

Argument structure, alignment and auxiliaries between Latin and Romance. A diachronic syntactic account Migliori, L.

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Possessive and deontic periphrases between Latin and Romance

0. Introduction

The previous chapters have shown that the active/inactive alignment contrast was pervasive within the Latin verbal system and that this opposition was decisive for the rise of Romance periphrastic perfect forms. In the following sections, more support for these observations will be provided. More specifically, we will focus on possessive and deontic constructions. The approach will be mostly descriptive, as the main aim of this chapter is to compare the Latin distribution of these periphrases with the Romance scenario. The observation of the empirical evidence will also suggest that alignment changes were crucial for the development of the constructions under analysis. A significant parallelism can therefore be established between these changes and the development of perfective periphrases. On the basis of these observations, it will be argued that the Latin verbal domain is a consistent system, exhibiting coherent structural properties in different constructions, both at the synchronic and at the diachronic level.

1. Possessive constructions

Latin displays two distinct periphrases to express the relation of possession: one exhibiting auxiliary ESSE, the other displaying auxiliary HABERE. These two constructions crucially differ at the syntactic level, in that the former has an inactive structure, whereas the latter has active syntax. Latin possessive periphrases thus exhibit an active/inactive alignment contrast.

1.1 DP possessive constructions in Latin

In Latin, possession can be expressed by various means. In the nominal domain, different options are possible (Allen & Greenhough 1903; Kühner & Stegmann 1955; Ernout & Thomas 1961; Leumann, Hofmann & Szantyr 1963;

Hofmann, Rubenbauer & Heine 1995; Panhuis 2006, among others). One of the options is that the possessor is expressed through a genitive DP, as shown in (1):

(1) huiusce fratris filius [Pl. Poen. 1256] this-m.sg.GEN. brother-m.sg.GEN. son-m.sg.NOM. "this brother's son"

In other cases, the possessor is indicated by the presence of a possessive adjective, which agrees in ϕ -features with the possessee, as in (2):

(2) ubi nunc filius meus habitat? [Pl. *Trin.* 1085] where now son-m.sg.NOM. my-m.sg.NOM. live-ind.pres-3.sg. "Where does my son live now?"

Possessive adjectives can also occur as genitive pronouns¹¹²:

(3) mei senex [Pl. Merc. 503] mine-m.sg.GEN. old man-m.sg.NOM. "My old man"

All these nominal construals have a substantial distribution at every stage of Latin and are hence widely attested ¹¹³. Furthermore, there do not seem to be any specific restrictions that determine the choice of a particular option

(i) quos amor sui caecat [Sen. *Luc*. 109, 16] whom-ACC.pl. love-NOM. 3.sg.GEN. blind-pres.ind.3.sg "(The ones), whom self-love blinds"

In the case of 1st and 2nd person plural, there is a distinct morphological form for the partitive reading (i.e. *nostrum* "of us, among us", *vestrum* "of you, among you") as opposed to the form in –i, expressing the objective reading:

(ii) quis nostrum oblivisci potest? [Cic. Phil. 5, 38] who 1-pl.GEN. forget-inf.pres. can-pres. ind.3.sg. "Who among us can forget?"

(iii) nostri nosmet paenitet [Ter. *Phor.* 172] 1-pl.Gen. ourselves regret-impers.3.sg "We ourselves regret it"

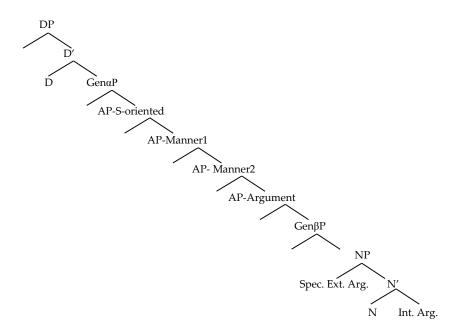
¹¹³ For a diachronic account of possessive DP-constructions from Latin to Romance, see Delfitto & Paradisi 2009; Simonenko 2010, Silvestri 2013a, b, among others.

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¹¹² Genitive pronouns in –i are most frequently associated with the objective reading:

depending on the type of possession involved¹¹⁴ (Allen & Greenhough 1903; Kühner & Stegmann 1955; Ernout & Thomas 1961; Leumann, Hofmann & Szantyr 1963; Hofmann, Rubenbauer & Heine 1995; Panhuis 2006, among others). In syntactic terms, these structures can be analysed by assuming a layered DP (Giorgi & Longobardi 1991; Longobardi 1993, 1996 *et seq.*; Giusti 1996, 2002; Silvestri 2013a), according to which the possession relation is part of the functional structure of a noun and thus encoded through a specific configuration within the DP. This is illustrated in the structure in (4):

(4) **DP internal structure** (from Silvestri 2013a: 127)



In the structure above, different DP sites encode different kinds of possession. For instance, the $Gen\alpha P$ and $Gen\beta P$ are claimed to be the sites for the so-called *functional* genitive (Longobardi 2001; Longobardi & Silvestri 2013), which is generally adpositional and not always morphologically marked. There is a parametric distinction concerning the activation of these positions: many languages of the world activate either $Gen\alpha P$ (like Hungarian) or $Gen\beta P$ (like

 $^{^{114}}$ However, some significant diachronic changes in this respect can be observed in Imperial and late Latin: see $\S~1.3$ in this chapter.

Greek), while in other languages both positions are equally active, as is the case for instance, in most Germanic languages. Conversely, *free* genitive is apparently less constrained in terms of its syntactic position, but is characterized by specific requirements (cf. Longobardi & Silvestri 2013):

- it is always formally marked, even in languages wherein other realizations of morpho-phonologically unmarked or less robustly encoded genitives occur;
- ii. it is freely iterable, whenever thematically interpreted;
- iii. it does not suffice to satisfy requirements on definiteness marking of the head nominal.

All languages have at least one strategy to express the *free* genitive. Moreover, from a parametric point of view, a language can exhibit both the *free* and the *functional* genitive. English, for instance, displays Gen α next to *free* genitive(cf. Longobardi & Silvestri 2013). Latin exhibits free genitive realized in an inflectional form. Notice, however, that, as observed in Gianollo (2005), Latin also uses the same genitive morphology in the Gen α and Gen β positions. The same seems to happen in Classical Greek as well (Guardiano 2011). On the basis of these facts, Silvestri (2013) has formulated the hypothesis that if a language displays free genitive occurring in functional positions, this can be defined as "uniform genitive":

'Uniformity' (from Silvestri 2013: 59)

if the form of free genitive is compatible with functional checking, then it is used in all functional positions also.

Therefore, there is no restriction that prevents a language from having both genitive types, nor from exhibiting free genitives in functional positions. This is exactly what we observe in Latin.

1.2 Possessive periphrastic constructions in Latin

Alongside to the DP constructions shown above, Latin also displays other strategies to express possession. More specifically, this kind of relationship can also be indicated through periphrastic constructions, as exemplified in (5) and (6):

(5) est patri

BE-pres.ind-3.sg. father-m.sg.DAT.

meo domus [Pl. Aul. 187]

my-m.sg.DAT. house-f.3.sg.NOM.

"My father has a house"

(6) habet domum formosam [Sen. Luc. 87, 5]

HAVE-pres.ind-3.sg. house-f.sg.ACC. beautiful.sg.ACC

"He has a beautiful house"

Although the periphrasis with ESSE is older, both possessive constructions are widespread in early and Classical Latin. They are often both attested in the same work, or in works by the same author, as shown in the following examples:

(7) a. si decem habeas linguas [Pl. Bacch.128] if ten HAVE-cong.pres-2.sg. tongue.f.pl.3.sg.ACC. "Even if you had ten tongues!"

b. Nulla tibi lingua-st? [Pl. Stich. 260] None.fem.sg.NOM. 2.sg.DAT tongue-f.sg.NOM-BE-3.sg.pres. "Have you got any tongue?"

(8) a. ubi tempus tibi erit [Ter. Eun. 485] where-Adv. time-n.3.sg.NOM. 2.sg.DAT. BE-fut.ind-3.sg "Where you will have the time"

b. unde habes vestem? [Ter. Eun. 694] from where HAVE-pres.ind.2.sg dress-f.sg.ACC. "From where do you have (that) dress?"

With regard to the interpretation, both constructions indicate a stative reading expressing possession: with ESSE, the state mainly relates to the possessee, whereas when HABERE is used, the focus is on the possessor argument (Kühner & Stegmann 1955; Allen & Greenhough 1903; Bauer 2000). This slight semantic difference seems to suggest that these two constructions are characterized by a different syntactic grid.

1.2.1 The syntax of Latin possessive periphrases

Besides this difference in the semantics, other factors seem to indicate that the Latin possessive constructions shown above crucially differ at the syntactic level. Firstly, arguments of these two construals display different morphological shape. In the case of the ESSE periphrasis, the possessor is marked dative, whereas the possessee is assigned nominative case.

Conversely, in the construction with HABERE, the possessor is the argument with nominative case, whereas the possessee has accusative case.

Another indication of the fact that these two constructions differ structurally is the asymmetrical behaviour of their functional elements. While ESSE can easily be omitted, HABERE cannot:

(9)domus [Pl. Aul. 187] patri (est) house.f.3.sg. 1.sg.DAT. BE-3.sg. "My father has a house" b. *(habet) [Sen. Luc. 87, 5] domum formosam HAVE-1.sg house-f.3.sg.ACC. beautiful.f.sg.ACC "He has a beautiful house"

These facts can be attributed to the different types of configuration in which ESSE and HABERE occur. The periphrasis with auxiliary ESSE exemplified in (9) seems to display the properties of an inactive structure, with analogous syntactic properties to those of a locative/existential construction (García-Hernandez 1991; Moro 1993; Kayne 1993; Szabolcsi 1994; Manzini & Savoia 2002). Within an inactive possessive configuration, the possessee, which is the sentential subject of the sentence (S_O), has the characteristics of an Undergoer (cf. Dowty 1991; Reinhart 2000, 2002)¹¹⁵. More specifically, this argument:

- (i) generally occurs in non-agentive contexts;
- (ii) is not the cause/agent of the clause/event

The DP expressing the possessor, on the other hand, shares many syntactic-semantic properties with locative arguments, such that it is possible to consider location and possessor as syntactically equivalent. This has been shown to hold cross-linguistically: in fact, numerous languages not only exhibit locative and possessor arguments with analogous syntactic properties, but they often also display the same morphology (especially when cliticized) and comparable semantic interpretation (Lyons 1967; Szabolcsi, 1994; Kayne 1993; Clark 1978; Haspelmath 2001; Manzini & Savoia 2002, among others). Although Latin also exhibits other morphological marking for expressing location (ablative as in *Athenis* "in Athens"; residual forms of locative case like *domi* "at home", *Romae* "in Rome"), the ESSE periphrasis seems to be analogous to the other possessive copular constructions attested cross-linguistically.

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¹¹⁵ Recall chapter 2.

Consider, moreover, that Latin locative case only survives in residual forms and is no longer productive at the stage of Classical Latin, while other morphological cases, like dative and ablative, took over its function (Meillet 1906; Ernout & Meillet 1932; Palmer 1954; Cupaiuolo 1991, among others). From this perspective it seems reasonable to consider the possessee in the dative case as a locative element. Recall, moreover, that the verbal domain encodes a dedicated position for this argument 116 within the inactive field:

(10) [VoiceP[ExpvP[Ben/GoalvP[Poss/LocvP [PatvP[VP]]]]]]

The dative DP expressing the possessor is a syntactic argument (and not an adjunct), as argued in the literature (Bolkstein 1983; Pinkster 1988; Kayne 1993; Bauer 2000): this element can, in fact, never be dropped or omitted. This DP is an essential constituent for this syntactic relationship, which is determined by the structural relation between possessor and possessee and their consequent case assignment. While the possessee, occupying an internal argument position, is assigned nominative case, the possessor¹¹⁷ gets dative¹¹⁸ (typical of locative arguments (cf. Kayne 1993; Manzini & Savoia 2002, 2007). Semantically speaking this argument is thus closer to an Undergoer than to a prototypical Agent. This is also indicated by the oblique morphological marking, which signals the presence of an indirect argument (cf. Pinkster 1988; Barðdal et al. 2012). A possessor in the nominative is, in fact, never attested in combination with auxiliary ESSE:

¹¹⁷ In the *mihi est* possessive periphrasis, the possessor is typically animate and frequently consists of a pronoun (cf. Bennet 1914; Löfsted 1963; Bauer 2000; Baldi & Nuti 2010). Cases of inanimate possessors in the dative are also attested, but in this case, there is a full DP and not a pronoun:

Notice, moreover, that such examples are extremely rare (cf. Bennet 1914).

¹¹⁶ Recall chapter 2, § 4.2.4.

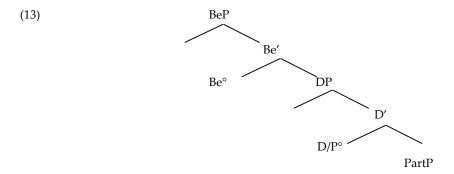
⁽i) ut splendor meo sit clipeo [Pl. Mil. 1 in Bauer 2000: 185] so that brightness-NOM. my-DAT. BE-subj.3.sg shield-DAT.

[&]quot;So that my shield has brightness/is bright"

¹¹⁸ When this argument is assigned genitive case, it probably occupies a different site on the syntactic spine, as also suggested by the slightly different interpretation of such cases (cf. Longobardi 1991, 1993, 1996 *et seq.*; Bauer 2000; Silvestri 2013, among others)

This again shows that the ESSE periphrasis corresponds to an inactive, and, therefore, unaccusative, configuration. A final confirmation in this regard is that it not possible to find a possessive ESSE periphrasis where structural accusative case is assigned to the possessee (i.e. to the argument encoding the Undergoer):

This fact demonstrates that this structure is basically unaccusative. When the auxiliary is morphologically realized, the selected item for this configuration is ESSE. In light of all these properties, a parallel has been established in the literature between the inactive possessive structure and the occurrence of auxiliary BE in other contexts, i.e. in perfective periphrases (cf. Freeze 1992; Kayne 1993)¹¹⁹. In other words, both cases correspond to a copular structure headed by aux BE:



This construal is always accompanied by auxiliary BE, not only in Latin, but also in several other languages. Consider Hungarian, for instance, which displays an analogous possessive construction, exhibiting a dative possessor and a nominative possessee (Szabolcsi 1994; Kayne 1993; Jung 2011; Manzini & Savoia 2007):

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¹¹⁹ Recall chapter 2.

(14) nek-em van haza-m [Hungarian]
DAT.-1sg BE-3sg house-1.sg
"I have a house" (Jung 2011: 51)

Because of the similarities with the predicative (locative) structures outlined above, these constructions have also been analysed as characterized by a small clause structure (cf. Moro 1990, 1993 *et seq.*; D'Alessandro & Migliori 2015):

(15) Small clause (on the basis of Williams 1975; Stowell 1975):

A small clause (SC) is a subset of the construction that expresses the subject/predicate relationship. This predicate can be an adjective, a preposition, a non-inflected verb or a noun.

The syntactic structure of a small clause is exemplified herewith:

(16) [_{SC} subject predicate]

In the case of possessive constructions, the SC is made up for the combination of 2 DPs: In other words, possessor and possessee are in a predicative relationship:

(17) [_{SC} possessee possessor]

On the basis of the properties observed, we can conclude that ESSE possessive constructions appear to be syntactically more similar to a locative/existential predication than to an active possessive expression (cf. Moro 1993, 1996, 2006; Kayne 1993). Indeed, it should be noted that despite the apparent differences, both in (13) and in (17), the inactive possessive periphrases is analysed as a syntactic structure, the properties of which are analogous to a predicative construction. To sum up, auxiliary BE is cross-linguistically characterized by unaccusative properties, as it is not able to assign structural accusative case. Conversely, the possessive construction with HABERE encodes an active argument configuration:

(18) [TP [Asp/MoodP [VoiceP [vP [VP]]]]]

In this case, the possessee argument is merged as the internal argument of V and is thus assigned the [Theme] θ -role. v is compatible with the selection of Voice, the active functional head (Harley 2006, 2012, among others). The

possessor is inserted in [Spec, VoiceP] and receives a [Holder of State] semantic role (i.e. [Sentient] in Reinhart's term, cf. Ramchand 2008; Cyrino 2009, among others), which is typical of active-stative structures¹²⁰. The result is an active structure, where the possessee is assigned accusative case.

To sum up, Latin possessive constructions differ at the structural level, in that the ESSE periphrasis reflects an inactive structure, in which the sentential subject is an Undergoer (S_O), whereas the HABERE construction is syntactically active. These differences seem to confirm the presence of a pervasive active/inactive contrast within the Latin system (cf. La Fauci 1988; 1991, 1997, 1998; Bauer 2000; Zamboni 2000; Ledgeway 2012): these constructions unambiguously display this alignment opposition, which is expressed here too through the alternation of the two elements ESSE (inactive) vs. HABERE (active).

1.3 Possessive periphrases between Latin and Romance

As this study focuses particularly on Latin periphrases and auxiliaries, we will now turn our attention specifically to the development of the possessive constructions exhibiting ESSE and HABERE. The aim will be both to examine their development into Romance and to consider the forces that determined their outcomes. On the other hand, this work will not deal with the development of the DP possessive construction, as our interest here lies in auxiliation.

1.3.1 Romance outcomes of Latin possessive periphrases

While both the ESSE and the HABERE periphrasis are well attested in Latin, the Romance scenario looks different, with significant changes in the modern Romance languages compared to Latin. Table I provides a summary of the possessive constructions attested in modern Romance:

¹²⁰ Recall the contrast between verbs like "murder" with an [Agent] EA and "love" with a [Holder of State/Sentient] EA. Both structures are active transitive, but with a difference in the degree of agentivity (cf. chapter 2).

Table I - Possessive periphrases in modern Romance

Romance languages	H-construction	E-construction
Italian	$\sqrt{}$	X
French	V	V
Spanish	V	X
E. Portuguese	V	V
Romanian	V	$\sqrt{}$
NIDs	V	X
SIDs	V	V

Table I shows that modern Romance typically exhibits the possessive construction with HAVE, whereas the periphrasis with BE is much rarer. The tendency towards the diffusion of the HAVE construction and the loss of the BE periphrasis can already be observed in the Latin data. In fact, while the dative-possessive construction was extremely common in early Latin, over time this periphrasis became gradually confined to specific groups of nouns such as abstract nouns, (19), nouns referring to kinship relationships, (20), and nouns expressing body parts, (21) (Bennet 1914; Löfstedt 1963; Bauer 2000):

- (19) nec enim mihi mos est [Sen. Clem. 2,2,2] and not indeed 1.sg-DAT. custom-n.sg.NOM. BE-3.sg "And I certainly do not have this custom"
- (20) esse illi coniugem et
 BE-pres.inf Dem-DAT. wife-f.sg.ACC. and
 tres liberos [Tac. Ann. 3, 56]
 three-pl.ACC. children-m.pl.ACC.
 "(that) he has a wife and three children"
- (21) quibus quini sint digiti [Plin. Nat. 10, 119]

 Rel-pl.DAT. five BE-pres.subj-3.pl. fingers-m.pl.NOM.

 "Who have five fingers"

Body parts and kinship nouns can certainly be related to inalienable possession. The abstract noun class is broader, but it also includes a number of nouns, like *mos* "custom", in the example, which can also be associated to the same class . It seems, therefore, that these three noun groups are not random, but relate to a specific kind of possession, which has been shown to have dedicated syntactic encoding (cf. Cheng & Ritter 1987; Alexiadou 2003). The restrictions concerning the distribution of the ESSE possessive periphrasis

in Latin can be explained as a gradual specialization of the construction for this particular context. On the other hand, Latin empirical evidence unambiguously shows a gradual extension of the HABERE possessive construction over time. Table II (from Bauer 2000: 186) summarizes the development of the two Latin constructions *spes* DAT *est/potestas* DAT *est* ("have hope"/" have the power"), as opposed to their active counterparts with HABERE:

Table II

I ubic II				
	spes DAT est	spem HABERE	potestas DAT est	potestatem HABERE
Plautus	8	0	4	0
Cicero (Speeches)	2	13	19	21
St. Augustine (Civ.)	not available	not avail.	1	25
Vulgata	3	17	0	43

These observations allow us to understand modern variation from a diachronic perspective, as they provide us with relevant information concerning the direction of the change that these periphrases underwent.

1.3.2 Languages with the HAVE possessive periphrasis

Languages like Italian and northern Italian dialects generally exhibit the active possessive construction with HAVE:

(22)	a.	Но		una	casa	[Italian]
		HAVE-1.sg.pres.		a-f.sg	house-f.sg.	
		"I have a house"				
	b.	L'	ho	compra	ta ieri	
		it-f.sg.ACC.	H-1.sg.	bought-	PP yesterday-a	adv.
		"I bought it yeste	erday"			
(23)		t∫ ¹²¹ o		na	kæ: za	[Isola del Piano]
		Poss-Cl. HAVE-	0	a-f.sg	house-f.sg	
		"I have a house"				

¹²¹ Here, too, the possessive and locative clitics are morpho-phonologically identical (cf. also Loporcaro & La Fauci 1993, 1998; Ciconte 2013; Bentley, Ciconte & Cruschina 2015, among others):

This construction is syntactically active, as shown by the structural accusative assigned to the possessee¹²². This fact is morphologically visible with pronouns/cliticization, as illustrated in (22-b). The same varieties, in contrast, do not display any possessive strategies corresponding to the Latin inactive periphrasis¹²³:

(24) a. *La/una casa è a me [Italian] the/a-f.sg. house-f.sg. BE-1.sg. 1.sg.DAT

¹²² Despite the presence of structural accusative case, possessive periphrases with HAVE can only marginally be passivized, if at all:

(i) ??La casa è stata avuta dal padre

[Italian]

The house BE-3.sg had-PP by father

"The house has been had by the father"

On the other hand, the PP of HAVE can be used as the participle of other transitive verbs:

(ii) avuta la notizia, tornai a casa [Italian] had-PP the news went-back-1.sg to home "Once I had got the news, I went back home"

We attribute this ambiguous behaviour to the syntactic-semantic properties of this construction. On the one hand, syntax is active, but on the other, this is a stative construal in which the possessor is not a prototypical Agent, but is assigned a [Sentient] theta-role (recall chapter 2).

A few instances can be found in Romance that might be considered counterexamples. Consider, for instance, the following data from Italian:

- (i) mi si sono sporcate le mani 1-sg-DAT. SE BE-3-pl dirty-PP the hand-pl "My hands became dirty"
- (ii) ho le mani sporche
 HAVE-1.sg the hand-pl dirty
 "I have dirty hands"

The example in (i) seems to suggest that, alongside the HAVE periphrasis, Italian also exhibits a possessive periphrasis with BE. However, cases like these are to be interpreted as resultatives and not as possessive *stricto sensu*: observe the presence of a resultative participial phrase (cf. Alexiadou 2001; Alexiadou & Anagnostopoulou 2008; Anagnostopoulou 1993, 2003 *et seq.*) Note also that the same cases are not grammatical if construed with an adjectival phrase:

(iii) * Mi sono sporche le mani 1-sg-DAT. BE-3-pl dirty the hand-pl

These data contrast with the Latin examples provided above, where the posessee in the nominative could be accompanied by an adjective. They cannot thus be considered as occurrences of the BE possessive periphrasis.

b. *Mi è la/una casa
1.sg.DAT BE-1.sg the/a-f.sg. house-f.sg.
c. *La/una casa è di me/del mio the/a-f.sg. house-f.sg.
BE-1.sg 1.sg.GEN

However, Standard Italian exhibits a number of locative constructions with auxiliary BE (sometimes expressed with its variant *stare* "stay" 124):

(25)è/sta i piedi [Italian] a. mi sempre tra 1.sg always-Adv. between the feet-pl BE/STAY-3.sg "He is always in my way" b. i piedi ho sempre tra Loc-cl. him-ACC. HAVE-1.sg always beween the feet-pl "I always have him in my way"

Spanish and European Portuguese do not exhibit any inactive construction of the kind exemplified in (25):

(26) * me está entre los pies [Spanish]
1.sg BE/STAY-3.sg between the feet-pl.
"He/it is in my way"

(27) *ele está entre os meus pés [E. Portuguese]
"He/it is in my way"

In these varieties, the active possessive verb is *ter/tener* "hold":

(28)Tengo casa [Spanish] una hold-1.sg. house-f.sg. a-f.sg. "I have a house" [E. Portuguese] (29)tenho uma casa 1.sg hold-1.sg. a-f.sg. house-f.sg. "I have a house"

Portuguese also displays an inactive construction formed by auxiliary *estar com* + a predicative complement. This periphrasis is specifically used to express states, such as "be hungry", "be sad", etc. and looks very much like the Latin periphrasis with the dative:

¹²⁴ For the diachronic development of STARE and its functional properties, see Cennamo 1993; Ledgeway 2008, 2009).

(30)estou saudade/fome/sede eu stay-1.sg with homesickness/hunger/thirst "I am homesick, hungry, thirsty"

Therefore, the Portuguese periphrasis is only used for expressing states, which might also be considered a sub-category of inalienable possession. Although this might seem to suggest that Portuguese has maintained the Latin inactive constructions, the estar periphrasis is actually a Portuguese innovation (Da Silva Dias 1841-1916; Moraes de Castilho 2005, among others), which cannot be etymologically linked to the Latin possessive construction. This Latin construction has thus been lost in all these Romance languages.

1.3.3 Languages with the BE and HAVE possessive periphrases

In some other Romance varieties, however, two possessive constructions coexist. This true of Standard French, as illustrated in (31) and of several USIDs, as exemplified in (32)125:

(31)	a.	Le		livre/	la		maison	
		the-m.sgl	book-m	.sg/	the-f.sg		house.f.sg	
		est			à moi			[French]
		BE-pres.i	nd.3.sg	•	1.sg-DA	ΛT		
		"I have th	ne book	the hous	se"			
	b.	J′		ai		un	livre	
		1.sg.NON	Л.	HAVE-	1.sg.	a-m.sg.	book-m.sg	
		"I have a	book"					
(32)	a.	ε	'ffiλλə		a 'tte		[Castro	dei Volsci]
		E-3.sg	son-m	ı.sg.	2.sg-D	AT		
		"He is yo	ur son"	•				
	b.	tengə		'nu		'fiλλia'		
		hold-1.sg	; .	a-m.sg		son-m.s	g.	
		"I have a	son"					

Although French and USIDs display the two possession strategies, there are specific restrictions on their distribution in both varieties:

¹²⁵ Observe that in many SIDs exhibit *tenere* "hold" is used for the active possessive construction, as it is in Spanish and Portuguese (Rohlfs 1969; Fanciullo 1984; Manzini & Savoia 2005; Ledgeway 2008, 2009, among others).

(33)*un livre/une maison [French] book-m.sg/a-f.sg house.f.sg a-m.sg est à moi BE-pres.ind.3.sg. 1.sg-DAT. b. J′ livre/ 1.sg.NOM. HAVE-1.sg. a-m.sg. book-m.sg une maison a-f.sg house-f.sg "I have a book/a house"

The French examples in (33) illustrate that the BE periphrasis is only licensed when the possessee is a definite DP, while only the active construction is possible with an indefinite DP (Jones 1996; Gledhill 2003). Moreover, the French BE construction is only possible when the possessor is a pronoun or a personal name:

(34) la maison est à moi/Jean/*la femme [French] the-f.sg house-f.sg BE-3.sg to me/John/the woman

This construction is broadly attested in Old French as well:

(35) ele fut a noble vassal [Rol. 1123] she-f.sg BE-past-3.sg to noble knight-m.sg "She belonged to a noble knight" (Bauer 2000 : 188)

Therefore, the distribution of the BE periphrasis in French is more restricted than in Latin. Despite the apparent similarities with the Latin periphrasis, the French construction does not descend from it. There is also a difference in meaning: while in Latin the main meaning is possession, the French construction renders more the idea of belonging (cf. Benveniste 1966). In SIDs, the inactive construction only occurs in the expression of inalienable possession (D'Alessandro & Migliori 2015)¹²⁶:

(36) a. 'Mariə t' ε 'fiλλə [C. dei Volsci]

Mario-m.3.sg 2.sg.-DAT. BE-3.sg son-m.sg.

"Mario is your son" (D'Alessandro & Migliori 2015)

¹²⁶ The same contrast also characterizes other Romance possessive constructions such as enclitic possessives (see Penello 2002; D'Alessandro & Migliori 2015) and a-prepositional genitive (cf. Delfitto & Paradisi 2009; Silvestri 2013a, b; D'Alessandro &

Migliori 2015).

-

b. j
$$\epsilon$$
 'fijjə a Pi'truttsə [Verbicaro] BE-3.sg son-m.sg to Pietruzzo-m.sg "È figlio di Pietruzzo" (Silvestri 2013b)

The development of the ESSEconstruction outlined above (recall Table II) might suggest a diachronic interpretation of the situation in SIDs. Given that this construction had already undergone a restriction in its usage in Latin, it is possible to hypothesize that SIDs still exhibit a stage in which this periphrasis was limited to a specific context (i.e. inalienable possession). Recall, indeed, that the change observed in Latin seemed to moving precisely in the direction of inalienable possession. From this perspective, the situation observed in SIDs contrasts with most Romance languages, in which the *mihi est* periphrasis has completely disappeared. However, at this stage, we have no empirical data to support this proposal, so we leave it open as one possible hypothesis. Finally, Romanian exhibits an inactive possessive construction that survives alongwide the active one (Niculescu 2008):

(37)	a.	Mihai	îi	este	naş	[Rom.]
		Mihai	3.sg-DAT	BE-3.sg	godfather	
		"Mihai	is godfather to hir	n"		
	b.	El îl	are	naş pe	Mihai	
		3.sg	HAVE-3.sg	godfath	er Mihai	
		"He has	"He has Mihai as godfather"			(Niculescu 2008: 494)

Also in this case, the dative possessive periphrasis exhibits auxiliary BE¹²⁷:

a.	Ion	îmi	este	frate		[Rom.]
	Ion	1.sg-DAT.	BE-3.sg	brother		
	"Ion is r	ny brother"				
b.	Capul	îi	este		frumos	
	head	3.sg-DAT	BE-3.sg		beautiful	
	"His hea	ad is beautiful"				
		Ion "Ion is 1 b. Capul head	Ion 1.sg-DAT. "Ion is my brother" b. Capul îi	Ion 1.sg-DAT. BE-3.sg "Ion is my brother" b. Capul îi este head 3.sg-DAT BE-3.sg	Ion 1.sg-DAT. BE-3.sg brother "Ion is my brother" b. Capul îi este head 3.sg-DAT BE-3.sg	Ion 1.sg-DAT. BE-3.sg brother "Ion is my brother" b. Capul îi este frumos head 3.sg-DAT BE-3.sg beautiful

¹²⁷ It is interesting that Niculescu (2008) proposes an Experiencer analysis for the argument expressing the possessor. This is along the lines of one of the core claims of this work, namely that Experiencer/location/possessor all pertain to the inactive field

(recall chapter 2).

-

c. Mi-e foame¹²⁸
1-sg-DAT-BE-3.sg. hunger
"I am hungry" (Niculescu 2008: 495)

However, in cases like (37-a) and (38-a), the value of BE is analogous to "function as". It cannot therefore be described as a possessive periphrasis *stricto sensu*. Another possible strategy for a possessive interpretation is a locative construction with dative:

(39) a. Copilul îi este aici [Rom.] child 3.sg BE-3.sg here

"The child is here to him = His child is here"

This fact provides us with further empirical evidence for the syntactic equivalence between locative and possessive (recall § 1.2).

¹²⁸ An analogous stative construction is also displayed in several southern Italian varieties, where *fare* often functions as the inactive functional element (cf. Cennamo 2006). This is true of some Lucanian-Calabrian dialects:

(i) Mə fa 'fama/'sita/'friddə [Verbicaro]
1.sg-DAT makes-3.sg hunger/thirst/cold
"I am hungry/thirsty/cold"

In these varieties, this is the semantically neutral construction for expressing a state. This is in stark contrast to Italian, where the same construction is only licensed with a restricted set of nouns and only in the presence of a presupposition/context:

(ii) *mi fa fame [Italian] 1.sg-DAT makes-3.sg hunger (iii) (*)mi fa paura = *without a given context 1.sg-DAT makes-3.sg fear

Alongside these, Italian also exhibits constructions with the serial verbs *mettere* "put", *venire* "come":

(iv) mi mette fame [Italian]
1.sg put-3.sg hunger
"It gives me hunger"

(v) mi viene fame1.sg come-3.sg hunger"I get hungry (literally "hunger comes to me)"

Here too, the construction can only be used in this particular context, i.e. to express a state. Moreover, in contrast to the simple HAVE possessive periphrasis, these constructions are associated with an inchoative reading. To sum up, all these stative periphrases seem to resemble a possessive periphrasis, but are in fact associated with a particular context and interpretation.

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With regard to its distribution, this structure can encode a variety of types of possession: Romanian thus looks less restrictive than other Romance varieties which exhibit the construction in a more limited set of contexts (Dobrovie-Sorin 1993; Daniliuc & Daniliuc 2000; Niculescu 2008). However, in modern Romanian the configuration with copular BE is typically limited to animate relational nouns. This contrasts with old Romanian, where the construction had a broader use, licensing inanimate relational DPs as well (Niculescu 2008):

This change might at first suggest that there is a tendency towards the restriction of contexts with which the inactive possessive construction can be associated. Despite this fact, this construction is still highly productive in modern Romanian.

1.4 Possessive periphrases: concluding remarks

On the basis of the empirical evidence observed, three groups of Romance languages can be identified, as far as the outcomes of Latin possessive constructions are concerned. The first set includes Ibero-Romance and Standard Italian, in which the inactive periphrasis disappeared. A second group comprises French and other Italo-Romance varieties: in these languages, the active periphrasis is the most common and productive strategy for expressing possession. However, remnants of the Latin inactive construction still survive in specific syntactic-semantic environments. Finally, Romanian can be considered to constitute its own category, as the distribution of the inactive periphrasis (alongside the active one) is more productive than in other Romance languages.

A comparison between the development of the possessive periphrasis in Latin and in modern Romance indicates that alignment changes played a decisive role in the diachronic development of these constructions as well. These data suggest, in fact, that the initial extension of the active domain first and the subsequent rise of the nominative/accusative alignment were essential factors for the changes in these possessive periphrases, as they were for perfective constructions.

Syntactically, this can be attributed to the gradual erosion of the inactive field¹²⁹. In the case of the possessive construction the possessor has the properties of a locative argument while it is the semantic subject of the predication. On the other hand, the possessee is the syntactic subject, while it displays the properties of an Undergoer. The change towards a nominative/accusative system meant a gradual correspondence between the active field and syntactic subjects, which increasingly became associated with[Spec, Voice]¹³⁰. This is the reason why the active structure with HAVE continued in Romance for possessive constructions. Conversely, the predicative structure with BE, which is essentially nominal, only survives in some relics and has otherwise basically disappeared.

To sum up, modern Romance is homogeneous in the preservation of the active possessive periphrasis. On the other hand, the inactive possessive periphrasis has been preserved in some varieties, where it is still used in a specific set of contexts. The development of possessive periphrases displays correspondences with the diachronic changes that affected perfective periphrases between Latin and Romance, in that its outcomes were determined by alignment changes.

2. Deontic constructions

Latin displays various periphrastic strategies formed by an indefinite verbal form accompanied by an auxiliary to express the idea of obligation/necessity¹³¹ (Gildersleeve & Lodge 1895; Allen & Greenhough

¹³⁰ Recall the reanalysis of Latin deponents discussed in chapter 2.

(i) Africam obtinere debebat [Caes. *BC* 1, 30 1]
Africa-f.sg.ACC. rule-inf.pres. must-ind.impf.

"He had to rule the province of Africa"

However, at this chronological stage, the most frequent meaning is "owe"

(ii) leno hic debet merchant-m.3.sg.NOM. this- m.3.sg.NOM owe-pres.ind -3.sg nobis triginta minas [Pl. Curc. 364] 1.pl-DAT. thirty mines-f.pl.ACC.

"This merchant of slaves owes us thirty mines"

The syntactic properties and the diachronic development of this construction look different from the periphrasis examined in this study. The diachronic rise of modal DEBERE + infinitive can instead be attributed to the development of modal verbs

¹²⁹ See § 3.1 in this chapter.

¹³¹ The constructions DEBERE + present infinitive is already attested in archaic and Classical Latin with a modal function, as shown in the following example:

1903; Palmer 1954, Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others). In this section, two main types of Latin deontic periphrasis wil be analysed: modal periphrases formed by gerundive/gerund + auxiliary, and constructions composed of present infinitive + auxiliary. An examination of the properties of these constructions will show that the Latin verbal system clearly displays an active/inactive contrast here too. Furthermore, the Romance outcomes of the periphrases under investigation will be discussed from a diachronic perspective, illustrating that alignment played a decisive role in their diachronic development.

2.1 Latin deontic periphrases with gerund/gerundive + auxiliary

One of the strategies used to express obligation in Latin consists of a periphrasis formed by gerund/gerundive¹³² + auxiliary ESSE. This construction is defined in the literature as "passive periphrastic construction" (Gildersleeve & Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others):

(41)dicenda tibi a. say-GRDV.n.pl.NOM. 2.sg-DAT. [Liv. IV, 40,9] BE-pres.ind.3.pl today-Adv. "You have to say these things today" b. facienda sunt this-n.pl.NOM. do-GRDV-n.pl.NOM. BE-3.pl casibus iis [Cel. Med. 8,25] them-m.pl.ABL. case-m.pl.ABL. "These things have to be done in such cases" moriendum c. est die-GRD.n.sg. BE-3.sg.pres.ind. [Cic. Tusc. 1, 9] enim omnibus in fact everyone-pl.DAT. "In fact, everyone has to die"

(NOLO/VOLO/MALO) between Latin and Romance (cf. Väänänen 1966). For this reason, this construction will not be considered in this study.

¹³² For the definition of "gerund" and "gerundive", see § 2.1.2 in this chapter.

d. res [...] de qua loquendum est [Quint. *In*.12,6] topic-f.sg.NOM. about which-f.sg talk-GRD BE-3.sg "The topic, about which it is necessary to talk"

As shown in the above examples, this periphrasis can either be formed with the gerundive (a-b) or with the gerund $(c-d)^{133}$. The alternation between these two forms is due to the presence vs. absence of an expressed *Undergoer*: the gerundive is licensed when a sentential subject (S_O) is present. This argument can either be implicit, as in (41-a), or explicit, like in (41-b): agreement on the verb unambiguously shows its presence in the structure. On the other hand, the gerund is found if the periphrasis is construed impersonally, as in (41-c,d). Observe that both with the gerund and with the gerundive, the optional agent can be expressed through a dative DP, as illustrated by the agents *tibi* "by you" in (41-a) and *omnibus* "by everyone" in (41-c). Alongside this construction, Latin also displays another deontic periphrasis with the gerund/gerundive. In this case, the functional element is auxiliary HABERE:

(42)agrum [...] colendum cultivate-GRDV.m.sg.ACC. campo-m.sg.ACC. habet [Ter. *Phorm*.361] HAVE-pres.ind-3.sg. "He has to cultivate a field" b. pugnandum habebam [Sen. Contr. 10,2] fight-GRD.n.sg.ACC. HAVE-impf.ind-1.sg "I had to fight"

In this case, the alternation between gerund and gerundive is the result of the presence vs. absence of an overt direct object: while the gerundive occurs with an explicit direct object, like in (42-a), the gerund occurs if a direct object is absent, as in (34-b).

In the following section, the differences between gerund and gerundive as well as their diachronic development will be discussed. This will allow a better understanding of their function and distribution within the Latin system as well as their development into Romance.

¹³³ The structural differences between these two verbal forms and their respective diachronic development will be discussed in detail in § 2.1.2 in this chapter.

2.1.1 Latin gerund and gerundive

The gerund and gerundive are both widely attested in Latin with deontic constructions, both in combination with aux ESSE and with aux HABERE. A better understanding of their properties will shed light not only on the reasons that underlie their alternation within the same construction, but also on the structure of the periphrases in which they occur. Morphologically, these two forms are the same: they are both formed by the durative stem + suffix - $(e)nd^{134}$ - + endings expressing number/gender/case (Gildersleeve & Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Leumann, Hofmann & Szantyr 1963; Hofmann, Rubenbauer & Heine 1995; Panhuis 2006, among others), as summarized in Table III:

Table III

able III				
	-a- paradigm	-ē- paradigm	-ĕ/ĭ- paradigm	-ī- paradigm
Gerund	neca-nd-i	mone-nd-i	vinc-end-I	audi-end-i
	"of murdering"	mone-nd-o	vinc-end-o	audi-end-o
	neca-nd-o	mone-nd-um	vinc-end-um	audi-end-um
	neca-nd-um	mone-nd-o	vinc-end-o	audi-end-o
	neca-nd-o			
Gerundive	neca-nd-us, a, um	mone-nd-us, a,	vinc-end-us, a,	audi-end-us, a,
	"be murdered"	um	um	um

Nonetheless, these two Latin verb forms exhibit distinct properties. The gerund is a member of the same category as the infinitive, since it can be seen as a "verbal noun" (Roby 1896; Wackernagel 1926; Hofmann & Szantyr 1972, Miller 2000). Since the Latin infinitive only has the nominative form, the gerund is used to conjugate the active infinitive:

¹³⁴ From the PIE suffix *-ndo (see Benveniste 1935; Cupaiuolo 1991, among others)

(43)	a.	NOM.	bib-e-re bonum est	
			"to drink is good"	
	b.	GEN.	bib-end-ī amor	
			"love of drinking"	
	c.	DAT.	bib-end-o aptum	
			"fit for drinking"	
	d.	ACC.	bib-e-re amō	
			"I love drinking"	
			inter bib-end-um	
			"amid drinking"	
	c.	ABL.	bib-end-ō defessus est	
			"he is worn out from drinking"	(Miller 2000: 295)

For this reason, the Latin gerund has often been defined in the literature as an "active verbal noun" (Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others).

The gerundive, by contrast, is usually referred to as a "passive verbal adjective", as it occurs associated with an argument with the properties of an Undergoer (Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others):

(44) Karthago delenda
Carthage destroy-GRDV
"Carthage has to be destroyed"

This classification is roughly correct at the synchronic level, as the gerund usually occurs in active contexts, whereas the gerundive is typical of inactive ones. Consider, for instance, the following contrast:

(45) a. Catonis cupiditas
Cato-GEN. desire-NOM.
Karthaginem delendi
Carthage-ACC. destroy-GRD-GEN.
b. Catonis cupiditas
Cato-GEN. desire-NOM.
Karthaginis delendae

Carthage-GEN. destroy-GRDV-GEN.
"Cato's desire of destroying Carthage" (Miller 2000:296)

In (45-a), the gerund, in the genitive, assigns accusative to the direct object. Conversely, in (45-b), the gerundive agrees in number, gender and case with

the Undergoer argument. This means that while the gerund has active properties, the gerundive occurs within an inactive structure. Even though this distribution is generally taken to be regular and systematic, quantitative and diachronic studies have shown that the situation is more complex¹³⁵. More specifically, it seems relevant that gerundive + accusative is far less frequent that the option with gerundive only, and that this structure is rare both in archaic and Classical Latin (cf. Kirk 1942, 1945; Miller 2000).

Therefore, the core questions of this section regard both the origin and emergence of the active construction with the gerund, and the diachronic relationship between the two forms in -nd-. In other words, we are looking to establish which form should be taken to be chronologically earlier than the other. This issue, which has been widely debated in the literature, is not only relevant from a diachronic perspective, but has significant consequences for our analysis as well, as it sheds light on the original structural properties of these verbal forms. This will help us to understand both their distribution in Latin and their outcomes in Romance.

2.1.1.1 Gerund-first or gerundive-first hypothesis?

According to the mainstream hypothesis, the oldest form in -nd- is the gerund (Roby 1896; Kirk 1942, 1945; Aalto 1949; Hahn 1943, 1965, 1966; Drexler 1962, among others). From this perspective, the clausal gerundive gradually derived from the (nominal) gerund at a certain chronological stage. This claim is based on the following arguments (here reported from Hahn's work (1943, 1965, 1966): (i) in other IE languages, clausal structures generally derive from nominal structures, thus that is also the case for the gerundive derived from the gerund (nominal); (ii) the gerundive arose by an ambiguity in agreement; (iii) the -nd- form in Latin seems to resist agreement in the case of neuters and some pronouns. Despite the validity of the first argument produced by the gerund-first hypothesis (cf. Gippert 1978, who showed that diachronic changes often move in this direction), neither the second nor the third argument is decisive in supporting the theory that the gerund came first. These facts can, in fact, also be explained from another perspective, as will be shown later in the chapter. It appears, then, that this mainstream hypothesis is not well supported by convincing arguments

Another major problem with this gerund-first hypothesis arises from the comparison with historical data from other IE languages, in particular, from

¹³⁵ For an exhaustive taxonomy concerning the distribution of the Latin gerund and gerundive, see, in particular Aalto (1949), Risch (1984a, b) and Vester (1991).

other Italic varieties¹³⁶. The empirical evidence seems to unambiguously indicate that the gerundive is the older form. This is particularly clear in the case of Oscan (Aalto 1949; Vetter 1953; Poccetti 1979), which is fortunately relatively well documented in this regard. Most interestingly, some Sabellian inscriptions contain the same syntactic uses of the gerundive attested in archaic Latin:

(46)	trííbúm.	ekak .	kúmben nieís .
	house-f.sg.ACC.	this	committee-GEN.
	tanginud .	úpsannam	deded .
	vote-ABL.	build-f.sg.GRDV.ACC.	gave-3.sg
	ísídum .	prúfatted	[Vetter 1953: 11.5, Pompeii]
	same-m.sg.NOM	I. approved-3.sg	
	[cf. Lat: domum] probavit]	hanc (dē) conventus senter	itial faciendam dedit, īdem
	"by vote of the co	ommittee, (the quaestor) pr	rovided (fundings) for building
	this house and (t	he same) approved it"	
(47)	portās	faciundās	dedērunt
	doors-f.pl.ACC.	make-GRDV.f.pl	.ACC. gave-3.pl
	eisdemque	probāvērunt	
	same-and	approved-3.pl	
		**	

[D 374, 3-4: Formiae, in Miller 2000: 307]

As pointed out by Poccetti (1981), this use of the gerundive is quite frequent in this type of text: both Oscan and archaic Latin data clearly show that the gerundial obligatorily agrees in number, gender and case with its referent: this means that the gerundive is attested very early. Instances of the gerund with an accusative direct object, by contrast, are not attested at this stage and only become frequent in the post-Classical period. This gerund construction can thus be considered an innovative trait of Latin (Miller 2000). Therefore, the gerund-first hypothesis does not seem tenable: both the low frequency of gerund constructions in archaic Latin and comparative data from Oscan suggest that the gerundive is th earlier form and that the gerund etymologically derives from it.

On the basis of these arguments, many studies have supported the theory that the gerundive predates the gerund (Draeger 1878; Harling 1960; Pariente

¹³⁶ For the location of the Latin language within the Italic linguistic scenario, see Palmer (1954), Cupaiuolo (1991), Sihler (2008), among others.

1981; Risch 1984a, 1984b; Poccetti 1981; Miller 1974, 2000, among others)¹³⁷, claiming that the inactive verbal adjective is the original form from which the verbal noun etymologically descended. From this perspective, the structural properties of these verbal forms can be more clearly understood: the fact that the gerund derives from the inactive gerundive suggests that the gerund might also have been inactive, at least originally. This is relevant for the analysis of the deontic constructions in which this form occurs: the probable inactive origin of this form can, in fact, explain its occurrence in certain inactive contexts like the so-called "passive periphrastic construction":

The occurrence of aux ESSE together with an optional agent in the dative (*omnibus*, "everyone") demonstrates the inactive nature of this construction. It therefore seems possible to argue that the gerund originally displayed some inactive properties which have been preserved at least in some constructions, whereas the form gradually shifted towards the active domain.

If the gerundive-first hypothesis is correct, which seems to be the case on the basis of historical data, a question then arises concerning the origin of the "active" nature of the gerund form, which is never attested in archaic Latin or other Italic languages with an accusative direct object. An answer can probably be found in a process of syntactic reanalysis (in the sense of Roberts & Rousseau 2003; Roberts 2007) that caused the reinterpretation of a default form of the gerundive as a verbal nominal (gerund) (Miller 2000). In other words, gerundive forms not displaying agreement (i.e. in *–um*), often occurring in impersonal constructions, have gradually been reanalysed as active deverbal nouns, as schematized below:

(49)
$$NP + Gerundive + V > [NP + Gerund] + V$$

-

¹³⁷ Some studies have also proposed a hypothesis according to which the two forms arose simultaneously (see Hettrich 1993, among others). However, this proposal does not seem to be supported by the comparative empirical evidence shown above, which indicates that the gerundive is older.

The causes of this change can be found in the occurrence of default gerundives in a number of ambiguous contexts. A first possible factor may be the fact that Latin regularly allows null object constructions, both with finite and non-finite verbs. When this happens in the case of gerundives, it renders them barely distinguishable from gerund structures (cf. also Kirk 1945):

(50) quandō accūsandō fierī since accuse-GRDV. become-pres.inf.

īnfectum nōn potest, ignōsce [Ter. *Ph*.1034-35] undone-PP non can-3.sg forgive-imp.pres-2.sg

"Since it cannot be undone by reproaching (him), forgive (him)"

In (50), the gerundive must agree with a dropped Undergoer subject: *accusando* (*eo*). However, the lack of argument makes the context ambiguous from a morphological point of view, as *accusando* can equally be analysed as a gerund or as a gerundive. Notice, moreover, that in this specific case, the coordination of the verb with another transitive accompanied by a dropped object, *ignosce* (*eum*) "forgive him", can be considered as an extra factor that plays a role in the reanalysis of the gerundial form as an active one. Such ambiguous cases are extremely frequent in Latin, to the extent that they functioned as the basis for syntactic reanalysis. They have thus been gradually reinterpreted by speakers as displaying an active verbal noun (with lack of agreement) in combination with an implicit structural object, instead of exhibiting a gerundive with a dropped Undergoer (cf. Kirk 1945; Miller 2000). A second factor that might have triggered the extension of gerund + accusative can be detected in instances of conjoined objects displaying a mismatch in φ-features:

(51)portās turreis moirōs | gate-f.pl.ACC. tower-f.pl.ACC. wall-m.pl.ACC. turreis-que aeguās gum moirō tower-f.pl.-AND level-f.sg.ACC. with wall-m.sg.ABL. [CIL I²1722/9.1140] faciundum coerāvērunt build-ger.sg.neut.take charge-perf.3.pl. "They were in charge of building gates, towers, walls and levelled towers with a wall"

In the example in (51), the gerundial must agree with a number of coordinated direct objects (*portas, turreis, moiros* and *aequas turreis*) exhibiting different gender/number specification. In this syntactic context, where the conjoined DP is formed by two or more referents, Latin often resolves the indeterminacy

with default agreement: faciundum exhibits a (n., sg.) ϕ -feature specification¹³⁸. Therefore, the neuter singular gerundive was often used as a strategy for the resolution of φ-feature mismatches. Observe that a default gerundive and a neuter gerund look exactly the same from a morpho-phonological point of view: one of the core characteristics of the gerundive, indeed, is that it must agree with its referent. If the agreement gives a default form as a result, as in the example above, it is no longer possible to distinguish between the two verbal forms. Nonetheless, the chronology of such cases (consider the archaic character of the morphological form) strongly suggests that we are still dealing with gerundives, as unambiguous examples of transitive gerunds are not yet attested yet at this stage. The high frequency of this construction, combined with the fact that it is attested at a very early stage, is likely to have functioned as an additional trigger for the reanalysis of the neuter gerundive as an active verbal form. On the basis of the morpho-phonological string, an example like (51) might have been reanalysed a gerund accompanied by a number of accusative objects¹³⁹. Furthermore, the occurrence of an explicit direct object is generally not attested with a gerund in active deontic constructions:

(52) a. agrum [...] colendum
field-m.sg.ACC. cultivate-GRDV.m.sg.ACC.
habet [Ter. *Phorm.* 361]
HAVE-pres.ind-3.sg.
"He has a field to be cultivated = He has to cultivate a field"

¹³⁸ Different resolution strategies are adopted in verb/subject agreement with two conjoined subjects. In this context, the agreement type depends on the kind of coordination: while full agreement occurs with the conjunction *et*, partial agreement is displayed with the conjunction *-que*. This is related to the different syntactic properties of these two operators, and can be observed on finite verbs, as well as on auxiliaries (cf. Migliori, submitted).

¹³⁹ With these empirical observations in mind, recall Hahn's arguments outlined at the beginning of the section: (a) the gerundive arose from an ambiguity in agreement; (b) the *-nd-* form in Latin seems to resist agreement in the case of neuters and some pronouns. The first statement is not consistent with the empirical evidence: in fact, cases of agreement mismatch show that a gerund came to substitute a gerundive and not the other way around. The same holds for the second argument: the frequency of gerundives with plural neuter features must be associated to cases of mismatch in gender (Miller 2000). Hahn's arguments in favour of the gerund-first hypothesis do not in fact provide support for her theory: instead, interpreted from the correct perspective, they show that the gerundive developed first.

b. pugnandum habebam [Sen. Contr. 10,2] fight-GRD.n.sg.ACC. HAVE-impf.ind-1.sg "I had to fight"

These data provide us with a further argument in support of the gerundivefirst hypothesis outlined above. Moreover, they once again show that object drop occurred in Latin so often that it could constitute the basis for syntactic reanalysis (Kirk 1945; Vester 1991). A final factor that is likely to have been relevant for the development of gerund + accusative is the ambiguity in interpretation evident in some contexts, such as in the example below:

(53) macel[amque] . opidom |

Macela-sg.ACC. town.ACC.sg.

[p]ucnandōd cēpet

storm.ger.ABL.sg. take-perf.3.sg.

"and he took the town Macela by storming"

[D 271 in Miller 2000: 318]

The example in (53) can be interpreted in two different ways¹⁴⁰: either "and he took the town Macela by storming" or "by storming the city Macela, he took (it)". The second possible reading, with a dropped direct object for *cepet* "he took", necessarily implies the presence of a neuter gerundive ([p]ucnandōd) in combination with an accusative object (opidom). Examples of this type might therefore also have functioned as cues for the reanalysis of the gerund as an active verbal form. To sum up, the rise of the gerund as an active verbal form must be the result of the syntactic reanalysis of a number of ambiguous contexts. Syntactically, the change is from an inactive structure to an active one:

(54) [Gerundive] > [GerundP [VoiceP NP [Gerund]]

As shown in (54), the reanalysis of the gerundive as an active verbal structure involved syntactic rebracketing (cf. Hopper & Traugott 1993, 1995). Namely, the NP, originally occupying the IA position, is reanalysed as the prototypical EA, located in [Spec, VoiceP]. Therefore, an extra-functional layer is added to the structure, which thereby becomes active. Moreover, this process also makes the IA position available again, allowing the presence of a direct object

 140 According to Miller (2000), this is because of changes in word order (Miller 2000: 318 and ff.).

(which is possible with the gerundive). To sum up, because of the ambiguous cases illustrated above, the gerundive has been reanalysed as active, giving rise to a novel deverbal noun, the gerund. In this way, this clause, which was originally not compatible with VoiceP, became able to select the active functional head and hence to assign structural accusative case.

The diachronic development of these verbal forms displays similarities with other aspects of the Latin verbal system: recall that an analogous reanalysis process (inactive > active) has been observed for deponent verbs and perfective periphrases. Once again, the rise of the active alignment seems to have played a crucial role, pushing the reanalysis of a number of ambiguous cases in the same direction.

In light of these empirical and theoretical observations it is possible to claim that the gerundive chronologically precedes the gerund. The fact that the gerund derives from the gerundive shows that this verbal form was probably inactive as well, and that the original difference between these two forms was simply their category (verbal vs. nominal adjective). Diachronic empirical data seem to confirm this fact: the development of an "active" gerundive, which also licenses the presence of an accusative object looks like an innovative trait of Latin, which is not attested in other Italic varieties. Finally, the fact that this change followed the same direction as other diachronic processes that affected the Latin verbal system (i.e. inactive > active) provides us with a further argument in support of the key role of alignment oppositions within the Latin verbal system.

2.1.2 The syntax of Latin deontic constructions with gerund/gerundive

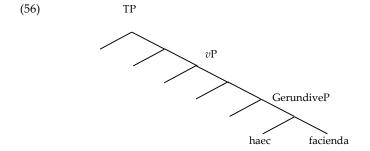
As shown in the previous sections, the gerund and gerundive occur in several periphrases expressing the idea of obligation/necessity. This is the case of the so-called "passive periphrastic construction", formed by gerund/gerundive + aux ESSE:

(55) a. dicenda tibi
say-GRDV.n.pl.NOM. 2.sg-DAT.
sunt hodie [Liv. IV, 40,9]
BE-pres.ind.3.pl today-Adv.
"You have to say these things today"

b. haec facienda sunt this-n.pl.NOM. do-GRDV-n.pl.NOM. BE-3.pl [Cel. Med.8,25] in iis casibus Dem.-m.pl.ABL. case-m.pl.ABL. in "These things have to be done in such cases" moriendum c. die-GRD.n.sg. BE-pres.ind.3.sg enim omnibus [Cic. Tusc. 1, 9] in fact everyone-pl.DAT. "In fact, everyone has to die" d. res [...] de qua loquendum est [Quint. In.12,6] topic-f.sg.NOM. about which-f.sg talk-GRD BE-3.sg "The topic, about which it is necessary to talk"

(55-a,b) are examples of this "personal construction": both the gerundive and the auxiliary display agreement with the *Undergoer* argument, generally expressing "the thing that has to be done". By contrast, in (55-c,d) the gerund and the auxiliary occur with default features. In both cases, the optional agent is a DP in the dative case. Note that the distribution of the two verbal forms is clear cut: while the gerundive always shows agreement with its referent, the gerund has the properties of a nominal and only occurs in impersonal constructions.

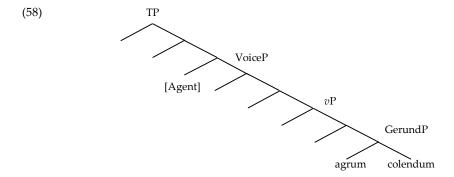
Independently from the personal vs. impersonal character of the deontic construction, the periphrasis formed by gerund/gerundive + ESSE always reflects an inactive syntactic structure: the focus is on the action, which is generally encoded by a mono-argumental configuration lacking a prototypical external argument:



The agent, which can possibly be expressed in the dative, is not essential in this argument grid and constitutes an optional syntactic constituent (see, for instance, (55-d)). The fact that the gerundive can participate in this structure can be explained in diachronic terms in that this verbal form was originally inactive. By contrast, the deontic periphrasis formed by gerund/gerundive + HABERE displays different properties:

(57)colendum agrum [...] a. field-m.sg.ACC. cultivate-GRD.m.sg.ACC. [Ter. Phorm. 361] habet HAVE-pres.ind-3.sg. "He has a field to be cultivated = He has to cultivate a field" b. pugnandum habebam [Sen. Contr. 10,2] fight-GRD.n.sg.ACC. HAVE-impf.ind-1.sg "I had to fight"

In this kind of construction, the sentential subject always coincides with Agent and is expressed in the nominative. Differently from what has been observed for the inactive periphrasis, in this case the agentive argument cannot be omitted. Observe, moreover, that an accusative direct object is licensed, as shown in (57-a). These facts clearly suggest an underlying active structure:



In this periphrasis, the alternation between gerund and gerundive is determined by the absence vs. presence of an explicit direct object: while the gerund occurs when an object is not present, (57-b) a gerundive is exhibited when a structural object occurs, (57-b). Note, however, that this argument is licensed by HABERE and that the gerundive only functions as inactive verbal adjective (*Predicativum*). The option with an explicit direct object is

sporadically attested in Classical Latin (Kirk 1945; Vester 1991). This asymmetry in the distribution provides us with a further argument in favour of the gerundive being inactive, as this form does not seem to occur within an active construction. On the other hand, the gradual movement of the gerundive towards the active domain clarifies the acquisition of transitive properties by this verbal form, which appears to occur in active periphrases:

(59) pugnandum habebam [Sen. Contr. 10,2] fight-gerund.n.sg.ACC. HAVE-impf.ind-1.sg "I had to fight"

The deontic construction formed by gerund/gerundive + HABERE is far less frequent than that with auxiliary ESSE. Two observations help to shed some light on this fact. Firstly, quantitative studies show that the gerundive is much less apt to function as a *praedicativum* than the perfect participle (Vester 1991). Secondly, the frequent association of these verbal forms with an inactive periphrasis seems to confirm the original inactive character of them both. It seems plausible, then, to argue that the gerund/gerundive + HABERE periphrasis is chronologically innovative with respect to the inactive one and that it emerged as a consequence of the gradual reanalysis of the gerund as an active nominal. The expansion of the active domain therefore also seems to have played a crucial role in this respect¹⁴¹:

ESSE: inactive // HABERE: active

However, the intrinsic inactive character of the gerund/gerundive, combined with competition from the active deontic construction formed by HABERE + present infinitive¹⁴², did not allow the HABERE-periphrasis to become significantly productive.

To sum up, Latin deontic constructions with gerund/gerundive display an active/inactive contrast as well: while the inactive periphrastic construction reflects a non-agentive syntactic configuration, the periphrasis with HABERE corresponds to active syntax. Here too, the active/inactive opposition is expressed in Latin through the alternation of the functional elements HABERE (active) vs. ESSE (inactive). Furthermore, the development of the active periphrasis can probably be understood as one of the consequences of the expansion of the active domain within the Latin verbal system. Therefore, the

¹⁴¹ Recall chapter 3, about the extension of HAVE as an active marker.

¹⁴² See § 2.2 in this chapter.

development of deontic constructions with the gerund/gerundive seems to confirm, once again, that alignment changes were crucial for the development of the Latin verbal system.

2.2 Deontic periphrases with present infinitive (PI)

Another modal strategy attested in Latin is a periphrasis formed by auxiliary + present infinitive (PI hereafter), which can either occur with auxiliary HABERE, as exemplified in (60) or with auxiliary ESSE, as shown in (61):

(60)	a.	quid			habes		
		what-n.sg.ACC.		HAVE-pres.ind-2.sg			
		igitur		dicere			
		then			say-pre	s.inf	
		de	Gaditano			foedere	[Cic. Bal.33, 5]
		about	of Cadiz-n.	.sg.AE	BL.	deal-n.sg.A	BL.
		"What	could you sa	y abo	ut the de	al regarding	Cadiz?"
	b.	habeo	-	•	etiam	dicere	[Cic. Rosc. 100]
		HAVE-	1.sg.pres.ind	l.	also	say-pres.in	f
			d also add′				
	c.	si	inimicos			iubemur	
		if	enemy-m.p	ol.AC	C. order-pres.inc		ind-1.pl- <i>r</i>
		diligere	2,		quem		
		love-pr	es.inf.		chi-ACC.		
		habemi	us		odisse ¹⁴³ ?		[Tert. <i>Apol.</i> 37,1]
		HAVE-	1.pl.pres.ind		hate-inf.perf.		
		"If we a	are ordered t	o love	our enemies, whom do we have to		
		hate?"					
(61)	a.	neque	est te		faller	e	[Verg. Georg. IV, 44]
	and not BE-3.sg 2.sg.AC		CC. deceive-pres.inf.				
		"And it	t is not possik	ole to	deceive y	you"	
	b.	quantu	m dinosce	ere		erat	[Val.Max. 2,6,8]
		how m	uch disting	uish-p	res.ind.	BE-3.sg.impf	ind.
			as it was pos	•		~ .	
	ı						

¹⁴³ The verb *odi, odisse* is only available in the perfect as it etymologically derives from a PIE perfect with stative meaning (Kühner, Holzweissig & Stegmann 1879; Allen & Greenhough 1903; Cupaiuolo 1991; Hofmann, Rubenbauer & Heine 1995; Panhuis 2006, among others).

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c. ante enim est firstly-Adv. BE-3.sg.pres.ind. in fact scire quibus rescribere know-pres.ind. which-pl.DAT. write back-pres.inf. habeam [Cypr. Epist. 33, 2] HAVE-1.sg.pres.subj. "First of all, it is necessary to know the ones to whom I have to write back"

Differently from the HABERE + PI construction, the periphrasis with ESSE + PI can only be construed impersonally:

(62) a. *sum scire

BE-1.sg.pres.ind. know-pres.inf
b. habeo scire

HABERE-1.sg.pres.ind. know-pres.inf

"I could/ have to know"

Therefore, in the case of ESSE + PI, there is never a correspondence between the Agent of the action expressed and the sentential subject of the clause. The ESSE + PI periphrasis thus displays different characteristics from the HABERE + PI construction, in which the sentential subject and the Agent always coincide. These observations suggest that the two periphrases exhibit crucial differences in their syntactic properties.

2.2.1 Auxiliary HABERE + Present Infinitive

The periphrasis formed by auxiliary HABERE + PI is already attested during the Classical age:

(63) de divis [...] habeo dicere [Cic. *Deor.*1, 63, 25] about gods-m.pl.ABL. HAVE-1.sg say-pres.inf.
"I could add something about the gods"

Nonetheless, this construction is not particularly common at this chronological stage: in fact, only 13 attestations have been counted for this period (cf. Hertzenberg 2009: 375). A significant extension in the usage of the periphrasis took place starting from the 1st to the 2nd century AD, as clearly shown by quantitative studies (Thielmann 1885; Coleman 1971, 1976; Hertzenberg 2009). Consider, for instance, Table IV, which summarizes the

evidence collected by Hertzenberg (2009) on the basis of a considerable corpus of data:

Table IV – Attestations of HABERE + PI in Latin (on the basis of Hertzenberg 2009: 375)

	Number of attestations	Meaning
Classical age	13	possibility/deontic
Post-Classical age	10	possibility/deontic
Late Latin	299	mostly deontic/prospective

These figures illustrate the gradual and constant expansion of this construction, which became increasingly frequent until it became commonplace from the 2nd century onwards. Alongside this extension in frequency, a broadening of the semantic values associated with the periphrasis over time can also be observed. During the Classical age, the main interpretation indicated ability/possibility, as shown in the examples from Cicero given below:

- (64) nihil habeo ad te scribere [Cic. Att. 2,22] nothing HAVE-1.sg to 2.sg-ACC. write-pres.inf.

 "I could not write anything to you"

 (65) item in multis hoc rebus similarly-adv. in many-ABL. this-n.sg.ACC. things-f.pl.ABL.
 - dicere habemus [Lucr. VI 711] say-pres.inf. HAVE-1.pl

"in the same way, we could say this with many arguments"

However, an obligation/necessity reading also seems to be appropriate in several cases attested during this period (Thielemann 1885; Coleman 1971, 1975):

(66) de divis [...] habeo dicere [Cic. *Deor.*1, 63, 25] about gods-m.pl.ABL. HAVE-1.sg say-pres.inf.
"I could/have to add something about the gods"

The obligation interpretation could, in fact, also fit the example from Cicero provided in (64). As pointed out by Coleman (1971: 217), "the function of the construction during the Classical age is difficult to define neatly and is tangential to possibility/obligation". This means that this periphrasis is already related to the modal domain at an early stage, with a range of

meanings spanning from possibility to necessity¹⁴⁴. A diachronic look at the data shows that the obligation reading of the periphrasis becomes more and more established over time (cf. *TLL*, *DML*, Hertzenberg 2009). Some examples of late Latin are provided below:

- (67)si inimicos iubemur diligere, if enemies-m.pl.ACC. order-pres.1.pl-r love-pres.inf odisse? [Tert. Apol. 37,1] quem habemus chi-ACC. HAVE-1.pl.pres.ind. hate-inf. perf. "If we are ordered to love our enemies, whom do we have to hate?" b. Christus [...] at vero nasci but in truth-adv. Christ-m.sg.NOM. be born-pres.inf-*r*
 - habuit
 HAVE-perf.ind-3.sg
 "But Christ had in truth to be born..."

[Tert. Carn.6]

Unlike the examples dating from the 1st century BC, the meaning of which oscillates between different modal nuances, the examples in (67) can only be interpreted with a necessity/obligation reading. This is particularly evident in (67-a), where the HABERE + PI periphrasis is used as a synonym of the verb iubeo "command" in a clear parallelism. This correspondence indicates that the required interpretation for the periphrasis is deontic. The same observation can be made about (67-b). In this passage, the Christian author is talking about the Virgin Mary "from whom Christ had to be born", according to God's plan of salvation. Here too, it is clear that a reading indicating necessity fits the context, whereas a possibility reading does not seem appropriate. The increasing frequency of unambiguous examples like these during the Imperial age provides us with evidence that the construction underwent a more definite semantic change towards a necessity interpretation (Thielemann 1885; Coleman 1971, 1976; Hertzenberg 2009). Finally, between late and medieval Latin this periphrasis underwent a further semantic development. Starting from a deontic interpretation, the construction gradually acquired a de futuro reading. This development is well attested in medieval Latin (cf. DML): consider, for instance, the example in (68) (7th century AD):

¹⁴⁴ This is quite interesting from a typological perspective as it is relatively rare crosslinguistically to find a single modal periphrasis expressing two different values. The Latin data should probably be interpreted from a diachronic perspective and be understood as the result of a change that was underway affecting this construction.

(68) neque mori adhuc habes [Bed. HE IV 22] and not die-pres.inf. so far-adv. HAVE-2.sg`
"And you will not die so far"

This last stage is particularly relevant for later diachronic developments affecting the construction, as this passage constitutes the basis for the development of Romance future/conditional forms¹⁴⁵. Note that the deontic reading does nevertheless continue to coexist together with the prospective reading in medieval Latin:

(69) quaecumque illi debebantur
whatever-n.pl.NOM. Dem.3.sg-DAT. owe-impf.ind.3.pl-r
supplicia tu solvere habes [Bed.HE I,7]
punishment-n.pl.NOM. 2.sg-NOM. remit-pres.inf. HAVE-2.sg
"Whatever punishments are own to him, you have to remit (his sins)"

Moreover it has been shown in the literature that the development of different readings for this construction was also related to word order. More specifically, in the deontic/*de futuro* interpretation HABERE generally preceded the PI, whereas with the possibility reading, the auxiliary followed it (cf. Adams 1991). To sum up, the semantic values of the HABERE + PI periphrasis extended throughout the time along the following path:

(70) ability/possibility > obligation/necessity > prospective value

During the Classical age, the periphrasis had a modal value that spans across ability and obligation (with a preference for the former interpretation). Starting from the Imperial age, the construction increasingly came to be associated to a deontic interpretation, which can be considered to be steadily established from the 2nd century onwards, as illustrated by Christian authors. Finally, starting from a deontic reading, HABERE + PI acquired a *de futuro* interpretation in medieval Latin, which eventually gave rise to the Romance future and conditional¹⁴⁶. This gradual change went hand in hand with an

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¹⁴⁵ See § 2.3 in this chapter.

¹⁴⁶ For a discussion of the relationship between the development of the future and the rise of the conditional, see Bourova (2005, 2007), Bourova and Tasmowski (2007), in which this diachronic change is analysed on the basis of an extensive corpus of data.

extension in the usage of the construction, which became an established modal strategy within the Latin language over time.

In syntactic terms, this periphrasis reflects an active configuration: its sentential subject always coincides with the Agent of the event and constitutes an essential argument of the thematic grid:

[TP [VoiceP [vP [InfP]]]]]

Note that this periphrasis can never be construed inactively:

(72) *aliquid dicere habetur something-n.3.sg.NOM. say-inf. HAVE-3.sg-*r*

The gradual extension of this construction throughout the system can therefore be attributed to the expansion of the active domain within the Latin verbal system, as occurred with other verbal structures (cf. perfective periphrases, deponent verbs, gerundives). The chronological development of the Latin verbal domain thus looks to be a coherent process, involving different kinds of constructions in a consistent way.

2.2.2 Auxiliary ESSE + present infinitive

Next to the HABERE + PI periphrasis, Latin also displays a modal construction formed by auxiliary ESSE + PI:

(73)a. neque est and not BE-3.sg-pres.in. te fallere [Verg. Georg. IV, 44] 2.sg.ACC. deceive-pres.inf. "And it is not possible to deceive you" b. quantum dinoscere [Val.Max. 2,6,8] erat how much distinguish-pres.inf. BE-3.sg.impf.ind. "As far as it was possible to distinguish"

As with the HABERE + PI periphrasis, an evolution can also be observed here regarding the interpretation of the construction. While in Classical Latin, this structure is generally found with a possibility/ability interpretation, like in (66), a deontic reading becomes increasingly frequent in Imperial and late Latin. An clear example of this development can be found in Cyprianus (3rd

century AD), in a passage where both the HABERE and periphrases are unambiguously used for indicating necessity/obligation:

(74)ante est enim firstly-Adv. BE-3.sg.pres.ind. in fact rescribere scire quibus know-pres.inf. which-pl.DAT. write back-pres.inf. habeam [Cypr. Epist. 33, 2] HAVE-1.sg.pres.subj. "First of all, it is necessary to know the ones to whom I have to write back"

The diachronic development of the two constructions thus displays significant similarities in terms of semantics.

Nevertheless, these constructions differ in their structural properties: while HABERE + PI reflects an active syntactic structure, the periphrasis with ESSE can only be construed impersonally:

In this case, the sentential subject does not coincide with the Agent, as the sentence is impersonal. The subject is, in fact, a null argument with 3.sg specification; in semantic terms a free variable bound to a generic operator, which gives the impersonal interpretation (cf. Heim & Kratzer 1998; Reinhart 2002). If the optional agent is specified, this event participant is expressed through a dative DP:

(76) nec sit mihi
and not BE-2.sg.subj.pres. 1.sg-DAT.
credere tantum! [Verg. Ecl. X, 4]
believe-pres.ind. that much-Adv.
"that I don't have to believe up to that point!"

Note, however, that this element is not essential to the thematic grid and can easily be dropped without losing grammaticality, as shown in (73). The structure thus displays relevant structural similarities with the impersonal deontic constructions examined in section 2.1:

To sum up, while the periphrasis with HABERE + PI reflects active syntax, the modal construction with ESSE, which can only be impersonal, displays the characteristics of an inactive structure. Latin therefore clearly also exhibits an active/inactive alignment contrast in the case of deontic constructions with present infinitive, which is morphologically expressed through the alternation of the functional elements HABERE (active) vs. ESSE (inactive). In the following section, it will be illustrated that this fact has also been crucial in the diachronic development of these constructions.

2.3 Deontic constructions between Latin and Romance

This section focuses on the Romance outcomes of the Latin deontic periphrases examined above. An overview of the presence vs. absence of a direct continuation of these constructions is provided in Table V:

Table V – Romance outcomes of Latin deontic constructions

Deontic periphrases	Italian	French	Spanish	Portuguese	Romanian
Gerund/Gerundive + E	X	X	X	X	X
Gerund/Gerundive + H	X	X	X	X	X
PI + H	√	√	√	√ (with ter)	X
PI + E	√	√	X	X	Χ

2.3.1 Deontic constructions with gerund/gerundive in Romance

The deontic constructions with the gerund/gerundive, which were common in Latin, disappeared in modern Romance (Harris 1976; Väänänen 1966; Egerland 2010, among others). The gerundive, in particular, has nearly completely died out as a verbal form in itself and survives only in a few residual lexicalised forms, which still express the original prospective/deontic meaning:

(78) dottorando/a [Italian]

doctor-nd-m.sg/f.sg

"the one who is about to become a doctor"

(79) laureando/a graduate-nd-m.sg./f.sg.
"the one who is about to graduate"

(80) nubendi marry-nd-m.pl"the ones who are about to marry"

The gerund, on the other hand, maintained its productivity in several old and modern Romance varieties. This form, which derives from the ablative of the Latin gerund, is generally associated with several clausal functions, such as instrumental, concessive, causal, modal (Väänänen 1966; Harris 1976; Egerland 2010; Adams 2014). Consider, for instance, the continuing use of the gerund to express an instrumental clause from Latin, (81), to Old Italian, (82), to modern Italian, (83):

(81) erudiunt iuventutem
educate-3.pl.pres.ind. youth-f.sg.ACC.
venando, currendo [Cic. *Tusc.* 2, 14]
hunt-GRD-ABL. run-gerundive-ABL.
"They educate the youth by hunting, running ...

- (82) in notificando la tua condizione
 by make known-GRD the-f.sg your-f.sg condition-f.sg
 "By making your condition known" [Old It., Egerland 2010]
- (83) sono arrivato correndo [Italian]
 BE-1.sg arrived-PP run-GRD
 "I have arrived running"

Note, moreover, that the Romance outcomes of the gerundive and the gerund continue to behave differently with respect to agreement: while in the examples in (78)-(80) the deverbal adjective agrees with the referent, this is not the case for the gerund in (81)-(83), which never displays morphological agreement as it maintains its nominal properties as in Latin.

The same functions of the gerund can be observed in the rest of Romance, in which this verb form generally expresses a temporal/causal/modal/concessive clause, sometimes acquiring a quasi-adverbial meaning. Consider, for instance, the following cases from Romanian (Daniliuc & Daniliuc 2000):

- (84) a. Îşi aşteaptă prietenul citind [Romanian] [him] is waiting friend-the reading-GRD. "He is waiting for his friend reading"
 - Plimbându-se prin pădure a răcit
 walking-GRD-refl. thourgh forest got a cold-3.sg
 "Walking through the forest, he got a cold"
 - Uitându-se înapoi a văzut accidentul looking-GRD-refl.back saw-3.sg accident-the "Looking back, he saw the accident"
 - d. Lăsând uşa deschisă, vei auzi toată discuţia letting-GRD. the door open-f.sg will hear entire-f.sg the discussion "Leaving the door open, you will hear the entire discussion"

Despite the productive persistence of the gerund in these contexts, the association of this verbal form with an auxiliary to express a deontic reading is no longer attested. It is thus possible to conclude that modern Romance has developed consistently in losing the deontic constructions with the gerund/gerundive.

2.3.2 PI + HABERE: Romance outcomes

While the deontic periphrases with the gerund/gerundive have completely disappeared from Romance, those formed by PI + aux do have some Romance outcomes. In particular, the prospective interpretation of aux HABERE + PI gave rise to the Romance future/conditional paradigms. In fact, as is well known from the literature, all these synthetic forms descend from a present infinitive + a reduced form of HABERE (Thielemann 1885; Valesio 1968; Coleman 1971; Lanly 1973; Harris 1978; Pinkster 1987; Ramat 1987; Adams 1991; Roberts 1993; Maiden 1996; Loporcaro 1999; Bentley 2000; Nocentini 2001; Bourova 2005, 2007; Bourova & Tasmowsky 2007; Haverling 2010, among others), as exemplified below:

A comparative overview of this development is provided in Table VI (from Ledgeway 2012: 135):

Table VI - The rise of Romance future forms

Late Latin	French	Italian	Occitan	Portuguese	Spanish
cantar+a(i)o	chanterai	canterò	cantarai	cantarei	cantaré
cantar+as	chanteras	canterai	cantarás	cantarás	cantarás
cantar+at	chantera	canterà	cantará	cantarás	cantará
cantar-emo	chanterons	canteremo	cantarem	cantaremos	cantaremos
cantar-etes	chanterez	canterete	cantaretz	cantareis	cantereis
cantar-ant	chanteront	canteranno	cantaren	cantarão	cantarán

As shown in the table, most Romance future forms descending from this construction became synthetic. However, there are some Romance varieties in which the future displays an analytic form, such as Sardinian and southern Italian dialects¹⁴⁷, for instance:

(86)	de(v)o	cantare	[Sardinian]
	must-1.sg	sing-inf.	
	"I will sing"		
(87)	ajja	cantà	[Abruzzese]
	HAVE-1.sg	sing-inf.	
	"I will sing"	-	
			(Ledgeway 2012: 135)

Alongside these future forms, some Romance languages display a deontic periphrasis similar to Latin HABERE + PI:

(88)	Но	da fare		[Italian]
	HAVE-3.sg	to do-inf.		
	"I have to do"			
(89)	a	dda passa'	a nuttatə	[Neapolitan]
	HAVE-3.sg	to spend-pres.inf.	the night	
	"He must overco	ome the night"		
(90)	J′ ai	beaucoup	à faire	[French]
	1-sg HAVE-1	.sg much	to do-pres.inf.	
	"I have much to	do"		
(91)	Hemos	de estudiar		[Spanish]
	HAVE-1.pl	to study-pres.inf.		
	"We have to stud	dy"		

¹⁴⁷ Several SIDs, however, used to exhibit the synthetic *cantare habeo* future, which died out over time (cf. Loporcaro 1988, 1999).

Although these forms probably do not directly descend from the Latin periphrasis, their existence in Romance shows that HAVE continues to function as an auxiliary in an analogous context. Nevertheless, it should be noted that the productivity of this construction is much lower than it was in Latin. In Standard Italian, for instance, this periphrasis is mainly used in fixed expressions like those ones exemplified above. However, when it occurs in different contexts, the grammaticality judgments become less clear:

(92) ?Ha da vedere se può venire HAVE-3.sg to see-pres.inf. whether can come-PI "He has to see whether he can come"

In some languages the prospective and the deontic interpretation of this periphrasis coexist. In languages like Standard Italian, the distinction between these two semantic values is marked morphologically through a synthetic/analytic contrast, where the analytic form indicates the deontic reading, whereas the synthetic one is always associated with a *de futuro* interpretation. Other varieties, by contrast, only display a periphrastic form which expresses both the prospective and the modal value, such as numerous modern SIDs (Rohlfs 1969; Castagna 1982, Ledgeway 2009, among others). Old Neapolitan (93) and Modern Neapolitan (94) provide good examples of the usage of this construction in both contexts¹⁴⁸:

(93)	a.	io	non	saccio		chello	
		1.sg	not	know-1	.sg	that	
		che	l'aggia		da	dicere	
		that	HAVE-	1.sg	to	say-pre	s.inf.
		"I do no	t know v	vhat I hav	ve to say	to him/h	em"
						[Petito IV	in Ledgeway 2009: 452]
(94)	a.	Emilia [] me	1′	aggi	o da spi	usà io!
		Emilia-	f.sg. 1.sg-	obl. her-f	sg HAV	E to mar	ry 1.sg-NOM.
		"Emilia	, I have to	o marry ł	ner!"		
					[Scar	petta II.7	'in Ledgeway 2009: 453]
	b.	Pecché	dice		che	Errico	stanotte
		Because	say-3.sg	3	that	Errico	tonight
		m'	ha	da spa	arà [Scar _]	petta III.2	? in Ledgeway 2009: 453]
		1.sg-obl	. HAVE-	3.sg to sh	oot-pres.	inf.	
		"Becaus	"Because he says that Errico will shoot me tonight"				tonight"

¹⁴⁸ Recall, however, footnote 28 in this chapter.

To sum up, modern Romance exhibits different outcomes and values of the HABERE + PI periphrasis. Independently from its morphological realization and its value, this construction is attested in modern Romance with a certain productivity.

2.3.3 PI + ESSE: Romance outcomes

Romance exhibits an ESSE + present infinitive construction in a few indefinite contexts. The inactive nature of these cases is demonstrated both by their semantics and by the possibility of inactive morphology¹⁴⁹ (in the varieties that display it):

(95) a.		è	da fare/farsi	[Italian]
		BE-3.sg	to do-pres.inf/ pres.inf-SE	
	b.	è da sapere	e/ sapersi	
		BE-3.sg to know-	pres.inf./pres.inf-SE	
		"It has to be done,	/known"	
	c.	c'est	à voir	[French]
		SC- BE-3.sg	to see-pres.inf.	
		"It has to be seen"		

In some Romance languages, a 3.pl subject is licensed in some contexts. This structure must also be analysed as inactive, as also shown by the morphological alternation:

(96) queste cose sono da fare/farsi; dire/dirsi [Italian] these things BE-3.pl to do/to do-pres.inf.-SE say-inf./say-inf-SE "These things have to be done/said"

By contrast, it is not grammatical to construe the periphrasis with a [participant] subject, which confirms is intrinsically indefinite character. The distribution and usage of this periphrasis in Romance therefore appears to be much more restricted than that of its active counterpart with HABERE.

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¹⁴⁹ Romance SI/SE is the morpho-phonological strategy to mark inactive constructions (Burzio 1986; Cennamo 1993 *et seq.*; D'Alessandro 2007; Manzini & Savoia 2007 *et seq.*). In diachronic terms, the development of this morphological marker must be understood as related to the changes that affected Latin –*r* morphology in the passage from Latin to Romance: the gradual loss of-*r* morphemes in fact went hand in hand with the emergence of the SE system (<Lat. SE/SIBI) for the marking of inactive verbal structures (cf. Cennamo 1991, 1993a,b *et seq.*).

2.3.4 Deontic periphrases: concluding remarks

The observation and analysis of Latin deontic periphrases has shown that an active/inactive contrast within the Latin system is also at play for these constructions. Here too, this opposition is expressed through the alternation of the two elements ESSE (inactive) vs. HABERE (active). Diachronically, it has been observed that inactive periphrases almost completely disappeared in the transition to Romance. This change follows the same direction as the other developments observed in this study, namely, it gradually shifts from inactive to active contexts. Therefore, the morpho-syntactic behaviour of deontic constructions looks consistent with the properties identified in the Latin verbal domain, both synchronically and diachronically.

3 Some diachronic observations

After examining the diachronic development of possessive and deontic constructions between Latin and Romance, it is possible to formulate some generalizations. Looking at possessive structures, a tendency towards the loss of the inactive possessive constructions has been observed. In this sense, the development of the linguistic system between Latin and Romance looks consistent, in that it shows similar properties and tendencies in a number of constructions which are apparently independent from each other.

Similar remarks can be made about deontic periphrases: it has been observed that the so-called "passive periphrastic construction" has totally disappeared from modern Romance. This also holds for HABERE + gerund/gerundive, which has left no trace in modern varieties¹⁵⁰. By contrast, the active deontic periphrasis formed from HABERE + present infinitive maintains a certain productivity. Indeed, Romance deontic periphrases and future/conditional forms descend from this construction. Turning to the impersonal periphrasis formed by ESSE + present participle, it has been pointed out that the distribution of this construction in Romance is very restricted and in fact, it only survives in indefinite contexts. Taking all these facts into account, we can claim that the passage from Latin to Romance was characterized by a general tendency towards the loss of inactive verbal structures. Indeed, all the

¹⁵⁰ Recall the restricted distribution of this construction in Latin, which can be explained with the intrinsic inactive nature of the gerund, on the one hand and the limited use of the gerundive as a *Praedicativum* on the other hand.

periphrases under investigation appear to be consistent as far as their diachronic development is concerned: all the examples analysed exhibit a gradual loss of the inactive element, whereas the active domain appears to be in expansion. From this perspective, it is possible to capture all these diachronic changes under a unified approach. More specifically, it seems plausible that the development of these periphrases should be taken to be closely related to alignment changes in the linguistic system, which then also had consequences in the verbal domain. As discussed previously¹⁵¹, the passage from Latin to Romance was characterized by two major phases of alignment development, which in turn provoked several changes in the linguistic system (La Fauci 1988 *et seq.*; Bauer 2000; Zamboni 2000; Loporcaro 2007; Ledgeway 2012):

- 1) preservation of the active/inactive alignment (conservative)
- 2) rise of the nominative/accusative alignment (innovative)

In the previous chapter, it was claimed that both stages were crucial for the rise of Romance perfective periphrases, as the development of these periphrases appears to be closely linked to alignment changes. Two stages of the process have been identified in modern Romance varieties. A first stage of development reflects the active/inactive opposition, typical of the Latin verbal system. A successive stage follows the rise of the nominative/accusative contrast, typical of early Romance. This diachronic path is clearly demonstrated by the development of perfective auxiliation patterns, which developed towards the extension of the active element HABERE.

The properties of these periphrases in Latin, and their diachronic development, as examined in this chapter, seem to confirm that the hypothesis of this work is correct. Firstly, the syntactic characteristics of these constructions in Latin clearly show an active/inactive alignment opposition. Moreover, the general tendency towards the loss of all these inactive periphrastic constructions in the passage from Latin to Romance strongly indicates that the initial extension of the active domain, and the subsequent extension of the nominative/accusative alignment, were the key factors driving the changes that affected these structures. These developments can thus be understood as the reflex of alignment changes, which gradually provoked the loss of the inactive element in the system, whereas the active element remained salient and productive. The modern Romance picture is summarized in the table below:

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¹⁵¹ Recall chapter 3.

Table VI

Romance languages		Periphrases	5	Alignment
imiguages	Perf.	Poss.	Deont./Future	
Spanish	Active	Active	Active	Nom./acc.
E. Portuguese	Active	Active	Active	Nom./acc.
Extreme SIDs	Active	Active	Active	Nom./acc.
Romanian	Active	Active/ inactive	Active	Nom./acc. vs. active/inactive
Italian	Active/ inactive	Active	Active	Active/inactive vs. nom/acc.
French	Active/ inactive	Active/ (inactive)	Active	Active/inactive vs. nom/acc.
Upper SIDs	Active	Active/ (inactive)	Active	Active/inactive vs. nom./acc.

As shown in Table VI, the Romance scenario looks consistent with respect to the outcomes of periphrastic constructions, as the gradual extension of the active domain can be observed in all cases. In some language groups, such as Ibero-Romance, this development has reached all the constructions under investigation, whereas in other languages, it only affected deontic periphrases. The diachronic change towards the active domain appears to be regular and systematic in all the observed constructions.

On the one hand, this consistency confirms the importance of alignment within the linguistic system, both in Latin and in the passage fromLatin to Romance; on the other hand, these observations shed new light on the Romance outcomes of these periphrases, which had often been examined as isolated cases and not in relation to other changes that occurred in the language. The diachronic developments of the Latin periphrastic constructions analysed here should instead be understood as the related to a single factor, namely the alignment changes that took place in the transition to Romance.

3.1 Some speculations on syntactic change

From a syntactic point of view, alignment change consists in the reorganization of arguments and their consequent morphological marking. The developments observed in this study can all be said to involve a transformation regarding argument encoding in the syntax. While in Latin only VoiceP belonged to the active domain, in Romance experiential deponents were reanalysed as active (recall chapter 2). In other words,

rebracketing took place, including more syntactic structure within the active domain:

Up to a certain stage, this process led to an inactive/inactive system with a division that differed from that present in Latin. This is well illustrated by the Romance varieties that display split intransitivity, in which the auxiliation pattern roughly reflects the schema in (97). In other cases, this process correlates with the gradual erosion of the inactive counterpart. A subsequent step can be identified in the loss of numerous constructions in which the sentential subject is an *Undergoer* and the Agent an optional element. Notice that all the inactive structures observed in this chapter exhibit these argument structure properties (see Table VII):

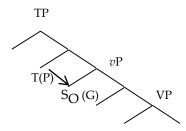
Table VII

Inactive constr.	Syntactic subject	Other
		arguments
Possessive	Possessee	Possessor
	(Undergoer)	dative
	nominative	(obligatory)
Deontic	Undergoer	Optional Agent
(Gerundive)	nominative	dative
Deontic (Infinitive)	-	Optional agent
	(Imp.)	dative

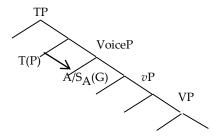
In all the structures analysed, the syntactic subject has the properties of an Undergoer. Moreover, in the case of deontic constructions, the Agent is optional and is always marked with dative case. By contrast, in possessive constructions, the locative argument expressing the possessor is obligatory. In all cases the sentential subject is not merged in [Spec, Voice], but in a lower site in the structure. On the basis of this observation, it will be suggested that the loss of these constructions (recall tables I and V) is closely related to the point of the clausal spine at which the sentential subject is merged.

In fact a major structural change that occurred between Latin and Romance is the possibility vs. impossibility of a non-canonical subject controlling a clause. In other words, during this period, the tendency of the system is to confine all subjects to the active > nominative domain, while the arguments, merged within the vP-field, can no longer function as syntactic subjects:

(98) Latin (inactive)



(99) Romance (active/inactive vs. nominative/accusative)



This difference is also shown by different case marking: while in Latin most non-canonical subjects were marked with default nominative (while their non-canonical status is signalled on the verb by -r), in Romance, they have an oblique case (generally dative)¹⁵². In other words, the gradual erosion of the inactive field corresponded to the impossibility of having a syntactic subject merged within the vP-field, because an association between structural nominative, A-semantic role and syntactic subject became increasingly established in the system. This proposal, although only briefly laid out here, makes correct predictions as far as the development of the Romance scenario is concerned, as it not only predicts the disappearance of the structures exhibiting a non-agentive subject in Latin, but also the loss of numerous deponent verbs which were not included in the active field, i.e. which did not

¹⁵² Recall chapter 1.

undergo the process of reanalysis illustrated in chapter 3¹⁵³. A difference in the status of the verbal clause, and in particular of Voice therefore seems closely related to Romance variation in argument structure and its corresponding morphological marking, as clearly shown by Latin and old Italian data, compared to the data from the modern language.

3.2 Conclusions

A syntactic reanalysis process affecting the clause was one of the major forces that triggered linguistic change in the passage between Latin and Romance. In particular, an initial rebracketing process and a difference in the status of the active functional head, which in Romance then becomes the only syntactic locus for merging active subjects, have been claimed to be the basis of major changes affecting the clause. Alignment competition can be seen as a consequence of this development. Under the influence of this opposition, all the periphrases under investigation developed in the same direction, apparently independently from each other. The facts observed here have therefore provided us with further relevant evidence that the changes in the Latin verbal domain that took place in the passage from Latin to Romance should not be considered as independent phenomena, but as the reflexes of a major consistent change involving the whole linguistic system.

¹⁵³ The theory that there is a difference in the status of the verbal clause, and in particular of Voice, seems to be supported by a number of properties that distinguish Latin from Romance. One of these properties is the existence of conditions licensing past participle fronting, widespread in Latin and old Italian inactive constructions, but impossible in active constructions (cf. Franco & Migliori 2015).