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**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_A**): the sentential subject of an agentive intransitive clause (i.e. unergatives)
- Subject Object (**S_O**): 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]⁴. Active transitive construction.
- S_A: [Agent], merged in [Spec, VoiceP]. Active intransitive construction.
- S_O merged within the VP-field. Intransitive inactive construction⁵.

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 languages⁶, as shown in Table I (based on La Fauci 1988):

⁴ 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.

⁵ See § 4.2 in this chapter.

⁶ 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 _A	S
	S _O	
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)⁷. 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_O patterned together more and more. This fact can be understood as the consequence of a system characterized by an active/inactive opposition (Ledgeway 2012).

⁷ 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_A or S_O):

- (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_A vs. S_O 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_A and S_O, 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)⁸. 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>	Indicative	Subjunctive	Imperative
<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>	Indicative	Subjunctive
<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

⁸ 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>
Indicative			
Present	nec- o “I murder/am murdering” neca- s neca- t neca- mus neca- tis neca- nt	Perfect	neca-v- i “I (have) murdered” neca-v- isti neca-v- it neca-v- imus neca-v- istis neca-v- erunt
Imperfect	neca-ba- m “I was murdering” neca-ba- s neca-ba- t neca-ba- mus neca-ba- tis neca-ba- nt	Pluperfect	neca-v- eram “I had murdered” neca-v- eras neca-v- erat neca-v- eramus neca-v- eratis neca-v- erant
Future	neca-b- o “I will murder” neca-bi- s neca-bi- t neca-bi- mus neca-bi- tis neca-bu- nt	Future Perfect	neca-v- ero “I will have murdered” neca-v- eris neca-v- erit neca-v- erimus neca-v- eritis neca-v- erint
Subjunctive			
Present	nec-e- m “I murder (subj.)” nec-e- s nec-e- t nec-e- mus nec-e- tis nec-e- nt	Perfect	neca-v- erim “I murdered (subj.)” neca-v- eris neca-v- erit neca-v- erimus neca-v- eritis neca-v- erint
Imperfect	neca- rem “I was murdering (subj.)” neca- res neca- ret neca- remus neca- retis neca- rent	Pluperfect	neca-v- issem “I had murdered (subj.)” neca-v- isses neca-v- isset neca-v- issemus neca-v- issetis neca-v- issent

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)	Active endings	
	<i>Primary</i>	<i>Secondary⁹</i>
	<i>(infectum)</i>	<i>(perfectum)</i>
1.sg	-o/-m	-i
2.sg	-s	-isti
3.sg	-t	-it
1.pl	-mus	-imus
2.pl	-tis	-istis
3.pl	-nt	-erunt

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

⁹ 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>
Indicative			
Present	nec- o-r "I am (being) murdered" neca- ris neca- tur neca- mur neca- mini neca- ntur	Perfect	necatus, a, um sum "I was/have been murdered" es est necati, ae, a sumus estis sunt
Imperfect	neca-ba- r "I was being murdered" neca-ba- ris neca-ba- tur neca-ba- mur neca-ba- mini neca-ba- ntur	Pluperfect	necatus, a, um eram "I had been murdered" eras erat necati, ae, a eramus eratis erant
Future	neca-b- o-r "I will be murdered" neca-be- ris neca-bi- tur neca-bi- mur neca-bi- mini neca-bu- ntur	Future perfect	necatus, a, um ero "I will have been murdered" eris erit necati, ae, a erimus eritis erunt
Subjunctive			
Present	nec-e- r "I am murdered (subj.)" nec-e- ris nec-e- tur nec-e- mur nec-e- mini nec-e- ntur	Perfect	necatus, a, um sim "I was/have been murdered (subj.)" sis sit necati, ae, a simus sitis sint
Imperfect	neca-re- r "I was being murdered (subj.)" neca-re- ris neca-re- tur neca-re- mur neca-re- mini neca-re- ntur	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*¹⁰. Latin *-r* morphology is summarized below:

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

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

¹⁰ 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)¹¹:

¹¹ 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
Jugurtha-m.3.sg.NOM. | Adherbalem[...]
Adherbalem-m.sg.ACC. | necat [Sall. <i>Iug.</i> 26,3]
murder-pres.ind.3.sg |
| | “Jugurtha murders Adherbal” | | |
| (9) | alter
other-m.sg.NOM. | filius [...]
son-m.sg.NOM. | necatur [Cic. <i>Cl.</i> 28, 16]
murder-pres.ind.3.sg- <i>r</i> |
| | “The second son is (being) murdered” | | |

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 structure¹².

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).

- (12) vereor serio [Naev. *Com.* 65]
fear-pres.ind.1.sg-*r* seriously-Adv.
“I am seriously afraid”

On the other hand, deponents completely lack an active counterpart both in the *infectum* and in the *perfectum* paradigm:

- | | | | | | |
|------|----|----------------------------|---------|---------------|------------------------|
| (13) | a. | medit-o-r | b. | *medit-o | |
| | | meditate-1.sg- <i>r</i> | | 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” | | | |

These facts seem to indicate that deponents constitute a class on their own that is characterized by specific properties. Moreover, the observed data apparently suggest that *-r* morphology occurs in heterogeneous contexts, as passives and deponents look *prima facie* like two different environments. The next section will focus specifically on deponent verbs, with the aim of establishing whether these verbs can be considered as a class in the first place. It will also address the issue of possible commonalities between these verbs and passive constructions.

3.4 Latin deponent verbs

Latin deponent verbs have featured in grammatical studies since antiquity and are often mentioned by Latin grammarians because of their apparently peculiar characteristics. While they all share the same morphological marking (*-r* morphology), this group also seems to include cases characterized by a variety of different properties. For this reason, many studies have underlined the difficulty of capturing these verbs under a common description. Here it will be argued that deponents, despite their apparent heterogeneity, can be considered a single class in that they all pertain to the inactive syntactic-semantic domain.

3.4.1 Terminology

In descriptive grammars, deponent verbs are usually defined as verbs characterized by “passive form and active meaning” (Gildersleeve & Lodge 1895; Allen & Greenough 1903; Palmer 1954; Kühner & Stegmann 1955; Leumann, Hofmann & Szantyr 1963; Panhuis 2006, among others.). This

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 instead¹³. 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)¹⁴. 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.

¹³ See § 3.4.2 in this chapter.

¹⁴ 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 contexts¹⁵. 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.

¹⁵ 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 data¹⁶. 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 below¹⁷:

¹⁶ 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).

¹⁷ 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 movement¹⁸, 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”

¹⁸ 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 Latin¹⁹:

- (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

¹⁹ See also § 4.3 in this chapter.

argument shares several properties with the direct object of transitives and is assigned the [Theme] θ -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 features²⁰:

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

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

²⁰ 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* morphology²¹. 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

²¹ 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 complement²³, 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 express²⁴. 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:

²³ 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"

²⁴ 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 language²⁵.

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):

²⁵ 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”)²⁸, 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

²⁸ 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	-r	- Past Participle + BE-1.sg
2.sg	-ris	- Past Participle + BE-2.sg
3.sg	-tur	- Past Participle + BE-3.sg
1.pl	-mur	- Past Participle + BE-1.pl
2.pl	-mini	- Past Participle + BE-2.pl
3.pl	-ntur	- Past Participle + BE-3.pl

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 generalization²⁹. In conclusion, both Latin data and cross-linguistic empirical evidence suggest that all inactive structures should be captured under a unified syntactic account³⁰, as they seem to share relevant semantic and morphological properties.

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

³⁰ 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.

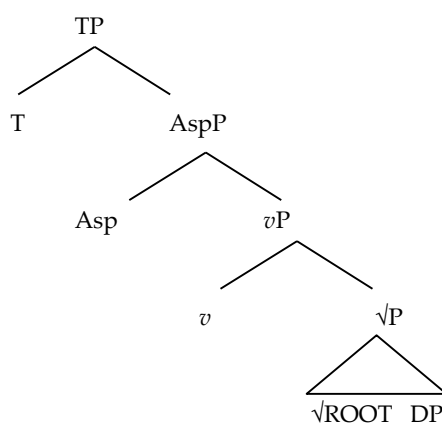
4.1.1 *-r* morphology as reflecting the [pass] feature

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**

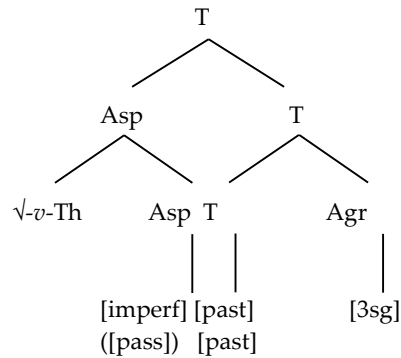


(Embick 2000: 192)

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

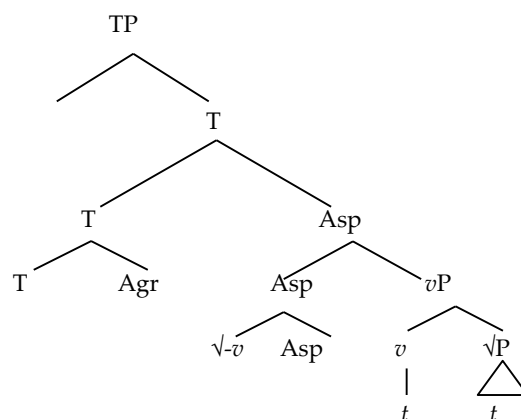
structure is the same. However, these cases differ from the active structures in that the syntactic feature [pass] is present in the syntax on the Aspectual head (see the figure in 44): this specific fact triggers the presence of morphological *-r*. Moreover, two extra mechanical operations are stipulated 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
murder-pres.ind.1.sg- <i>r</i>
"I am (being) murdered" | b. | necatus sum [passive]
murder-PP BE-1.sg
"I was/have been murdered" |
| (47) | a. | meditor
meditate-pres.ind.1.sg- <i>r</i>
"I (am) meditating" | b. | meditatus sum [deponent]
meditated-PP BE-1.sg.
"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 exceptions³¹.

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

³¹ 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 contexts³² 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* morphology³³:

- (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:

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

³³ 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)³⁴. Therefore, postulating a transitive structure for Latin deponents means making an assumption that contradicts both the Latin evidence and cross-linguistic data³⁵. 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,

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

³⁵ 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 view³⁶. 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 θ -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 θ -roles: types and definition

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

³⁶ *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>θ-role</i>	<i>Definition</i>
[+c, +m]	Agent	A participant which the meaning of the verb specifies as doing or causing something, possibly intentionally.
[+c, -m]	Instrument	Means by which something comes about
[-c, +m]	Experiencer	A participant that undergoes a sensory, cognitive, or emotional experience.
[-c, -m]	Theme/Patient	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]	Cause	Entity causing the event
[+m]	Sentient/Holder of state	A participant whose state is expressed by the predicate.
[-m]	Locative/Source	Locative: place in which something is situated Source: Object from which the motion proceeds
[-c]	Goal/Benefactive	Entity benefitting from some action
[]	[]	Argument semantically corresponding to a free variable (Heim & Kratzer 1998)

As illustrated in the table above, θ -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 arguments³⁷ of a clause must respect the θ -criterion, so that the computation can be read at the Semantic Interface:

³⁷ 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.).

(53) *θ-criterion* (cf. Chomsky 1981)

Each argument bears only one θ -role, and each θ -role is assigned to one and only one argument

Since θ -roles relate to the syntactic and semantic function of arguments, they are one of the devices that the interpretational system can use to decode the output of the derivation. In other words, by functioning as a device putting syntax and semantics in communication with each other, they make it possible for the derivation to fulfill this essential criterion.

As shown in the Table, the [Agent] role can only be assigned when both the [+c] (cause) feature and the [+m] feature (intentionality) are present in the derivation. This feature cluster thus encodes prototypical agentivity and is typical of verbs like “murder”, “hit”, and “smash”. This fact is crucial for our analysis of the Latin verbal system, as it will be shown that the active/inactive contrast is determined by the lack/presence of this feature cluster.

Other semantic roles are the result of a different feature combination. [Instrument] expresses the means by which something comes about [+c]. This role generally refers to an inanimate entity and is hence characterized by the lack of intentionality [-m], as in the examples below:

- (54) a. The key opens the door
[Instr]
- b. I open the door with the key
[Instr]

The [Cause] semantic role is assigned to an argument that expresses the cause of the predicate:

- (55) John died from the poison
[Cause]

[Theme] is assigned to an argument that the verb characterizes as being affected by the predicate. This role can also be defined as a participant that is characterized by changing its position/condition or by being in a state or position. This is the semantic role of unaccusative verbs (e.g. “die”, “become”, “be born”, etc.) and of passive constructions, which have a sentential subject generated as IA of the VP (Perlmutter 1978; Burzio 1986).

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 θ -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 Θ -roles: classification and site of assignment

In the literature, θ -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 θ -role classes can be identified:

- (59) *θ -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- θ -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)³⁸. This is crucial for our analysis and it will be used in a different way from 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

³⁸ 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- θ -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 [_vP [VP]]]]]

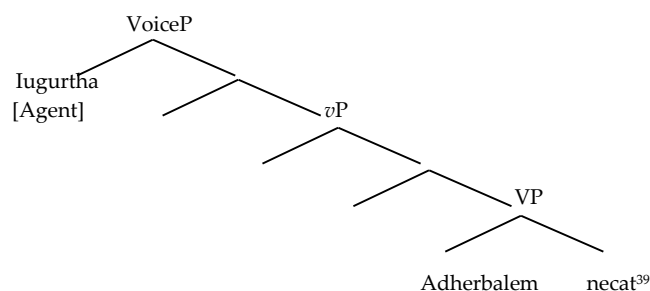
In (62), [Agent] is assigned to the EA in [Spec, VoiceP]. Voice is meant as the functional head responsible for active syntax (Kratzer 1996 *et seq.*; Alexiadou & Anagnostopoulou 1999, 2004 *et seq.*; Alexiadou, Anagnostopoulou & Schäfer 2006, 2015). In this case, *v* encodes transitivity and is compatible 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]
Jugurtha-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 object⁴⁰:

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

³⁹ 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).

⁴⁰ 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 [_vP [VP]]]]

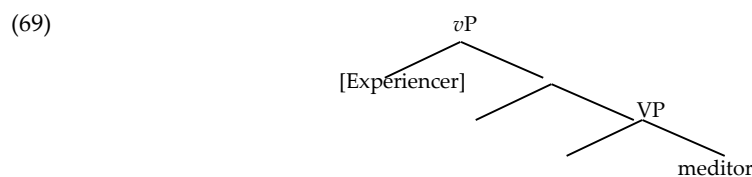
Verbs that require a B/C-role for their sentential subject do not have a Voice head in their structure. This crucial fact makes them syntactically and semantically inactive. Therefore, the argument that functions as the sentential subject is merged within the *v*/V-domain, which is the syntactic site 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 form⁴¹, 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- θ -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 θ -roles⁴². 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

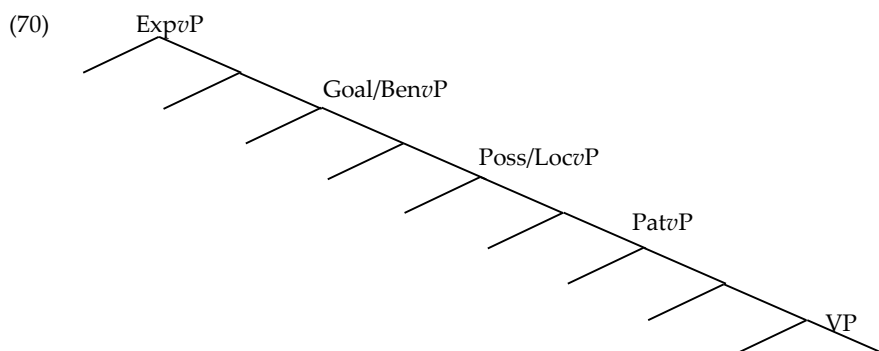
⁴¹ As for the periphrastic nature of the Latin inactive perfect, see § 4.4 in this chapter.

⁴² 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 properties⁴³

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 _v P]
Perception verbs (e.g. <i>conspicor</i> , "glimpse")	-	+	-	[Experiencer]	[Spec, Exp _v P]
<i>Verba affectuum a</i> (<i>vereor</i> , "fear")	-	+	-	[Experiencer]	[Spec, Exp _v P]
<i>Verba affectuum b</i> (cognitive processes) (e.g. <i>reor</i> "think")	-	+	-	[Experiencer]	[Spec, Exp _v P]
<i>Verba affectuum c</i> (verbs of speaking) (e.g. <i>loquor</i> , "speak")	-	+	+	[Experiencer]	[Spec, Exp _v P]
Reciprocals (e.g. <i>amplector</i> "hug")	-	+	+/-	[Experiencer]	[Spec, Exp _v 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

⁴³ 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 ending⁴⁵. 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 verb⁴⁶, 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 subjects⁴⁷, as it also occurs in all Latin

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

⁴⁶ 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).

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

inactive constructions, which syntactically require a dative "subject". On the other hand, the presence of *-r* morphology on the verb signals the presence of an inactive syntactic configuration. This morphological marker on the head can be seen as an indication of the fact that the subject of that construction pertains to the non-agentive domain and is merged in a non-canonical site. Other Latin non-canonical subjects occur in the dative case. Consider, for instance, possessive constructions in which the possessor is expressed through a dative argument⁴⁸:

- (86) 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"

To sum up, the subject argument of a Latin syntactic configuration can exhibit different morphological markers depending on its point of Merging in the structure:

	VoiceP	Exp v P	Goal/Ben v P	Poss/Loc v P	Pat v P	VP
Latin	NOM	NOM	DAT/ACC	DAT	ACC/DAT	ACC

Therefore, there is a correspondence between the point of Merging of this argument, and semantic role assignment and morphological marking. The actual morphological case can vary depending on the parametric choice of a specific language, whereas the syntactic properties of the construction seem to be cross-linguistically analogous (Barðdal & Eyþórsson 2003, 2006).

-
- (i) praedicavit aduersa Caesarem proelia fecisse [Caes. *BC.* 2,18,3]
 preach-perf.ind.3.sg hostile Caesar-ACC. war do-perf.inf.
 "He argued that Caesar had provoked hostile wars"

These cases are generally introduced by a *verbum dicendi/cogitandi*, like "believe", "think", "say", or to *verba irrealis* like *volo* "want", *nolo* "not want", *malo* "prefer". Their properties and behaviour are, therefore, the same as those of their cross-linguistic counterparts:

- (ii) I believe her to be an expert
 Therefore, the accusative case on the subject of Latin infinitival clauses can be considered a case of Exceptional Case Marking (Oniga 2004).

⁴⁸ See chapter 4.

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 deponents⁴⁹. On

⁴⁹ 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 semantics⁵⁰. 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 passivized⁵¹. 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":

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).

⁵⁰ 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.

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

- (94) a. nec-o
murder-1.sg
"I murder"
- b. neca-v-i
murder –perf.ind.-1.sg
"I murdered/I have murdered"
- c. nec-o-r
murder-1.sg-r
"I am (being) murdered"
- d. neca-tus sum
murdered-PP BE-1.sg
"I was/have been murdered"
- (95) a. *medit-o
meditate-1.sg
"I meditate/am meditating"
- b. medit-o-r
meditate -1.sg-r
- b. *medita-v-i
meditate-perf.ind.-1sg
"I (have) meditated"
- d. medita-tus sum
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
murder-pperf-1.sg
"I had murdered"
- b. necatus eram
murdered-PP BE-1.sg.impf.ind.
"I was/had been murdered"
- (97) a. neca-v-ero
murder-perf-fut.1.sg
"I will have murdered"
- b. necatus ero
murdered-PP BE-1.sg.fut.ind.
"I will have been murdered"

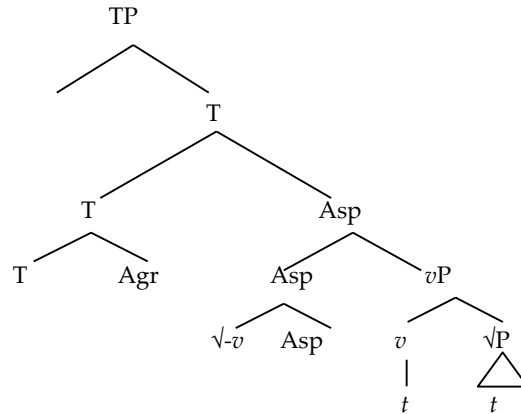
There is thus also a morphological split between a synthetic active form and an analytic inactive form in the pluperfect and future perfect⁵². At this point, a question concerning the analytic nature of the Latin inactive perfect arises, given the fact that the Latin verbal paradigm is apparently mostly synthetic⁵³. 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 periphrastic⁵⁴. 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:

⁵² Recall footnote 5 in this chapter.

⁵³ For other Latin periphrases and their Romance outcomes, see chapters 3 and 4.

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

(98) Perfect without movement of Asp-to-T



(Embick 2000: 214)

In this sense, the occurrence of a periphrastic form is not necessarily linked to the syntactic properties of the construction: an analytic form can occur with passives (passive syntax) and deponents (active syntax). In the same way, the difference between analytic and synthetic is merely morphological, as both transitive and deponents are characterized by an active structure. Nevertheless, it should be noted that both the default movement of the Asp-complex to T and the “blocking” property of the [pass] feature appear to be stipulated within this proposal. No evidence is provided in support of these facts and the Latin forms alone provide insufficient support for this type of operation, as this would simply result in a circular argument.

Furthermore, if [pass] is the only element that causes a periphrastic perfect form, the prediction is that active periphrastic forms cannot be generated. However, active periphrases with PP + HABERE are also attested in Latin⁵⁵:

- (99) 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”

⁵⁵ The occurrence and properties characterizing the Latin perfective periphrasis with Aux HABERE and its relationship to the synthetic perfect will be examined in detail in 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 be 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 auxiliaries, 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 periphrases⁵⁶. Consider, for instance, the possessive constructions illustrated below⁵⁷:

- (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

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

⁵⁷ Possessive periphrases are examined more in detail in chapter 4, § 1.

morphological elements related to the inactive domain: an originally stative participle on the one hand, and an inactive functional element on the other. Therefore, the periphrastic character of the Latin inactive perfect forms can be explained as a consequence of the inactive character of the structure, and of the particular strategy available in Latin to express it.

5. Possible counterexamples

In this section, some data will be discussed which seem to constitute counterexamples to the analysis outlined in this study. It will be shown that these cases are in fact not as problematic as they seem and can indeed be explained under the proposed approach.

5.1 Deponents + accusative

A number of deponent verbs (e.g. *miror* “be astonished”, *vereor* “fear”) can select an accusative argument, as shown in the following examples:

- (104) [Quinctius] miratur
 Quinctius-m.sg.NOM. be astonished-pres.ind.3.sg-r
 subitum aduentum [Liv. XXXIX 30,10]
 sudden arrival-m.sg.ACC.
 “Quinctius is surprised for the sudden arrival”
- (105) 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”

In (104), the verb *miror* “be astonished” selects an accusative argument, *aduentum* “arrive/attack”. In the same way, in the example in (105), the deponent *vereor* “fear” is accompanied by an accusative argument as well, *cogitationem* “plan”. These facts are *prima facie* problematic for the hypothesis proposed in the present study: if deponents have an inactive structure, the prediction is that they are not able to assign structural accusative case (Burzio 1986; Kratzer 1996 *et seq.*). The existence of such verbs thus seems to constitute a strong counterexample for the proposed approach; they have, in fact, frequently been used as evidence in support of the transitive character of deponents (Embick 1997, 1998, 2000; Weisser 2014, among others). However, a closer examination of the internal structure of these verbs shows that they do not differ from other deponents and that they are also syntactically inactive. Consider, for instance, the contrast between the underlying structure

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

<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):

---

<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>.

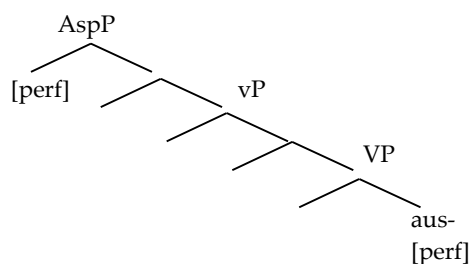
In light of these observations, these cases can be taken to be lexical exceptions within the proposed account, characterized by an asymmetrical paradigm. In

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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.

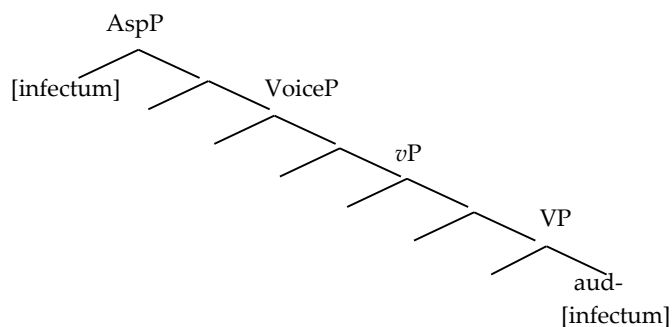
syntactic terms, they can be understood as a restricted list of lexically specified items: the *perfectum* is associated with an inactive syntactic structure, expressed through an analytic form, only in these few cases:

(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.

