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A diachronic syntactic account

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

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Laura Migliori

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in 1984

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Matri patri maioribusque amatissimis



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**Table of contents**


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<b>Acknowledgements</b>	<b>xi</b>
<b>Abbreviations</b>	<b>xiii</b>
<b>Chapter 1: Introduction</b>	
1. The Latin language and the definition of alignment	1
2. Alignment, argument structure and auxiliaries between Latin and Romance	3
3. The Latin language and linguistic studies	4
4. Outline of the present study	7
4.1 Corpus and methodology	7
<b>Chapter 2: The Latin verbal system and the fine structure of the <i>vP</i></b>	<b>9</b>
0. Introduction	9
1. Alignment typology and Latin	9
2. <i>Infectum</i> and <i>perfectum</i>	14
3. The occurrence of Latin <i>-r</i> morphology	15
3.1 Active <i>vs.</i> inactive	21
3.2 Latin <i>-r</i> morphology: passives	23
3.3 Latin <i>-r</i> morphology: deponents	24
3.4 Latin deponent verbs	25
3.4.1 Terminology	25
3.4.2 Deponent verbs within the grammatical discussion	26
3.4.3 Verb types, functions and distribution	28
3.4.3.1 Unaccusatives (change-of-state and movement verbs)	29
3.4.3.2 Experiential verbs	32
3.4.3.3 Perception verbs	37
3.4.3.4 Other experientials. Verbs of advantage	38
3.4.3.5 Reciprocals	39
3.4.3.6 Interim conclusions	39
3.5 <i>-r</i> as inactive morphology	40



4.	The syntax of Latin <i>-r</i> forms	42
4.1	<i>-r</i> as reflecting different syntactic environments	42
4.1.1	<i>-r</i> morphology as reflecting the [pass] feature	42
4.1.2	<i>-r</i> as reflecting [pass]: advantages and problems	46
4.2	Different morphology, different argument structure	49
4.2.1	Θ-roles: types and definition	49
4.2.2	Θ-roles: classification and site of assignment	53
4.2.3	Active vs. inactive argument structure	54
4.2.4	The fine structure of <i>vP</i>	58
4.2.5	Argument structure and morphological case	62
4.3	Further evidence	66
4.3.1	Intentionality adverbs	66
4.3.2	Agentive nominalizations	67
4.3.3	No passive form	68
4.4	The analytic perfect reflects an inactive structure	68
5.	Possible counterexamples	73
5.1	Deponents + accusative	73
5.2	Present participles	80
5.3	Semi-deponents	81
5.4	<i>Hortor</i> and other <i>verba dicendi</i>	86
5.4.1	Agentive nominalizations	87
5.4.2	Passive forms	87
5.5	Conclusions	88
6.	Concluding remarks	88

### Chapter 3: Between Latin and Romance: the rise of periphrastic perfects

	<b>Synchronic variation and diachronic observations</b>	<b>91</b>
0.	Introduction	91
1.	The expression of the perfect in Romance	91
1.1	The synthetic-analytic opposition in the Romance perfect	92
1.2	The diachrony of Romance perfect forms	97
1.3	Auxiliary selection in the perfect: Romance synchronic variation	99
1.3.1	Pattern 1: one-auxiliary systems	102
1.3.2	Pattern 2: Split Intransitivity	105
1.3.3	Pattern 3: BE/HAVE alternation based on other factors	109

2.	The rise of perfective periphrases in Romance	115
2.1	The limits of the grammaticalization account	115
2.2	The rise of perfective periphrases in Romance: alignment and auxiliaries	123
2.3	The role of deponent verbs in the change	127
2.3.1	The reanalysis of <i>v</i> P field	132
2.4	Consequences for Romance auxiliation	132
2.5	Diachronic empirical evidence	135
3.	The rise of different auxiliation patterns	139
3.1	Split Intransitivity	139
3.1.1	Split Intransitivity: synchrony and diachrony	142
3.2	BE as the only perfective auxiliary	144
3.3	Synchronic variation as mirror of a diachronic path	147
3.3.1	The diachrony of auxiliation pattern in SIDs	149
4.	Concluding remarks	157
<b>Chapter 4: Possessive and deontic periphrases between Latin and Romance</b>		<b>159</b>
0.	Introduction	159
1.	Possessive constructions	159
1.1	DP possessive constructions in Latin	159
1.2	Possessive periphrastic constructions in Latin	162
1.2.1	The syntax of Latin possessive periphrases	163
1.3	Possessive periphrases between Latin and Romance	168
1.3.1	Romance outcomes of Latin possessive periphrases	168
1.3.2	Languages with the HAVE possessive periphrasis	170
1.3.3	Languages with the BE and the HAVE possessive periphrases	173
1.4	Possessive periphrases: concluding remarks	177
2.	Deontic constructions	178
2.1	Latin deontic periphrases with gerund/gerundive + auxiliary	179
2.1.1	Latin gerund and gerundive	181

2.1.1.1 Gerund- or gerundive-first hypothesis?	183
2.1.2 The syntax of Latin deontic constructions with gerund/gerundive	189
2.2 Deontic periphrases with present infinitive (PI)	193
2.2.1 Auxiliary HABERE + present infinitive	194
2.2.2 Auxiliary ESSE + present infinitive	198
2.3 Deontic constructions between Latin and Romance	200
2.3.1 Deontic constructions with gerund/gerundive in Romance	200
2.3.2 PI + HABERE: Romance outcomes	202
2.3.3 PI + ESSE: Romance outcomes	205
2.3.4 Deontic periphrases: concluding remarks	206
3. Some diachronic observations	206
3.1 Some speculations on syntactic change	208
3.2 Conclusions	211
<b>Chapter 5: Conclusions</b>	<b>213</b>
1. The Latin verbal domain	213
2. The development of Romance analytic perfects and of other periphrases: argument structure and auxiliation	214
3. Concluding remarks and future research	215
<b>References</b>	<b>217</b>
<b>Sources</b>	<b>245</b>
<b>Samenvatting in het Nederlands</b>	<b>247</b>
<b>Curriculum Vitae</b>	<b>253</b>

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**Abbreviations**

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1	first person
2	second person
3	third person
A	Agent
ABL.	ablative
ACC.	accusative
act.	active
Adv.	adverb
Alg. Cat.	Alghero Catalan
arg.	argument
AspP	Aspect Phrase
aux	auxiliary
Bal. Cat.	Balearic Catalan
Ben.	Benefactive
Cat.	Catalan
C. dei Volsci	Castro dei Volsci
cl.	clitic
cond.	conditional
DAT.	dative
Dem.	demonstrative
DO	direct object
DP	Determiner Phrase
E	ESSE
EA	External Argument
E. Port.	European Portuguese
ESIDs	Extreme Southern Italian dialects
Exp.	Experiencer
GEN.	genitive
GRD	gerund
GRDV	gerundive
f.	feminine gender

Fr.	French
fut.	future tense
H	HABERE/HAVE
IA	internal argument
IE	Indo-European
imp.	impersonal
impf.	imperfect
inact.	inactive
ind.	indicative
inf.	infinitive
IO	indirect object
It.	Italian
Lat.	Latin
Loc.	Locative
m.	masculine gender
n.	neuter gender
N. Cat.	Northern Catalan
NIDs	Northern Italian dialects
NOM.	nominative
O	Object
Occ.	Occitan
OI	Old Italian
perf.	perfect tense
PI	present infinitive
PIE	Proto-Indo-European
pl	plural
Port.	Portuguese
Poss.	Possessor
PP	Past participle
pperf	pluperfect
pres.	present tense
pret.	preterite
ps	person
refl.	reflexive
retr.	retroherent

Rom.	Romanian
Sard.	Sardinian
S. B. del Tronto	San Benedetto del Tronto
sg	singular
SIDs	Southern Italian dialects
simp. past	simple past
Sp.	Spanish
subj.	subjunctive
T	Tense
TP	Tense Phrase
trans.	transitive
unacc.	unaccusative
unerg.	unergative
<i>v</i>	little- <i>v</i>
<i>v</i> P	little- <i>v</i> Phrase
VoiceP	Voice Phrase
VP	Verb Phrase
USIDs	Upper Southern Italian dialects





## Introduction

*Similia vocibus esse ac syllabis confitemur,  
dissimilia esse partibus orationis videmus.*  
[M. T. Varro, *De lingua latina* X, 7]

### 1. The Latin language and the definition of alignment

This work focuses on the Latin language with the aim of examining both its syntactic characteristics and the relation between syntax and morphology. The starting point for this investigation is the observation of systematic morphological alternations displayed by the Latin verbal system (see Table I and Table II):

**Table I - Transitive verbs**

	<b>Active</b>	<b>Inactive</b>
<i>Infectum</i> (imperfective aspect)	nec-o murder-1.sg "I murder"	nec-o-r murder-1sg-r "I am (being) murdered"
<i>Perfectum</i> (perfective aspect)	neca-v-i murder-perf-1.sg "I murdered/ I have murdered"	necatus sum murdered-PP BE-1.sg "I was/ have been murdered"

**Table II - Deponent verbs**

	<b>Active</b>	<b>Inactive</b>
<i>Infectum</i> (imperfective aspect)	*medito meditate-1.sg	medit-o-r meditate-1sg-r "I meditate/am meditating"
<i>Perfectum</i> (perfective aspect)	*medita-v-i meditate-perf-1.sg	meditatus sum meditated-PP BE-1.sg "I (have) meditated"

Table I and II show that the active and inactive paradigms differ as far as their morphology is concerned. The active paradigm includes active (transitive) forms, characterized by the presence of an agentive sentential subject.

Morphologically, these verbs exhibit a set of active endings in the *infectum* paradigm (cf. *-o* in Table I) and synthetic perfect forms in the *perfectum* (cf. *necavi* in Table I). Conversely, the inactive paradigm, generally characterized by the absence (or a low grade) of agentivity, displays *-r* endings in the *infectum* (cf. *neco-r* in Table I) and a periphrastic perfect formed by past participle + auxiliary ESSE “be” (cf. *necatus sum* in Table I) in the *perfectum*. Table II shows that deponent verbs always occur with *-r* morphology in the *infectum* (cf. *medito-r* in Table II) and with a periphrastic perfect in the *perfectum* (cf. *meditatus sum* in Table II). Therefore, these verbs morphologically look the same as passive forms, even though they are not passive. For this reason, deponents have often been defined in the literature as an anomalous class, having “passive” morphology and “active” meaning (Gildersleeve & Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others).

This study will raise the issue of the nature of the morphological alternations exemplified in Table I and II: does different morphological marking reflect distinct syntactic configurations or is it just arbitrary? In particular, the investigation will examine the syntactic structure of deponent verbs, a widely debated topic in the literature thanks to their apparently heterogeneous character (Flobert 1975; Gianollo 2000, 2005, 2010; Baerman 2006, 2007; Embick 1997, 1998, 2000; Danckaert 2012a, Weisser 2014, among others). It will be claimed that inactive morphology on these verbs is syntactically motivated, as they consistently display the properties of non-agentive verbal items.

The proposed analysis of the Latin verbal domain will also allow the comparison of Latin with other related and non-related languages. More specifically, the issue of the definition of alignment in Latin will be raised, i.e. the way in which this language groups and marks arguments. The question will be whether Latin is entirely a nominative/accusative language or if it instead displays properties that can be related to other alignment types. On the basis of the observations made about the verbal domain, it will be claimed that Latin also displays the properties of an active/inactive system (cf. La Fauci 1997, 1998; Zamboni 2000; Ledgeway 2012). Finally, the analysis of the Latin verbal system will provide a more detailed understanding of the verbal spine, providing us with information concerning its syntactic structure.

## 2. Alignment, argument structure and auxiliaries between Latin and Romance

This study will also focus on a number of Latin constructions and their development from Latin to Romance. More specifically, the investigation will examine perfective periphrases (1), possessive constructions (2), and modal/deontic construals (3)-(4):

- (1) a. multi                      mortales      in carcere  
many-m.3.pl.NOM. mortal-m.pl. in jail-m.sg.ABL.  
necati                              sunt                              [Sall. *Iug.* 31,7]  
murdered-PP-m.pl.NOM. BE-3.pl  
“Many mortals have been murdered in jail”
- b. quid Athenis                      exquisitum      habeam [Cato, *ad fil.* Frg. 1]  
what Athens.f.pl.ABL. found-PP      HAVE-pres.subj-1sg  
“What I have found out in Athens”
- (2) a. 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”
- b. habet                                      domum                      formosam [Sen. *Luc.* 87, 5]  
HAVE-pres.ind-3.sg. house-f.sg.ACC. beautiful.f.sg.ACC.  
“He has a beautiful house”
- (3) a. dicenda                      tibi                      sunt      hodie [Liv. IV 40, 9]  
say-GRDV-n.pl.NOM 2.sg-DAT. BE-3.pl. today-Adv.  
“These things have to be said by you today = You have to say these things today”
- b. pugnandum                      habebam                              [Sen. *Contr.* 10,2]  
fight-GRD.n.sg.ACC.      HAVE-impf.ind-1.sg  
“I had to fight”
- (4) a. 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!”
- b. 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”

As shown by these examples, all these construals have a periphrastic form, in which either the auxiliary *ESSE* (“be”)—see (1-a), (2-a), (3-a), (4-a)—or auxiliary *HABERE* (“have”) occurs. In this study, the syntactic structure of these constructions will be examined, along with the reasons that determine the distribution of these two functional elements. Secondly, the discussion will look at the forces that determined either their Romance outcomes or their disappearance in modern varieties. More specifically, the claim will be made that the properties of these construals as well as their diachronic change was the result of two interconnected factors: alignment and argument structure. The development of auxiliation, which appears to be consistent across Romance, can be seen as a consequence of the interaction between these two factors. The aim is to understand these diachronic developments within a coherent and broad picture taking into consideration the whole verbal system, instead of considering them as isolated phenomena.

### 3. The Latin language and linguistic studies

A significant proportion of the linguistic studies concerning the Latin language are based on a traditional philological approach, aiming principally to detect and describe a number of phenomena. This method is exhaustive as far as descriptive adequacy is concerned: it provides a comprehensive and detailed account of linguistic and stylistic facts, often with the robust support of relevant quantitative evidence. Moreover, these studies provide an enormous amount of highly reliable linguistic data, thanks to their highly accurate investigation of the philological component, with relevant historical and geographical facts also taken into account. On the other hand, this approach often does not aim to provide structural accounts of the linguistic facts that it reveals; it is therefore solid and reliable as far descriptive adequacy is concerned, but appears to be weaker from an explanatory perspective.

Many of the problems left open by descriptive grammars have been solved by the historical linguistic tradition which has attempted to provide an explanation for a number of phenomena by looking at Latin from a diachronic perspective. This holds both for works which have focused on the Proto-Indo-European origin of Latin (Leumann 1929; Meillet 1933; Palmer 1954; Cupaiuolo 1991; Clackson 2007; Sihler 2008, among others) and for studies which have looked at the diachronic development of Latin itself, with a Romance perspective (Rohlf s 1956; Väänänen 1966; Serianni 2000; Clackson & Horrocks 2007, among others). These works have made a huge contribution to the field, especially in terms of the diachronic development of phonology

and morphology. As far as syntax is concerned, these studies have often looked at it on a purely descriptive basis. Consider, for instance, Bennet's seminal work on early Latin syntax (1910-1914), which provides us with an impressive amount of data concerning Latin constructions. On the other hand, the perspective adopted often looks at linguistic facts as isolated phenomena and not as sub-parts of a linguistic system characterized by a structural coherence. In this sense, many facts and possible correlations are overlooked, so that a coherent syntactic account is missing.

Nowadays the historical-philological approach is often used within linguistic studies of Latin and other ancient languages. Well-known older works still constitute the main reference point for most studies (Gildersleeve & Lodge 1895; Allen & Greenough 1903; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963, among others), and the same method has also been adopted in numerous recent works regarding several aspects of the Latin language (Panhuis 2006; Clackson 2007, 2011<sup>1</sup>; Pezzini 2015, forthcoming). This traditional method is essential to the accurate understanding of an ancient language, as it offers a detailed and frequently reliable description of the data set. Nonetheless, a broader look at the language from a formal perspective raises some questions that cannot be answered through the mere description of the data. More specifically, many issues concerning the syntactic properties and the development of Latin as a system have been left open by this approach. Even works which have looked at this language from a more structural perspective (e.g. Lehmann 1973), do not offer a formal explanation for the facts subjected to analysis.

More recently, Latin has been the subject of more theoretical studies that have tried to give a formal answer to a number of unsolved problems. A significant example in this respect is the work of Harm Pinkster (1971, 1984, 1987, 1990 *et seq.*), which has enriched the discussion on Latin linguistics with a novel examination of the empirical material with reference to a variety of phenomena. The most relevant fruit of his work to date is the *Latijnse Syntaxis en Semantiek* (1984), which deals for the first time with a number of problems from a formal perspective. The very same approach has been adopted in his new *Oxford Latin Syntax*, the first volume of which was published in 2015. This study looks at the whole Latin system from a broad syntactic point of view. Another work that should be mentioned in this regard is Bauer's structural analysis (2000), the aim of which is to analyse Latin syntactic constructions

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<sup>1</sup> Note, however, that the chapter written by Horrocks for this volume is characterized by a more formal approach.

from a wide Indo-European perspective. The approach is thus comparative and diachronic at the same time.

The first generative works<sup>2</sup> on Latin (Calboli 1980, 1986 *et seq.*, Bertocchi & Orlandini 1995, Bertocchi, Orlandini & Maraldi 2001, Oniga 2004; Bortolussi 2006; Kroon 2010) represent a significant step towards the formal analysis of this ancient language. Moreover, the extensive work by Baldi and Cuzzolin (2009-2011) has provided a solid basis for a systematic syntactic analysis of different domains of the Latin language (even though not always in purely formal terms). Another important step is the *Blackwell History of the Latin Language* (Clackson & Horrocks 2007), in which significant space is given to syntax alongside the philological-historical account. In addition to the studies mentioned, which provide us with a comprehensive view of Latin, a number of theoretical papers and books have recently focused on specific aspects of the language, such as the left periphery (Danckaert 2014b), the nominal domain (Galdi 2004, Gianollo 2007; Iovino 2012; Giusti & Iovino in press; Giusti, Iovino & Oniga in press), word order (Danckaert 2012b), the verbal domain (Cennamo et al. 2015; Gianollo 2000, 2005, 2010 *et seq.*; Danckaert 2012a, 2014b), quantifiers (Gianollo 2013), verb/subject agreement (Migliori, submitted).

An analogous method has also been adopted in a number of studies focusing on the changes that occurred between Latin and Romance. A deeper understanding of the properties characterizing the Latin system has provided relevant information on the diachronic linguistic changes that occurred around the Late Imperial Age and the beginning of the Romance era. This can be seen in works that have looked at the internal organization of the language and at its morphological marking, for instance La Fauci (1997, 1998 *et seq.*), Zamboni (2000), Ledgeway (2012), and in studies that have mostly focused on the developments of the verbal and the pronominal domain (Adams 1991; Cennamo 1993, a,b *et seq.*). A seminal work in this domain is Adams' book about social variation in Latin (2013), which considers numerous aspects of the language from a broad and exhaustive historical perspective. This approach has also provided the basis for a cross-linguistic comparison which looks at syntactic structures from both a synchronic and a diachronic point of view (Bauer 2000; Barðdal & Eypórssón 2003, 2009; Barðdal et al. 2013; Kroonen 2014 among others).

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<sup>2</sup> As this study mainly focusses on the study of syntactic structures, this literature review will not mention the many relevant works which have been focusing on Latin semantics.

The aim of the present study will be thus to combine the advantages of the philological-historical perspective with the new insights provided by formal approaches to linguistics. More specifically, the intention will be to obtain a more complete picture of the Latin language, with special attention given to the syntactic properties of its verbal system and the diachronic developments in this domain during the crucial transition to early Romance.

#### **4. Outline of the present study**

This dissertation is structured as follows. Firstly, this study will focus on the syntactic analysis of the Latin verbal domain (chapter 2). After a description of its key characteristics, the main hypothesis will be formulated and discussed, together with the supporting empirical evidence. In chapter 3, the development of perfective periphrases between Latin and Romance will be analysed from a syntactic and diachronic perspective. Moreover, the variation characterizing (Italo)-Romance perfective auxiliation will be examined in diachronic terms. Chapter 4 looks at the syntactic properties of other Latin periphrases (possessive and deontic periphrases) and the development of these constructions from Latin to Romance. The final chapter provides concluding remarks.

##### **4.1 Corpus and methodology**

For Latin data, the corpus mainly consists of a selection of prose works spanning from early Latin (II c. B. C.) to the early Christian Age (III-IV c.)<sup>3</sup>. Poetry has generally been excluded from this investigation because of the well-known major variation in the structure of this register of the language. However, comedy, although written in verse, has frequently been taken into account: despite the restrictions imposed by the meter, it can still be considered a fairly reliable indication of the language, at least as far as syntactic constructions are concerned. Since we are mostly interested in the development of auxiliation, which is generally not meter-related, some evidence from drama (in particular from comedy) has also been examined. This has been done with caution, always taking into account the caveat concerning the meter and the wholly literary character of the language of comedy.

With regard to methodology, it is clear that the syntactic investigation of a dead language imposes some significant restrictions on the set of data, in that

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<sup>3</sup> A complete list of all the sources mentioned is provided in the References.



it is not possible to collect synchronic data and check native intuitions. Nonetheless, a well-attested language like Latin still makes it possible to formulate quite reliable generalizations, as a number of patterns appear to be systematic. The core aim is to provide a reliable picture of the Latin verbal system and its properties. From this perspective, the symbol used in generative studies to signal ungrammaticality (\*) will here be employed to indicate a consistent and regular non-attestation of a specific form/structure. This systematic negative evidence will be thus considered a strong (though not always conclusive) indication of its absence in the system and, therefore, of its ungrammatical character.

The editions used for this linguistic investigation are those by Teubner (*Bibliotheca Teubneriana Latina*), except where otherwise indicated.

**The Latin verbal system.  
The occurrence of *-r* morphology  
and the fine structure of the *v*P**

## **0. Introduction**

The Latin verbal system exhibits a regular morphological alternation between forms displaying active endings and forms showing the so-called *-r* morphology. The aim of this chapter is to understand the syntactic reasons underlying this alternation and thus to discuss the relationship between morphology and syntax within the Latin verbal system.

It will be shown that different morphological marking in Latin always reflects crucial differences in argument structure: while active forms correspond to active syntax, the occurrence of *-r* morphology reflects an inactive syntactic configuration. Given these properties, the Latin verbal system can be said to be characterized by an active/inactive alignment contrast. Finally, the Latin data under analysis will provide consistent evidence for the existence of a layered *v*-field, the main function of which is to encode different inner aspectual properties of a variety of verbal items.

## **1. Alignment typology and Latin**

Alignment is a term that comes from typological studies in linguistics and generally refers to the marking mechanism that distinguishes the core arguments in a language (Schachter 1977; Dixon 1979, 1987, 1994; Chomsky 1981, 1995, 2001; Mallinson & Blake 1981; Marantz 1982, 1984; Comrie 1981, 2005; Grimshaw 1990, 2005; Mithun 1991, Mahajan 1994 *et seq.* Legate 2002 *et seq.* Comrie, Dryer, Gil & Haspelmath 2005; Haspelmath 2005; Bickel & Witzlack-Makarevich 2008; Donohue & Wichmann 2008, Bickel, Witzlack-Makarevich, Iemmolo & Zakharko 2013; Sheehan, to appear, among others). The core participant classification in the typological literature allows three main types of core event participants to be distinguished (cf. Comrie 1981, 2005; Dixon 1994):

- Agent (**A**): the sentential subject of a transitive clause;
- Subject (**S**): the sentential subject of an intransitive clause;
- Object (**O**): the direct object of a transitive clause.

Moreover, a further distinction can be made between different kinds of intransitive subjects, depending on the kind of clause they are associated with (Perlmutter 1978; La Fauci 1988, 1997, 1998):

- Subject Agent (**S<sub>A</sub>**): the sentential subject of an agentive intransitive clause (i.e. unergatives)
- Subject Object (**S<sub>O</sub>**): the sentential subject of a non-agentive intransitive clause (i.e. unaccusatives).

In structural terms, this classification reflects the different merger points of the sentential subject, as well as the different properties of distinct verbal constructions:

- A: [Agent], merged in [Spec, VoiceP]<sup>4</sup>. Active transitive construction.
- S<sub>A</sub>: [Agent], merged in [Spec, VoiceP]. Active intransitive construction.
- S<sub>O</sub> merged within the VP-field. Intransitive inactive construction<sup>5</sup>.

The distinction between the core event participants is expressed in various ways in the languages of the world. Typological studies have shown that different languages display various morphological strategies for this purpose, such as nominal marking (case marking, adpositions, etc.) and specific marking on verbs (for example via auxiliaries, agreement or diathesis distinctions). Word order can also be used to express this particular difference (Comrie 1981; Dixon 1994; Haspelmath 2005).

With regard to classification, three main different alignment types have been detected in natural languages<sup>6</sup>, as shown in Table I (based on La Fauci 1988):

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<sup>4</sup> See Kratzer 1996; Alexiadou & Anagnostopoulou 1999; Alexiadou, Anagnostopoulou & Schäfer 2006, 2015. For a further discussion of the properties of Voice, see § 4.2 in this chapter.

<sup>5</sup> See § 4.2 in this chapter.

<sup>6</sup> Other alignment types which have been detected in the literature (cf. Haspelmath 2005; Bickel & Witzlack-Makarevich 2008; Bickel, Witzlack-Makarevich & Zakharko 2013 and related work) can be considered sub-types of these three main kinds. However, further distinctions are made principally on morphological, rather than structural grounds, and will hence not be taken into account in this study.

Table I – Typological alignment of A, S and O

Nominative/Accusative	Active/Inactive-Stative	Ergative/Absolutive
A	A	A
S	S <sub>A</sub>	S
	S <sub>O</sub>	
O	O	O

In a nominative/accusative system, A and S pattern together. Conversely, in an ergative/absolutive language, A is always distinguished from S and O. A third option is a system in which the difference between different kinds of intransitive subjects (S) is marked: while agentive intransitive subjects display similar properties to A, non-agentive S have the properties of an Undergoer, i.e. a participant which undergoes an event/state (Dowty 1991; Sorace 2000; Van Valin 2001; Bentley 2006). This alignment type is called active/inactive, as the difference is marked between agentive and non-agentive subjects.

In the literature, it has been shown that natural languages are often characterized by more than one alignment pattern. In fact, it appears to be impossible to describe a given language as only one type, as competing alignment types are frequently present at the same time, targeting different domains, for example clausal *vs.* nominal (cf. Dixon 1979, 1987, 1994; Haspelmath 2005; Witzlack-Makarevich 2013 among others). This is also the case for Latin, in which at least two distinct alignment kinds can be detected. In general terms, this language can be defined as predominantly characterized by a nominative/accusative alignment, as it quite consistently exhibits the properties of this kind of system (La Fauci 1988, 1991, 1997, 1998; Zamboni 2000; Ledgeway 2012). This seems most clear in the case of the nominal domain: A and S are systematically marked with nominative, whereas a structural direct O is signalled with accusative case:

- (1) a. Iugurtha [...] Adherbalem necat [Sall. *BI* 26, 3]  
 Jugurtha-m.3.sg.NOM. Adherbal-m.3.sg.ACC. murder-pres.ind.3.sg  
 “Jugurtha murders Adherbal”
- b. Quintus frater [...] [Cic. *Att.* 7, 18, 4]  
 Quintus-m.3.sg.NOM. brother.m.sg.NOM.  
 laborat  
 work with effort-ind.pres.3.sg.  
 “My brother Quintus is working hard”

- c. Cluilius, Albanus rex,  
 Cluilius-m.3.sg.NOM. Alban-m.sg.NOM. re-m.sg.NOM.  
 moritur [Liv. I, 23,4]  
 die-pres.ind.3.sg-r  
 “Cluilius, king of the Albans, dies”

Despite this quite coherent system, it has been frequently observed that Latin also shows the characteristics of an active/inactive system at different levels of the grammar (La Fauci 1988, 1991, 1997; Bauer 2000; Zamboni 2000; Ledgeway 2011, 2012)<sup>7</sup>. In the nominal system, for instance, an example of this contrast has been detected in the gradual emergence of the so-called “extended accusative” which characterized the passage between Latin and early Romance (Löfsted 1933; Norberg 1941; Plank 1985). This diachronic change, which increased significantly in Late Latin, consisted in the gradual emergence of accusative as a generalized case marker. It has been observed in the literature that this extension of accusative case was not random, but followed structural constraints. More specifically, accusative initially came to substitute nominative in inactive constructions (cf. Ledgeway 2012; Adams 2013), as exemplified below:

- (2) a. multos languores sanantur  
 many-pl.ACC. weakness-m.pl.ACC. heal-3.pl-r  
 in ipsis locis [Ant. Plac. Itin. 165,16]  
 in same-pl.ABL. places-pl.ABL.  
 “Many weaknesses are healed in these places”
- b. nascitur ei genuorum contractionem  
 be born-3.sg-r 3.sg-DAT. knee-pl.GEN. contraction-f.sg.ACC.  
 aut claudicationem [Mul. Ch. 516]  
 or limp-f.sg.ACC.  
 “his knees are developing a contraction or a limp”  
 (Ledgeway 2012: 328)

The direction of this change shows that O and S<sub>O</sub> patterned together more and more. This fact can be understood as the consequence of a system characterized by an active/inactive opposition (Ledgeway 2012).

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<sup>7</sup> It has also been claimed that Latin showed some ergative traits (cf. Lehmann 1985). However, since the evidence for this is limited and is based solely on morphological evidence, this proposal will not be discussed in detail in this study.

Several studies have also observed this contrast in the Latin verbal system. The *infectum* paradigm, expressing imperfective aspect, has a nominative/accusative opposition, as finite V always behaves in the same way and agrees in person/number with the subject in nominative (A, S<sub>A</sub> or S<sub>O</sub>):

- (3) a. ill(e) me non videt [Pl. *Aul.* 709]  
 he-3.sg.NOM. 1.sg-ACC. not see-pres.ind.3.sg  
 “He does not see me”
- b. pisces [...] qui neque videntur a nobis [...]  
 fish-3.pl who-NOM. and not see-ind.pres.-r by 1.pl.ABL.  
 neque ipsi nos  
 and not they-3.pl-NOM. us-1.pl.ACC.  
 suspicere possunt [Cic. *Ac.* 2, 81]  
 see-inf.pres. can-pres.ind.3pl.  
 “Fish [...] that neither are seen by us nor can see us”

On the other hand, the *perfectum* displays an active/inactive contrast, since the alternation of synthetic and analytic forms respectively reflects an A/S<sub>A</sub> vs. S<sub>O</sub> split (La Fauci 1988, 1991, 1997; Ledgeway 2012):

- (4) a. quid enim viderunt? [Cic. *Agr.* 2, 95]  
 what-ACC. indeed see-perf.ind.3.pl  
 “What indeed did they see?”
- b. subito sunt Haedui visi [Caes. *BG.* 7, 50]  
 suddenly BE-3.pl. Haedui seen-PP  
 “The Haedui were suddenly seen”

Therefore, Latin patterns with many other languages of the world, displaying a stative (or in other cases an ergative) split in the perfect (cf. Dixon 1979, 1987, 1994). From this perspective, the Latin verbal system exhibits asymmetric behaviour, as it displays distinct alignment patterns in different aspectual domains. Conversely, in this study it will be claimed that Latin is consistent and systematic in expressing the distinction between A/S<sub>A</sub> and S<sub>O</sub>, both in the *infectum* and in the *perfectum* paradigm (importantly not only in the *perfectum*). More specifically, it will be argued that both the occurrence of *infectum* –r morphology and the presence of analytic perfect forms with ESSE are the consequence of an inactive syntactic configuration. In this sense, the Latin verbal system regularly displays an active/inactive contrast, which reflects the opposition between active vs. inactive syntax.

## 2. *Infectum and perfectum*

The distinction between Latin *infectum* and *perfectum* is primarily a matter of aspect. The term *infectum* refers to all those paradigms expressing unaccomplished aspect. The unfinished event can be located in the present, in the past or in the future (Gildersleeve & Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others.). Following a Reichenbachian classification for tense (1947), we will make use of the concepts of Reference time (R), Event time (E), and Speech time (S):

**Table II – *Infectum***

	Tense	Lat. verb. paradigm	Example
R, E, S	Present	Present	neco "I murder"
R, E – S	Past	Imperfect	necabam "I was murdering"
S, R – E	Future	Future	necabo "I will murder"

In the present, the Reference time, the Event time and the Speech time coincide. In the imperfect, the unaccomplished process is located in the past and thus precedes the Speech time. Finally, in the future, the Reference time and the Event time coincide and are preceded by the Speech time (Reichenbach 1947; Comrie 1985). The Latin *perfectum*, on the other hand, includes all those paradigms expressing an accomplished event, as schematized in the table below:

**Table III – *Perfectum***

	Tense	Lat. verb. paradigm	Example
E – R, S E, R – S	Present	Perfect	necavi "I (have) murdered"
E – R – S	Past	Pluperfect	necaveram "I had murdered"
S – E – R	Future	Anterior future	necavero "I will have murdered"

Notice that the Latin *perfectum* tense paradigm (e.g. *necavi* "I (have) murdered") expresses both the preterite (E, R – S) and the present perfect

interpretation (E – R, S)<sup>8</sup>. The relationship between Aspect and Tense within the Latin finite verbal paradigm is summarized in the Tables IVa and IVb, (on the basis of Panhuis 2006: 48)

**Table IVa – Aspect and tense in the Latin *infectum* paradigm (finite paradigm)**

<i>Aspect</i>	<i>Infectum</i>		
<i>Mood</i>	<b>Indicative</b>	<b>Subjunctive</b>	<b>Imperative</b>
<i>Tense</i>	Present	Present	Present
	<i>neco</i> “I (am) murder (ing)”	<i>necem</i> “I murder (subj.)”	<i>neca</i> “Murder (you)! <i>necate</i> “Murder (you-pl)!”
	Imperfect	Imperfect	-
	<i>necabam</i> “I was murdering”	<i>necarem</i> “I was murdering (subj.)”	
	Future	-	Future
	<i>necabo</i> “I will murder”	-	<i>necato, necato,</i> <i>necatote, necanto</i> “Will murder (you, he, you-pl, they)!”

**Table IVb – Aspect and tense in the Latin *perfectum* paradigm (finite paradigm)**

<i>Aspect</i>	<i>Perfectum</i>	
<i>Mood</i>	<b>Indicative</b>	<b>Subjunctive</b>
<i>Tense</i>	Perfect	Perfect
	<i>necavi</i> “I (have) murdered”	<i>necaverim</i> “I have murdered (subj.)”
	Pluperfect	Pluperfect
	<i>necaveram</i> “I had murdered”	<i>necavissem</i> “I have murdered (subj.)”
	Future perfect (anterior future)	
	<i>necavero</i> “I will have murdered”	-

To sum up, the *infectum/perfectum* contrast in Latin expresses the opposition between an accomplished and an unaccomplished event, independently from its location on the time line.

### 3. The occurrence of Latin *-r* morphology

The Latin verbal system displays regular morphological alternations. The

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<sup>8</sup> In this respect, Latin differs from Romance languages in which this aspectual difference is often marked through the occurrence of different perfect forms, as it will be shown in chapter 3, § 1.



active paradigm, related to agentive contexts, is characterized by a specific set of endings. As an example, consider the active finite paradigm of the verb *necare* “murder”:

**Table V – Active paradigm in *-are* (finite)**

	<i>Infectum</i>		<i>Perfectum</i>
<b>Indicative</b>			
Present	nec- <b>o</b> “I murder/am murdering” neca- <b>s</b> neca- <b>t</b> neca- <b>mus</b> neca- <b>tis</b> neca- <b>nt</b>	Perfect	neca-v- <b>i</b> “I (have) murdered” neca-v- <b>isti</b> neca-v- <b>it</b> neca-v- <b>imus</b> neca-v- <b>istis</b> neca-v- <b>erunt</b>
Imperfect	neca-ba- <b>m</b> “I was murdering” neca-ba- <b>s</b> neca-ba- <b>t</b> neca-ba- <b>mus</b> neca-ba- <b>tis</b> neca-ba- <b>nt</b>	Pluperfect	neca-v- <b>eram</b> “I had murdered” neca-v- <b>eras</b> neca-v- <b>erat</b> neca-v- <b>eramus</b> neca-v- <b>eratis</b> neca-v- <b>erant</b>
Future	neca-b- <b>o</b> “I will murder” neca-bi- <b>s</b> neca-bi- <b>t</b> neca-bi- <b>mus</b> neca-bi- <b>tis</b> neca-bu- <b>nt</b>	Future Perfect	neca-v- <b>ero</b> “I will have murdered” neca-v- <b>eris</b> neca-v- <b>erit</b> neca-v- <b>erimus</b> neca-v- <b>eritis</b> neca-v- <b>erint</b>
<b>Subjunctive</b>			
Present	nec-e- <b>m</b> “I murder (subj.)” nec-e- <b>s</b> nec-e- <b>t</b> nec-e- <b>mus</b> nec-e- <b>tis</b> nec-e- <b>nt</b>	Perfect	neca-v- <b>erim</b> “I murdered (subj.)” neca-v- <b>eris</b> neca-v- <b>erit</b> neca-v- <b>erimus</b> neca-v- <b>eritis</b> neca-v- <b>erint</b>
Imperfect	neca- <b>rem</b> “I was murdering (subj.)” neca- <b>res</b> neca- <b>ret</b> neca- <b>remus</b> neca- <b>retis</b> neca- <b>rent</b>	Pluperfect	neca-v- <b>issem</b> “I had murdered (subj.)” neca-v- <b>isses</b> neca-v- <b>isset</b> neca-v- <b>issemus</b> neca-v- <b>issetis</b> neca-v- <b>issent</b>

As shown in Table V, these endings occur regularly within the active paradigm, in all tense/mood specifications. Moreover, they are the same for all verb classes (Gildersleeve & Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others). Therefore, we will refer to this set of endings as “active”:

(5)	<b>Active endings</b>	
	<i>Primary</i>	<i>Secondary<sup>9</sup></i>
	<i>(infectum)</i>	<i>(perfectum)</i>
1.sg	<b>-o/-m</b>	<b>-i</b>
2.sg	<b>-s</b>	<b>-isti</b>
3.sg	<b>-t</b>	<b>-it</b>
1.pl	<b>-mus</b>	<b>-imus</b>
2.pl	<b>-tis</b>	<b>-istis</b>
3.pl	<b>-nt</b>	<b>-erunt</b>

Conversely, a different set of endings is displayed with passive constructions and deponent verbs. Consider the passive paradigm of the transitive verb *necare*:

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<sup>9</sup> The traditional primary/secondary distinction is adopted here for the sake of clarity. For a detailed discussion of the etymology of these endings and the historical reasons underlying their occurrence in the Latin verbal paradigm see Palmer (1954); Leumann, Hofmann & Szantyr (1963); Cupaiuolo (1991); Beekes 1995; Sihler (2008).

Table VI – Passive paradigm in *-ari* (finite)

	<i>Infectum</i>		<i>Perfectum</i>
<b>Indicative</b>			
Present	nec- <b>o-r</b> "I am (being) murdered" neca- <b>ris</b> neca- <b>tur</b> neca- <b>mur</b> neca- <b>mini</b> neca- <b>ntur</b>	Perfect	necatus, a, um sum "I was/have been murdered" es est necati, ae, a sumus estis sunt
Imperfect	neca-ba- <b>r</b> "I was being murdered" neca-ba- <b>ris</b> neca-ba- <b>tur</b> neca-ba- <b>mur</b> neca-ba- <b>mini</b> neca-ba- <b>ntur</b>	Pluperfect	necatus, a, um eram "I had been murdered" eras erat necati, ae, a eramus eratis erant
Future	neca-b- <b>o-r</b> "I will be murdered" neca-be- <b>ris</b> neca-bi- <b>tur</b> neca-bi- <b>mur</b> neca-bi- <b>mini</b> neca-bu- <b>ntur</b>	Future perfect	necatus, a, um ero "I will have been murdered" eris erit necati, ae, a erimus eritis erunt
<b>Subjunctive</b>			
Present	nec-e- <b>r</b> "I am murdered (subj.)" nec-e- <b>ris</b> nec-e- <b>tur</b> nec-e- <b>mur</b> nec-e- <b>mini</b> nec-e- <b>ntur</b>	Perfect	necatus, a, um sim "I was/have been murdered (subj.)" sis sit necati, ae, a simus sitis sint
Imperfect	neca-re- <b>r</b> "I was being murdered (subj.)" neca-re- <b>ris</b> neca-re- <b>tur</b> neca-re- <b>mur</b> neca-re- <b>mini</b> neca-re- <b>ntur</b>	Pluperfect	necatus, a, um essem "I had been murdered (subj.)" esses esset necati, ae, a essemus essetis essent

Deponent verbs display the same morphology as passive forms, but they do not have passive interpretation. For this reason, deponents are traditionally defined as having "passive form" and "active meaning" (Gildersleeve &

Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006 among others). Consider, for instance, the finite paradigm of the deponent verb *meditor* "meditate" (Table VII):



- (6) a. \* medit-o  
 meditate-pres.ind-1.sg  
 b. \* medita-vi  
 meditate-perf.ind-1.sg

In this study, the morphology displayed by passives and deponents will be indicated with the term “*-r* morphology”, on the basis of its characteristic *-r*<sup>10</sup>. Latin *-r* morphology is summarized below:

(7)	<b><i>-r</i> morphology</b>	
	<i>Infectum</i>	<i>Perfectum</i>
1.sg	<b>-r</b>	<b>- Past Participle + BE-1.sg</b>
2.sg	<b>-ris</b>	<b>- Past Participle + BE-2.sg</b>
3.sg	<b>-tur</b>	<b>- Past Participle + BE-3.sg</b>
1.pl	<b>-mur</b>	<b>- Past Participle + BE-1.pl</b>
2.pl	<b>-mini</b>	<b>- Past Participle + BE-2.pl</b>
3.pl	<b>-ntur</b>	<b>- Past Participle + BE-3.pl</b>

Observe that *infectum -r* morphemes always alternate with analytic perfect forms in the *perfectum* paradigm. In other words, no synthetic perfect is attested for passives and deponents. These alternations are systematic and consistent, as summarized in (7) and hold for all Latin verbal paradigms (Gildersleeve & Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others). In this chapter, it will be claimed that the presence of Latin *-r* morphology (and of its *perfectum* counterpart) is syntactically motivated, as this morphological marking always reflects an inactive syntactic configuration.

### 3.1 Active vs. inactive

Passives and deponents are apparently heterogeneous environments. Nonetheless, they share the common property of being inactive (in the terms

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<sup>10</sup> Latin *-r*, also occurring in Celtic languages, was originally related to the Proto-Indo-European middle paradigm. Its etymological root is probably in an ancient locative (cf. Leumann 1929; Leumann, Hofmann & Szantyr 1963; Clackson 2007; Sihler 2008, among others). This could also account for its occurrence in other apparently non-related contexts of the language (Giorgi & Migliori, in prep.).

of La Fauci 1988, 1997, 1998; Lazzeroni 1990, 1997; Zamboni 2000; Gianollo 2000, 2005, 2010):

**Inactive constructions:** verbal clauses expressing an event/state lacking (prototypical) agentivity.

The term “inactive” indicates all those contexts in which the sentential subject is partially or totally affected by the action expressed. Hence, inactive refers to all the cases in which this argument has the syntactic-semantic properties of an Undergoer, i.e. a participant which undergoes an event/state (Dowty 1991; Sorace 2000; Van Valin 2001; Bentley 2006). This is true of passive, experiential and anti-causative constructions, for instance (Kemmer 1993; Alexiadou & Anagnostopoulou 1999 *et seq.*; Van Valin 2001; Alexiadou 2013; Alexiadou, Anagnostopoulou & Schäfer 2006, 2014; Alexiadou & Schäfer 2013).

The inactive character of passives is straightforward, as the sentential subject of these derivationally corresponds to the internal argument and has the semantic properties of a [Theme] (Burzio 1986; Baker 1988). In this study, it will be claimed that deponents are also inactive, since they generally pertain to non-agentive contexts.

Conversely, the term “active” refers to agentive clauses, typically related to transitivity (Burzio 1986; La Fauci 1988, 1997, 1998 *et seq.*; Kratzer 1996)<sup>11</sup>:

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<sup>11</sup> Reflexive constructions constitute a borderline case between active and inactive constructions. Consider the example below:

- (i) auditor [...] se laudat [Quint. *Inst.* IX, 2]  
 listener-NOM himself praise-pres.ind-3.sg  
 “The listener praises himself”

On the one hand, the subject of (i) is both the agent and the patient of the clause. On the other hand, these two entities are syntactically distinguished. The reflexive interpretation is only given by the semantic component of the grammar, which interprets the two elements as co-referent thanks to their anaphoric dependency (cf. Kemmer 1993; Reuland 2011; Manzini & Savoia 2007, among many others). The fact that Latin (and many other languages) adopt distinct morphology for these constructions is an indication of the specific character of reflexives.

As reflexives do not pertain to Latin *-r* forms and are a distinct verb group, they will not be discussed in this chapter, which focuses on the occurrence of *-r* morphology in Latin. Nonetheless, some aspects of the development of reflexives will be illustrated in the following chapter, as their diachronic outcomes were related to the development of other inactive forms between Latin and early Romance (Väänänen 1966; Cennamo 1991, 1993 *et seq.*).

**Active constructions:** (transitive) agentive verbal constructions.

This study will show that the active/inactive distinction is central within the Latin verbal system. More specifically, it will be argued that *-r* morphology, occurring in the *infectum*, always signals an inactive configuration. Therefore, the Latin verbal system displays an active/inactive opposition throughout and not only in the *perfectum* paradigm (as stated in La Fauci 1988 *et seq.*). This fact plays a decisive role both synchronically and diachronically.

### 3.2 Latin *-r* morphology: passives

The occurrence of *-r* morphemes on a transitive root confers the passive interpretation (Gildersleeve & Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others). Consider, for instance, the contrast between (8) and (9):

- |     |  |   |  |
|-----|--|---|--|
| (8) | Iugurtha<br>Jugurtha-m.3.sg.NOM.<br>"Jugurtha murders Adherbal"  | Adherbalem[...]<br>Adherbalem-m.sg.ACC. | necat [Sall. <i>Iug.</i> 26,3]<br>murder-pres.ind.3.sg             |
| (9) | alter<br>other-m.sg.NOM.<br>"The second son is (being) murdered" | filius [...]<br>son-m.sg.NOM.           | necatur [Cic. <i>Cl.</i> 28, 16]<br>murder-pres.ind.3.sg- <i>r</i> |

In (8), the predicate is the active transitive verb *neco* "murder", associated with an agentive sentential subject in the nominative, *Iugurtha* "Jugurtha", and with an accusative direct object (henceforth DO), *Adherbalem* "Adherbal". In (9), by contrast, the same verb occurs with an *-r* ending: in this case, the sentential subject *filius* "son" constitutes the [Theme] of the sentence and the interpretation of the whole structure is passive. This is consistent throughout the whole Latin verbal system, with no stem distinction. Therefore, the occurrence of *-r* morphemes on Latin transitive roots typically corresponds to a passive structure<sup>12</sup>.

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12 *-r* morphology on transitives can rarely provide a quasi-reflexive interpretation as well. This is true of very few verbs, such as the so-called "verbs of personal care" (like *lavo* "wash"). Despite their apparent reflexive character, these verbs differ from reflexives, both morphologically and semantically. At a morphological level, the verbs of personal care exhibit *-r* morphemes, whereas Latin reflexives are expressed in Latin either by means of an anaphoric pronoun or through an intrinsically reflexive form (e.g. *crucio*, as discussed in Gianollo 2000, 2005). Semantically, the participants of curative verbs cannot be distinguished from each other, as the event refers to an action



For the *perfectum* paradigm, the passive of a transitive verb is always expressed by means of an analytic form, as opposed to the synthetic active form:

(10)	a.	nec-o murder-1.sg "I murder"	b.	neca-v-i murder-perf-1.sg "I murdered/I have murdered"
	c.	nec-o-r murder-1.sg-r "I am (being) murdered"	d.	necatus sum murdered-PP BE-1.sg "I was/have been murdered"

This opposition is also consistent and regular and displays no exceptions (Gildersleeve & Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others).

### 3.3 Latin *-r* morphology: deponents

The second context in which Latin *-r* morphology occurs is on deponent verbs. The characteristics of deponents are different to those of both passive and active verbs. Even though these verbs always display *-r* morphemes, their interpretation is not passive. Consider the examples here that illustrate the unavailability of a passive reading:

(11)	animus	meus	miratur	[Pl. <i>Bac.</i> 528]
	soul-m.3.sg-NOM.	my- m.sg-NOM.	be astonished-pres.ind3.sg. <i>r</i>	
	"My soul is astonished"			

---

taking place on the subject's body, which is not considered as a distinct entity. Moreover, verbs of personal care are generally used intransitively and hence receive an intrinsic interpretation; this which may be related to the middle diathesis, which expresses events involving an affected subject (cf. Kemmer 1993). Reflexives, on the contrary, express a transitive action which is reflected on a co-referent (distinct) entity (Kemmer 1993; Gianollo 2000, 2005). The difference between these two verb classes is thus in the grade of transitivity of the event (cf. Hopper & Thompson 1980).

The *-r* form of verbs of personal care seems to confirm the similarity of this verb class with other deponents and, in particular, with anti-causative constructions: inactive contexts in which the cause of the event is underspecified. These cases therefore constitute a borderline group between reflexives and anti-causatives.

The restricted character of this class also shows that the formation of deponent *-r* forms from transitives is extremely limited in Latin (as well as in other languages, cf. Kemmer 1993) and specifically pertains to anti-causative constructions (Gianollo 2000).



definition specifically refers to the particular properties shown by these verbs, which both lack active morphology and passive interpretation, as in (14):

- |      |    |                            |         |    |                        |
|------|----|----------------------------|---------|----|------------------------|
| (14) | a. | medit-o-r                  |         | b. | *medit-o               |
|      |    | meditate-1.sg-r            |         |    | meditate-1.sg          |
|      |    | "I meditate/am meditating" |         |    |                        |
|      | c. | meditatus                  | sum     | d. | *medita-v-i            |
|      |    | meditated-PP               | BE-1.sg |    | meditate-perf.ind-1.sg |
|      |    | "I (have) meditated"       |         |    |                        |

The paradigm above shows that the deponent *miror* "be astonished" always exhibits *-r* morphology, but completely lacks an active counterpart: (14-b) and (14-d) are not attested. On the one hand, the traditional description of deponents correctly indicates that passives and deponents display the same morphological marking. On the other hand, this definition seems problematic, in that it associates deponents with an active interpretation *tout court*. This fact seems empirically incorrect, since these verbs appear to pertain to the inactive domain instead<sup>13</sup>. In this sense, the terminology oversimplifies the properties of deponents, because it associates them with an interpretation which is not found in the actual data. This discrepancy between the term and the empirical evidence reveals the difficulty of classifying these verbs, which dates back to antiquity and has kept the discussion about this verb class alive right up to the present day.

### 3.4.2 Deponent verbs within the grammatical discussion

The term "deponent" was coined by ancient grammarians from the Latin verb *deponere* "lay aside", with specific reference to a supposed defectivity. This definition, first attested during the III century (Flobert 1975), could, in fact, be used by grammarians in two ways: either to indicate the alleged lack of "passive" interpretation (semantic approach) or to make reference to the absence of an active morphological counterpart (morphological approach)<sup>14</sup>. It is clear that both interpretations rely on a paradigmatic view of grammar, according to which a linguistic system should always exhibit a certain original "symmetry". For deponents, it was held that the paradigm must have been "complete" at some chronological stage and that either the passive interpretation or the active morphology had been lost over time.

<sup>13</sup> See § 3.4.2 in this chapter.

<sup>14</sup> For an extensive discussion of the treatment of deponents by Ancient grammarians, see Flobert 1975 and Gianollo 2000.

The paradigmatic approach was widespread within the ancient grammatical tradition and remained in use even during the Modern Age: a great deal of literature from between the XVI and the XVIII centuries is characterized by this view of grammar, which forms the basis for attempts to classify passives and deponents together, to accommodate this apparently problematic class of verbs within a symmetrical system (cf. Scheller 1779). A clear example of this is the well-known work by Voorbroek (1687), in which deponents are analysed as former passives that acquired a new function in the grammar at a later stage.

Subsequently, at different times, other attempts have been made to assimilate deponents with passives or with other constructions, for instance with reflexives (Bopp 1820; Nölting 1859) and with intransitives/anti-causatives (Nausester 1907). The original and distinct status of deponents within the Latin verbal system has thus been overlooked. This approach is problematic, as it does not consider deponents to have specific properties or an independent path of development. Moreover, this view has created confusion regarding the verbal group described as “deponent”. Because of the continuous attempts to accommodate these verbs within other classes, this definition often ended up in indicating the *communia*, i.e. verbs which can be used as both active and as passive/reflexive depending on the context (think of pairs like *movere/moveri* “move, be moved/move oneself”). As illustrated above, these are not the verbs to which “deponent” *stricto sensu* refers to: *communia* are, in fact, derived from transitive roots and do not constitute an original class. Core deponents, by contrast, are a distinct class in that they completely lack an active counterpart and are associated with specific contexts<sup>15</sup>. Indeed, comparative historical studies have illustrated that deponents never used to have a passive interpretation, and occur with their own specific properties even in early attestations. This observation does not only hold for Latin, but also for most Indo-European languages, in which deponents can typically be related to the middle conjugation, i.e. a paradigm that encodes an event (partially or totally) affecting an Undergoer subject (Meillet 1937; Rix 1988; Clackson 2007; Kortland 2010). Moreover, it should be noted that from a historical perspective the PIE passive is an innovative category, whereas the middle probably characterized an older stage of the language (Ernout 1909; Ernout – Meillet 1979; Palmer 1954; Clackson 2007; Clackson & Horrocks 2011; Kulikov 2006; Kortland 2010; Beekes 1995, among others.). Therefore, trying to derive deponents from passives is on the wrong track, both from a semantic and from a diachronic point of view.

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<sup>15</sup> See § 3.4.3 in this chapter.

The assumption that deponent verbs originally had an active morphological counterpart for these verbs seems even more dubious, since there is no empirical evidence to support this claim. In the languages that display this paradigm, deponents have occurred with this morphological marking since their earliest attestations (Ernout 1909; Ernout & Meillet 1979; Palmer 1954; Clackson 2007; Clackson & Horrocks 2011; Beekes 1995, among others). Here too, the paradigmatic approach shows its incongruity with linguistic data<sup>16</sup>. Despite these observations, “deponent” has now become a conventional term within the linguistic literature and is generally used as a practical tool to unambiguously indicate those Latin verbs that only occur with *-r* morphology. The incorrect judgements related to the original meaning of the definition are thus no longer implied in the use of the term.

This study will therefore adopt the term “deponent” as a convention to refer to all Latin verbs that only display *-r* morphology. The aim is to examine the specific properties of this class of verbs and to detect the characteristics that make them distinct from other kinds of constructions, both from a historical and from a syntactic point of view.

### 3.4.3 Verb types, functions and distribution

Latin deponent verbs are found in all Latin stem paradigms, as illustrated below<sup>17</sup>:

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<sup>16</sup> Synchronic and diachronic evidence has frequently revealed that asymmetry and defectivity are broadly attested in natural languages, often since their earliest attestations. Consider, for instance, the data concerning ancient (and less ancient) Indo-European languages, which display an original asymmetry in many aspects of the grammar. One example of this is the original absence of a category like “future”, which developed only at a later stage, probably starting from the subjunctive (Meillet 1937; Hoffmann 1975-80; Beekes 1995; Szemerényi 1989; Clackson 2007; Meier-Brügger 2010; Peyrot 2013, among others). These empirical facts demonstrate that asymmetry can and must be accepted as a characteristic of human languages (cf. Di Giovine 1997; Di Sciullo 2003, 2005 *et seq.*). This significant change in approach made it possible to look at deponent verbs from the correct perspective, i.e. as a group of verbs with specific properties that has been distinct from transitives and passives since the origins of the Latin language (cf. Palmer 1954; Lazzaroni 1997; Clackson 2007; Kortland 2010).

<sup>17</sup> It has been observed, however, that deponents are most frequent in the a-paradigm, and seem to be less numerous in the *-ē-* class. This fact can be explained on diachronic and functional grounds, as proposed by Gianollo (2000), since both *-r* and *-ē-* etymologically relate to the stative field. Therefore, a relative complementary distribution of these two elements can be attributed to the fact that they both relate to the same semantic-syntactic domain.

- |      |    |  |                |
|------|----|--|----------------|
| (15) | a. | miror, aris, miratus sum, mirari       | [a-paradigm]   |
|      |    | “be astonished”                        |                |
|      | b. | vereor, eris, veritus sum, vereri      | [ē-paradigm]   |
|      |    | “be afraid”                            |                |
|      | c. | morior, ĕris, mortuus sum, mori        | [ĕ/ī-paradigm] |
|      |    | “die”                                  |                |
|      | d. | opperior, īris, oppertus sum, opperiri | [ī-paradigm]   |
|      |    | “wait for”                             |                |

On semantic grounds, it is possible to distinguish several deponent types (Delbrück 1897; Lazzeroni 1990, 1997; Panhuis 2006; Gianollo 2000, 2005, 2010), which often correspond to verbal classes with distinct syntactic properties.

#### 3.4.3.1 Unaccusatives (change-of-state and movement verbs).

A first group of deponents is constituted by verbs expressing change of state:

- |      |                                 |   |   |                 |
|------|---------------------------------|---|---|-----------------|
| (16) | eodem anno                      | Q. Fabius Maximus   | moritur                                   | [Liv. XXX 26,7] |
|      | same year-ABL.                  | Q. F.Maximus-m.3.sg.NOM.  | die-pres.ind.3.sg.r                       |                 |
|      |                                 |   | “In the same year Q. Fabius Maximus died” |                 |
| (17) | si vera                         | a deo   | mittuntur,                                |                 |
|      | if true-n.pl.NOM.               | by god-m.sg.ABL.  | send-3.pl.r                               |                 |
|      | falsa unde                      | nascuntur?  | [Cic. Div. 2, 97]                         |                 |
|      | false-n.pl.NOM. from where-Adv. | be born-3.pl-r  |   |                 |
|      |                                 | “If true things come from the divinities, where do false things come from?” |   |                 |

Secondly, some deponents express movement<sup>18</sup>, as shown in (18) and (19):

- |      |                       |  |                  |
|------|-----------------------|--|------------------|
| (18) | proficiscitur         | e castris  |                  |
|      | leave-pres.ind.3.sg-r | from camp-n.pl.ABL.                              |                  |
|      | cum modico            | praesidio  | [Liv. XXIII 7,8] |
|      | with small-n.sg.ABL   | presidium-n.sg.ABL.                              |                  |
|      |                       | “He leaves from the camp with a small presidium” |                  |
| (19) | confestim             | adgreditur                                       | [Liv. II 53, 1]  |
|      | immediately-Adv.      | approach-pres.ind-3.sg-r                         |                  |
|      |                       | “He approaches immediately”                      |                  |

<sup>18</sup> Notice, however, that a subclass of Latin motion verbs is unergative (e.g. *ambulare* ‘walk’), as discussed in Napoli 2013.

In change-of-state verbs, the sentential subject does not provoke the event but is affected by it. Therefore, this argument has the properties of an Undergoer (Perlmutter 1978; Reinhart 2000, 2002; Van Valin 2001; Levin & Rappaport Hovav 2005 *et seq.*). Movement verbs appear problematic in this sense in that their semantics seems at least partially agentive (see Reinhart 2000, 2002). Nonetheless, the syntax of these verbs displays unaccusative properties cross-linguistically (Perlmutter 1978; Burzio 1981, 1986). Consider, for instance, the fact that unaccusative roots do not allow agentive nominalizations, even in the case of movement verbs, as shown by the Italian examples below:

- (20) a. \*anda-tore [Italian]  
       "the one who goes"  
       b. \*veni-tore  
       "the one who comes"  
       c. \*cadi-tore  
       "the one who falls"

The same fact holds for Latin: nominalizations of these verbs with the agentive suffix *-tor* are not attested in Classical Latin<sup>19</sup>:

- (21) a. \*proficiscitor  
       "the one who leaves"  
       b. \*adgressor  
       "The one who approaches"

Therefore, despite their apparently agentive character, Latin movement verbs instead seem to display inactive properties.

Cross-linguistically, change-of-state verbs and movement verbs both belong to the syntactic class of unaccusative verbs. According to Baker's Uniformity of Theta-role Assignment Hypothesis (1988), there is a universal uniformity in the language as far the assignment of semantic roles is concerned. In other words, the same semantic roles are assigned in the same syntactic sites in all languages. On the basis of this study, Latin change-of-state verbs and movement verbs will be considered to be syntactically unaccusative. Despite some language-specific differences, the unaccusative class looks quite consistent in that it generally includes verbs pertaining to the two semantic fields outlined above (Perlmutter 1978; Burzio 1981; 1986 *et seq.*; Levin & Rappaport Hovav 2002, 2005 *et seq.*). The sentential subject of unaccusative verbs is generated as the internal argument (IA) of V. For this reason, this

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<sup>19</sup> See also § 4.3 in this chapter.

argument shares several properties with the direct object of transitives and is assigned the [Theme]  $\theta$ -role, characterized by the total absence of agentivity (Perlmutter 1978; Burzio 1981, 1986; Baker 1988; Dowty 1991; Reinhart 2000, 2002). Consider, at this point, Reinhart's classification of thematic functions (2002) (Table VIII), according to which theta-roles can be broken down into syntactic-semantic features<sup>20</sup>:

**Table VIII – Theta-role decomposition (based on Dowty 1991, Reinhart 2002)**

<i>Syntactic-semantic features</i>	<i><math>\theta</math>-role</i>	<i>Definition</i>
[+c, +m]	<b>Agent</b>	A participant which the meaning of the verb specifies as doing or causing something, possibly intentionally.
[+c, -m]	<b>Instrument</b>	Means by which something comes about
[-c, +m]	<b>Experiencer</b>	A participant that undergoes a sensory, cognitive, or emotional experience.
[-c, -m]	<b>Theme/Patient</b>	A participant which the verb characterizes as being affected by the predicate (change of state/location)
[+c]	<b>Cause</b>	Entity causing the event
[+m]	<b>Sentient/Holder of state</b>	A participant whose state is expressed by the predicate.
[-m]	<b>Locative/Source</b>	<b>Locative:</b> place in which something is situated <b>Source:</b> Object from which the motion proceeds
[-c]	<b>Goal/Benefactive</b>	Entity benefitting from some action
[ ]	[ ]	Argument semantically corresponding to a free variable (Heim & Kratzer 1998)

Table VIII shows that [Agent] can only be assigned when both the cause of the event (indicated by [+c] in the schema) and the mental participation of the sentential subject (schematized as [+m]) are encoded in the semantics of the verb. Conversely, when both of these syntactic-semantic features are absent, the sentential subject corresponds to a [Theme]. This is exactly what happens with unaccusatives, which can be defined as non-agentive verbs *par excellence*: the action expressed is not intentionally provoked ([-cause], [-mental]) and

<sup>20</sup> Sorace (2000) proposes, on the other hand, a system in which verb properties are only defined by the semantics of verbal items. For instance, unaccusative verbs are classified as "change of state" verbs, with reference to their semantics. This proposal is discussed more extensively in chapter 3, with regard to Split Intransitivity systems in Romance.



the sentential subject happens to be affected by it. The situation for unaccusatives is summarized in the schema below:

<i>Features</i>	<i>⊖-role</i>	<i>Verb class</i>
[-c, -m]	[Theme]: A participant which the verb characterizes as being affected by the predicate	Unaccusatives

In Latin, most unaccusatives are deponent and occur with *-r* morphology<sup>21</sup>. Consider for instance the following examples, corresponding to the core cases of unaccusativity attested cross-linguistically:

- (22)
- |    |             |            |
|----|-------------|------------|
| a. | morior      | “die”      |
| b. | nascor      | “be born”  |
| c. | fieri       | “become”   |
| d. | labor       | “fall”     |
| e. | proficiscor | “leave”    |
| f. | dilabor     | “dissolve” |
| g. | gradior     | “move”     |
| h. | orior       | “rise”     |
| i. | medeor      | “recover”  |
| l. | liqueor     | “smelt”    |

The fact that Latin unaccusatives generally display *-r* morphology already suggests a possible link between deponents and passives, as both are characterized by a structure with an Undergoer subject, originally merged as the IA of the VP.

#### 3.4.3.2 Experiential verbs

Another macro-group of deponents is the *verba affectuum* (experiential verbs). Within this class, three distinct semantic fields can be identified: emotions (the

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<sup>21</sup> The few exceptions to this generalization are movement verbs (e.g. *eo* “go”, *venio* “come”, *descendo* “descend”), whereas change-of-state verbs, generally considered to be the core unaccusative group, consistently occur as deponents. These movement class exceptions, which may be related to the problematic character of this sub-group (semantics vs. syntax, Reinhart 2000, 2002), do not affect the general observation about the deponent character of most Latin unaccusatives.



the sentential subject. This argument therefore has the properties of an [Experiencer] (in the terms of Reinhart 2000, 2002): it does not provoke the event expressed by the predicate ([-c]), but it has a mental participation in it ([+m]).

**Theta-role decomposition (based on Dowty 1991; Reinhart 2002)**

<i>Syntactic-semantic features</i>	<i>θ-role</i>
[+c, +m]	Agent
[+c, -m]	Instrument
[-c, +m]	Experiencer
[-c, -m]	Theme
[+c]	Cause
[+m]	Sentient
[-m]	Locative/Source
[-c]	Goal/Benefactive
[ ]	[ ]

This is unambiguous in the case of emotions and cognitive processes, which intuitively take place independently of the subject's initiative: their cause, if ever expressed, is typically external. On the other hand, *verba dicendi*, i.e. verbs indicating events of speaking, may *prima facie* appear different in this sense, since they seem to be agentive to a certain extent. However, a closer look at the behaviour of this sub-class reveals that it is not prototypical agentivity which is at play. This is indicated by two properties that these verbs are endowed with. Firstly, it is relevant that deponent *verba dicendi* are generally used intransitively (Flobert 1975). This suggests an incompatibility with a direct object and explains the inactive character of these verbs. Consider, for instance, the following examples from Plautus, which illustrate the absolute use of *loquor* "talk":

- (26) Non loquor? non uigilo? [Pl. *Amph.* 406]  
 not talk-pres.ind.1.sg-r not pay attention-pres.ind-1.sg  
 "Don't I talk? Don't I watch out?"
- (27) Ita loquor [Pl. *Amph.* 1021]  
 this way-Adv. talk-pres.ind.1.sg-r  
 "I talk this way"
- (28) non male loquor [Pl. *Pers.* 2017]  
 not badly talk-pres.ind.1.sg-r  
 "I do not talk badly"

- (29) omnes loquentur [Pl. *Capt.* 786]  
 everybody-3.pl.NOM. talk-pres.ind.3.pl-r  
 “Everybody talks”

The fact that this deponent *verbum dicendi*, which is the most frequent one in early and Classical Latin, nearly always occurs without a complement<sup>23</sup>, seems to confirm its intrinsically intransitive character. Another property of deponent *verba dicendi* relates to their semantics. It seems to be the case that these verbs are most frequently used to indicate the faculty of speaking in general, i.e. “the ability to talk”. They can thus be said to have only a limited agentive character, as the subject is not entirely responsible for an “ability”. This fact indicates that these cases are analogous to verbs expressing states, as confirmed by the absolute usage of these verbs: this suggests that these verbs specifically relate to the process that they express<sup>24</sup>. In this sense, they can be interpreted intrinsically, i.e. as exclusively “subject related”. Another argument in support of this claim is the fact that many languages of the world display a contrast between a class of transitive “extrinsic” verbs of speaking and an intransitive “intrinsic” class, as illustrated in Table X:

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<sup>23</sup> The few attestations with an accusative almost exclusively involve neuter adjectives or neuter nouns, which can frequently be interpreted as having an adverbial function (cf. Gianollo 2000):

- (i) recte et vera loquere [Pl. *Capt.* 960]  
 righteously-Adv. and truthfully-n.pl.ACC. talk-inf.pres-r  
 “To talk righteously and truthfully”
- (ii) nimis longum loquor [Pl. *Ep.* 337, *Ep.* 665, *Per.* 167]  
 never for a long time-n.sg-ACC. talk-pres.ind.1.sg-r  
 “I never talk for a long time”

<sup>24</sup> The lack of impingement on an object has, on the other hand, been shown to be, on a cross-linguistic basis, one of the low-transitivity factors (cf. Cennamo 1998b).

Table X – Verbs of speaking

Languages	Transitive (extrinsic) “say”	Intransitive (intrinsic) “talk, speak”
Latin	<i>dico</i>	<i>loquor</i>
Italian	<i>dire</i>	<i>parlare</i>
French	<i>dire</i>	<i>parler</i>
Spanish	<i>decir</i>	<i>hablar</i>
English	<i>say</i>	<i>talk</i>
Dutch	<i>zeggen</i>	<i>praten , spreken</i>
German	<i>sagen</i>	<i>sprechen</i>
Romanian	<i>a spune</i>	<i>a vorbi</i>

Cross-linguistically, languages quite consistently exhibit these two classes. Moreover, Marelj (2004) has observed that several Slavic verbs also refer to the “ability of speaking” and thus roughly correspond to the intrinsic class identified above. From this perspective, it is possible to classify *loquor* and the other deponent *verba dicendi* as members of the intransitive (subject related) verbs of speaking, which form a consistent class cross-linguistically. Therefore, despite their apparently agentive character, deponent *verba dicendi* are not prototypically agentive, but rather display a number of properties suggesting that they have an inactive character. Nonetheless, their particular semantics indicates a certain degree of control on the part of the subject over the event expressed. In formal terms, we will refer to this property as being encoded by a [control] feature. In the next chapter it will be claimed that this sub-group of verbs played an essential role in the passage between Latin and Romance, in particular because of their “border-line” properties, which made their syntax ambiguous and opaque at a certain stage of the language<sup>25</sup>.

To sum up, even with some slight distinctions in the degree of control over the predicate, all experiential verbs are characterized by a non (or merely partially) agentive character and by the mental participation of their sentential subject, which is assigned the [Experiential] semantic role (cf. Reinhart 2002):

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<sup>25</sup> In chapter 3, it will be claimed that *verba dicendi* are, in fact, one of the reanalysis triggers that caused the change of the clausal domain during the passage to early Romance.

<i>Features</i>	<i>θ-role</i>	<i>Verb class</i>
[-c, +m]	Experiencer : the entity that undergoes a sensory, cognitive, or emotional experience	Experientials (emotions, cognitive processes, verbs of speaking)

### 3.4.3.3 Perception verbs

Three deponent verbs express perception:

- (30) atque ego conspicor navem [Pl. *Merc.* 256]  
 and 1.sg.NOM. glimpse-pres.ind.1.sg-r ship-f.sg.ACC.  
 “I also glimpse a ship”
- (31) odoraris cibum [Hor. *Ep.* 6, 5]  
 smell-pres.ind.2.sg-r food-m.sg-ACC.  
 “You smell food”
- (32) caeli templa tueri [Lucr. *RN VI*, 1225]  
 sky-sg.GEN. temples-n.pl.ACC. contemplate-inf.pres.-r  
 “to contemplate the vault of the sky”

These verbs are generally considered to be non-agentive, because the event of perceiving something is not intentional and not directly caused by an [Agent]. Their sentential subject can, by contrast, be considered an [Experiencer] in that it undergoes a mental process for which he is not (completely) responsible.

**Theta-role decomposition (based on Dowty 1991; Reinhart 2002)**

<i>Syntactic-semantic features</i>	<i>θ-role</i>
[+c, +m]	Agent
[+c, -m]	Instrument
[-c, +m]	Experiencer
[-c, -m]	Theme
[+c]	Cause
[+m]	Sentient
[-m]	Locative/Source
[-c]	Goal/Benefactive
[ ]	[ ]



<i>Features</i>	<i>θ-role</i>	<i>Verb class</i>
[-c, +m]	Experiencer : the entity that undergoes a sensory, cognitive, or emotional experience	Experientials (emotions, cognitive processes, verbs of speaking)

### 3.4.3.5 Reciprocals

Finally, some deponent verbs express events that are implicitly reciprocal, as shown in (36):

- (36)      *ambae*                  *filiae*                                  *sumus*:  
              both-f.NOM.      daughter-f.pl.NOM.      BE-pres.ind.1.pl  
              *amplectamur*                                  *ambae*                                  [Pl. *Poen.* 1261]  
              hug-pres.ind.1.pl.r                                  both-f.NOM.  
              “We are both (your) daughters: we both hug (each other)”

The few cases of reciprocal deponents are listed below:

- (37)      **Reciprocal deponents**  
              a.      *amplector/amplexor*                  “embrace”  
              b.      *complector*                                  “embrace”  
              c.      *paciscor*    “find an agreement”  
              d.      *pacificor*    “negotiate, reconcile”

Reciprocals are generally considered structurally similar to reflexives, as the sentential subject is partially affected by the event of the predicate (cf. Reinhart & Reuland 1993). On the other hand, the occurrence of *-r* morphology indicates that Latin encodes these structures as intrinsically middle. This puts them alongside the quasi-reflexive verbs (cf. *lavor* “wash oneself”)<sup>28</sup>, except that reciprocal verbs do not exhibit an active counterpart.

### 3.4.3.6 Interim conclusions

The types of deponent identified all appear to be related to contexts in which the sentential subject is not (prototypically) agentive. Although every subclass exhibits specific characteristics, all deponents share the crucial property

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<sup>28</sup> Recall footnote 9 in this chapter.



of being related to the inactive domain (Lazzeroni 1990, 1997; Gianollo 2000, 2005, 2010; Kallulli 2013; Migliori 2014.). It therefore seems possible to assume that these verbs form a single class and to account for them under a unified syntactic account.

### 3.5 *-r* as inactive morphology

Now that we have examined the various deponent types attested in Latin, let us return to the contexts where *-r* morphology occurs, namely passives (38), and deponent verbs (39):

- (38) alter                      filius [...]                      necatur                      [Cic. *Cl.* 28, 16]  
 other-m.sg.NOM.      son-m.sg.NOM.                      murder-pres.ind.3.sg.*r*  
 "The second son is murdered"
- (39) vereor                      serio                      [Naev. *Com.* 65]  
 fear-pres.ind.1.sg-*r*                      seriously-Adv.  
 "I am seriously afraid"

Furthermore, recall the definition of "inactive" given at the beginning of this chapter:

**Inactive constructions:** verbal clauses expressing an event/state lacking (prototypical) agentivity

Passives are the inactive construction *par excellence*: their sentential subject is always a [Theme], which is wholly affected by the event expressed in the predicate. The demoted Agent can optionally be expressed with a *by*-phrase, but this argument is not indispensable to the argument grid of the construction, which is basically mono-argumental (Chomsky 1957 *et seq.*, Baker, Johnson & Roberts 1989; Collins 2005; Harley 2012).

Deponent verbs have been shown to pertain to inactive contexts, in that they refer to an event or a state characterized by the absence (or a low grade) of agentivity. In light of the observed data, it is possible to formulate a generalization concerning the occurrence of *-r* morphology in Latin:

- (40) **Generalization about Latin *-r* morphology**  
 Latin *-r* morphology only occurs in inactive contexts.

Recall, at this point, that the *-r* morphemes that occur in the imperfective paradigm always alternate with analytic forms in the *perfectum*:

(41) **–r morphology (inactive)**

	<i>Infectum</i>	<i>Perfectum</i>
1.sg	<b>-r</b>	<b>- Past Participle + BE-1.sg</b>
2.sg	<b>-ris</b>	<b>- Past Participle + BE-2.sg</b>
3.sg	<b>-tur</b>	<b>- Past Participle + BE-3.sg</b>
1.pl	<b>-mur</b>	<b>- Past Participle + BE-1.pl</b>
2.pl	<b>-mini</b>	<b>- Past Participle + BE-2.pl</b>
3.pl	<b>-ntur</b>	<b>- Past Participle + BE-3.pl</b>

Periphrastic perfect forms can be considered as the *perfectum* counterpart of *infectum* –r: they occur in the very same contexts and only differ from the former in their aspectual specification. The generalization above can hence be formulated more precisely:

- (42) **Generalization about Latin inactive morphology**  
 Latin –r morphology only occurs in inactive contexts (*infectum*)  
 Latin analytic perfect forms only occur in inactive contexts (*perfectum*)

In both the imperfective and in the perfective paradigm, the occurrence of –r marking and of periphrastic perfects can be taken as the Latin morphological strategy for signalling inactive constructions (Lazzeroni 1990, 1997; Gianollo 2000, 2005, 2010; Ledgeway 2012; Kallulli 2013; Migliori 2014). In this respect, Latin behaves like many other languages that display a dedicated morphological marking for passives and for other inactive constructions (Kemmer 1993, a. o.), such as Albanian and Arberësh varieties (Manzini & Savoia 2007, 2011), Ancient Greek (Clackson 2007; Sihler 2008, among others), Modern Greek (Alexiadou & Anagnostopoulou 1999 *et seq.*; Alexiadou & Doron 2012), many Romance varieties (D’Alessandro 2007; Manzini & Savoia 2011), German (Schäfer 2008 *et seq.*), Icelandic (Sigurðsson 2004 *et seq.*; Barðdal et al. 2012; Wood 2013, a. o.), just to mention a few. There are therefore serious problems with claims that deponent verbs have an active (i.e. agentive) character (Embick 2000; Baerman 2006, 2007; Weisser 2014) as these are at odds with this cross-linguistic empirical generalization<sup>29</sup>. In conclusion, both Latin data and cross-linguistic empirical evidence suggest that all inactive structures should be captured under a unified syntactic account<sup>30</sup>, as they seem to share relevant semantic and morphological properties.

<sup>29</sup> The treatment of deponents as a case of syntax-morphology mismatch is discussed in detail in § 3.2 of this chapter.

<sup>30</sup> More empirical evidence in support of the inactive character of Latin deponents is provided in § 4.3 of this chapter.

## 4. The syntax of Latin *-r* forms

Because of the apparent diversity of the contexts displaying *-r* morphemes, a great deal of the existing literature has claimed that the occurrence of this morphological marking is idiosyncratic. In particular, deponents have often been considered to be a heterogeneous class, which is only superficially distinguished from transitives. From this perspective, these verbs are active as far as the syntax is concerned, although they exhibit passive morphology (Meillet 1966; Baldi 1976; Embick 1997, 1998, 2000; Baerman 2006, 2007; Weisser 2014). Nevertheless, it will be shown that this type of approach encounters both theoretical and empirical problems. This study, by contrast, will propose that inactive structures crucially differ from active ones at the syntactic level and that the occurrence of *-r* morphology in Latin always reflects an inactive syntactic configuration.

### 4.1 *-r* morphology as reflecting different syntactic environments

It has often been claimed that the occurrence of Latin *-r* morphology does not reflect a specific syntactic configuration. In other words, this morphological marker can correspond to different syntactic structures (Meillet 1966; Baldi 1976; Embick 1997, 1998, 2000; Baerman 2006, 2007; Weisser 2014). The various proposals that have been formulated in this regard differ in their technicalities, but the main arguments of the approach are roughly the same, namely: (i) the alleged diversity of the contexts in which *-r* morphology occurs (passives vs. deponents); and (ii) the supposed impossibility of defining any common properties that characterize the deponent class. From this perspective, the presence of this morphology on verbs does not necessarily express a salient syntactic distinction, as it does not always signal a passive structure. More specifically, deponents are considered to be a case of syntax-morphology mismatch in that their syntax is active and their morphology is passive. The occurrence of *-r* morphology on these verbs is thus assumed to be lexically determined, i.e. not related to any specific syntactic properties.

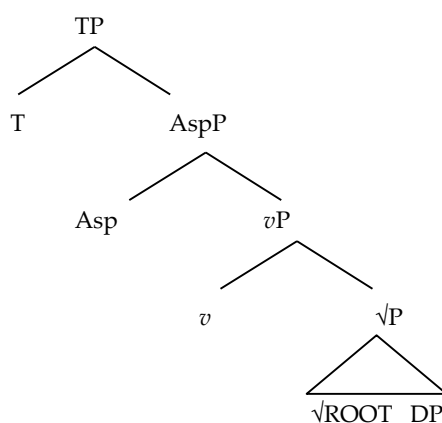
#### 4.1.1 *-r* morphology as reflecting the [pass] feature

One of the most recent analyses of the morphological alternations of the Latin verbal system was proposed by Embick (1997, 1998, 2000), who formulated his analysis within the Distributed Morphology framework (Halle & Marantz 1993, 1994 *et seq.*; Noyer 1992, 1997, 1998 *et seq.*; Embick & Noyer 2001, 2007).

The main argument of this proposal is that deponents are too heterogeneous for a unified syntactic account. Therefore, the occurrence of *-r* on these verbs must be understood as being lexically determined. The core claim of this study is that the occurrence of *-r* morphology reflects the presence of [pass], a syntactic feature, which is absent when active morphology is present.

The Latin verbal spine is formed by three functional heads, *v*P, TP and AspP, where (i) *v* is the light verb associated with features related to agentivity/causativity/eventivity (Chomsky 1996, 1998; Kratzer 1996); (ii) Asp contains features relating to perfectivity and imperfectivity and (iii) T contains temporal features, as shown in (43):

(43) **Latin verbal clause**

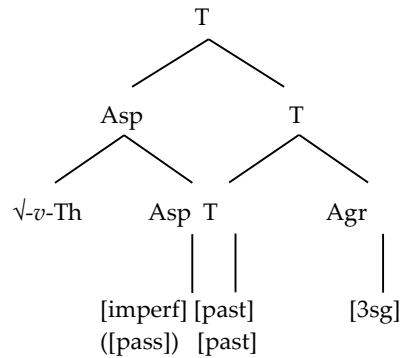


(Embick 2000: 192)

Given this structure, the syntactic feature [pass] can appear in the syntax at two distinct points of the derivation: either on *v* or on roots. In the former case the presence of [pass] causes passive syntax (passives), while in the latter, this feature does not influence the syntactic structure, which remains active (deponents). Yet, its presence on *roots* determines the occurrence of *-r* morphology: that is the reason why deponents have active syntax and passive morphology. Therefore, under this approach, the difference between passives and deponents is simply the result of the different location of [pass] in the structure. In this sense, *-r* can be said to be syntactically determined, as it corresponds to this specific syntactic element. On the other hand, the assumption is also made that [pass] can be inherent on roots, which means that *-r* can also be syntactically not salient (i.e. only lexically determined and not corresponding to any syntactic property).

Furthermore, a number of assumptions are made with regard to the derivation of Latin verbal forms, with particular focus on the operations that determine their morphological shape. More specifically, it is postulated that, given the structure in (43), there is an Asp-to-T movement in all default cases. Moreover, an Agr-node is taken to be merged to the end of the structure as a consequence of this movement:

(44) **Structure/Features**



(Embick 2000: 194)

It is claimed that the structure in (44) underlies all Latin synthetic forms, as in the examples below:

- (45)
- a. nec-o  
murder-pres.ind.1.sg  
"I (am) murder(ing)"
  - b. nec-a-t  
murder-pres.ind.3.sg  
"He murders"
  - c. neca-ba-t  
murder-impf.ind.3.sg  
"He was murdering"
  - d. neca-v-it  
murder-perf.ind.3.sg  
"He (has) murdered"

Latin *-r* forms belonging to the *infectum* paradigm, such as *neco-r* "I am (being) murdered" (passive) and *meditor* "I meditate" (deponent), are also claimed to be derived in this way: since these forms are synthetic as well, the basic

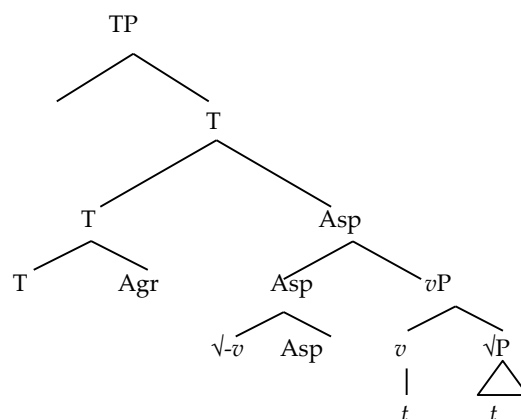
structure is the same. However, these cases differ from the active structures in that the syntactic feature [pass] is present in the syntax on the Aspectual head (see the figure in 44): this specific fact triggers the presence of morphological *-r*. Moreover, two extra mechanical operations are stipulated in this case. Firstly, *Fission* has to take place so that the [pass] feature is separated from the Asp head. Secondly, a *Morphological Merger* is needed in order to join [pass] to the Agr-node. In this way, *-r* morphology is also able to encode the grammatical information related to the person specification.

The derivation is analogous for the *perfectum* paradigm: here too, the presence of [pass] is claimed to be responsible for the morphological difference between active forms and *-r* forms. For the perfect, this distinction is encoded by a synthetic/analytic morphological split: recall that periphrastic perfects always alternate with *infectum -r* morphemes:

- |      |    |  |    |   |
|------|----|--|----|---|
| (46) | a. | necor<br>murder-pres.ind.1.sg- <i>r</i><br>"I am (being) murdered" | b. | necatus sum [passive]<br>murder-PP BE-1.sg<br>"I was/have been murdered"  |
| (47) | a. | meditor<br>meditate-pres.ind.1.sg- <i>r</i><br>"I (am) meditating" | b. | meditatus sum [deponent]<br>meditated-PP BE-1.sg.<br>"I (have) meditated" |

More specifically, in this case the presence of [pass] in the structure is assumed to block the default movement of the Asp complex to T. For this reason, an analytic form is generated for the perfect of passives and of deponents:

(48) **Perfect without movement of Asp-to-T**



(Embick 2000: 214)

On the contrary, in an active perfect there is no intervening element blocking this movement: the result is a synthetic form, the morpheme ordering of which mirrors the features in the structure, as in (44).

To sum up, according to this proposal, Latin verbal forms are derived through the interplay of a number of syntactic and morphological operations. More precisely, the occurrence of *-r* morphology (both of *infectum -r* morphemes and of periphrastic perfect forms) corresponds to the presence in the syntax of a feature [pass], the different location of which determines the difference between passive constructions ([pass] on *v*) and deponent verbs ([pass] on roots). Under the approach outlined here, deponents (e.g. *meditor* “meditate”) and transitives (e.g. *neco* “murder”) are syntactically the same: in both cases, the syntactic structure is active (i.e. with an agentive external argument; henceforth EA). Deponents are therefore claimed to be a case of syntax-morphology mismatch, as they have active syntax and passive morphology.

#### 4.1.2 *-r* as reflecting [pass]: advantages and problems.

Embick’s (2000) proposal concerning the Latin verbal system undoubtedly has the great advantage of capturing within a formal perspective the link between the occurrence of *infectum -r* and of analytic perfect forms. One of the core observations on which his study relies is that these two morphological facts are triggered by the same underlying cause and that they must therefore be linked by analogous syntactic properties. This remark is empirically correct, as this correspondence is strongly consistent in Latin with no significant exceptions<sup>31</sup>.

A further important point made by Embick’s proposal is the key distinction between passive syntax and *-r* morphology: passives always exhibit *-r* morphemes, but *-r* does not always indicate a passive structure. This means that assuming a correspondence “passive: *-r*” is too narrow and not descriptively adequate, as it does not take deponents into account. The accuracy of this empirical observation holds, suggesting that it is necessary to formulate a different and more precise definition of syntactic-semantic domains which could solve this apparent inconsistency. Embick’s solution, as

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<sup>31</sup> An apparent exception to this correspondence is the class of semi-deponent verbs, which display an active *infectum* paradigm together with an analytic perfective form (Gildersleeve & Lodge 1895; Allen & Greenough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others.). Nevertheless, a diachronic and synchronic explanation for these cases can be found, as discussed in § 5.3 of this chapter.

shown above, is to group deponents together with transitives, so that *-r* on deponents must be considered lexically determined.

This approach raises a number of issues. Firstly, the claim that deponents are syntactically equivalent to transitive verbs is not convincing. In the previous section, it was observed that deponents generally pertain to the inactive domain, since they typically refer to non-agentive contexts<sup>32</sup> Recall, in fact, that the three main sub-groups of deponents are unaccusative, experiential and quasi-reflexive verbs, which all lack prototypical agentivity. Therefore, it seems problematic to claim that they are characterized by an active structure with an agentive EA. Embick's analysis is thus at odds with the generalization concerning the occurrence of Latin *-r* morphology<sup>33</sup>:

- (49) **Generalization about Latin inactive morphology**  
 Latin *-r* morphology only occurs in inactive contexts (*infectum*)  
 Latin analytic perfect forms only occur in inactive contexts (*perfectum*)

Moreover, it has been frequently shown in the literature that deponents are cross-linguistically consistently intransitive (Lazzeroni 1990, 1996, 1997; Zombolou 2004; Gianollo 2000, 2005, 2010; Ikonomou 2011; Kallulli 2013 Zombolou & Alexiadou 2014a, b). Consider, for instance, the following examples from Albanian, showing that deponents like *dukem* "appear" are incompatible with *by/from*-phrases:

- (50) a. Dielli u duk (\*nga Zoti/ quielli) [Albanian]  
 sun Nact appear by/from God/ sky  
 "The sun appeared (\*by/from God/the sky)"  
 b. Krenohem (\*nga djali) / për/me djalin  
 am proud-pr.Nact. from/by son-the / for/with son-the  
 "I am proud of my son" (Kallulli 2013: 352)

However, some Albanian deponents can be construed in a transitive frame of the kind "make/cause V". More interestingly, when this happens, these verbs cannot bear inactive marking:

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<sup>32</sup> More evidence in support of the inactive character of Latin deponents is provided in § 4.3 of this chapter.

<sup>33</sup> Recall § 3.4 in this chapter.



- (51) a. Në rregull, po zhdukem atëhere [Albanian]  
 in order prog. disappear-Nact. then  
 “OK, I (go) disappear, then”
- b. I zhduka gjurmët  
 CL-3.pl.Acc. disappear traces  
 “I made the traces disappear”
- c. \*Duk diellin/ gjurmët  
 “I make the sun/traces disappear”

This shows unambiguously that a deponent verb like *dukem* “appear” lacks a transitive frame (Kallulli 2013).

Modern Greek deponent verbs seem to display analogous properties. Statistical analyses have shown that Modern Greek deponents are generally intransitive as well (cf. Zombolou 2004; Ikonomou 2011; Zombolou & Alexiadou 2014a). One example of this is provided by intransitive verbs like *erhome* “come” and *fternizome* “sneeze”, which always occur with inactive morphology. Furthermore, 70% of Modern Greek deponents occur with no complement. A minority of deponents require the accusative case (18%, e.g. *esthanome* “feel”, *metahirizome* “handle, use”); very few require a prepositional phrase (10%, e.g. *agonizome enantion* “fight against”, *asholume me* “deal with”); and still fewer the genitive case (1%, e.g. *proistame* “head”, *ipolipome* “fall short of”) or a non-finite clause object (1%, e.g. *prothimopiume* “be willing”, *protitheme* “intend”) (cf. Alexiadou & Zombolou 2014a). Therefore, Greek deponents also consistently display inactive properties.

Latin deponents display the same characteristics as their cross-linguistic counterparts. As shown above, these verbs pertain to inactive functions and are generally also intransitive (recall § 3.3.3)<sup>34</sup>. Therefore, postulating a transitive structure for Latin deponents means making an assumption that contradicts both the Latin evidence and cross-linguistic data<sup>35</sup>. This analysis, then, encounters a serious empirical problem.

A further issue with Embick’s account is that it is based on cases like *hortor*, a verb of speaking. As previously observed, *verba dicendi* are endowed with a [control] feature, which makes their semantics apparently agentive-like. In this sense this sub-group differs slightly from the great majority of deponents,

<sup>34</sup> For the case of deponents + accusative, see § 5.1 in this chapter.

<sup>35</sup> The basically intransitive character of deponents is also supported by diachronic data. Deponents are, in fact, etymologically related to the PIE middles which were related to the inactive domain, i.e. to the presence of an *affected* (i.e. Undergoer) subject (see Lazzeroni 1990, 1997, Gianollo 2000, Sihler 2008, Clakson 2007, Kulikov 2006, Beekes 1995).

which consistently display a low grade of agentivity. Recall, for instance, cases like *morior* “die”, *labor* “fall”, *meditor* “meditate”, *patior* “suffer”. Therefore, Embick’s proposal is not based on the prototypical deponent type, but on a sub-group with specific properties. This fact seems problematic from a methodological point of view. Potentially problematic cases must be taken into consideration and discussed, but cannot constitute the basis for a generalization. *Hortor* and other *verba dicendi* do not contradict the observation about the inactive character of deponents. Their apparently “active” properties can, in fact, be understood from a diachronic point of view<sup>36</sup>. To sum up, assuming that deponents constitute a case of syntax-morphology mismatch leaves several issues unexplained, both empirically and theoretically. The present study will therefore not adopt this approach.

#### 4.2 Different morphology, different argument structure

In section 3, it was observed that *-r* morphology and analytic perfect forms (in the *infectum* and in the *perfectum* paradigm respectively) occur in inactive contexts (passives and deponents). On the basis of this empirical generalization, it is possible to formulate the following proposal:

- (52) *Inactive morphology in Latin (-r morphology and analytic perfects)*  
The occurrence of inactive morphology in Latin reflects the *Merging* of the argument that functions as sentential subject with a functional head assigning a non-agentive  $\theta$ -role.

In other words, the claim is that the presence of Latin *-r* morphology always reflects specific syntactic conditions, namely a configuration which lacks a prototypically agentive EA. This contrast can be understood by analysing the internal organization of arguments within the verbal domain. It will be argued that active and inactive configurations display crucial syntactic differences.

##### 4.2.1 $\theta$ -roles: types and definition

Recall, at this point, Table VIII, which summarizes the  $\theta$ -role properties discussed above:

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<sup>36</sup> *Hortor* and other *verba dicendi* are discussed in § 5.4.1 of this chapter.

Table VIII - (based on Dowty 1989, 1991; Reinhart 2002)

<i>Syntactic-semantic features</i>	<i><math>\theta</math>-role</i>	<i>Definition</i>
[+c, +m]	<b>Agent</b>	A participant which the meaning of the verb specifies as doing or causing something, possibly intentionally.
[+c, -m]	<b>Instrument</b>	Means by which something comes about
[-c, +m]	<b>Experiencer</b>	A participant that undergoes a sensory, cognitive, or emotional experience.
[-c, -m]	<b>Theme/Patient</b>	A participant which is characterized for changing its position/condition or as being in a state or position. A participant which the verb characterizes as being affected by the predicate.
[+c]	<b>Cause</b>	Entity causing the event
[+m]	<b>Sentient/Holder of state</b>	A participant whose state is expressed by the predicate.
[-m]	<b>Locative/Source</b>	<b>Locative:</b> place in which something is situated <b>Source:</b> Object from which the motion proceeds
[-c]	<b>Goal/Benefactive</b>	Entity benefitting from some action
[ ]	[ ]	Argument semantically corresponding to a free variable (Heim & Kratzer 1998)

As illustrated in the table above,  $\theta$ -roles can be broken down into syntactic-semantic features. Each verb is endowed with syntactic-semantic features, thanks to which its arguments will be assigned a specific semantic role. All arguments<sup>37</sup> of a clause must respect the  $\theta$ -criterion, so that the computation can be read at the Semantic Interface:

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<sup>37</sup> Expletives are not syntactic arguments, but the realization of the EPP. For this reason they are not assigned any semantic roles themselves. On the other hand, when they are linked to another argument via a chain, they indirectly acquire the semantic role of their associate (Lasnik 1995; Moro 1997, among others.).



The [Experiencer] role is assigned to a participant that undergoes a sensory (e.g. “perceive”), cognitive (e.g. “think”), or emotional (e.g. “fear”) experience. This role was first distinguished from the [Sentient] role (later on also defined as “Holder of state” cf. Ramchand 2004, 2008; Christensen 2008) by Reinhart (2002):

This cluster has not been identified as an independent  $\theta$ -role before. I label it **sentient**, in the present draft, just to give it a name. Arguments with this feature-cluster are the subjects of verbs like *love*, *know*, *believe*, which have been viewed as instances of the **experiencer** role before. In its semantic interpretation, this role may be hard to distinguish from the **experiencer** role, but it has very different syntactic realization (linking): It always merges externally, unlike the standard **experiencer** (Reinhart 2002: 285).

This study will also adopt this distinction, as the Latin data suggest that two different verb types are associated with the [Experiencer] vs. [Sentient] semantic role.

The [Locative] role refers to the place in which something is situated:

- (56) John sees the cat in the garden  
[Loc]

Location often corresponds to possession (Szabolcsi 1994, Manzini & Savoia 2002). This fact will be crucial in chapter 4, in which possessive constructions will be discussed. Another role expressing location is [Source], which defines the object from which the motion proceeds:

- (57) He arrived from Paris  
[Source]

[Goal/Benefactive] expresses the entity that benefits from a particular action. This semantic role is generally present with three-place predicates indicating transfer of possession:

- (58) I gave the book to Mary  
[Ben]

Finally, the absence of a feature specification [ ] corresponds to the lack of a semantic role, as in the case of impersonal constructions, the sentential subject refers semantically to a free variable (Heim & Kratzer 1998).

#### 4.2.2 $\Theta$ -roles: classification and site of assignment

In the literature,  $\theta$ -roles have often been classified on the basis of their properties (Dowty 1991; Baker 1988; Reinhart 2002; Platzack 2009; Ramchand 2008; Cyrino 2009). More specifically, the following  $\theta$ -role classes can be identified:

- (59)  *$\theta$ -role classification*  
**A:** Agent, Instrument, Cause, Sentient  
**B:** Experiencer, Goal/Beneficiary, Location/Possessor  
**C:** Theme/Patient

A-roles pertain to active (transitive) structures, which are generally characterized by the presence of an EA and possibly of a DO (Burzio 1986):

- (60) **A-roles**  
 A- $\theta$ -roles pertain to active (transitive) structures.

[Agent] is the prototypical agentive role and involves both causation [+c] and intentionality [+m]. Other A-roles are not agentive *stricto sensu*, as they mostly pertain to inanimate arguments (cf. [Instrument] and [Cause]). However, their compatibility with a direct object makes them fit into the A-class.

The functional head responsible for active syntax is Voice. Voice is indeed the active head that introduces transitivity into a (originally mono-argumental) syntactic structure (Kratzer 1996; Alexiadou & Anagnostopoulou 1999, 2004 *et seq.*; Alexiadou, Anagnostopoulou & Schäfer 2006, 2015)<sup>38</sup>. This is crucial for our analysis and it will be used in a different way from the Chomskyan tradition (cf. Chomsky 1995), in which it refers to a functional head that can be further specified in terms of diathesis thanks to formal features (e.g. [pass]/[active]). Under the approach adopted in this study, the semantic roles pertaining to the A-class are claimed to be assigned in the Specifier of this active functional head (cf. Kratzer 1996; Alexiadou & Anagnostopoulou 1999 *et seq.*; Platzack 2009; Cyrino 2009, among others). Their properties are therefore closely related to their site of assignment in the syntax. Conversely, B and C semantic roles are generally non-agentive as they refer to participants

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<sup>38</sup> Observe, furthermore, that evidence has been provided in support of a layered Voice-field, encoding different kinds of agentive participants (Fukuda 2013).

which do not cause the event/state expressed by the predicate, but generally undergo it. These semantic roles pertain to inactive structures:

- (61) **B/C-roles**  
B/C- $\theta$ -roles pertain to inactive structures.

In this study, the term “inactive” is used to indicate all those syntactic configurations that are not compatible with the active functional head Voice, like anti-causative, passive and experiential constructions (cf. Alexiadou 1994, 2012, 2014; Alexiadou & Anagnostopoulou 1999, 2004 *et seq.*; Alexiadou, Anagnostopoulou & Schäfer 2006, 2015, among others). Therefore, it is precisely the presence/absence of Voice that determines the contrast between active *vs.* inactive syntax, as will be claimed in the following section.

#### 4.2.3 Active vs. inactive argument structure

A-theta roles are typical of an active argument structure, characterized by the presence of Voice:

- (62) [TP [Asp/MoodP [VoiceP [<sub>v</sub>P [VP]]]]]

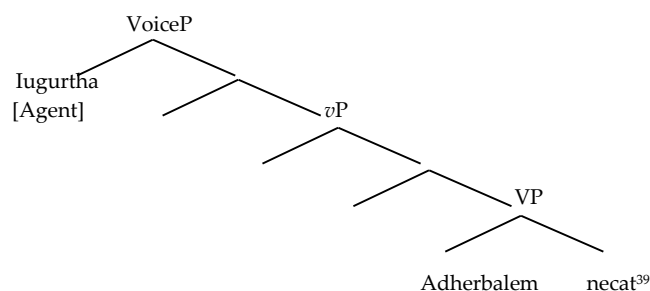
In (62), [Agent] is assigned to the EA in [Spec, VoiceP]. Voice is meant as the functional head responsible for active syntax (Kratzer 1996 *et seq.*; Alexiadou & Anagnostopoulou 1999, 2004 *et seq.*; Alexiadou, Anagnostopoulou & Schäfer 2006, 2015). In this case, *v* encodes transitivity and is compatible with the selection of Voice (Harley & Folli 2005; Harley 2006, 2012). The result of this configuration is an active structure, which also possibly licenses an accusative direct object (Burzio 1986). Morphologically, *-r* morphology is not present:

- (63) a. Iugurtha                      Adherbalem [...]      necat                      [Sall. *Iug.* 26,3]  
Iugurtha-m.3.sg.NOM. Adherbal-m.sg.ACC. murder.pres.ind.3.sg  
“Jugurtha murders Adherbal”
- b. C. Oppianicum                      fratrem                      necavit                      [Cic. *Cl.* 30,52]  
C. Oppianicus-m.sg.ACC. brother-m.sg.ACC. murder-perf.ind.3.sg  
“He murdered the brother, Gaius Oppianicus”

The examples in (63) illustrate active transitive structures that display an agentive EA, inserted in [Spec, VoiceP], and a direct accusative object. The

verb occurs in an active form: in the *infectum* paradigm, exemplified in (64-a), the inflected verb displays active endings. The perfect, on the other hand, is expressed synthetically, as is typical of the active paradigm, as shown in (63-b). The syntactic structure of (63) is exemplified below:

(64)



The same observations also hold for other A-roles. Consider, for instance, the verb *amo* “love”, which has a [Sentient] sentential subject. Here too, a canonical EA is licensed, together with an accusative object<sup>40</sup>:

(65) Quia me amat [Pl. Mil. 1257]  
 because me-1.sg-ACC. love-pres.ind-3.sg  
 “Because he/she loves me”

<sup>39</sup> The syntactic location of the inflected verb in Latin is a complex issue. On the one hand, Latin has rich morphology, which would suggest a movement to T; on the other hand, the verb is often taken to stay low like in English, mainly based on linear order considerations. As the precise structural location of the inflected verb is not crucial for our argument, we will not discuss this complicated matter here; we will simply assume that the verb stays in the VP, as in Oniga (2004); Ledgeway (2012). For further discussion of this problem, see Oniga (2004); Danckaert (2012a, 2014b), Ledgeway (2012) and Holmberg and Roberts (2013).

<sup>40</sup> Note, however, that verbs with a [Sentient] subject constitute a borderline case. In contrast to core transitives, these verbs do not always require the presence of a direct object:

(i) Miser est qui amat [Pl. Pers. 179]  
 unhappy BE-3.sg who love-ind.pres.3.sg  
 “Unhappy is the one who loves”

[Sentient] is thus typical of those verbs which can both be construed as transitive and as unergative (e.g. like “eat”, “drink”).



Conversely, the thematic roles of the B/C-classes generally pertain to inactive structures. These semantic roles are assigned by verbs that are not associated to a (prototypical) agentive subject. In this study, these constructions are claimed to lack the Voice head (see Alexiadou 1994; Alexiadou & Anagnostopoulou 1999, 2004; Alexiadou & Doron 2012; Alexiadou & Schäfer 2013, 2015). The inactive verbal clause is schematized in (66):

(66) [TP [Asp/MoodP [<sub>v</sub>P [VP]]]]

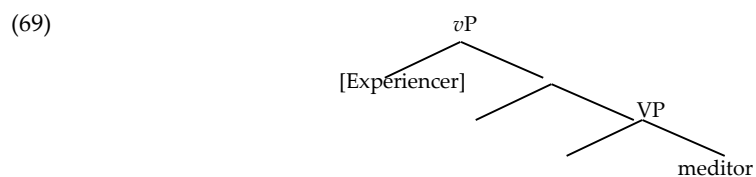
Verbs that require a B/C-role for their sentential subject do not have a Voice head in their structure. This crucial fact makes them syntactically and semantically inactive. Therefore, the argument that functions as the sentential subject is merged within the *v*/V-domain, which is the syntactic site where non-agentive theta-roles are discharged (Baker 1988; Ramchand 2008; Platzack 2009, among others). Moreover, the absence of Voice makes it impossible to assign structural accusative (Burzio 1986): in these constructions the presence of a direct object is therefore not licensed.

This difference determines the specific syntactic and semantic properties of the whole construction: the structure is generally mono-argumental and characterized by the presence of a non-(prototypically) agentive subject. At the semantic level, this argument does not provoke the event/state expressed by the predicate, but is rather affected by it. An inactive argument configuration is thus characterized by a sentential subject with the syntactic-semantic properties of an Undergoer, i.e. a participant which undergoes an event/state (see Sorace 2000; Van Valin 2001 *et seq.*; Bentley 2006, among others.). Morphologically, this syntactic configuration is marked through the presence of *-r* morphology, as shown in the following examples:

- (67) a. alter                      filius [...]                      necatur                      [Cic. *Cl.* 28, 16]  
 other-m.sg.NOM. son-m.sg.NOM. murder-pres.ind.3.sg.*r*  
 "The second son is murdered"
- b. alter                      eorum  
 other-m.3.sg.NOM.                      Dem-pl.GEN.  
 necatus                      est                      [Sall. *Iug.* 14, 14]  
 murdered-PP.                      BE-3.sg  
 "The second of them was/has been murdered"
- (68) a. cottidie                      meditor                      [Cic. *Att.* 5,9,1]  
 everyday-adv. meditate-pres.ind.1.sg.*r*  
 "I meditate everyday"

- b.        in unum                    annum  
           in one-m.sg.ACC.        year-m.sg.ACC.  
           meditatus        sum                                    [Cic. Att. 5,11,5]  
           meditated-PP.    BE-1.sg  
           “I have thought about this for one year”

In (67), which shows an example of a passive structure, the sentential subject is assigned the [Theme] role, belonging to the C-class. At morphology, an inactive structure is signaled through the occurrence of specific marking: in the *inflectum* paradigm the verb occurs with an *-r* ending, as in (67-a); in the case of the perfect, the inactive structure is reflected by a periphrastic form<sup>41</sup>, as shown in (67-b). Similar observations can be made about (68), which shows an experiential deponent verb. As the semantics encoded by the verb is inactive, the *vP* is not compatible with the active functional head. The subject is assigned a non-agentive thematic role, namely [Experiencer] (Reinhart 2002, 2002) within the *vP*-domain. The syntactic structure of (68) is exemplified below:



Also in this case, the claim is that the occurrence of *-r* endings and of analytic perfects reflect an inactive structure. In other words, *-r* is inserted at morphology as a consequence of the assignment of a B/C- $\theta$ -role. The same mechanism is at work in all other cases of deponents, in which the syntactic-semantic features encoded in the verb do not allow the selection of Voice. These verbs are all associated with inactive  $\theta$ -roles<sup>42</sup>. Therefore, the fact that *-r* never occurs within an active structure is connected to the fact that Voice cannot be present in the structure in the case of inactive syntax.

To sum up, the cases exemplified above illustrate that although inactive structures may differ from each other as far as the specific construction is concerned, they still share relevant syntactic-semantic properties, namely: (i) intransitivity, which is incompatible with the active functional head (Voice); (ii) a sentential subject, with the properties of an Undergoer. Therefore, the presence of *-r* morphology in Latin, both in the imperfective and in the

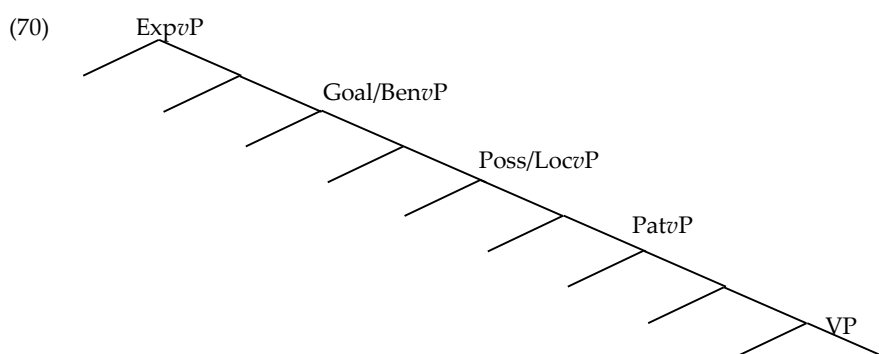
<sup>41</sup> As for the periphrastic nature of the Latin inactive perfect, see § 4.4 in this chapter.

<sup>42</sup> Consider, in this sense, Table V.

perfective paradigm, can be understood as the morphological realization of an inactive syntactic configuration. To sum up, active and inactive constructions display crucial syntactic differences in that the former always has an active functional head (Voice) in the structure, whereas the latter do not. This relevant difference in their argument structure determines their diverse syntactic and semantic properties.

#### 4.2.4 The fine structure of *v*P

According to the proposed analysis, *v* is crucial for the derivation: indeed, it is within this domain that the properties of the structure are encoded and determined. In this sense, *v* must be understood as a functional field encoding the different inner aspectual properties of different verbal items (Folli & Harley 2005, Ramchand 2008, Travis 2010):



Different *vs* correspond to different semantic roles, the assignment of which is determined by the specific semantic properties of roots. Notice, moreover, that thematic roles are hierarchically ordered in the structure according to their degree of agentivity: lower syntactic sites are associated with less agentive semantic roles (Baker 1988; Dowty 1991; Reinhart 2000, 2002; Folli & Harley 2005; Ramchand 2008; Platzack 2009). As previously observed, most Latin deponents are either unaccusative or experiential verbs, as in the examples below:

- (71) illa summa nascitur controversia [Cic. *Inu.* 11,14,18]  
 that great be born-pres.ind-3.sg-r dispute-f.3.sg-NOM.  
 “[from which] this great controversy arises”



Table XI – Latin verb types and their syntactic-semantic properties<sup>43</sup>

Latin Verbs	[cause]	[mental]	[control]	Theta-role	Site of assignment
Change of state (e.g. <i>morior</i> "die")	-	-	-	[Theme]	[Comp, VP]
Movement (e.g. <i>proficiscor</i> , "leave")	-	-	+/-	[Theme]	[Comp, VP]
Verbs of advantage (e.g. <i>fruor</i> , "avail oneself")	-	+	+	[Experiencer]	[Spec, Exp <sub>v</sub> P]
Perception verbs (e.g. <i>conspicor</i> , "glimpse")	-	+	-	[Experiencer]	[Spec, Exp <sub>v</sub> P]
<i>Verba affectuum a</i> ( <i>vereor</i> , "fear")	-	+	-	[Experiencer]	[Spec, Exp <sub>v</sub> P]
<i>Verba affectuum b</i> (cognitive processes) (e.g. <i>reor</i> "think")	-	+	-	[Experiencer]	[Spec, Exp <sub>v</sub> P]
<i>Verba affectuum c</i> (verbs of speaking) (e.g. <i>loquor</i> , "speak")	-	+	+	[Experiencer]	[Spec, Exp <sub>v</sub> P]
Reciprocals (e.g. <i>amplector</i> "hug")	-	+	+/-	[Experiencer]	[Spec, Exp <sub>v</sub> P]
Active intransitives (e.g. <i>cano</i> "sing")	+	+	+	[Agent]	[Spec, VoiceP]
Active transitives (e.g. <i>neco</i> , "murder")	+	+		[Agent]	[Spec, VoiceP]

As shown in the table, active verbs (both intransitive and transitive) are characterized by a featural specification including both [cause] and [mental], which is crucial for their association with the [Agent] role. Inactive verbs, by contrast, generally lack the [c] feature: for this reason their eventive structure is not compatible with the selection of the active functional head (Voice). Other *v*-types introduce other Latin non-agentive arguments in their

<sup>43</sup> Note the interesting parallelism with Tsunoda's transitivity hierarchy (2005), aimed at predicting the emergence of transitive and intransitive verbs across languages:

Transitivity hierarchy (simplified)

- (i) change of state verbs > surface contact verbs >  
perception/cognition/emotion verbs > effective action

The hierarchy is ordered from left to right from those whose members are least likely to be cross-linguistically transitive. The claim is that verbs are ordered from the least 'affected' second argument. This is relevant as far as deponents are concerned, since it has been noticed that a core characteristic of these verbs is to be basically 'intrinsic', i.e. subject related.



- (78) auditor [...]                      se        laudat                      [Quint. *Inst.* IX, 2]  
 listener-NOM.                      himself    praise-pres.ind-3.sg  
 “The listener praises himself”

Observe that this argument is both structurally and semantically close to the [Theme] position.

To sum up, most inactive constructions are encoded within the *vP*-field (cf. Alexiadou 2004 *et seq.*). The arguments introduced in its Specifier(s) are all assigned non-agentive theta-roles.

#### 4.2.5 Argument structure and morphological case

In the previous section, it was argued that active verbal constructions are always related to A-theta roles, which are generally agentive in that the predicate produces/affects a direct object. Conversely, inactive verbal constructions assign B-C theta roles, which are typically non-agentive and subject-related. A distinction can thus be drawn between canonical and non-canonical subjects. The arguments inserted in [*Spec*, *VoiceP*] can be considered canonical subjects because they syntactically correspond to the prototypical Agent and they are associated with a verb licensing a DO. On the contrary, arguments that are assigned a B/C semantic role can be considered non-canonical subject: syntactically, they are different from A-subjects as far as their Merging-point is concerned, and semantically, they pertain to non-agentive contexts. Recall, moreover, that non-canonical subjects generally occur in mono-argumental structures (i.e. they relate to a configuration that is not compatible with structural accusative). Recall the field concerning the verb clause outlined above:

- (79) [VoiceP[Exp*vP*[Goal/Ben*vP*[Poss/Loc*vP* [Pat*vP*[VP]]]]]]

As previously shown, each projection of the *vP*-field corresponds to a specific (non-agentive) non-canonical subject. In many natural languages, non-canonical subjects are morphologically marked by a dedicated morphological case. More specifically, they often occur as oblique dative arguments. This is the case in Italian, for instance, as in the following experientials:

- (80) a. Il film fa paura a Piero [Italian]  
 the movie make-3.sg fear to Piero-DAT.  
 "It scares Piero"
- b. Il film piace a Maria  
 the movie like-3.sg to Maria-DAT.  
 "Maria likes it"

In (80), the verb agrees with an object marked in nominative case, whereas the [Experiencer] subject is in the dative. In the literature, it has been shown that the subject properties of this dative-marked argument are structurally motivated, as this element moves to the prototypical subject position, namely [Spec, AgrSP] (cf. Belletti & Rizzi 1988 and Cardinaletti 2003). However, the [Experiencer] can also occur marked in the nominative case in Italian (cf. Belletti & Rizzi 1988):

- (81) Io temo la tempesta [Italian]  
 I fear-1.sg the storm  
 "I fear the storm"

Other languages display a different morphological case for these arguments. In English, for instance, the [Experiencer] often occurs as marked in the nominative:

- (82) a. I fear the storm  
 b. Mary/She likes it.

The most extreme case in this respect is Icelandic, which displays a number of inherent morphological case combinations for expressing experiential constructions (Jónsson 1996, 1998 *et seq.*; Sigurðsson 2003, 2004; Barðdal & Eyþórsson 2003, 2009; Barðdal 2006). Some examples are given below (from Sigurðsson 2004: 141):

- (83) a. Hún skelfist hættuna. [Icelandic]  
 she.NOM. is terrified by danger.the.ACC.  
 "She is terrified/horrified by the danger"
- b. Hana hryllir við hættunni.  
 her. ACC. is.horrified by danger.the.DAT.  
 "She is horrified by the danger"
- c. Henni ógnar hættan.  
 her. DAT. terrifies danger.the.NOM.  
 "She is terrified/horrified by the danger"



The three experiential verbs in (83), all expressing a meaning close to “scare, terrify”, exhibit different case marking as far as their subject is concerned. In (83-a), the subject occurs in the nominative case, while the verb exhibits an inactive ending<sup>45</sup>. By contrast, (83-b) exhibits an Experiencer subject bearing accusative case. Finally, in (83-c) the subject occurs in the dative. Icelandic thus seems to exhibit a multiplicity of options as far as subject marking is concerned. Note, however, that Icelandic case marking is often unpredictable in that it is construction specific. In other words, inherent case is at play: morphological case pertains to a precise construction and is hence not necessarily syntactically determined (Sigurðsson 2003, 2004).

Latin generally behaves like English as far as subject marking is concerned: in the presence of an inflected verb<sup>46</sup>, non-canonical subjects morphologically occur in the nominative case, both in the active and in the inactive paradigm, as in the following examples:

- (84) a. Iugurtha                      Adherbalem [...]    necat                      [Sall. *Iug.* 26,3]  
 Jugurtha- m.3.sg.NOM. Adherbal-m.sg.ACC. murder.pres.ind.3.sg  
 “Jugurtha murders Adherbal”  
 b. alter                      filius [...]                      necatur                      [Cic. *Cl.* 28, 16]  
 other-m.sg.NOM. son-m.sg.NOM. murder-pres.ind.3.sg.r  
 “The second son is murdered”
- (85) a. capio                                      consilium                                      [Pl. *Most.* 1048]  
 take-pres.ind-1.sg                      decision-n.sg.ACC.  
 “I take a decision”  
 b. intra paucos    dies                      oppidum                      capitur [Liv. II, 25,5]  
 in    few-ACC. days-ACC.    city-n.sg.NOM take-pres.ind.3.sg-r  
 “After a few days, the city was taken”

On the basis of these data, it can be claimed that morphological nominative can be considered the default case for subjects<sup>47</sup>, as it also occurs in all Latin

<sup>45</sup> For the similarities between analogous cases and Latin deponents, see also § 5.1 in this chapter.

<sup>46</sup> Note, however, that [Experiencer] exhibits morphological accusative in the case of impersonal experiential constructions of the type *me pudet* “I am ashamed”. Default nominative seems thus to pertain specifically to contexts in which the verbs is fully inflected, otherwise default accusative occurs (see the discussion of these constructions in Fedriani 2012, 2013).

<sup>47</sup> This holds for all finite clauses. In infinitival clauses the sentential subject is marked with accusative case



### 4.3 Further evidence

The fact that *-r* forms, including deponents, have inactive syntactic structure is supported and confirmed by a large body of empirical evidence.

#### 4.3.1 Intentionality adverbs

Non-agentive verbs are generally not compatible with adverbs expressing intentionality, typical of agentive contexts (Cinque 1999 *et seq.*; Levin & Rappaport Hovav 2005). Consider, for, instance, the following examples:

- (87) a. \*Maria medita/ cresce apposta [Italian]  
 Mary meditate/grow up-pres.ind-3.sg on purpose  
 b. \*Maria lo teme deliberatamente  
 Mary it/him fear-pres.ind-3.sg deliberately  
 c. Maria lo uccide deliberatamente  
 Mary it/him murder-pres.ind-3.sg deliberately  
 “Mary murders him/it deliberately”
- (88) a. \*Mary reflects/grows up on purpose [English]  
 b. \*Mary fears it deliberately  
 c. Mary murders him deliberately
- (89) a. \*Marij denkt express na/ groeit express [Dutch]  
 Mary reflect-pres. 3.sg. on purpose after/grows up-pres.3.sg  
 b. \*Marij schuuwt beraamd de zon  
 Mary fear-pres.ind-3.sg deliberately the sun  
 c. Marij vermoordt hem express  
 Mary murder-pres.ind-3.sg him deliberately

This incompatibility suggests that these constructions are inactive from both a syntactic and a semantic point of view. Latin deponent verbs behave in the same way as their cross-linguistic counterparts. A significant indication of the inactive character of deponents is provided by the fact that *-r* constructions are incompatible (insofar as they are not attested) with adverbs/adverbial expressions such as *consulto* “deliberately/ intentionally”; *ultra* “deliberately”, *dedita opera/de industria* “on purpose”, etc. An examination of the data has revealed that examples of this type cannot be found. This seems to be a strong indication that *-r* occurs in a structure in which the sentential subject is not agentive. Agentive predicates, by contrast, regularly occur in association with this type of adverb, as exemplified below:

- (90) a. facias                    an            de industria?            [Ter. *And.* 794]  
do-pres.subj.2.sg. maybe of purpose.f.sg.ABL.  
“May it be the case that you do this on purpose?”
- b. incusant                    ultro                                    [Acc. *Tr. Fr.* 594]  
blame-pres.ind-3.pl            deliberately-Adv.  
“They blame (him/her) deliberately”

### 4.3.2 Agentive nominalizations

A further argument in favour of the proposal can be found by analysing Latin word-formation. In particular, nominalizations in *-tor*, the Latin suffix with the highest degree of agentivity (Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Cupaiuolo 1991; Panhuis 2006, among others) are not possible with deponent roots. Consider, for instance, the contrast between the nominalizations in (91), based on transitive roots, and those in (92) based on deponent roots:

- (91) a. laud-a-tor            “praiser, the one who praises”  
b. mon-i-tor            “exhorter”  
c. capt-or            “catcher”  
d. aud-i-tor            “hearer”
- (92) a. \*arbitrator            “the one who decides/judges”  
b. \*veretor            “the one who fears”  
c. \*mor(t)(i)tor            “the one who dies”  
d. \*oritor            “the one who rises”

These examples clearly show that while *-tor* can be used to form nouns based on transitive roots, it cannot be selected as a nominalizer with deponents<sup>49</sup>. On

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<sup>49</sup> The same restrictions concerning nominalizations also seem to hold at the cross-linguistic level (Alexiadou 2001; Alexiadou & Rathert 2010; Fábregas 2010; Fábregas & Scalise 2010, 2012; Scalise & Masini 2012, among others). Consider, for instance, the following examples from Italian and Dutch:

- (i) a. \*deciditore/giudicatore            “the one who judges/decides” [It.]  
b. \*temitore            “the one who fears”  
c. \*moritore            “the one who dies”  
d. uditore            “listener”
- (ii) a. \*beslisser            “the one who decides/judges” [Dutch]  
b. \*vrezer            “the one who fears”  
c. \*doder            “the one who dies”  
d. luisteraar            “listener”

the other hand, formations with adjectival suffixes are very frequent with deponents. Suffixes like *-ax*, or *-lis*, denoting a close relationship between the referent and the property expressed by the verb, often occur in combination with these roots (Panhuis 2006: 15):

- (93) a. loqu-ax "inclined to talk"  
 b. mort-alis "(with the property of being) mortal"

Deponent roots thus select suffixes related to a stative/adjectival reading and discard nominalizations with an agentive semantics<sup>50</sup>. This fact constitutes further confirmation of the inactive character of these verbs.

### 4.3.3 No passive form

A final strong argument in favour of the proposed analysis is provided by the fact that deponent verbs cannot be passivized<sup>51</sup>. As claimed above, these verbs are generally intransitive, meaning that this operation is unavailable. This fact is further confirmed by the restrictions on the presence of a *by*-phrase (Gianollo 2000). This again demonstrates that these verbs have the properties of anti-causative and experiential constructions. Deponent verbs therefore cannot have an active syntactic structure or an agentive EA.

In conclusion, the restrictions observed concerning deponent roots confirm that these verbs differ from transitives in their syntactic structure (*contra* Embick 1997, 1998, 2000; Baerman 2006, 2007, among others). They fail to exhibit a number of properties which are predicted to be there in the case of active syntax. The data shown above therefore support the proposed analysis as they are compatible with an inactive syntactic structure.

## 4.4 The analytic perfect reflects an inactive structure

Recall, at this point, that the Latin inactive perfect always occurs in the form of a periphrasis, composed by past participle (PP hereafter) + aux ESSE "be":

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This fact seems to suggest the existence of a cross-linguistic inactive domain characterized by specific properties, which constitutes a further argument in support of the analysis outlined here (cf. also Baker 1988).

<sup>50</sup> For the sporadic formations in *-tor* with deponent roots, like *opinator* (from the deponent *opinor* "express an opinion"), *locutor* (from the deponent *loquor* 'speak') and *hortator* (from *hortor* "exhort"), see § 5.5 in this chapter.

<sup>51</sup> For the occurrence of *hortor* "exhort" as a passive, see § 5.5 in this chapter.

- |      |  |   |
|------|--|---|
| (94) | a. nec-o<br>murder-1.sg<br>"I murder"                            | b. neca-v-i<br>murder –perf.ind.-1.sg<br>"I murdered/I have murdered" |
|      | c. nec-o-r<br>murder-1.sg-r<br>"I am (being) murdered"           | d. neca-tus sum<br>murdered-PP BE-1.sg<br>"I was/have been murdered"  |
| (95) | a. *medit-o<br>meditate-1.sg<br>"I meditate/am meditating"       | b. medit-o-r<br>meditate -1.sg-r                                      |
|      | b. *medita-v-i<br>meditate-perf.ind.-1sg<br>"I (have) meditated" | d. medita-tus sum<br>meditate-PP BE- 1.sg                             |

Analytic forms occur in the whole *perfectum* paradigm, which as well as the perfect (preterite/present perfect) also includes the pluperfect paradigm (96) and the future perfect (97):

- |      |   |   |
|------|---|---|
| (96) | a. neca-v-eram<br>murder-pperf-1.sg<br>"I had murdered"         | b. necatus eram<br>murdered-PP BE-1.sg.impf.ind.<br>"I was/had been murdered" |
| (97) | a. neca-v-ero<br>murder-perf-fut.1.sg<br>"I will have murdered" | b. necatus ero<br>murdered-PP BE-1.sg.fut.ind.<br>"I will have been murdered" |

There is thus also a morphological split between a synthetic active form and an analytic inactive form in the pluperfect and future perfect<sup>52</sup>. At this point, a question concerning the analytic nature of the Latin inactive perfect arises, given the fact that the Latin verbal paradigm is apparently mostly synthetic<sup>53</sup>. More specifically, we will address the issue of whether there are any specific reasons underlying this morphological difference, i.e. why Latin inactive perfect forms are always periphrastic<sup>54</sup>. As previously discussed, a possible answer can be identified by relating this morphological split to a difference in the syntactic and morphological operations involved, as proposed by Embick (2000). Within his proposal, the feature [pass] is directly responsible for the generation of an analytic morphological form in that it blocks the default movement of the Asp-complex to T, as in the figure below:

<sup>52</sup> Recall footnote 5 in this chapter.

<sup>53</sup> For other Latin periphrases and their Romance outcomes, see chapters 3 and 4.

<sup>54</sup> In contrast, both an analytic (aux HABERE + PP) and a synthetic form are attested for the active perfect (see chapter 3).



- (100) in nostris commentariis  
 in our-n.pl.ABL. book-n.pl.ABL.  
 scriptum habemus [Cic. *Div.* 2,42]  
 written-PP HAVE-pres.ind.1.pl  
 “We have written in our books”

This approach, which has already been shown to be problematic for other reasons, encounters further issues here. The systematic correspondence between inactive syntax and an analytic form regularly associated with aux ESSE suggests that an alternative explanation is required.

Under the analysis proposed in the present study, the synthetic/analytic split of the Latin perfect is the morphological realization of a different argument structure (*contra* Embick 1997, 1998, 2000): with active syntax the perfect results in a synthetic form, while if the configuration is characterized by an Undergoer subject, an analytic form is produced.

The specific properties of the Latin inventory shed some light on the fact that expression of the Latin inactive perfect with a periphrastic form. Latin has no strategy available to form an inactive perfective synthetic form. This can be considered a parametric property of Latin, as the same strategy is available in several other languages, such as Ancient Greek (101):

- (101) τέ-θυ-μαι [A. Greek]  
 perf-be angry-1.sg.inact.  
 “I was/have been angry”

In this type of language, inactive endings can be associated with both the imperfective and the perfective stem. In Latin, by contrast, this is not possible: Latin *-r* morphemes are only compatible with a durative (*infectum*) stem. This fact can probably explained in diachronic terms as an independent and specific development characterizing PIE *-r* middle markers (attested in Latin and in Celtic) which in Latin have specialized such that they are only associated with the *infectum* (cf. Palmer 1954; Clackson 2007; Beekes 1995). Therefore, an alternative strategy must have been developed in the language to express this specific syntactic environment. On the other hand, Latin has *-to-* participles, which are related to the inactive domain (Flobert 1975; Palmer 1954; Jones & Sidwell 2003; Gianollo 2000, 2005; Cyrino 2009, among others, *pace* Vincent 2006; Remberger 2012). These verbal adjectives are etymologically and functionally related to the inactive syntactic-semantic domain: their occurrence in this environment seems thus a further signal of the non-agentive character of the construction. As for the auxiliiation, ESSE is the Latin inactive functional element *par excellence* (La Fauci 1997, 1998,



Cennamo 1998, 2007, 2008 *et seq.*; Vincent 1982; Ledgeway 2012, among others). This auxiliary also occurs in many other inactive periphrases<sup>56</sup>. Consider, for instance, the possessive constructions illustrated below<sup>57</sup>:

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

While (102-a) is an inactive possessive structure, in which the possessor looks like a locative argument, (102-b) has active syntax, as shown by the presence of a direct accusative object. In these and in many other Latin periphrases, the active/inactive opposition is expressed through the alternation between the ESSE (inactive) *vs.* HABERE (active) auxiliary. Therefore, the presence of auxiliary ESSE is also related to the inactive character of the structure.

The use of the PP + aux ESSE structure can be seen as the Latin morphological strategy for expressing an inactive perfective configuration, as both elements also occur in several other inactive contexts. A final note concerning the semantics of this periphrasis confirms the accuracy of this claim. It has often been observed that the analytic perfect formed with PP + ESSE is etymologically associated with a stative/resultative interpretation (cf. Jones & Sidwell 2003):

- (103) a. miratus sum  
 astonished-PP BE-1.sg  
 "I am in a state of having been astonished"  
 b. locutus sum  
 spoken-PP BE-1.sg  
 "I am in a state of having spoken"

This provides further evidence (including diachronically) for the inactive character of this construction, which is formed by an etymologically stative verbal adjective associated with an inactive auxiliary.

To sum up, in the absence of a synthetic strategy able to reflect an inactive perfective configuration, Latin resorts to a periphrasis formed by

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<sup>56</sup> The active/inactive contrast characterizing several Latin and Romance periphrases is further discussed in chapters 3 and 4.

<sup>57</sup> Possessive periphrases are examined more in detail in chapter 4, § 1.



of the transitive construction in (106), as opposed to that of the deponent + accusative in (107):

- (106) consul [...] duxit legiones [Liv. XXVI, 40, 1]  
 consul-m.sg.NOM. lead-perf.ind.3.sg legions-f.pl.ACC.  
**[Agent] Predicate [Theme]**  
 “The consul led the legions”

- (107) [Quinctius] miratur adventum [Liv. XXXIX 30,10]  
 Quinctius-m.sg.NOM. be astonished-3.sg-r arrival-m.sg.ACC  
**[Experiencer] Predicate [Cause]**  
 “Quinctius is surprised because of the sudden arrival”

In (107) the accusative argument *legiones* “the legions” exhibits the properties of a direct object in that it constitutes the argument that is produced/affected by the expressed event. This argument can thus be identified as a [Theme], as also suggested by the agentive character of the context. In (108), by contrast, the DP in the accusative is not the argument produced/affected/caused by the event, but rather the *stimulus* (Pesetsky 1995; Anagnostopoulou 1999) that produces the subject’s state. Therefore, it behaves more as a [Causer] than as a [Theme]. Recall, on the other hand, that in an experiential construction such as that in (108), the *affected* argument (in the terms of Kemmer 1993) is the sentential subject itself.

- (108)
- 
- ```

graph TD
  vP --> Quinctius
  vP --> VP1[VP]
  VP1 --> VP2[VP]
  VP1 --> DP[DP  
adventum]
  VP2 --> miratur
  
```

Therefore, deponents + accusative differ markedly from transitive verbs in their underlying syntactic-semantic structure: with transitives the complement in the accusative is always a structural direct object with the semantic properties of a Theme, while with deponents, the accusative argument normally behaves as a [Causer]. Observe, furthermore, that these verbs also select other kinds of complement. Let us consider *vereor* “fear/to be afraid”, which can occur with various constructions:



DP associated with an agreeing element, which can either be another DP (112-a) or an adjective/participle (112-b, c). The value of this construction is generally temporal/causal/concessive/modal (Gildersleeve & Lodge 1895; Allen & Greenough 1903, Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others):

- (111) a. L. Quinctio Cn. Domitio  
 L.Quinctius-m.sg.ABL. Cn.Domitius-m.sg.ABL.  
 consulibus [Liv. XXXVIII 11,9]  
 consuls-m.pl.ABL.  
 “In the year that L. Quinctius and Cn. Domitius were consuls”
- b. defendente nullo  
 defend-pres.part.sg.ABL. nobody-sg.ABL.  
 transcenderunt [Caes. BC 3,68,3]  
 proceed-perf.ind.3.pl.  
 “Without anyone defending (the spot), they have proceeded”
- c. senatus his auditis  
 senate-m.sg.NOM. this-n.pl.ABL. listened-PP-n.pl.ABL.  
 in sententia perseveravit [Liv. XXXVIII, 42, 16]  
 in decision-f.sg.ABL. persist-perf.ind-3.sg  
 “After hearing these facts, the Senate persisted in that decision”

In the case of transitive roots, like (111-c), the past participle always displays agreement with the argument expressing the [Theme]. If deponents + accusative are syntactically equivalent to transitives, the prediction is that analogous examples should be attested, in which the past participle displays agreement with this argument. The empirical evidence, however, unambiguously shows that this prediction is not borne out and that such cases are consistently not attested in Latin. Deponents occur in the ablative absolute construction only intransitively (cf. Laughton 1964, Bauer 2000)<sup>59</sup>:

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other hand, this construction is semantically and syntactically linked to the rest of the clause (see Panhuis 2006, among others). Therefore, this definition, which has by now become conventional, is only partially appropriate as a description of the properties of this adverbial clause.

<sup>59</sup> Consider, however, the attestation of an active ablative absolute in Sallust:

- (i) Sulla omnia pollicito [Sall. *Iug.* 103,7]  
 Sulla-NOM. all-n.pl. promised-PP.ABL.  
 “After Sulla had promised everything”

This example, isolated at its time, can be understood in light of the observations made above about *verba dicendi* and about the development this specific class underwent (as discussed in § 3.4.3.2 and § 5.4.1 of this chapter).

- (112) a.      illo                      profecto                                      [Cic. *Sull.*56]  
                  that-ABL.                      left-PP-ABL.  
                  “Having (he) left...”  
       b.      \* verito                      homine  
                  feared-PP                      man-m.sg.ABL.  
                  “Having feared a man”

This empirical observation constitutes further compelling evidence in favour of the intransitive character of all deponents, even those that select an argument in the accusative: the behavior of these verbs in ablative absolute constructions also differs sharply from the structural properties expected in transitive constructions. Another example of non-structural accusative case in Latin can be found in impersonal experiential verbs, like the ones exemplified below:

- (113) et            me                      pudet                                      [Cic. *Tusc.* 2, 5, 14]  
                  and    1.sg-ACC.                      be ashamed-pres.ind-3.sg  
                  “And I feel ashamed”  
       (114) tui                      me                      miseret                                      [Cic. *Div.* 1, 64]  
                  2.sg-GEN.                      1.sg-ACC.                      commiserate-pres.ind-3.sg  
                  “I have sympathy for you”

These verbs are generally inflected as impersonal<sup>60</sup> and their [Experiencer] argument is expressed through accusative marking. Here again, the presence of accusative case does not correspond to a direct object, but rather to a non-canonical subject (Fedriani 2011, 2013, 2014)<sup>61</sup> which is assigned lexical accusative case.

To sum up, Latin data show several contexts where the presence of an argument in the accusative does not syntactically correspond to the presence of a DO. More specifically, this case marking seems to occur in a number of constructions where lexical/inherent marking is needed to signal the specific function of an argument within the structure. Observe that this argument is never the element with which the verb agrees: in this sense, Latin non-structural accusative seems to behave as an inherent “default” marking for

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<sup>60</sup> Some examples of personal use of these verbs are attested as well, as discussed in Fedriani 2014.

<sup>61</sup> Notice, however, that this argument is not the grammatical subject, as the verb displays 3.sg inflection.

non-subject arguments. Gianollo (2000, 2005) has observed that deponents selecting oblique case (genitive/dative) occasionally select accusative instead. This fact has been explained as a sub-standard form of these constructions, typical of less cultivated linguistic contexts. The presence of an accusative a substitute for an etymologically motivated oblique can then be said to indicate a less controlled register of the language. If this hypothesis is correct, we are provided with a further argument supporting the “default” character of the accusative in Latin in contexts that are not related to a structural DO. These cases demonstrate the tendency of extending accusative to several oblique functions. There is thus significant linguistic evidence in Latin that consistently suggests a non-structural nature for the accusative that accompanies deponent verbs.

The fact that the accusative argument of deponents does not constitute a direct object is also confirmed by cross-linguistic empirical data. Consider, in particular, the commonalities between Icelandic quirky subjects like that exemplified in (115) and the Latin facts under analysis (the relevant data are reported in (116):

- (115) Hún skelfist hættuna  
 she-NOM. is terrified. danger.the-ACC  
 “She is terrified/horrified by the danger”
- (116) horum ego cogitationem non vereor [Cic.Phil.12,30]  
 this-m.pl.GEN. 1.sg.NOM. plan-f.sg.ACC. not fear-pres.ind.1.sg-r  
 “I am not afraid of these people’s plan”
- ( Sigurðsson 2004: 141)

The Icelandic data show an experiential construction comparable to that exhibited by the Latin deponent *vereor* “be afraid/terrified”<sup>62</sup>. In both cases there is, in fact, a nominative argument with the properties of an *Undergoer* and an accusative argument that expresses the cause of the subject’s state/affection. All experiential deponents behave like *vereor*. This suggests that the Icelandic structures may be equivalent to and those under analysis for Latin (cf. Barðdal & Eypórsson 2003, Barðdal 2006). Observe, moreover, that the Icelandic example in (115) exhibits *-st* morphology, which reflects a mono-argumental structure (Taraldsen 1983; 1995; Wood 2013). Consider, for instance, the occurrence of this morpheme on anti-causative constructions like (119-b) (Wood 2013: 89):

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<sup>62</sup> The experiential construction exhibiting NOM.-ACC. is only one of the possible cases found in Icelandic quirky subject constructions, which display a number of possible case combinations (see Sigurðsson 2003, 2004).

- (117) a. Trúðurinn opnaði hurðina  
 clown.the.NOM. opened door.the.ACC.  
 'The clown opened the door.'
- b. Hurðin opnaðist.  
 door.the.NOM. opened-ST  
 'The door opened.'

Latin and Icelandic therefore also display common behaviour in this regard: both languages morphologically mark a mono-argumental (inactive) structure via a dedicated set of endings. In short, a cross-linguistic comparison between Icelandic and Latin shows that the inactive structures in these two languages share relevant properties.

From this perspective, it is also possible to formulate a hypothesis concerning the status of the accusative argument selected by deponents. For the Icelandic cases, the [Causer] argument is generally assumed to bear inherent case, which has properties that differ from those of structural case:

The inherent cases are more complex, not only distinguishing between event participants ('first', 'second', ...) but also encoding specific relations (roles, aspectual relations, ...) of the participants to the event (i.e., they are 'semantically associated', in the sense of Chomsky 2002: 113). Moreover, the underlying relations involved are numerous and their interaction is often so intricate that the case correlations between PF and LF can become completely opaque, such that one and the same underlying deep case is expressed by more than one morphological case or such that one and the same morphological case is an exponent of many deep cases (cf. Sigurðsson 2004: 151).

Therefore, inherent case differs crucially from structural case in that it is construction-specific and thus often opaque at the interface (Jónsson 1998, 1999, 2000, 2001; Sigurðsson 2003, 2004 *et seq.*, Wood 2013). From this perspective, the assignment of accusative (or of another case) to the Causer of the predicate can be explained as the consequence of the property of a specific construction.

The observed correspondences between the Icelandic and Latin experiential constructions suggest that the accusative assigned to the Cause-argument in the latter might also be of a quirky/lexical nature. This could explain both its case marking and its specific properties, which are markedly different from those displayed by a direct object. The parallelism between the Latin and the Icelandic cases seems to be further confirmed by a broader observation regarding the distribution of such constructions. The verbal classes involved



in inactive constructions show consistent correspondences at a cross-linguistic level: languages like Old Norse-Icelandic, Ancient Greek, Latin, Old Slavic and Lithuanian, to mention just a few, display analogous constructions to refer to the same semantic fields, namely, states, possession, happenstances, perception, speaking, modality, emotions, cognition. It has furthermore been observed that all these languages display non-canonical subjects for many of these functions (Barðdal 2006; Barðdal et al. 2012; Wood 2013). Many of the categories identified by these studies precisely correspond to the deponent types illustrated above: indeed, Latin inactive constructions are generally related to the same contexts. Therefore, cross-linguistic correspondences<sup>63</sup> further support the inactive status of this syntactic-semantic field, which directly relate to the non-agentive  $\theta$ -roles identified above. These facts provide further empirical evidence for the proposal.

In light of these observations, it is possible to conclude that deponents selecting an accusative argument do not differ from other deponents from a structural point of view, and furthermore that they are inactive and mono-argumental. These verbs thus differ markedly from transitives in that they show different syntactic and semantic properties (*contra* Embick 1997, 1998, 2000).

## 5.2 Present Participles

The fact that deponents of present participles of the type *mirans* “the one who is astonished” exist has been claimed to constitute evidence against the inactive nature of these verbs. It has been argued that these forms are only licensed in the case of an active structure (Baerman 2006, 2007; Embick 2000; Weisser 2014). From this perspective, deponents display transitive properties in that they allow a formation that can be considered roughly equivalent to an agentive nominalization (Embick 2000). However, this assumption is inconsistent with the attested evidence and with the properties displayed by present participles in general. Consider the following examples, displaying the present participle of a deponent and of a transitive verb:

- (118)           neca-ns  
                  murder-pres.part.NOM.  
                  “the one who murders/the murderer”
- (119)           mira-ns  
                  be astonished-pres.part.NOM.

---

<sup>63</sup> Latin and Old Norse/Icelandic also display relevant similarities and differences as far as their anti-causative constructions are concerned (cf. Cennamo et al. 2015).

“the one who is astonished”

The translation of these two cases is already enough to unambiguously demonstrate that the alleged agentive characteristics of present participles are not empirically confirmed. The fact that (118) expresses an agentive predicate is simply related to the properties of the root itself and not to the formation of a participle. Note, moreover, that a stative reading is also available for transitive. The example in (118) can, in fact, also be interpreted as “in the state of murdering”. With deponent root, the formation of a present participle unambiguously indicates a state, as shown in (119). Therefore, it is possible to conclude that agentivity is not encoded by this specific form in itself and that the suffix *-nt-* is not the morphological exponent of the active functional head (*contra* Embick 2000).

Present participles are not related to agentivity in any way. They are verbal adjectives that express “the property of the action in an absolute way” (Ernout 1909, among others). The *-nt-* suffix does not display selection restrictions and is apt to be associated both with an experiential/stative construction and with the expression of transitive verb. These formations can thus be seen as neutral as far as the diathesis is concerned. In other words, they can be considered as adjectival (cf. Kratzer 1994, 2000; Anagnostopoulou 2003 *et seq.*; Alexiadou & Anagnostopoulou 2008, among others) and do not necessarily require the presence of an Agent in their argument structure. Therefore, the fact that present participles are available for deponent verbs does not constitute evidence for their transitive character. Their availability for all verb classes is simply a matter of their specific adjectival status (cf. Gianollo 2010 *contra* Embick 1997, 1998, 2000).

### 5.3 Semi-deponents

The definition “semi-deponent” is used to indicate some Latin verbs that have integrated a *-tu-* participle in their paradigm in order to form a perfect participle/infinitive (Gildersleeve & Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Flobert 1975; Panhuis 2006, among others). These verbs display a synthetic/analytic split within their paradigm: while they occur with active forms in the *infectum*, their *perfectum* always exhibits analytic forms. This group is traditionally taken to include four verbs:

- |       |    |                              |         |
|-------|----|------------------------------|---------|
| (120) | a. | audeo, ausus sum, audere     | “dare”  |
|       | b. | gaudeo, gavisus sum, gaudere | “enjoy” |

- |    |                            |                 |
|----|----------------------------|-----------------|
| c. | soleo, solitus sum, solere | "be accustomed" |
| d. | fido, fisis sum, fidere    | "trust"         |

The cases in (120) constitute a recognizable class in Classical Latin and occur with regularity. Alongside these four canonical cases, some other verbs also belong to this group, which all happen to be impersonal<sup>64</sup>:

- |       |    |                                   |                 |
|-------|----|-----------------------------------|-----------------|
| (121) | a. | licet, licitum est / licuit       | "be legitimate" |
|       | b. | libet, libitum est / libuit       | "be pleasant"   |
| (122) | a. | miseret, miseritum est / miseruit | "be merciful"   |
|       | b. | piget, pigitum est / piguit       | "be afflicted"  |
|       | c. | pudet, puditum est / puduit       | "be ashamed of" |
|       | d. | tedet, taesum est / taeduit       | "be bored"      |

These verbs also display a morphological split within their paradigm, as they exhibit active *inflectum* forms and periphrastic *perfectum* forms at the same time. Nonetheless, impersonal semi-deponents also exhibit synthetic perfect forms alongside the analytic forms, as shown in the examples above. In this regard, their paradigms display a less systematic character than those observed in (120).

The discordant character of semi-deponents had already been observed by many ancient grammarians, who defined them in a variety of ways:

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<sup>64</sup> The cases in (i) are canonically impersonal and only allow a 3.sg specification with impersonal reference:

- |     |                                                   |                       |           |                                  |
|-----|---------------------------------------------------|-----------------------|-----------|----------------------------------|
| (i) | non licet                                         | tibi                  | flere     | immodice [Sen. <i>Pol.</i> 6, 4] |
|     | non                                               | to be legitimate-3.sg | 2.sg.DAT. | cry-inf.pres. excessively-Adv.   |
|     | "It is not legitimate for you to cry excessively" |                       |           |                                  |

The verbs in (ii), on the other hand, require the presence of a non-canonical subject marked with inherent accusative case. All person specifications are allowed here, but the verb is only inflected in its 3.sg form:

- |      |    |                                                        |           |                 |                               |
|------|----|--------------------------------------------------------|-----------|-----------------|-------------------------------|
| (ii) | a. | nec                                                    | me        | pudet           | [Cic. <i>Tusc.</i> 1, 25, 60] |
|      |    | and not                                                | 1.sg-ACC. | be ashamed-3.sg |                               |
|      |    | "And I am not ashamed"                                 |           |                 |                               |
|      | b. | vestri                                                 | me        | pudet           |                               |
|      |    | 2.pl.GEN.                                              | 1.sg-ACC. | be ashamed-3.sg |                               |
|      |    | miseret-que                                            |           |                 | [Tac. <i>Hist.</i> 4, 58,1]   |
|      |    | to be merciful-3.sg-and                                |           |                 |                               |
|      |    | "I feel ashamed of you guys and I have mercy upon you" |           |                 |                               |

Notice the morphological and syntactic similarities between these cases (discussed in Fedriani 2013) and Icelandic quirky subject constructions (Jónsson 1998 *et seq.*; Sigurðsson 2003, 2004 *et seq.*).

*neutropassiva* (Consent. *GL* V 368, 19; Prisc. *GL* II 420, 9); *anomala* (Consent. *GL* V 368 13); *inaequalia* (Consent. *GL* V 368 18; Donat. *GL*. IV 383, 14), *defectiva* (Charis. *GL*. I 248, 8), *supina* (Serv. *GL*. IV 437, 13). Similarly, modern studies have underlined the difficulty of understanding these apparently inconsistent paradigms:

« le maintien d'un infectum actif discordant reste frappante en latin » (Flobert 1975: 494).

Semi-deponents constitute *prima facie* a problem for the proposal advanced in the present study, in that they display an active/inactive mismatch within the same paradigm. These verbs apparently lack the syntax-morphology correspondence identified in the rest of the Latin verbal system. Nonetheless, these semi-deponents can also be captured under the analysis put forward here. Despite some specific syntactic differences (i.e. personal vs. impersonal constructions), all Latin impersonals are characterized by certain common properties. As a first general observation, it should be noted that the semi-deponent class is not an open class, but rather a very restricted verbal group. Moreover, all semi-deponents share the characteristic of being high-frequency verbs. This is probably related to their structural properties: they often select a verbal complement and behave like restructuring verbs (Wurmbrand 2001; Cable 2004):

|       |                                                  |                         |                               |
|-------|--------------------------------------------------|-------------------------|-------------------------------|
| (123) | audet<br>dare-pres.ind.3.sg<br>"He dares to say" | dicere<br>say-inf.pres. | [Cic. <i>Verr.</i> II, 3, 34] |
|-------|--------------------------------------------------|-------------------------|-------------------------------|

(124) [TP SUBJ [<sub>vP</sub> V [<sub>VP</sub> V<sub>restructuring-verb</sub> [<sub>VP</sub> V<sub>head-of-restructured complement</sub> ] ] ] ]

Furthermore, the semantics of these verbs typically refers to a non-(prototypically) agentive context. More specifically, they can all be categorized as experiential constructions, whereby the sentential subject is at least partially affected. These verbs, then, are related to the syntactic-semantic inactive domain<sup>65</sup>.

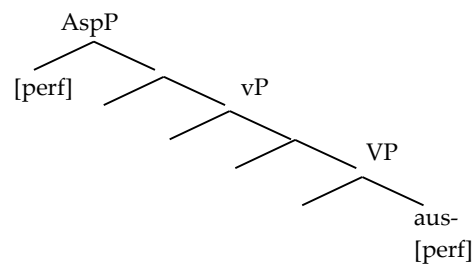
In light of these observations, these cases can be taken to be lexical exceptions within the proposed account, characterized by an asymmetrical paradigm. In

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<sup>65</sup> The presence of impersonals within this group is logical, as these constructions are crucially characterized by a non-canonical (non-agentive) subject inserted within the *v*-field. These cases also seem to be related to the inactive domain from this perspective.

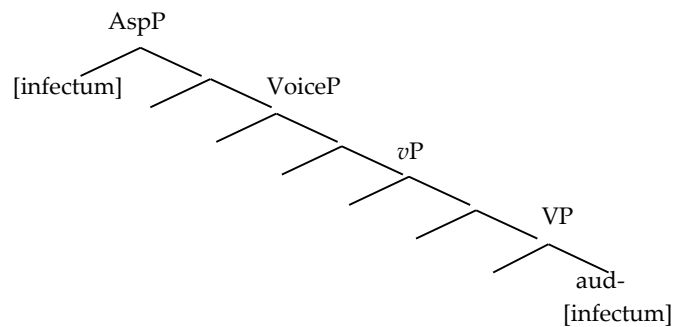
syntactic terms, they can be understood as a restricted list of lexically specified items: the *perfectum* is associated with an inactive syntactic structure, expressed through an analytic form, only in these few cases:

(125)



*Infectum* forms, on the other hand, select Voice and have active syntax:

(126)



Semi-deponents therefore seem to constitute a case of nano-parametric variation in Latin (in the sense of Biberauer, Roberts & Sheehan 2010).

This explanation is corroborated by extensive diachronic evidence. A possible diachronic explanation could be that these verbs changed their status over time. Specifically, we can claim that semi-deponents were probably originally active intransitive verbs, which have been gradually assimilated to inactive structures, so that at a certain point they acquired an inactive perfective form. The reasons behind this change can be found in the particular syntactic-semantic properties characterizing these verbs, namely in the fact that they generally express an experiential/stative meaning. In addition, these same verbs probably occurred extremely frequently, due to their restructuring character, and this fact may also have played a role in the change in question. Empirical evidence for this change can be found both in early and in Late

Latin. Ancient texts provide us with interesting data that demonstrate the previous existence of a synthetic perfect for these verbs:

- (127) non ausi reserare [En. *Ann.Fr.* 7, 17]  
 not dare-perf.ind.1.sg open-inf.pres.  
 "I did not dare to open"
- (128) quoniam audivi paucis gavisi [L. *And. Od. Fr.* 22]  
 since hear-perf.ind.1.sg few (things)-pl.ABL. enjoy-perf.ind-1.sg  
 "Since I heard (that), I was delighted because of these few facts"

These attestations seem to indicate that these paradigms were also active in the perfect at an earlier stage in the language. Evidence from ancient grammarians generally supports the active status of the perfect in early Latin:

«vetustissimi autem et 'ausi' pro 'ausus sum' et 'gavisi' pro 'gavisus sum' protulerunt » [Prisc. *Inst.* 6]

"Very ancient writers used *ausi* instead of *ausus sum* and *gavisi* instead of *gavisus sum*"

The relative chronology of these data seems to indicate that this diachronic change involved the *perfectum* paradigm initially, and that a second stage included *infectum* forms, which began to occur with inactive morphology as well (see Flobert 1975). However, analytic perfect forms of semi-deponents are frequently attested in early Latin along with the synthetic forms:

- (129) sum tangere ausus [Pl. *Aul.* 740]  
 BE-1.sg touch-inf.pres. dared-PP  
 "I dared to touch"
- (130) Ah, frustra sum igitur gavisus [Ter. *Heaut.* 857]  
 Ah uselessly-Adv BE-1.sg thus enjoyed-PP  
 "Ah, therefore, I was uselessly delighted"

As well as demonstrating that both forms were already attested at this stage, this finding casts doubt on the original status of the synthetic perfect forms above. Consider, moreover, that only a small number of examples of these alleged original forms are attested, and that both the cases provided come from poetry, the language of which is more prone to literary creations or to the usage of uncommon forms. In other words, the synthetic perfects of semi-deponents are likely to be analogical formations.

In light of these observations, a different diachronic explanation can be put forward. Semi-deponents were originally defective verbs that completely

lacked a *perfectum* paradigm (cf. TLL). At a certain chronological stage, two *perfectum* forms were created, an analogical synthetic one and an analytic one formed of PP + aux ESSE. Our sources are too limited to allow us to assess how widely the synthetic form was actually in circulation or whether it only belonged to the written language. Nonetheless, the fact that the analytic (i.e. deponent-like) form was already the more established one in early Latin and then became part of the paradigm of these verbs, indicates that semi-deponents were associated with inactive constructions because of their semantic similarities with other non-agentive contexts. Additional evidence for this tendency comes from Late Latin, which exhibits instances of the *infectum* of semi-deponents displaying inactive endings as well:

- |       |                                                               |                                    |
|-------|---------------------------------------------------------------|------------------------------------|
| (131) | gaudeatur!<br>enjoy-pres.subj.3.sg-r<br>"May he be delighted" | [Tert. <i>Paen.</i> 8, 12]         |
| (132) | gaudetur<br>enjoy-pres.ind.3.sg-r<br>"he enjoys"              | [Aug. <i>Conf.</i> VIII 4, et al.] |

A final confirmation in this regard is provided by impersonal verbs of the type *licet*, *licuit/licitum est* "be licit", whereby the alternation between a synthetic and an analytic perfect is still visible. This alternation shows that the change was still at work within this limited group of verbs, leading to competing forms of the perfect both being attested at a certain diachronic stage.

To sum up, semi-deponent verbs do not in fact constitute a counterexample to the proposed analysis and can be accounted for both from a synchronic and from a diachronic perspective. Their syntax and development actually provides us with additional evidence in favour of the proposed hypothesis, as the diachronic change that these verbs underwent shows that deponents were related to inactive syntax and that speakers perceived them as such. Only in this way could these verbs attract other verbal items endowed with similar properties until these were at least partially included within the same class.

#### 5.4 *Hortor* "exhort" and other *verba dicendi*

In Embick's study (2000) on the Latin perfect, *hortor* and a couple of other verbs exhibiting similar characteristics are used as evidence in favour of the transitive character of deponents. These verbs display some properties that appear to contradict the generalization about the inactive character of

deponents. However, a closer look at these verbs shows that this is not the case.

#### 5.4.1 Agentive nominalizations

Unlike most other deponent verbs<sup>66</sup>, some roots allow agentive formations in *-tor*, such as *opinator* (from the deponent *opinor* “express an opinion”) and *hortator* (from *hortor* “exhort”). This formation, which seems contrary to our proposal regarding the inactive character of the deponent class, can be understood in diachronic terms. Specifically, these cases can be related to the syntactic reanalysis of some deponents as transitives. This was a long diachronic process ultimately resulting in the inclusion of a number of deponents in the early-Romance transitive class (Flobert 1975; Cyrino 2009; Migliori 2015a, b *et al.*). More specifically, this mechanism mostly affected the sub-class of *verba dicendi*, because of the presence of a [control] feature in the syntactic-semantic specification of these verbs. For this reason, Latin verbs of speaking have been gradually reanalysed and are taken to be related to agentivity (see chapter 3). Nominalizations such as *opinator* and *hortator*, which are both based on *verba dicendi* (Delbrück 1897; Gianollo 2000, 2005) can be explained on the basis that they have undergone this change. Their appearance in Classical texts can therefore be seen as a case of early reanalysis and does not constitute a substantial argument in support of the active character of deponents as a class (*pace* Embick 2000).

#### 5.4.2 Passive forms

Another argument made in favour of the transitivity of deponents is the sporadic occurrence of some of these verbs in passive contexts. However, this claim does not seem to be supported by clear empirical evidence. Examples such as the one quoted by Embick (2000) (given below) are too rare and too limited to constitute a solid basis for a generalization:

- (133) ab amicis hortaretur [Varro in Prisc. GL II 387,2]  
 by friends-Abl. exhort-impf.subj-3.sg-r  
 “May he/she be exhorted by friends”

Moreover, the fact that the verb involved is once again *hortor* appears to confirm that this particular verbal item has been reanalysed as a transitive at

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<sup>66</sup> This suffixation is discussed in § 4.3.2 of this chapter.



quite an early chronological stage, leading to its seemingly anomalous behaviour with respect to other deponents.

To sum up, it is not possible to claim that the whole deponent class is transitive in nature on the basis of these few limited verbs, which exhibit different properties because of their specific diachronic development.

### 5.5 Conclusions

In this section, it has been shown that deponents + accusative, deponent present participles, semi-deponents and *hortor* are not in fact problematic for the hypothesis put forward in this study. Not only do they fit the generalization concerning the inactive character of deponents, but in some cases they even provide further evidence in favour of our proposal.

## 6. Concluding remarks

This chapter has provided an analysis of the Latin verbal system from a syntactic perspective. Firstly, we have demonstrated that the occurrence of Latin *-r* morphemes always reflects an inactive syntactic configuration, in which the sentential subject is assigned a  $\theta$ -role ( $S_O$ ) typical of the inactive domain. This holds both for passives and for deponents. It has been illustrated that Latin deponents display syntactic-semantic properties related to the non-agentive domain. Therefore, these verbs can be counted among the inactive verbs (*contra* Embick 1997, 1998, 2000, Baerman 2006, 2007; Weisser 2014, among others).

In the same way, the occurrence of analytic perfect forms can be understood as the consequence of an inactive syntactic configuration: along with the inactive nature of the contexts in which periphrastic perfects occur, both the presence of a stative participle and of *ESSE*, the Latin inactive functional element, seem to provide further evidence in this respect.

This analysis has been shown to be both consistent with the Latin data and with the cross-linguistic empirical evidence. Conversely, approaches that consider deponents to be a case of syntax-morphology mismatch (Baerman 2006, 2007; Embick 1997, 2000; Weisser 2014, among others) have been shown to be theoretically and empirically problematic.

It has been possible to specify the alignment properties of the Latin verbal domain: more specifically, it has been observed that the Latin verbal system consistently exhibits a syntactic and morphological distinction between  $A/S_A$  (active contexts) as opposed to  $S_O$ , (inactive contexts). This holds both in the

durative and in the perfective paradigm. The Latin verbal system is not asymmetric as far as alignment is concerned, but is characterized by an active/stative alignment opposition throughout (*pace* La Fauci 1997 *et seq.*). In light of these observations, we can conclude that although Latin is a predominantly nominative/accusative alignment language, it displays several properties typical of an active/inactive linguistic system.

In the following chapters, it will be shown that this fact is also crucial in diachronic terms, as it also played a decisive role in the development of the verbal system in the transition from Latin to Romance.



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**Between Latin and Romance: the rise of periphrastic perfects.  
Synchronic variation and diachronic observations.**

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## 0. Introduction

Romance displays substantial synchronic variation in the expression of the perfect: the distribution of analytic vs. synthetic forms is not the same in all Romance varieties, and different languages also show different perfective auxiliary selection patterns. In this chapter, these issues will be explored from a diachronic perspective. In particular, it will be shown that the syntactic reanalysis of deponent verbs and the active/inactive contrast of the Latin verbal system were decisive factors in the development of periphrastic perfect forms. From this perspective, the current Romance outcomes can be understood under a unified account as different chronological stages of a long and predictable diachronic development that began in late Latin with the reshuffling of voice distinctions.

## 1. The expression of the perfect in Romance

Romance languages vary in the strategy they adopt to express the perfect: they use a synthetic form, an analytic form, or both. Moreover, in the case of periphrastic forms, there is massive variation in the selection of the auxiliary. The term 'perfect' is used to refer to an event/state that precedes the Speech Time on the time-line. This event/state can either have present relevance (present perfect interpretation) or not (preterite interpretation) (Reichenbach 1947):

|                        |                  |
|------------------------|------------------|
| Past (present perfect) | Past (Preterite) |
| E – R, S               | E, R – S         |

In both cases, the past action has been accomplished with respect to the Speech Time. In this sense, the perfect differs from the imperfect, which

expresses an unaccomplished event located in the past<sup>67</sup>. In this section, the data concerning Romance variation in the perfect will be presented and discussed.

### 1.1 The synthetic-analytic opposition in the Romance perfect

Romance languages generally display two strategies for the expression of the perfect tense. Some varieties only display a synthetic perfect form, like Sicilian, as exemplified in (1):

- (1) a. ora la luna si nascusi,  
 now the-f.sg. moon-f.sg. itself hid-past-3.sg  
 ma prima era bellissima [Sicilian]  
 but earlier was-3.sg beautiful  
 “Now the moon has hidden itself, but earlier it was beautiful”
- b. mi scrissi tanti anni fa [Sicilian]  
 1.sg.obl wrote-past-3.sg many years ago  
 “He wrote to me many years ago”

The examples in (1) show that the perfect in this case expresses both the past punctual and the present perfect interpretation. It can be associated both with adverbs expressing present relevance like *ora* “now”, and with adverbial expressions referring to a temporal point located in the past, like *tanti anni fa* “many years ago”<sup>68</sup>.

Other languages, by contrast, display both an analytic and a synthetic perfect form, which usually express different aspectual specifications. Consider, for instance, the examples below from Standard Italian:

<sup>67</sup> Recall chapter 2, § 2.

<sup>68</sup> In these varieties, an analytic form (aux + PP) is also available, but either with an aspectual resultative value, as in (i), or with an experiential aspectual value, as in (ii) (Bertinetto & Squartini 1996; Harris 1982; Ledgeway 2000; Squartini & Bertinetto 2000; Amenta 2010):

- (i) Non m' a scrivutu [Sicilian]  
 Not to me-DAT. HAVE-3.sg written-PP  
 “He has not written to me”
- (ii) aju manciatu u piscispata  
 HAVE-1-sg eaten -PP the swordfish  
 “I have eaten the swordfish = I know what swordfish tastes like”

- (2) a. Oggi/adesso mi hanno rubato la macchina [It.]  
 today/now 1.sg-DAT. HAVE-3.pl stolen-PP the car  
 "They stole my car today today/now"
- b. \*Oggi/adesso mi rubarono la macchina  
 today/now 1.sg-DAT. stole-past.3.pl the car  
 "They stole my car today/now"
- c. Il mese scorso mi rubarono la macchina  
 the month last 1.sg-DAT. stole-past.3.pl the car  
 "They stole my car last month"

In Italian, the periphrastic form is used to refer to a past event with present relevance, as shown in (2-a). Conversely, the synthetic *passato remoto* "remote past" is associated with a preterite (i.e. no present relevance), as illustrated in (2-b-c)<sup>69</sup>. The same contrast can be observed in other languages, like French and Spanish:

- (3) a. Aujourd'hui ils m' ont volé la voiture [French]  
 today 3.pl 1.sg-DAT. H-3.pl stolen-PP the car  
 "They stole my car today/now"
- b. \*Aujourd'hui/maintenant ils me volèrent  
 today/now 3.pl 1.sg-DAT. stole-past.3.pl  
 la voiture  
 the car
- c. Le mois dernier ils me volèrent la voiture  
 the month last 3.pl 1.sg-DAT. steal-past.3.pl the car  
 "Last month they stole my car"
- (4) a. Hoy me han robado el coche [Spanish]  
 today 1.sg-DAT. HAVE-3.pl stolen-PP the car  
 "They stole my car today"

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<sup>69</sup> In spoken Italian (even in the formal spoken variety), the use of the *passato remoto* has become quite rare (Serianni 2006), whereas the *passato prossimo* tends to be increasingly used in all contexts, probably because of its greater transparency (cf. Beretta 1993). The same tendency can be observed in many other Romance varieties (cf. Squartini & Bertinetto 2000), like French, where the *passé simple* has practically disappeared from the spoken language (Jones 1996; Lang & Perez 2006), Romanian (Daniliuc & Daniliuc 2000; Dindelegan 2013), and peninsular Catalan (Badia i Margarit 1994; Wheeler, Yates & Dols 1999). Nonetheless, the *passato remoto* is still robustly used in the regional Italian of a number of linguistic areas, especially in Southern Italy, where this tense is productively used in the dialectal substrate.

- b. \*Hoy me robaron el coche  
today 1.sg-DAT. stole-past.3.pl the car
- c. Me robaron el coche la semana pasada  
1.sg-DAT. stole-past-3.pl the car the week last  
"They stole my car last week"
- d. ? Me han robado el coche la semana pasada  
1-sg. HAVE-3.pl stolen-PP the car the week last

Romanian exhibits two forms as well: the simple perfect (*perfectul simplu*), (5-a), and the compound perfect (*perfectul compus*), (5-b), (Daniliuc & Daniliuc 2000; Dindelegan 2013):

- (5) a. eu adunai [Romanian]  
1-sg gathered-past  
"I gathered"
- b. eu am adunat  
1-sg HAVE-1.sg gathered  
"I have gathered"

In this language, the analytic form is very frequent, whereas the synthetic form is only sporadically used in the standard variety<sup>70</sup>. Nevertheless, the periphrastic perfect is quite commonly used in southwestern Romania, especially in the Oltenia region, to express a past event with present relevance (Daniliuc & Daniliuc 2000; Dindelegan 2013):

- (6) Tocmai îl văzui pe Ion la facultate [Romanian]  
just 3.sg saw-past.1sg John-ACC. at faculty  
"I have just seen John at the faculty".

By contrast, in Romanian, this interpretation is impossible with the synthetic past:

- (7) \*Îl văzui pe Ion la facultate ieri [Romanian]  
3.sg saw-past.1sg John-ACC. at faculty yesterday  
"Yesterday I saw John at the faculty"

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<sup>70</sup> The usage of synthetic past forms in Romanian is limited to a high register of the language. In particular it is used in narrative, mostly after a dialogue line in narration (Weinrich 1964; Dindelegan 2013):

- (i) Ion a venit!, zise Maria  
John came! said-past.3.sg Mary

In Catalan, too, the analytic past (*pretèrit indefinit*), formed by the auxiliary HAVE + PP, expresses a past action with present relevance. Moreover, Catalan displays the *anar* “go” + infinitive<sup>71</sup> construction (*pretèrit perfet*), (8), which is highly productive in most varieties of Catalan, including the language of Barcelona. This periphrasis generally conveys preterite interpretation (Badia i Margarit 1951, 1995; Wheeler, Yates & Dols 1999):

- (8) El 1999 i entre el 2005 i el 2007, Ahtisaari **va intentar** trobar una sortida negociada al conflicte de Kosovo. [Barcelona Catalan]  
 “In 1999 and between 2005 and 2007, Ahtisaari tried to find a negotiated solution to the Kosovo conflict”

Conversely, the synthetic perfect (*passat simple*) is the dominant form in Valencia Catalan, whereas it has almost disappeared from most varieties:

- (9) El 1999 i entre el 2005 i el 2007, Ahtisaari **intentà** trobar una sortida negociada al conflicte de Kosovo. [Valencia Catalan]  
 “In 1999 and between 2005 and 2007, Ahtisaari tried to find a negotiated solution to the Kosovo conflict”

In European Portuguese, on the other hand, the synthetic/analytic opposition encodes a different aspectual contrast:

- (10) estudei muito esta semana [E. Portuguese]  
 study-past.1.sg much this-f.sg week-f.sg  
 “I studied a lot this week”
- (11) tenho estudado muito esta semana  
 hold-1.sg studied-PP much this-f.sg week-f.sg  
 “I have been studying a lot this week”

<sup>71</sup> Functional *anar* “go” in Catalan exhibits a full-fledged paradigm, as opposed to a lexical one, which confirms its auxiliary status in the system:

| Table IV | Lexical <i>anar</i> “go” | Functional <i>anar</i> “go” |
|----------|--------------------------|-----------------------------|
| 1.sg     | vaig                     | vaig/vàreig                 |
| 2.sg     | vas                      | vas/vares                   |
| 3.sg     | va                       | va                          |
| 1.pl     | anem                     | vam/vàrem                   |
| 2.pl     | aneu                     | vau/vàreu                   |
| 3.pl     | van                      | van/varen                   |



As illustrated in the example above, the alternation between the Portuguese preterite and the *ter*-periphrasis encodes an aspectual contrast: the synthetic form expresses a perfective interpretation as shown in (10). On the other hand, the *ter* + PP periphrasis (in the indicative) is used in order to confer a durative/iterative aspectual meaning, as in (11).

Finally, some Romance languages only display an analytic form, which expresses both the past punctual and the present perfect interpretation. This is the case in Sardinian, for instance, which has no synthetic perfect form (Mensching 1992):

- (12) a. apu cantau [Sardinian]  
 HAVE-1.sg sung-PP  
 "I sang/I have sung"  
 b. seu andau  
 BE-1.sg. gone-PP  
 "I went/I have gone"

The same holds for several Italo-Romance varieties<sup>72</sup> that only display a periphrastic perfect. This typically happens in northern Italian dialects, as in (13-a); but also in many southern Italian varieties, as in (13-b):

- (13) a. a sòm 'nitʃ/'nitʃa [Cavergno]  
 CLS-1.sg BE-1.sg come-PP.m.sg./f.sg  
 "I have come/I came" (Manzini & Savoia 2005, II:553)  
 b. sɔŋgə mə'nu:tə/ maŋ'neɛtə [Pescolanciano]  
 BE-1.sg come-PP/ eaten-PP  
 "I (have) come/eaten" (Manzini & Savoia 2005, II:759)

The contrast between synthetic and analytic perfect forms in Romance therefore looks quite different from the synthetic/analytic opposition characterizing the Latin perfect. In Latin, the occurrence of either form depends on the argument structure of the verbal construction. In Romance, by contrast, this alternation is related to the aspectual specification (in those languages that display such an opposition). To understand this difference, we must look at the diachronic development of the verbal forms involved. It will

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<sup>72</sup> Italo-Romance dialects descend from Latin. From a linguistic point of view they are therefore sister languages of the standard Romance varieties, and their contribution to a better understanding of the Romance area is essential. A substantial part of this work will focus on Italo-Romance varieties and their interesting patterns of perfective auxiliiation.

then be possible to capture both the synthetic/analytic distribution of the perfect and the variation in patterns of auxiliation.

## 1.2 The diachrony of Romance perfect forms

Most Romance synthetic perfect forms descend from the Latin *perfectum*. This form was synthetic in the active domain, as shown below:

|      |    |                       |           |   |                    |
|------|----|-----------------------|-----------|---|--------------------|
| (14) | a. | egli disse            | [Italian] |   |                    |
|      |    | he-3.sg say-past.3.sg |           |   |                    |
|      | b. | il dit                | [French]  | < | DIXIT [Latin]      |
|      |    | he-3.sg say-past.3.sg |           |   | say-perf.ind-3.sg  |
|      | c. | él dijo               | [Spanish] |   | "he said/has said" |
|      |    | he-3.sg say-past.3.sg |           |   |                    |
|      |    | "He said/has said"    |           |   |                    |

The Italian *passato remoto* form *disse*, the French *passé simple* form *il dit* and the Spanish *pretérito* form *dijo* all directly descend from the Latin perfect form DIXI(T). It should be noted, though, that while the Latin form expresses both the past punctual and the present perfect meaning, the value of its Romance counterparts varies depending on the synthetic/analytic distribution of the perfect forms, as observed in the previous paragraph. On the other hand, Romance periphrastic perfect forms descend from Latin periphrases, as shown in the examples below<sup>73</sup>:

|      |    |                         |           |   |                  |
|------|----|-------------------------|-----------|---|------------------|
| (15) | a. | egli è nato             | [Italian] |   |                  |
|      |    | he-3.sg BE-3.sg born-PP |           |   |                  |
|      | b. | il est né               | [French]  | < | NATUS EST [Lat.] |
|      |    | he-3.sg BE-3.sg born-PP |           |   | born-PP BE-3.sg  |
|      |    | "He was born"           |           |   | "He was born"    |

<sup>73</sup> Latin is generally claimed to have a SOV basic linear order (Oniga 2004 and references therein). This order has gradually shifted to SVO for a number of reasons, among which alignment factors seem to play an important role (Ledgeway 2012). For a detailed discussion of the changes in linear order from SOV to SVO, see Väänänen 1966; Adams 1976; Ledgeway 2012; Danckaert 2012, among others)



The example above illustrates that it is not possible to establish a one-to-one correspondence between auxiliaries in Latin and their Romance outcomes. It seems, therefore, that in the passage from Latin to Romance some other processes took place along with phonological changes. The diachronic reasons behind these differences will be examined in this chapter; we will begin with the synchronic variation in Romance auxiliary selection.

### **1.3 Auxiliary selection in the perfect: Romance synchronic variation**

Romance languages display significant variation in the selection of the auxiliary with perfective periphrases (Tuttle 1986; Vincent 1982, 1988; Cocchi 1994, 1995; Ledgeway 2000, 2009; Cennamo 2002, 2003, 2008 *et seq.*; Bentley 2006; D'Alessandro & Ledgeway 2010a; D'Alessandro & Roberts 2010; Manzini & Savoia 2005, 2007; Loporcaro 2007, 2011, 2012, 2014; D'Alessandro 2016). The patterns attested today are summarized in Table I (on the basis of Ledgeway 2012):

Table I - Auxiliary selection in Romance perfective periphrases

|                      | INACTIVE |              |       | ACTIVE     |        |
|----------------------|----------|--------------|-------|------------|--------|
|                      | Passive  | Unaccusative | Refl. | Unergative | Trans. |
| E. Portuguese        |          |              |       |            |        |
| Spanish              |          |              |       |            |        |
| Catalan              |          |              |       |            |        |
| N./Bal./Alg. Catalan |          |              |       |            |        |
| French               |          |              |       |            |        |
| Occitan              |          |              |       |            |        |
| Raeto-Romance        |          |              |       |            |        |
| Sardinian            |          |              |       |            |        |
| Italian              |          |              |       |            |        |
| NIDs                 |          |              |       |            |        |
| Upper SIDs           |          |              |       |            |        |
| Extreme SIDs         |          |              |       |            |        |
| Romanian             |          |              |       |            |        |

| Legend              |  |
|---------------------|--|
| BE                  |  |
| Alternating HAVE/BE |  |
| HAVE                |  |

Most Romance languages are consistent in selecting BE as passive auxiliary<sup>76</sup>, as illustrated in the following examples:

- (19) a. egli è colpito [Italian]  
 he-3.sg BE-3.sg hit-PP  
 "He is hit/he is being hit"
- b. egli è stato / fu colpito  
 he-3.sg BE-3.sg been-PP BE-past.3.sg. hit-PP  
 "He has been/was hit"
- (20) a. il est frappé [French]  
 he-3.sg BE-3.sg hit-PP  
 "He is hit"

<sup>76</sup> An exception to this general tendency can be found in several Italo-Romance varieties, located in the areas of Basilicata and northern Puglia, which exhibit the auxiliary *ve* "have" with passives (cf. Loporcaro 1988).

- (21) b. il a été frappé  
 he-3.sg HAVE-3.sg<sup>77</sup> been-PP hit-PP  
 "He has been hit"
- a. él es golpeado [Spanish]  
 he-3.sg BE-3.sg. hit-PP  
 "He is hit"
- b. él ha sido golpeado  
 he-3.sg BE-3.sg been-PP hit-PP  
 "He has been hit"
- (22) a. Fui ferido por José [E. Portuguese]  
 BE-perf-3.sg struck-PP by José  
 "I was struck by José"
- (23) a. sunt văzut/ă [Romanian]  
 BE-1.sg seen-PP-m/f  
 "I am (being) seen"
- b. am fost văzut/ă  
 HAVE-1.sg BE-PP seen-PP-m/f  
 "I was/have been seen"

The analytic perfect of the active paradigm in modern Romance displays different patterns of auxiliary selection. More specifically, observing the variation schematized in Table I, at least five different types can be identified:

- 1) The paradigm displays only one auxiliary (either BE or HAVE) in all active contexts. This is the case in Spanish, Romanian and ESIDs, for instance.
- 2) The paradigm is characterized by a BE/HAVE alternation based on verbal class (split intransitivity). Some examples of this pattern are Occitan, Balearic Catalan, Standard French and Standard Italian.
- 3) The paradigm displays a BE/HAVE alternation sensitive to other factors (person specification, modal/temporal factors or free variation ) (USIDs).

The core aim of this chapter is to outline a diachronic and syntactic link between the properties of the Latin perfect identified in the previous chapter

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<sup>77</sup> The presence of HAVE in this context can be explained by the fact that HAVE is used as a functional element in BE-compound tenses (Rowlett 2007). A similar explanation holds for Spanish in (13): in this case HAVE is the only perfective auxiliary for all active contexts, as shown in Table I.

and its (Italo)-Romance outcomes<sup>78</sup>. The investigation will mainly focus on auxiliary selection in the perfect indicative for two main reasons. Firstly, the perfect indicative (periphrastic and/or synthetic) is present in all Romance varieties, making it very suitable for a comparative analysis. Secondly, the paradigm can be considered “unmarked” compared to other paradigms such as the future and the conditional, which present additional mood/tense specification and do not always occur in modern languages with the same characteristics. The perfect indicative, therefore, constitutes a good basis for an examination of the pan-Romance scenario. The analysis of other Romance perfective periphrases, including other mood paradigms, will be left open for future research.

### 1.3.1 Pattern 1: one-auxiliary systems

When a system exhibits only one auxiliary throughout the whole perfective paradigm<sup>79</sup>, this auxiliary can be either BE or HAVE. The former is mainly found in some Italo-Romance varieties of the upper southern linguistic area, in particular in the dialects of Molise, Campania, Abruzzo and Lazio. An example is given in (24):

|      |          |                                             |          |                 |
|------|----------|---------------------------------------------|----------|-----------------|
| (24) | sɔŋgə    | mə'nu:tə/                                   | maŋ'ɲɛtə | [Pescolanciano] |
|      | BE-1.sg  | come-PP/                                    | eaten-PP |                 |
|      | si       | mə'nu:tə/                                   | maŋ'ɲɛtə |                 |
|      | BE-2.sg  | come-PP /                                   | eaten-PP |                 |
|      | ɛ        | mə'nu:tə/                                   | maŋ'ɲɛtə |                 |
|      | BE-3.sg  | come-PP /                                   | eaten-PP |                 |
|      | semə     | mə'nu:tə/                                   | maŋ'ɲɛtə |                 |
|      | BE-1.pl  | come-PP /                                   | eaten-PP |                 |
|      | setə     | mə'nu:tə/                                   | maŋ'ɲɛtə |                 |
|      | BE-2.pl  | come-PP /                                   | eaten-PP |                 |
|      | suə(nnə) | mə'nu:tə/                                   | maŋ'ɲɛtə |                 |
|      | BE-3.pl  | come-PP/                                    | eaten-PP |                 |
|      |          | “I/you/he/we/you/they have come/have eaten” |          |                 |
|      |          | (Manzini & Savoia 2005, II : 759)           |          |                 |

In the paradigm in (24), BE is selected as perfective auxiliary both with the transitive verb “eat” and with the unaccusative verb “come”. It functions,

<sup>78</sup> In the spirit of the VIDi-project *Splitting and clustering grammatical information*, of which this dissertation is part.

therefore, as a universal active perfective auxiliary. The same behaviour is exhibited by HAVE in the varieties that select this functional element as the only perfective auxiliary. One-auxiliary systems with HAVE are exemplified below:

- |      |    |                  |           |                                  |
|------|----|------------------|-----------|----------------------------------|
| (25) | a. | he               | venido    | [Spanish]                        |
|      |    | HAVE-1.sg        | come-PP   |                                  |
|      |    | "I have come"    |           |                                  |
|      | b. | he               | comido    |                                  |
|      |    | HAVE-1.sg        | eaten-PP  |                                  |
|      |    | "I have eaten"   |           |                                  |
| (26) | a. | he               | portat    | [Catalan]                        |
|      |    | HAVE-1.sg        | bring-PP  |                                  |
|      |    | "I have brought" |           |                                  |
|      | b. | he               | anat      |                                  |
|      |    | HAVE-1.sg        | gone-PP   |                                  |
|      |    | "I have gone"    |           |                                  |
| (27) | a. | aju              | vi'nutu   | [Calascibetta]                   |
|      |    | HAVE-1.sg        | come-PP   |                                  |
|      |    | "I have come"    |           |                                  |
|      | b. | aju              | ca'mato   |                                  |
|      |    | HAVE-1.sg        | called-PP |                                  |
|      |    | "I have called"  |           | (Manzini & Savoia 2005, II: 801) |
| (28) | a. | 'addʒə           | be'nutə   | [Neapolitan]                     |
|      |    | HAVE-1.sg        | come-PP   |                                  |
|      |    | "I have come"    |           |                                  |
|      | b. | 'addʒə           | 'maj'natə |                                  |
|      |    | HAVE-1.sg        | eaten-PP  |                                  |
|      |    | "I have eaten"   |           |                                  |

The Spanish examples in (25) illustrate that HAVE is always selected as perfective auxiliary, even though the syntactic environment differs: it is selected with both unaccusative and transitive verbs. The same pattern is broadly attested in all extreme southern Italian dialects, exemplified by the Sicilian example in (27) and also in many dialects of Campania, as shown in (28). HAVE also functions as active auxiliary in the Romanian finite paradigm<sup>80</sup>:

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<sup>80</sup> Romanian has two paradigms for HAVE, which are partially distinct: functional HAVE, as in (i-a), and lexical HAVE, as in (i-b) (Dobrovie-Sorin 1994, Dindelegan 2013):



- (29) am plecat [Romanian]  
 HAVE-1.sg left-PP  
 "I have left" (Dobrovie-Sorin 1994: 3)

In the Romanian example in (29) HAVE is selected as the perfective auxiliary<sup>81</sup> with the unaccusative verb "leave", illustrating that HAVE is also present as an active perfective marker in prototypically inactive contexts.

Finally, Portuguese exhibits functional *ter*, originally meaning "hold", as an active perfective auxiliary (Dias da Costa 1976; Harre 1991):

- (30) a. estudei muito esta semana [E. Portuguese]  
 study-past-1.sg much this-f.sg week-f.sg  
 "I studied a lot this week"  
 b. tenho estudado muito esta semana  
 hold-1.sg studied-PP much this-f.sg week-f.sg  
 "I have been studying a lot this week"

Although the active auxiliary in Portuguese is lexicalized as *ter*, its distribution and properties are the same as HAVE in other Romance varieties. Therefore, it can be considered a different lexicalization of the active perfective auxiliary<sup>82</sup>.

- 
- (i) a. am/ ai/ a/ am/ ați/ au  
 HAVE-1.sg/HAVE-2.sg/ HAVE-3.sg/ HAVE-1.pl/ HAVE-2.pl/H-3.pl  
 b. am/ ai/ are/ avem/ aveți/ au  
 HAVE-1.sg/ HAVE-2.sg/HAVE-3.sg/HAVE-1.pl/HAVE-2.pl/HAVE-3.pl

<sup>81</sup> However, with infinitival constructions, the future perfect, and the conditional perfect, as well as in the forms of the analytic pluperfect, the perfective auxiliary is BE (Ledgeway, 2014):

- (ii) Înainte de a fi mâncat / plecat citeam ziarul  
 before of to be.INF eaten/ left (I) read newspaper.DEF  
 "Before having eaten/left, I was reading the newspaper"

(Ledgeway 2014: 4)

<sup>82</sup> The distribution of Portuguese *ter* is different from that of Spanish *tener*:

- (i) a. Tenho estudado muito esta semana [E. Portuguese]  
 hold-1.sg studied-PP much this-f.sg week-f.sg  
 "I have been studying a lot this week"  
 b. Tenho uma irmã  
 hold-1.sg a-f.sg sister-f.sg  
 "I have a sister"

### 1.3.2 Pattern 2: Split Intransitivity

In some Romance languages, the perfective auxiliary is selected depending on verbal class: while transitive and unergative verbs are always accompanied by aux HAVE, reflexive (and other *si/se-*) constructions and unaccusative verbs select BE (Perlmutter 1978; Burzio 1986). This auxiliation pattern has been defined in the literature as “split intransitivity”, as it marks the distinction between two different kinds of intransitive verbs, namely unergatives and unaccusatives. An example of this pattern is the auxiliation system exhibited in Standard Italian:

- (31)
- |    |                         |          |         |            |           |
|----|-------------------------|----------|---------|------------|-----------|
| a. | ho                      | mangiato | una     | mela       | [Italian] |
|    | HAVE-1.sg               | eaten-PP | an-f.sg | apple-f.sg |           |
|    | “He has eaten an apple” |          |         |            |           |
| b. | ho                      | dormito  |         |            |           |
|    | HAVE-1.sg               | slept-PP |         |            |           |
|    | “I have slept”          |          |         |            |           |
| c. | sono                    | venuto   |         |            |           |
|    | BE-3.sg                 | come-PP  |         |            |           |
|    | “He has come”           |          |         |            |           |

In (31), HAVE is the selected auxiliary in transitive constructions and with unergative verbs like *dormire* “sleep”. Conversely, BE is selected with unaccusative verbs like *venire* “come” (Burzio 1986). Therefore, auxiliary selection appears to be syntactically motivated, as it reflects differences in

- 
- (ii)
- |    |                                                |            |             |           |           |           |
|----|------------------------------------------------|------------|-------------|-----------|-----------|-----------|
| a. | He                                             | estudiado  | mucho       | esta      | semana    | [Spanish] |
|    | HAVE-1.sg                                      | studied-PP | much        | this-f.sg | week-f.sg |           |
|    | “I have studied a lot this week (resultative)” |            |             |           |           |           |
| b. | Tengo                                          | una        | hermana     |           |           |           |
|    | hold-1.sg                                      | a-f.sg     | sister-f.sg |           |           |           |
|    | “I have a sister”                              |            |             |           |           |           |

The contrast between the examples above shows that, while Portuguese *ter* is displayed in both possessive and perfective contexts, Spanish *tener*, also etymologically from Lat. *TENERE*, is only present in possessive constructions. In this sense, Portuguese *ter* seems to display a more functional behaviour than its Spanish counterpart

argument structure. The same pattern is also exhibited by Standard French, (32)<sup>83</sup>, Balearic Catalan<sup>84</sup>, (33), and Occitan, (34):

- (32) a. j' ai mangé une pomme [French]  
 1.sg HAVE-1.sg eaten-PP an-f.sg apple-f.sg  
 "I have eaten an apple"  
 b. j' ai dormi  
 1.sg HAVE-1.sg slept-PP  
 "I have slept"  
 c. je suis venu  
 1.sg BE-3.sg come-PP  
 "I have come"
- (33) a. en Joan ha menjat una poma [Bal. Cat.]  
 John-3sg. HAVE-3sg. eaten-PP an apple  
 "John has eaten an apple"  
 b. en Joan és arribat  
 John-3.sg BE-3sg. arrived/come-PP  
 "John has arrived/come"
- (34) a. ai vist [Occitan]  
 HAVE-1.sg seen-PP  
 "I have seen"  
 b. es arribada  
 BE-3.sg arrived-PP  
 "She has arrived"

<sup>83</sup> Note, however, that in contrast to Italian, French selects HAVE for indefinite change-of-state verbs (Jones 1996, Rowlett 2007):

- (i) a. Il a grandi [French]  
 he-3.sg HAVE-3.sg grown up-PP  
 "He has grown up"  
 b. È cresciuto [Italian]  
 BE-3sg. grown up-PP  
 "He has grown up"

On the other hand, both French and select BE for telic change-of-state verbs:

- (ii) a. Il est né/mort [French]  
 he-3.sg BE-3.sg born-PP/dead-PP  
 b. E' nato/morto [Italian]  
 BE-3.sg born-PP/dead-PP

This variation can be accounted for as a parametric distinction (in the sense of Biberauer, Roberts and Sheehan 2010) in the way in which different languages encode syntactic-semantic properties in the grammar (cf. Sorace 1995, 2000; Bentley 2006).

<sup>84</sup> Continental Catalan, on the other hand, lost this distinction, in the same way as Spanish did, and displays now a one-auxiliary system with HAVE (Badía i Margarit 1951, 1962).



In the example above, the selection of BE predicts that the S-argument behaves like an Undergoer. Yet, the compatibility with an intentionality adverb like *apposta* “on purpose” constitutes a counterexample to this prediction. In other words, it seems that the intentional vs. non-intentional character of the construction is not sufficient to determine auxiliary selection. Another factor that has been claimed to play a role in this sense is telicity. Consider, for instance, the following data:

- (36) a. Maria ha corso per tre ore [Italian]  
 Mary-f.sg. HAVE-3.sg run-PP for three hours  
 “Mary has run for three hours”  
 b. Maria è corsa a casa  
 Mary-f.sg. BE-3.sg run-PP to home-f.sg  
 “Mary has run home” (Sorace 2000: 876)

Although the examples above display the same verbal item, *correre* “run”, they exhibit a contrast as far as perfective auxiliiation is concerned: while in (36-a) the perfective marker is HAVE, in (36-b) auxiliary BE is selected. This difference is related to the difference in telicity between the two examples: non-telic contexts tend to prefer aux HAVE as the perfective marker, whereas telic contexts generally select BE (Folli 2002; Schäfer 2007; Cennamo 2008; Folli & Harley 2005). Romance varieties display a number of phenomena like those exemplified above, in which various factors seem to influence the selection of the auxiliary. In the literature, these cases have been analysed as semantically (rather than syntactically) motivated (cf. Sorace 1995, 2000, 2004, 2011): the core claim of this approach is that contextual and semantic factors may also play a role in the selection of the perfective auxiliary. From this perspective, auxiliary selection is not seen as a syntactic phenomenon but rather as a semantic one. Moreover, it is claimed that auxiliary alternations follow fine-grained semantic distinctions. This approach is summarized by the Auxiliary Selection Hierarchy (ASH hereafter) which identifies the main classes of verbs and their corresponding auxiliaries mainly by examining their semantic properties (Sorace 2000 *et seq.*):

**Table II - Auxiliary Selection Hierarchy (from Sorace 2000)**

|                                      |                                   |
|--------------------------------------|-----------------------------------|
| CHANGE OF LOCATION                   | selects BE (least variation)      |
| CHANGE OF STATE                      |                                   |
| CONTINUATION OF A PRE-EXISTING STATE |                                   |
| EXISTENCE OF A STATE                 |                                   |
| UNCONTROLLED PROCESS                 |                                   |
| CONTROLLED PROCESS (MOTIONAL)        |                                   |
| CONTROLLED PROCESS (NON-MOTIONAL)    | selects HAVE<br>(least variation) |

The ASH undoubtedly has the advantage of capturing all verb classes under a unified approach and provides us with a good indication of general tendencies regarding auxiliary selection across languages. Indeed, the classes identified roughly correspond to the verb classes which have been shown to share relevant syntactic-semantic commonalities (cf. Levin & Rappaport Hovav 2005). Observe, however, that it is the syntactic factor that seems to play a decisive role as far as auxiliation is concerned (cf. Kayne 1993; Ledgeway 2000; Manzini & Savoia 2005; Bentley 2006; Loporcaro 2007, 2012, 2014; D'Alessandro & Ledgeway 2010; D'Alessandro & Roberts 2010, among others). Consider, for instance, the example in (35): the selection of auxiliary BE is syntactically motivated on the basis of the properties of the verb, even though the verb is contextually used agentively<sup>86</sup>. In the previous chapter, it was claimed that syntax and semantics are related in that inner aspectual properties of verbs are syntactically encoded through functional features (in the spirit of Folly & Harley 2005; Ramchand 2008, among others). These features are generally related to the semantics of the verb as well, but there are also cases in which the syntax-semantics relationship happens to be more opaque (as in (35)). To sum up, the ASH is a good tool to express the BE/HAVE alternation in split intransitivity systems, but it cannot be disjoint from a syntactic analysis of the contexts where these alternations take place.

### 1.3.3 Pattern 3: BE/HAVE alternation based on other factors

In some Romance varieties, the BE/HAVE alternation does not depend on the verbal class like in split intransitivity systems, but on other factors. In particular, the person specification of the sentential subject plays a decisive

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<sup>86</sup> Consider also the parallelism with Tsounoda's Transitivity Hierarchy (2005), according to which verb argument structure and semantics are related to each other.

role with respect to auxiliary selection in many upper southern Italian Dialects (henceforth USIDs), such as that of San Benedetto del Tronto:

- (37) a.        sɔ/        ʃi/        və'nu:tə/dər'mi:tə/ 'viʃtə        [S. B. del Tronto]  
                  BE-1.sg /BE-2.sg    come-PP/slept-PP/seen-PP  
                  ʃɛmə/        ʃetə        və'nu:tə/dər'mi:tə/ 'viʃtə  
                  BE-1.pl/ BE-2.pl    come-PP/slept-PP/seen-PP  
                  "I/ you/ we/ you have come/slept/seen"  
                  b.        a                                və'nu:tə/dər'mi:tə/ 'viʃtə  
                  HAVE-3ps        come-PP/slept-PP/seen-PP  
                  "He has seen/They have seen"        (Manzini & Savoia 2005, II:682)

In this dialect, the selected auxiliary is always BE for 1<sup>st</sup> and 2<sup>nd</sup> person (both singular and plural), as shown in (37-a). By contrast, in the case of 3<sup>rd</sup> person, the selected auxiliary is HAVE, as illustrated in (37-b). Notice that this pattern is independent from the verbal class, as it is exactly the same with unaccusatives (*və'nu:tə* "come"), unergatives (*dər'mi:tə* "slept") and transitives (*'viʃtə* "seen") (Rohlf's 1969; Ledgeway 2000; Manzini & Savoia 2005; D'Alessandro & Roberts 2010; Legendre 2010; Torcolacci 2012; D'Alessandro 2016). Therefore, in the varieties that behave like that of San Benedetto del Tronto, the perfective auxiliary is selected on the basis of the person specification of the sentential subject<sup>87</sup>. Interestingly, this only holds for the *passato prossimo*: the alternation disappears in other periphrastic paradigms. For example, in the dialect of Canosa Sannita, the *passato prossimo* exhibits person driven auxiliiation, (38), but the pluperfect does not, (39):

- (38) a.        sɔ/ si/ semə/ setə        mi'nutə/ məɲ'ɲa:tə        [Canosa Sannita]  
                  BE-1.sg /BE-2.sg/ BE-1.pl/ BE-2.pl    come-PP/eaten-PP  
                  "I/you/we/you have come/eaten"  
                  b.        a                                mi'nutə/ məɲ'ɲa:tə  
                  HAVE-3ps        come-PP/eaten-PP  
                  "He has come/eaten; They have come/eaten"

<sup>87</sup> This auxiliiation pattern is not attested in any other Romance varieties, except from the Catalan dialect of Olot, which displays a person driven auxiliary system:

- (i)        sɔ/        ha                                bist/    vingut                                [Olot Catalan]  
                  BE-1.sg    HAVE-3.sg    seen-PP/come-PP  
                  "I have/he has seen/come"

(Ledgeway 2012: 324)

This is the only Catalan dialect exhibiting this auxiliiation strategy. Conversely, in some Italo-Romance geo-linguistic areas, like Abruzzo, Southern Marche and Southern Lazio, this pattern is extremely frequent.

- (39) a. a've/ a'vi/ a've/ (s)a'vamə/ (s)a'vatə/ a've mi'nutə  
 HAVE-1.sg/H-2.sg/ H-3.sg/H-1.pl/H-2.pl/H-3.pl come-PP  
 "I/you/he/we/you/they have come"
- b. a've/ a'vi/ a've map'ja:tə  
 HAVE-1.sg/H-2.sg/ H-3.sg eaten-PP  
 "I/you/he has eaten"
- a'vamə/ a'vatə/ a've map'ji:tə  
 HAVE-1.pl/H-2.pl/H-3.pl come-PP  
 "I/you/he/we/you/they have come" (Manzini & Savoia 2015, II : 687)

In other mood/tense paradigms, some varieties even display both split intransitivity and auxiliary alternations according to person . The dialect of Guardiaregia (Molise), for instance, which always selects auxiliary BE in the *passato prossimo* (cf. Manzini & Savoia 2005, II : 714), displays two distinct splits in the pluperfect (40) and in the counterfactual paradigms (41) (cf. Ledgeway, in press):

- [Guardiaregia]
- (40) a. εva/ sivə/ εva/ sa'vamə/ sa'vatə/ 'εvanə mə'nutə/a; par'latə  
 BE-impf.1.sg/2.sg/3.sg/1.pl/2.pl/3.pl come-PP/talked-PP  
 "I/you/he/we/you/they had come/talked"
- b. r εva ca'matə  
 him/it BE-impf.1.sg called-PP  
 ru sivə ca'matə  
 him/it BE-impf.2.sg called-PP  
 r εva ca'matə  
 him/it BE-impf.3.sg called-PP  
 ru sa'vamə / r a'vamə ca'matə  
 him/it BE-impf.1-pl/him/ it HAVE-impf-1.pl called-PP  
 ru sa'vatə/ r a'vatə ca'matə  
 him/it BE-impf.2-pl/him/ it HAVE-impf-2.pl called-PP  
 r 'εvanə ca'matə  
 him/it BE-impf.3.pl called-PP  
 "I/you/he/we/you/they had called him/it"
- (Manzini and Savoia 2005,II: 715)

In the pluperfect, all intransitive subjects ( $S_O$  and  $S_A$ ) align with BE, as shown in (40-a). Conversely, in the transitive paradigm (40-b), HAVE can be selected with 1<sup>st</sup> person plural and 2<sup>nd</sup> plural. In counterfactual constructions, by contrast, intransitive subjects select BE in the singular (41-a) but HAVE in the



plural, (41-b), whereas for some persons, transitive subjects can select both auxiliaries (41c), (cf. Ledgeway, in press):

- (41) a. *fussə/ sar'ria/ 'sera* *mə'nutə/ par'latə* [Guardiaregia]  
 BE-subj.impf.1.sg/BE-cond.1.sg come-PP/talked-PP  
*fussə/ sar'rissə/ a'vissə* *mə'nutə/ par'latə*  
 BE-subj.impf.2.sg/BE-cond.2.sg/H-subj.impf.2.sg come/talked-PP  
*fussə/ a'vessə* *mə'nutə/ par'latə*  
 BE-subj.impf.3.sg /H-subj.impf.3.sg come-PP/talked-PP  
 “I/you/he would have come/talked”
- b. *a'vissəmə* *mə'nutə/ par'latə*  
 H-subj.impf.1.pl come-PP/talked-PP  
*a'vissətə* *mə'nutə/ par'latə*  
 H-subj.impf.2.pl come-PP/talked-PP  
*a'vissərə(mə)* *mə'nutə/ par'latə*  
 H-subj.impf.3.pl come-PP/talked-PP  
 “We/you/they would have come/talked”
- c. *ru sar'ria ca'matə*  
 him/it BE-cond.1.sg called-PP  
*ru fussə/ r a'vissə ca'matə*  
 him/it BE-cond.2.sg/ him/it H-subj.2.sg called-PP  
*ru sar'ria ca'matə*  
 him/it BE-cond.3.sg called-PP  
*r a'vəs'simmə/ ru sar'rimmə ca'matə*  
 him/it H-subj.1.pl/ him/it BE-cond.1.pl called-PP  
*r avəs'sitə ca'matə*  
 him/it H-subj.2.pl called-PP  
*rə 'fusserə ca'matə*  
 him/it BE-subj.3.pl called-PP  
 “I/you/he/we/you/they would have called him/it”  
 (Manzini and Savoia 2005,II: 716)

Therefore, modal/temporal factors also seem to play a role in auxiliation, embedded within an overriding person-based system (Rohlf's 1969; Ledgeway 2000, in press; Manzini & Savoia 2005, among others). Moreover, numerous USIDs display split intransitivity phenomena, in that person-based auxiliary selection excludes unaccusative verbs. An example of this is provided the southern Marchigiano variety of Ortezzano:

- (42) a. *sə/ si/ ε/ semo/ sete/ ε* *vi'nutu/a* [Ortezzano]  
 BE-1.sg /BE-2.sg/ BE-3.ps/ BE-1.pl/ BE-2.pl/ BE-3.ps come-PP  
 “I/you/he/we/you/they have come”

- b. sɔ/ si/ semo/ sete                      dur'mito/ rla'vato i 'paŋŋi  
 BE-1.sg /BE-2.sg/ BE-1.pl/ BE-2.pl    slept-PP/washed-PP the clothes  
 "I/ you/we/you have slept/washed clothes"  
 a                      dur'mito/ rla'vato                      i 'paŋŋi  
 HAVE-3.ps        slept-PP/washed-PP                      the clothes  
 "He has slept/washed clothes; They have slept/washed clothes"  
 (Manzini & Savoia 2005, II: 682)

These varieties therefore have quite complex grammatical systems, defined in the literature as "mixed", in which various grammatical factors play a role in determining auxiliary selection as well as other syntactic properties (cf. Loporcaro 2007; Ledgeway 2012).

The auxiliary selection paradigm in (37) is very widespread in USIDs and constitutes one of the many distinctive traits of this linguistic area (Rohlf's 1969; Giammarco 1973; Ledgeway 2000; Manzini & Savoia 2005). It should be noted, however, that this pattern occurs with massive micro-variation (Ledgeway 2000, 2012, in press; Manzini & Savoia 2005; Loporcaro 2007, 2011, 2014; Legendre 2010; Migliori & Torcolacci 2012; Migliori 2015b; Torcolacci, 2015), such that it is impossible to identify all USIDs with this pattern. There are numerous varieties in which BE only occurs with the 1<sup>st</sup> and 2<sup>nd</sup> person singular, as shown in (43):

- (43) a. sɔ/si        və'neutə/drəm'meutə/la've:tə    la'makəŋə [Giovinazzo]  
 BE-1.sg/BE-2.sg come-PP/slept-PP/washed-PP the car  
 "I/you have come/slept/washed the car"  
 b. a/ammə/a'vitə/ann        və'neutə/drəm'meutə/la've:tə    la makəŋə  
 H-3.sg/H-1.pl/H-2.pl/H-3.pl come-PP/slept-PP/washed-PP the car  
 "He/we/you/they have come/slept/washed the car"  
 (Manzini & Savoia 2005, II: 722)

In other dialects, on the other hand, BE is only selected in the 2<sup>nd</sup> person singular, as in the variety spoken in Bitetto (Puglia):

- (44) a. aŋŋə                      və'neutə/dər'meutə/ca'mi:tə                      [Bitetto]  
 BE-1.sg                      come-PP/slept-PP/ called-PP  
 "I have come/slept/called"  
 b. si                      və'neutə/dər'meutə/ca'mi:tə  
 BE-2.sg                      come-PP/slept-PP/called-PP  
 "You have come/slept/called"

- c.  $\varepsilon/sim\grave{a}/si:t\grave{a}/ann\grave{a}$                        $v\grave{a}'neut\grave{a}/d\grave{a}r'meut\grave{a}/ca'mi:t\grave{a}$   
 H-3.sg/H-2.pl/H-2.pl/H-3.pl come-PP/slept-PP/called-PP  
 "He/we/you have come/slept/called"  
 (Manzini & Savoia 2005, II: 725)

Finally, some southern Italian varieties exhibit free variation in the selection of the perfective auxiliary (cf. Rohlf's 1969; Loporcaro 1988, 2007, 2011, 2012, 2014; Ledgeway, in press), as in Altamurano, studied by Loporcaro (1988, 2007, 2012, 2014):

- (45) a.  $s\grave{o}$              $mman'g\acute{e}it/$              $a\ddot{y}\ddot{y}\grave{a}$              $man'g\acute{e}it$  [Altamura]  
 BE-1.sg eaten-PP/            HAVE-1.sg            eaten-PP  
 "I have eaten"
- b.  $s\grave{o}$              $'g\acute{g}out/$              $a\ddot{y}\ddot{y}\grave{a}$              $'\acute{s}out$   
 BE-1.sg gone-PP/            HAVE-1.sg            gone-PP  
 "I have gone"

Auxiliary selection in Altamurano can be summarized in the following table (on the basis of Loporcaro 2007):

**Table III – Auxiliary selection in Altamurano**

| Altamurano          | 1.sg | 2.sg | 3.sg | 1.pl | 2.pl | 3.pl |
|---------------------|------|------|------|------|------|------|
| <i>Transitive</i>   | BE/H | BE/H | BE   | BE/H | BE/H | BE/H |
| <i>Unergative</i>   | BE/H | BE/H | BE/H | BE/H | BE/H | BE/H |
| <i>Unaccusative</i> | BE/H | BE/H | BE/H | BE/H | BE/H | BE/H |

Moreover, for some speakers of this variety, indirect reflexives pattern together with active clauses, whereas others treat them as an independent verb type, displaying free variation in auxiliary selection (Loporcaro 2007, 2014).

To sum up, the southern Italian picture is very complex and diversified as far as auxiliariation is concerned. However, the huge variation that characterizes auxiliary selection in this area can be understood through the identification of systematic auxiliariation paradigms which show a certain regularity in the patterns of variation and suggest the possibility of a principled explanation. See Table IV (from Migliori & Torcolacci 2012) showing the most recurrent patterns:

**Table IV – Auxiliary selection in SIDs. Synchronic variation.**

| <b>Dialect</b> | <b>BE</b>          | <b>HAVE</b>                              |
|----------------|--------------------|------------------------------------------|
| Type I         | All persons        | -                                        |
| Type II        | 1 and 2 (sg e pl)  | 3 (sg and pl)                            |
| Type III       | 1 and 2 (sg)       | 3 (sg and pl), 1 and 2 (pl)              |
| Type IV        | Either 1 or 2 (sg) | 1 / 2 (sg) ; 3 (sg and pl), 1 and 2 (pl) |
| Type V         | -                  | All persons                              |

This schema shows that in SIDs the BE/HAVE alternation often depends on the person specification of the sentential subject (see Types II-IV). However, there are many other factors that also appear to play a role in some varieties, such as number and mood, among others (Ledgeway 1997a, 1997b, 1999, 2000, 2009; Manzini & Savoia 2005; Cennamo 1999a, 2001c *et seq.*; D’Alessandro 2014). In particular, number seems to be relevant for types III-IV (Torcolacci 2015). Conversely, Type I and Type V constitute one-auxiliary systems, comparable to those that we identified in section 1.3.1 in other Romance languages. In section 2 of this chapter, it will be shown that this variation can be understood under a unified diachronic account.

## **2. The rise of perfective periphrases in Romance**

In diachronic terms, the substantial variation in the distribution and semantic value of Romance perfective periphrases can be taken to be tightly related to the development of ESSE “be” and HABERE “have” as tense markers.

### **2.1 The limits of the grammaticalization account**

In order to look at the development of Romance perfective periphrases, we first need to recall the relevant Latin data. As illustrated in the previous chapter, the Latin perfect exhibits a contrast between an active synthetic perfect, (46-b), and an analytic inactive perfect, (46-d), (47-d). This difference is not only relevant to the morphological expression of the perfect, but also reflects crucial differences in argument structure. Moreover, the Latin perfect encodes both the past punctual and the present perfect reading. It will be shown later that this fact is crucial for the Romance outcomes.

|      |    |                                                            |    |                                                                       |
|------|----|------------------------------------------------------------|----|-----------------------------------------------------------------------|
| (46) | a. | nec-o<br>murder-1.sg<br>"I murder/am murdering"            | b. | neca-v-i<br>murder-perf.ind-1.sg<br>"I murdered/I have murdered"      |
|      | c. | nec-o-r<br>murder-1.sg-r<br>"I am (being) murdered"        | d. | necatus sum<br>murdered-PP BE-1.sg<br>"I was/have been murdered"      |
| (47) | a. | *medit-o<br>meditate-1.sg                                  | b. | *medita-v-i<br>meditate-perf.ind.-1.sg                                |
|      | c. | medit-o-r<br>meditate-1.sg-r<br>"I meditate/am meditating" | d. | meditatus sum<br>meditated-PP BE-1.sg<br>"I meditated/have meditated" |

The Latin paradigm above shows that the ESSE + PP periphrasis was already part of the Latin system and that it was regularly used in an inactive perfective configurations (passive, deponent verbs) (La Fauci 1988, 1997, 1998; Cennamo 1999b, 2008, 2009, 2011; Bauer 2000; Zamboni 2000; Panhuis 2006; Ledgeway 2012; Migliori 2014). By contrast, HABERE + PP does not seem to belong to the regular conjugation. This then raises a question about the development of this active periphrasis, which does not at first appear to occur regularly in the Latin verbal system.

According to the traditional account, the development of this periphrastic construction is to be seen as the result of a grammaticalization process (Thielmann 1885; Nicolau 1936; Harris 1982; Vincent 1982; Salvi 1987; Squartini & Bertinetto; Fruyt 2011; Haverling 2013). The lexical verb HAVE was then reanalysed and grammaticalized, so that it gradually changed its status from lexical to functional. This diachronic process is generally argued to follow a predictable path, as schematized below:

- (48) **Grammaticalization path (on the basis of Hopper & Traugott 2003)**  
lexical verb > aspectual marker > perfective marker > past tense marker

The claim is thus that possessive HABERE went through these stages, gradually changing its state from lexical to functional. According to this approach, the basis for this diachronic process is the Latin resultative construction in which HABERE governs a *praedicativum* past participle (HAVE + object + PP), like in the following cases:

- (49) in ea provincia pecunias  
 in that-f.sg.ABL. province-f.sg.ABL. money-f.pl.ACC.  
 magnas conlocatas habent [Cic. *Man.* 10, 17,18]  
 big- f.pl.ACC. invested-PP.f.pl.ACC. HAVE-3.pl  
 "They have huge amounts of money invested in that province"
- (50) qui eum vinctum  
 who-m.3.sg.NOM. him-m.sg.ACC. tied-PP-m.sg.ACC.  
 habebit [Lex XII Tab. 3,4]  
 HAVE -3.sg.fut.  
 "The one who will hold him tied in bonds"

In the examples above, it is not possible to identify the Agent of the event expressed by the participle, as in both cases this argument is not expressed. It has been claimed that this absence/under-specification of the Agent is an important trigger for the reanalysis and subsequent grammaticalization of the HABERE-periphrasis: since the subject of the *praedicativum* is not specified, speakers have reanalysed the subject of HABERE, which still has lexical value in such cases, as the subject of the whole periphrasis. Therefore, a process of reanalysis took place (in the sense of Roberts and Roussou 2003; Roberts 2007), thanks to which HABERE + PP were reinterpreted as monoclausal, as schematized below<sup>88</sup>:

- (51) [VP HABERE [NP [AP Part]]] > [VP HABERE [VP PartP]]

The consequence of this process of reanalysis was the gradual transformation of HABERE from lexical to functional. It has been claimed that this change passed through fixed semantic stages, which are summarized in Table V (from Harris 1982: 49-50):

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<sup>88</sup> An analogous process is claimed to be at the basis of other active auxiliaries like, for instance, Port. *ter* < Lat. TENERE. This verb, originally meaning "hold/keep", was gradually grammaticalized and eventually became a full auxiliary (Thielmann 1885; Harre 1991, among others.).

Table V

|         | HABERE + PP periphrasis                                                                                            | Languages                                                                                                  |
|---------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Stage 1 | <b>Aspectual value:</b><br>Present resultant state of past actions (resultative)                                   | ESIDs                                                                                                      |
| Stage 2 | <b>Aspectual value:</b><br>Current relevance of past situation and also marked for duration/ repetition (durative) | European Portuguese<br>Brazilian Portuguese<br>Galician<br>Asturian<br>Leonese<br>Latin-American varieties |
| Stage 3 | <b>Temporal value:</b><br><i>Present perfect</i> : past action with present relevance                              | Castilian Spanish<br>Catalan<br>some Occitan varieties<br>Italian                                          |
| Stage 4 | <b>Temporal value:</b><br><i>Past punctual</i> : Past situations without present relevance                         | (spoken) French<br>NIDs and northern regional<br>Italian<br>Romanian<br>Sardinian                          |

Table V shows that the different stages of grammaticalization of HABERE + PP are reflected in modern Romance varieties. Moreover, it has been claimed that the development of different semantic values is also reflected by the synthetic/analytic distribution of perfect forms, as the gradual extension of HABERE + PP goes hand in hand with the development of different semantic interpretations (Harris 1982):

**Table VI – Semantic values of the synthetic/analytic perfect in Romance (Harris 1982)**

| Stages | Preterite (Tense) | Present perfect (Tense) | Resultative (Aspect) | Durative/iterative (Aspect) |
|--------|-------------------|-------------------------|----------------------|-----------------------------|
| 1      | Synthetic         | Synthetic               | Analytic             | -                           |
| 2      | Synthetic         | Synthetic               | Analytic             | Analytic                    |
| 3      | (Synthetic)       | Analytic                | Analytic             | Analytic (also other aux)   |
| 4      | Analytic          | Analytic                | Analytic             | Analytic (also other aux)   |

The grammaticalization approach therefore appears to have great explanatory power, because it explains the development of HABERE + PP while also providing an account of the variation in modern Romance periphrases. It should be noted, however, that this analysis is problematic as there are numerous Romance counterexamples to the generalizations in Table V. Recall, for instance, that the analytic perfect does not always occur with HAVE, as shown in the previous sections (cf. the case of many SIDs displaying BE as universal perfective auxiliary discussed in Manzini & Savoia 2005). Examples of this type constitute a significant empirical problem for the analysis. This approach also seems problematic for other reasons, for instance because of the status of HABERE + PP within the Latin system. According to this approach, the perfective value of the periphrasis is an innovation, which emerged at quite a late stage, at the earliest during the late Latin period. However, as demonstrated by Pinkster (1987), this is not consistent with the empirical evidence. In fact, HABERE + PP was already productive in early and Classical Latin and coexisted together with the synthetic form in order to express perfective/accomplished interpretation, as shown in the following examples (already Pinkster 1987):

- (52) quid Athenis exquisitum habeam [Cato, *ad fil.* Frg. 1]  
 what Athens.f.pl.ABL. found-PP.n.sg H-pres.subj-1sg  
 “What I have found out in Athens”
- (53) quantum tironi sit commitendum  
 how much-Adv. recruit-DAT. BE-subj.pres-3.sg rely-GRDV-n.sg  
 nimium saepe expertum habemus [Pl. *apud Cic. Fam.* 10,24, 3]  
 too much-Adv. often-Adv. experienced-PP HAVE-1.pl  
 “We have too often experienced how far recruits are to be relied upon”



- (54) necdum omnia in quae coniurarent  
 not yet every-n.pl.ACC. to which-n.pl.ACC. conspire-subj.impf-3.pl.  
 edita facinora habent [Liv. XXXIX, 16,3]  
 revealed-PP-n.pl.ACC. crimes-n.pl.ACC HAVE-1.pl  
 “They have not revealed yet all the crimes to which they have conspired”
- (55) quem ad modum de ea re  
 which-m.sg.ACC. to way-m.sg.ACC. about that thing-f.sg.ABL.  
 scriptum habemus [Vitr. 9,1,14]  
 written-PP.n.sg.ACC. HAVE-3.pl  
 “As we have written above on this matter”
- (56) qui per urbes agri Sallentini  
 who-Nom. through cities-pl.ACC. field Salentino-m.sg.GEN.  
 castra disposita habebat [Liv. XXVII, 40,11]  
 military camp placed-PP HAVE-impf.ind.3.sg  
 “who had disposed military camps through the cities of the Salentino  
 country”

As observed by Thielmann (1885), this construction is frequent in Classical Latin, especially in Cicero’s prose, in which the HABERE +PP periphrasis appears to be used as a stylistic variant of the synthetic perfect. Consider the examples below (from Thielemann 1885: 518 and Adams 2013: 622-23):

- (57) quem si tu iam forte cognosti [...] [Cic. *Fam.* 13.17.2-3]  
 him-ACC. if 2.sg-NOM.already by chance know-ind.perf.2.sg  
 sin autem. . . nondum eum satis habes cognitum  
 if not instead not yet him-ACC. HAVE-2.sg known-PP  
 “if you happen already to have got to know him [...] but if you have not yet  
 got to know him sufficiently”
- (58) aliquid sese, quod de his duobus  
 something-ACC. 3-sg.Acc. which-ACC. about these two-ABL.  
 habuerint compertum,  
 HAVE-3pl.subj.perf. discovered-PP  
 de ceteris comperisse [Cic., *Cluent.* 127]  
 about others-ABL. discover-inf.perf.  
 “[they might claim] that they discovered about the others something  
 which they might have discovered about these two,”

Despite the claims made by Adams (2013) that only a resultative reading was available in Latin, cases like those above are likely to be understood as perfective periphrases. In fact, a present perfect (and sometimes even a past punctual) interpretation seem much more appropriate than a resultative interpretation in this context. Moreover, in many cases a (implicit or explicit) direct object is absent: this shows that the *praedicativum* cannot refer to an



- (62) cum cognitum habeas  
 when understood-PP.n.sg.ACC. HAVE-pres.subj.2.sg  
 quod sit summi  
 which-n.sg.NOM. BE-pres.subj.3.sg supreme-m.sg.GEN.  
 rectoris [...] numen [Cic. *Fin.* 4,11]  
 lord- m.sg.GEN. will-n.sg.NOM.  
 “When you have realized which the will is of the supreme lord”
- (63) auditum habemus quod [...]  
 heard-pp HAVE-1.pl that [Vulg. *Gal.* 1, 23]  
 “We have heard that...”

As pointed out by Pinkster (1987), the object in these examples cannot be interpreted as an object of HABERE only, but must be interpreted as the object of the whole periphrasis. In these cases too, then, HABERE seems to be a functional element rather than a lexical one. This poses a serious problem for the grammaticalization approach, which claims that HABERE was still lexical at this stage: the Latin data presented above in fact show that the alleged final stage of development was already present in the Latin system at quite an early stage and that HABERE functioned as an active tense marker in that period.

Another issue that is not resolved by the grammaticalization approach regards the relationship between the active periphrasis with HABERE and the inactive one with ESSE. According to this analysis, the two developments were, in fact, more or less independent from each other: while HABERE + PP was the product of a long diachronic process, ESSE + PP was already part of the Latin verbal system. It is only at the end of the grammaticalization path that the two periphrases have become active/inactive counterparts (cf. Vincent 1982; Harris 1982). Nonetheless, in the light of the Latin data examined in this section, such an assumption does not seem to be correct, as it does not take into consideration the functional status of HABERE in Latin. Moreover, it does not seem plausible, in diachronic terms, that the presence of another periphrasis in the system, namely the inactive perfect with ESSE, would not have played any role in this development.

To sum up, the grammaticalization approach cannot provide an accurate explanation for the rise of HABERE as a perfective marker, as this element seems to display different properties in Latin than those predicted by this hypothesis. For all these reasons, then, this account will be abandoned in this study. An alternative analysis will be proposed, which will not treat the development of the HABERE and the ESSE perfective constructions as isolated phenomena. Instead, an attempt will be made to analyse these facts from a broader perspective, and in relation to the properties of the whole Latin verbal system.

## 2.2 The rise of perfective periphrases in Romance: alignment and auxiliaries

In the previous section, it was observed that the HABERE + PP periphrasis coexisted with the synthetic perfective form to express the active present perfect. Nevertheless, it should be noted that the use of this periphrasis was less frequent in Latin than in modern Romance varieties (Cennamo 1998, 1999b, 2002, 2008; Ledgeway 2012). This therefore raises a question about the forces that triggered the expansion of the H + PP throughout the system, until it became the regular (proto)-Romance strategy for expressing accomplished/perfective interpretation within the active conjugation. In particular, two facts seem to have been significant for this change: the presence of the perfective inactive periphrasis ESSE + PP, and the active/inactive contrast of the Latin verbal system<sup>89</sup>. In this chapter, we will claim that these facts, which are not taken into account in the grammaticalization analysis, have played an essential role in the development of periphrastic perfect forms in Romance.

The Latin data show that this language was characterized by an active/inactive contrast in several domains of the grammar. In the previous chapter, it was shown that this alignment opposition was particularly pervasive within the clausal domain (cf. the occurrence of *-r* for marking inactive contexts). The same alignment contrast can be observed in other environments. What is interesting for our analysis is that this contrast is frequently encoded by the ESSE/HABERE opposition. This is the case with possessive constructions, for instance<sup>90</sup> (La Fauci 1988, 1997, 1998; Zamboni 2000; Baldi & Nuti 2010; Ledgeway 2012):

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

In (64-a) the possessor is a dative argument, the possessee is in the nominative and the possession relation is expressed by the auxiliary ESSE, in a clear

<sup>89</sup> Recall chapter 2.

<sup>90</sup> The development of possessive constructions from Latin to Romance is discussed in detail in chapter 4, § 1.

inactive configuration. Conversely, in (64-b), the possessor has nominative case, the possessee is in the accusative and the relation is expressed through the auxiliary HABERE, in an active configuration. In possessive structures, the ESSE/HABERE contrast therefore encodes an active/inactive opposition. An analogous example can be found in participial structures expressing material/mental acquisition (Ledgeway 2012: 319; Adams, 2013). Observe the contrast between the inactive periphrasis in (65-a) and the active periphrasis in (65-b):

- (65) a. tanti sunt mi emptae? [Var. *Rust.* II 2, 5]  
 so much-sg.GEN. BE-3.pl 1.sg.DAT. bought-PP.f.pl.NOM.  
 “Have they been bought by me for such a price?”
- b. eum autem emptum habebat  
 it-m.ACC. but bought-pp.m.sg.ACC H-ind.impf.3sg.  
 cum socio Cn. Acerronio [Cic. *Tull.* XVI]  
 with partner-m.sg.ABL. Cn. Acerronio-m.sg.ABL.  
 “On the other hand, he had bought him with his partner, C.  
 Acerronius” (Ledgeway 2012: 319)

Furthermore, the same contrast can be observed in the periphrases expressing obligation/necessity<sup>91</sup>:

- (66) a. dicenda tibi sunt hodie [Liv. IV 40, 9]  
 say-GRDV-n.pl.NOM 2.sg-DAT. BE-3.pl. today-Adv.  
 “These things have to be said by you today = You have to say these things today”
- b. pugnandum habebam [Sen. *Contr.* 10,2]  
 fight-GRD.n.sg.ACC. HAVE-impf.ind-1.sg  
 “I had to fight”
- (67) a. (homini) necesse est mori [Cic. *Fat.* 17 ]  
 human-m.sg.DAT. necessary BE-3sg. die-inf.pres.  
 “Humans have to die”
- b. multa probare necesse habet [Quint. *Inst.* 3, 8, 24]  
 many-n.pl.ACC. prove-inf.pres. necessary HAVE-3.sg  
 “He has to prove many claims”

In (66-a) the necessity/obligation of the action is expressed through a construction formed by gerundive + ESSE with a dative Agent: the configuration is thus inactive. In contrast, in (66-b) the obligation is expressed

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<sup>91</sup> The development of deontic periphrases between Latin and Romance will be examined in chapter 4, § 2.

by a HABERE + gerund construction, in which the subject coincides with the Agent. The structure is thus active. The same contrast can be observed in the deontic constructions with NECESSE “necessary”, (67), which can be expressed both with ESSE and with HABERE, displaying an inactive/active contrast. Finally, Latin displays a number of periphrases which can be either expressed with ESSE, in an inactive configuration, or with HABERE, in an active one. Some examples are given below (cf. *TLL*):

- (68) a. aliquis est mihi obvius  
 someone-NOM. BE-3.sg 1.sg-DAT. that you come across-NOM.  
 b. habeo aliquem obvium  
 HAVE-1-sg someone-ACC. that you come across-ACC.  
 “I met someone”
- (69) a. perspectum mihi est  
 known-PP 1.sg-DAT. BE-3.sg  
 b. perspectum habeo  
 known-PP HAVE-1.sg  
 “I know, I am convinced”
- (70) a. aliquis mihi invisus est  
 someone-NOM. 1.sg-DAT. hated-PP BE-3.sg  
 b. invisum habeo aliquem  
 hated-PP.ACC. HAVE-1.sg someone-ACC.  
 “To hate someone”

Therefore, there are numerous contexts in Latin in which ESSE and HABERE alternate in the same construction, encoding an inactive/active opposition. In light of these observations, it seems plausible to link the extension of HABERE + PP to this active/inactive contrast present in Latin (La Fauci 1988, 1997, 1998; Cennamo 1999b, 2002, 2008, 2009, 2011; Zamboni 2000, Ledgeway 2012). The claim is that this process could take place as a result of two forces: the presence of the inactive auxiliary ESSE in the perfect and in other periphrastic constructions on the one hand; and the active/inactive alignment of the whole verbal system on the other hand. Therefore, HABERE has gradually developed into an active marker, according to the following correspondence<sup>92</sup>:

- (71) ESSE : inactive // HABERE: active

This periphrasis, which would initially have been only marginally used, was able to expand throughout the whole system because of the extension of the use of functional HABERE as an active functional element. In this sense, the

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<sup>92</sup> See also Cyrino 2009.

innovation does not involve a change in the status of the verb from lexical to functional, but its gradual expansion as an active marker. In other terms, this verbal periphrasis, which was a minor usage pattern, i.e. a non-obligatory variant of the synthetic perfect, gradually became a major usage pattern until it became one of the main strategies for expressing the perfect in Romance.

Another relevant fact should be taken into account at this point. The aspectual distinction between *infectum* inactive forms (synthetic, e.g. *necatur*) and *perfectum* ones (analytic, e.g. *necatus sum*) gradually faded away starting from late Latin (Winter 1984; Bauer 2006; De Melo 2012, among others). This in turn provoked an increase in the use of inactive periphrastic forms, which gradually took the place of the synthetic forms (cf. Italian *sono ucciso* “I am (being) murdered”). Therefore, periphrastic forms with ESSE became more and more widespread. It seems likely, then, that the presence of this frequently used analytic form in the system significantly influenced the extension of the active form. Therefore, the extension of HABERE can be said to be related to the active/inactive opposition characterizing the Latin verbal system that was pervasive at different levels of the grammar and triggered a number of phenomena in several domains of the language<sup>93</sup> (cf. La Fauci 1988, 1997, 1998; Zamboni 2000; Cennamo 2001, 2002, 2008, 2009, 2011; Loporcaro 2007, 2014; Ledgeway 2011, 2012). The extension of functional HABERE can be understood as a diachronic process coherent with other phenomena triggered by this alignment contrast. From this perspective, the extension of the perfective periphrasis can be defined as a “conservative innovation” (cf. Zamboni 2000: 87) in that it simply extended a property with which auxiliary HABERE had already been endowed since a very early stage and made that its property *par excellence*.

To sum up, the extension of HABERE + PP is not merely the result of a grammaticalization process, but must instead be understood as the consequence of an alignment opposition. It can hence be understood as one of many processes and changes in the Latin system as a whole, rather than being treated as an isolated phenomenon.

Finally, it should be noted that this approach is not at odds with the generalizations made in Table V; those data must, however, be interpreted from a different perspective. The stages detected do not correspond to the various steps of grammaticalization of HABERE, but rather to the different phases of extension of this periphrasis as an active perfective marker. It is then possible to capture the Latin data presented in this section: considering Latin HABERE as functional allows us to understand its early occurrence in a number

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<sup>93</sup> See Ledgeway (2012: 312 and ff.).

of constructions/values, without losing the generalization about a major development in one specific direction. It thus appears that this alignment account allows for a more exhaustive explanation of the development and a more satisfactory account of both the diachronic data and of current variation.

### 2.3 The role of deponent verbs in the change

In the previous chapter, it was shown that Latin deponents generally pertain to the non-agentive field and therefore always occur with *-r* morphology (*-r* endings/periphrastic perfect forms constituted by ESSE + PP). In this sense, deponents form a fairly homogeneous class: they are structurally inactive, i.e. they lack a canonical agentive EA (Gianollo 2000, 2005, 2010; Kallulli 2013; Migliori 2015 a, b; *contra* Baerman 2006, 2007; Embick 1997, 1998, 2000; Weisser 2014). On the other hand, deponents occur in a number of different inactive structures: recall, for instance, the contrast between experiential deponents (e.g. *meditor* “reflect” and *arbitror* “decide”) with S merged in [Spec, Exp $\nu$ ] and unaccusative deponents (e.g. *proficiscor*, “leave”, *morior* “die”, *nascor* “be born”, *labor* “fall”), the S of which is an IA. In this sense, deponents are also a heterogeneous class, as the *Merging*-point of the sentential subject is not the same for all verbs. Furthermore, it has been observed that some deponents (e.g. *vereor* “fear”, *miror* “be astonished”) select an argument with inherent accusative case, as in the following examples:

- (72) a. [Quinctius] miratur  
 Quinctius-m.sg.NOM. is astonished-3.sg.*r*  
 subitum aduentum [Liv. XXXIX 30,10]  
 sudden-m.sg.ACC arrival-m.sg.ACC.  
 “Quinctius is astonished for the sudden arrival”  
 b. moderationem patientiam-que  
 temperance-f.sg.ACC. patience-f.sg.ACC.  
 mirantur [Cic. *Phil.* X 14, 127]  
 are astonished-3.pl-*r*  
 “They are admired because of his temperance and patience”
- (73) a. qui omnia verentur [Cic. *Phil.* X 17, 28]  
 who everything-n.pl.ACC. fear-3.pl-*r*  
 “[those], who are afraid of everything”  
 b. quid enim vereris? [Cic. *Att.* 4,7,2]  
 what-ACC. in fact fear-2.sg-*r*  
 “What are you afraid of, then?”



Deponents look like a complex verbal class, in that they appear to be homogeneous on the one hand (all inactive) and heterogeneous on the other hand (they pertain to various inactive constructions with different syntactic-semantic properties). Given these properties, it is not surprising that deponents created learnability problems from an acquisition point of view. In fact, it has extensively been shown in the literature (cf. Flobert 1975; Gianollo 2005, 2010; Cyrino 2009) that this class has continuously undergone reanalysis throughout the development of the Latin language, from the early Latin right up to the early Romance period, constantly including new verbs via analogy or excluding others whose properties were no longer associated, in the speakers' mind, with the characteristics of this class<sup>94</sup>. Recall, too, the case of semi-deponents, discussed in the previous chapter, which were gradually associated with the deponent class in the speakers' mind, probably because of their semantic commonalities with those verbs.

The core claim of this chapter is that deponent verbs, precisely because of their specific properties, played a crucial role in the development of Romance perfective auxiliation. More specifically, it will be proposed that the basis for the rise of specific Romance auxiliation patterns is to be found in the syntactic reanalysis of a precise group of deponents, i.e. the verbs pertaining to the experiential domain. Under this hypothesis, experiential deponents are held to have been gradually reanalysed as active, paving the way for the extension of auxiliary HAVE in Romance perfective periphrases<sup>95</sup>.

Syntactic reanalysis (i.e. the structural reinterpretation of a given morphological form in the speakers' mind, cf. Roberts & Rousseau 2003; Roberts 2007) is here claimed to have been triggered by a number of potentially ambiguous contexts that, combined with the specific (heterogeneous) properties of deponents, might have gradually separated experiential deponents from other deponent types .

An initial significant trigger for reanalysis can be identified in the deponents selecting an accusative argument (recall the example in 72). The ambiguity was caused not only by the presence of the accusative itself, but also by the

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<sup>94</sup> Consider the interesting parallelism with Modern Greek, in which the deponent class appears to be undergoing a number of changing as well, either creating or loosing (new) active counterparts, as discussed in Zombolou & Alexiadou (2014b).

<sup>95</sup> The role of experiential verbs in the reanalysis process is also taken into account also under the traditional grammaticalization approach, as in these cases the subject of the PP must co-refer with the subject of HAVE. However, this account has not considered the deponent character of numerous Latin experientials, which is crucial for understanding this change from a syntactic point of view.

comparison between deponent + ACC structures and constructions like the following:

- (74) rogatus                      sum      sententiam      [Cic. *Pont.* XVI 41, 13]  
 asked-PP.m.sg.NOM.      BE-1.sg      opinion-f.sg.ACC.  
 "I was asked for an opinion"
- (75) nos<sup>96</sup>                      ne                      hoc  
 we-1.pl.ACC.      int-prtel              this-n.sg.ACC.  
 celatos                      tam                      diu                      [Ter. *Hec.* 643]  
 hidden-PP.m.pl.ACC.      such      long time  
 "And we have been ignoring this fact for such a long time?!"

These examples show the passive form of double accusative constructions, which are typical of ditransitive verbs like *rogo* "ask", *celo* "hide", *dono* "give". Observe that these cases look exactly like deponents from a morphophonological point of view:

- (76) Past participle      aux      BE      ACC.-argument

Nonetheless, differently from deponents, these examples also have an active counterpart, as shown below:

- (77) otium                      divos                      rogat                      [Hor. *Car.* II, 16,1]  
 rest-n.sg.ACC.      gods-m.pl.ACC.              ask-3.sg.pres.  
 "He asks the gods a rest"

The claim is that the morphological similarity between the perfect of deponents + accusative and the passive form of double accusative constructions was a locus of syntactic reanalysis. As stated in the literature (Roberts & Rousseau 2003; Roberts 2007) morphological ambiguity is one of the most frequent triggers for this phenomenon. As a result of this ambiguity, deponent verbs taking the accusative were gradually reanalysed as transitive. It is also important to note that the Latin verbal system underwent a massive reshuffling process with regard to voice distinction, particularly in late Latin. This process mostly involved the active/inactive distinction, in that the syntactic-semantic value of *-r* forms was often reanalysed, and they came to be used in different contexts (cf. Cennamo 1998a, 1999b, 2001b, 2008, *et seq.*).

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<sup>96</sup> This argument is in the accusative as it is the sentential subject of an infinitival complement clause, exhibiting Exceptional Case Marking (Oniga 2004).

Given this scenario, it seems entirely plausible that deponent + accusative constructions might have been reinterpreted as structurally active.

A further significant fact must be taken into consideration at this point. Most deponents occurring with an accusative argument are experientials. As already observed in the previous chapter, these verbs constitute a class with specific syntactic semantic properties. In particular, this class is syntactically closest to active constructions:

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

This structural proximity, together with the ambiguous contexts identified above, has probably created a context for reanalysis leading to the inclusion of experientials were included in the active domain. Another factor that might have pushed the change in this direction can be found in *verba dicendi*. These verbs are a sub-group of the experiential class, with specific properties. As already observed in chapter 2, deponent verbs of speaking (e.g. *loquor* “speak”) are less agentive than transitive verbs, as the grade of intentionality is lower than in active transitive cases like *neco* “murder” (Gianollo 2000, 2005, 2010). Moreover, it has been observed that *verba dicendi* occurring with inactive morphology are generally used intransitively in the languages of the world (cf. Kemmer 1993; Marelj 2004; Kallulli 2013, among others). However, these verbs are endowed with a [control] feature, as the sentential subject is partly responsible for the action expressed<sup>97</sup>. In this sense, experiential verbs constitute the most “agentive-like” class within the deponent group: their argument is, in fact, the highest inactive argument. Moreover, these verbs could also occur with a neuter accusative element, which was generally used adverbially:

- (79) sed nimis longum loquor [Pl. Ep. 376]  
 but too long-n.sg.ACC. speak-1.sg-r  
 “But I do not speak for a too long time”
- (80) nimis diu et longum loquor  
 too long time and long speak-1.sg-r  
 “I do not speak for at length and for a too long time”
- (81) si falsum loquor  
 if false-n.sg.ACC. speak-1.sg-r  
 “If I speak untruthfully”

---

<sup>97</sup> Recall the discussion on semantic roles in chapter 2.

It is possible to hypothesize that this fact, together with the agentive-like character of these verbs, created a further context for syntactic reanalysis and that they were reanalysed as transitive at a certain stage. To sum up, because of their properties and because of the existence of some ambiguous contexts, experiential deponents have been reanalysed as active and gradually included in the active/transitive class. Evidence in favour of this hypothesis can be found in the widespread process of deponentization that occurred in late Latin, thanks to which active verbs began to occur with inactive morphology, without losing their active structural properties (cf. Bonnet 1890; Norberg 1943; Flobert 1975; Cennamo 1998a, 2001b, 2008, *et seq.*):

- (82) si quislibet ea coercebatur [Chron. Sal. in Norberg 1943: 155]  
if someone-NOM. her-ACC. force-ind.impf-3.sg-r.  
“If someone forced her”
- (83) proviciam lues debellata est [Greg. Tour H.F. 8,39 in Bonnet 1890: 411]  
province plague-NOM. conquered-PP BE-3.sg  
“The plague conquered the province”
- (84) et cogniti sunt Romulides [Agnell.81 in Norberg 1943: 155]  
and learnt-PP BE-3-pl Romans-3.pl-NOM.  
“And... the Romans (have) learnt”
- (85) certati sunt cursu [Hygin. *Fab.* 273,120 in Norberg 1943: 155]  
competed-PP BE-3.sg race-ABL  
“They had a race”

Similarly, it is possible to find examples of active verbs (displaying active morphology) indicating an inactive interpretation:

- (86) item si a rota vexaverit [Pelag. 233 in Feltenius 1977: 137]  
then if by wheel-ABL. troubled-subj.perf-3.sg-r  
“Then if he (= the horse) is troubled by the wheel”

These morphological alternations found in late Latin clearly show that a change in the active/inactive distinction was occurring, meaning that the correct interpretation could only be inferred by the contexts and not by morphology alone. These facts seem to constitute strong evidence in support of the hypothesis that deponents were reanalysed as active: the fact that verbal endings alternated shows that that a process of reanalysis affected the syntactic distinction between active and inactive fields, between which deponents are syntactically and semantically located.

### 2.3.1 The reanalysis of the *v*-field

In syntactic terms the inclusion of experiential deponents in the active class meant a reanalysis of the Latin little *v*-field, which encodes inactive structures. In Latin, the structural border between active and inactive clauses lay at the height of Voice, as discussed in the previous chapter:

|      |               |                                                                                                                                                                                        |                                                                                                                                                                                                                                                        |
|------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (87) | <b>Latin:</b> | <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;"><b>[VoiceP</b></div> <div style="margin-bottom: 10px;">ACTIVE</div> </div> | <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">[Exp<math>\nu</math>P [Rec/Goal<math>\nu</math>P [Poss/Loc<math>\nu</math>P [Pat<math>\nu</math>P[VP]]]]]</div> <div>INACTIVE</div> </div> |
|------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

By contrast, after this process of reanalysis, the experiential projection is exhaustively included in the active domain:

|      |                         |                                                                                                                                                                                 |                                                                                                                                                                                                                                 |
|------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (88) | <b>(Early) Romance:</b> | <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;"><b>[VoiceP [Exp<math>\nu</math>P</b></div> <div>ACTIVE</div> </div> | <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;">[Rec/Goal<math>\nu</math>P [Poss/Loc<math>\nu</math>P[Pat<math>\nu</math>P[VP ]]]]</div> <div>INACTIVE</div> </div> |
|------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

This reanalysis had decisive consequences for the development of the verbal system between Latin and Romance. In the next sections, the focus will turn to the changes that this reanalysis meant for Romance perfective auxiliaries.

## 2.4 Consequences for Romance auxiliation

In the literature, the analytic perfect, made up of aux + PP, has been often analysed as corresponding to a copular structure headed by auxiliary BE (Benveniste 1966; Freeze 1992; Kayne 1993). This claim has been made on the basis of the similarities between perfective structures and possessive structures, which can cross-linguistically occur either with BE (as in 89-a) or with HAVE (as in 89-b):

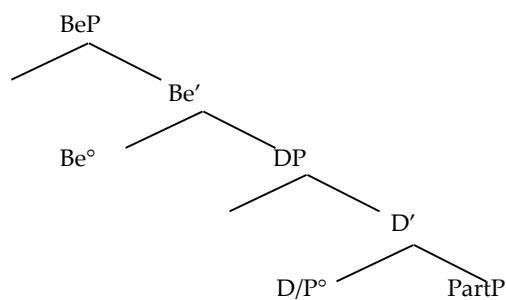
|      |    |                  |        |           |                 |
|------|----|------------------|--------|-----------|-----------------|
| (89) | a. | nek-em           | van    | haza-m    | [Hungarian]     |
|      |    | DAT-1sg          | BE.3sg | house-1sg | (Jung 2011: 51) |
|      | b. | ho               | una    | casa      | [Italian]       |
|      |    | HAVE.1sg         | a      | house     |                 |
|      |    | "I have a house" |        |           |                 |

Both in the perfect and in possessive structures, BE is always associated with an inactive structure. On the other hand, HAVE is able to assign accusative case. This difference has been explained as a consequence of the different composition of these two elements. The core claim is that BE is the only primary auxiliary, whereas auxiliary HAVE results from the incorporation of BE into a locative preposition (P) (Freeze 1992; Kayne 1993):

(90) BE + P → HAVE

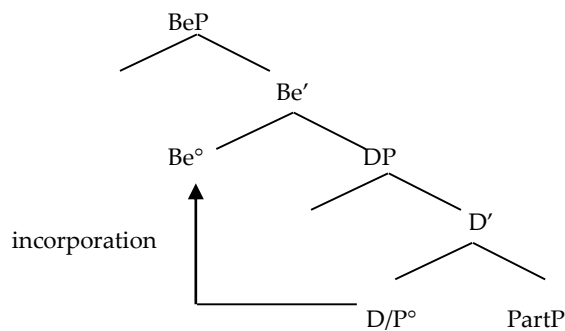
Because of the presence of the P, HAVE can assign structural accusative. The basic structure of possessive BE/HAVE and auxiliary BE/HAVE is given below (based on Kayne 1993):

(91)



In (91), copula BE takes a DP complement, headed by a covert prepositional D (labelled D/P). This head contains an NP (possessive) or VP (auxiliary) substructure. Conversely, HAVE differs from BE in that it is the result of the incorporation of an abstract preposition, namely D/P, into BE (Freeze 1992). This movement is claimed to be triggered by properties of the participial clause:

(92)



For this reason, BE is basically unaccusative, i.e. unable to assign structural accusative case.

Very much in the spirit of Kayne (1993), D'Alessandro & Roberts (2010) and Roberts (2013) claim that HAVE auxiliaries arise through incorporation (of *v* to Voice), while BE auxiliaries are the default, arising where no such incorporation takes place. The basic cross-linguistic environments for the realization of the auxiliary *v* as HAVE or BE are considered to be as follows, where *v*\* denotes a non-defective *v*, one capable of agreeing with the case of the direct object and assigning an external thematic role to the subject (in the sense of Chomsky (2001)):

- (93) **BE/HAVE alternation (cf. Roberts & D'Alessandro 2010, Roberts 2013)**
- a.  $v^*_{\text{Perfect}} = \text{have}; v_{\text{Perfect}} = \text{be}$  (Italian, German, etc.)
  - b.  $v_{\text{Perfect}} = \text{have}; v_{\text{Passive}} = \text{be}$  (Spanish, English, Sicilian, etc.)
  - c.  $v_{\text{Perfect}}[3\text{pers}] = \text{have}; v_{\text{Perfect}}[1,2\text{pers}] = \text{be}$  (USIDs)

Even though the technical details of this analysis are different from Kayne's, the gist of the proposal is roughly the same, namely that BE is the default auxiliary, whereas HAVE is the result of an incorporation operation. Moreover, these two functional elements reflect an active vs. inactive syntactic structure in this study too. Building on this core idea, this study will consider the occurrence of auxiliary BE as corresponding to an inactive syntactic structure, whereas HAVE will be taken to occur in the case of active syntax. In this chapter, it has been proposed that the passage between Latin and early Romance meant a change in the active/inactive distinction, in that a number of deponents gradually came to be included within the active field:

- (94) **(Early) Romance:**
- |                         |                                                                    |
|-------------------------|--------------------------------------------------------------------|
| [VoiceP [Exp <i>v</i> P | [Rec/Goal <i>v</i> P [Poss/Loc <i>v</i> P [Pat <i>v</i> P [VP]]]]] |
| ACTIVE (H)              | INACTIVE (BE)                                                      |

Morphologically, the active/inactive contrast is expressed through the alternation of the auxiliaries HAVE (active) vs. BE (inactive) in those languages that mark this distinction<sup>98</sup>. The distribution and development of

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<sup>98</sup> For one-auxiliary systems, see § 3.2 in this chapter.

these two functional elements seems to confirm that syntactic reanalysis of experiential deponents was decisive in the development of (Italo)-Romance perfective auxiliiation.

## 2.5 Diachronic empirical evidence

Relevant empirical evidence in support of the hypothesis that experiential deponents were gradually included in the active class can be found in Old Italian (henceforth OI; i.e. the Tuscan variety attested around the 12<sup>th</sup>-14<sup>th</sup> century). At this stage of the language the etymological descendants of experiential deponents behave consistently as active verbs, as reflected in their perfective auxiliiation (selection of HAVE as perfective auxiliary). These facts, which contrast with the Latin situation, show that these verbs had already been reanalysed as active at this chronological stage<sup>99</sup>:

- (95) a. nemo minus passus est [Sen. Rh. Con. 1,2,22]  
 no one-NOM. less-Adv. suffered-PP BE-3.sg  
 “No one could suffer/bear less (that)...”
- b. quando l’ anima a patito [Best.Tosc. 27,50,9]  
 when the-f.sg soul-f.sg HAVE-3.sg suffered-PP  
 “He has suffered”

---

<sup>99</sup> However, the *Confessione di Norcia* (1040 ca AD, Central Italy) (Castellani 1973) displays BE as the perfective auxiliary of a verb descending from the deponent *confiteor* “confess”:

- (i) confessu so ad me senior  
 confessed-PP BE-1.sg to my lord  
 “I have confessed to my Lord”

The same text exhibits auxiliary HAVE in the case of the transitive verb *fare* “do”:

- (ii) et qual bene tu ai factu  
 and which good you HAVE-2.sg done-PP  
 “And good things that you have done”

This auxiliary alternation shows that HAVE was already used as an active perfective marker at this stage. On the other hand, the presence of auxiliary BE in (i) seems to suggest that deponents had not yet been reanalysed yet in this linguistic area. Nonetheless, the specific nature of this text must be taken into account: it is a religious text containing clearly latinized language, as was usual in religious contexts. It hence seems wise to consider this occurrence of BE as a consequence of the specific features of this text.



- (96) a. ἀνέξιαν                      in unum                      annum  
 tolerance-f.sg.ACC.              for one-m.sg.ACC. year-m.sg.ACC.  
 meditatus              sum                                              [Cic. *Att.* 5,11,5]  
 meditated-PP      BE-1.sg  
 “I have been meditating about the concept of tolerance for one year”
- b. ho              meditato      la      legge      tua [Bib. tosc. *Sal.*118,5]  
 HAVE-1.sg      meditated-PP      the- f.sg      law-f.sg      your-f.sg  
 “I have meditated about your law”

Other deponents, however, still display inactive properties in Old Italian. This is true of unaccusative verbs, which generally exhibit BE auxiliation, indicating that they preserved the same structure in OI as in Latin:

- (97) a. quia      exacto                      anno                      mortuus  
 because exact-m.sg.ABL.      year-m.sg.ABL.      died-PP  
 erat                                                                                              [Liv. XXVI, 23,8]  
 BE-impf.ind-3sg  
 “Because he had died precisely in that year”
- b. appo      Mirsia      fue                      morto                      [B. Giamb. *Or.* 7, 25]  
 near      Mirsia      BE-ind.pret.              died-PP  
 “He had died near Mirsia”

Most interestingly, some auxiliary alternations can still be observed with certain verbs at this stage, which suggests that the change was still underway. This is true of verbs of advantage, for instance (*e.g. uter* “make use of”), which select an ablative complement in Latin. Their behaviour in Old Italian is ambiguous: while they generally display intransitive properties (as etymologically expected), they behave, in very few examples, like transitive verbs. This contrast in the structure often also encodes a difference in interpretation, as in OI *usare* (descending from the Latin deponent *utor* “make use of”), which means “be used/usual” in its inactive occurrence and “use (something)” when employed actively:

- (98) a. sì                      come      usato                      è                      [Stat. *Pis.* 2,46]  
 in this manner      as              used-PP      BE-3.sg  
 “In this way, as it is usual”
- b. avere                      usato                      il                      dominio  
 HAVE-inf.pres.              used-PP                      the-m.sg              supremacy-m.sg.  
 e              la                      signoria                      [Ciamp. 3,86,6]  
 and      the-f.sg                      lordship-f.sg  
 “Having used the supremacy and the lordship”



- (101) a. E poy che           aveano           figlyato                           [LDT 234.8]  
 and after that    HAVE-impf.3.pl given birth-PP  
 “And after that they had given birth”
- b.       in Napole èy figliata [una donna]                           [De Rosa 54v.12]  
 in Naples BE-3.sg given birth [a woman]  
 “A woman gave birth in Naples”

This shows that a verb like *figliare* had a double status in Old Neapolitan as it could be employed both actively and inactively (Ledgeway 2009). This ambiguity confirms the hypothesis sketched above, as it demonstrates the diachronic change that took place in verbs in the experiential domain. Modern Neapolitan differs from Old Neapolitan, as auxiliary HAVE has been extended to all contexts:

- (102) a.       'addʒə           be'nutə                           [Neapolitan]  
 HAVE-1.sg       come-PP  
 “I have come”
- b.       'addʒə           'maŋ'ŋatə  
 HAVE-1.sg       eaten-PP  
 “I have eaten”

The Old Neapolitan data, then, provide us with useful evidence for the direction of the diachronic change under investigation, which proves quite regular and predictable. Finally, an extensive survey of old and modern Romance data (Formentin 2002; Loporcaro 2007, 2011, 2012) seems to confirm the regularity of this change, as, despite a number of alternations, the various perfective patterns make up a fairly systematic picture (see Table VII):

Table VII (from Loporcaro 2014: 63)

|                | INACTIVE |           |                  |                     |                  | ACTIVE                    |
|----------------|----------|-----------|------------------|---------------------|------------------|---------------------------|
|                | Unacc.   | Reflexive |                  |                     |                  | Transitive/<br>unergative |
|                |          | retr.     | direct<br>trans. | indirect.<br>unerg. | indir.<br>trans. |                           |
| Italian        |          |           |                  |                     |                  |                           |
| Sardinian      |          |           |                  |                     |                  |                           |
| Old Romanesco  |          |           |                  |                     |                  |                           |
| Old Florentine |          |           |                  |                     |                  |                           |
| Leccese        |          |           |                  |                     |                  |                           |
| Spanish        |          |           |                  |                     |                  |                           |

|  |      |
|--|------|
|  | BE   |
|  | HAVE |

The diachronic data therefore seem to indicate that the direction of the change is from active/inactive and that a gradual reanalysis process affected deponent verbs from late Latin to early Romance. Indeed, the data presented above show that this change sometimes even involved verbs that were structurally and semantically different from transitives but that were nevertheless occasionally reanalyzed simply because a more general reanalysis process involving other inactive verbs was taking place<sup>100</sup>.

### 3. The rise of different auxiliation patterns

The syntactic reanalysis of experiential deponents as active verbs was a crucial factor in the rise of all Romance auxiliation patterns. This diachronic change forms the basis of split intransitivity systems, which plausibly constitute the origin of all further Romance developments.

#### 3.1 Split Intransitivity

In Romance split intransitivity systems, the structural distinction between active vs. inactive structures is expressed morphologically through the

<sup>100</sup> Consider, moreover, that to this reanalysis process concerning voice distinction corresponded a gradual extension of the Latin reflexive pronoun SE/SIBI, which became more and more frequent as a strategy to indicate inactive structures. At an initial stage, this pronoun was involved in this reshuffling process, so that it is possible to observe its frequent pleonastic usage (cf. Cennamo 1991, 1993 a,b).

BE/HAVE alternation. Recall the relevant data from Italian (Perlmutter 1978; Merlan 1985; Burzio 1986; Klaiman 1991):

- (103) a. ho mangiato una mela [Italian]  
 HAVE-1.sg eaten-PP an-f.sg apple-f.sg  
 "I have eaten an apple"
- b. ho dormito/ meditato  
 HAVE-1.sg slept-PP/ meditated-PP  
 "I have slept/meditated"
- c. è nato  
 BE-1.sg born-PP  
 "He was born"

The intrinsic connection between Romance split intransitivity systems and Latin deponent verbs has been observed by Gianollo (2010), who pointed out that the development of this pattern is closely related to the encoding of voice distinctions in Latin. In particular, deponents seem to have played a decisive role in that they often encode stativity (see also Lazzeroni 1990). Building on this observation, in this chapter it has been proposed that a change in the active/inactive distinction formed the basis of the development of Romance auxiliation. In this sense, split intransitivity systems directly follow from the syntactic reanalysis of deponents. While they displayed inactive properties in Latin, these verbs are generally included in the active domain in Romance, and therefore occur with auxiliary HAVE<sup>101</sup>:

- (104) Experientials > Active (aux HAVE)
- a. meditates sum [Lat.] > ho meditato [Italian]  
 meditated-PP BE-1.sg HAVE-1.sg meditated-PP  
 "I have meditated"
- b. patitus sum [Lat.] > ho patito [Italian]  
 suffered-PP BE-1.sg HAVE-1.sg suffered-PP  
 "I have suffered"
- c. recordatus sum [Lat.] > ho ricordato [Italian]  
 remembered-PP BE-1.sg HAVE-1.sg remembered-PP  
 "I have remembered"
- d. usatus sum [Lat.] > ho usato [Italian]  
 used-PP BE-1.sg HAVE-1.sg used-PP  
 "I have used"

---

<sup>101</sup> Notice that most experientials are associated with a [Sentient] semantic role, which means that they are related to the stative domain while still being structurally active (recall Chapter 2).

|    |                                        |                      |           |
|----|----------------------------------------|----------------------|-----------|
| e. | auspicatus sum [Lat.] > ho             | auspicato            | [Italian] |
|    | hoped-PP BE-1.sg HAVE-1.sg             | hoped-PP             |           |
|    | "I have hoped"                         |                      |           |
| f. | suspensus sum [Lat.] > ho              | sospettato           | [Italian] |
|    | suspected-PP BE-1.sg HAVE-1.sg         | suspected-PP         |           |
|    | "I have suspected"                     |                      |           |
| g. | (ad)miratus sum [Lat.] > ho            | (am)mirato           | [Italian] |
|    | astonished BE-1.sg HAVE-1.sg           | admired/surprised-PP |           |
|    | "I have been astonished" "I admire..." |                      |           |
| h. | ratiocinatus sum [Lat.] > ho           | raziocinato          | [Italian] |
|    | reasoned-PP BE-1.sg HAVE-1.sg          | reasoned-PP          |           |
|    | "I have reasoned"                      |                      |           |
| i. | confessus sum [Lat.] > ho              | confessato           | [Italian] |
|    | confessed-PP BE-1.sg HAVE-1.sg         | confessed-PP         |           |
|    | "I have confessed"                     |                      |           |
| j. | adsensus sum [Lat.] > ho               | assentito            | [Italian] |
|    | agreed-PP BE-1.sg HAVE-1.sg            | agreed-PP            |           |
|    | "I have agreed"                        |                      |           |
| k. | (ex)hortatus sum [Lat.] > ho           | esortato             | [Italian] |
|    | exhorted-PP BE-1.sg HAVE-1.sg          | exhorted-PP          |           |
|    | "I have exhorted"                      |                      |           |

Conversely, unaccusative deponents remained inactive in Romance as well:

(105) Unaccusatives = Inactive

|    |                      |                           |           |
|----|----------------------|---------------------------|-----------|
| a. | natus sum [Lat.]     | > sono nato/              | [Italian] |
|    | born-PP BE-1.sg      | BE-1.sg born-PP.m.sg/f.sg |           |
|    | "I was born"         |                           |           |
| b. | mortuus est [Lat.] > | è morto/a                 |           |
|    | dead-PP BE-3.sg      | BE-3.sg dead-PP.m.sg/f.sg |           |
|    | "He has died"        |                           |           |

The examples above show that although a number of deponents disappeared in the passage between Latin and Romance (cf. Flobert 1975), those that survived consistently follow this pattern. Split intransitivity systems therefore continue to reflect this structural distinction between experiential and unaccusative deponents. While the former are included in the active domain and occur with auxiliary HAVE, the latter always select BE, as they are syntactically inactive.

On the basis of these observations, it seems plausible to argue that this auxiliatio pattern directly arose as a consequence of the syntactic reanalysis of argument structure, in particular the reanalysis of experiential deponents as transitives. This theory also allows us to explain why HAVE spread to

experiential constructions in Romance, while these constructions selected BE in Latin. Once the active/inactive structural border had shifted in early Romance, the active domain included both transitives and experientials (active statives): aux HAVE began to be selected for the perfect of the latter group of verbs as well (La Fauci 1997, 1998; Cennamo 1998a *et seq.*; Loporcaro 2007; Ledgeway 1997, 2009, 2012). This fact can be thus considered as the direct consequence of the reanalysis of this structural opposition. Therefore, the auxiliary alternation generally reflects a syntactic distinction in the Merge-point of arguments in the syntactic spine<sup>102</sup>.

In this respect, split intransitivity systems can be considered as “conservative” Romance varieties, in that they still display the active/inactive alignment contrast characterizing Latin verbal system, even though the structural border is found at a different point in the verbal clause (Zamboni 2000; Cennamo 1998a, 2001b, 2008 *et seq.*; Loporcaro 2007, 2014; Ledgeway 2012; Migliori 2015a).

### 3.1.1 Split intransitivity: synchrony and diachrony

The split intransitivity pattern, which is displayed by many modern Romance varieties (Italian, French, Occitan, Catalan and most northern Italian dialects) was also attested during earlier stages of other Romance languages that today display a different auxiliatiion system. This is true of Old Spanish, for example (Aranovich 2003; Stolova 2006):

- (106) a. Exido es de Burgos [Cid, 231]  
 exit-PP BE-3.sg from Burgos  
 “He left from Burgos”
- b. Los Yfantes de Carrion  
 the-m.pl. infants-m.pl of Carrion  
 bien an caualgado [Cid, 2246]  
 well HAVE-3.pl ridden-PP  
 “The infants of Carrion have ridden well” (Stolova 2006: 301)

The examples above show that Old Spanish displayed an opposition between two distinct groups of intransitive verbs, in the same way that modern split intransitivity systems do. While an unaccusative verb like *exir* “exit” used to select auxiliary BE, the unergative *cabalgar* “ride” was conjugated with HAVE.

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<sup>102</sup> Recall, nevertheless, the caveat concerning fine-grained semantic factors which may also play a role with regard to auxiliary selection (see Sorace 2000).

Modern Spanish, in contrast, no longer expresses this distinction. As shown in section 1, this language is characterized by a one-auxiliary system, in which HAVE is the only perfective auxiliary:

- (107) a. he venido [Spanish]  
 HAVE-1.sg come-PP  
 "I have come (resultative)"  
 b. he comido  
 HAVE-1.sg eaten-PP  
 "I have eaten (resultative)"

This extension of aux HAVE to the whole system can be explained by considering it to be related to the occurrence of HAVE in *irrealis* contexts (i.e. modal conditional), from which this auxiliary also spread to *realis* context (cf. Ledgeway 2003, in press, Stolova 2006). Moreover, the rise of the nominative/accusative alignment, which is an innovative feature of Romance, also seems to have played a role (La Fauci 1997, 1998; Bauer 2000; Zamboni 2000; Loporcaro 2007, 2014; Ledgeway 2012): because of this change, the active/inactive contrast lost saliency. The structural distinction between unaccusative vs. unergative/transitive is hence no longer visible from a morphophonological point of view<sup>103</sup>. The data from Spanish therefore show that split intransitivity is the first diachronic step between the late Latin scenario and the extension of aux HAVE to the whole system. It is therefore possible to understand the rise of systems that only display HAVE as a subsequent and more innovative chronological step, triggered by structural changes in alignment.

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<sup>103</sup> Observe, however, that the structural contrast between these two intransitive classes is still present in Spanish. Despite the lack of alternation in the morphological marking, unergatives and unaccusatives still display distinct syntactic properties. Consider, for instance, the case of bare plural DPs, which are licensed in with unaccusative subjects and transitive objects but not with unergatives:

- (i) a. Han visto animales [Spanish]  
 HAVE-3.pl seen-PP animals-m.3.pl  
 "They have seen animals"  
 b. Han pasado animales  
 HAVE-3.pl passed by-PP animals-m.3.pl  
 "Animals have passed by"  
 c. \*Han dormido animales  
 HAVE-3.pl slept-PP animals-m.3.pl



### 3.2 BE as the only perfective auxiliary

As shown in § 1.3.3, a number of USIDs display an auxiliation system with BE as the only perfective functional element. In light of the observations made above, we will propose in this study that these systems must be understood as a consequence of the reanalysis of deponents<sup>104</sup>. In other words, in a number of Italo-Romance varieties, the transitivization of experiential verbs produced a different pattern of perfective auxiliation, namely the overgeneralization of auxiliary BE. This paradigm is exhibited in numerous USIDs, in particular in the Molise area:

|       |          |                                         |          |                 |
|-------|----------|-----------------------------------------|----------|-----------------|
| (108) | sɔŋgə    | mə'nu:tə/                               | maŋ'ɲɛtə | [Pescolanciano] |
|       | BE-1.sg  | come-PP/                                | eaten-PP |                 |
|       | si       | mə'nu:tə/                               | maŋ'ɲɛtə |                 |
|       | BE-2.sg  | come-PP/                                | eaten-PP |                 |
|       | ɛ        | mə'nu:tə/                               | maŋ'ɲɛtə |                 |
|       | BE-3.sg  | come-PP/                                | eaten-PP |                 |
|       | semə     | mə'nu:tə/                               | maŋ'ɲɛtə |                 |
|       | BE-1.pl  | come-PP/                                | eaten-PP |                 |
|       | setə     | mə'nu:tə/                               | maŋ'ɲɛtə |                 |
|       | BE-2.pl  | come-PP/                                | eaten-PP |                 |
|       | suə(nnə) | mə'nu:tə/                               | maŋ'ɲɛtə |                 |
|       | BE-3.pl  | come-PP/                                | eaten-PP |                 |
|       |          | "I/you/he/we/you/they have come/ eaten" |          |                 |

(Manzini & Savoia 2005, II: 759)

In (108), BE is the only perfective marker. In fact, no auxiliary alternation marks the difference between diverse verbal classes: both inactive (unaccusatives, e.g. *mə'nu:tə* "come") and active structures (transitives/unergatives, e.g. *maŋ'ɲɛtə* "eaten") exhibit the same functional element to form the active periphrastic perfect. However, it is likely that an early stage of the language was characterized by an active/inactive distinction in this case too (cf. Loporcaro 2007, 2012; Ledgeway, in press). Recall, on the other hand, that split intransitivity reflexes are often present in modern SIDs as well, as observed in the previous sections.

<sup>104</sup> This claim does not preclude the analysis of the gradual extension of BE as an innovative trait in some varieties (like the ones observed by Cennamo 2001c; Ledgeway in press) in which BE gradually seems to permeate HAVE contexts. In these cases, differently from the variety exemplified in (108), is often possible to observe a HAVE/BE alternation. Conversely, Molise dialects (and the varieties exhibiting the same auxiliation pattern) look stable in the selection of BE for all persons.



|       |              |                                                       |             |
|-------|--------------|-------------------------------------------------------|-------------|
| (112) | ero          | vi'nutu/ dur'mito/ rla'vato i 'paɲɲi                  |             |
|       | BE-impf-1.sg | come-PP/slept-PP/washed-PP                            | the clothes |
|       | eri          | vi'nutu/ dur'mito/ rla'vato i 'paɲɲi                  |             |
|       | BE-impf-2.sg | come-PP/slept-PP/washed-PP                            | the clothes |
|       | era          | vi'nutu/ dur'mito/ rla'vato i 'paɲɲi                  |             |
|       | BE-impf-3.ps | come-PP/slept-PP/washed-PP                            | the clothes |
|       | era'vamo     | vi'nuti/ dur'mito/ rla'vato i 'paɲɲi                  |             |
|       | BE-impf.1.pl | come-PP/slept-PP/washed-PP                            | the clothes |
|       | era'vate     | vi'nuti/ dur'mito/ rla'vato i 'paɲɲi                  |             |
|       | BE-impf.2.pl | come-PP/slept-PP/washed-PP                            | the clothes |
|       | era          | vi'nuti/ dur'mito/ rla'vato i 'paɲɲi                  |             |
|       | BE-impf.3.ps | come-PP/slept-PP/washed-PP                            | the clothes |
|       |              | "I/you/he/we/you/they have come/slept/washed clothes" |             |
|       |              | (Manzini & Savoia 2005, II : 683)                     |             |

This fact seems to suggest that at a previous stage BE was present as a universal auxiliary and the perfect was partially modified, whereas other paradigms maintained the former pattern. Finally, many of these dialects lack the passive paradigm<sup>105</sup>, which is generally formed by the BE + PP periphrasis in other Romance languages:

|       |    |                                                    |           |
|-------|----|----------------------------------------------------|-----------|
| (113) | a. | una mela è mangiata da Luigi                       | [Italian] |
|       |    | a-f.sg apple-f.sg BE-3.sg eaten-PP by Luigi-m.3.sg |           |
|       |    | "An apple is (being) eaten by Luigi"               |           |
|       | b. | une pomme est mangé par Louis                      | [French]  |
|       |    | a-f.sg apple-f.sg BE-3.sg eaten-PP by Louis-m.3.sg |           |
|       |    | "An apple is (being) eaten by Louis"               |           |

This fact seems to confirm once again that the model for the systems like (104) were deponent verbs: this class was composed of inactive intransitive verbs that did not pertain to passive constructions. The general lack of passive structures in these varieties shows that, on the basis of the syntactic reanalysis of deponents, auxiliary BE encoded the middle-active field.

To sum up, as a consequence of syntactic reanalysis, a number of SIDs overgeneralized deponent morphology to the whole verbal system. While this process triggered the extension of HAVE in the experiential domain in other

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<sup>105</sup> Consider, however, the cases of passives and impersonals discussed in Cennamo (1997). If the passive is present in the system, it is marked by some other means, as in the case of eastern Abruzzese (Biberauer & D'Alessandro 2008; D'Alessandro & Scheer, forth.) and some varieties of Molisano (D'Alessandro, p.c.).

Romance varieties, in these dialects aux BE became the only active perfective auxiliary.

### 3.3 Synchronic variation as mirror of a diachronic path

Let us return to the three main patterns of Romance perfective auxiliation detected in section 1.3:

- 1) The paradigm displays only one auxiliary (either BE, (Pattern 1a) or HAVE, (Pattern 1b) in all active contexts. This is the case for Spanish, Romanian, Sicilian and Neapolitan, for instance.
- 2) The paradigm is characterized by a BE/HAVE alternation based on verbal class (split intransitivity). Some examples of this pattern are Old Spanish, Occitan, Balearic Catalan, Standard French and Standard Italian.
- 3) The paradigm displays a BE/HAVE alternation sensitive to other factors (person specification, modal/temporal factors or free variation) (USIDs).

In light of the observations made above, it is possible to understand the attested patterns of perfective auxiliation in diachronic terms. Modern variation can, in fact, be said to reflect different stages of a long diachronic process that began in late Latin with the reorganization of the diathesis (Cennamo 1999b, 2001a, 2001b, 2001c, 2002, 2005, 2007, 2008 *et seq.*), with changes in the alignment that took place between Latin and early Romance being one of the main triggers of this development (La Fauci 1997, 1998; Zamboni 2000; Cennamo 2002, 2009, 2011; Ledgeway 2012).

At an initial stage, the persistence of an active/inactive opposition, typical of the Latin verbal system, was the determining factor in the development of Romance perfective auxiliation. The active/inactive alignment contrast can still be observed in several Romance varieties which still retain this opposition in their verbal domain: this is the case for varieties that display pattern 1a and pattern 2. Languages exhibiting pattern 1a, (only auxiliary BE, cf. some USIDs) can be considered as relatively conservative varieties, as the extension of HAVE as a functional element can be understood as a hyper-generalization of the inactive auxiliary as a universal perfective element (Cennamo 2008; Migliori, 2015). On the other hand, diachronic evidence seems to indicate that this system was actually found at the earliest stage of many varieties that

display a different pattern today<sup>106</sup> (Cennamo 1998, 1999, 2008; Ledgeway 1997, 2009).

In split intransitivity systems (Pattern 2), like Italian, French and Occitan, the active/inactive contrast is still visible in the verbal domain and is marked through the BE (S<sub>O</sub>) / HAVE (A/S<sub>A</sub>) alternation (La Fauci 1997, 1998; Loporcaro 2007; Ledgeway 2012). In this sense, these languages can also be considered to be conservative, even though the active/inactive border is located at a different structural point with respect to Latin, as experiential verbs have been included within the active field. Pattern 1 and pattern 2a can thus be considered as the two possible Romance outcomes of the syntactic reanalysis of deponents, i.e. as the two attested starting points for the development of other patterns.

At a later stage, the rise of the nominative/accusative alignment, an innovative feature of Romance, caused a number of changes in the linguistic system, including the reorganization of the verbal domain (La Fauci 1988, 1997, 1998; Cennamo 1999b, 2002, 2009, 2011; Zamboni 2000; Loporcaro 2007; Ledgeway 2012). In this kind of system, the distinction between active and inactive contexts is not salient. In other words, all sentential subjects group together and are distinct from direct objects, as recalled in Table VIII (from La Fauci 1988):

**Table VIII- Typological alignment of A, S and O**

| Nominative/Accusative | Active/Inactive-Stativ | Ergative/Absolutive |
|-----------------------|------------------------|---------------------|
| A                     | A                      | A                   |
| S                     | S <sub>A</sub>         | S                   |
|                       | S <sub>O</sub>         |                     |
| O                     | O                      | O                   |

As far as perfective auxiliation is concerned, the emergence of the nominative/accusative alignment corresponded to an extension of the perfective auxiliary HAVE. The final step of this process is displayed by those languages in which HAVE has reached the inactive domain as well (with the exception of passives) as in Modern Spanish, Modern Neapolitan and Romanian<sup>107</sup>. In these varieties, the distinction between active/inactive is no longer salient for auxiliary selection: both unaccusatives and transitive/unergatives form the perfective periphrasis with auxiliary HAVE.

<sup>106</sup> See also § 4.3.1 in this chapter.

<sup>107</sup> Recall, however, that Romanian maintains auxiliary BE in indefinite clauses

Therefore, the distinction between an Undergoer subject ( $S_O$ ) and an Agentive one  $A/S_A$  is no longer marked. Here too, diachronic data show unambiguously that these languages are mostly innovative: recall, for instance, the case of Old Spanish and Old Neapolitan which both used to display a split intransitivity system, whereas they exhibit HAVE as a universal perfective auxiliary in the modern varieties.

To sum up, variation in Romance perfective auxiliation can be understood as a predictable diachronic path, whose evolution was mainly driven by syntactic reanalysis on the one hand and the competition of different kinds of alignment on the other.

### 3.3.1 The diachrony of auxiliation patterns in SIDs

Considering the reanalysis of experiential deponents as the basis of Romance auxiliation also allows us to capture the diachronic development of the auxiliation patterns attested in Southern Italy. As is well established in the literature, this linguistic area is characterized by great variation as far as auxiliary selection is concerned (cf. Ledgeway 2000, 2012, in press; Cennamo 1998a *et seq.*; Manzini & Savoia 2005; Legendre 2010; D'Alessandro 2016; Torcolacci 2012, 2015; Migliori 2015, among others). Nonetheless, this massive variation can be captured through the identification of recurrent paradigms, as summarized in Table IX (from Migliori & Torcolacci 2012):

**Table IX - Auxiliary selection pattern in SIDs (most frequent paradigms)**

| Dialect  | BE                  | HAVE                                        |
|----------|---------------------|---------------------------------------------|
| Type I   | All persons         | -                                           |
| Type II  | 1 and 2 (sg and pl) | 3 (sg and pl)                               |
| Type III | 1 and 2 (sg)        | 3 (sg and pl), 1 and 2 (pl)                 |
| Type IV  | Either 1 or 2 (sg)  | 1 / 2 (sg) ; 3 (sg and pl),<br>1 and 2 (pl) |
| Type V   | -                   | All persons                                 |

In light of the diachronic observations sketched above, it is possible to understand this variation in diachronic terms too. More specifically, it will be claimed here that the different auxiliation patterns observed reflect different chronological stages of a long diachronic process that began in late Latin with the reshuffling of voice distinction (Cennamo 1998a, 1999a *et seq.*). The first diachronic stage is represented by one-auxiliary systems with BE (Type I). The relevant data are given below:

- (114) sɔŋgə/si/ε/semə/setə/suə(nnə) mə'nu:tə/ məŋ'ne:tə [Pescolanciano]  
 BE-1.sg/BE-2.sg/BE-3.sg/BE-1.pl/BE-2.pl/BE-3.pl come-PP/eaten-PP  
 "I/you/he/we/you/they have come/have eaten"  
 (Manzini & Savoia 2005, II: 759)

As stated above, there are plausible reasons to assume that this pattern descends directly from Latin, as the perfect of these varieties seem to share relevant morphosyntactic properties with deponent verbs, such as the absence of passivization, for instance. More specifically, it is claimed that auxiliary BE was extended in these varieties because of two main triggers: (i) the reanalysis of experiential deponents (cf. Migliori 2015); (ii) the process of deponentization characterizing late Latin (Bonnet 1890; Norberg 1943; Hermann 2002; Flobert 1975; Cennamo 2008, 2009, 2011)<sup>108</sup>.

A second stage of this diachronic development can be observed in types II to IV, which display a BE/HAVE alternation:

- (115) a. sɔ/ fɪ/ və'nu:tə/dər'mi:tə/ 'viʃtə [S. B. del Tronto]  
 BE-1.sg/BE-2.sg come-PP/slept-PP/seen-PP  
 ʃɛmə/ ʃetə və'nu:tə/dər'mi:tə/ 'viʃtə  
 BE-1.pl/BE-2.pl come-PP/slept-PP/seen-PP  
 "I/you/ we/you/ have seen"  
 b. a və'nu:tə/dər'mi:tə/ 'viʃtə  
 HAVE-3ps come-PP/slept-PP/seen-PP  
 "He has seen/they have seen" (Manzini & Savoia 2005, II:682)
- [Giovinazzo]
- (116) a. sɔ/si və'neutə/drəm'meutə/la've:tə la'makənə  
 BE-1.sg/BE-2.sg come-PP/slept-PP/washed-PP the car  
 "I/you have come/slept/washed the car"  
 b. a/ammə/a'vitə/ann və'neutə/drəm'meutə/la've:tə la'makənə  
 H-3.sg/H-1.pl/H-2.pl/H-3.pl come-PP/slept-PP/washed-PP the car  
 "He/we/you/they have come/slept/washed the car"  
 (Manzini & Savoia 2005, II: 722)

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<sup>108</sup> Recall § 3.2 in this chapter.

- (117) a. sɔ/ɛʝə və'neuətə/drəm'meuətə/la'va:tə le: 'mɛkənə [Molfetta]  
BE-1.sg/H-1.sg come-PP/slept-PP/washed-PP the car  
sə və'neuətə/drəm'meuətə/la'va:tə le: 'mɛkənə  
BE-2.sg come-PP/slept-PP/washed-PP the car
- b. a/ammə və'neuətə/drəm'meuətə/la'va:tə le: 'mɛkənə  
H-3.sg/H-1.pl come-PP/slept-PP/washed-PP the car  
a'vitə/ɔnnə və'neuətə/drəm'meuətə/la'va:tə le: 'mɛkənə  
/H-2.pl/H-3.pl come-PP/slept-PP/washed-PP the car  
“He/we/you/they have come/slept/washed the car”  
(Manzini e Savoia 2005, II: 723)
- (118) a. əʝə və'neutə/dər'meutə/ca'mi:tə [Bitetto]  
BE-1sg come-PP/slept-PP/called-PP  
“I have come/slept/called”
- b. si və'neutə/dər'meutə/ca'mi:tə  
BE-2.sg come-PP/slept-PP/called-PP  
“You have come/slept/called”
- c. ɛ/simə/si:tə/annə və'neutə/dər'meutə/ca'mi:tə  
H-3.sg/H-2.pl/H-2.pl/H-3.pl come-PP/slept-PP/called-PP  
“He/we/you have come/slept/called”  
(Manzini & Savoia 2005, II: 725)

In Type II, exemplified in the variety of San Benedetto del Tronto, the auxiliary of the *passato prossimo* is selected on the basis of the person specification of the sentential subject: while 1<sup>st</sup> and 2<sup>nd</sup> person always select BE, 3<sup>rd</sup> person always selects auxiliary HAVE, with no distinction according to verbal class (Rohlf's 1969; Giammarco 1973, 1979; Ledgeway 2000; Legendre 2010; D'Alessandro & Roberts 2010). Therefore, in these varieties, the perfective auxiliary BE also encodes the grammatical information related to person specification (Ledgeway 2000; Manzini & Savoia 2005; Ledgeway & D'Alessandro 2010; Legendre 2010; D'Alessandro 2016; Torcolacci 2011, 2014, 2015).

In types III and IV (examples 116-118), the distribution of the two auxiliaries is not the same as in (115): BE is generally selected with 1<sup>st</sup> / 2<sup>nd</sup> singular, whereas HAVE is present in the rest of the paradigm. From a diachronic perspective, this can be related to the gradual extension of auxiliary HAVE in the system. In this respect, Types II-IV are more innovative with respect to Type I. This is further confirmed by the pluperfect paradigms of these varieties, which reflect the gradual emergence of auxiliary HAVE:



- (119) a. sɔ/si/samə/satə      arrə'vi:tə/par'læ:tə/ca'mæ:tə 'frætə-tə [Campli]  
BE-1.sg/2.sg/1.pl/2/pl    come-PP/talked-PP/called-PP brother-your  
"I/you have come/talked/called your brother"  
samə/satə              arrə'vi:tə/par'li:tə/ca'mæ:tə 'frætə-tə  
BE-1.pl/BE-2.pl        come-PP/talked-PP/called-PP brother-your
- b. a              arrə'vi:tə/par'læ:tə/ca'mæ:tə 'frætə-tə  
BE-3.ps    come-PP/talked-PP/called-PP brother-your  
"He has/They have come/talked/called your brother"
- (120) (a)'erə/sa'vevə              arrə'vi:tə/par'læ:tə/ca'mæ:tə 'frætə-tə  
BE-impf./HAVE-impf.    come-PP/talked-PP/called-PP brother-your  
(a)'erə/sa'vevə              arrə'vi:tə/par'læ:tə/ca'mæ:tə 'frætə-tə  
BE-impf./HAVE-impf.    come-PP/talked-PP/called-PP brother-your  
(a)'era/sa'vevə              arrə'vi:tə/par'læ:tə/ca'mæ:tə 'frætə-tə  
BE-impf./HAVE-impf.    come-PP/talked-PP/called-PP brother-your  
sa'vamə/sa'emə              arrə'vi:tə/par'læ:tə/ca'mæ:tə 'frætə-tə  
H-impf.1.pl/BE-impf.1.pl    come-PP/talked-PP/called-PP brother-your  
sa'vatə/sa'etə              arrə'vi:tə/par'læ:tə/ca'mæ:tə 'frætə-tə  
H-impf.1.pl/BE-impf.1.pl    come-PP/talked-PP/called-PP brother-your  
(a)'era/sa'vevə              arrə'vi:tə/par'læ:tə/ca'mæ:tə 'frætə-tə  
BE-impf./HAVE-impf.    come-PP/talked-PP/called-PP brother-your  
"I/you/he/we/you/they had come/talked/called your brother"  
(Manzini & Savoia 2005, II: 685)

In the dialect of Campli, which exhibits person-driven auxiliary selection in the *passato prossimo*, see (119), the pluperfect displays a BE/HAVE alternation, as shown in (120). Conversely, in the dialect of Bitetto, belonging to Type IV (cf. 118), the pluperfect auxiliary is always HAVE:

|       |                           |                                                           |           |
|-------|---------------------------|-----------------------------------------------------------|-----------|
| (121) | a'vevə<br>HAVE-impf.      | və'neutə/dər'meutə/ca'mi:tə<br>come-PP/slept-PP/called-PP | [Bitetto] |
|       | a'vivə<br>HAVE-impf.2.ps  | və'neutə/dər'meutə/ca'mi:tə<br>come-PP/slept-PP/called-PP |           |
|       | a'vevə<br>HAVE-impf.      | və'neutə/dər'meutə/ca'mi:tə<br>come-PP/slept-PP/called-PP |           |
|       | a'vemmə<br>HAVE-impf.1.pl | və'neutə/dər'meutə/ca'mi:tə<br>come-PP/slept-PP/called-PP |           |
|       | a'vivə<br>HAVE-impf.2.ps  | və'neutə/dər'meutə/ca'mi:tə<br>come-PP/slept-PP/called-PP |           |
|       | a'vevənə<br>HAVE-impf.    | və'neutə/dər'meutə/ca'mi:tə<br>come-PP/slept-PP/called-PP |           |

“I/you/he/we/you/they have come/talked/ called”  
(Manzini & Savoia 2005, II: 726)

As in the rest of Romance, the main reason underlying the extension of HAVE in this case is the rise of the nominative/accusative alignment (Loporcaro 2007, 2011, 2014; Cennamo 2008; Zamboni 2000; Ledgeway 2012). Moreover, other factors also seem to have played a crucial role in the development of perfective auxiliation in SIDs: verbal class, person specification and mood/tense (Cennamo 1998, 1999b, 2001, 2002, 2008; Ledgeway 2012; Loporcaro 2007, 2011, 2014). Verbal class characterized the extension of HAVE in all other Romance varieties as well: historical data show that this auxiliary gradually extended from the inactive to the active domain. Modal factors<sup>109</sup> also played a role in some other languages: recall the case of Old Spanish and Old Neapolitan as opposed to the modern varieties, discussed above in this chapter. By contrast, the syntactic saliency of person specification for auxiliary selection is a grammatical trait attested only in the dialects of southern Italy and absent from the rest of the Romance-speaking area, if we do not consider the limited case of Olot Catalan. In this respect, SIDs, and USIDs in particular, can be said to display a mixed system, in which different grammatical factors determine the selection of the perfective auxiliary (Ledgeway 2000, 2009, 2012; Loporcaro 2007, D' Alessandro & Roberts 2010).

The role of these forces can be observed by looking at the diachronic development of auxiliaries in these varieties. Historical data show that auxiliary HAVE is gradually and systematically extended. The direction of this change generally proceeds from the active (transitive/ unergative) paradigm to the inactive (unaccusative) conjugation; and from 3<sup>rd</sup> person to

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<sup>109</sup> For the role of mood/tense specification see also Ledgeway (1997a, 1997b, 1999, 2003, 2009); Cennamo (2001, 2002); Formentin (2001).

the rest<sup>110</sup>. This diachronic path has proven to be consistent in several SIDs, such as Neapolitan (Ledgeway 1999, 2009, 2012), numerous Campanian dialects (Cennamo 2001c, 2002, 2008) and northern Pugliese (Loporcaro 2007, 2011, 2014). Consider, for, instance, the following examples from Campania dialects, which display competition between auxiliary BE and HAVE (Altamura 1961; Altamura & D'Ascoli 1970; Del Donno 1965; Maturi 1997; Ledgeway 1998; Cennamo 2001): the variant with auxiliary HAVE happens is the innovative one (Cennamo 2002; Ledgeway 2003, 2009):

- (122) a. sɔ/ si akkat'tatə nu kilə 'e fa'sulə  
 BE-1.sg/BE-2.sg bought-PP a kilogram of beans-pl  
 "I/you bought a kilogram of beans"  
 b. simmo / site durmuto  
 BE-1.pl/BE-2.pl slept-PP  
 "We/you guys have slept"
- (123) a. l' 'addʒu / ε 'vistə  
 him/it HAVE-1.sg HAVE-2.sg seen-PP  
 "I have seen him/it"  
 b. ammo / avite durmuto  
 HAVE-1.pl HAVE-2.pl slept-PP  
 "We/you guys have slept"

Furthermore, the change from BE to HAVE generally starts from the 3rd person, as shown by the alternations in the examples below:

- (124) a. sɔ/ si rri'mastə [Sorrento]  
 BE-1.sg/BE-2.sg stayed-PP  
 b. ε rri'mastə  
 HAVE-3.pl remained-PP (Cennamo 2001c: 438)

<sup>110</sup> This is exactly the opposite of what has been observed for ergative languages, which display, in the case of a split system, a nom/acc contrast in the 1<sup>st</sup>/2<sup>nd</sup> person and an erg/abs contrast for 3<sup>rd</sup> person (Dixon 1994, among others). This seems to confirm that, despite the 1<sup>st</sup>/2<sup>nd</sup> person vs. 3<sup>rd</sup> person opposition exhibited in many USIDs, these languages only appear to display ergative traits. In fact, the data concerning the diachronic development of the verbal domain seem to indicate an active/inactive system changing into a nom/acc system, as in the rest of Romance, even though in this case the system is structurally more complex as other factors also play a role both synchronically and diachronically (Loporcaro 2007 *et seq.*; Ledgeway 2009 *et seq.*)

As a further example, consider the alternations in the transitive class in the Vallecorsa dialect in southern Lazio (cf. V.v. 1972):

- (125) a. so fatta magnata de ciammotte [Vallecorsa]  
 BE-1.sg done-PP eating-f.sg of snails-f.pl  
 "I have eaten snails"
- b. m' ai fatta sposa  
 1.sg-ACC. H-2.sg. made-PP bride  
 "You have made me your bride"
- b'. sie fatto le ciambelle  
 BE-2sg made-PP the donuts-pl  
 "You have made donuts"
- c. tre anni de suldato a /au fatto  
 three years-m.pl of soldier-m.sg. H-3.sg/pl done-PP  
 "He/they have done three years of military service"
- (126) a. so vvista  
 BE-1.sg seen-PP  
 "I have seen"
- b. sie / ai visto  
 BE-2.sg H-2.sg seen-PP  
 "You have seen"
- c. chi t' a visto?  
 who-NOM. 2.sg-ACC. 3.sg seen-PP  
 "Who has seen you?"

These data illustrate that this variety generally selects BE with the 1<sup>st</sup>/2<sup>nd</sup> person singular, whereas HAVE is generally found with 3<sup>rd</sup> person specification. Nonetheless, there is a BE/HAVE alternation in the 2<sup>nd</sup> person, frequently within the same verb paradigm: this fact suggests that a change is underway and that HAVE is undergoing expansion within this system. Moreover, observe that this extension begins, as predicted by our hypothesis, in transitive contexts. With unaccusatives, however, this dialect regularly displays BE as a perfective auxiliary. Auxiliary alternations such as those attested in Vallecorsa thus provide significant empirical evidence about the forces and the direction of the diachronic change affecting perfective auxiliaries in SIDs.

The "three-auxiliary" systems found in northern Pugliese varieties, in which BE and HAVE apparently alternate freely (Loporcaro 2007, 2011, 2014) can also be understood in these terms. Here, the competition between BE and HAVE should not be seen as a random fluctuation, but can be considered as the result of this change (*pace* Loporcaro 2007, 2011 *et seq.*). This "three-

auxiliary” system involves the class of indirect reflexives, which is a borderline case from an argument structure perspective. This can be the reason why these verbs exhibit auxiliary alternations. It has also been observed that alternations in auxiliary selection is often a matter of variation between different age groups (Cennamo 2001c): this fact again confirms that a reanalysis process is still affecting the verbal clause in some areas, so this process can be observed and documented.

The final stage of the extension of functional HAVE can be observed in Type V, where this auxiliary throughout the whole perfective system:

|       |           |          |           |                   |
|-------|-----------|----------|-----------|-------------------|
| (127) | ad'dʒu    | və'nutə/ | rur'mutə  | [S. Maria a Vico] |
|       | HAVE-1.sg | come-PP/ | slept-PP  |                   |
|       | a         | və'nutə/ | rur'mutə  |                   |
|       | HAVE-2.sg | come-PP/ | slept-PP  |                   |
|       | a         | və'nutə/ | rrur'mutə |                   |
|       | HAVE-3.sg | come-PP/ | slept-PP  |                   |
|       | am'mu     | və'nutə/ | rur'mutə  |                   |
|       | HAVE-1.pl | come-PP/ | slept-PP  |                   |
|       | a'litə    | və'nutə/ | rur'mutə  |                   |
|       | HAVE-2.pl | come-PP/ | slept-PP  |                   |
|       | an'nu     | və'nutə/ | rur'mutə  |                   |
|       | HAVE-3.pl | come-PP/ | slept-PP  |                   |

(Manzini & Savoia 2005, II: 779)

In this pattern, HAVE has developed into the only perfective auxiliary for all contexts: the variety above clearly does not display person distinctions, and auxiliary selection is unrelated to any factors concerning the verbal class. This type is typical of most of the Campania region, many Lucanian dialects and extreme southern Italian dialects (Sicilian, Southern Calabrian and Salentino). From a diachronic perspective, these SIDs can be grouped with Modern Spanish; they are the most innovative systems in Romance with regard to alignment development (Ledgeway 2012).

A variety of explanations have been proposed for the extension of HAVE in these varieties. Some studies have argued that modal/temporal factors played a crucial role in the process. Under this approach, the generalization of HAVE in SIDs (and in other Romance varieties, like Old Spanish) was due to *irrealis* modality, which eventually led to the generalized use of this auxiliary in all contexts (Ledgeway 1997a, 1997b, 2005, 2009). In light of the observations above, it seems that internal (i.e. grammatical) factors, rather than external factors, were crucial for this development. Moreover, it is also plausible that auxiliary BE might have been, at a certain stage, de-functionalized with

respect to its perfective function, because of its systematic association with person specification<sup>111</sup>. At the same time, the rise of the nominative/accusative alignment increased the extension of HAVE, which gradually entered the system to fulfill this function. This final stage can then be understood as a predictable result of previous chronological steps. From this perspective, it seems feasible that this process was caused by language-internal factors, i.e. by grammatical triggers (like mood) and by a general internal readjustment of the system. This change is still operational in certain varieties, specifically those that display BE/HAVE alternations in the unaccusative class. This oscillation regarding auxiliary selection again seems to be related to the person specification (Cennamo 2001c). Consider, for instance, the Campanian variety of Vico Equense, which only allows BE (alternating with HAVE) for the 2<sup>nd</sup> person singular of unaccusative verbs:

- |       |    |                                                   |                      |                      |
|-------|----|---------------------------------------------------|----------------------|----------------------|
| (128) | a. | 'eddʒə<br>HAVE-1sg<br>"I have fallen"             | ka'rutə<br>fallen-PP | [Vico Equense]       |
|       | b. | si/ jə<br>BE-2.sg/ HAVE-2.sg<br>"You have fallen" | ka'rutə<br>fallen-PP | (Cennamo 2001: 439). |

These data confirm, once again, that the direction of the diachronic change is as outlined above. In summary, a chronological development path can be drawn from Type I to Type V, allowing all the synchronic micro-variation to be understood as a predictable diachronic change.

#### 4. Concluding remarks

In this chapter, the development of perfective auxiliaries from Latin to Romance has been examined from a diachronic and comparative perspective. Firstly, it has been demonstrated that the traditional grammaticalization account encounters serious issues both empirically and theoretically. In particular, the fact that HAVE already behaves as a functional element in Latin constitutes a significant argument against this approach.

Instead, it has been claimed that the syntactic reanalysis of specific inactive contexts (i.e. experiential deponent verbs) has been crucial both for the rise of

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<sup>111</sup> Consider, in this sense, the recent proposal made in D'Alessandro (2016), according to which the occurrence of BE in person driven auxiliary systems merely corresponds to the morphologization of  $\pi$ , a bundle of  $\phi$ -features encoding the specification of grammatical person.

periphrastic perfects in general and for the development of specific Romance outcomes. This analysis has allowed us to account for both the synchronic and the diachronic variation in the distribution of Romance perfective periphrases and in the auxiliatiion patterns.

## **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  $\phi$ -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 pronouns<sup>112</sup>:

- (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<sup>113</sup>. Furthermore, there do not seem to be any specific restrictions that determine the choice of a particular option

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<sup>112</sup> Genitive pronouns in *-i* are most frequently associated with the objective reading:

- (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”

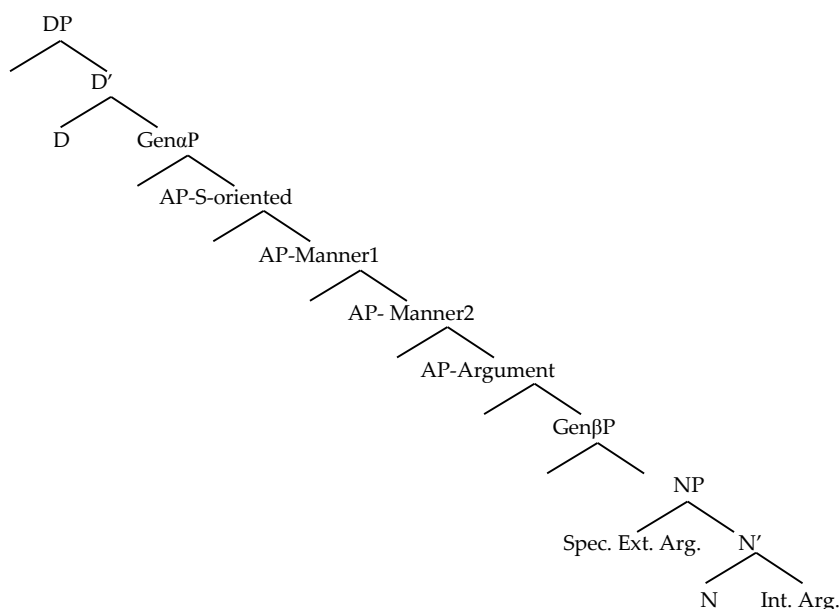
In the case of 1<sup>st</sup> and 2<sup>nd</sup> person plural, there is a distinct morphological form for the partitive reading (i.e. *nostrum* “of us, among us”, *vestrum* “of you, among you”) as opposed to the form in *-i*, expressing the objective reading:

- (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”

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

depending on the type of possession involved<sup>114</sup> (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

<sup>114</sup> However, some significant diachronic changes in this respect can be observed in Imperial and late Latin: see § 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):

- i. 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  $\text{Gen}\alpha$  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  $\text{Gen}\alpha$  and  $\text{Gen}\beta$  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) a.        domus                patri                (est)                [Pl. *Aul.* 187]  
               house.f.3.sg.    1.sg.DAT.        BE-3.sg.  
               “My father has a house”
- b.        \*(habet)            domum                formosam        [Sen. *Luc.* 87, 5]  
               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)<sup>115</sup>. 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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<sup>115</sup> 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<sup>116</sup> 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 possessor<sup>117</sup> gets dative<sup>118</sup> (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:

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<sup>116</sup> Recall chapter 2, § 4.2.4.

<sup>117</sup> 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:

(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.  
 “So that my shield has brightness/is bright”

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

<sup>118</sup> 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)

- (11) \*pater                      est                      domum                      [Lat.]  
          father-m.sg.NOM.      BE-3.sg.                  house-f.sg.ACC.

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):

- (12) \*mihi                      est                      domum                      [Lat.]  
          1.sg.DAT.                  BE-3.sg.                  house-f.sg.ACC.

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)<sup>119</sup>. In other words, both cases correspond to a copular structure headed by aux BE:

- (13)
- 
- ```

graph TD
    BeP --- BeDegree[Be°]
    BeP --- BePrime[Be']
    BePrime --- DP
    BePrime --- Node1[ ]
    DP --- DPrime[D']
    DP --- Node2[ ]
    DPrime --- DPSlash[D/P°]
    DPrime --- PartP
  
```

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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<sup>119</sup> Recall chapter 2.





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 structures<sup>120</sup>. 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<sub>O</sub>), 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 auxiliaries.

#### 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:

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<sup>120</sup> 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	√	X
French	√	√
Spanish	√	X
E. Portuguese	√	√
Romanian	√	√
NIDs	√	X
SIDs	√	√

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>spes DAT est</i>	<i>spem HABERE</i>	<i>potestas DAT est</i>	<i>potestatem HABERE</i>
Plautus	8	0	4	0
Cicero (Speeches)	2	13	19	21
St. Augustine ( <i>Civ.</i> )	not available	not avail.	1	25
<i>Vulgata</i>	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. Ho una casa [Italian]  
 HAVE-1.sg.pres.ind. a-f.sg house-f.sg.  
 “I have a house”
- b. L’ ho comprata ieri  
 it-f.sg.ACC. H-1.sg. bought-PP yesterday-adv.  
 “I bought it yesterday”
- (23) tʃ<sup>121</sup> ɔ na kæ: za [Isola del Piano]  
 Poss-cl. HAVE-1.sg a-f.sg house-f.sg  
 “I have a house”

<sup>121</sup> 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):

- (i) tʃ 'vagg [Isola del Piano]  
 Loc-cl. go-1.sg  
 “I go there”

This construction is syntactically active, as shown by the structural accusative assigned to the possessee<sup>122</sup>. 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 periphrasis<sup>123</sup>:

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

<sup>122</sup> 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).

<sup>123</sup> 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 possessee 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”<sup>124</sup>):

- (25) a. mi è/sta sempre tra i piedi [Italian]  
 1.sg BE/STAY-3.sg always-Adv. between the feet-pl  
 “He is always in my way”
- b. ce l’ ho sempre tra i piedi  
 Loc-cl. him-ACC. HAVE-1.sg always between 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 una casa [Spanish]  
 hold-1.sg. a-f.sg. house-f.sg.  
 “I have a house”
- (29) Eu tenho uma casa [E. Portuguese]  
 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:

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

- (30) eu       estou    com     saudade/fome/sede  
 1.sg    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)<sup>125</sup>:

- (31) a.       Le                    livre/    la                    maison  
           the-m.sg book-m.sg/    the-f.sg        house.f.sg  
           est                    à moi                                    [French]  
           BE-pres.ind.3.sg.        1.sg-DAT  
           “I have the book/the house”  
       b.       J’                    ai                    un        livre  
           1.sg.NOM.        HAVE-1.sg.        a-m.sg. book-m.sg  
           “I have a book”
- (32) a.       ε                    'ffiλλṑ        a 'tte                                    [Castro dei Volsci]  
           E-3.sg        son-m.sg.        2.sg-DAT  
           “He is your son”  
       b.       tengṑ                    'nu                    'fiλλṑ  
           hold-1.sg.        a-m.sg.        son-m.sg.  
           “I have a son”

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

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

- (33) a. \*un livre/une maison [French]  
 a-m.sg book-m.sg/a-f.sg house.f.sg  
 est à moi  
 BE-pres.ind.3.sg. 1.sg-DAT.
- b. J' ai un 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)<sup>126</sup>:

- (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)

<sup>126</sup> 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.      jɛ           'fiʝə                  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 alongside the active one (Niculescu 2008):

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

Also in this case, the dative possessive periphrasis exhibits auxiliary BE<sup>127</sup>:

- (38)   a.       Ion    îmi                                  este   frate                                  [Rom.]  
           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  
           “His head is beautiful”

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<sup>127</sup> 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).





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):

- (40)                      să le fie moşie    [Old Rom.]  
                                   “to be their estate”    (DÎR : 130 in 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 field<sup>129</sup>. 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]<sup>130</sup>. 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/necessity<sup>131</sup> (Gildersleeve & Lodge 1895; Allen & Greenhough

<sup>129</sup> See § 3.1 in this chapter.

<sup>130</sup> Recall the reanalysis of Latin deponents discussed in chapter 2.

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

(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

1903; Palmer 1954, Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others). In this section, two main types of Latin deontic periphrasis will 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/gerundive<sup>132</sup> + 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)
- |    |  |                   |                   |                   |
|----|--|-------------------|-------------------|-------------------|
| 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           |                   |
|    | in   | iis               | casibus           | [Cel. Med. 8,25]  |
|    | in   | them-m.pl.ABL.    | case-m.pl.ABL.    |                   |
|    | “These things have to be done in such cases” |                   |                   |                   |
| c. | moriendum                                    |                   | est               |                   |
|    | die-GRD.n.sg.                                |                   | BE-3.sg.pres.ind. |                   |
|    | enim   | omnibus           |                   | [Cic. Tusc. 1, 9] |
|    | in fact                                      | everyone-pl.DAT.  |                   |                   |
|    | “In fact, everyone has to die”               |                   |                   |                   |

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

<sup>132</sup> 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)<sup>133</sup>. 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<sub>O</sub>) 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) a. agrum [...] colendum  
 campo-m.sg.ACC. cultivate-GRDV.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.

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<sup>133</sup> 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<sup>134</sup>- + 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**

	-a- paradigm	-ē- paradigm	-ē/ī- paradigm	-ī- paradigm
<i>Gerund</i>	neca-nd-i "of murdering" neca-nd-o neca-nd-um neca-nd-o	mone-nd-i mone-nd-o mone-nd-um mone-nd-o	vinc-end-I vinc-end-o vinc-end-um vinc-end-o	audi-end-i audi-end-o audi-end-um audi-end-o
<i>Gerundive</i>	neca-nd-us, a, um "be murdered"	mone-nd-us, a, um	vinc-end-us, a, um	audi-end-us, a, 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:

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<sup>134</sup> From the PIE suffix \*-ndo (see Benveniste 1935; Cupaiuolo 1991, among others)

- (43)
- |    |      |   |
|----|------|---|
| a. | NOM. | bib-e-re bonum est<br>"to drink is good"                                    |
| b. | GEN. | bib-end-ī amor<br>"love of drinking"  |
| c. | DAT. | bib-end-o aptum<br>"fit for drinking"                                       |
| d. | ACC. | bib-e-re amō<br>"I love drinking"<br>inter bib-end-um<br>"amid drinking"    |
| c. | ABL. | bib-end-ō defessus est<br>"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 complex<sup>135</sup>. More specifically, it seems relevant that gerundive + accusative is far less frequent than 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

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<sup>135</sup> 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 varieties<sup>136</sup>. 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) trífúbúm .                      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.                      approved-3.sg  
[cf. Lat: domum hanc (dē) conventus sentential faciendam      dedit,      idem probavit]  
“by vote of the committee, (the quaestor) provided      (fundings) for building this house and (the 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 the 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

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<sup>136</sup> 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 )<sup>137</sup>, 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”:

- (48)            moriendum                    est  
                   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”

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

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<sup>137</sup> 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*            *fieri*  
           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  $\phi$ -features:

- (51)    *portās*            *turreis*            *moirōs* |  
           gate-f.pl.ACC.    tower-f.pl.ACC. wall-m.pl.ACC.  
           *turreis-que*            *aequās*            *qum moirō*  
           tower-f.pl.-AND    level-f.sg.ACC.    with wall-m.sg.ABL.  
           *faciundum*            *coerāvērunt*            [CIL I<sup>2</sup>1722/9.1140]  
           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





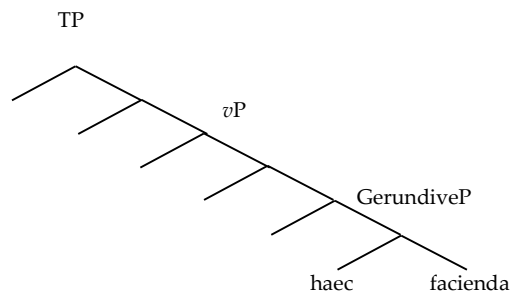


- b. haec                      facienda                      sunt  
 this-n.pl.NOM. do-GRDV-n.pl.NOM. BE-3.pl  
 in        iis                      casibus                      [Cel. *Med.*8,25]  
 in        Dem.-m.pl.ABL. case-m.pl.ABL.  
 "These things have to be done in such cases"
- c. moriendum                      est  
 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:

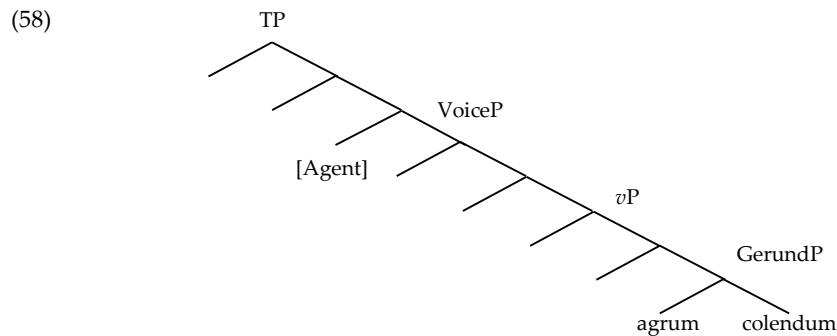
(56)



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) a. agrum [...] colendum  
 field-m.sg.ACC. cultivate-GRD.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"
- 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 *praedictivum* 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 respect<sup>141</sup>:

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 infinitive<sup>142</sup>, 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

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<sup>141</sup> Recall chapter 3, about the extension of HAVE as an active marker.

<sup>142</sup> 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-pres.inf  
 de Gaditano foedere [Cic. *Bal.*33, 5]  
 about of Cadiz-n.sg.ABL. deal-n.sg.ABL.  
 “What could you say about the deal regarding Cadiz?”
- b. habeo etiam dicere [Cic. *Rosc.* 100]  
 HAVE-1.sg.pres.ind. also say-pres.inf  
 “I could also add...”
- c. si inimicos iubemur  
 if enemy-m.pl.ACC. order-pres.ind-1.pl-r  
 diligere, quem  
 love-pres.inf. chi-ACC.  
 habemus odisse<sup>143</sup>? [Tert. *Apol.* 37,1]  
 HAVE-1.pl.pres.ind. hate-inf.perf.  
 “If we are ordered to love our enemies, whom do we have to hate?”
- (61) a. neque est te fallere [Verg. *Georg.* IV, 44]  
 and not BE-3.sg 2.sg.ACC. deceive-pres.inf.  
 “And it is not possible to deceive you”
- b. quantum dinoscere erat [Val.Max. 2,6,8]  
 how much distinguish-pres.ind. BE-3.sg.impf.ind.  
 “As far as it was possible to distinguish”

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<sup>143</sup> 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).



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

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

	Number of attestations	Meaning
<b>Classical age</b>	13	possibility/deontic
<b>Post-Classical age</b>	10	possibility/deontic
<b>Late Latin</b>	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 necessity<sup>144</sup>. 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) a. si inimicos iubemur diligere,  
 if enemies-m.pl.ACC. order-pres.1.pl-*r* love-pres.inf  
 quem habemus odisse? [Tert. *Apol.* 37,1]  
 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. at vero Christus [...] nasci  
 but in truth-adv. Christ-m.sg.NOM. be born-pres.inf-*r*  
 habuit [Tert. *Carn.* 6]  
 HAVE-perf.ind-3.sg  
 “But Christ had in truth to be born...”

Unlike the examples dating from the 1<sup>st</sup> 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) (7<sup>th</sup> century AD):

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<sup>144</sup> This is quite interesting from a typological perspective as it is relatively rare cross-linguistically 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 forms<sup>145</sup>. 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 2<sup>nd</sup> 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 conditional<sup>146</sup>. This gradual change went hand in hand with an

<sup>145</sup> See § 2.3 in this chapter.

<sup>146</sup> 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:

(71) [TP [VoiceP [<sub>v</sub>P [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                      erat                              [Val.Max. 2,6,8]  
               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. A clear example of this development can be found in Cyprianus (3<sup>rd</sup>

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              |                             |
| scire   | quibus            | rescribere           |                             |
| know-pres.inf.  | which-pl.DAT.     | write back-pres.inf. |                             |
| habeam  |                   |                      | [Cypr. <i>Epist.</i> 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:

- (75)
- |    |         |         |          |                             |
|----|---------|---------|----------|-----------------------------|
| a. | est     | scire   | quibus   | [Cypr. <i>Epist.</i> 33, 2] |
|    | BE-3.sg | know-PI | 3.pl-DAT |                             |
| b. | *sunt   | scire   |          |                             |
|    | BE-3.pl | know-PI |          |                             |

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. <i>Ecl.</i> 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:



- (77)            moriendum                      est  
                  die-GRD.n.sg.    BE-3.sg.pres. ind.  
                  enim                      omnibus                      [Cic. *Tusc.* 1, 9]  
                  in fact                      everyone-pl.DAT.  
                  “In fact, everyone has to die”

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**

<i>Deontic periphrases</i>	Italian	French	Spanish	Portuguese	Romanian
<i>Gerund/Gerundive + E</i>	X	X	X	X	X
<i>Gerund/Gerundive + H</i>	X	X	X	X	X
<i>PI + H</i>	✓	✓	✓	✓ (with <i>ter</i> )	X
<i>PI + E</i>	✓	✓	X	X	X

#### 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. *Își așteaptă prietenul citind* [Romanian]  
 [him] is waiting friend-the reading-GRD.  
 “He is waiting for his friend reading”
- b. *Plimbându-se prin pădure a răcit*  
 walking-GRD-refl. through forest got a cold-3.sg  
 “Walking through the forest, he got a cold”
- c. *Uitându-se înapoi a văzut accidentul*  
 looking-GRD-refl.back saw-3.sg accident-the  
 “Looking back, he saw the accident”
- d. *Lăsând ușa deschisă, vei auzi toată discuția*  
 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:

- (85) CANTARE (H)A(B)EO > *canterò* [Italian]  
 sing-PI have-1.sg “I will sing”

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	<i>chanterai</i>	<i>canterò</i>	<i>cantarei</i>	<i>cantarei</i>	<i>cantaré</i>
cantar+as	<i>chanteras</i>	<i>canterai</i>	<i>cantarás</i>	<i>cantarás</i>	<i>cantarás</i>
cantar+at	<i>chantera</i>	<i>canterà</i>	<i>cantarà</i>	<i>cantarás</i>	<i>cantarà</i>
cantar-emo	<i>chanterons</i>	<i>canteremo</i>	<i>cantarem</i>	<i>cantaremos</i>	<i>cantaremos</i>
cantar-etes	<i>chanterez</i>	<i>canterete</i>	<i>cantaretz</i>	<i>cantareis</i>	<i>cantareis</i>
cantar-ant	<i>chanteront</i>	<i>canteranno</i>	<i>cantaren</i>	<i>cantarão</i>	<i>cantarán</i>

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 dialects<sup>147</sup>, 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) Ho                              da fare    [Italian]  
       HAVE-3.sg                to do-inf.  
       “I have to do”
- (89) a                                dda passa’                                      a nuttata    [Neapolitan]  
       HAVE-3.sg                to spend-pres.inf. the night  
       “He must overcome 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 study”

<sup>147</sup> Several SIDs, however, used to exhibit the synthetic *cantare habeo* future, which died out over time (cf. Lopporcaro 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 (Rohlf 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 contexts<sup>148</sup>:

- (93) a. io non saccio chello  
 1.sg not know-1.sg that  
 che l’aggia da dicere  
 that HAVE-1.sg to say-pres.inf.  
 “I do not know what I have to say to him/hem”  
 [Petito IV in Ledgeway 2009: 452]
- (94) a. Emilia [...] me l’aggio da spusà io!  
 Emilia-f.sg. 1.sg-obl. her-f.sg HAVE to marry 1.sg-NOM.  
 “Emilia, I have to marry her!”  
 [Scarpetta II.7 in Ledgeway 2009: 453]
- b. Pecché dice che Errico stanotte  
 Because say-3.sg that Errico tonight  
 m’ ha da sparà [Scarpetta III.2 in Ledgeway 2009: 453]  
 1.sg-obl. HAVE-3.sg to shoot-pres.inf.  
 “Because he says that Errico will shoot me tonight”

<sup>148</sup> 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 morphology<sup>149</sup> (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/ 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 its 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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<sup>149</sup> 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 varieties<sup>150</sup>. 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

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<sup>150</sup> 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 previously<sup>151</sup>, 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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<sup>151</sup> Recall chapter 3.



**Table VI**

Romance languages	Periphrases			Alignment
	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. <i>vs.</i> active/inactive
Italian	Active/ inactive	Active	Active	Active/inactive <i>vs.</i> nom./acc.
French	Active/ inactive	Active/ (inactive)	Active	Active/inactive <i>vs.</i> nom./acc.
Upper SIDs	Active	Active/ (inactive)	Active	Active/inactive <i>vs.</i> 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 from Latin 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:

- (97)     **[VoiceP[ExpvP [Goal/BenvP[Poss/LocvP [PatvP]VP]]]]**  
           Active                                 Inactive

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 auxiliatio 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):

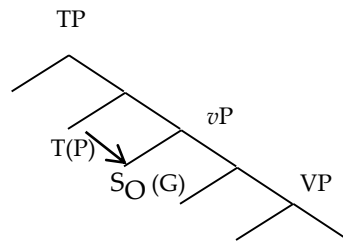
**Table VII**

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

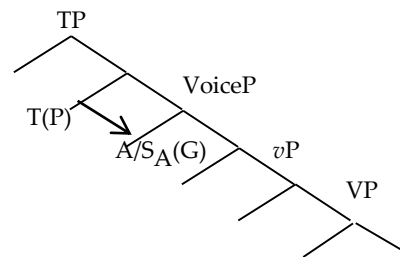
In all the structures analysed, the syntactic subject has the properties of an Undergoer. Moreover, in the case of deontic constructions, the Agent is optional and is always marked with dative case. By contrast, in possessive constructions, the locative argument expressing the possessor is obligatory. 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 *v*P-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)<sup>152</sup>. 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

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<sup>152</sup> Recall chapter 1.

undergo the process of reanalysis illustrated in chapter 3<sup>153</sup>. 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.

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<sup>153</sup> 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).



## Conclusions

In this study, the Latin verbal system has been brought under analysis both from a synchronic and from a diachronic perspective. At a synchronic level, the properties of the Latin clausal domain have been examined, with special attention to the relationship between syntax and morphology. As for diachrony, the focus has turned onto the structural development of a number of periphrastic constructions between Latin and Romance. In light of the linguistic facts analysed in this study, it has been possible to argue that the Latin verbal domain was characterized by an active/inactive alignment opposition throughout, the role of which was crucial both for the properties of the Latin system in itself and for the rise of Romance periphrases. The contribution of the present investigation is thus multifaceted. On the one hand, it provided us with a better understanding of the Latin empirical evidence in syntactic terms; on the other hand, it shed light of the changes occurred during the passage to Romance. Finally, the observation and analysis of these linguistic facts brought theoretical insights as far as the internal structure of the verbal clause is concerned.

### 1. The Latin verbal domain

In the first section, the properties of the Latin verbal domain have been examined from a syntactic point of view. More specifically, the attention has been focused on the occurrence of Latin *-r* morphology and on its relationship to argument structure. The investigation has shown that this morphological marking has to be understood as a signal of an inactive syntactic structure, both in the durative paradigm, where it is shown up as *-r* endings, and in the perfective conjugation, where inactive structures are reflected by an analytic form. This study has illustrated that this holds for all cases in which Latin displays a non-prototypical agentive sentential subject, thus both for passive constructions and for deponents, which have been shown to be generally non-agentive as well (*contra* much literature which has argued in favour of a transitive structure for this verb class). Therefore, the Latin verbal domain consistently exhibits the properties of an active/inactive system as the

presence of an A/S<sub>A</sub> is systematically distinguished from the occurrence of a S<sub>O</sub>. Latin behaves thus like numerous several languages that display a dedicated morphological paradigm for marking inactive structures. Moreover, it has been observed that the verbal classes involved in inactive constructions share relevant syntactic similarities at a cross-linguistic level. The empirical evidence, both related and unrelated languages, seems thus to provide us with further support for this analysis of the Latin data. Finally, the linguistic facts under analysis have provided us with solid arguments to support the view of the *vP*-field as a functional domain encoding the properties of diverse verbal items. It is, in fact, within this field that the syntactic-semantic features of verbal roots are computed, determining the characteristics of the whole verbal clause, among which the compatibility or the incompatibility with the active functional head (Voice).

## **2. The development of Romance analytic perfects and of other periphrases: argument structure and auxiliation.**

The detection of an active/inactive alignment contrast within the Latin verbal domain has also made it possible to understand its development between Latin and Romance. In particular, this investigation has focussed on a number of analytic construals: on the constructions expressing perfective interpretation, on the ones conveying the idea of possession and on verbal periphrases indicating necessity/obligation. The analysis of these periphrases has shown that the active/inactive alignment opposition was present and consistent in all these cases as well, confirming the pervasive character of this contrast within the Latin verbal domain. All these constructions, in fact, systematically exhibit a distinction between an active (generally agentive) construction *vs.* an inactive inagentive one. Moreover, it has been observed that this contrast is always morphologically expressed by the alternation of HABERE (active) *vs.* ESSE (inactive), which both display the properties of functional elements in Latin.

The diachronic development of these constructions between Latin and Romance is tightly related to argument structure as well. In chapter 3, it has been illustrated that the rise of Romance periphrastic perfects, and in particular the extension of HABERE as a perfect tense marker, has to be understood as a consequence of the syntactic reanalysis of experiential deponents. Thanks to this process a new active/inactive system rose, the border of which was at different syntactic height with respect to Latin. In other words, also in the clausal domain it is possible to observe relevant

alignment changes between Latin and Romance. This fact also seems to be confirmed by the development and distribution of nowadays perfective auxiliation patterns, which reflect different stages of a predictable diachronic path. The last step of this evolution can be identified in the stage where auxiliary HAVE functions as universal perfective element, reflecting the loss of salience of the inactive element.

Latin possessive and deontic constructions can be claimed to have followed an analogous development. In both cases, it is possible to observe the gradual disappearance of the Latin inactive counterpart: this suggests that the extension of the active domain first and the rise of the nominative/accusative alignment later on played a decisive role for the Romance outcomes of these periphrases as well. In this sense, these changes cannot be seen as isolated phenomena, but have to be considered as the various manifestations of a deeper change concerning the whole linguistic system in a consistent and systematic way. Finally, the analysis and investigation of these diachronic facts confirmed, once again, that syntactic reanalysis is one of the major forces at the basis of language change.

### **3. Concluding remarks and future research**

In light of the analysed linguistic facts, it is possible to claim that the Latin verbal system displays systematic structural properties, as it exhibits a consistent opposition between agentive and inagentive contexts. This characteristic has been shown to have been decisive both at a synchronic and at a diachronic level. Latin can thus typologically be classified as a language characterized by the competition of different kinds of alignment: although the nominative/accusative opposition is predominant, numerous properties of an active/inactive system are present the language. A careful linguistic analysis of Latin linguistic phenomena should, therefore, take this relevant fact into account.

The conclusions reached in this study also open the path for future research concerning several topics in linguistics. The syntactic analysis of dedicated morphological marking of inactive contexts detected in Latin could be, in fact, be broadened in relation to a number of interesting cross-linguistic phenomena, which can deepen our knowledge of the verbal domain, like differential subject marking, non-canonical subjects and the syntax of middle constructions, just to mention some. The debate about these phenomena, widely attested in the languages of the worlds, mainly concerns their syntactic *vs.* morphological status. The properties of the Latin forms detected in this



study seems to push in the direction of a syntactic analysis of these facts. Moreover, the synchronic and diachronic analysis of Latin deponents makes it possible to make a more extensive comparative analysis with other languages displaying an analogous verb class, like Albanian and Greek, for instance. The development of verbal structures from Latin to Romance opens the way for the diachronic analysis of numerous connected aspects as, for instance, the changes concerning other non-finite verbal forms (*i.e.* infinitive, participles). The study of these related diachronic facts will also shed light on the mechanisms which play a crucial role as far as language change is concerned. Finally, the individuation of an active/inactive alignment contrast in Latin has put this language on a wider typological perspective which provides us with novel diachronic insights. This suggests the possibility of using this tool for several purposes like language classification, diachronic reconstruction and linguistic comparison both with related and with non-related languages.

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The abbreviations in the text follow the *OLD* conventions.

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**Dictionaries**

*DML: Dictionary of Medieval Latin*. Oxford: Oxford University Press.

*OLD: Oxford Latin Dictionary*. Oxford: Oxford University Press.

*TLL: Thesaurus Linguae Latinae*. Berlin: Mouton de Gruyter.

**Old Italian:**

OVI Data base:

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## Samenvatting in het Nederlands

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**Argumentstructuur, alignment en hulpwerkwoorden  
tussen Latijn en Romaanse talen.  
Een diachrone syntactische analyse.**

Dit proefschrift analyseert het Latijnse werkwoord systeem zowel vanuit een synchroon als vanuit een diachroon perspectief. Synchroon worden de eigenschappen van het Latijnse werkwoord systeem bestudeerd met speciale aandacht voor de verhouding tussen syntaxis en morfologie. Diachroon bekijkt deze studie een aantal perifrastische constructies in hun ontwikkeling vanuit het Latijn naar de verschillende Romaanse talen. Op basis van de resultaten is het mogelijk om te beweren dat het Latijnse werkwoord systeem de eigenschappen had van een zogenaamd actief/inactief *alignment*, die een cruciale rol speelde zowel in de Latijnse taal zelf als voor de Romaanse ontwikkelingen. De wetenschappelijke bijdrage van dit onderzoek is tweeledig. Aan de ene kant levert het een duidelijker en preciezer beeld van de Latijnse data, die worden geanalyseerd vanuit een syntactisch perspectief. Aan de andere kant, verschaft het relevante informatie betreffende de taalveranderingen die plaatsvonden met de overgang naar Romaanse talen. Ten slotte levert de observatie en de analyse van deze taalfenomenen ook een aantal theoretische conclusies over de interne structuur van de VP.

Het eerste deel van deze studie bestudeert de syntaxis van Latijnse werkwoorden en de verhouding tussen syntaxis en morfologie. Het beginpunt van het onderzoek is de observatie dat het Latijnse werkwoordstelsel regelmatige morfologische alternaties toont (zie Tabel I en Tabel II):



Tabel I: Transitieve werkwoorden

	<b>Actief</b>	<b>Inactief</b>
<i>Infectum</i> (onvoltooid aspect)	nec-o vermoorden-1.sg "Ik vermoord"	nec-o-r vermoorden-1sg-r "Ik word vermoord"
<i>Perfectum</i> (voltooid aspect)	neca-v-i vermoorden-perf-1.sg "Ik vermoordde/ Ik heb vermoord"	necatus sum vermoorden-PP ZIJN-1.sg "I ben vermoord"

Tabel II: Deponentia

	<b>Actief</b>	<b>Inactief</b>
<i>Infectum</i> (onvoltooid aspect)	*medito nadenken-1.sg	medit-o-r nadenken-1sg-r "Ik denk na"
<i>Perfectum</i> (voltooid aspect)	*medita-v-i nadenken-perf-1.sg	meditatus sum nagedacht-PP ZIJN-1.sg "Ik heb nagedacht"

Tabellen I en II laten zien dat de actieve en inactieve paradigma's verschillende morfologische vormen hebben. Het actieve paradigma bevat actieve (transitieve) vormen geassocieerd met een agentief subject (aangeduid met A/S<sub>A</sub>). Deze werkwoorden tonen een serie actieve uitgangen in de verbuiging van het *infectum* (cf. *-o* in Tabel I) en synthetische *perfectum* (cf. *necavi* in Tabel I). Het inactieve paradigma daarentegen, gekarakteriseerd door een niet-agentief subject (of schaars agentief), toont *-r* uitgangen in het *infectum* (cf. *neco-r* in Tabel I) en een analytische *perfectum* vorm, die bestaat uit het voltooid deelwoord + hulpwerkwoord ESSE "zijn" (cf. *necatus sum* in Tabel I). Deponentia komen altijd met inactieve morfologie voor, zoals geïllustreerd in Tabel II (cf. *medito-r*, *meditatus sum* in Tabel II). Dat betekent dat deze werkwoorden dezelfde morfologische vorm tonen als passieve vormen, hoewel ze niet passief zijn. Daardoor worden deponentia vaak aangewezen als een afwijkende werkwoordklasse, die 'passieve vorm' en 'actieve betekenis' heeft (cf. Gildersleeve & Lodge 1895; Allen & Greenhough 1903; Palmer 1954; Kühner & Stegmann 1955<sup>3</sup>; Leumann, Hofmann & Szantyr 1963; Panhuis 2006).

Deze studie demonstreert dat deze morfologische alternaties van het Latijn altijd syntactisch gemotiveerd zijn, zowel in het onvoltooid als in het

voltooid paradigma (*pace* La Fauci 1998 et seq.). Met name wordt het duidelijk gemaakt dat de *-r* uitgangen en de perifrastische perfectum vormen altijd de reflectie zijn van een inactieve syntactische structuur en dat deze bewering geldt voor zowel passieve vormen als voor deponentia. In het bijzonder wordt bevestigd dat deponentia de syntactische kenmerken tonen van inactieve structuren en dat ze dus verschillen van transitieve werkwoorden (*contra* Embick 1998, 2000; Baerman 2006, 2007; Weisser 2012). Daarom toont het Latijnse werkwoordsysteem consequent de kenmerken van actief/inactief *alignment*: de aanwezigheid van een  $A/S_A$  wordt altijd onderscheiden van het voorkomen van een niet-agentief subject ( $S_O$ ). Latijn is dus zoals veel andere talen die specifieke morfologie gebruiken om inactieve structuren te signaleren (cf. La Fauci 1997, 1998; Zamboni 2000; Ledgeway 2012) (cf. Tabel III):

Tabel III: Typologische *alignment* van A, S en O

Nominatief/Accusatief	Actief/Inactief	Ergatief/Absolutief
A	A	A
S	$S_A$	S
	$S_O$	
O	O	O

Bovendien is het in deze studie mogelijk om te observeren dat de werkwoordklassen die deelmaken van inactieve structuren relevante gelijkenissen tonen in verschillende talen. De empirische data van gerelateerde en niet-gerelateerde talen lijken additioneel bewijs te leveren voor deze analyse van de Latijnse werkwoorden.

Ten slotte verschaffen de geanalyseerde data argumenten voor de analyse van *v* niet zoals één hoofd, maar zoals een functioneel veld dat de structurele verschillen tussen diverse werkwoorden codificeert. Het is binnen dit functionele domein dat de syntactisch-semantische kenmerken van werkwoordstammen in de syntactische computatie betrokken worden. Op deze manier kan bepaald worden of ze compatibel of niet zijn met het actieve functionele hoofd *Voice* (in de zin van Kratzer 1996).

Het tweede deel van dit proefschrift bestudeert een aantal Latijnse perifrastische constructies en hun ontwikkeling in de verschillende Romaanse talen. Met name gaat de analyse over parafrases die een voltooide gebeurtenis in het verleden aanwijzen (*perfective periphrases*), zoals te zien is

in (1), constructies die een bezit relatie uitdrukken (*possessive periphrases*) in (2), en analytische vormen met een modale betekenis (3)-(4):

- (1) a. multi                      mortales              in carcere  
 veel-m.3.pl.NOM.    sterfelijk-m.pl. in gevangenis-m.sg.ABL.  
 necati                              sunt                              [Sall. *Iug.* 31,7]  
 vermoord-PP-m.pl.NOM.    ZIJN-3.pl  
 “Veen mensen zijn in de gevangenis vermoord”
- b. quid Athenis                      exquisitum    habeam                      [Cato, *ad fil.* Frg. 1]  
 wat Athene.f.pl.ABL. gevonden-PP    HEBBEN-pres.subj-1sg  
 “Wat ik in Athene heb gevonden”
- (2) a. est                                      patri  
 ZIJN-pres.ind-3.sg.              vader-m.sg.DAT.  
 meo                                      domus                              [Pl. *Aul.* 187]  
 mijn-m.sg.DAT.                      huis-f.3.sg.NOM.  
 “Mijn vader heeft een huis”
- b. habet                                      domum                      formosam    [Sen. *Luc.* 87, 5]  
 HEBBEN-pres.ind-3.sg.    huis-f.sg.ACC.    mooi.f.sg.ACC.  
 “Hij heeft een mooi huis”
- (3) a. dicenda                              tibi              sunt              hodie    [Liv. IV 40, 9]  
 zeggen-GRDV-n.pl.NOM    2.sg-DAT.    ZIJN-3.pl.    vandaag-Adv.  
 “Je/U moet deze dingen vandaag zeggen”
- b. pugnandum                      habebam                              [Sen. *Contr.* 10,2]  
 vechten-GRD-n.sg.ACC.    HEBBEN-impf.ind-1.sg  
 “Ik moest vechten”
- (4) a. nec              sit                                      mihi  
 en niet    ZIJN-2.sg.subj.pres.              1.sg-DAT.  
 credere                                      tantum!                              [Verg. *Ecl.* X, 4]  
 geloven-pres.ind.                      zoveel-Adv.  
 “Ik moet niet tot dat punt geloven”
- b. de              divis [...]              habeo                                      dicere [Cic. *Deor.* 1, 63, 25]  
 over gods-m.pl.ABL.    HEBBEN-1.sg-pres.ind.    say-pres.inf.  
 “Ik kan/moet iets zeggen over de goden”

Als getoond in de voorbeelden, hebben al deze constructies een perifrastische vorm, waarin of het hulpwerkwoord ESSE (“be”)—zie (1-a), (2-a), (3-a), (4-a)—of het hulpwerkwoord HABERE (“have”) voorkomen. Deze studie illustreert dat de distributie van deze twee functionele elementen direct gerelateerd is aan de actief/inactief *alignment* oppositie van het Latijn:

ESSE komt altijd voor in het geval van inactieve structuren, terwijl HABERE een agentieve context reflecteert.

Deze studie illustreert verder dat de ontwikkeling van deze constructies ook te verklaren is met veranderingen in de argumentstructuur. Hoofdstuk 3 betreft de oorsprong van de Romaanse perifrastische vormen voor de voltooid tegenwoordige tijd en, in het bijzonder, het verspreiden van de constructie HEBBEN + voltooid deelwoord (PP). Hier wordt er beweerd dat deze taalontwikkeling gerelateerd was aan de syntactische reanalyse van een deponentia sub-klasse (*experiential deponents*). Dit feit is terug te vinden in patronen van verschillende Romaanse hulpwerkwoorden, die diverse fases reflecteren van een voorspelbaar diachroon proces. De allerlaatste stap van deze ontwikkeling is te identificeren met behulp van de talen waarin HEBBEN functioneert als het enige hulpwerkwoord voor de verleden tijd.

In hoofdstuk 4 wordt geïllustreerd dat de Latijnse bezittelijke en modale constructies hetzelfde diachrone proces hebben ondergaan. In beide gevallen is het mogelijk om het geleidelijke verlies van inactieve structuur te observeren: dit suggereert dat eerst de extensie van de actief *domain* en dan de opkomst van de nominatief/accusatief alignment een beslissende rol hebben gespeeld. Al deze constructies hebben dus dezelfde structurele ontwikkeling gevolgd. Vanuit diachroon perspectief is het dus mogelijk om deze veranderingen op een unitaire manier te analyseren: ze moeten niet geïnterpreteerd worden als geïsoleerde fenomenen, maar als gevolg van hetzelfde diachronisch proces dat het hele systeem heeft gemodificeerd op een consequent en systematische wijze. Ten slotte bevestigt het onderzoek over deze diachronische data dat syntactische reanalyse een van de belangrijkste factoren is die taalveranderingen veroorzaken.



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## Curriculum Vitae

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Laura Migliori was born on 25<sup>th</sup> February in Rome, Italy. In 2007 she obtained her Bachelor's degree in Classics at the *Università degli Studi di Roma "La Sapienza"* with a thesis on Ancient Greek linguistics. Afterwards, she began her Research Master's in Classical Philology at the same institution; she chose the historical linguistics programme, and specialised in comparative Indo-European linguistics. In 2008 she was awarded an ERASMUS scholarship, thanks to which she was able to spend an academic year at Leiden University. In the Netherlands, she took classes both in the Classical Languages department and at the Leiden University Centre for Linguistics. In January 2010 she graduated from the *Università degli Studi di Roma "La Sapienza"* with a thesis that examined linguistic problems in Ancient Greek dialectal texts. At the end of the same year, she began to work as a PhD student within the VIDI-project 'Splitting and clustering grammatical information'. In 2012 she spent a term at the University of Cambridge (UK) as a visiting scholar. This dissertation is the result of the research carried out during her doctoral studies.

Since 2015 she has been a lecturer in Italian and Romance linguistics at Leiden University.