.[8]

(23) *El* ***me*** *sempre* *disi.* (*Cosentino*)
he 1SG=always say.PRS.3SG
'He always tells me.' (Poletto & Pollock 2005: 148)

(24) *I* *vangumma* *già-**nni*** *da* *dü* *agni.* (*Borgomanerese*)
SCL see.PRS.1PL already=1PL of two years
'We've already been seeing each other for two years.' (Tortora 2010: 138)

In languages featuring interpolation, the clitic is essentially insensitive to the lexical category of its host, granted that it is a prosodic word. In essence, when the clitic adjoins to the verb at the surface level, the verb assumes the role of the host; however, in cases where an adverbial element intervenes, the adverb takes on the role of the host for the clitic. This type of cliticisation mechanism manifests itself at the PF-level only, as the clitic attaches to its host during the Spell Out process.

Turning to languages where proclisis is systematically adjacent, only the verb can satisfy the prosodic requirement of the clitic. This is what is normally found in Modern French. As we illustrated in (22), which we adapt to finite domains for the sake of the discussion here, both the clitic and the verb incorporate into v, and (in finite clauses only) they subsequently move to T as a single unit. Crucially, cliticisation on the (finite) verb takes place on v before the sentence is Spelled Out. Interpolation is naturally ruled out in this context.

8 Interpolation is available in some Romance varieties, or at some point in their diachrony. See Ledgeway & Lombardi (2005: 78-79) for Cosentino and Old Neapolitan, Poletto & Pollock (2005: 148) for Triestino and Calabrian, Miller & Monachesi (2003: 64) for Portuguese, Tortora (2010) for Borgomanerese, de Kok (1985: 337), Martineau (1990: 79), Hirschbühler & Labelle (1994) and Olivier (2022a: 243-244) for Middle French, and Lluch (1998) for Middle Spanish.

We are now in position to revisit Ledgeway & Lombardi's (2005) view: syntactic cliticisation is found when the clitic and its verbal host incorporate into the same functional head. Consequently, where enclisis results from V-movement over *v* as shown earlier with Old French infinitives, cliticisation is phonological.[9]

Whilst Ledgeway (2017: 189) argues that in Latin "enclisis is to be interpreted as the result of purely phonological cliticization", previous work by Jacobs (1993) substantiates the hypothesis that this characteristic remained in Old French. The latter study shows that, despite being syntactically dependent on the verb, Old French clitics phonologically lean on words that precede them (in particular pronominal subjects, conjunctions and particles). In addition to the traditional claim that clitics develop from weak, affix-like elements, we may hypothesise that phonological clitics can be reanalysed as syntactic clitics (but not vice versa).[10]

At first, the shift to proclisis in French did not affect the cliticisation mechanism, since interpolation with infinitives is found in our dataset until the early 19th century (25-27). Cliticisation remained a phonological process until then.[11]

(25) *Pourquoi ne* ***le*** *pas anneler?*
why NEG=3SG=NEG put-a-ring-in.INF
'Why not put a ring in it?' (Pesnelle, p.96)

(26) *&* *à* ***le*** *bien visiter avant de l'acheter.*
and to 3SG=well visit.INF before to 3SG=buy.INF
'and to visit it correctly, before buying it.' (Merville, p.60)

(27) *pour* ***s'en*** *mieux éclaircir ...*
to REFL=PART=better clear.INF
'and to clear himself up from it...' (Basnage, p.23)

In light of the above discussion, the loss of interpolation stems from a reanalysis of the cliticisation phenomenon, shifting from phonological to syn-

9 The absence of interpolation with enclisis in Italian suggests that the infinitive targets a position directly above the clitic, where no element can intervene. In Borgomanerese however, the availability of interpolation with enclisis on finite verbs may indicate that clitics are realised on a lower functional head (Tortora 2010). Another hypothesis may be that Italian infinitives have features that attract the clitic to the right-edge, as proposed by Mavrogiorgos (2013).

10 Given the nature of cliticisation, syntactic cliticisation is by definition also phonological.

11 It is not rare to observe instances of interpolation in Modern French literature, particularly with the genitive/partitive *en* and the locative *y* (Grévisse & Goosse 2008: 884). These examples are incontestably limited to literary and formal contexts, and reflect the norm of Classical French.

tactic with infinitives during the course of the 19th century. From then on, clitics incorporate with infinitives before Spell Out.[12]

The remainder of the article provides empirical support for the theoretical proposal presented here.

4 Empirical evidence for the loss of infinitive movement

The analysis of the loss of enclisis presented here heavily relies on the assumption that infinitives underwent V-to-I movement at an earlier stage of the language. There is robust empirical evidence that infinitives target a high position in Old French, in a similar way to what is found in most Romance languages today (e.g. Italian, Catalan, Spanish). In the following lines, I use the placement of adverbs to identify how high infinitives can move in Old French (Cinque & Rizzi 2009, Shlonsky 2010, Schifano 2018), and I will then illustrate how the loss of /r/ on infinitives played a crucial role in the shift from enclisis to proclisis in showing that it gave rise to a handful of factors responsible for the loss of V-to-I. After exposing changes in the structure of infinitival clauses, I will briefly discuss cliticisation with finite verbs in V2-clauses.

4.1 Adverb placement

Using adverbs to delimit the IP-domain from the VP-domain, Pollock (1989), building on Emonds (1978), showed that Modern French finite verbs move higher than their English counterparts.[13] With the advent of Cartography, Cinque (1999) identified an adverb hierarchy (28) where adverbs occupy functional positions.

(28) a. Higher Averb Space
[*frankly* $\text{Mood}_{\text{speech act}}$ [*unfortunately* $\text{Mood}_{\text{evaluative}}$ [*apparently* $\text{Mood}_{\text{evidential}}$ [*probably* $\text{Mood}_{\text{epistemic}}$ [*now* $\text{T}_{\text{past/future}}$ [*perhaps* $\text{Mood}_{\text{irrealis}}$ [*necessarily* $\text{Mood}_{\text{necessity}}$ [*usually* $\text{Asp}_{\text{habitual}}$ [*again* $\text{Asp}_{\text{repetitive (event)}}$ [*often* $\text{Asp}_{\text{frequentative (event)}}$ [*intentionally* $\text{Mood}_{\text{volitional}}$ [*slowly* $\text{Asp}_{\text{celerative (event)}}$

b. Lower Averb Space
[*not* $\text{Neg1}_{\text{presuppositional}}$ [*already* $\text{T}_{\text{anterior}}$ [*anymore* $\text{Asp}_{\text{terminative}}$ [*still* $\text{Asp}_{\text{continuative}}$ [*always* $\text{Asp}_{\text{perfect}}$ [*hardly* Neg2 [*just*

12 Note that this shift took place at a time where clitic climbing was lost in favour of proclisis in French. Clitic-incorporation into the infinitive, i.e. syntactic cliticisation, may thus also connect to the loss of clitic climbing.

13 Several studies from an earlier generative framework establish the need to differentiate multiple functional heads that interact with verb position, notably Belletti (1990) and Kayne (1991).

$\text{Asp}_{\text{retrospective}}$ [*soon* $\text{Asp}_{\text{proximative}}$ [*briefly* $\text{Asp}_{\text{durative}}$ [*typically* $\text{Asp}_{\text{PlCompletive}}$ [*well* Voice [*fast* $\text{Asp}_{\text{celerative (process)}}$ [*again* $\text{Asp}_{\text{repetitive (process)}}$ [*often* $\text{Asp}_{\text{frequentative (process)}}$ [*completely* $\text{Asp}_{\text{SgCompletive (process)}}$ [*v*-VP ⋯ (Schifano 2018: 2)

This hierarchy has been applied as a tool to investigate variation across several Romance varieties (Ledgeway & Lombardi 2005, Schifano 2018, Roberts 2019: 348-359), and also in diachronic studies (Pancheva 2005, Poletto 2014, Haeberli & Ihsane 2016, Araújo-Adriano 2022).[14] Importantly, it has long been observed that Italian infinitives target a high position on the syntactic structure (Belletti 1990, Cinque 1999), whereas Modern French (lexical) infinitives do not raise as much (Pollock 1989, Kayne 1991).[15] Schifano (2018) finds that Italian infinitives target the highest head of the HAS, and Modern French infinitives optionally move to $\text{T}_{\text{anterior}}$, but never higher than negation. Given that Modern Italian has high infinitive-movement and enclisis, Schifano's (2018) finding nicely fits the theoretical proposal exposed earlier, whereby height of V-movement relates to the distribution of enclisis and proclisis. In what follows, I test this empirical observation on Old French data.

If infinitives move higher than the clitic in Old French, we expect them to precede a certain set of adverbs. Indeed, this hypothesis is supported by the distribution of adverbs modifying infinitives in the Frantext corpus of Old French (ATILF-CNRS & Université de Lorraine 2019), as reported in Table 3.[16]

The prediction that infinitives move high in Old French is borne out. Excluding *bien* 'well', the adverb precedes the infinitive only 4 times out of 61.[17] Consider examples (29) to (31) where the infinitive precedes the adverb.

14 Pancheva (2005) uses the adverb hierarchy to analyse the position of clitics in Old Bulgarian, and Araújo-Adriano (2022) adopts it as a methodological tool to investigate (the loss of) verb movement in Brazilian Portuguese. See also Poletto (2014), who discusses verb placement in Old Italian in relation to adverbs, and Haeberli & Ihsane (2016) for the diachrony of verb movement in English.

15 French auxiliaries can optionally move to a high position, and thus precede the negation: *ne pas avoir* vs. *n'avoir pas*. The latter is mainly found in formal speech.

16 The results reported in Table 3 mainly consist of infinitives that are not (directly) introduced by a matrix verb, in order to ensure that the scope of the adverb is clearly on the infinitive. Sentences with a finite modal verb were excluded, given that in most cases the adverb is in the upper clause. Consider *Me voliez sempres ocire* "you always wanted to kill me", where the adverb *sempres* 'always' clearly modifies *voliez* 'wanted'. In addition, cases of imperative-infinitives as *nel dire ja!* "don't ever say it!" were excluded, since the verb is expected to target the CP-layer.

17 The adverb *bien*, which Cinque (1999) takes to be in Voice in Italian, may not be suitable given that its homophonous weak form targets a higher position in Modern French (see Cardinaletti & Starke 1999). If this holds true in Old French too, we can expect *bien* preceding the infinitive not to necessarily indicate a low infinitive.

		Vinf-Adv	Adv-Vinf	Total
Franchement	Frankly	5	0	**5**
Encore	Again/Still	2	0	**2**
Mie	Not	10	3	**13**
Pas	Not	15	0	**15**
Ja	Already/Ever	13	0	**13**
Plus	Anymore	8	0	**8**
Sempres/ Tousjours	Always	4	1	**5**
Bien	Well	26	23	**49**
Total		**83**	**27**	**110**

Table 3 Adverb placement with infinitives

(29) *et* *aviser* ***tousjours*** *icelle* *sentence* *de* *la* *pitié* *divine.*
and add.INF always this sentence of the pity divine
'and always add the divine pity to this sentence.' (*La vie et les Epistres* p.155, 1290)

(30) *il* *s'* *en ala* *mengier* *et* *dormir* ***bien*** *celle* *nuit*
he REFL=PART=went eat.INF and sleep.INF well that night
'He went away to eat and sleep well, that night.' (*Roman de Berinus* §261, ca. 1300)

(31) *Se* *je* *t'* *an oi* *parler* ***ja.***
if I 2SG=PART=hear speak.INF already
'If I hear you speak of it already.' (*Li romans dou Chevalier au Lyon* v.1647, ca. 1176)

Infinitive placement in Old French matches the empirical generalisation that non-finite forms generally raise higher than finite forms in Romance (Schifano 2018: 226, with Modern French being a notable exception). Consider examples (32) to (34) below, which are modern translations of (29) to (31) respectively. Importantly, the grammatical/unmarked order in Modern French shows Adv-V_{inf}.

(32) *et* **(*toujours*)** *assortir* (**toujours*) *cette* *sentence* *de* *la* *pitié*
and always add.INF always this sentence of the pity

divine.
divine
'and always add the divine pity to this sentence.'

(33) *il s' en alla manger et* **(*bien*)** *dormir* (**bien*) *cette*
he REFL=GEN=went eat.INF and well sleep.INF well that
nuit-là.
night-there
'He went away to eat and sleep well, that night.'

(34) *Si je t'entends* **(*déjà*)** *en parler* (*?déjà*).
if I 2SG=hear already GEN=speak.INF already
'If I hear you speak of it already.'

My proposal establishes a connection between the loss of infinitive movement in the diachrony of French and the shift from enclisis to proclisis. Nonetheless, there are apparent cases of V-movement in infinitival clauses until the 18th century over the postverbal negation, which have been analysed as evidence that infinitives could target a high position in Classical French (Roberts 1993, Pollock 1997). In Modern French, the infinitive would follow *pas* in (35), and in (36) the reinforcer *poinct* would precede the infinitive and its proclitic.

(35) *car elle (...) commencea à ne les chercher* ***pas***.
for she begin.PST.3SG to NEG=3PL=look.INF NEG
'for she began to not look for them.' (de Kok 1985: 335)

(36) *Le pauvre gentilz homme (...) les pria de*
the poor gentle man 3PL=beg.PST.3SG to
ne les habandonner ***poinct***.
NEG=3PL=abandon.INF NEG
'The gentleman begged them to not abandon them.' (de Kok 1985: 335)

These sentences *a priori* challenge the analysis presented earlier for they suggest that the infinitive could still raise outside v/VP four centuries after proclisis had become the standard ordering. This issue vanishes if we take *pas* and *point* to be VP-generated adverbs during the Middle French period (see also Martineau 1994). This claim is not without foundation: the preverbal negator *ne* did not need any support to mark negation yet (Jespersen 1917), unlike in Modern French, and *pas* could be fronted in the CP to satisfy V2-requirements (Hirschbühler & Labelle 1994). The reinforcer was reanalysed

quite recently in the history of the language, and it is now generated as main negator in NegP above the v/VP, essentially yielding [*ne pas* VINF] orderings. Essentially, late occurrences of [*ne* VINF *pas*] are not evidence for V-movement outside vP: in (35) and (36), the reinforcer is in the VP-layer.

4.2 The role of Amuïssement

The theoretical proposal of section 3.1 relies on the assumption that the loss of the suffix /r/ was a pivotal moment, as it previously served as a cue for the Inf-feature. Infinitival morphology in Modern French is absent from verbs of the first group of conjugation (37), which forms a macroclass of infinitives. Consequently, /r/ is not very salient in the PLD, which I will argue played an crucial part in the diachrony of the language.[18]

(37) 'love': aimer > /ɛme/

The rhotic is never pronounced for the macroclass, unlike what is found in other Romance varieties (38).

(38) a. amare > /aˈmare/ (Standard Italian)
b. amar > /aˈmaɾ/ (Spanish)
c. amar > /ɐˈmaɾ/ (European Portuguese)
d. amar > /aˈmaɾ/ (Valencian Catalan)

The presence of <r> in French orthography is a vestige of a time when it was pronounced. Grammarians have reported the muting of the final consonant, traditionally called *amuïssement* in the literature, as a shift that takes its roots during the 13th century and that was completed by the 14th century (Vising 1899: 586-589, Fouché 1966: 663-664, Marchello-Nizia, Combettes, Prévost & Scheer 2020: 850-851). Until then, the infinitival suffix was phonologically realised in a similar fashion to (38). Historically in Medieval French, the final consonant was first reduced to a fricative on infinitives ending in <er>, <ir> and <oir>, before being lost altogether (39).

(39) a. 'love': aimer > /aimeɾ/ → /ɛmez/ → /ɛme/

18 Whilst grammars forbid it, liaison with <er> infinitives is vanishingly rare. Laks & Peuvergne (2017) report that it is only found in certain verse texts, which some speakers are prescriptively taught at school. See Pustka, Chalier & Jansen (2017) for quantitative evidence for the absence of liaison with <er> infinitives. In any case, the rare occurrences can undoubtedly be analysed as a phenomenon of hypercorrection where speakers map phonology onto orthography in careful speech.

b. 'die': mourir > /muɾiɾ/ → /muɾiz/ → /muɾi/

c. 'see': voir > /voiɾ/ → /vwez/ → /vwe/

The suffix was reintroduced on French infinitives with the endings presented in (39b) and (39c) during the second half of the 18th century. Importantly, it was not pronounced throughout the Middle French period, and during the beginning of the Classical period, which all together consists of four centuries (from the 14th to the early 18th century).

We are now in a position to make one empirical observation and one empirical generalisation: first, reduction and subsequent loss of the suffix took place at the same time as the shift from enclisis to proclisis in French. Second, Romance languages that kept the suffix have enclisis and high V-movement with lexical infinitives (Schifano 2018). Based on this evidence, most Modern Romance languages (38) have a V+Inf compound that triggers V-to-I movement and which is successfully acquired through morphophonology. A potential connection between the infinitival suffix and V-movement has previously been entertained by Belletti (1990), Roberts (2010: 233, footnote 46) and Schifano (2018: 245-246), all with specific references to French.[19] For simplicity, I take the thematic vowel to be generated on the verb. This hypothesis is particularly strengthened since Occitan and Brazilian Portuguese also lack overt realisation of the rhotic and have proclisis.[20]

(40) a. amar > /aˈma/ (Occitan)

b. amar > /ɐˈma(ɾ)/ (Brazilian Portuguese)

Catalan has enclisis and high infinitives, despite *a priori* lacking the suffix (41a). The suffix nevertheless reappears when a clitic follows (41b).[21]

(41) a. amar > /aˈma/ (Catalan)

b. amar-ho > /aˈmaru/ (Catalan)

The reintroduction of the suffix in French was superficial, perhaps as decorum brought by the Enlightenment.[22] Importantly, it had no impact on infini-

19 The literature on (the loss of) V-movement in the diachrony of English also posits that a system with rich morphology triggers movement with finite verbs (Roberts 1993, Pollock 1997, Haeberli & Ihsane 2016), and Haeberli (2002) claims that the erosion of infinitival morphology connects to the loss of V2.

20 The situation of Brazilian Portuguese infinitives shows a lot of variation with regards to the loss of the suffix (Cardoso 2013, Serra & Callou 2013).

21 Importantly, muting of final rhotics in Catalan appears to be a different phenomenon of what we observe with French infinitives, given that it also applies to nouns.

22 I thank Paul Hirschbühler (personal communication) for raising this possibility.

tive movement, and it may not have been acquired as a suffix anymore.

4.3 Homophony with past participles

Additional empirical motivations for the loss of V-movement stem from homophony between French infinitives and past participles (42), which during the Middle French period extended to infinitives of the second group (43).

(42) a. 'love': aimer > /eme/
b. 'loved': aimé > /eme/

(43) a. 'finish': finir > /fini/
b. 'finished': fini > /fini/

Note that Modern French past participles occupy a low position in the adverb hierarchy (Schifano 2018: 85). This distribution holds robustly cross-Romance, which indicates parametric stability on the diachronic level. Since past participles remain low on the structure, the novel homophony in (42-43) may have contributed to the loss of V-movement with infinitives in pushing speakers to reanalyse infinitive placement alongside past participle placement; in other terms, since the two forms could not be distinguished phonologically anymore, acquisition may have drifted towards a more economical structure where all non-finite forms stay low.[23] My corpus does not contain any instance of past participles moving above *tousjours* 'always', which strongly suggests that no change took place on this level.

4.4 The case of irregular infinitives

We must address the subset of French infinitives that never lost the suffix and that shows no syncretism with past participles (44-46). In spite of undergoing no rhotic *amuïssement* and maintaining distinct non-finite forms, these infinitives also lost V-to-I movement.

(44) a. 'go down': descendre > /desɑ̃dʁ/
b. 'gone down': descendu > /desɑ̃dy/

(45) a. 'put': mettre > /mɛtʁ/

23 If homophony between infinitives and past participles contributed to the loss of high infinitives, it follows that the loss of /r/ alone may not be sufficient to result in low infinitives. For instance, even if Catalan infinitives show a partial loss of /r/, they are not homophonous with past participles, which may help speakers maintain the acquisition of high infinitives.

b. 'put': mis > /mi/

(46) a. 'believe': croire > /kʁwaʁ/

b. 'believed': cru > /kʁy/

We can deduce that the loss of V-to-I applied to the natural class of verbs, thus giving rise to irregular forms where the suffix was not treated as evidence for Inf anymore.

Further, it is well-known that children overgeneralise inflectional morphology during language acquisition (Prasada & Pinker 1993, Marchman 1997, Albright & Hayes 2003, Maslen, Theakston, Lieven & Tomasello 2004, Yang 2005, Ambridge, Pine, Rowland, Chang & Bidgood 2013). For instance, children acquire a rule "add *-ed*" to form the past tense in English, which upon generalisation to all verbs creates **goed*, instead of the irregular form *went*. This phenomenon has also been observed for the acquisition of French infinitives (Anđel, Klampfer, Kilani-Schoch, Dressler & Kovačević 2000, Kilani-Schoch 2003), where the ending of the macroclass is generalised to irregular verbs by analogy (47-48).

(47) 'go down': descendre → descender

(48) 'put': mettre → metter

Analogous overgeneralisation is based on the most productive class, which we have seen in French concerns <er> verbs. Note that past participles are also impacted by this phenomenon (49-50), where the suffix <é> is found on verbs that would normally take <u> or <is> (Kilani-Schoch 2003, Royle & Thordardottir 2008).

(49) 'has wanted': a voulu → a voulé

(50) 'has seen': a vu → a vé

Since this phenomenon is observed cross-linguistically, there is no particular reason to believe that Old French acquirers did not also overgeneralise the verbal morphology of the macroclass. This phenomenon may have further contributed to the loss of V-to-I in the grammar in treating irregular infinitives as regular during acquisition.

4.5 *Interim conclusions*

The evidence presented in this section provides valuable insights into the diachronic changes in French, shedding light on the factors that shaped the loss of infinitive movement and consequential clitic placement. The main changes are summarised in Table 4, where I contrast the succession of the three French grammars with that of Modern Italian. Ultimately, Old French and Italian share comparable characteristics.

The process of *amuïssement* that was completed by the late 13th century aligns with the shift to proclisis. The reanalysis of the cliticisation mechanism as a syntactic operation, however, only took place during the 19th century, as evidenced by interpolation in the corpus.

		Suffix	**V-to-I**	**Cliticisation**	**Placement**
Italian		✓	✓	Phon.	Enclisis
French	**pre-14th c.**	✓	✓	Phon.	Enclisis
	14th-19th c.	×	×	Phon.	Proclisis Interpolation
	post-19th c.	×	×	Synt.	Proclisis

Table 4 Main changes in French, compared to Italian

Through this discussion, I delved into the implications of the loss of infinitive movement during language acquisition. My analysis suggests that the lack of sufficient cues for this construction in the input prompts a reanalysis of the grammar, ultimately leading to the loss of infinitive movement.

4.6 *A note on cliticisation in Old French finite clauses*

Unlike infinitives, Old French finite verbs target the CP-domain to yield V2 (Adams 1987, Vance 1997, Klævik-Pettersen 2018, 2019, Wolfe 2018, 2021a,b, Larrivée 2019, 2021, 2022) and normally have proclisis (unless the context is V1, see Hirschbühler & Labelle 2000 and Labelle & Hirschbühler 2005), therefore the verb must adjoin to v on its way to C. Consider examples (51) to (53) below, where adjacent proclisis is systematic. The initial constituent satisfying V2 is in small capitals.

(51) *En cest cas* *ni doit* *li* *évesques* *nului*
in this case NEG=LOC=must.PRS.3SG the bishop noone
recevoir.
receive.INF

'In that case, the bishop must not receive anyone there.'
(Établissements et Coutumes, p.80)

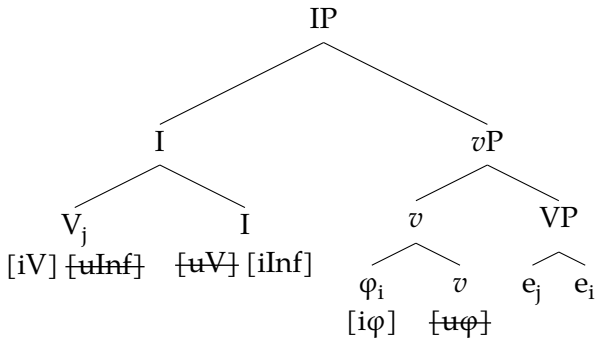
(52) *et* LORS ***se*** *puet* *elle* *marier* *à* *qui* *que* *elle*
and thus REFL=can.PRS.3SG she marry.INF to whom that she
voudra.
want.FUT.3SG
'and then she will marry whomever she wants to.' (Établissements et Coutumes, p.65)

(53) *Bie* ***les*** *peuuent-ils* *donner.*
well 3PL=can.PRS.3PL=they give.INF
'They can give them well.' (Terrien, p.41)

The distinction between phonological and syntactic cliticisation introduced in section 3.2 is necessary to account for this ordering.

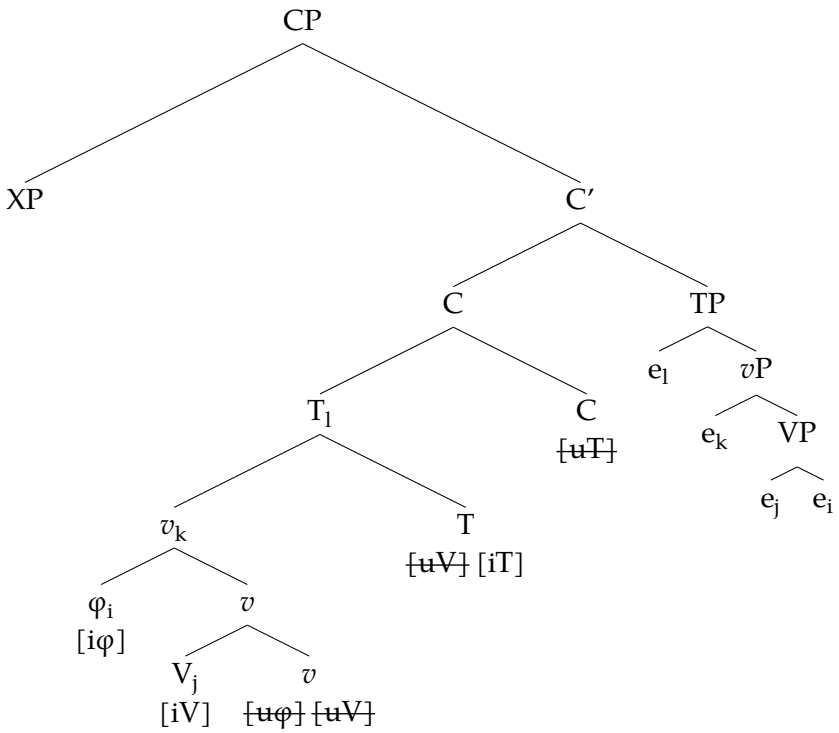
I proposed earlier that cliticisation in Old French infinitival clauses is phonological, and enclisis is spelled out once the infinitive has moved to the appropriate functional head and the clitic has valued *v*'s φ-features. Importantly, the infinitive and the clitic are on two distinct heads and cliticisation yields on the phonological level (54).

(54)



In finite clauses however, the clitic is incorporated on the verb before movement to the TP-domain, and subsequent movement to the CP-domain where I simply assume valuation of a T-feature on C (55).

(55)



Essentially, this further demonstrates that clitic placement in infinitival clauses differs from that of finite clauses because the two environments show different cliticisation mechanisms. The former shows phonological cliticisation as the two elements are independent from each other in the syntax, whereas the latter shows syntactic cliticisation as the clitic incorporates on the verb in the derivation to form a complex head. This is further evidenced by the absence of interpolation with finite verbs in the diachrony of French, whereas infinitives show interpolation until the 19th century (Olivier 2022a).[24] As a concluding remark, finite clauses constantly show syntactic procliticisation throughout the evolution of French, whereas infinitival clauses have transitioned from phonological cliticisation (evidenced by enclisis in Old French and interpolation in Middle French) to syntactic cliticisation (i.e. V-incorporation), as proclisis is necessarily adjacent in Modern French.

24 There are a couple of instances of interpolation reported for finite lexical verbs in the literature, which come from the early Old French period. According to (Moignet 1976: 130), this construction is extremely rare. In her comprehensive empirical documentation, de Kok (1985) does not mention the construction, which confirms Moignet's intuition. Further, Martineau (1990) argues that the rare occurrences reported by Moignet (1976) contain adverbs that cliticise on verbs and should therefore be considered as clitic clusters instead of interpolation.

5 Stronger pronouns

The data collected for this study enable us to make an additional observation about the diachrony of pronominal objects in infinitival clauses in French. It has previously been assumed that where clitic climbing fails to take place in Old French, the object remains as a pre-infinitival pronoun with a stronger morphology (Moignet 1970, Roberts 1997). I found 66 instances of this construction in the corpus, spread between the 12th and the 16th centuries (56-58).[25] Note that this construction is found in the very same environments as enclisis in Old French and proclisis from the Middle French period on.

(56) *et auquel nul ne puet fouir ne* ***soi*** *escuser.*
and to-which noone NEG can.PRS.3SG escape.INF nor REFL excuse.INF
'and from which noone can escape, nor give excuses.' (Actes Royaux du Poitou, CLXXXVIII)

(57) *Vous auriez tort de* ***moy*** *faire desplaisir.*
you have.COND.2PL wrong to me do.INF displeasure
'You would be wrong to make me unhappy.' (Actes de la Chancellerie d' Henri VI, JJ 172, p. 336, fol. 174 recto.)

(58) *je leur doinz pooir de* ***moy*** *escommenier.*
I 3PL=give.PRS.1SG power to me excommunicate.INF
'I give them the power to excommunicate me.' (SCRIPTA 2, Acte 4137)

This construction has been described (Moignet 1970, Pearce 1990, de Kok 1993, Roberts 1997), but it is yet to receive a formal analysis. To the best of my knowledge, it has not been found in any other Romance variety. Martineau (1990: 96) also reports that this word order is particularly rare, and she suggests that it may have been an innovation of late Old French. My data corroborate this hypothesis. In the following lines, I propose an analysis for these examples.

25 The instances of pre-infinitival stronger pronouns found in the corpus concern mainly the reflexive pronoun. The nature of the genre under investigation naturally accounts for the fact that the third person is more common: this material rarely addresses a person directly (which rules out the second person) or states personal matters (hence few occurrences of the first person). Furthermore, it is not possible to categorise the first and second person plural *nos* and *vos* as proclitic or strong when they precede an infinitive, although de Kok (1985) treats some of them as strong pronouns without defining how. In any case, this should not affect my findings in a significant manner, since *nos* and *vos* are not common in the corpus.

5.1 Stronger, but not strong

Cardinaletti & Starke (1999) identify three pronominal categories: one strong, and two deficient (see also Dechaine & Wiltschko 2002), and they further split the deficient pronouns into two categories: weak and clitics. This hierarchy is based on a certain level of deficiency that they identify simultaneously in morphology, syntax, prosody and semantics. The three categories are illustrated below in Italian with a strong pronoun in (59a), a weak pronoun in (59b) and a clitic in (59c).

(59) a. *Non dirò mai tutto a **lui**.*
NEG say.FUT.1SG never everything to him.DAT

b. *Non dirò mai **loro** tutto*
NEG say.FUT.1SG never them.DAT everything.

c. *Non **gli** dirò mai tutto.*
NEG him.DAT say.FUT.1SG never everything.
'I will never say everything to him/them.' (Cardinaletti & Starke 1999: 212)

Strong pronouns are phrases that can appear in isolation or be introduced by a preposition. They are characterised by their ability to bear stress, be coordinated and be modified, and essentially show a similar behaviour to full objects. Weak pronouns are also phrases, and as such they are prosodic words that have inherent stress to satisfy V2-constraints for instance, yet unlike the previous category they necessarily appear in a derived position. Lastly, clitics are the most deficient category, and as such they are heads that must adjoin to a functional head. Unlike strong and weak pronouns, they do not have inherent stress and cannot be coordinated. In what follows, I present an attempt to apply this tripartition to the data.

Interestingly, the aforementioned pre-infinitival stronger pronouns attested in earlier French are necessarily adjacent to the verb, a type of constraint that is not typical of genuine strong pronouns. In addition, the pronouns under discussion are less free than full objects, given that Old French (and to a certain extent Middle French) has a fairly free word order and accepts pre-infinitival (60) and post-infinitival objects (61) (Zaring 2010, 2011, Scrivner 2015).

(60) *por la pes porchacier.*
to the peace get.INF
'to get some peace.' (de Kok 1993: 261)

(61) *por* *reprendre* *s'ALAINNE.*
to catch.INF POS=breath
'To catch his breath.' (de Kok 1993: 261)

This freedom is not found with the pronouns discussed here, which indicates that they necessarily appear in a derived position. I propose that their hybridity (they are not clitics but they appear in a derived position and have a strong morphology) can be explained alongside Cardinaletti & Starke's (1999) tripartion: these pronouns are stronger than clitics, but not strong pronouns. I analyse them as weak pronouns that occupy a phrasal position in the *v*P-domain, directly above the infinitive.[26]

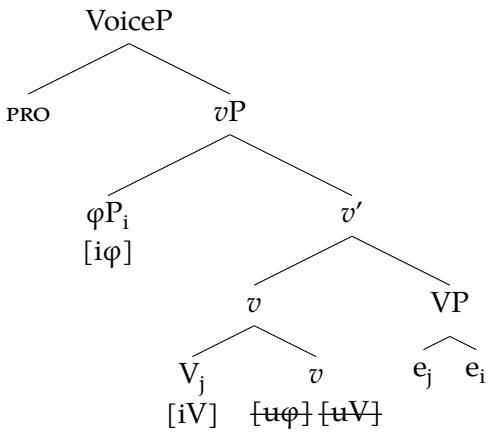
5.2 Towards an analysis of weak pronouns

In a similar vein to the proposal discussed earlier vis à vis clitic placement, I propose that *v* contains a set of unvalued φ-features that probes the internal argument of the verb (Mavrogiorgos 2010, Roberts 2010). Where the goal is a clitic, that is to say a φ-head, [uφ] is valued on *v* directly and the content of the φ-head is exhausted (cf. Roberts 2010: 60, this ensures that the clitic is spelled out on *v*).

I build on this hypothesis and propose that weak pronouns are φPs, as defined by Dechaine & Wiltschko (2002), and that they are generated in Comp,V before moving to Spec,*v*P to value [uφ]. For the purpose of the analysis, I take PRO to be generated in the specifier of VoiceP.

26 An anonymous reviewer asks how we can be sure that these pronouns are not clitics with a different morphology, given that this is what one finds with some enclitics (see section 2.1). The distribution of these pronouns does not match that of clitics as they cannot climb to finite verbs in restructuring clauses, nor with causative verbs or compound tenses. Weak forms can, however, climb to non-finite verbs (see Rizzi 1982: 25, Cardinaletti & Starke 1999: 227 fn78, Cinque 2004: 152, Pescarini 2019: 544, 2020: 47 and Olivier forthcoming on weak-climbing in non-finite contexts in Old French, Modern French and Modern Italian). Furthermore, if these pronouns were to be analysed as clitics, one would need to account for their unbalanced distribution as it would imply that proclisis on finite verbs shows a morphology different from that of proclisis on infinitives. The 'strong' morphology of some enclitics (the -oi forms), on the other hand, is consistently found with all verbs (finite V1, imperatives, infinitives) for 1SG, 2SG and the reflexive. Whilst the literature aknowledges that enclisis may be stressed (i.e. receive its prosodic host's stress, see Ordóñez & Repetti 2006, Torres-Tamarit & Pons-Moll 2019, Pescarini 2018, 2021), the same is not true with proclisis.

(62)



The stronger form of the pronoun may stem from emphasis, which clitics cannot bear (Zwicky 1977), or stress shift from the preposition (Olivier forthcoming). Crucially here, agreement within the *v*P-domain accounts for weak distribution (i.e. the derived position).

5.3 A case of 'failed change'

In light of the quantitative data introduced in section 2, the rise of proclisis and weak pronouns took place in the very same contexts, yet only the former fully actualised. Weak pronouns are particularly interesting since their frequency remains extremely low throughout the centuries, although we observe a peak during the 15th century (Figure 3). Whilst the trajectories of enclisis and proclisis are clear, weak pronouns never account for more than a sixth of all constructions and they disappear early after they first appeared.[27]

I propose that the development and loss of weak pronouns highlights a case of failed change (Postma 2010, 2017, Ringe & Yang 2022, Simonenko & Carlier 2022). Failed changes are cases where a new construction is not successful either because it is rapidly reanalysed, or because it is challenged by another construction. They are characterised by a change that gets underway but that is not fully generalised and dies out.

Let us briefly recall the change observed with clitic placement to account for the failure of weak pronouns: French infinitives target a position above *v*P until 1300, which is a necessary condition for enclisis. From then on, infinitives target a position not higher than *v* and proclisis rises. This change took place only a century after we first observe the construction under focus here. In fact, the innovative use of weak pronouns in the 12th century was rapidly

27 The data for the 12th century are insufficient and therefore unrepresentative. I counted 5 occurrences of enclisis, 6 occurrences of proclisis and 1 strong pronoun.

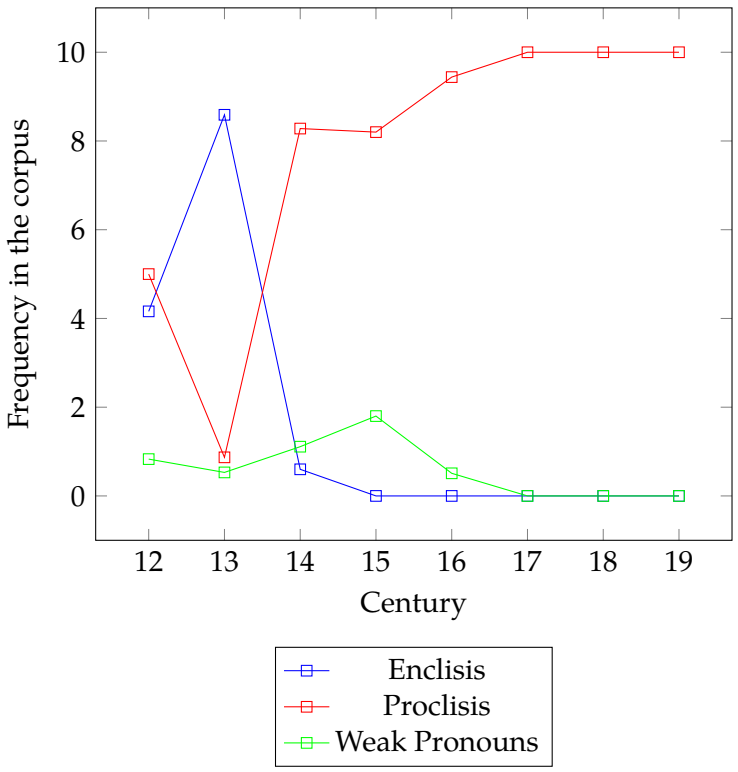


Figure 3 Distribution of clitics and weak pronouns

overshadowed by the rise of proclisis with infinitives. The two constructions are linearly identical, and the use of weak pronouns may not have been frequent enough for the rule to be acquired (Yang 2016). Another hypothesis is explored in Olivier (forthcoming), who considers the impact of prosodic changes during the 14th century. Until then, stress is assigned at the word level in French, whereas it is subsequently found on the last syllable of the prosodic phrase (Marchello-Nizia 1995, Rainsford 2011). The two strategies may have been competing for a short time, allowing pronouns to maintain a strong morphology.

Further, clitic climbing becomes optional in restructuring clauses towards the end of the 16th century (Iglesias 2015, Amatuzzi et al. 2020, Olivier 2022a, Olivier et al. 2023) which substantially increased the acquirers' exposure to proclisis. This pivotal moment connects to the loss of weak pronouns in the corpus. As a conclusion, I argue that the rapid shift from enclisis to proclisis resulted in a grammar where proclisis and weak pronouns were found in

the same linear position, therefore the most deficient form was acquired and weak pronouns could not remain.

6 Concluding remarks

This article presents a comprehensive investigation into the evolution of clitic placement in Old French infinitival clauses. Through this study, I have aimed to shed light on the historical changes that occurred in cliticisation, particularly the shift from enclisis to proclisis in the diachrony of French.

By analysing Old French data, I have demonstrated that enclisis was prevalent when the clitic could not undergo climbing, providing valuable insights into the patterns of clitic placement during that period. Additionally, I have proposed a novel perspective on the reasons behind the emergence of proclisis in post-1300 French. A combination of converging factors, including the loss of V-movement and the resulting syncretism with past participles due to the loss of infinitival morphology, has been identified as the driving force behind this change.

Furthermore, my investigation has pointed out that other Romance languages that still exhibit enclisis in similar contexts have also maintained the /r/ suffix and infinitive movement. Future research should explore whether this observation provides supporting evidence for a connection between these linguistic features.

Addressing the ongoing debate on the locus of cliticisation, my analysis suggests that adjacent proclisis may represent the ultimate stage in the evolution of cliticisation (before the potential reanalysis of the clitic as a genuine affix). This interpretation posits that it reflects pre-Spell Out left-adjunction on the host, thus providing a refined distinction between phonological and syntactic cliticisation.

In conclusion, this paper contributes significantly to our understanding of the diachronic changes in clitic placement in French infinitival clauses. The findings offer a clearer picture of the transition from enclisis to proclisis and the factors that influenced this evolution. Moreover, I have illustrated the intricate relationship between morphology, syntax and phonology in the context of clitic placement.

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