THE STRUCTURE OF INFINITIVES

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1. DATA AND PROBLEMS

The aim of this article is to study infinitival constructions whose NP subject precedes the infinitival verb, as shown in (1) and (3) for Middle and Classical French. These constructions raise problems for the current analysis of Case assignment. In addition to providing new data on these constructions, we propose an analysis which accounts for the disappearance of the corresponding sentences in Modern French, as in (2) and (4) below.

(1) Middle and Classical French
   a. Il faudroit l'auteur Dieu estre ou ignorant ou malicieux
      it should the Creator be-INF or ignorant or malicious
      ‘The Creator should have to be ignorant or malicious’
   b. Par ce moyen il luy sembloit le roy estre afoibly
      by this means it to-him seemed the king be-INF weakened
      ‘By this means, it seemed to him that the king was weakened’
   c. Comme il apert Dieu estre fin de tout
      as it seems God be-INF clever of everything
      ‘As God seems to know all about everything’
   d. ...tellement qu'il sembloit la bataille estre mortelle
      ...so-much that it seemed the battle be-INF fatal
      ‘so much that it seemed that the battle was fatal’

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1 The sources for the Classical French, Old French and Middle French data are given in an appendix.

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(2) Modern French
   a. *Il faudrait Dieu le créateur être ignorant ou malicieux
   b. *Par ce moyen il lui semblait le roi être affaibli
   c. *Comme il appert Dieu être fin de tout
   d. *Il semblait la bataille être mortelle

(3) Middle and Classical French
   a. Il congoissait ce jeune chanoine estre ung grant
      he knows this young priest be-INF a great
      ribleur
      fast-liver
      'He knows that this young priest is a great fast liver'
   b. Vous reconnoissez ce défaut être une source de discorde
      you recognize this fault be-INF a source of discord
      'You recognize that this fault is a source of discord'
   c. Je ne veux l'innocent souffrir pour le coupable
      I not want the innocent suffer-INF for the guilty
      'I do not want the innocent to suffer for the guilty'
   d. J'estimeroy l'Art pouvoir exprimer la vive energie
      I will consider the art can-INF express the live energy
      de la Nature
      of nature
      'I will consider that art can express the live energy of nature'

(4) Modern French
   a. *Il connait ce jeune chanoine être un grand noceur
   b. *Vous reconnoissez ce défaut être une source de disconde
   c. *Je ne veux l'innocent souffrir pour le coupable
   d. *J'estimerai l'art pouvoir exprimer la vive énergie de la nature

The sentences in (1) show that, unlike Modern French (2), Middle and Classical French allow an overt NP subject to appear in front of the infinitival verb with an impersonal main verb. These sentences are typical violations of the Case filter, as defined by Chomsky (1981: 175). In (5), parallel to (1), the NP subject France is considered to be in a position to which no Case can be assigned. Therefore, (5) violates the Case filter.

(5) *It is likely France to be here

How could the sentences in (1), in Middle and Classical French, escape the Case filter? Furthermore, how do we explain that sentences in (3),
The structure of infinitives

which are licit in Middle and Classical French, are no longer acceptable in Modern French (4).

We propose an analysis where this pattern of data is due to structural changes within functional categories. We assume that all infinitival constructions in (1–4) are deprived of the tense projection TP and are headed only by the functional projection AGRP. In Middle and Classical French, AGRP projected a specifier position to which the infinitival subject could move and receive nominative Case. This AGRP specifier position no longer occurs in Modern French, due to parametric changes in the functional head specifications.

In the second section of this article, we will explore possible current analyses of data similar to ours. In the third, we will develop an analysis which explains the diachronic variation in a unified way. In the last section, we will extend the data to wh-extraction and clitic climbing.

2. SOME POSSIBLE SOLUTIONS

A usual analysis of sentences such as (3) allows the main verb to assign Case directly or indirectly (through a preposition), to the NP in front of the infinitival verb. We will look at these two possibilities before we turn to a third possible explanation, where the infinitival construction is licensed by a corresponding small clause.

2.1. The Exceptional Case Marking solution

An ECM construction is a construction such as (6), where the Case of the NP Marie is taken to come from the main verb, since it presumably cannot get Case from the infinitival clause.²

(6) I know Marie to be nice

To allow (6), two conditions must be met in the ECM solution. First, the main verb must be a Case assigner. Second, the structure must be transparent so that the accusative Case can be assigned to the NP Marie.

The first condition applies clearly to our examples in (3), with (3a) repeated in (7a). The main verbs are possible Case assigners, as shown in (7b).

² INFL [-tense] cannot assign Case, see Chomsky (1981:19), among others.
(7)  *Middle and Classical French*
   a. Il connoissoit ce jeune chanoine estre ung grant ribleur
      he knows this young priest be-INF a great fast-liver
      ‘He knows that this young priest is a great fast liver’
   b. car il connoissoit bien sa femme
      because he knew well his wife
      ‘because he knew his wife well’

However, while the equivalent of (7b) is still possible in Modern French, (7a) is ungrammatical, as shown in (8):

(8)  *Modern French*
   a. *Il connaيت ce jeune chanoine être un grand noceur
   b. Il connaит ce jeune chanoine

(8b) shows that the main verb has not lost its property to assign accusative Case. Is (7a) therefore ungrammatical because the verb has changed its subcategorization? If subcategorization is linked to semantic selection (see Grimshaw 1979), we would expect a change in the meaning of all of our main verbs. As far as we know, their meaning is quite constant. 3 In fact, any verb accepts an NP subject in front of the infinitival verb in Middle and Classical French, as shown in (9); thus, a change in subcategorization would imply that all main verbs have changed their subcategorization between Middle French and Modern French.

(9)  *Middle and Classical French*
   a. Impersonal verb
      car par ce moyen il luy sembloit le roy estre affoibly
      by this means it to-him seemed the king be-INF weakened
      ‘By this means, it seemed to him that the king was weakened’

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3 Among our verbs, *connaitre* is the only one whose categorization has somewhat changed. While in Middle and Classical French *connaitre* could take a complement clause: *connaitre que*, in Modern French it is only the synonymous *savoir* which subcategorizes for *que*; *savoir que*. No other verb of our list underwent such a change. Therefore we do not see it as a pattern of change that could be related to the subcategorization of infinitival constructions.
b. Verb of opinion
   i. Les pouvres simples femmes, qui mieulx cuidoient these poor naive women, who better thought
      ces bons frères estre anges que hommes terriens these good friars be-INF angels than human beings
      ‘These poor naive women, who thought that these friars were angels and not human beings’
   ii. Lorsqu’on imagine l’objet désiré être when one imagines the desired object be-INF
       tel qu’on peut like one wants
       ‘When we imagine the object we wish to be like we want’

   c. Declarative verb
      Et affermerent ceci estre vrai and (they) declare that be-INF true
      ‘And they declare that to be true’

   d. Volition verb
      et aucuns d’autres estats eussent voulu les and no other states would-have liked the
      Bourguignons et les autres seigneurs estre dedans Paris Burgundians and the other lords be-INF in Paris
      ‘and other states would have liked the Burgundians and the other lords to be within Paris’

   e. Perception verb
      tant qu’il veit son mari estre à l’ostel as-long that he saw her husband be-INF in the house
      ‘as long as he saw her husband being in the house’

Thus, we conclude that it is not a change in subcategorization which explains the data in (1–4).

4 We shall leave for future research the comparison of our data with Portuguese data. Although both languages show some similarities (pro-drop languages, presence of an NP subject in the infinitival clause), they also show important differences. For instance, our Middle and Classical French constructions allow extraction of the NP subject by clitic climbing or by NP movement, and NP infinitival subject in matrix clauses while parallel Portuguese constructions do not. Moreover, Portuguese constructions show a contrast between two types of verbs: verbs such as lamentar ‘regret’, which take an NP subject before or after the infinitival verb and verbs such as afirmar ‘declare’, which allow the NP subject only if it appears after the infinitival verb. Raposo (1987a) explains this difference by a subcategorization difference between lamentar, which takes IP
In fact, this first condition of the ECM analysis, the presence of a Case assigner, is not always met in our data. Recall that Middle and Classical French allow infinitival constructions to be found after an impersonal main verb. In constructions such as (1), repeated below, the impersonal verb would have to assign accusative Case.

(10) il semblait la bataille estre mortelle

However, impersonal verbs do not usually assign accusative Case.\(^5\)

Another problem with the first condition is the fact that, unlike English as shown in (11), our infinitival constructions of Middle and Classical French are also allowed on their own, without a Case assigner, as shown in (12).\(^6\)\(^7\)

\(^5\) Raposo (1987a) proposed, for inflected infinitives in Portuguese, that the impersonal verb assigns nominative Case to the null expletive subject pronoun, of the main clause. This Case is then transmitted to the infinitival clause and then to the infinitival subject eles, as shown in (i).

(i) pro sera dificil [eles aprovar—a proposta].

When the expletive pronoun is lexical, however, Raposo (1987b) and Raposo and Uriagereka (1990) show that the nominative chain cannot be formed (ii):

(ii) *el seria dificil [eles aprovar—a proposta].

According to these analyses, the source of the nominative Case in our (10) cannot be the impersonal main verb, since in (10) the expletive subject is overt.

Note that we do not consider sentences such as (iii) to be raising constructions since the null subject of the infinitival verb is not necessarily the same as the subject of the main verb, as shown in (iiib).

(iii) Middle and Classical French

a. le cheval, se enfla tellement de nuyct qu’il semblait [AGR Pp, estre ung tonneau

‘The horse swelled so much during the night that it seemed to be like a barrel’

b. Monseigneur, comme il avoit de coutume, une heure environ devant le jour, se reveilla, et vers sa chambrerie, se vira, coidant [AGR Pp, estre sa femme]

‘...and he turned himself towards his servant, thinking she was his wife’

\(^6\) In examples (12a,b), the adverbs tantost and plus, which precede the NP subject, are clearly not Case assigners. Adverbs such as plus in Middle and Classical French are maximal projections (see Martineau 1993). They are found in positions where no Case needs to be assigned (as modifiers of verbs, adjectives or clauses).
(11) *As soon as the dogs to separate, the rabbit runs

(12) a. Tantost les chiens avoir esté decouplez, voicy le as soon as the dogs have-INF been separated, here the levraut qui sort en campagne... rabbit comes out in the country
   ‘As soon as the dogs had been separated, the rabbit comes out in the country’

b. Ceux qui soutenoeient le vin rouge et clairet estre plus chaud que le blanc, disoient les choses chaudes extremement tendre à une couleur rougeaste et jaune, comme est le vin rouge et clairet: plus le vin rouge nourrir mieux que le blanc, more the red wine nourish-INF better than the white... parquoey convenier mieux ès maigres, et le blanc aux gras...
   ‘Those who argued clear red wine to be more hot than white, said hot things tend to the reddish and yellow color, like the clear red wine is: red wine feeds better than white, therefore it is more suitable for the thin and the white for the fat...’

c. Le Medicin respondit, en son art bien avoir remedes propres pour faire parler les femmes, n’en avoir pour les faire taire; remede unique estre surdité du mary...
   cure the only be-INF deafness of the husband...
   ‘The doctor said that in his art he has cures to make women talk but does not have cures to keep them silent; the only cure was deafness of the husband’

The second condition of the ECM analysis, transparency of structure for Case assignment, does not seem to need to be met in Middle and Classical French. Our constructions are not subject to the requirement of adjacency in Case assignment (see Stowell 1981). Unlike the English examples, as in (13), the Middle and Classical French examples tolerate intervening

7 Constructions such as (12) should be distinguished from “infinitif de narration”, found in Middle, Classical and Modern French (i), and in Portuguese (Rouveret 1980:97):
   (i) Et les grenouilles de sauter
Note that an infinitival construction with an NP subject preceding the infinitival verb can be found on its own in Quebec French, as shown by Vinet (1985). Sentence (ii) is not possible in Standard French.
   (ii) le frigidaire tomer en panne. on aurait vraiment l’air fin!
   the fridge to-break-down, we would really look silly
   ‘if the fridge were to break down, we would really look silly’
material between the main verb (the potential Case assigner) and the subject NP (the Case assignee). In the examples in (14), the constituents in bold intervene between the main verb and the subject of the infinitival clause.

(13) *I know for many years Mary to be nice

(14) a. ...les moins experimentez reconnoissoient à veüe d’oeil,

    dit-il, les actions humaines estre tributaires

    he said, the actions human be-INF dependent

    à la censure du public

    on the censure of the public

    ‘...the least experienced recognized at a glance, he said, that human actions are dependent on public censure’

b. Admonestoit dessous l’image vide D’un air sans

    (he) asked under the picture empty of an air without

    corps ces ames volater

    bodies these souls fly-INF

    ‘He asked these souls to fly under the empty picture with an air without bodies’

For direct objects however, adjacency between the verb and the object is required. In Middle and Classical French, like in Modern French, sentences in (15) are excluded. We conclude that in (14), the assignment of accusative Case to the NP infinitival subject by the main verb would be a violation of this adjacency requirement.

(15) Middle and Classical French

a. *...les moins experimentez reconnoissoient à veüe d’oeil, dit-il,

    les actions humaines

b. *Admonestoit dessous l’image vide D’un air sans corps ces ames

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8 The systematic examination of two Middle French texts (over 2000 sentences) shows that, apart from some short adverbs, no material can intervene between the verb and its direct object. The presence of short adverbs is consistent with the verb raising analysis we adopt for French.
This adjacency requirement between the main verb and the infinitival subject is also violated when the main verb already has a direct object to which it assigns accusative Case, as in (16).

(16) Les gentilhommes l'assureoient a cela estre vray
the lords him told this be-INF true
'The lords told him this was true'

We have seen that the NP infinitival subject cannot always be licensed by the accusative Case assigning property of a main verb. Could it be licensed by an empty preposition, as in Kayne’s (1984) analysis?

2.2. Kayne's solution

Kayne (1984) suggested that when prepositions are Case assigners, they can also be Case transmitters. In English, the empty preposition in COMP allows accusative Case to be assigned to the NP subject in (17a) and excludes control constructions in (17b). In Modern French, the reverse situation occurs: the empty preposition in COMP cannot assign nor transmit Case, so that (18a), parallel to (17a), is ungrammatical and only the control construction in (18b), parallel to (17b), is allowed.

(17) a. I believe John to be the most intelligent of all
(Kayne 1984: 110)
b. *I believe to have made a mistake
(Kayne 1984: 112)

(18) a. *Je crois Jean être le plus intelligent de tous
(Kayne 1984: 111)
b. Je crois avoir fait une erreur
(Kayne 1984: 112)

While this analysis allows for an elegant solution to the contrast between Modern French and English, it cannot be extended to the Middle and Classical French data. Both constructions in (18) are found in Middle and Classical French, as shown in (19).

(19) Middle and Classical French
a. il ne cuidoit point sa fille estre tieulle
he not thought not his daughter be-INF like that
'He never thought that his daughter was like that'
b. je cuidoie recepvoir de l'argent et j'en suis bien loing
I thought receive-INF money and I am far from that
'I thought that I would receive money and I am far from that'
If we wish to pursue Kayne's analysis, we are forced to admit that an empty preposition would transmit Case from *croire* in (19a) to the NP infinitival subject, but would not do so in the control construction in (19b). This empty preposition would then not have a uniform property to assign/transmit Case in Middle and Classical French. Rather than a change in the Case assigning properties of prepositions, we think that the explanation of the above data lies in a structural change in the infinitival sentences themselves. Furthermore, examples such as (10) and (12) are not explained by Kayne's analysis. We will now examine a proposal made by Rizzi, where some infinitival constructions are licensed in a small clause environment.

2.3. Rizzi's analysis

Rizzi (1978) observes that in Italian an NP subject may marginally precede the infinitival verb with main verbs allowing small clauses (20)–(21). The existence of (21a) allows (20a) while (21b) disallows (20b).

(20) **NP subject in front of the infinitival verb**
   a. ?Ritenevo Mario essere una persona onesta  
      'I believed Mario to be an honest person’ (Rizzi 1978: 151)
   b. *Mario affermava questa donna non volerlo sposare  
      'Mario stated this woman not to want to marry him’  
      (Rizzi 1982: 79)

(21) **Small clauses**
   a. Ritengo tuo fratello un disgraziato  
      'I believe your brother a wretch’  
      (Rizzi 1978: 149)
   b. *Affermo tuo fratello un disgraziato  
      'I state your brother a wretch’  
      (Rizzi 1978: 149)

The parallelism stipulated by Rizzi implies that only copulas are found in the infinitival clause. However, Middle and Classical French data exhibit another pattern. Although *être* is the most frequent verb found in our constructions, any other verb is also attested. This is shown in (22) below.

(22) a. Il pourra *dire* cette faute **partir** d’une âme  
    he will be able to say this mistake **part-INF** from a soul...
    enyvrée de sa bonne fortune  
    'He will be able to admit this mistake due to a fulfilled soul pleased with good fortune’
b. Mais les princes Chrestiens n'estiment leur vertu but the princes Christian not estimate their virtue

Proceder ny de sang ny de glaive pointu proceed-INF neither with blood nor with sword pointed

‘But the Christian princes do not estimate their virtue to proceed neither with blood nor with a pointed sword’

c. esperans la nuyt parachever ce que le jour...

hoping the night finish-INF what the day...

‘Hoping that the night finishes what the day...’

d. Tarcon Etruscus écrit par certaine propriete occulte

Tarcon Etruscus wrote by a certain property hidden

la vigne blanche resister aux tonnerres...

the vine white resist-INF to the thunders

‘Tarcon Etruscus wrote that by a certain hidden property the white vine resists thunders’

e. a qui je prie qu'il permette la terre ouvrir qui me engloutisse

‘to whom do I write that he allows the earth to open which swallows me’

f. Je ne veux l'innocent soufrir pour le coupable

‘I don’t want the innocent to suffer for the guilty’

g. ... il y a science ou ignorance, ce que Metrodorus Chius

... there is science or ignorance, that which Metrodorus Chius

nioit l'homme pouvoir dire
denied man can-INF say

‘...there is science or ignorance, that which Metrodorus Chius denied man will able to say’

h. ... et qui sçavoit M. de Bouillon l'aymer uniquement...

... and who knew M. de Bouillon love-INF only...

‘... and who knew M. de Bouillon love her only...’

i. ... et a tellement devant les yeux les predictions d'un certain

Druyde, qu'elle croit tout son bonheur dependre de

that she believes all her happiness depend-INF upon

cest Amour

that Love

‘... and has so much before her eyes, the predictions of a

certain druid that she believes that all of her happiness depends

upon that love’

Furthermore, an analysis in terms of a parallelism between small clauses

and infinitival clauses has been questioned by Ruwet (1982), who has

shown that in Modern French there are not always corresponding small
clauses (23a) parallel to infinitival constructions with extracted NP subject such as (23b).

(23)  
a. *L’âme que Socrate a démontré immortelle, est, selon Platon, composée de trois parties

b. L’âme que Socrate a démontré être immortelle, est, selon Platon, composée de trois parties

(Ruwet 1982: 159)  
'The soul that Socrate showed (to be) immortal consists of three parts according to Platon'

We conclude that the possibility of having a small clause does not provide an explanation for our data. We have seen in this section that neither the accusative Case assigning property of the main verb, nor some particular Case transmitting property of prepositions in French, nor the existence of parallel small clauses, can provide a unified explanation for our data. We suggest that the disappearance of (1) and (3) are both due to a change, not in the main verb or clause, but in the structure of the infinitival clause. In the next section, we propose an analysis in which it is the structure of the infinitival clause that allows or disallows the particular subject position in constructions (1–4).

3. WHAT LICENCES THE NP INFINITIVAL SUBJECT?

3.1. The structure of the infinitival clause

We propose that the infinitival clause found in sentences (1–4) are not full sentential projections but reduced ones. We assume Pollock’s (1989) division of the functional category IP into two independent projections: AGRP (Agreement Phrase) and TP (Tense Phrase). \(^9\) We also assume that the NP subject is base-generated adjoined to VP (as in Koopman and Sportiche 1985). While a finite sentence has the structure given in (24), we assume that an infinitival sentence usually only projects to AGRP, as in (25). \(^10\) This view is consistent with the traditional assumption that in infinitival constructions, INFL is marked [-Tense].

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\(^9\) Adopting Belletti’s (1990) sentence structure with AGRP over TP would not have changed the main arguments of this article. Only the labels on functional categories need to be inverted.

\(^10\) There are a few exceptions such as constructions with *laisser* and perception verbs in Modern French which we assume to have the following structure:

(i) [Marie laisse les enfants] [\(\text{VP manger une pomme}\)]
Furthermore we assume, as implied in Pollock (1989), that only one specifier position is available among the functional projections for the subject of the clause.

We follow Junker’s (1990: 366) analysis of Middle French finite clauses, which states that a structural change occurred within functional categories between Middle and Modern French. In Middle French, AGRP had a specifier to which the subject NP could be raised. In Modern French, however, AGRP no longer has a specifier and the NP subject has to move to Spec TP. (26) illustrates the structural change between functional categories from Middle to Modern French.\footnote{Infinitival clauses seem more conservative than finite clauses for a number of phenomena. Classical French infinitival clauses behave according to the Middle French pattern while finite clauses show a mixed pattern.}
(26) Middle French  \[\text{AGRP} = [\text{TP} \text{ Spec } \text{AGR}'] \text{AGR}^0]\]
Modern French  \[\text{TP} = [\text{TP} \text{ Spec } \text{TP}^0]\]

We propose to extend this analysis to infinitival constructions. Since infinitival constructions such as (1–4) are projections of AGRP, the NP subject of the infinitival clause is allowed to move to Spec AGRP in Middle and Classical French. In Modern French, however, where AGRP has no specifier position, sentences such as (2) and (4) are ungrammatical.\(^{12}\) (27) shows the complete structure of Middle French sentences (1) and (3), according to our analysis.

(27) Middle French
a. (=1) Il faudroit l’auteur Dieu estre ou ignorant ou malicieux

\[\text{TP}\]
\[\text{il}\]
\[\text{T'}\]
\[\text{faudroit}_2\]
\[\text{AGRP}\]
\[\text{Spec}\]
\[\text{AGR'}\]
\[t_{V_2}\]
\[\text{VP}\]
\[\text{Spec}\]
\[\text{V'}\]
\[t_{V_2}\]
\[\text{AGRP}\]
\[\text{l’auteur}\]
\[\text{Dieu}\]
\[\text{estre}_1\]
\[\text{VP}\]
\[t_{NP}\]
\[\text{V'}\]
\[t_{V_1}\]
\[\text{ignorant ou malicieux}\]

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12 The fact that the infinitival clause is a projection of AGRP predicts that PRO could be governed in the Spec of VP, in the spirit of Kayne’s (1991) analysis of governed PRO. In this paper we shall focus on overt infinitival subjects and leave for future research the control constructions.
Modern French sentences (2) and (4) are excluded, since there is no specifier position in the infinitival clause to which the NP subject can move. Could the NP infinitival subject stay in its VP-internal position while only the verb raised to AGR? If so, the word order would then be as in (28).
(28) *Modern French
Il connaissait être ce jeune chanoine un grand noceur
he knew be-INF this young priest a great fast-liver

But (28) as well as (2) and (4) are ungrammatical in Modern French. To complete our explanation of these facts, we must now turn to the Case assigned to the infinitival subject.

3.2. The NP subject receives its Case from the infinitival verb

It is usually assumed that the subject of an infinitival clause does not receive its Case from the infinitival verb. This assumption has, however, been questioned, for example by Mohanan (1982) who shows that in languages where Case is morphologically overt, NP subjects exhibit the Case normally assigned to them by a tensed verb, in the corresponding infinitival clause. Both the NP subject of the tensed clause (29a) and the NP subject of the infinitival clause (29b) bear the nominative Case.

(29) Malayalam
a. ḳutṭi  talaṁnu
child-NOM tired
‘The child was tired’
b. amma ḳutṭi  ṭalaṁ ṭaṅa aagriahicccu
mother-NOM child-NOM tire-INF desired
‘Mother wanted the child to be tired’ (Mohanan 1982: 324)
Mohanan concludes that verbs assign Case to their subject both in finite and infinitival clauses. Portuguese also shows an NP infinitival subject with an overt nominative Case in inflected infinitival clauses, as shown in (30).

(30)  
  a. O João lamenta eles terem gastado esse dinheiro para nada  
      NOM  (from Rouveret 1980: 75)  
      ‘João regrets they have spent this money for nothing’  
  b. Será difícil eles aprovarem a proposta  
      NOM  (from Raposo 1987a: 86)  
      ‘It will be difficult for them to approve the proposal’

The constructions in (29b) and (30) are similar to (1) and (3) found in Middle and Classical French. Thus, we hypothesize that the Case of the NP subject in (1) and (3) comes from the infinitival verb.

A potential problem is that there is no morphological difference between nominative and accusative Case in Middle and Classical French, as shown in (31).

(31)  
  a. Ce jeune chanoine est ung grant ribleur  
      NOM  
  b. Il connoisait ce jeune chanoine estre ung grant ribleur  
      NOM or ACC?

If we look at Old French, which had a distinction between nominative ("cas sujet") and accusative ("cas régime"), in sentences similar to (1), the NP subject usually bears accusative Case (ACC) (32).13

(32)  
  Et il convient par estavoir Le castelain descendenre a pié  
  and it is necessary obligatorily the lord-ACC walk-INF down by foot  
  ‘And it is absolutely necessary that the lord walks down by foot’

This accusative Case seems to be a default Case assigned to the whole infinitival clause. This clearly appears with the following Latin example, where the entire infinitival clause bears accusative Case.14

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13 “Cas régime” also includes Cases like genitive, dative, partitive, ablative.
14 We are grateful to Corinne Delhay for this example. According to the current analysis of the passive (i.e. Jaeggli 1982) the main verb cannot assign this accusative Case in (33). Another example of the accusative as a default Case can be found in Pepicello (1980: 175):

(i) Feminam paenitere appareat  
    the woman-ACC to-be-sorry-INF seems  
    ‘It appears that the woman is sorry’
(33) Mihi videtur [Ciceronem bonum oratorem esse] to me is seen Cicero-ACC good-ACC speaker-ACC be-INF
'It seems to me that Cicero is a good speaker'

On the basis of Old French and Latin data, we conclude that a default accusative Case could show up in the infinitival clause in Middle and Classical French. Data from Malayalam and Portuguese have shown that the NP subject of similar infinitival clauses to (1) and (3) can be nominative. Massam (1985: 67), studying similar constructions across languages, suggested that two Cases might sometimes be assigned to the subject of an infinitival clause. If this is true, then the infinitival subject could get nominative Case from the infinitival verb and also “be covered” sometimes by a default accusative Case. We turn now to the question of how this nominative Case is assigned.

3.3. Nominative Case assignment to the infinitival subject

In section 3.1 we proposed that the structural difference between Middle and Modern French infinitival clauses is that the latter lack a specifier position in the functional projection AGRP. We then proposed, in section 3.2, that the infinitival verb must assign nominative Case to its subject. We will now link these two proposals in order to explain what licenses the specifier position of AGRP in Middle and Classical French.

The proposal in Junker (1990) for finite clauses draws on two ideas: Travis' (1984) characterization of functional projections with Case, tense, and person features, and Fukui and Speas' (1987) condition on the licensing of the specifier position of functional categories which state that only certain features in the head of a functional category license a specifier position. Junker (1990: 366) then proposed that the functional head bearing the nominative Case feature changed between Middle and Modern French. In Middle French, it is the head AGR which bears the nominative Case feature and thus licenses a specifier; in Modern French, it is T which bears this feature. Nominative Case is then assigned by Spec-Head agreement between the moved verb and the NP subject.¹⁵

¹⁵ We take the specifications of functional heads to be the locus of parametric variation. Such an approach is consistent with Chomsky's (1989:2) proposal that "only functional elements will be parametrized".
We can now extend this analysis to infinitival constructions. Recall our assumption that all infinitival clauses only project to AGRP. In Middle and Classical French, the functional head AGR\(^0\) bears the nominative Case feature. This licenses a specifier position to which the subject is moved to receive nominative Case.

\[(34) \quad \text{Case feature of the functional heads in Middle, Classical and Modern French} \]

- **Middle and Classical French:**
  - AGR\(^0\) \([+\text{nom}inative\text{Case}]\)
  - T\(^0\) \([-\text{nom}inative\text{Case}]\)

- **Modern French:**
  - AGR\(^0\) \([-\text{nom}inative\text{Case}]\)
  - T\(^0\) \([+\text{nom}inative\text{Case}]\)

Middle and Classical French sentences (1) and (3), repeated below, are licit because the subject has a position to which it may move (SpecAGRP) and receive nominative Case.

\[(35) \quad \text{Middle and Classical French} \]

- a. \((=1)\) Il faudroit l'auteur Dieu estre ou ignorant ou malicieux
- b. \((=3)\) Il congoissait ce jeune chanoine estre ung grant ribleur

In Modern French, however, since it is T\(^0\) and no longer AGR\(^0\) which bears the nominative Case feature, the AGR\(^0\) of the infinitival clause has no nominative Case feature; thus, no specifier position for the infinitival subject is projected. As shown in (36), Modern French sentences (35) are ruled out because no specifier position is available where the infinitival subject can get nominative Case. Even if the subject NP were moved and adjoined to AGRP, it would not receive nominative Case, since the functional head AGR\(^0\) no longer bears this feature in Modern French. However, another Case can be given to the infinitival subject in this position, for example an accusative Case, but this will not be sufficient, for we assume that nominative Case is needed to license the NP subject within the infinitival clause.

\[(36) \quad \text{Modern French} \]

- a. \((=2)\) *Il faudrait Dieu le créateur être ignorant ou malicieux
- b. \((=4)\) *Il connaît ce jeune chanoine être un grand noceur

To show that our analysis makes the right predictions, consider sentences (37). In Modern French, even if the subject stays in a VP-internal position, there is still no nominative Case that could be transmitted to it by a chain, and the sentence is ruled out, as shown in (37a). For Middle and Classical
French, our analysis predicts that sentences such as (37) will be grammatical. Indeed such sentences can be found, as shown in (37b).  
(37)  
a. Modern French  
(=28) *Il connaissait être ce jeune chanoine un grand noceur  
b. Middle and Classical French  
Anciennement l'en cuidoit estre trois déesses d’enfer  
formerly one believed be-INF three Goddesses  
appelées furies  
called Fury  
‘Formerly one believed that there were three Goddesses called Fury’

If we assume that nominative Case can be assigned to an empty pronominal such as pro (recall that Middle French is a language with null subjects) in the specifier of AGRP and transmitted to the NP in its VP-internal position, sentences such as (37b) are licit in Middle and Classical French with the following structure.

(38) Anciennement l’en cuidoit [AGRP pro_i [AGR_ estre [VP [NP trois déesses d’enfer] [v_ appelées furies]]]

Our analysis also explains why infinitival sentences such as (12), partially repeated in (39), are licit in Middle and Classical French but ruled out in Modern French. In Middle and Classical French, AGRP has a specifier

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16 Sentences like (37b) are also found in Italian, but have been analyzed differently from sentences such as (35), also marginally found in Italian (Rizzi 1978). In our analysis, these two types of constructions receive a unified explanation.

17 Indeed verbs such as laisser and voir, for which we assume a different structure in Modern French (see footnote 10), also allow this kind of construction in Old, Middle and Classical French.

(i)  
a. Old French  
Quant li quens vit avoir s’ame cele amesniere et cel tissu  
b. Middle and Classical French  
Et pour ce que luy, estant jeune, aultre fois, avoit ouy dire les femmes en la craigne, ausquelles craignes toutesfois jamais nulles menteries ne se dient, que a la tremere...

This is predicted by the present analysis. Since any main verb can be found with an infinitival AGRP in Middle French, so should laisser and voir. Two structures are therefore available for infinitives preceded by laisser and voir in Middle and Classical French; the VP structure and the AGRP structure. Only the former survived in Modern French.
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position where the NP subject gets nominative Case, a position no longer available in Modern French.

(39)  a. Middle and Classical French
     Tantost les chiens avoir esté decouplez, voicy le levraut qui sort en campagne...
     b. Modern French
     *Dès les chiens avoir été lâchés, le lièvre sort

We turn now to more complex structures and show how they fit into our analysis.

4. EXTENDING THE DATA: WH-EXTRACTION AND CLITIC CLIMBING

Our analysis explains that an NP subject, within the infinitival clause AGRP, can only be found in Middle and Classical French, where AGRP has a specifier position to which nominative Case is transmitted by the head AGR\(^0\). However, an infinitival subject outside the infinitival clause, as in clitic climbing and Wh movement structures, is licensed both in Middle, Classical and Modern French.\(^{18}\) Why is this so?

(40) Middle and Classical French
     a. NP subject in front of the infinitival verb
        Il connoissait ce jeune chanoine estre ung grant ribleur
        ‘He knew this young priest to be a great fast-liver’
     b. Wh-Movement
        lequel elle cuidoit estre le plus beynin et doux de tous
        ‘whom she thought to be the kindest and sweetest among all’

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\(^{18}\) Contrary to Middle and Classical French, Modern French does not allow wh-movement and clitic climbing if the main verb is a volition verb (cf. Pollock 1985; Pica 1985). Examples for wh-movement are given below:

(i) Middle and Classical French
    a. que de luy dire la chose en ce monde que plus vouldroye estre celée
    b. Excepté les choses que ce même decret a voulu dépender de notre libre arbitre,
        nous devons penser, ...

(ii) Modern French
    *Une femme que l’on veut être amoureuse d’un autre. (Pica 1985:270)
Similarly, Italian and Portuguese do not accept these constructions with volition verbs. We leave this problem for future research.
c. Clitic Climbing
   ad cause qu’il la congoissoit estre sa femme
   ‘because of that he knew her to be his wife’

(41) Modern French
   a. NP subject in front of the infinitival verb
      *Il connaît ce jeune chanoine être un grand noceur
   b. Wh-Movement
      Qui connaît-il être un grand noceur?
   c. Clitic Climbing
      (?)Il le connaît être un grand noceur

Recall that we have excluded sentence (41a) by proposing that the NP subject within the infinitival clause cannot, in Modern French, receive nominative Case. Such a condition on a nominative subject within the infinitival clause does not seem to be met when the infinitival subject forms a chain whose head is outside the infinitival clause, since Modern French (41b) and marginally (41c) are acceptable. It might be the case that in wh-movement and clitic climbing constructions, it is sufficient that the head of the chain is assigned accusative Case by the main verb which governs it.

When a subject wh-phrase (40b)–(41b) is extracted from the infinitival clause, it can get accusative Case in the main TP adjoined position. (41b) has the structure in (42) for Modern French. The wh-phrase is adjoined to AGRP.

Similarly, when there is clitic climbing, the infinitival subject raises from head to head to the main clause where it is assigned accusative Case by the main (raised) verb. (41c) has the structure in (43) for Modern French.
(42) Wh-Movement in Modern French
(43) **Clitic Climbing in Modern French**

\[
\begin{array}{c}
\text{TP} \\
\text{il}_2 \\
\text{T'} \\
\text{T}^0 \\
\text{N}^0 \\
\text{lec}_1 \\
\text{V} \\
\text{connait}_2 \\
\text{AGR}^0 \\
\text{tN}_{\text{N}^0} \\
\text{tV}_2 \\
\text{VP} \\
\text{tNP}_{\text{N}^0} \\
\text{V'} \\
\text{AGR} \\
\text{tV}_2 \\
\text{tN}_{\text{N}^0} \\
\text{etre}_1 \\
\text{tN}_{\text{N}^0} \\
\text{VP} \\
\text{tV}_1 \\
\text{un grand noceur} \\
\end{array}
\]

Compare now (44a) and (44b) below. The accusative clitic representing the infinitival subject must be in the main clause — (44a) — in order to be licensed. In (44b), where the clitic is still within the infinitival clause, accusative Case is not sufficient.

(44) **Modern French**

a. je le connais être un grand noceur
b. *je connais l'être un grand noceur

'I know him to be a fast-liver'

These facts are consistent with our analysis. For the infinitival subject to be licensed within the infinitival clause, the functional categories of the infinitival must have the right structural properties.
5. CONCLUSION

We have argued that the licensing of an NP infinitival subject as in (1) and (3) depends on the structure of the infinitival clause. Infinitival clauses are AGRP functional projections whose specifier position is licensed by the nominative Case feature borne by the functional head. We hypothesized that the existence and further disappearance of infinitives such as (1–4), are linked to a change in the functional head bearing the nominative Case.

Our analysis questions a common assumption made in the GB framework that nominative Case is assigned under head-complement government. An analysis where nominative Case is assigned by a spec-head procedure allows us to account for a large body of data and to explain diachronic changes within French in a principled way. The consequences of this analysis for other Romance languages remain to be explored.

APPENDIX: SOURCES FOR CLASSICAL, OLD, AND MIDDLE FRENCH DATA

(1a) (Charron, 3 vérités III: 262, from Stimming 1915: 165–66)
(1b) (Comynes I: 15, from Stimming 1915: 165–66)
(1c) (Chr. de Pisan 119: 22, from Stimming 1915: 165–66)
(1d) (Le Loyal Serviteur X: 65, from Damourette and Pichon 1911–33: 571)
(3a) (Vigneulles 17, 30, from Martineau 1990: 447)
(3b) (Bosquet, 3e exhort., from Haase 1969: 207)
(3c) (Robert Gamier, Les Juifves II; t. II: 118, from Damourette and Pichon 1911–33: 571)
(3d) (Du Bellay, Defense et Illustration I: 11, from Gougenheim 1984: 172)
(7a) (Vigneulles 17: 30, from Martineau 1990: 447)
(7b) (Vigneulles 40: 33)
(9a) (Comynes I: 15, from Stimming 1915: 165–66)
(9b) (Anonymous, Les Cent Nouvelles Nouvelles 216: 55, from Martineau 1990: 447)
(9bii) (Descartes, Pass. 120, from Haase 1969: 207)
(9c) (Vigneulles 51: 8, from Martineau 1990: 447)
(9d) (Comynes, Mémoires, 979)
(9e) (Vigneulles 71: 50, from Martineau 1990: 430)
(12a) (Du Fail, Eutrapel 40, from Lorian 1973: 203)
(12b) (Bouchet 7–8, from Lorian 1973: 200)
(12c) (Rabelais III: 231, from Lorian 1973: 200)
(14a) (Les Caquets de l’accouchée I: 11, from Damourette and Pichon 1911–33: 572)
(14b) (D. Bellay I: 408, from Stimming 1915: 133)
(19a) (Vigneulles 65: 58, from Martineau 1990: 447)
(19b) (Vigneulles 36: 95, from Martineau 1990: 316)
(22a) (Montaigne I: 47, from Gougenheim 1984: 171)
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