

# Non-finite verb movement in Romance<sup>1</sup>

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## 1 Introduction

Verb movement has been widely studied within generative syntax. One of the main findings has been that there is a contrast between Romance and English, as in the former the finite verb moves into the I-domain, but not in the latter (Emonds 1978; Pollock 1989; Belletti 1990; Giorgi and Pianesi 1996; Zanuttini 1997; Cinque 1999; Schifano 2018; Roberts 2019: Chap. 5; Ledgeway and Schifano forthcoming). Recently, Schifano (2018) has given a more fine-grained picture of this verb movement, dividing the Romance languages into four macrotypes. These studies, however, concern mostly *finite* verb forms; a question that remains unanswered is how finiteness influences the presence and the height of verb movement. With regards to non-finite forms, it has been noted that infinitives, like subjunctives, move to the highest relevant position in the I-domain (Ledgeway and Lombardi 2005; 2014; Schifano 2018: 230–239). However, the verb movement of other types of non-finite clauses in Romance have not been studied

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systematically before, a gap that the present study aims to fill, by presenting novel data from a wide range of Romance languages, including non-standardised ones.

Apart from the target position, also the trigger of verb movement has been a central question in the literature. One particular idea which has been around for a long time, is that verbs move to the I-domain to ‘pick up’ their inflection. Inflectionally richer languages have higher verb movement than languages with poor agreement paradigms (Vikner 1995; Koenenman 2001; Koenenman and Zeijlstra 2010; 2014). The correlation between richness of paradigms and verb movement has, however, exceptions (Rohrbacher 1999; Wiklund et al. 2007). The Rich Agreement Hypothesis has therefore been rejected by various scholars (cf. Schifano 2018 a.o.). Studying non-finite forms will be crucial for this debate, as finiteness is traditionally defined on the basis of the presence or absence of subject-verb agreement and inflectional morphology (but see for discussion Groothuis 2020: Chap. 1). We might thus expect a relationship between finiteness and verb movement. The Rich Agreement Hypothesis would predict that non-finite forms do not move high, with the exception of *inflected* non-finite forms. If verb movement occurs independently of agreement, this can be an argument against taking subject-verb agreement as the sole trigger for it.

A third related question which unfortunately cannot not be addressed here due to space limitations, regards the exact nature of the element that moves in so-called verb-movement. Within GB, it was generally assumed that verb movement was an instance of head movement. Later, a debate started with Chomsky’s (2001) claim that head movement is not part of narrow syntax, but of PF, because verb movement would not have any semantic effect (cf. Roberts (2011) and Schifano (2018: 5) for discussion and references). An alternative account analyses instances of what is traditionally

considered head-movement as remnant movement (cf. e.g. Bentzen 2007; Tescari Neto 2012; Poletto and Pollock 2015). Since a discussion of the exact nature of verb movement goes beyond the scope of this paper, I will continue to use the label ‘verb movement’ while remaining agnostic about whether it is a head or a phrase that is moving.

Couched in the cartographic approach (Cinque and Rizzi 2015), the aim of the present study is to trace and analyse verb movement in various types of non-finite clauses in Romance, including infinitives with specified subjects, inflected infinitives, bare infinitival clauses, Aux-to-Comp (cf. Rizzi 1982), and past participial clauses. The article is structured as follows: §2 discusses the main diagnostics that will be used; §3 discusses the verb movement of the different types of non-finite forms; §4 will argue that inflection nor tense are the triggers of this movement, which is analysed in terms of anchoring instead. §5 concludes with a discussion of the relation between verb movement and finiteness.

## **2 Diagnostics for verb movement**

Adopting the cartographic approach (Cinque and Rizzi 2015), I will assume that adverbs lexicalise the specifier positions of a series of functional heads in the I-domain, which occur in the same order cross-linguistically (Cinque 1999).<sup>2</sup> They are generally

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<sup>2</sup> This view, though supported by many scholars, is not unanimously accepted (cf. e.g. (Bobaljik 1999; Haider 2000; Ernst 2001).

divided into the higher adverb space (HAS)<sup>3</sup>, comprising the adverbs from Mood<sub>speechact</sub> to Mod<sub>volitional</sub>, and the lower adverb space (LAS), which includes all adverbs lower than Mod<sub>volitional</sub>, comprising mostly aspectual projections and Voice (Cinque 1999; Ledgeway and Lombardi 2005: 81ff.; Ledgeway and Roberts forthcoming). By testing the relative order between the verb and the adverb in its neutral, intonationally-flat position, we can establish the height of verb movement (Pollock 1989; Belletti 1990; Cinque 1999; Ledgeway and Lombardi 2005; Schifano 2018).

In the same vein, I will adopt the split-CP as proposed by Rizzi (1997) which allows us to further investigate the exact final position of the verb of what is traditionally called V-to-C movement. Medieval Romance showed verb movement to Fin or Force (cf. Poletto (2002), Wolfe (2019) and references therein), so the question arises as to whether the cases that have been analysed as V-to-C, such as Aux-to-Comp (§3.4) or past participial clauses (§3.6), are movement to Force or to Fin. The location of the verb can be established on the basis of the relative order of the verb and left-peripheral elements such as complementisers, topics and foci (being careful to distinguish between C-domain and the lower left periphery above the VP [Belletti 2004]).

Finally, also the relative position of the verb and its subject, when realised, will be informative in case of movement into the I-domain. Obligatory inversion is often seen as an indication of movement into the CP, across the subject (e.g. with Aux-to-Comp). However, we need to keep in mind that the subject can occupy various positions itself. According to the cartographic view, a preverbal subject can be analysed as the

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<sup>3</sup> Although Cinque (1999: 3-4) divides the adverbs in “higher” and “lower” adverbs, the HAS and LAS labels were first coined by Ledgeway and Lombardi (2005).

‘canonical’ position, i.e. what we conventionally call [Spec,TP] (cf. AgrSP in Cardinaletti’s (2004) overview), but also as a higher position somewhere in the C(omplementiser)-domain of the clause (for instance, TopicP).

Thus, a series of diagnostics can be used for investigating verb movement, such as the relative position of the verb and different types of adverbs; the position of left-peripheral elements with respect to the verb; and the relative position of verb and subject. Here, adverbs will be taken as primary diagnostic; subject positions and left-peripheral elements will be invoked when further specification is necessary.

Data have been collected for a wide range of Romance languages, including both standardized and non-standardized varieties, in order to get a sample representative of the Romance language family: European Portuguese, Galician, Spanish, Catalan, French, Italian, Venetian, Moianese (Campanian), Sardinian and Romanian. For each language, native speakers were asked to judge the acceptability of the sentences with both verb-adverb and adverb-verb orders on a three-point scale.

### **3 Verb movement in non-finite clauses: results**

#### **3.1 Infinitival clauses**

As has been already noted in the literature (Ledgeway and Lombardi 2005; 2014; Schifano 2018: 230–239), the ‘regular’ infinitive raises quite high in most Romance

languages. It moves out of the LAS, as it has to precede lower adverbs across Romance; see the following examples from European Portuguese (1) and Sardinian (2):<sup>4</sup>

- (1) a. *Treinar regularmente (\*treinar) parece uma boa ideia.*  
 train.INF regularly train.INF seem.3SG a good idea  
 ‘It seems a good idea to train regularly.’
- b. *Precisa de trabalhar bem (\*trabalhar) para obter uma promoção.*  
 be.necessary.3SG of work.INF well work.INF for obtain.INF a promotion  
 ‘It is necessary to work well to obtain a promotion.’
- (EuPt.)

- (2) a. *Est meda importante a manicare bene (\*manicare).*  
 be.3SG very important to eat.INF well eat.INF  
 ‘It is very important to eat well.’
- b. *Diat èssere troppu difitzile, pro mene, a non bi manicare pius (\*manicare) cicculatte.*  
 AUX.COND.3SG be.INF too difficult for me to not LOC=eat.INF anymore eat.INF chocolate

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<sup>4</sup> Please note that here (and in the remainder of this article) only a few representative examples from one or two languages will be given due to space limitations. All relevant examples have been collected and are available upon request.

‘It would be too difficult for me to not eat chocolate anymore.’

(Srd., Orani [NU])

With HAS adverbs, there is more variation across varieties. However, a strong tendency to place the adverbs after the infinitive can be discerned, as exemplified here by Venetian and an upper Southern Italian variety, Moianese:

(3) a. *Perder probabilmente (\*perder) el lavoro xe na bruta situassion.*

lose.INF probably lose.INF the work be.3SG a ugly situation

‘To probably lose one’s job is an ugly situation.’

b. *Trovar fortunatamente (\*trovar) dei amissi lo ga giutà.*

find.INF fortunately find.INF of.the friends him=have.3SG helped

‘Finding fortunately some friends has helped him.’

c. *(Ndar) necessariamente (ndar) ogni di a lavorar xe masa.*

go.INF necessarily go.INF every day to work.INF be.3SG too.much

‘Going necessarily every day to work is too much.’

(Ven.)

(4) a. *(A jji) pe fforzà (a jji) a ffaticà ognà juornà è troppo.*

to go.INF for force to go.INF to work.INF every day be.3SG too.much

‘Going necessarily to work every day is too much.’

b. *A pperde forsà a faticà è na bbrutta situazionà.*

to lose.INF maybe the work be.3SG a ugly situation

‘To maybe lose one’s job is an ugly situation.’

The adverb data suggest a very high movement of the verb, potentially into the C-domain. The exact location can be tested with left peripheral elements such as topics and foci, as in the following examples:

- (5) a. (*\*El vestit adequat*) trobar-lo, el vestit adequat, és difícil per  
the dress right find.INF=it the dress right be.3SG difficult for  
a una núvia.

DOM a bride.

‘The right dress, finding it is difficult for a bride.’

- b. (*\*Un cotxe*) comprar un cotxe és car, però una  
a car buy.INF a car be.3SG expensive but a  
bicicleta no.

bicycle NEG

‘Buying a car is expensive, not a bicycle.’

(Cat.)

- (6) a. (*Trovarlo*), l’abito giusto, (%trovarlo) è difficile per una  
find.INF=it the dress right find.INF=it be.3SG difficult for a  
sposa.

bride

‘The right dress, finding it is difficult for a bride.’



b. *Comprare una macchina (\*comprare) è costoso, non uno scooter.*

buy.INF a car buy.INF be.3SG expensive NEG a  
scooter

‘To buy a car is expensive not a scooter.’

(It.)

From my data it emerges that in French, Italian, Catalan, Northern Italian Dialects (henceforth NIDs) and Southern Italian Dialects (henceforth SIDs) infinitives cannot be preceded by foci, only (marginally) by topics. Cinque (1999: 227 n.8) finds the same for topics but gives data with fronted foci for Italian, which are marginally acceptable. There is thus interspeaker variation in Italian. In Romanian, the left periphery of infinitival clauses is inaccessible for foci and topics alike.

At first glance, French infinitives seem to behave unlike the other Romance varieties. As discussed in the literature (cf. Pollock 1989; Schifano 2018: 244–46, a.o.), French infinitives show optional movement with LAS adverbs:

(7) a. *(Connaître) déjà (connaître) les questions serait un avantage.*

know.INF already know.INF the questions be.COND.3SG an  
advantage

‘Knowing already the questions would be an advantage.’

b. *(Sortir) toujours (sortir) le samedi soir est habituel chez*  
go.out.INF always go.out.INF the Saturday evening be.3SG normal at

*les jeunes.*

the young

‘Always going out on Saturday night is normal for young people.’

c. *(Travailler) bien (travailler) est très important.*

work.INF well work.INF be.3SG very important

‘To work well is very important.’

(Fr., Schifano 2018: 92)

In the case of *bien*, the order *bien* -infinitive is preferred<sup>5</sup> (cf. also the statistics presented in Engver [1972: Chap. 3]). Moreover, lexical infinitives cannot raise over the negator *pas* in French (8a), only auxiliary infinitives can (8b), and, more marginally, modals:

(8) a. *Ne (pas) sembler (\*pas) heureux est une condition pour écrire*

NEG1 NEG2 seem.INF (not) happy be.3SG a condition for write.INF

*des romans.*

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<sup>5</sup> There is a difference in meaning between preverbal *bien* and postverbal *bien*:

(i) a. *Il a décidé de chanter bien.*

he have.3sg decided of sing.inf well

‘He has decided to sing well.’

b. *Il a décidé de bien chanter.*

he have.3sg decided of well sing.inf

‘He has decided he would indeed sing.’

(Fr., Rowlett 2007: 109)

Affirmative *bien* is located in the same position as negative adverbs (Belletti 1990, 39ff. 1994b cited in Cinque 1999: 171 n.20).

of.the novels

‘Not seeming happy is a condition for writing novels.’

- b. *Ne (pas) être (pas) heureux est une condition pour écrire des romans.*

NEG1 NEG2 be.INF NEG happy be.3SG a condition for write.INF of.the romans.

novels

‘To be unhappy is a condition for writing novels.’

(Fr., Pollock 1989: 373-4)

The prediction that these data make is that infinitives necessarily follow the adverbs in the HAS, which is, however, not borne out:

- (9) a. *Partir maintenant (??partir) pour l'étranger l'enthousiasmait.*

leave.INF now leave.INF for the=abroad  
him=make.enthusiastic.IPFV.3SG

‘Leaving now for a foreign country made him enthusiastic.’

- b. *Gagner peut-être (\*gagner) à la loterie le faisait espérer.*

win.INF maybe win.INF at the lottery him=make.IPFV.3SG hope.INF

‘Maybe winning at the lottery gave him hope.’

- c. *?Être possiblement (\*?être) rejeté fait peur à tous.*

be.INF possibly be.INF rejected make.3SG fear to all

‘Everyone is afraid of possibly being rejected.’

- d. *?Perdre probablement (\*perdre) son travail serait une condition*

lose.INF probably lose.INF his work be.COND.3SG a condition

*terrible.*

terrible

‘To probably lose one’s job would be a terrible condition.’

(Fr.)

French infinitival movement thus seems optional across LAS adverbs, but it is obligatory across HAS adverbs. These puzzling results, however interesting, will be left aside here (but cf. Groothuis 2021).

Table 1 gives an overview of the results of this section:

*Table 1 Movement of infinitives in Romance*

<b>Language</b>	<b>Movement infinitive</b>
<b>European Portuguese</b>	HAS
<b>Catalan</b>	C/Fin or HAS?, across ‘maybe’, Mod <sub>irrealis</sub>
<b>Spanish</b>	In HAS, across ‘necessarily’ Mod <sub>necessity</sub>
<b>French</b>	Optional across LAS, obligatory across HAS
<b>Italian</b>	In Fin/HAS across probably ‘Mod <sub>epistemic</sub> ’
<b>NIDs</b>	In Fin/HAS across fortunately ‘Mod <sub>eval</sub> ’
<b>SIDs</b>	HAS, optionally across ‘necessarily’ Mod <sub>necessity</sub>
<b>Sardinian</b>	C/HAS across ‘fortunately’ Mod <sub>eval</sub>
<b>Romanian</b>	HAS across ‘probably’ Mod <sub>epistemic</sub>

Generally, infinitives in subject clauses seem to move to a high position in the HAS or to Fin, confirming Schifano’s (2018) data. The most noticeable exception is given by

French, where movement into the inflectional domain seems entirely optional with LAS adverbs, but not with HAS adverbs. French deserves a more detailed discussion, which will be left aside here (but see Groothuis 2020: Chap.4; Groothuis 2021).

### 3.2 Personal infinitives

Even though the licensing of overt, nominative subjects is typically considered a feature of finite clauses, almost all Romance languages present infinitives with specified lexical subjects distinct from the matrix clause subject, which will be referred to as ‘personal infinitives’ (Ledgeway 1998; 2000: Chap. 4; Mensching 2000 a.o.). In most Romance languages, they are limited to unselected clauses, such as adjuncts (10) and subject clauses (11). These are usually non-control contexts, restricted to marking non-coreferentiality (Ledgeway 2000: 123). This is the case in Spanish (Torrego 1998; Hernanz 1999), Catalan (Hualde 1992: 38–9; Rigau 1995; Wheeler et al. 1999: 399; Ledgeway 2000: 121; Institut d’Estudis Catalans 2016), Southern Italian dialects (Ledgeway 2000: 116–117), Sardinian (Blasco Ferrer et al. 1988; Jones 1992; Mensching 2000: 32–33; Viridis 2015), and Romanian (Dobrovie-Sorin 1994: 89; Pană Dindelegan 2013: 218):

- (10) a. *Després d'arribar nosaltres, va començar la reunió.*  
 after of arrive.INF we go.3SG start.INF the meeting  
 ‘After we arrived, the meeting started.’

(Cat., Institut d’Estudis Catalans 2016: 1296–7)

- b. *Primme de succedere chesto, ha ditto che fa cose de pazze!*

before of happen.INF this, have.3SG said that do.3SG things of crazy  
'Before this happens, he said he'll get up to wild things!'

(Nap., Ledgeway 2000: 116)

c. *Est andau aicci e tottu chene dhi donai su premissu su*  
be.3SG gone here and all without to.him=give.INF the permission the  
*babbu.*

father

'He has gone anyway without his father giving him the permission.'

(Campidanese Srd., Viridis 2015: 466–7)

(11) a. *Cummene a ce ne parla tu.*

be.better.3SG to LOC=PART=speak.INF you.SG

'It is better for you to speak about it with him.'

(Nap., Ledgeway 2000: 117)

b. *Su de t'inci essi andau aicci allestru tui mi fait*  
the of you=PART be.INF gone thus hurriedly you to.me=make.3SG  
*feli meda.*

anger much

'The fact that you went away in such a hurry makes me very mad.'

(Camp. Srd., Viridis 2015: 469)

c. *E important a decide tu însuși.*

be.3SG important to decide.INF you.SG yourself

'It is important for you yourself to decide.'

(Ro., Pană Dindelegan 2013: 216)

Conversely, complement clauses in Romance generally cannot contain personal infinitives. There are however exceptions to this generalisation. In Sicilian and Sardinian, personal infinitives are found in complements (Jones 1992; 1993: 268; Sitaridou 2002; Bentley 2014; Viridis 2015):<sup>6</sup>

(12) a. *Si dicinu di tu mangiarmi, mi mangi.*

if say.3PL of you.SG eat.INF=me, me=eat.2SG

‘If they say that you should eat me, you will eat me.’

(Sic., Bentley 2014: 111)

b. *Su dottore m’at nadu a no papai tropu durcis tui.*

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<sup>6</sup> Both Romanian and Spanish marginally allow personal infinitives in complements, although this seems subject to interspeaker variation:

(i) *Dos testigos declararon [ser tú/yo/él/ella cómplice del robo].*  
two testimonies declare.PRET.3PL be.INF you.NOM/I.NOM/he/she accomplice of.the theft

‘Two testimonies declared that you/I/he/she were/was an accomplice in the theft.’

(Sp., Ambar & Jiménez-Fernández 2017: 2001)

(ii) *Ion se teme a nu-l apuca iarna cu casa neterminată.*  
Ion REFL=fear.3SG to NEG=him overtake.INF winter.DET with house.DET unfinished

‘Ion is afraid of winter overtaking him with the house unfinished.’

(Ro., Pană Dindelegan 2013: 216)

the doctor to.me=has said to not eat.INF too.many sweets you.SG

‘The doctor told me that you should not eat too many sweets.’

(Campidanese Srd., Virdis 2015: 466)

There is variation across Romance with respect to the relative position of the verb and its subject. As can be seen in (10)-(12), the subject usually occurs postverbally in southern Italian dialects (Ledgeway 2000:126), in Sardinian (Jones 1992; Jones 1993:168), in Romanian (Dobrovie-Sorin 1994: 89; Pană Dindelegan 2013: 218), and in peninsular Spanish (Torrego 1998: 207; Hernanz 1999: 2211; Ledgeway 2000: 126; Zagona 2002: 28; Ambar and Jiménez-Fernández 2017: 2002).<sup>7</sup>

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<sup>7</sup> Other varieties, including some Caribbean and Latin American varieties, as well as Sicilian, however, allow preverbal subjects (Lipski 1994: 32; Ledgeway 2000: 128; Zagona 2002: 71–2), as in the following examples:

(1) a. *Antes de yo salir de mi país, ...*

before of I leave.INF of my country

‘before I leave my country’

(Colombian Sp., Lipski 1994: 215)

b. *Chi ci vurrissi pi io nèsciri di ccà?*

what LOC=want.COND.3SG for I go.out.INF of here

‘What would be necessary for me to escape from here?’

(Sic., Bentley 2014: 112)

In both languages, the preverbal position is restricted to kinship terms and pronominal subjects, i.e. heads (Xs). Lexical (XP) subjects appear obligatorily postverbally. There is no difference in interpretation



Applying the adverb test, we can conclude that the personal infinitives occupy a high position. As shown in the following selection of examples, they have to precede adverbs from the LAS:

(13) a. *Mamma cucina assaiə pe magnà sempə (\*magnà) tutti quanti*  
 mother cook.3SG a.lot for eat.INF always eat.INF all how.many  
*bbuonə.*

good

‘Mother cooks a lot so that everyone always eats well.’

b. *Prima e’ (\*ancorə) succerə chestə ancorə, stevə al telefənə.*  
 before of again happen.INF this again, stay.IPFV.1SG at.the phone

‘Before this happened again, I was on the phone.’

c. *Convene ‘e (\*sempə) ce parlà tu sempə.*  
 be.better.3SG of always to.him=speak.INF you.SG always

‘It is better if you always speak to him.’

(SIDs, Moiano [BN])

(14) a. *At segadu sos pratos pro non manigare pius (\*manigare) tue.*

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between the two positions (Ledgeway 2000: 126–127). Pronominal subjects do not occupy a left-peripheral position, as they are incompatible with a topicalised or focused reading; furthermore, foci and topics precede the complementiser (Ledgeway 2000: 139–40). Therefore, in case of a preverbal subject, the infinitive does not occupy a position within the C-domain. The same preverbal position can be occupied by pronoun in Catalan infinitival adjuncts (see Groothuis 2020: 144-145 and references therein for discussion).

have.3SG broken the plates for NEG eat.INF anymoreeat.INF you.NOM

‘S/he has broken the plates so you do not eat anymore.’

(Srd., Mensching 2000:123)

b. *Maria cheriat a mandigare sempre (\*mandigare) bene (\*mandigare)*

Maria want.COND.3SG to eat.INF always eat.INF well eat.INF

*sos pizzinnos.*

the boys

‘Maria wanted the boys to always eat well.’

(Nuorese Srd.)

In all languages studied, the personal infinitive moves out of the LAS. Most postverbal subjects precede these adverbs as well, indicating that they too can move out of the VP. However, this is not the case in Sardinian (cf. [14b]) and it is not obligatory in Spanish or the SIDs.

For the HAS adverbs, there is a clear tendency across all languages studied: speakers prefer the infinitive to precede high adverbs. Although in most cases of HAS adverbs the infinitive can also marginally follow the adverb, this is not the pragmatically unmarked order:

(15) a. *De tomar generalmente (\*tomar) Juan dos vasos con la cena,*

of take.INF generally take.INF Juan two glasses with the dinner

*ciertamente engordará.*

certainly gain.weight.FUT.3SG

‘If Juan generally takes two glasses with dinner, he will certainly gain weight.’

b. ?*Sin saberlo yo francamente (\*saberlo), mi marido*  
 without know.INF=it I frankly know.INF=it myhusband  
*vendió mi casa.*  
 sell.PRET.3SG my house

‘Without me knowing it frankly, my husband sold my house.’

c. ?*Se casaron justo al acabar afortunadamente (\*acabar) la*  
 REFL=marry.PRET.3PL just at.the end.INF fortunately end.INF the  
*guerra.*  
 war

‘They got married just when the war fortunately ended.’

(Sp.)

(16) a. *Abans de (#perdre) potser perdre tu la feina, hauríem de*  
 before of lose.INF maybe lose.INF you.SG the job have.COND.1PL of  
*vendre la casa.*  
 sell.INF the house

‘Before you maybe lose your job, we should sell the house.’

b. *Insultar el Jordi expressament (#insultar) la seva mare, va ser*  
 insult.INF the Jordi on.purpose insult.INF the his mother go.3SG be.INF  
*terrible.*  
 terrible

‘Jordi insulting his mother on purpose has been terrible.’

(Cat.)

The normal position for an adverb from the HAS is thus to follow the personal infinitive. Personal infinitives move to a high position, possibly in the C-domain. This high position also explains the obligatory postverbal position of the subject.

Pragmatically marked constituents such as topics and foci, however, generally precede the infinitive:

(17) *Al el JUEZ leer el verdicto, todo el mundo se levantó.*

at.the the judge read.INF the verdict, all the world REFL=stand.up.PRET.3SG

‘When *the judge* read the verdict, everyone stood up.’

(Sp., Torrego 1998: n. 3)

(18) a. *Io capisco so’ femmene, e li femmene pe fà toletta,*

I understand.1SG be.3PL women and the women for make.INF toilet

*nce vò la mano de lo Cielo.*

LOC=want.3SG the hand of the heaven

‘I know they are women, and for women to get ready requires divine intervention.’

b. *E TU pe t’ascì na parola da la vocca nce vonno*

and you.SG for you=go.out.INF a word of the mouth LOC=want.3PL

*de spuntunate.*

of urging

‘And you, to get a word out of your mouth, it takes some encouragement.’

(Nap., Ledgeway 2000: 140)

This indicates that the infinitive is not in Force, but is instead located in a high position within the HAS or in Fin.

As most of the personal infinitives are preceded by a non-finite complementiser such as *AD* or *DE*, which in Italian arguably lexicalises Fin (cf. Rizzi 1997), the verb is located lower than both Fin and Force, viz. in the I-domain. In Spanish and Catalan, personal infinitives are often preceded by the prepositions *al* or *en*. However, as seen in (17), these precede the focus phrase and are thus located higher than Fin.

Table 2 summarises the results of this subsection:

*Table 2 Movement of personal infinitives in Romance*

Language	Movement
<b>Spanish</b>	HAS (across ‘generally’ $Asp_{\text{habitual}}$ )
<b>Catalan</b>	HAS (across ‘on purpose’ $Mod_{\text{volitional}}$ , not across ‘maybe’ $Mood_{\text{irr}}$ )
<b>SIDs</b>	HAS (across ‘on purpose’ $Mod_{\text{volitional}}$ )
<b>Sardinian</b>	HAS (across always $Asp_{\text{perfect}}$ )
<b>Romanian</b>	HAS (across maybe $Mood_{\text{irr}}$ , fortunately $Mood_{\text{eval}}$ )

The various Romance languages under examination pattern remarkably similarly in that the personal infinitive occupies a high position within the inflectional domain. It precedes all the LAS adverbs and can precede most HAS adverbs. The infinitive follows elements located in the C-domain.

### 3.3 Inflected infinitives

Some Romance languages present inflected infinitives which agree with their subject in both person and number, as can be seen in the European Portuguese example in (19):

(19) *Será difícil eles aprovarem a proposta.*

be.FUT.3SG difficult they approve.INF.3.PL the proposal

‘It will be difficult for them to accept the proposal.’

(EuPt., Raposo 1987: 86)

Other Romance languages that present inflected infinitives include Brazilian Portuguese, Galician, old Leonese, old Neapolitan, and the Logudorese and Nuorese varieties of Sardinian.<sup>8, 9</sup> In all these languages, the inflected infinitive consists of the regular infinitive to which inflectional endings are added.

The inflected infinitive can appear in a variety of contexts. It is found mostly in embedded clauses,<sup>10</sup> which can never be introduced by a finite complementiser. Inflected infinitives are found in subject clauses, in various types of complement

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<sup>8</sup> Cf., among many others, Maurer (1968), Gondar (1978), Loporcaro (1986), Raposo (1987), Jones (1992; 1993), Pountain (1995), Vincent (1996; 1998), Ledgeway (1998; 2007; 2009; 2012: 293–294; 2016: 1016–1018), Mensching (2000), Sitaridou (2002), Scida (2004), Groothuis (2018), Sheehan, Blokzijl & Parafita Couto (2020)

<sup>9</sup> Due to the limited amount of adverb data for old Neapolitan, and the generally few attestations of the inflected infinitive in old Leonese, only the modern varieties will be taken into account here.

<sup>10</sup> In Portuguese and Galician, the inflected infinitive can also be found in main clauses, more specifically in root exclamatives (Álvarez Blanco et al. 1986: 386–387; Madeira 1994).

clauses and in clausal adjuncts. European Portuguese and old Neapolitan also allow inflected infinitives in combination with causative and perception verbs whenever the embedded subject intervenes between the embedded and the matrix verbs. Impossible contexts in all languages are raising verbs with a raised subject, modal verbs and contexts of exhaustive local subject control.

An indication that inflected infinitives move high is provided by adverb placement. Adverbs of the LAS have to follow inflected infinitives:

(20) a. *É preciso eles beberem frequentemente (%beberem)*  
 be.3SG necessary they drink.INF.3.PL frequently drink.INF.3.PL  
*água (frequentemente).*  
 water frequently

‘It is necessary that they frequently drink water.’

b. *É pena eles perderem já (\*perderem) o emprego.*  
 be.3SG pity they lose.INF.3.PL already lose.INF.3.PL the job

‘It is a pity that they already lose their job.’

c. *É preciso nós fazermos bem (\*fazermos) os exercícios.*  
 be.3SG necessary we do.INF.1.PL well do.INF.1.PL the exercises

‘It is necessary for us to do the exercises well.’

(EuPt.)

(21) a. *Appo fattu cussu po essereis torra (\*essereis) cuntentos.*  
 have.1SG done this for be.INF.2.PL again be.INF.2.PL happy

‘I have done this for you to be happy again.’

b. *Mariu at cunzau sa ventana pro no intenderet prus*

Mariu have.3SG closed the window for NEG feel.INF.3.SG anymore

(\**intenderet*) *fritu.*

feel.INF.3SG cold

‘Mariu has closed the window in order not to feel cold anymore.’

c. *Non credo de esseret dza (\*esseret) ghiratu Juanne.*

NEG believe.1SG of be.INF.3.SG already be.INF.3.SG returned Juanne

‘I don’t think Juanne has already returned.’

(NU, Srd.)<sup>11</sup>

The following examples show that movement into the HAS is not obligatory, as speakers of European Portuguese and Galician allow adverbs from the HAS both to precede and follow the infinitive, although the preferred option is the infinitive preceding the adverb.

(22) a. *É pena eles perderem provavelmente (%perderem) o emprego.*

be.3SG pity they lose.INF.3PL probably lose.INF.3.PL the job

‘It is a pity that they probably lose their job.’

b. *Lamento (eles) terem estupidamente (terem) perdido os*

I.regret they have.INF.3PL stupidly have.INF.3PL lost the

*documentos.*

documents

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<sup>11</sup> The examples without adverb are from Jones (1993: 280).



‘I regret that they have stupidly lost the documents.

(EuPt.)

(23) a. *Os meninos lamentam (terem) os deputados cautelosamente*

the boys regret.3PL have.INF.3.PL the deputies cautiously

*(terem) votado a proposta.*

have.INF.3.PL voted the proposal

b. *Os meninos lamentam terem cautelosamente os deputados*

the boys regret.3PL have.INF.3PL cautiously the deputies

*(\*terem) votado a proposta.*

have.INF.3PL voted the proposal

‘The boys regret that the deputies have cautiously voted for the proposal.’

(EuPt., Costa 2004: 138)

In Sardinian, the infinitive necessarily has to precede the T-related adverb *como* ‘now’:

(24) *Mannedda cheriat a mandigaremus como (\*mandigaremus).*

grandmother want.IPFV.3SG to eat.INF.1.PL now eat.INF.1.PL

‘Grandmother would like us to eat now.’

(Srd.)

Indeed, Costa (2004: 138) argues on the basis of the examples in (23) that I-to-C movement is not obligatory in EuPt., because the verb can follow both the adverb and the subject. This set of examples shows that a certain degree of verb movement is

obligatory, as the inflected infinitive cannot appear after the lower subject position (indicated by the fact that the subject follows the adverb *cautelosamente*). This high position of the inflected infinitive is very different from the generally low position of the finite verb (Schifano 2018: 134). It makes the inflected infinitive more similar to the subjunctive (Schifano 2018: 228), with which it is in competition.

A second indication of movement into the I-domain is provided by the relative position of the verb and its subject. The subject is postverbal in Sardinian (25). In Portuguese (26), it is usually preverbal.<sup>12</sup> However, inversion is also allowed with auxiliaries in Portuguese (28b) (Ambar 1994; Ambar and Jiménez-Fernández 2017):

- (25) *Non keljo a (\*tue) cantares (tue).*  
 not want.1SG to you.SG sing.INF.2.SG you.SG  
 ‘I do not want you to sing.’

(Srd., Jones 1992: 297)

- (26) a. *Lamento eles perderem \*(eles) os documentos.*  
 regret.1SG they lose.INF.3.PL they the documents  
 ‘I regret that they lose the documents.’
- b. *Lamento (eles) terem (eles) perdido os documentos.*  
 regret.1SG they have.INF.3.PL they lost the documents  
 ‘I regret that they have lost the documents.’

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<sup>12</sup> The Portuguese inflected infinitive is also found with obligatory subject-verb inversion in declarative and epistemic complements, see §3.4.

(EuPt., Madeira 1994: 183)

In Sardinian the subject occupies a relatively low, or a right-dislocated position, as the most natural word order is VOS, rather than VSO (Groothuis 2019). The subject position will therefore not be very informative about the position of the verb within the IP, but shows that the verb has left the *vP*.

The Galician inflected infinitive allows both orders in adjuncts (29a), but permits only postverbal subjects in complements of declaratives and in subject clauses (29b):

- (27) a. *Para (ti) ires (ti) ó partido,*  
for you.SG go.INF.2.SG you.SG to.the game  
'For you to go to the game, ...'

(Gal., Parafita Couto 2002: 46–47)

- b. *Será difícil (\*eles) aprobaren eles a proposta.*  
be.FUT.3SG difficult they approve.INF.3.PL they the proposal  
'It will be difficult that they approve the proposal.'

(Gal., Sheehan and Parafita Couto 2011: 2)

It can easily be shown that when appearing postverbally, the subject has also left its base position:

- (28) *Para iren os nenos todos ó partido, ...*  
for go.INF.3.PL the boys all to.the game  
'For the boys all go to the game, ...'

(Gal.)

The grammaticality of the floating quantifier *todos* ‘all’ following the subject shows that the subject has moved out of the *v*-VP in Galician inflected infinitival clauses. This means that the verb has also left the *v*-VP.

Finally, we can test the relative order of the infinitive and elements in the left-periphery. Topicalisation is impossible both in factive and epistemic/declarative contexts in European Portuguese:

(29) a. \**Eu lamento, esse livro, terem eles lido.*

I regret.1SG this book have.INF.3.PL they read

b. \**Eu lamento terem, esse livro, eles lido.*

I regret.1SG have.INF.3.PL this book they read

‘This book, I regret they read it.’

(EuPt., Costa 2004: 137)

In Galician subject clauses, the inflected infinitive can follow and precede left-peripheral phrases such as topics (30) and contrastive foci (31):

(30) a. *Convén facermos todas as cousas.*

be.better.3SG do.INF.1.PL all the things

‘It is better for us to do all the things.’

b. *Convén, as cousas, facermol-as todas.*

be.better.3SG the things do.INF.1.PL=them all

c. *Convén, facermol-as cousas todas.*

be.better.3SG do.INF.1.PL=the things all

‘The things, it is better if we do them all.’

(Gal.)

(31) a. *Convén, HOXE facermo-las cousas, non mañá.*

be.better.3SG today do.INF.1.PL=the things NEG tomorrow

b. *Convén, facermos HOXE as cousas, non mañá.*

be.better.3SG do.INF.1.PL today the things NEG tomorrow

‘It is better to do the things today, not tomorrow.’

(Gal.)

These topics and focused elements could indicate that there is optional movement of the inflected infinitive into the CP. However, it is more likely that the foci and topics instead can move to both the lower and the higher left periphery while the verb occupies the same position in both cases. This latter option will be assumed as the adverbs indicate a high placement of the infinitive.

Inflected infinitives in European Portuguese and Galician are generally not preceded by the (non-finite) complementisers, unlike Sardinian counterparts, which are always introduced by *a* or *de* when occurring in argumental position. Assuming that these lexicalise Fin, we can conclude that the Sardinian inflected infinitives are therefore located within the IP.

*Table 3 Movement of inflected infinitives in Romance*

Language	V-Movement
EP	HAS/Fin across ‘probably’ Mod <sub>epistemic</sub>
Galician	HAS across ‘now’ T, optional across ‘maybe’ Mood <sub>irrealis</sub>
Sardinian	HAS across ‘now’ T

As can be seen in Table 3, a general pattern of high verb movement can be noted for inflected infinitives in Romance. In European Portuguese, adverbs indicate a possible high movement in all cases, where the infinitive can precede all adverbs. Also in Galician and Sardinian, the infinitive moves into the HAS, which is confirmed by postverbal position of the adverbs, and the postverbal subject.

### 3.4 Aux-to-Comp

The phenomenon of Aux-to-Comp, whereby an auxiliary occurs in complementiser position yielding subject inversion, was first discussed by Rizzi (1982: Chap. 3). This is a learned and stylistically marked construction. In Italian, it occurs in several high-register constructions: infinitives selected by epistemic/declarative verbs (32), conditional sentences with dropped *se* ‘if’, subjunctive complements with dropped *che*, gerunds (34), and nominalised infinitives headed by the article and certain prepositional adjuncts. Other Romance languages feature the same phenomenon, albeit in fewer contexts. European Portuguese has Aux-to-Comp in inflected infinitival complements of epistemic and declarative verbs (33); Spanish has it with uninflected, personal infinitives, complements of epistemic, declarative or factive verbs (in the latter case

preceded by the article *el*); and French features Aux-to-Comp in embedded infinitival *wh*-questions and *wh*-relatives (35):<sup>13</sup>

- (32) *Suppongo non esser la situazione suscettibile di ulteriori miglioramenti.*  
suppose.1SG NEG be.INF the situation sensitive of further improvements  
'I suppose that the situation is not sensitive to further improvements.'

(It., Rizzi 1982: 79–80)

- (33) *Eu afirmo (\*os deputados) terem os deputados trabalhado pouco.*  
I claim.1SG the deputies have.INF.3.PL the deputies worked little  
'I claim that the deputies have worked little.'

(EuPt., Raposo 1987: 87, 98)

- (34) *Essendo Gianni (\*essendo) disposto ad aiutarci, ...*  
be.GER Gianni be.GER willing to help.INF=us  
'Gianni being willing to help us, ...'

(It., Rizzi 1982: 83)

- (35) *Qui Pierre croit-il avoir frappé un voleur?*  
who Pierre believe.3SG=he have.INF hit a burglar

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<sup>13</sup> None of my informants accepted sentences like (35) so French will not be discussed further in this section. The same judgment is shared by an anonymous reviewer.

‘Who does Pierre believe to have hit a burglar?’

(Fr., Bošković 1997: 68)

The subject occurs obligatorily postverbally in Aux-to-Comp contexts; more specifically, it intervenes between the auxiliary and the rest of the predicate. That this word order is grammatical is surprising given the impossibility of this order in finite clauses in modern Romance (Rizzi 1982, Giorgi and Pianesi 1996). It was however allowed in many medieval Romance varieties which were verb-second languages (cf. Wolfe (2019) and references therein). The obligatory inversion in these contexts has been taken as an indication of a high position of the auxiliary (Rizzi 1982: Chap. 3), which has been analysed as Comp (just as with V2). Assuming a split CP, the question is which position exactly is targeted by the verb: V2 in Romance could be movement to both Fin and Force (Poletto 2002, Wolfe 2019). We will use adverbs and left peripheral elements as diagnostics to establish more precisely the location of the verb.

Regarding verb movement in this construction, Cinque (1999: 149) notes that “as expected, the past participle in the Aux-to-Comp absolute construction also precedes all lower AdvPs.” This is confirmed by our data:

- (36) a. (\*Troppo) avendo Laura (\*troppo) cotta troppo la pasta, gli  
too.much have.GER Laura too.much cooked too.much the pasta the  
ospiti si lamentarono.  
guests REFL=complain.PRET.3PL

‘Since Laura cooked the pasta too much, the guests complained.’

- b. (\*Sempre) essendo (\*sempre) la ragazza (?sempre) stata sempre in



always be.GER always the girl always been always in  
*ritardo da quel momento non l'aspettarono più.*

delay from that moment NEG her=await.PRET.3PL anymore

‘Since the girl had always been too late, from that moment on, they did not wait for her anymore.’

(It.)

However, the movement of the participle is already optional with higher functional heads of the LAS. The movement of the gerund on the other hand is obligatory across all functional heads in the LAS.

Likewise, the infinitive in complements of epistemic and declarative verbs needs to precede all adverbs both from the HAS and the LAS:

(37) a. *Sostengo non esserci fortunatamente (\*esserci) state*  
 argue.1SG NEG be.INF=LOC fortunately be.INF=LOC been  
*complicazioni.*

complications

‘I argue that there fortunately have not been any complications.’

b. *Il direttore ritenne poter forse (\*poter) fallire*  
 the director believe.PRET.3SG can.INF maybe be.able.INF go.bankrupt.INF  
*la ditta.*

the company

‘The director believed that the company could maybe go bankrupt.’

c. *Afferma non essere sempre (\*essere) necessaria la procedura*

state.3SG NEG be.INF always be.INF necessary the procedure  
*amministrativa.*

administrative

‘He states that the administrative procedure is not always necessary.’

(It.)

If the verb is in the C-domain, it should also precede all adverbs from the HAS. This prediction is borne out, but only if the subject also precedes these adverbs.

(38) *\*?Ritenevano aver probabilmente lui sbagliato troppe volte.*

think.IPFV.3PL have.INF probably he made.mistake too.many times

‘They thought he had made mistakes too many times.’

(It.)

(39) *Penso comprare evidentemente /necessariamente/felizmente*

think.1SG buy.INF.3PL evidently necessarily fortunately

*(\*?comprarem) eles frequentemente livros de fisica.*

buy.INF.3PL they frequently books of physics

‘I think they buy evidently/necessarily/fortunately frequently physics books.’

(EuPt. (Groothuis 2015: 78)

(40) *Lamento el (\*estúpidamente) haber (\*estúpidamente)comido*

regret.1SG the (stupidly) have.INF stupidly eaten

*(?estúpidamente) los niños (estúpidamente) demasiadas chocolatinas.*

stupidly            the children    stupidly            too.many    chocolates

‘I regret that the children have stupidly eaten too many chocolates.’

(Sp.)

According to Belletti (2008: 37–38), nothing can intervene between the auxiliary and the subject because that would block Case-assignment. Indeed, in the following examples of gerunds with Aux-to-Comp, speakers prefer the order in which both subject and infinitive precede the adverb:

(41) a. *Avendo lui probabilmente accettato di aiutarti...*

have.GER he    probably            accepted of help.INF=you

b. *?\*Avendo probabilmente lui accettato di aiutarti...*

have.GER    probably            he accepted of help.INF=you

(It.)

This seems to indicate that both the subject and infinitive or gerund need to move high, otherwise the subject is expected to follow higher adverbs such as *probabilmente* ‘probably’.

In Portuguese, focalisation is possible in complements of epistemic and declarative verbs; topicalisation, on the other hand, is not possible:

(42) *A Maria disse só ontem o terem visto.*

the Mary say.PRET.3SG only yesterday    him=have.INF.3PL seen

‘Mary said that only yesterday did they see him.’

(EuPt., Raposo and Uriagereka 2005: 685)

(43) *Penso só eles terem votado a proposta.*

think.1SG only they have.INF.3.PL voted the proposal

‘I think that only they have voted for the proposal.’

(EuPt., Ambar and Jiménez-Fernández 2017: 5 n.2)

(44) *\*Creio esse livro, terem-o já lido.*

believe.1SG this book have.INF.3.PL=it already read

‘This book, I believe they already read it.’

(EuPt.)

The inflected infinitive follows the focused constituent. From this, we can conclude that the inflected infinitive is located in a relatively low position within the C-domain, such as Fin.

In Italian, in contrast, only the lower focus position is available, as can be seen in the following example:

(45) *La commissione ritiene (\*IL BILANCIO) aver (\*IL BILANCIO) la ditta*

the committee believe.3SG the balance have.INF the balance the company

*(\*IL BILANCIO) falsificato IL BILANCIO, non gli altri documenti.*

the balance falsified the balance NEG the other documents

‘The committee believes that the company has falsified the balance sheet, not the other documents.’

(It.)

Focused elements will therefore not be informative about the exact location of the auxiliary infinitive within the left periphery in Italian.

The results are summarised in Table 4:

*Table 4 Movement of Aux-to-Comp verbs in Romance*

<b>Language</b>	<b>V-movement Aux-to-Comp</b>
<b>Italian</b>	C-domain
<b>Portuguese</b>	Fin
<b>Spanish</b>	HAS/C-domain

In Portuguese and Italian, the infinitival form of Aux-to-Comp moves into a position within the CP as it obligatorily precedes all the adverbs of the Cinquean hierarchy. The exact position within the CP is unclear for Italian, as focalisation is impossible within the left periphery of the clause. For EuPt., the position of focused constituents is preceding the inflected infinitive, which can therefore be located in a low position within the CP.

### **3.5 Gerunds**

Clausal gerunds in all the languages under examination raise out of the LAS, as can be shown by the fact that they necessarily precede all LAS adverbs:

(46) a. *Leyendo completamente (\*leyendo) los libros, aprobarás el examen.*

read.GER completely read.GER the books pass.FUT.2SG the exam

‘If you read the books completely, you will pass the exam.’

b. *Estudiando siempre (\*estudiando), aprobarás el examen.*

study.GER always study.GER pass.FUT.2SG the exam

‘If you always study, you will pass the exam.’

(Sp.)

(47) a. *Semus essios currende lestros (\*currende).*

be.1PL gone.out run.GER quickly run.GER

‘We went out running quickly.’

b. *A bintu sa gara sonande bene (\*sonande) sa chitarra.*

have.3SG won the match play.GER well play.GER the guitar

‘He has won the competition by playing the guitar well.’

(Srd., Orani [NU])

That gerunds raise very high is shown by the following examples. All speakers prefer to place all HAS adverbs after the gerund:

(48) a. *En partant maintenant (\*en partant), nous pourrions arriver à*

in leave.GER now in leave.GER we can.COND.1PL arrive.INF at

*l’heure.*

the hour

‘If we leave now, we could arrive in time.’

b. *Je me suis perdue dans le vieux centre de la ville, (en me trompant)*

I me=be.1SG lost in the old centre of the city in me=err.GER

*apparemment (en me trompant) de route.*

apparently in me=err.GER of street

‘I got lost in the old city centre because apparently I got the route wrong.’

(Fr.)

(49) a. *Greşind proşteste (\*greşind) strada din nou, am ajuns prea*

err.GER stupidly err.GER street of new have.1SGe arrived too

*târziu.*

late

‘Stupidly getting the route wrong, I arrived too late.’

b. *(plecând) acum (\*plecând), aş putea să ajung la*

leave.GER now leave.GER AUX.COND.1SG can.INF SA arrive.1SG to

*timp.*

time

‘Leaving now, I could arrive on time.’

(Ro.)

There is thus a clear indication that the gerund occupies a high position within the IP in all languages (cf. Pollock 1989: .

Foci can only follow the gerund in Italian, as can be seen in the following example:

(50) *Mi sono preparata all'esame leggendo bene QUESTO LIBRO*

REFL=be.1SG prepared to.the exam, read.GER well this book

(\*leggendo) (bene) (\*leggendo), non quell'altro.

reading.GER well reading.GER NEG that other

'I prepared for the exam reading this book well, not that other one.'

(It.)

The fact that the adverb can follow and precede the focus phrase shows that the gerund must always precede the focused constituent, whether it is located in the higher or lower left periphery. The gerund is therefore probably located high in the C-domain, viz. in Force.

The results of this section are summarized in Table 5:

*Table 5 Movement of gerunds in Romance*

<b>Language</b>	<b>Movement gerund</b>
<b>European Portuguese</b>	HAS/C, across 'probably' Mod <sub>epistemic</sub>
<b>Spanish</b>	HAS/C, across 'stupidly' Mood <sub>evaluative</sub>
<b>Catalan</b>	HAS/C, across 'apparently' Mod <sub>evidential</sub>
<b>French</b>	HAS/C, across 'apparently' Mod <sub>evidential</sub>
<b>Italian</b>	HAS/C, across 'stupidly' Mood <sub>eval</sub> and focus
<b>NIDs</b>	HAS/C, across 'fortunately' Mood <sub>eval</sub>
<b>Sardinian</b>	HAS/C, across 'stupidly' Mood <sub>eval</sub>
<b>Romanian</b>	HAS/C across 'stupidly' Mood <sub>eval</sub>



### 3.6 Past participial clauses

In formal registers, Romance languages can use a past participle as subordinate clause which can be syntactically independent from the matrix clause (Belletti 1990: Chap. 2; Belletti 2006; Perlmutter 1989; Loporcaro 2003). These past participial clauses<sup>14</sup> are formed by a past participle followed by a DP, with which it agrees in number and gender:

(51) a. *Finita*                    *la festa, tutti tornarono*                    *a casa.*

finished.PTC.F.SG the party all return.PRET.3PL at home

‘After the party finished, everyone returned home.’

b. *Venduta*                    *la casa, la famiglia si trasferì*                    *all'estero.*

Sold.PTC.F.SG the house the family REFL=move.PRET.3SG to.the=abroad

‘After selling the house, the family moved abroad.’

c. *\*Dormita*                    *la bambina, preparai*                    *la merenda.*

Slept.PTC.F.SG the girl, prepared.PRET.1SG the snack

‘After the girl had slept, I prepared a snack.’

(It.)

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<sup>14</sup> Often referred to as ‘absolute past participles’, but not all instances of past participle clauses are ‘absolute’ in that they are connected to the matrix clause (cf. Loporcaro 2003: 202ff. for discussion).

As captured by Perlmutter's (1989) generalisation<sup>15</sup>, these clauses can be formed with unaccusatives (51a) and transitives (51b), but not with unergatives (51c).

There is variation with respect to the position of the DP. In Catalan and Italian, it appears postverbally (52); in contrast, in French, it must precede the participle (53). Romanian past participial clauses distinguish themselves from their Romance counterparts in that they allow two subject positions, a preverbal and a postverbal one (54), where the postverbal is the most neutral. The preverbal position needs to be marked as a topic or a focus (Ștefania Costea, p.c.):

(52) *Un cop nascuda la criatura, triarem el nom.*

a time born.PTC the creature choose.FUT1.PL the name

'Once the child will be born, we will choose the name.'

(Cat., Institut d'Estudis Catalans 2016:1208)

(53) *Le train à peine arrivé, Silvie est descendue.*

the train at sorrow arrived.PTC Silvie be.3SG gone.down

'As soon as the train arrived, Silvie got off.'

(Fr.)

(54) *(Făcute) temeie (făcute), profesoara ne-a laudat.*

made.PTC homework.DET made.PTC, professor.DET us=have.3SG praised

'Having done the homework, the professor praised us.'

(Ro.)

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<sup>15</sup> However, whereas this generalisation seems to hold for most Romance languages, in Italian, past participle clauses are not excluded with all types of unergatives (cf. Loporcaro 2003 for discussion).

The postverbal subject position could be an indication of high verb movement, but could also be caused by the subject remaining *in situ*. This latter possibility can be excluded on the basis of the following examples, which show that the subject has moved, stranding a floating quantifier in a lower position:

- (55) *Arrivati finalmente i suoi figli tutti a casa, la mamma*  
 arrived.PTC finally the her children all at house the mom  
*poteva stare tranquilla.*  
 can.IPFV.3SG stay.INF calm  
 ‘After all her children finally arrived home, the mum could be calm.’

(It.)

If the postverbal subject has moved out of the VP, this means that the past participle is also located within the I-domain (or higher).

According to Cinque (1999: 149), Italian absolute past participles can be found to either precede or follow habitual adverbs, negative adverbs, *già* ‘already’, *più* ‘(any)more’, *sempre* ‘always’ and *completamente* ‘completely’, but they have to precede *bene* ‘well’. My informants, however, seem to prefer to move the past participle across all lower adverbs as shown in the following examples of dependent participial clauses:

- (56) a. *Fatti bene (\*fatti) i compiti, potevamo finire il corso.*  
 done.PTC well done.PTC the homework can.IPFV.1PL finish.INF the course

‘After having done the homework well, we could finish the course.’

- b. *Finiti già (\*?finiti) i taralli, la signora va dal*  
finished.PTC already finished.PTC the taralli the woman go.3SG to.the  
*panettiere.*

baker

‘Having already finished the taralli, the woman goes to the baker.’

- c. *Non vista più (\*vista) Maria, tutti iniziarono a*  
NEG seen.PTC anymore seen.PTC Maria all start.PRET.3PL to  
*preoccuparsi.*

worry.INF=REFL

‘Not having seen Maria anymore, everyone started to worry.’

(It.)

- (57) a. *Feta ja (\*feta) tota la feina, se'n va anar*  
done.PTC already done.PTC all the work REFL=of.it=go.3sg go.INF to  
*a dormir*

sleep.INF

‘Having already finished all the work, s/he went to sleep.’

- b. *Destrossada completament (\*destrossada) la casa, els lladres van*  
destroyed.PTC completely destroyed.PTC the house the thieves go  
*marxar.*

march.INF

‘Having destroyed the house completely, the thieves left.’

(Cat.)

- (58) a. *Făcute bine (\*făcute) temele, profesoara ne-a laudat.*  
 made.PTC well made.PTC homework.DET professor.DET us=have.3SG  
 praised
- b. *Odată discutate des (\*discutate), subiectele nu mai reprezentau un punct de interes pentru noi.*  
 once discussed.PTC often discussed.PTC subjects.DET NEG anymore  
 represent.IPFV.3PL a point of interest for us  
 ‘Having discussed them often, subjects are not a point of interest anymore.’  
 (Ro.)

Similarly, there is a tendency to place the HAS adverb after the past participle as well, in Italian and Romanian. In Catalan, both positions are grammatical:

- (59) a. *Finita fortunamente (\*finita) la scuola, ci sentimmo liberi.*  
 finished.PTC finally finished.PTC the school us=feel.PRET.1PL free  
 ‘When school finally finished, we felt free.’
- b. *Superato probabilmente/evidentemente (?superato) l’esame, Marco decide di prendersi una vacanza.*  
 passed.PTC probably /evidently passed.PTC the exam Marco  
 decide.PRET.3SG of take.INF=REFL a holiday  
 ‘Having probably/evidently passed the exam, Marco decided to take a holiday.’

(It.)

(60) *(Assasinada) malauradament (assassinada) tota la població,*  
murdered.PTC unfortunately murdered.PTC all the population,  
*la ciutat va quedar deserta.*  
the city go.3SG remain.INF deserted

‘After the whole population was unfortunately murdered, the city was deserted.’

(Cat.)

(61) a. *Găsită poate de un străin, scrisoarea nu ar mai*  
found maybe by a stranger letter.DET not AUX.COND.3SG anymore  
*fi ajuns la mine.*  
be.INF arrived at mine

‘Maybe if the letter had been found by a stranger, it would not have arrived at my place.’

b. *(terminate) din fericire (\*terminate) cursurile, am plecat*  
finished.PTC of happiness finished.PTC courses.DET have.1SG left  
*în vacanță.*  
in holiday

‘With the courses fortunately finished, I left on holiday.’

(Ro.)

It can be concluded that the past participle of both unaccusative and transitive verbs can precede most HAS and LAS adverbs, with the exception of *appena* ‘as soon as’, which

acts as a conjunction in these types of clauses (cf. also Cat. *un cop, una vegada* ‘once’). This indicates a movement of the participle into a very high position in the IP or even into the CP (for both unaccusative and transitive verbs).

French past participle clauses show a very different pattern than the ones in Catalan, Italian and Romanian. The past participle stays in a low position, and cannot even raise over *bien* ‘well’:

(62) a. *Marie (\*partie) déjà (partie), Marc ne pouvait plus  
 Marie left.PTC already left.PTC Marc NEG can.IPFV.3SG anymore  
 lui déclarer son amour.  
 to.her=declare.INF his love  
 ‘Marie already having left, Marc could not declare his love to her anymore.’*

b. *Les devoirs (\*faits) bien (faits), les copains pouvaient  
 the homework done.PTC well done.PTC the friends can.IPFV.3PL  
 sortir.  
 go.out.INF  
 ‘Having done their homework well, the friends could go out.’*

c. *Le livre (?lu) complètement (lu), j’étais devenue une  
 the book read.PTC completely read.PTC I=be.IPFV.1SG become an  
 experte de la matière.  
 expert of the subject  
 ‘Having read the book completely, I had become an expert on the subject.’*

(Fr.)

The absolute past participle clause seems to lack a left periphery (except in Romanian), as foci necessarily need to follow both the past participle and a low adverb such as *bene* ‘well’. Topics are ungrammatical in French and Italian:

(63) (\**IL LIBRO*) *studiato bene IL LIBRO, non l’articolo, ho capito il fenomeno.*  
 the book studied.PTC well the book NEG the article have.1SG understood  
*il fenomeno.*

the phenomenon

‘Having studied the book well, not the article, I understood the phenomenon.’

(It.)

(64) \**Il libro, letto completamente, ho capito il fenomeno.*  
 the book read.PTC=it completely have.1SG understood the  
*fenomeno.*

phenomenon

‘The book, having read it completely, I understood the phenomenon.’

(It.)

(65) \**Ce document, une fois bien retravaillé, tu pourras contacter un journal de publication.*  
 this document a time well revised.PTC you can.FUT.2SG  
*contacter un journal de publication.*

contact.INF a journal of publication

‘Once you have revised this document well, you can contact a journal.’

(Fr.)



It can be concluded that the left periphery in these clauses is reduced in participial clauses.

The results of this section are summarised in Table 6:

*Table 6 Movement of absolute participles in Romance*

<b>Language</b>	<b>PTC movement in PPCs</b>
<b>Italian</b>	C/HAS across ‘fortunately’ Mood <sub>eval</sub>
<b>Catalan</b>	C/HAS optionally across ‘fortunately’ Mood <sub>eval</sub>
<b>French</b>	None (not across <i>bien</i> ‘well’)
<b>Romanian</b>	Across ‘apparently’ Mood <sub>evidential</sub>

There is variation between the languages. Whereas in Catalan, Romanian, and Italian, both adverbs and subject position indicate a high verb movement, the opposite is found in French. Again, French deserves a more detailed discussion, which due to space limitations will be left aside here.

### 3.7 Summary results

The results of the preceding subsections are schematised in Table 7:

*Table 7 Movement of non-finite verbs in Romance*

<b>Language</b>	<b>Infl./person</b>	<b>Bare</b>	<b>Aux-to-</b>	<b>Gerund</b>	<b>PPC</b>
	<b>al inf.</b>	<b>infinitives</b>	<b>Comp</b>		

<b>EuPt.</b>	HAS	HAS	HAS/Fin	HAS	-
<b>Sp.</b>	HAS	HAS	HAS	HAS	-
<b>Cat.</b>	HAS	Fin/HAS	-	C/HAS	C/HAS
<b>Fr.</b>	-	LAS/HAS	-	HAS	none
<b>It.</b>	-	Fin/HAS	HAS	C	C/HAS
<b>NIDs</b>	-	C	-	C/HAS	-
<b>SIDs</b>	HAS	C	-	-	-
<b>Srd.</b>	HAS	HAS	-	C/HAS	-
<b>Ro.</b>	HAS	HAS	-	HAS	HAS

It can be immediately noted that there is a general tendency across Romance for non-finite forms to raise to a high position within IP or to a low position within the C-domain.

The various Romance languages with a personal infinitive pattern remarkably similarly in that the personal infinitive occupies a high position within the inflectional domain, as it precedes all the LAS adverbs and can precede most HAS adverbs. The infinitive follows constituents located in the C-domain, such as foci and topics. Inflected infinitives also move in most cases to the HAS. In Portuguese, the context determines its position, in that in non-selected contexts the inflected infinitive always raises to the HAS, but even higher in selected contexts (after epistemic and declarative verbs, i.e. Aux-to-Comp).

The Aux-to-Comp construction seems to confirm its name: the verb necessarily precedes all adverbs and cannot co-occur with a complementiser. Given the fact that foci and topics precede it, the landing site of the infinitive is arguably Fin. Other verb

forms that seem to exhibit V-to-C movement are the gerund and the past participle when used in a PPC.

In many respects, French behaves differently to the other Romance languages. With both infinitives and past participle constructions, the lower adverbs can also precede the verb, indicating very low verb movement.

#### 4 Analysis of verb movement in non-finite clauses

From the preceding section, a general picture has emerged. In non-finite clauses across most Romance varieties, except for French infinitives and PPCs, the non-finite verb moves into a high position within the HAS or the lowest position of the CP, *Fin*.

Our first research question was whether the verb movement of finite forms and non-finite verbs are of the same type, triggered by the same formal features. The results from §3 indicate that this is not the case. If it were, we would expect differences between Romance languages, in a pattern similar to what we find for finite verb movement, contrary to fact. Compare our results with the four types of Romance finite verb movement in Table 8 (Schifano 2018: 136):

*Table 8 Target of Romance verb movement (Schifano 2018:136)*

<b>Target of movement</b>	<b>Languages</b>
<b>Mood field (high)</b>	French, Romanian
<b>Tense field (medial)</b>	Sardinian, Northern and Central Regional It., NIDs
<b>Aspect field (low)</b>	European Portuguese, SIDs, southern regional It.

Not only is non-finite verb movement much more uniform, the one exception to the general high movement of non-finite verbs, i.e. French, is a language which in finite clauses instead displays very *high* verb movement.

The property responsible for causing verb movement in finite indicative clauses thus must be different in non-finite clauses, resulting in different patterns of movement. In fact, the movement of the non-finite forms is more similar to that of subjunctives, which target a higher position than indicatives (Schifano 2018: 228). It is clear that a classic account in terms of richness (or even the presence) of person and number inflection cannot explain all cases of verb movement.

#### **4.1 Inflection**

One idea which has been around from very early on is that verbs move to the I-domain to ‘pick up’ their inflection.<sup>16</sup> Inflectionally richer languages have higher verb movement than languages with poorer agreement paradigms (Roberts 1985; 1993; 1999; Koenenman 2001; Koenenman and Zeijlstra 2010; 2014). This generalisation has however many well-known exceptions (Rohrbacher 1999; Wiklund et al. 2007) and has been rejected by various scholars (cf. e.g. Schifano 2018). This hypothesis would

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<sup>16</sup> As pointed out by an anonymous reviewer, Pollock (1989: 408) already admits that gerunds, despite not featuring agreement morphemes, move high like finite verbs, which is difficult to reconcile with the view that subject verb agreement is the trigger of ‘high’ verb movement. He proposes a null agreement morpheme on the gerund, but this raises several problems for acquisition.

predict that non-finite forms do not move high, with the exception of *inflected* non-finite forms.

On the basis of the data presented here, we can conclude that Romance verb movement does not seem to be triggered by inflection. Non-finite forms move high, arguably higher than finite counterparts (cf. data Schifano 2018), which is unexpected under the view that inflection drives verb-movement. Particularly revealing in this respect also is the comparison between inflected and non-inflected infinitives in Sardinian:

(66) a. *Maria cheriat a mandigare(n) sempre (\*mandigare(n)) bene*

Maria want.IPV.3SG to eat.INF(.3PL) always eat.INF(.3PL) well

*(\*mandigare(n)) sos pizzinnos.*

eat.INF(.3PL) the boys

‘Maria wanted the boys to always eat well.’

b. *Mannedda cheriat a mandigare(mus) como (\*mandigare(mus)).*

grandmother want.IPV.3SG to eat.INF(.1.PL) now eat.INF(.1.PL)

‘Grandmother would like us to eat now.’

(Srd.)

The absence or presence of overt agreement between the infinitival form and its subject does not seem to influence the position of the verb:<sup>17</sup> speakers prefer the adverbs to

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<sup>17</sup> The same conclusion is reached by Jones (1993: 281), who argues that the realisation of the agreement is a purely PF phenomenon.

follow it either way. Furthermore, non-finite forms seem to raise consistently high into the HAS, apart from the exceptions of French and Romanian. It thus seems very unlikely that a verb moves only to pick up its inflection in Romance or to license its subject.

## 4.2 Tense

If richness or the presence of personal agreement endings is not responsible for the movement of non-finite verb forms, richness of Tense could maybe explain the attested patterns, as has been proposed for finite forms (Biberauer and Roberts 2010). Although morphological markings of tense are absent in Romance infinitives, it is generally assumed that some control infinitives do have (relative) tense, as they refer to an ‘unrealised future’ (Stowell 1982; Bošković 1997; cf. Wurmbrand's 2014 WOLL). However, not all non-finite forms discussed above, e.g. gerunds or past participles, can be analysed as having this type of tense, as they express simultaneity and anteriority respectively.

Similarly, the presence of a T-feature on C has been proposed as reason for movement to a high position in the Aux-to-Comp construction (Rizzi 1982, Raposo 1989). Tense in this case is not located on T but on C (cf. Ouali's (2008) SHARE, DONATE and KEEP options), due to defectiveness of non-finite forms. Following this approach, Ambar (1994) and Ambar and Jiménez-Fernández (2017) have argued that Portuguese inflected infinitives (and Romance infinitives with specified subjects in general) have tense. This feature is absent in irrealis complements selected by volitive clauses, which explains the absence of inflected infinitives in these contexts in European Portuguese.

In factive complements, the [+T] feature is located on a D-head. This approach can however not explain the high movement in other non-finite contexts, where we do find other temporal interpretations. Moreover, inflected infinitives are allowed in volitive contexts in Sardinian. In sum, if tense were the trigger of movement, we would expect differences between the Romance non-finite verb forms, as they differ in their temporal interpretation. Tense or tense oppositions are therefore to be discarded as the (sole) trigger of verb movement.

### 4.3 [-realis] feature

It has been argued that infinitives move to the highest relevant position in the I-domain, to license a [-realis] feature, just like subjunctives (Ledgeway and Lombardi 2005; 2014; Schifano 2018: 230–239). Evidence for this claim comes from the fact that subjunctives in all Romance languages move high (Ledgeway and Lombardi 2014: 37; Schifano 2018: 226-230). Unlike indicatives, subjunctives consistently target a high position across Romance, even in languages which generally show low verb movement, such as Valencian Catalan:

- (67) *Joan vol que la seva dona prepare sempre (\*prepare)*  
 Joan want.3SG that the his wife prepare.SBJV.3SG always prepare.SBJV.3SG  
*les postres.*  
 the desserts  
 ‘Joan wants his wife to always prepare the desserts.’

(VCat., Schifano 2018: 100)

The high movement described in this paper thus mimics the movement of the subjunctive, and not that of indicative finite forms. The licensing of a [-realis] feature might therefore seem a logical trigger for movement of these cases.

However, not all non-finite forms have a [-realis] interpretation. As discussed above, we also find high verb movement of non-finite forms in other types of complements, such as complements of factive verbs and in realis complements selected by epistemic and declarative verbs, as well as gerunds and past participle clauses. If [-realis] were the trigger for high verb movement (in opposition with [+realis]), we would expect that the [realis] clauses, finite or non-finite, pattern similarly. This is not the case because gerunds, past participles and factive infinitival complements do not replicate Schifano (2018)'s findings for finite verb movement. Furthermore, factive verbs often license the subjunctive in many Romance varieties:

(68) a. *Mi dispiace che si sia ammalato.*

to.me=displease.3SG that REFL=be.SBJV.3SG gotten.ill

'I regret that he got ill.'

(It.)

b. *Je regrette qu'elle ne veuille pas en parler avec moi.*

I regret.1SG that=she NEG1 wants.SBJV.3SG NEG2 of.it=talk.INF with me

'I regret that she does not want to talk about it with me.'

(Fr.)



These complements are not [-realis], but nevertheless show high verb movement. The feature [-realis] thus cannot be the determining factor for high verb movement.

#### **4.4 Anchoring**

There must thus be a trigger for the high movement of non-finite forms, which also applies to subjunctives. The relevant feature must thus be shared by both non-finite forms and subjunctives. As argued in Groothuis (2020a; 2020b), the different degrees of finiteness in Romance can be best analysed as different degrees of anchoring of Tense and Person (Groothuis 2020, cf. Ritter and Wiltschko 2014). For both categories, we can distinguish three degrees of anchoring: they can be completely finite and thus independent in their interpretation, in the sense that both are directly interpreted with respect to the speech act. Otherwise, the interpretation of person and tense may be somehow dependent on a higher clause: their interpretation can be restricted by another clause (e.g. future/irrealis tense with respect to the higher clause, or obviation for person) or their interpretation is completely anaphoric (simultaneous tense and full subject control). These two anchoring mechanisms can apply independently, in the sense that different degrees of anchoring are allowed for Tense and Person. However, they are not completely disconnected from one another, because, when Tense is completely anaphoric, also Person has to be. There is thus an implicational relationship between the two; Tense remains the primary anchoring category (cf. Ritter and Wiltschko 2014). The locus for this anchoring to another clause (in the case of indirect anchoring) is Fin (cf. Roussou 2001).

Returning to verb movement of non-finite forms, these verb forms have in common with subjunctives that their interpretation of Tense and/or Person is dependent on another clause. Also subjunctives have an irrealis future interpretation (Giorgi 2010: 32–38) and can be restricted in their subject interpretation (*viz.* the obviation effect, cf. Kempchinsky 1987; 2009 a.o.). Indeed, these can be considered ‘less finite’ compared to indicative (main) clauses. What I would like to propose here, is that there is a formal requirement for indirect anchoring to take place locally, *viz.* for the verb to be ‘visible’ to Fin (the anchoring head). This is the trigger for non-finite verb movement. Non-finite verbs need to move to or very close to this position to receive the appropriate temporal and subject interpretation. Unlike direct anchoring, I assume that for indirect anchoring, the verb must move into a local checking domain with Fin. Here it is crucial to establish that both subjunctives and non-finite forms move to a high position within the HAS or even to a low CP position (*viz.* Fin), whereas finite (indicative) forms do not.

Given that this process of anchoring establishes a relation with speech act and hence with the speaker, the oddness of the high adverbs, which are speaker-oriented, falls out automatically. The fact that these are odd in both subjunctives and non-finite clauses is because they are related to the speaker, which is only indirectly present in these clauses (cf. Giorgi 2010: 72–75). This means that at this point unfortunately it is impossible to establish an exact location of the verb. Although it would have been desirable to be able to pinpoint a more precise landing point of the verb, the general result, *viz.* the high movement of non-finite forms, which is fundamentally different from finite verb movement, is clear result in itself.

## 5 Conclusions

In this paper, the movement of Romance verb forms that are traditionally considered non-finite has been studied, such as the personal and inflected infinitive, bare infinitives in subject clauses, Aux-to-Comp infinitives, gerunds, and absolute past participles. The most important finding, which has not been noted explicitly before, is that the movement of non-finite verbs in Romance is thoroughly different from that which has been argued for finite verbs. Whereas finite verb movement targets different areas within the IP in different Romance languages, non-finite forms generally move high into the IP domain, in some cases also into the CP.

The overall finding is that there is a commonality to the syntax of non-finite verbs despite the morphological differences between these forms: all target a high clausal position at the edge of IP close to CP. We thus find different movement patterns than with finite indicative forms; the pattern resembles more the high placement of the subjunctive. There is thus no difference in verb movement between finite and non-finite forms in the traditional definition; subjunctives instead pattern with the infinitives, gerunds etc. in their high verb movement. Since all these forms differ in their morphology, some agreeing with their subjects, some indicating aspectual differences, the conclusion can be drawn that the morphological shape of a verb form does not cause it to move. The data described in this article can therefore be taken as argument against analyses of verb movement as driven by their morphological form (such as the Rich Agreement Hypothesis, [Vikner 1995; Koenenman 2001; Koenenman and Zeijlstra 2010; 2014]).

Instead, what all these forms have in common, is that they are non-finite in the sense that they depend on a higher clause for their temporal and/or subject interpretation, i.e. they are indirectly anchored. This property is also shared with subjunctives. I have proposed that this anchoring mechanism is what triggers the verb movement. In order to be anchored to a higher clause, non-finite verbs as well as subjunctives need to be in a local relationship with the anchoring head *Fin* (cf. Groothuis 2020: Chap. 5 and references therein).

The verb movement patterns have been described on the basis of a series of diagnostics, focusing mostly on adverb placement as these gave the most consistent results. Foci, topics, and subjects generally confirmed the results. However, it has been noted that speakers generally find using the highest adverbs of the IP domain (such as ‘probably’ or ‘evidently’) in non-finite embedded contexts odd, because these adverbs typically encode the speaker’s perspective, which is not present in indirectly anchored clauses.

Finally, French seems to pattern differently from the other Romance languages. With French, movement of the infinitive is apparently very low, as most LAS adverbs can precede the infinitive. With HAS adverbs, however, the only possible order is V+Adv, which seems to indicate that French is not essentially different from other Romance languages and also shows V-movement with infinitives. Further research is necessary to explain the diverging patterns of lower adverbs and negation in French.

## **References**

- Álvarez Blanco, Rosario, Henrique Monteagudo & Xosé Luis Regueira. 1986. *Gramática galega* [Galician grammar]. Vigo: Galaxia.
- Belletti, Adriana. 1990. *Generalized verb movement. Aspects of verb syntax*. Turin: Rosenberg & Sellier.
- Belletti, Adriana. 2004. Aspects of the low IP area. In Luigi Rizzi (ed.), *The structure of CP and IP* (The Cartography of Syntactic Structures 2), 16–51. Oxford: Oxford University Press.
- Belletti, Adriana. 2006. (Past) participle agreement. In Martin Bert Hans Everaert & Henk van Riemsdijk (eds.), *The Blackwell companion to syntax*, vol. 3, 493–521. Oxford: Blackwell.
- Belletti, Adriana. 2008. *Structures and strategies*. London: Routledge.
- Bentley, Delia. 2014. On the personal infinitive in Sicilian. In Paola Benincà, Adam N. Ledgeway & Nigel Vincent (eds.), *Diachrony and Dialects. Grammatical Change in the Dialects of Italy*, 96–115. Oxford: Oxford University Press.
- Bentzen, Kristine. 2007. *Order and structure in embedded clauses in Northern Norwegian*.
- Biberauer, M. Theresa & Ian G. Roberts. 2010. Subject, tense and verb movement in Germanic and Romance. *Cambridge Occasional Papers in Linguistics (COPiL)* 3.
- Blasco Ferrer, Eduardo, Michel Contini, Ines Loi Corvetto & Heinz Jürgen Wolf. 1988. Sardisch: Interne Sprachgeschichte, I: Grammatik/Evoluzione della grammatica; II: Lexik/Evoluzione del lessico; III: Onomastik/Evoluzione dell'onomastica. In Günter Holtus, Michael Metzeltin & Christian Schmitt (eds.), *Lexikon der Romanistischen Linguistik, IV: Italienisch, Korsisch, Sardisch/Italiano, corso, sardo*, 836–884. Niemeyer.
- Bobaljik, Jonathan David. 1999. Adverbs: The hierarchy paradox. *Glott international* 4(9/10). 27–28.
- Bošković, Željko. 1997. *The syntax of nonfinite complementation: An economy approach*. Cambridge, MA: MIT Press.
- Cardinaletti, Anna. 2004. Towards a cartography of subject positions. In Luigi Rizzi (ed.), *The structure of CP and IP: The cartography of syntactic structures*, vol. 2, 115–165. Oxford: Oxford University Press.
- Chomsky, Noam. 2001. Derivation by Phase. In Michael Kenstowicz (ed.), *Ken Hale: a Life in Language*, 1–52. Cambridge, MA: MIT Press.
- Cinque, Guglielmo. 1999. *The syntax of adverbs*. Oxford: Oxford University Press.
- Cinque, Guglielmo & Luigi Rizzi. 2015. The cartography of syntactic structures. In Bernd Heine & Heiko Narrog (eds.), *The Oxford Handbook of Linguistic Analysis*, 67–78. 2nd edn. Oxford: Oxford University Press.
- Costa, João. 2004. *Subject positions and interfaces: the case of European Portuguese*. Berlin: Walter de Gruyter.
- Dobrovie-Sorin, Carmen. 1994. *The syntax of Romanian: Comparative studies in Romance*. Berlin: Mouton de Gruyter.
- Emonds, Joseph. 1978. The verbal complex V'-V in French. *Linguistic inquiry* 9. 151–175.
- Engver, Karl. 1972. *Place de l'adverbe déterminant un infinitif dans la prose du français contemporain* (Studia Romanica Upsaliensia 7). Stockholm: Almqvist & Wiksell.

- Ernst, Thomas. 2001. *The syntax of adjuncts*. Vol. 96. Cambridge University Press.
- Giorgi, Alessandra. 2010. *About the speaker. Towards a syntax of indexicality* (Oxford Studies in Theoretical Linguistics). Oxford: Oxford University Press.
- Giorgi, Alessandra & Fabio Pianesi. 1996. Verb movement in Italian and syncretic categories. *Probus* 8(2). 137–160.
- Gondar, Francisco G. 1978. *O infinitivo conxugado en galego*. Santiago de Compostela: Universidade de Santiago de Compostela.
- Groothuis, Kim A. 2015. *The inflected infinitive in Romance*. Leiden University, unpublished Research master thesis. <https://openaccess.leidenuniv.nl/handle/1887/34426> (23 May, 2016).
- Groothuis, Kim A. 2018. Empirical and Analytical Problems of the Romance Inflected Infinitive: The State of the Art. In Gabriela Pană Dindelegan, Adina Dragomirescu & Alexandru Nicolae (eds.), *Comparative and Diachronic Perspectives on Romance Syntax*, 289–324. Newcastle: Cambridge Scholars Publishing.
- Groothuis, Kim A. 2019. Postverbal subject positions in ‘semi-finite’ clauses in Southern Italo-Romance and Sardinian. In *Romance Languages and Linguistic Theory 2016. Selected papers from “Going Romance” Frankfurt 2016* (Romance Languages and Linguistic Theory 15), 220–236. Amsterdam/Philadelphia: John Benjamins.
- Groothuis, Kim A. 2020a. *Reflexes of finiteness in Romance*. Cambridge: University of Cambridge unpublished PhD thesis.
- Groothuis, Kim A. 2020b. Finiteness in Romance as anchoring of Tense and Person.
- Groothuis, Kim A. 2021. On the interaction between finiteness, negation, and verb movement: Northern Italian varieties and French compared. Presented at the Romance grammars, context and contact workshop (RGCC2021), Birmingham.
- Haider, Hubert. 2000. Adverb placement-convergence of structure and licensing. Walter de Gruyter, Berlin/New York Berlin, New York.
- Hernanz, Maria-Lluïsa. 1999. El infinitivo. In Ignacio Bosque & Violeta Demonte (eds.), *Gramática descriptiva de la lengua española*, vol. 2, 2197–2356. Madrid: Editorial Espasa Calpe.
- Hualde, José Ignacio. 1992. *Catalan*. London: Routledge.
- Institut d’Estudis Catalans. 2016. *Gramàtica de la llengua catalana*. Barcelona: Institut d’Estudis Catalans.
- Jones, Michael Allan. 1992. Infinitives with specified subjects in Sardinian. In Christiane Lauefer & James Morgan (eds.), *Theoretical Analyses in Romance Linguistics: Selected papers from the Linguistic Symposium on Romance Languages XIX, Ohio State University, April 21 23, 1989*, 295–309. Amsterdam: John Benjamins.
- Jones, Michael Allan. 1993. *Sardinian syntax*. London: Routledge.
- Kempchinsky, Paula. 1987. The subjunctive disjoint reference effect. In Carol Neidle & Rafael A. Nuñez Cedeño (eds.), *Studies in Romance languages*, vol. 25, 123–140. Dordrecht: Foris.
- Kempchinsky, Paula. 2009. What can the subjunctive disjoint reference effect tell us about the subjunctive? *Lingua* 119(12). 1788–1810. <https://doi.org/10.1016/j.lingua.2008.11.009>.
- Koenenman, Olaf. 2001. *The flexible nature of verb movement*. Groningen University.

- Koenenman, Olaf & Hedde Zeijlstra. 2010. Resurrecting the rich agreement hypothesis: Weak isn't strong enough. In Duk-Ho An & Soo-Yeon Kim (eds.), *Movement in Minimalism: Proceedings of the 12th Seoul Conference on Generative Grammar*. Seoul: Hankwukmwunhwasa.
- Koenenman, Olaf & Hedde Zeijlstra. 2014. The rich agreement hypothesis rehabilitated. *Linguistic Inquiry* 45(4). 571–615.
- Ledgeway, Adam N. 1998. Variation in the Romance infinitive: the case of the Southern Calabrian inflected infinitive. *Transactions of the Philological Society* 96(1). 1–61.
- Ledgeway, Adam N. 2000. *A comparative syntax of the dialects of Southern Italy: a minimalist approach*. Oxford: Wiley-Blackwell.
- Ledgeway, Adam N. 2007. Diachrony and finiteness: subordination in the dialects of Southern Italy. In Irina A. Nikolaeva (ed.), *Finiteness: Theoretical and Empirical Foundations*, 335–365. Oxford: Oxford University Press.
- Ledgeway, Adam N. 2009. *Grammatica diacronica del napoletano* (Beihefte Zur Zeitschrift Für Romanische Philologie 350). Tübingen: Niemeyer.
- Ledgeway, Adam N. 2012. *From Latin to Romance: Morphosyntactic typology and change*. Oxford: Oxford University Press.
- Ledgeway, Adam N. 2016. Clausal Complementation. In Adam N. Ledgeway & Martin Maiden (eds.), *The Oxford Guide to the Romance Languages*, 1013–1028. Oxford: Oxford University Press.
- Ledgeway, Adam N. & Alessandra Lombardi. 2005. Verb movement, adverbs and clitic positions in Romance. *Probus* 17(1). 79–113.
- Ledgeway, Adam N. & Alessandra Lombardi. 2014. The development of the southern subjunctive: morphological loss and syntactic gain. In Paola Benincà, Adam N. Ledgeway & Nigel Vincent (eds.), *Diachrony and Dialects. Grammatical Change in the Dialects of Italy.*, 25–47. Oxford: Oxford University Press.
- Ledgeway, Adam N. & Ian G. Roberts. forthcoming. the VP. In *The syntax of Italian*.
- Ledgeway, Adam N. & Norma Schifano. forthcoming. Parametric variation. In Adam N. Ledgeway & Martin Maiden (eds.), *The Cambridge Handbook of Romance Linguistics*. Cambridge: Cambridge University Press.
- Lipski, John M. 1994. *Latin American Spanish*. London: Longman.
- Loporcaro, Michele. 1986. L'infinito coniugato nell'Italia centro-meridionale: ipotesi genetica e ricostruzione storica. *L'Italia dialettale* 49. 609–65.
- Loporcaro, Michele. 2003. The Unaccusative Hypothesis and participial absolutes in Italian. Perlmutter's generalization revised. *Rivista di Linguistica/Italian Journal of Linguistics* 15. 199–263.
- Madeira, Ana Maria. 1994. On the Portuguese inflected infinitive. *UCL Working Papers in Linguistics* 6. 179–203.
- Maurer, Theodoro Henrique. 1968. *O infinito flexionado português: estudo histórico-descritivo* [The Portuguese inflected infinitive: a historical-descriptive study]. São Paulo: Editora Nacional.
- Mensching, Guido. 2000. *Infinitive constructions with specified subjects: A syntactic analysis of the Romance languages*. Oxford: Oxford University Press.
- Pană Dindelegan, Gabriela. 2013. Non-finite verb forms and non-finite clauses. The infinitive. In Gabriela Pană Dindelegan (ed.), *The Grammar of Romanian*, 211–222. Oxford: Oxford University Press.

- Parafita Couto, Maria del Carmen. 2002. *Minimalist Approach to Galician Inflected Infinitives*. Unpublished MA thesis, University of Kansas.
- Perlmutter, David M. 1989. Multiattachment and the unaccusative hypothesis: the perfect auxiliary in Italian. *Probus* 1(1). 63–120.
- Poletto, Cecilia. 2002. The left-periphery of V2-Rhaetoromance dialects: A new view on V2 and V3. In Sjeff Barbiers, Leonie Cornips & Susanne Van der Kleij (eds.), *Syntactic microvariation* (Meertens Institute Electronic Publications in Linguistics 2), 414–442. Amsterdam: Meertens Instituut.
- Poletto, Cecilia & Jean-Yves Pollock. 2015. Arguing for remnant movement in Romance. In Günther Grewendorf (ed.), *Remnant movement*, 135–177. Berlin/New York: De Gruyter Mouton.
- Pollock, Jean-Yves. 1989. Verb movement, Universal Grammar, and the structure of IP. *Linguistic inquiry* 20. 365–424.
- Pountain, Christopher J. 1995. Infinitives with overt subjects: a pragmatic approach. In T. Earle & N. Griffin (eds.), *Portuguese, Brazilian and African Studies: studies presented to Clive Willis on his retirement*, 11–25. Warminster: Aris and Philips.
- Raposo, Eduardo. 1987. Case theory and Infl-to-Comp: The inflected infinitive in European Portuguese. *Linguistic inquiry* 18. 85–109.
- Raposo, Eduardo P & Juan Uriagereka. 2005. Clitic placement in Western Iberian: a Minimalist view. In Guglielmo Cinque & Richard S. Kayne (eds.), *The Oxford Handbook of Comparative Syntax*, 639–697. Oxford: Oxford University Press.
- Rigau, Gemma. 1995. The properties of the temporal infinitive constructions in Catalan and Spanish. *Probus* 7(3). 279–302.
- Rizzi, Luigi. 1982. *Issues in Italian syntax*. Dordrecht: Foris.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane M.V. Haegeman (ed.), *Elements of grammar*, 281–337. Dordrecht: Kluwer.
- Roberts, Ian G. 2011. Head movement and the minimalist program. In Cedric Boeckx (ed.), *The Oxford handbook of linguistic minimalism*. Oxford: Oxford University Press. 10.1093/oxfordhb/9780199549368.013.0009.
- Roberts, Ian G. 1985. Agreement parameters and the development of English modal auxiliaries. *Natural Language & Linguistic Theory* 3(1). 21–58.
- Roberts, Ian G. 1993. *Verbs and diachronic syntax: A comparative history of English and French*. Dordrecht: Kluwer.
- Roberts, Ian G. 1999. Verb movement and markedness. In Michel DeGraff (ed.), *Language creation and change.*, 287–328. Cambridge, MA: MIT Press.
- Roberts, Ian G. 2019. *Parameter Hierarchies and Universal Grammar*. Oxford: Oxford University Press.
- Rohrbacher, Bernhard Wolfgang. 1999. *Morphology-driven syntax: A theory of V to I raising and pro-drop*. Amsterdam/Philadelphia: John Benjamins.
- Roussou, Anna. 2001. Control and Raising in and out of Subjunctive Complements. In Maria-Luisa Rivera & Angela Ralli (eds.), *Comparative Syntax of Balkan Languages* (Oxford Studies in Comparative Syntax). Oxford: Oxford University Press.
- Rowlett, Paul. 2007. *The syntax of French*. Cambridge: Cambridge University Press.
- Schifano, Norma. 2018. *Verb movement in Romance. A comparative study*. Oxford: Oxford University Press.



- Scida, Emily E. 2004. *The Inflected Infinitive in Romance Languages*. London: Routledge.
- Sheehan, Michelle, Jeffrey Blokzijl & M. Carmen Parafita Couto. 2020. Inflected infinitives in Galician. In Irene Vogel (ed.), *Romance Languages and Linguistic Theory 16: Selected papers from the 47th Linguistic Symposium on Romance Languages (LSRL), Newark, Delaware*, vol. 16, 259–273. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Sheehan, Michelle & Mari-Carme Parafita Couto. 2011. Optional inflected infinitives in Portuguese and Galician. Paper presented at the Poznań Linguistics Meeting, special session on the syntax of gerunds and infinitives, Adam Mickiewicz University, Poznań, 1-3 May 2011.
- Sitaridou, Ioanna. 2002. *The Synchrony and Diachrony of Romance Infinitives with Nominative Subjects*. Manchester: University of Manchester PhD thesis.
- Stowell, Tim. 1982. The tense of infinitives. *Linguistic inquiry* 13(3). 561–570.
- Tescari Neto, Aquiles. 2012. *On verb movement in Brazilian Portuguese: a cartography study*. Venice: Ca' Foscari PhD thesis.
- Torrego, Esther. 1998. Nominative subjects and pro-drop INFL. *Syntax* 1(2). 206–219.
- Vikner, Sten. 1995. *Verb movement and expletive subjects in the Germanic languages*. Oxford: Oxford University Press.
- Vincent, Nigel. 1996. L'infinito flesso in un testo napoletano del Trecento. In Paola Benincà, Guglielmo Cinque, Tullio De Mauro & Nigel Vincent (eds.), *Italiano e dialetto nel tempo: saggi di grammatica per Giulio C. Lepschy*, 389–409. Rome: Bulzoni.
- Vincent, Nigel. 1998. On the grammar of inflected non-finite forms (with special reference to Old Neapolitan). *Copenhagen studies in language* 22. 135–158.
- Virdis, Maurizio. 2015. Le proposizioni infinitive in sardo. In Maria Grazia Busà & Sara Gesuato (eds.), *Lingue e contesti. Studi in onore di Alberto M. Mioni*. Padova: CLEUP.
- Wheeler, Max, Alan Yates & Nicolau Dols. 1999. *Catalan: A comprehensive grammar*. London: Routledge.
- Wiklund, Anna-Lena, Gunnar Hrafn Hrafnbjargarson, Kristine Bentzen & Þorbjörg Hróarsdóttir. 2007. Rethinking Scandinavian verb movement. *The Journal of Comparative Germanic Linguistics* 10(3). 203–233.
- Wolfe, Sam. 2019. *Verb Second in Medieval Romance* (Oxford Studies in Diachronic and Historical Linguistics). Oxford: Oxford University Press.
- Wurmbrand, Susanne. 2014. Tense and aspect in English infinitives. *Linguistic Inquiry* 45(3). 403–447.
- Zagona, Karen. 2002. *The syntax of Spanish*. Cambridge: Cambridge University Press.
- Zanuttini, Raffaella. 1997. Negation and verb movement. In Liliane MV Haegeman (ed.), *The New Comparative Syntax*, 214–245. London/New York: Longman.