

# Corso di Dottorato di ricerca in Lingue, culture e società moderne e Scienze del linguaggio

ciclo 30°

## Tesi di Ricerca

## Stuck in the Middle

A morphosyntactic analysis of the deponent verbs from Latin to Romance SSD: L-LIN/01

**Coordinatore del Dottorato** 

ch. prof. Enric Bou Maqueda

**Supervisore** 

ch. prof. Alessandra Giorgi

**Dottorando** 

Francesco Pinzin Matricola 956151

# Contents

#### Introduction

2. A corpus language and its problems 3. The database and the methodology. 4. Structure. 5. Part I 1. The primary concepts. 1.1 A short outline of the verbal system of Classical Latin. 1.1.1 Moods. 1.1.2 Tenses. 1.1.3 Diathesis. 2.4 1.2 The notion of deponency. 2.7 1.3 Argument structure. 2. The Latin Middle morphology. 2.1 A cross-linguistic and diachronic perspective. 2.1.1 The distribution of the Middle morphology in Latin. 2.1.2 SE' self' pronominal elements in Italian and German, a similar distribution. 4.7 2.1.2 SE' self' pronominal elements in Italian and German, a similar distribution. 4.7 2.1.4 A brief overview of the diachronic analysis of the -r morpheme. 5.1 2.1.4 A brief overview of the diachronic analysis of the other personal endings, of the infinitive and of the perfect. 5.2 2.2 The Latin Middle/-r morphology: a syntactic approach. 5.4 2.2.1 The ontology of eventive heads, the Latin data. 5.4 2.2.2 The core of the Middle morphology anticausatives, reflexives and passives. 5.2 2.3 Anticausatives, reflexives and middle-passives, a complex cohabitation: Anticausatives as reflexives (Koontz-Garboden 2009). 5.2 2.4 Anticausatives, passives and reflexives within a typology of Voice (Schafer 2008, 2017) 5.7 5.2 5.2 The Latin Middle morphology within the typology of Voice (Schafer 2008, 2017) 5.7 5.8 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9 5.9	1. Aim of the work and proposal.	3
Part I  1. The primary concepts	2. A corpus language and its problems.	7
Part I  1. The primary concepts	3. The database and the methodology	9
1. The primary concepts	4. Structure	9
1. The primary concepts		
1.1 A short outline of the verbal system of Classical Latin	Part I	
1.1.1 Moods	1. The primary concepts	15
1.1.2 Tenses	1.1 A short outline of the verbal system of Classical Latin	15
1.1.3 Diathesis	1.1.1 Moods	19
1.2 The notion of deponency	1.1.2 Tenses	21
1.3 Argument structure	1.1.3 Diathesis	24
2. The Latin Middle morphology	1.2 The notion of deponency	27
2.1 A cross-linguistic and diachronic perspective	1.3 Argument structure	32
2.1.1 The distribution of the Middle morphology in Latin	2. The Latin Middle morphology	47
2.1.2 SE 'self' pronominal elements in Italian and German, a similar distribution	2.1 A cross-linguistic and diachronic perspective	47
2.1.3 A brief overview of the diachronic analysis of the -r morpheme	2.1.1 The distribution of the Middle morphology in Latin	47
2.1.4 A brief overview of the diachronic analysis of the other personal endings, of the infinitive and of the perfect	2.1.2 SE 'self' pronominal elements in Italian and German, a similar distribution	49
feet	2.1.3 A brief overview of the diachronic analysis of the -r morpheme	51
2.2 The Latin Middle/-r morphology: a syntactic approach	2.1.4 A brief overview of the diachronic analysis of the other personal endings, of the infinitive and of the p	er-
2.2.1 The ontology of eventive heads, the Latin data	fect	52
2.2.2 The core of the Middle morphology: anticausatives, reflexives and passives	2.2 The Latin Middle/-r morphology: a syntactic approach	54
2.2.3 Anticausatives, reflexives and middle-passives, a complex cohabitation: Anticausatives as reflexives (Koontz-Garboden 2009)	2.2.1 The ontology of eventive heads, the Latin data	54
(Koontz-Garboden 2009)	2.2.2 The core of the Middle morphology: anticausatives, reflexives and passives	67
2.2.4 Anticausatives, passives and reflexives within a typology of Voice (Schäfer 2008, 2017)		
2.2.5 The Latin Middle morphology within the typology of Voice°	(Koontz-Garboden 2009)	72
2.2.6 A proposal for the elimination of expletive Voice°. 93 3. Deponent verbs. 111 3.1 Deponents as idiosyncratic forms. 111 3.2 Deponents as standard Middles. 113 3.2 Beyond idiosyncrasy. 114	2.2.4 Anticausatives, passives and reflexives within a typology of Voice (Schäfer 2008, 2017)	75
3. Deponent verbs	2.2.5 The Latin Middle morphology within the typology of Voice°	88
3.1 Deponents as idiosyncratic forms	2.2.6 A proposal for the elimination of expletive Voice°	93
3.2 Deponents as standard Middles	3. Deponent verbs	111
3.2 Beyond idiosyncrasy	3.1 Deponents as idiosyncratic forms.	111
	3.2 Deponents as standard Middles	113
3.3 The productive core of deponents	3.2 Beyond idiosyncrasy	114
3.5 The productive core of deponents.	3.3 The productive core of deponents	116
3.3.1 The characteristics of the productive deponents	3.3.1 The characteristics of the productive deponents	119
3.3.2 The Identification denominal deponents	3.3.2 The Identification denominal deponents	121
3.3.3 The Possession denominal deponents	3.3.3 The Possession denominal deponents	131
3.3.4 The Possession+Identification denominal/deadjectival deponents	3.3.4 The Possession+Identification denominal/deadjectival deponents	136

3.3.5 Concluding remarks about denominal/deadjectival deponents	140
3.4 The non-denominal/deadjectival deponents	141
3.4.1 The third category	142
3.4.2 The second category	143
3.4.3 The first category	152
4. Beyond Latin, what lexicon can and cannot do	173
5. Concluding remarks	181
Part II	
1. Introductory remarks.	
1.1 The set of data and the main philological issues.	
1.2 Organizing the analysis	
2. Denominal/deadjectival deponents, diachronically	
2.1 Identification denominal/deadjectival deponents.	
2.1.1 III century BCE – 150 BCE	
2.1.2 II century BCE	208
2.1.3 I century BCE	212
2.1.4 I cent. CE	214
2.1.5 II cent. CE	215
2.1.6 From the III cent. CE on	215
2.2 Possession denominal/deadjectival deponents	218
2.2.1 III cent. BCE – 150 BCE	219
2.2.2 II cent. BCE	226
2.2.3 I cent. BCE	230
2.2.4 I cent. CE	236
2.2.5 II cent. CE	240
2.2.6 From the III cent. CE on.	243
2.3 Possession+Identification denominal/deadjectival deponents	246
2.3.1 III century BCE – 150 BCE	247
2.3.2 II cent. BCE.	255
2.3.3 I cent. BCE	256
2.3.4 I cent. CE	257
2.4 The diachronic data from the denominal/deadjectival deponents	260
2.4.1 Causativization.	260
2.4.2 The lexicalization of the nominal/adjectival element	261
2.4.3 Middle-marked → SE-marked / Labile derivations	266
2.4.4 No change	268
3. Non-denominal/deadjectival deponents, diachronically	271
3.1 Change of state deponents	272
3.2 Change of location non-denominal/deadjectival deponents	278
3.3 Interim conclusion, the loss of the Middle morphology and the Labile mechanism	
3.4 Middle+Accusative non-denominal/deadjectival deponents	288

3.4.1 A(di)piscor 'I reach, I obtain'	289
3.4.2 Comminiscor 'I imagine, I invent', reminiscor 'I remember' and commentor 'I think about'	293
3.4.3 Experior 'I try'	297
3.4.4 Fungor 'I fulfill, accomplish'	300
3.4.5 Hortor 'I exhort'	302
3.4.6 Imitor 'I imitate'	305
3.4.7 Medeor 'I heal' and meditor 'I think'	307
3.4.8 Mereor 'I earn, I deserve'	312
3.4.9 Metior 'I measure'	314
3.4.10 Molior 'I move'	315
3.4.11 Nanciscor 'I get'	318
3.4.12 Obliviscor 'I forget'	321
3.4.13 Opinor 'I think'	326
3.4.14 Ordior 'I weave, I start speaking'	329
3.4.15 Paciscor 'I make a deal'	331
3.4.16 Palpor 'I caress'	333
3.4.17 Praestolor 'I wait'	334
3.4.18 Queror 'I complain'	336
3.4.19 Reor 'I think'	338
3.4.20 Suffragor 'I support' and refragor 'I oppose'	339
3.4.21 Ulciscor 'I take revenge, I vindicate'	341
3.4.22 Ut(it)or 'I use'	346
3.4.23 Venor 'I hunt'	348
3.4.24 Vereor 'I fear'	349
3.4.25 Vescor 'I eat'	352
3.5 Dealing with the loss of the Middle morphology	353
Conclusions and open issues.	363
Appendix	371
References	381

## Acknowledgments

Three years pass by so fast, so many people, so many places, so many friends. These short paragraphs cannot do justice to everyone who has been important for this work and for me, both as a researcher and as a person. I will try my best, even if it could never be enough.

First of all, I want to thank my supervisor, Alessandra Giorgi. She has always been present for me and has been a perfect guide, letting me free to make my own research and guiding me through the complexities of the academic world. I cannot stress enough how much she has been important, a big part of this work would not be accomplished by now, if it was not for her.

I want to thank many other professors of the Venice Linguistics Department too: Guglielmo Cinque, Anna Cardinaletti, Giuliana Giusti, Nicola Munaro, Roland Hinterhölz and Laura Brugé. Your advices and critiques have been vital and highly appreciated. With some of you I have also shared, as an assistant, some courses. Those experiences will always remain with me, thank you for letting me understand how it is beautiful to be in front of a classroom and to teach linguistics.

During my second year I spent a semester at the university of Köln, supervised by Chiara Gianollo. Her help has been crucial, I started writing this thesis there, with her. She has been incredibly supportive and spent many hours with me, speaking about all kind of problems related to my project. I am truly in debt with you Chiara! There are many other professors in Köln who supported and helped me with specific problems: many thanks to Marta Donazzan, Martin Becker, Klaus von Heusinger and Peter Orth.

Part of this work has been presented at different conferences and seminars (LOT summer school, LSRL46, ICLL19, IGG43, Köln, Berlin and Padova seminars). I want to thank the audiences for the constant feedback I received in these occasions. In particular, I want to thank Artemis Alexiadou, Florian Schäfer, Giorgos Spathas, Jaume Mateu, Lieven Danckaert, Andrea Padovan and Michela Cennamo for the interesting and helpful talk I had with them.

A very special thank goes to the other PhD students I met during these years in Venice: Vincenzo, Silvia, Fabiana, Camilla, Beatrice, Elena, Laura, Chiara, Chiara and Chiara (way too many Chiaras in our department!). With you I shared way more than just linguistics: the *bacari* around Ca' Bembo will miss us, I think! Thank you for everything, you all will remain part of me, wherever I will settle, even if it will be too far away.

Venice and many other places have been essential for the outcome of this thesis, but Padova, if possible, even more. Besides being the place where I lived for more than eight years, it is the place where I met many of the best people I know. The Linguistics Department of Padova slowly became a second family to me. The people of the department helped me in any possible way during these

years. They saved me and my work so many times that I cannot count them (isn't it Silvia? I still owe you a couple of spritz!). Thank you Cecilia, Jacopo, Silvia, Emanuela. A special thanks goes to Davide, who supervised both my BA and MA thesis. He proved himself a wonderful person to work with and, more importantly, a friend.

The last words, finally, must go to the guys and girls who spent much of their time with me in our "Auletta" and in the department. We shared an entire year and a half, the last part of my PhD, basically living and working together. Their help and support has been something for which I will always be grateful. I discussed my thesis with them so many times that they probably know it better than me! It would be demeaning, however, to say that they helped me only on the linguistic side. Their moments that I spent with them are gift that I will always carry with me. Thank you Camilla, Hiroshi, Tommaso, Laura, Victoria, Giovanni, Sira and Enrico.

Francesco Pinzin

Padova, December 2017

To my mom, my dad and my brother.

«Penso talora che la bussola del mio geografo sia impazzita e che, credendo di procedere sempre verso il meridione, noi in realtà siamo forse andati girando su noi stessi, senza mai aumentare la distanza che ci separa dalla capitale; questo potrebbe spiegare il motivo per cui ancora non siamo giunti all'estrema frontiera.»

Dino Buzzati, "I sette messaggeri", in *La Boutique del mistero*. Milano: Mondadori, 1968, p. 1.

Introduction

### 1. Aim of the work and proposal

This work investigates the lexicon-syntax interface and, more specifically, the influence of the morphosyntactic component on the structuring of lexical categories. The issue is analyzed with respect to the verbal domain, both from a synchronic and a diachronic perspective. The data that I present show how the morphosyntactic component drives the lexical classification. The linguistic system, depending on specific morphosyntactic characteristics, allows for the existence of certain lexical classes and disallows the existence of others. This is particularly evident when it comes in the diachronic change: the morphosyntactic change has a domino effect on the lexical classes, as the relevant morphosyntactic change is recognized and explained, the reorganization of the lexical classes becomes predictable.

The focus of the investigation is a class of Latin verbs which is characterized by the obligatory presence of a specific element, the Middle morphology. These verbs are usually labeled *deponents*. There are different classes of deponents. Each class has a different eventive meaning and a different number of arguments, but, within each class, the eventive meaning and the number of arguments is consistent and always connected with the presence of the Middle morphology. The relevant classes are: change of state verbs (Lat. nascor 'I am born'), change of location verbs (Lat. labor 'I slip'), controlled change of state verbs (with an optional Accusative/Oblique secondary argument; Lat. molior 'I exert myself upon something') and benefactive verbs (with an obligatory Accusative secondary argument; Lat. imitor 'I copy for myself' \rightarrow 'I imitate'). The presence of the Middle morphology in the linguistic system relevantly influences the existence itself of these highly constrained classes of verbs. This is crosslinguistically evident: the self-benefactive deponents and the controlled change of state deponents with a secondary Accusative argument exist only if the Middle morphology is present in the system. In a language that has no Middle morphology, these classes of verbs do not exist. In Latin it is possible to find lexical verbs that can only be present in a self-benefactive derivation, while in Italian, a language that has no Middle morphology, each lexical verb that can be present in a self-benefactive derivation can also be present in a non-selfbenefactive one. Lat. imitor 'I imitate', for example, always appears with a direct Accusative argument and with the Middle morphology.

Imitabor nepam. (Plaut. *Cas.* 443) imitate.1<sup>st</sup>SG.FUT.MID scorpion.ACC 'I will imitate the scorpion.'

In Italian, instead, this behavior is not attested:

Gianni si è finito il gelato.

Gianni self is finished the ice-cream

'Gianni finished the ice-cream (for himself)'.

Gianni gli ha finito il gelato.

Gianni self is finished the ice-cream

'Gianni finished the ice cream (for him).'

Gianni ha finito il gelato.

Gianni is finished the ice-cream

'Gianni finished the ice-cream.'

The explanation of these facts follows from a crosslinguistic differentiation: there are languages that have the morphosyntactic element that allows them to derive events in which one of the arguments is syntactically absent and languages that do not. Latin belongs to the first kind, Italian and the Romance languages to the second. This morphosyntactic element is the Middle morphology.

The Middle morphology, in a Distributed Morphology spirit (Halle and Marantz 1993), is the morphophonological output of an argument-introducing head (usually called Voice°, in this work called i\*°, following Wood and Marantz 2017), which is deprived of the syntactic feature (+D) that allows for the actual syntactic merging of an argument. This means that the Middle morphology, in the structures in which it appears, signals a reduction in the number of the syntactically projected arguments: the number of events does not correspond to the number of syntactic arguments. The languages with no Middle morphology use different means to signal the lack of a referential argument in the syntactic derivation. The Romance languages, the languages relevant for this analysis, use two mechanisms. The first one is the merging, in the argumental position, of a non-referential element, a SE 'self' pronoun (Schäfer 2008, 2017). The second one is the movement of an argument merged in a low argumental position to the higher argumental position; this way, a single referential argument occupies two argumental positions, reducing the number of the referential arguments in the structure. The relevant difference is that in a Latin Middle-marked

structure there is a syntactic argument that is entirely missing, while in a Romance SE-marked or "movement" structure all the argumental positions are actually filled by an element, be it a non-referential SE pronoun or an argument initially merged in a lower position<sup>1</sup>. Latin has the morphosyntactic possibility of projecting an argument structure in which an argument is syntactically missing, the Romance languages do not.

From the described difference, it is possible to derive a series of linguistic phenomena. A language with the Middle morphology can derive a controlled change of state structure in which the complement of the state is marked by dependent case (overt Accusative in Latin²). A language without the Middle morphology cannot, since dependent case is absorbed by the syntactically projected SE pronoun or by the copy of the moved argument.

(5)

Horrifer Aquilonis stridor gelidas molitur terrifying.Nom.sg Aquilon.gen screech.nom icy.acc.pl move.3<sup>RD</sup>SG.PRS.MID nives. (Acc. *trag.* 566) snows.acc 'The terrifying screech of the Aquilon moves the icy snow.' (lit. 'exerts himself upon the

'The terrifying screech of the Aquilon moves the icy snow.' (lit. 'exerts himself upon the icy snow')

(6)

Luca si è impadronito del castello. Luca self is seize.PST.PTCP.M.SG of.the castle 'Luca seized the castle.'

Both structures involve a stative event and a dynamic event that leads to that state. In both cases, the Nominative argument (horrifer Aquilonis stridor 'the terrifying screech of the Aquilon' and Luca) is the subject of the state of being, respectively, molitus 'exerted' and padrone 'owner', and the argument initiating the whole dynamic event. The difference is that the complement of the state is marked by Accusative case in (5), while it is marked by the preposition di 'of' in (6). This happens because Accusative case, in (6), is absorbed by SE, the second syntactic argument in the structure, while in (5) the second syntactic argument is the complement of the state itself. In Late and Medieval Latin, the system lost the Middle morphology and, consequently, the possibility of deriving a structure with a syntactically missing argument. A controlled change of state structure

<sup>1</sup> As I underline in Section 2.1.1 and 2.2.1, I do not take into consideration the impersonal derivations and the analytic passives.

<sup>2</sup> See the Case assignment algorithm in Section 2.2.4).

with a secondary Accusative argument like *molior* 'I exert myself upon something, I move' is no longer available. The solution adopted by the system in this case is to maintain the Accusative argument and reinterpret the Nominative one as directly merged in the external argument position, thus deriving an Active structure (Part II, Section 3.5). This outcome is predictable under the proposed analysis, and confirmed by the diachronic data of many different deponents.

A second characteristic of a language with the Middle morphology is, as already underlined, the possibility of having lexical verbs that can only be present in a Middle-marked self-benefactive derivation. This second characteristic can be explained adopting a Constructivist approach to argument structure (Borer 2005, Marantz 2005, 2013a, Harley 2014a, Mateu 2014, Acedo-Matellán 2016). In this framework, the lexical meaning of each verbal phrase is considered as structurally and not lexically defined: the relevant part of the verb meaning does not come from the lexical element but from the syntactic derivation, from the syntactic functional heads<sup>3</sup>. This means that the semantics related to the lexical part of the verb (called root  $\rightarrow \sqrt{}$ ) does not come into play until the syntactic derivation is over. The constraints that a  $\sqrt{}$  poses on the syntactic interpretation, consequently, are post-syntactic: the  $\sqrt{}$ , adjoined to a syntactic derivation, looks back at the completed derivation after spell-out and checks if it is interpretable or not in that environment (Harley 2014a). A Middle-marked self-benefactive derivation is post-syntactically different from a benefactive derivation, the first one involves two arguments, while the second one involves three:

$$[v-doP^{\emptyset}\ [[DP_{_{1}}]\ v-be/withP^{+D}\ [[DP_{_{2}}]\ v-beP^{+D}]]]\ (Middle-marked\ self-benefactive)$$

(8) 
$$[[DP_1] \text{ v-doP}^{+D} [[DP_2] \text{ v-be/withP}^{+D} [[DP_3] \text{ v-beP}^{+D}]]] \text{ (benefactive derivation)}$$

This means that a  $\sqrt{\ }$ , looking back at the spelled-out derivation, is able to single out the derivation in (7) and to pose an interpretability constraint that excludes the derivation in (8).

In Italian, instead, where there is no Middle morphology, the SE-marked self-benefactive derivation and the standard benefactive derivation are post-syntactically indistinguishable: a  $\sqrt{}$  cannot pose an interpretability constraint that excludes the derivation in (10), while it accepts the derivation in (9).

(9)

<sup>3</sup> There are other approaches to argument structure, that I review in Section 1.3.

$$[[DP_{1}] \text{ v-doP}^{+D} [[DP_{SE}] \text{ v-be/withP}^{+D} [[DP_{3}] \text{ v-beP}^{+D}]]]$$
(10)
$$[[DP_{1}] \text{ v-doP}^{+D} [[DP_{2}] \text{ v-be/withP}^{+D} [[DP_{3}] \text{ v-beP}^{+D}]]]$$

This analysis explains why we do not find, in Italian,  $\sqrt{s}$  that are only present in a self-benefactive environment. The proposal is confirmed by the Late and Medieval Latin data. Once the Middle morphology is not in the linguistic system anymore, all the self-benefactive  $\sqrt{s}$  lose the constraint that allows the  $\sqrt{s}$  to be present only in a self-benefactive environment and start being present also in Active derivations.

The majority of the Latin deponents is denominal/deadjectival, meaning that there is a nominal or adjectival element that can be considered, phonetically, morphologically and semantically, as the basis of the verbal derivation. Only this class is morphologically productive. A part of the work, consequently, deals with the analysis of the productive denominal/deadjectival derivation as opposed to the non-productive derivation based on a  $\sqrt{}$ , exploiting the concepts of Incorporation and Conflation (Haugen 2008). The distinction between denominal/deadjectival derivations and non-denominal/deadjectival is crucial: the lexicalization of the nominal/adjectival element as a  $\sqrt{}$  has syntactic consequences diachronically observable.

Finally, I have to underline the fact that I do not deal with the reason behind the loss of the Middle morphology. The topic of this thesis is to better define the structural characteristics of a language that has the Middle morphology compared with the structural characteristics of a language that does not have it. This target is pursued, as already said, by means of a synchronic and diachronic analysis. The diachronic analysis, then, is ancillary to the mentioned target.

## 2. A corpus language and its problems

The analysis of a classical language from a generative crosslinguistic perspective is a relatively new endeavor (see, e.g., Oniga 2007, Acedo-Matellán 2016, Danckaert 2017, Mateu 2017 and, for a diachronic perspective, Ledgeway 2012). The standard approach to the synchronic study of Latin as a natural language does not take into consideration crosslinguistic evidence, as it is mainly focused on the careful internal description of the system (see, e.g., Baldi 1999, Haverling 2000, Pinkster 2015). The study of the crosslinguistic variation becomes relevant only when one accepts the idea that the Language Faculty is common to any native speaker of any language<sup>4</sup>. Under this view, it is

<sup>4</sup> With respect to the issue at stake here it is irrelevant to conceive it as an autonomous cognitive mechanism devoted only to the generation of language or as based on other shared cognitive processes.

natural to analyze Latin as a single token in a larger picture, that is the real target of the present investigation. In this perspective, Latin cannot be analyzed by itself, it can only be analyzed in comparison with other natural languages, in order to find similarities and divergences. The divergences, then, are analyzed in the most economical way, in the sense that, ideally, we should be able to derive a high degree of variation from a single linguistic fact that differentiates two groups of languages. In such a framework, the target is not an internal description of a specific language, but to understand what can be said (grammatical) and what cannot be said (ungrammatical) in a specific language in comparison with other languages. It follows that the relevant linguistic evidence is derived by means of the opposition grammatical/ungrammatical. It is quite obvious that Latin, being a corpus language with no living native speakers, does not offer any kind of grammatical/ungrammatical opposition. Latin does not provide us with negative evidence (ungrammatical sentences), but only with positive evidence (grammatical sentences). Consequently, we only have absence of evidence, not evidence of absence: the lack of a specific structure in a selected relevant period can indicate that that specific structure was ungrammatical in that period. It is always possible, anyway, that the data that we have are not complete and that the specific structure was grammatical but unattested in the corpus. An additional problem is that the corpus is built on philological editions based on medieval manuscripts. A linguist cannot deal with the second issue, the only option is to trust the work done by the philologists. The first problem, as Acedo-Matellán (2016: 2-3) points out very clearly, can be dealt with adopting a deductive method, the standard option in a theoretical framework. A theory is not directly derived from the data (inductive method), it is formulated and then *checked* against the available data. A theory makes predictions on what a linguist should find in the data. If the available data support the proposed theory, possibly without unexplainable exceptions, then the problem of the existence of only positive evidence becomes less relevant.

Given the above problems connected to the analysis of a corpus language, one may ask why a theoretical linguist should study Latin. There are many natural languages in the world right now, why should someone decide to go through the problems of a corpus language? A first answer is that, even if problematic, Latin is still a natural language. Being a natural language, it can provide relevant new data for the general target of setting a more adequate general theoretical analysis. A second answer is that Latin is diachronically relevant. Latin is one of the oldest languages for which we have a relevant corpus, a corpus that is composed of enough tokens to propose coherent analyses. Moreover, we also have the Romance languages, that derive from Latin. This fact is extremely helpful if one wants to analyze how natural languages structurally change through time (a point underlined in Ledgeway 2012: 3-5).

A final note. In this Section I used the word "Latin", but I did not use it to suggest the idea that everything that in this world is labeled "Latin" (from the XII tables to the scientific Latin used till the XIX cent CE) belongs to the same language and, consequently, has the same grammar. There are many different Latins, each one with its own specific characteristics. In this work I take into consideration this issue.

#### 3. The database and the methodology

I mainly used the *Library of Latin Texts* (LLT Series A and Series B) to collect the Latin data. The database is available at http://clt.brepolis.net/llta/pages/Search.aspx (accessed 14/09/2017). Sporadically, I used data coming from works of other scholars. I overtly mark each Latin example that does not directly come from the LLT database, signaling the work and author from which it has been collected. For the diachronic analysis, as I remark in the introductory Section of Part II, I also u s e d t h e *Archivio della Latinità Italian nel Medioevo* (ALIM, available at http://www.alim.dfll.univr.it/, accessed 14/09/2017).

The data analysis involved two steps. The first step was the creation of a list of the deponent verbs. This has been done by searching in the Oxford Latin Dictionary (OLD) for all the verbs fitting the criteria proposed in Section 1.2. The second step was the actual data collection, performed on the mentioned databases. I searched for the entire set of occurrences of each deponent verb in the relevant period (III cent. BCE - IX cent. CE), marking the author in which it occurs for the first time, the general meaning, the morphophonological derivation (denominal/deadjectival/derived from a √), the presence of Accusative/Oblique arguments (and if these arguments are obligatory or not), the possible presence of SE pronouns and of Active occurrences. In each case, having set an analysis for the first occurrences of each verb, I looked at these characteristics from a diachronic point of view, searching for overt changes. In the Introductory Section of Part II I treat more in detail the problematic aspects of this kind of diachronic analysis: the philological issues, the problems related to the availability of the Late and Medieval data and the fact that these data, coming from authors who write in a language they do not speak natively, cannot be unquestioningly trusted.

#### 4. Structure

The thesis is composed of two parts. The first part (Part I) analyzes the deponent classes from a synchronic and crosslinguistic point of view, the second part (Part II) analyzes the deponent classes

from a diachronic point of view, focusing on the Late and Medieval period, the period in which the Middle morphology disappears from the linguistic system.

Part I is subdivided into five Sections. The first Section introduces the primary concepts that are relevant for the correct understanding of the proposed analyses. I propose a brief outline of the Latin verbal system (mood/tenses/diathesis), the working definition of the deponent class, and the main theoretical issues about the concept of verbal argument structure.

The second Section analyzes the Latin Middle morphology. In the first part of the Section, I propose a crosslinguistic and diachronic description of the Latin Middle, while in the second part I propose a formal analysis, adopting and further refining the Constructivist framework and the formal approaches to the description of the Middle morphology. In this part of the Section I discuss the Latin morphosyntactic data that support the presence of two verbal dynamic heads, v-do° and v-go°, while in the second part I analyze the consequences of this proposal on the formal analysis of the Middle morphology. The formal analysis of the Middle morphology presented in this Section (the morphophonological output of an argument-introducing head whose syntactic +D feature is deactivated) serves as a starting point for the analysis of the different classes of deponents.

In Section three I analyze the different classes of deponents. After a general overview of the previous hypotheses about the deponents, I propose an analysis of the denominal/deadjectival deponents. These verbs are split into three classes: Identification denominal/deadjectival deponents, Possession denominal/deadjectival deponents and Possession+Identification denominal/deadjectival deponents. The data presented show that, in each case, the Middle morphology allows for the contextual identification of an argument merged in a lower position, in a stative relation with the nominal formative of the verb, with the external argument ROLE, usually a DOER. The second part of this Section deals with the non-denominal/deadjectival deponents, organized in three different classes. The first class includes the non-denominal/deadjectival deponents which never show an Active alternant. The second class includes the non-denominal/deadjectival deponents that dispaly an Active alternant that, apparently, has the same structural eventive meaning of the Middle one. The third class includes the non-denominal/deadjectival deponents that, with specific prefixes, appear only with the Middle morphology, while with other prefixes (or in the unprefixed form) appear with the Active morphology. The third class, I show, contains standard alternating verbs, in which the Active morphology signals the direct merging of the Nominative argument in the external argument position, while the Middle morphology signals the fact that the external argument position is not syntactically filled by an argument and that, consequently, the Nominative argument is merged in an inner position. The second class contains, instead, verbs that alternate between an Active reading (usually causative) and a benefactive one, signaled by the presence of the Middle

morphology. Also in these cases, then, the Nominative argument is not merged in the external argument position, syntactically empty, but in an inner position, marked for the BENEFACTIVE role. The first class, finally, is the most complex. Its complexity derives from the fact that it is non homogeneous. Given this, I further split the verbs belonging to this class among change of state verbs, change of location verbs, controlled change of state verbs with an optional Accusative/Oblique argument and benefactives. In each case, I show, the Middle morphology signals the syntactic absence of the external argument in the structure, may that argument be a DOER (v-doP) or an UNDERGOER (v-goP). The Nominative argument, consequently, is always merged in a low position: HOLDER of a state/location, BENEFACTIVE of a further stative event. In Section four I sum up the data coming from the analysis of the different classes of Latin deponents, comparing the Latin system, based on the presence of the Middle morphology, with the Italian one, in which the Middle morphology is not present. In this Section I analyze the systemic consequences of the presence of the Middle morphology on the formation of certain verbal classes, as the self-benefactives and the controlled change of state verbs with an optional Accusative/Oblique argument.

In Section five I present the general conclusions regarding Part I.

Part II is subdivided in three Sections. In the first Section I introduce the main target, the major philological issues surrounding a formal diachronic analysis based on a corpus language and the general organization of Part II.

In Section two I analyze the diachronic changes involving the denominal/deadjectival deponents, subdivided, following the synchronic analysis presented in Part I, among Identification, Possession and Possession+Identification denominal/deadjectival deponents. The last part of the Section sums up the diachronic changes connected with the denominal/deadjectival status of these verbs.

In Section three I analyze the diachronic changes involving the non-denominal/deadjectival deponents. The diachronic analysis is only focused on the verbs belonging to the first class identified in Part I, leaving aside the verbs belonging to the second and third class. The analysis follows the subdivision proposed in Part I: change of state deponents, change of location deponents and Middle+Accusative deponents, analyzed one by one in order to disentangle the controlled change-of-state ones and the benefactive ones. The last part of this Section presents a final summary of the relevant diachronic changes that regard the deponent classes. The analysis proposed in the first part coherently manages to give reason of the attested changes.

The thesis is supplemented with an appendix containing the list of the deponent verbs taken into consideration.

# Part I

### 1. The primary concepts

The aim of this section is to define a few fundamental concepts that will be relevant for the analysis of the Latin verbal class of deponent verbs.

To propose a meaningful analysis of these verbs, I need to define a benchmark. In the first part of this introduction I will give an overview of the Latin verbal system, including the Latin moods, tenses and diathesis. The second part will be devoted, instead, to an analysis of the defining characteristics of the class of deponent verbs and of the peculiar features that characterize this set of verbs. The analysis of deponents, as will be clarified later, is the analysis of their argument structure: therefore, in the final part of this preliminary chapter I will introduce the fundamental concepts used in the analysis of verbal argument structure.

#### 1.1 A short outline of the verbal system of Classical Latin

In this Section I give a descriptive overview of the Latin verbal system to provide a basis for my later analysis. I will treat the Latin verbal system in a rather schematic way, omitting the elements that will not be relevant for my purposes. In this section I rely primarily on the Oxford Latin Syntax (Pinkster 2015).

Latin has three moods (indicative, subjunctive and imperative), six persons (I, II, III singular and I, II, III plural), six tenses (present, imperfect, perfect, pluperfect, simple future, future perfect), a tensed infinitive (present, past and future) and three participles (present, past and future). There are, finally, two possible diathesis for these forms, the active and the passive one<sup>5</sup>.

I will first present a complete table of a verb of the first Latin conjugation ( $-\bar{a}$  conjugation). As a specimen I will use the verb *paro* 'I prepare'.

First I present the active diathesis:

Indicative			
Present		Perfect	
I sg	paro	I sg	parāvi
II sg	paras	II sg	paravisti
III sg	parat	III sg	paravit
I pl	parāmus <sup>6</sup>	I pl	paravimus

<sup>5</sup> Since in this section I am presenting a simple overview of the Latin verbal system I will not use the term Middle or middle-passive. These terms will be introduced later (Sections 1.1.3 and 2).

I signal the length of the vowel only when it is relevant for the accent position. The accent is predictable in Latin, it falls on the penultimate syllable if that syllable is long, in all the other cases it falls on the third-to-last syllable.

II pl	parātis	II pl	paravistis
III pl	parant	III pl	paravērunt paravēre <sup>7</sup>
	Imperfect		Pluperfect
I sg	parābam	I sg	paraveram
II sg	parābas	II sg	paraveras
III sg	parābat	III sg	paraverat
I pl	parabāmus	I pl	paraverāmus
II pl	parabātis	II pl	paraverātis
III pl	parābant	III pl	paraverant
Future			Future perfect
I sg	parābo	I sg	paravero
II sg	parābis	II sg	paraveris
III sg	parābit	III sg	paraverit
I pl	parabĭmus	I pl	paraverimus
II pl	parabĭtis	II pl	paraveritis
III pl	parābunt	III pl	paraverint

	Subjunctive			
	Present		Perfect	
I sg	parem	I sg	paraverim	
II sg	pares	II sg	paraveris	
III sg	paret	III sg	paraverit	
I pl	parēmus	I pl	paraverimus	
II pl	parētis	II pl	paraveritis	
III pl	parent	III pl	paraverint	
	Imperfect		Pluperfect	
I sg	parārem	I sg	paravissem	
II sg	parāres	II sg	paravisses	
III sg	parāret	III sg	paravisset	
I pl	pararēmus	I pl	paravissēmus	
II pl	pararētis	II pl	paravissētis	
III pl	parārent	III pl	paravissent	

When no length mark is given, vowel should be considered short. This is mainly due to inner Latin phonological processes (e.g., *jambenkurzung* 'iambic shortening' of the [a] of the 2<sup>nd</sup> person endings)

These two forms alternate.

Imperative			
	Present		
II sg	para		
II pl	parāte		
	Future		
II sg	parāto		
III sg	parāto		
II pl	paratōte		
III pl	parānto		

Infinitive	Participle <sup>8</sup>
Present	Present
parāre	parans, -antis <sup>9</sup>
Perfect	
paravisse	
Future	Future
paraturum, -a, -um esse	paraturus <sup>10</sup> , -a, -um

Now the passive diathesis will be presented:

	Indicative				
Present		Perfect			
I sg	paror	I sg	paratus sum		
II sg	parāris/parāre	II sg	paratus es		
III sg	parātur	III sg	paratus est		
I pl	parāmur	I pl	parati sumus		
II pl	parāmini	II pl	parati estis		
III pl	parāntur	III pl	parati sunt		
Imperfect		Pluperfect			
I sg	parābar	I sg	paratus eram		
II sg	parabāris/parabāre	II sg	paratus eras		
III sg	parabātur	III sg	paratus erat		

<sup>8</sup> The present and the future participle are usually analyzed as inherently active and the past participle as inherently passive. Given this, the present and the future will be present only in the paradigm of the active diathesis and the past only in the paradigm of the passive one.

<sup>9</sup> The present participle follows the standard declension of adjectives of the second class.

<sup>10</sup> The future participle follows the standard nominal declension of adjectives of the first class.

I pl	parabāmur	I pl	parati eramus
II pl	parabamĭni	II pl	parati eratis
III pl	parabāntur	III pl	parati erant
Future			Future perfect
I sg	parābor	I sg	paratus ero
II sg	parāberis/parabēre	II sg	paratus eris
III sg	parābitur	III sg	paratus erit
I pl	parabimur	I pl	parati erimus
II pl	parabimini	II pl	parati eritis
III pl	parābuntur	III pl	parati erunt

	Subjunctive				
	Present		Perfect		
I sg	parer	I sg	paratus sim		
II sg	parēris/parēre	II sg	paratus sis		
III sg	parētur	III sg	paratus sit		
I pl	parēmur	I pl	parati simus		
II pl	parēmini	II pl	parati sitis		
III pl	parentur	III pl	parati sint		
	Imperfect		Pluperfect		
I sg	parārer	I sg	paratus essem		
II sg	pararēris/pararēre	II sg	paratus esses		
III sg	pararētur	III sg	paratus esset		
I pl	pararēmur	I pl	parati essemus		
II pl	pararēmini	II pl	parati essetis		
III pl	pararentur	III pl	parati essent		

Infinitive	Participle
Present	
parāri	
Perfect	Perfect
paratus esse	paratus <sup>11</sup> , -a, -um
Future	
paraturum, -a, -um iri	

<sup>11</sup> The past participle follows the standard nominal declension of the adjectives of the first class.

The descriptive grammars include three other forms in the verbal domain: the gerund, the gerundive and the supine. The gerund is usually presented as the declension of the infinitive (gen. parandi, dat. parando, acc (ad) parandum, abl. parando). The gerundive (parandus, -a, -um) is an adjectival form (a verbal form that agrees with a nominal element) mainly used to derive sentences with a deontic meaning (i.e., "x has to be..."). This deontic meaning evolves toward a future passive meaning (see Pinkster 2015: 434 and 549). An important difference between the gerundive and the participle (both adjectival forms) is that the gerundive is not inflected for tense, while the participle is. The supine is a residual nominal form of the verb with only two cases remaining: parātum and parātu (for an extensive analysis see Pinkster 2015: 65).

I have used as an example a verb of the first conjugation because productive deponents, the target of this thesis, (see Section 2.2.1) are verbs of the first conjugation. Each conjugation is characterized by a specific formative of the present stem (Meiser 1998; Weiss 2009: 399-409), that a few authors, such as Embick and Noyer (2007), analyze as a thematic vowel. The first conjugation is characterized by the formative  $-\bar{a}$ , the second by the formative  $-\bar{e}$  (albeo 'I am white'), the third by the alternant formative -e/-o (consonantal themes, tero 'I rub'), the fourth by the formative  $-\bar{i}$  (audio 'I hear') and the fifth by the formative  $-\bar{i}$  (capio 'I take'). There are important differences between these classes. These differences are stronger in the future paradigm: the  $3^{\rm rd}$ ,  $4^{\rm th}$  and  $5^{\rm th}$  conjugations do not form the future through the formative  $-b\check{o}/\check{e}^{12}$  but through a characteristic  $-\bar{e}$  vowel (ex. future of the verb audio of the  $4^{\rm th}$  conjugation 'I will hear: audi-am, audi-es, audi-et, audi-emus, audi-etis, audi-ent). The passive infinitive, moreover, is different in the  $3^{\rm rd}$  and  $5^{\rm th}$  conjugations, losing the  $-s/-t^{13}$  consonant: parari vs teri/audi. Other minor differences are not relevant for the purposes of this thesis (see Vineis 2005). The first conjugation, on the other hand, stands out with respect to the subjunctive, as it is the only class that does not show an -a vowel as a formative of the subjunctive mood.

#### 1.1.1 **Moods**

As we have already seen, Latin has three moods: indicative, subjunctive and imperative. In general, the speaker uses a specific mood to convey her specific views on the extralinguistic reality and her intentions toward the other people participating in the linguistic event.

The imperative is perhaps the most transparent mood with the most explicit semantic meaning. When the speaker uses the imperative, she expresses a deontic and prescriptive attitude towards the

<sup>12</sup> The connecting vowel -ĕ rises to -ĭ and -ŏ rises to -ŭ.

<sup>13</sup> The -r is derived through rhotacism from an original -s (see Section 2.1.3 for a deeper analysis).

hearer (i.e., she is giving an order to someone or prescribing a specific behavior).

The indicative has a clear semantic use as well. It is usually conceived as the mood in which "the speaker asserts a state of affairs that is, he presents an event as factual" (Pinkster 2015: 395). Its use is a subjective choice of the speaker, meaning the speaker is not grammatically forced to use the indicative mood: "[...] it is not the case that events that actually take or took place must be expressed in the indicative, nor is it the case that events which do or did not take place cannot be expressed in the indicative" (ibid.: 395). This observation points toward a semantically relevant use of the Latin indicative in which the speaker uses the indicative mood to express her specific view on the extralinguistic reality.

The subjunctive mood, instead, is more complex. Subjunctive can be used as a semantically relevant mood (meaning the speaker chooses the subjunctive mood to convey her views about the world or her intentions towards the event's participants) or as a grammatical mood (meaning the speaker does not have a choice: the grammar forces her to use the subjunctive in specific grammatical contexts). When the subjunctive is an active and meaningful choice of the speaker it can convey quite a wide range of meanings. In declarative and interrogative sentences subjunctive expresses a non-factive epistemic modality that can be subdivided in a proper non factual modality (coniunctivus potentialis)<sup>14</sup> and in a counter-factual modality (coniunctivus irrealis)<sup>15</sup>. This use contrasts with the use of the indicative which expresses, as previously stated, a factive epistemic modality. In imperative sentences, on the other hand, subjunctive expresses deontic modality (coniunctivus volitivus). A third semantically relevant use of the subjunctive is the optative form, in which the speaker expresses a hope for a specific eventuality (utinam amarem. 'If only I loved'). On the other hand, subjunctive is a forced choice in subordinate sentences in Latin. In this case it has a grammatical use: it is not semantically relevant and does not convey the speaker's views on the extralinguistic reality and her intentions toward the other participants in the linguistic event<sup>16</sup>. In its grammatical use, subjunctive is a subordinating device signaling that the syntactic subordination mechanism is operative<sup>17</sup>.

<sup>14</sup> It expresses what could have happened or what could happen, not what has happened or what, actually, happens.

<sup>15</sup> This kind of subjunctive expresses the surprise of the speaker with regards the fact that she cannot conceive something as being possible (*ex homine hunc natum dicas*? 'would you dare to say that his father is a human being?!' (Ter. *Eun.* 460)).

<sup>16</sup> The subjunctive mood, in Latin, is used in a subordinated clause when the subordinated clause is causal, final or hypothetical. Given the fact that these subordinated clauses, by themselves, express a "visualized" event and not a real one, the use of the subjunctive could be seen as something more than just a subordinating device also in these cases. See Meillet et al. (1994: Section 2).

<sup>17</sup> For a deeper analysis of the other peculiarities of the subjunctive mood in Latin see Pinkster (2015). For a syntactic analysis of the use of the grammatical and modal subjunctive in other languages see Giorgi and Pianesi (1997), Giorgi (2009a, 2009b).

#### 1.1.2 Tenses

The full set of the six Latin tenses is present only in the indicative mood. In the subjunctive, the future and future perfect are absent, while in the imperative, the only relevant tenses are the present and the so-called future.

A full analysis of the Latin tenses and their semantics is beyond the scope of this thesis. The target of this subsection is to indicate the most and least frequent uses of these tenses.

It is possible to differentiate tenses on the basis of their ability (or lack of ability) to situate events with respect to utterance time, the time at which the speaker delivers the sentence. In other words, there are tenses which situate the event with respects to the utterance time and others which situate the event with respect to another reference time (*anaphoric* tenses). The verbal event can be situated in the past (antecedent), in the present (simultaneous), or in the future (posterior) with respect to the utterance time. I will use this general frame to propose a schema of the Latin tenses<sup>18</sup>.

The Latin tenses that can refer to utterance time are the present indicative, the perfect indicative and the future indicative. The other tenses refer to other reference times and, consequently, relate to an anchoring time that is the time of the utterance. This anchoring time is made available by the linguistic expression. There are various linguistic means that can make these reference times available, including temporal adverbs (e.g., *hodie* 'today' *cras* 'tomorrow'), temporally anchored sentences (e.g., *cum Caesar militem laudabat...* 'while Cesar was praising the soldier...') and the introduction of secondary utterances (e.g., *Caesar dixit....* 'Cesar said...').

The present indicative, in its standard use, instantiates a simultaneous relationship between event time and speech/utterance time. When the present tense is used, the speaker places the event described by the present verb at utterance time. However, the situation is more complex than this: there are two other important uses of the Latin present. Latin present indicative can be used to refer to an event in the future with respect to speech time or to an event in the past. The first use is called *praesens pro futuro* (present instead of future), and the second is called *praesens historicus* (historical present)<sup>19</sup>.

The perfect indicative, in its standard use, places the event described by the verb in the past with respect to utterance time. Many scholars (Leuman et al. 1977: 585-620; Baldi 1999; Haverling 2010) have proposed that the function of the Latin perfect comes from the merging of two different PIE verbal stems: the agrist and the perfect. It is generally assumed that he agrist describes the pure event, without referring to speech time or to the internal development (aspect) of the event. The perfect, instead, describes a concluded event, giving as an output a past interpretation (with respect

<sup>18</sup> For an extensive analysis of this topic see Giorgi and Pianesi (1997), Giorgi (2009a, 2009b).

<sup>19</sup> For an introduction to these cases see Pinkster (2015: 399-410).

to utterance time). On the basis of historical data, these scholars propose a double temporal meaning for the Latin perfect, a real perfective meaning and an aoristic meaning. Other scholars (Pinkster 2015), however, argue against this theory and propose a unified perfective meaning for the Latin perfect<sup>20</sup>. The fact that the Latin perfect is or was related to a resulting perfective state is clearly visible in the passive forms, which are construed by means of the present *esse* 'to be' stem and the past participle of the verb, e.g., *paratus est*: 'x is in the situation of being ready'. This does not mean that these forms have to be interpreted, in the synchronicity of Classical Latin, as describing a stative resultative situation. It simply means that the perfective forms have a relation, be that relation diachronic or not, with forms describing resultant states (for more, see Dankaert 2017). This issue is far from settled, but, for the purposes of this short introduction, the characterization of the Latin perfect as a tense which situates an event in the past with respect to utterance time is sufficient.

The future indicative has a double temporal use and does not always relate to utterance time. In its utterance time-related use, it is able to set the event in the future with respect to utterance time. In its non-utterance time-related use, Latin future indicative instantiates a simultaneous relationship between the event time and an available future reference time (e.g., *postridie*, 'tomorrow'). The future indicative is used in many other situations. It can be used to state general assertions (gnomic future)<sup>21</sup> or potential situations (the "deductive" use of the future). The use of the future can also be related to a special state of mind of the speaker: it is not usual to know what will happen and, in many cases, when the speaker asserts that something will happen she is indicating a possible direction to the addressee, she is suggesting an action (a sort of light imperative). The future indicative also has many periphrastic competitors with a future-like meaning and additional modal semantics: the *-urus* + *a form of sum*, the *gerundive* + *forms of sum*, the *habeo* + *infinitive*<sup>22</sup>, the *debeo/possum/volo* + *infinitive* and the *incipio* + *infinitive* (for an overview see Pinkster 2015: 429-442).

The imperfect indicative does not relate to utterance time. It instantiates a simultaneous relationship between the event and an available reference time set in the past. The standard grammatical definition of the imperfect states that it refers to an unfinished event in the past, an event that was going on during a specific time in the past (for a thorough description of the uses of the Latin imperfective as opposed to the perfective see Haverling 2010: 439-441. For an analysis of the imperfective tense in Italian and in a crosslinguistic perspective see Giorgi and Pianesi 2001,

<sup>20</sup> Aspectually perfective, the Latin Perfect describes, following this analysis, an event that is completed.

<sup>21</sup> This is used mainly in legal texts, to indicate a standard way of proceeding in a legally relevant situation (see Pinkster 2015: 425).

<sup>22</sup> This form is the diachronic ancestor of the widespread Romance syncretic future.

2002).

The pluperfect indicative, like the imperfect indicative, does not relate to utterance time. It places the event in an anterior/past time with respect to a past reference time (see Pinkster 2015: 455-461).

The future perfect indicative, often called future anterior, has a very low rate of use. Like the imperfect indicative and the pluperfect indicative, it does not relate to utterance time. The future perfect indicative places the event in an anterior/past time with respect to a future reference time (see Pinkster 2015: 462-472).

The subjunctive tenses are more complex. One must first distinguish between the modal/semantic use of the subjunctive and the grammatical/dependent use of the subjunctive.

In the modal/semantic use, subjunctive tenses alternate with the indicative, since the choice of the subjunctive over the indicative is semantically relevant and operated by the speaker. In these cases, avoiding the most idiosyncratic cases, the subjunctive tenses behave like the indicative ones: the present locates the event during utterance time, the perfect locates the event before utterance time and the other two tenses relate the event during a past reference time (imperfect subjunctive) or before a past reference time (pluperfect subjunctive).

In their grammatical/dependent use, instead, the subjunctive tenses never refer to utterance time. The subjunctive tenses depend on the tense of the main clause: present and imperfect subjunctive signal simultaneity with respect to a present tense, the former, or to a past tense, the latter<sup>23,24</sup>. The other two subjunctive tenses signal anteriority: the perfect subjunctive is used to signal anteriority with respect to a present tense in the main clause, while the pluperfect subjunctive is used to signal anteriority with respect to a past tense in the main clause.

Infinitive tenses are always dependent and do not relate to utterance time. They signal anteriority (past infinitive), simultaneity (present infinitive) or posteriority (future infinitive) with respect to a specific reference time. A peculiar use of the present infinitive is the *infinitivus historicus* 'historic infinitive' (Pinkster 2015: 527-531), in which a present infinitive is used sometimes as a perfect and sometimes as an imperfect in telling stories.

The present participle expresses a simultaneous state of affairs with respect to a reference time, be that reference in the past, in the future or simultaneous to utterance time. The future participle, in the same vein, expresses a posterior state of affairs with respect to a reference time. The past participle expresses an anterior stat of affairs with respect to a reference time, with the only

<sup>23</sup> I am using the general notion of "past" to include the imperfect and the pluperfect. As I already stated, these tenses can appear in a main clause only if a general past reference time has been set.

<sup>24</sup> This is true for the Classic period. For the Early period, the imperfect is also used to signal anteriority, not only simultaneity.

difference being that the past participle indicates a resultant state of a previous event that holds also in the present (of the reference time). This difference opens up the possibility of interpreting the past participle as a simultaneous state.

#### 1.1.3 Diathesis

The notion of diathesis (*species/genus verbi*, in Latin; also called *Voice* in English) is the most relevant for this thesis: the peculiarity of deponents, as I will show later (Section 1.2), is related to their morphological diathesis.

Diathesis usually indicates the verbal category that modifies the relationships between the event described by the verb and the actual participants in the event. In the classical grammatical descriptions, Latin has two morphological diathesis: Active and Passive<sup>25</sup>. The standard function that is attributed to these two morphological markings is to present the same state of affairs from two different perspectives: the perspective of the agent and the perspective of the patient (ex. from Pinkster 2015: 231):

(1)

Auctor opus laudat. (Ov. *Pont.* 3, 9, 9) author.NOM work.ACC praise.3sg.PRES.ACT 'The author praises (his) work.'

(2)

Laudatur Apronius a Trimarchide. (Cic. *Verr.* 2, 3, 155) praise.3<sup>RD</sup>SG.PRS.PASS Apronius.NOM from Trimarchides.ABL 'Apronius is praised by Trimachides.'

This is commonly considered the standard use of the Passive diathesis or -r diathesis<sup>26</sup>. The adopted label, Passive, implies a direct parallelism between the Latin Passive diathesis and the Passive constructions that one can find in Italian (and many Romance languages), German and

<sup>25</sup> I label the actual morphological realization of Voice with a capital letter (e.g., Active), while the structure instantiated by means of these morphologies will be labeled in lowercase (e.g., active, passive, reflexive, anticausative). This is needed because the single Passive morphology can be present in more than one syntactic structure. In this general introduction I use the classical terminology which labels the non-Active morphology as Passive, I will later change this label adopting the term Middle (see Section 2). The interlinear notation follows the same schema.

<sup>26</sup> In the rest of the discussion I will also use the term -*r* morphology to refer to this diathesis. Even if it is quite clear that the -*r* element does not characterize the whole conjugation (see the schema above), this term has been used many times (starting from the Latin grammarians themselves, see the next section) in the literature and I will follow this standard use.

English. This implication is underlined by the actual translations given in (1) and (2).

The Latin Passive, however, is not a restricted only to passive structures. In Italian, English and German the Passive construction has a uniform distribution and triggers a uniform relation between the agent and the patient in the sentence: when a Passive construction is used, the Patient argument becomes the syntactic subject (it agrees with the verb), while the Agent argument is syntactically demoted but interpretively present. The two arguments must be referentially distinct:

(3) The gold has been hidden.

Sentence (3) means that someone hid the gold, but that argument, semantically implied by the sentence, is demoted and syntactically present. The other argument, the patient, is promoted as the most prominent element in the structure and agrees with the finite verb. In Latin, on the other hand, the use of the morphological Passive marking does not always trigger this implication. Let us examine some of these "non standard" cases:

In (4), the patient (ea 'it') becomes the subject, as in (2). The difference is that in this case, the existence of an agent is by no means implied by the sentence: the crown, to which the pronoun ea 'it' refers, breaks by itself, not because of the action of someone/something. This construction is usually called anticausative (see Schäfer 2008, Koontz-Garboden 2009) or decausative (Pinkster 2015).

(4)

Africano illi superiori coronam sibi in convivio ad caput adcommodanti,

cum ea saepius rumperetur,

while it.NOM.F.SG many.times break.3<sup>RD</sup>SG.SBJV.IPFV.PASS

P. Licinius Varus: "noli mirari" inquit "si non convenit; caput enim magnum est!" (Cic. de orat. 2, 250)

'While Africanus, during the dinner, was putting back again on his own head the crown, since it (the crown) kept on breaking, P. Licinius Varus said: "You shouldn't wonder that it doesn't fit. In fact, you have a big head!"

Sentence (4) can not be considered a "standard" passive construction. The agent is not present, which is key to the entire joke made by *Varus*: the crown does not break because of the action of someone (an agent): it breaks by itself. This state of affairs allows *Varus* to state that this happens

because of the big head of the Africanus (*caput magnum* 'big head' can be a physical condition or a statement about the cleverness of someone).

In (5), the patient becomes the subject and the agent is present, as in (2), only in this case, agent and patient are the same person. This construction is usually called middle-reflexive<sup>27</sup> or autocausative (Pinkster 2015):

(5)

Abduntur tricenis diebus. (Plin. *Nat*, 9, 22) hide.3<sup>RD</sup>SG.PRS.PASS thirty.PL.ABL days.ABL 'They hide for thirty days.'

This occurrence is clearly different from the passive interpretation of the Latin Passive in (2) and from the passive constructions of Italian, German and English ((3)), in which identification between the agent and the patient is not available.

Another possible interpretation of the Latin Passive morphology is the impersonal one, in which an arbitrary agent performs an event. This interpretation is clearly different from the passive in (2) because, in this case, the internal argument can be absent<sup>28</sup>:

(6)

Amatur atque egetur acriter. (Plaut. *Pseud*. 273) love.3<sup>RD</sup>SG.PRS.PASS and need.3<sup>RD</sup>SG.PRS.PASS direly 'We love and we are in dire need.'<sup>29</sup>

The relevant question is if it is possible to consider the Passive Latin morphology as equivalent to the Italian, German and English Passive. The answer is negative. The Active/Passive dichotomy does not work well for Latin, where the data force us to conclude that there is a third kind of Diathesis/Voice. This third Diathesis/Voice is able to derive the whole set of constructions that we have already seen (the proper passive, the anticausative, the middle-reflexive, the impersonal<sup>30</sup>). This conclusion is not new: many scholars, since the beginning of linguistic inquiry into the Indo-European linguistic family, have hypothesized that there is a morphological third diathesis/Voice different from the Passive and the Active ones (e.g., Delbrück 1897). This morphology is usually

<sup>27</sup> This distinguishes it from the standard reflexive construction, which involves the reflexive pronoun se 'self'.

<sup>28</sup> When the patient is present it is usually marked by an Oblique case and not by an Accusative case. I will not delve into the impersonal Latin construction in depth in this thesis.

<sup>29</sup> An Italian translation would be more adequate: 'si ama e si soffrono terribili privazioni'.

<sup>30</sup> Even if, as we will later see (Section 2.1.2), the impersonal construction seems to be a different kind of animal.

labeled Middle. In the remainder of this thesis I will use the term Middle to refer to the Latin morphological diathesis<sup>31</sup>.

The Latin Middle morphology creates events in which the agent is not a normal agent: the agent can be entirely absent (anticausatives), demoted (passives), identified with the internal one (middle-reflexives) or an arbitrary argument (impersonals)<sup>32</sup>. I reserve the term Passive only to those morphologies that appear only in a passive structure, in which the external agentive argument is syntactically demoted but interpretatively still present and identified with an element that is external to the derivation. Following this definition, then, Latin does not have a Passive morphology. The Middle/Active morphological system is present in some Indo-European languages (e.g., Latin, as already shown, and Modern Greek). There are languages, finally, in which all three Voices — Active, Middle and Passive — have a morphological realization. An example of this situation is Ancient Greek, which has a tripartite Active/Middle/Passive system. For a wider sample of Middle/Active(/Passive) languages see Kemmer (1993).

### 1.2 The notion of deponency

In this section, I will introduce a few fundamental concepts concerning deponent verbs, the target of this thesis. How has the verbal class of deponents been identified? Is this identification adequate? Are there grey areas? Are there interesting widespread features in this class?

The name itself (deponens) is iconic: it is the participial form of the verb depono and means 'giving up, abandoning'. The use of this term goes back to Latin grammarians. The meaning of this term is usually analyzed per antiphrasin 'as an antiphrasis': a verb is called deponens because it never gives up the Middle morphology:

Deponens per antiphrasin dicitur, id est e contrario, quia verbum r littera finitum deponenre eam non potest. (Char. gramm. I, 11)

'A verb is called deponent "per antiphrasin", that means "from the opposite", because it is a verb ending with the r litter that cannot give it up'

<sup>31</sup> This term has been widely and heterogeneously used in the literature: in the Generative and syntactic framework, Middle also refers to a specific kind of construction, in which the event is described as general and not tied to a specific time or location:

i. This book reads easily.

I will not follow this labeling in this thesis.

<sup>32</sup> About the impersonal construction see Section 2.1.2.

The general characterizing feature is clear: a deponent verb does not alternate between a Middle and an Active form. A second relevant characteristic is that the Middle morphology does not have a clear semantic import in a deponent verb, meaning it is not involved in a standard Middle environment:

```
Deponens, quae habet speciem passivae, sed non habet vim [...]; (Ps. Asper gramm. V, p.551, 1.15)
```

'Deponent, which has a passive form but not a passive meaning.'

The Middle morphology does not seem to have an oppositional use in these verbs, meaning it is not used to convey a *diathesis* 'disposition' opposed to the Active one. Modern scholars also follow this differentiation. In Pinkster's syntactic survey of Latin, for example, these verbs are not treated in the subsection reserved for the Middle meanings but in a special, autonomous, subsection (Pinkster 2015: 282-285).

Schematically, deponents:

- appear only with the Middle morphology.
- do not exhibit a standard Middle semantics.

If we apply these identification criteria to the set of Latin verbs from the III cent. BCE to the IX cent. CE, around 330 verbs are identified<sup>33</sup>. A list of these verbs is provided in the appendix.

(7) is an example of a deponent verb, while (8)-(9) are examples of a classic Active-Middle opposition.

**(7)** 

Eos ego fortasse nunc imitor. (Cic. *fam*. 2, 16, 6) they.ACC I maybe now imitate. 1<sup>ST.</sup>SG.PRS.MID 'Maybe, I imitate them now.'

(8)

Olli somnum ingens rumpit pavor. (Verg. *Aen.* 7, 458) him.dat sleep.acc great.nom.sg break.3<sup>RD</sup>.sg.PRS.act fear.nom 'A great fear breaks his sleep.'

<sup>33</sup> The various prepositional pre-verbs are signaled but not taken into account: for example, *in-gredior* and *de-grdior* are under the same lemma. Accounting for those variants under account would enlarge the set of deponents to more than 700 items.

```
Qua ante rumpebar. (Cic. ad Q. fr. 3, 7, 1) which.ABL before break.3<sup>RD</sup>SG.IPFV.MID 'From which, before, I was broken.'
```

The event described in (7) is agentive and the external argument (*ego* 'I') is in control of it. The occurrence of the Middle morphology (-r) does not seem to be related to a non active event. In (8) the verb hasActive morphology, *rumpit* 'he breaks' and is part of an active event in which, just like in the previous example, there is an agent controlling it. In (9) the same verb (*rumpebar* 'I was broken') appears with the Middle morphology and, consequently, the event described is not Active: the subject, a 1<sup>st</sup>sg covert pronominal element, is not in control of the 'breaking' event but is the patient of it. In (9), the Middle morphology modifies the number of arguments and their "disposition" with respect to the event., demoting the agentive argument and making the patient more prominent. In (7), instead, this does not occur.

It is important to note, however, that the definition of deponency is flawed. There are questionable cases for both the proposed requirements, as some verbs fit only one of the two defining properties. With respect to the first requirement (to "give up" the active form), there is a set of verbs (I found 27 of these verbs<sup>34</sup>) alternating between the Middle morphology and the Active one without a change in meaning (e.g., *adulor-adulo* 1 flatter', *oscitor-oscito* 1 yawn', *veneror-venero* 1 worship').

```
Oscitat extemplo. (Lucr. 3, 1063)

yawn.3<sup>RD</sup>SG.PRS.ACT suddenly
'He suddenly yawns.'

(11)

Ut pandiculans oscitatur. (Plaut. Men. 834)

that stretch.PRS.PTCP.NOM.SG yawn.3<sup>RD</sup>SG.PRS.MID
'That he yawns stretching.'
```

These verbs are considered deponents because they (in their Middle alternant) follow the second requirement: the appearance of the Middle morpheme is not related to a standard middle environment. The Middle morpheme does not seem to have a function since it does not modify the

<sup>34</sup> See the appendix.

relations between the verb and the arguments' disposition, which appears the same in the Active variant. To define these verbs as deponents is clearly problematic, as the main factor is that the Active and Middle occurrences do not differ. As I will show in Section 3.4.2 this premise is not borne out: there is a clear difference between the two variants. However, until we reach Section 3.4.2, in which I will explain this difference, I will treat these verbs as deponents, following the standard grammatical classification.

There are also issues with respect to the second requirement (that the Middle morphology should not be related to a middle meaning). There is a set of 20 verbs that, with certain prefixes, alternate between the Middle and Active morphology with an opposition in meaning: e.g., revertorverto 'I come back'-'I turn' (tr.), circum/convolutor-voluto 'I roll around'-'I roll (tr.), aspernorsperno 'I despise'-'I divide'.

```
Nodosa -que robora verto. (Ov. met. 6, 690)

knobby.ACC.PL and woods.ACC overturn.1<sup>ST</sup>SG.PRS.ACT

'And I overturn knobby woods.'

(13)

Ad vos studiosa revertor pectora. (Ov. trist. 4, 10, 91)

to youACC eager.VOC.PL return.1<sup>ST</sup>SG.PRS.MID breasts.VOC

'I return to you, eager hearts.'
```

These verbs are considered deponents because they respect the first condition: the prefixed form does not have an Active counterpart (there are no cases of \*reverto, \*convoluto or \*asperno). This is problematic, because there is an unprefixed Active counterpart of these Middle verbs, with which these verbs are clearly related. As I will show in Section 3.4.1, in this case the Middle morphology is present in the Middle-related environment of the reflexive: verto 'I turn' vs. reverto 'I turn myself'  $\rightarrow$  'I go back'. Even if the boundaries of the deponent class are not so neat, there is still a strong core of deponent verbs: circa 330 considering the "troubled" cases, circa 280 not considering them.

At first glance, one can notice two relevant widespread features. The first is related to the thematic role of the arguments that are present in their event-building phase: deponent verbs usually involve an Agent/Causer. This is true for all deponent verbs except for a small but relevant group. This small group is formed by verbs whose roots are ancient (data from De Vaan 2008)<sup>35</sup>. These

<sup>35</sup> In many of these cases there are additional morphemes, including some prefixes or the -sco suffix (expergiscor 'I wake up', fatiscor 'I get tired', irascor 'I get angry', reminiscor 'I remember', nascor 'I am born', obliviscor 'I

verbs do not involve an Agent/Causer but an Undergoer (Dowty 1989, 1991; Ramchand 2008) of the event, meaning an argument that does not control the dynamicity of the event but undergoes it. These verbs are *experior* 'I experience', *expergiscor* 'I wake up', *fatiscor* 'I get tired', *irascor* 'I get angry', *labor* 'I slip', *mereor* 'I deserve', *reminiscor* 'I remember', *morior* 'I die', *nascor* 'I am born', *obliviscor* 'I forget', *orior* 'I arise', *patior* 'I suffer' and *vereor* 'I fear'. These verbs are relevant because of their high frequency, which is much higher than the frequency of the other deponent verbs. The high frequency was likely a key factor in their preservation. This small group patterns differently not only with respect to the presence of an Agent/Causer, but also with respect to other important features of the productive Latin deponent derivation, like denominality (see Section 3.3). These verbs can be further subdivided in change of state/location verbs, which involve a single argument (*expergiscor* 'I wake up', *irascor* 'I get angry', *morior* 'I die', *nascor* 'I am born', and *orior* 'I arise', *fatiscor* 'I get tired' and *labor* 'I slip') and verbs which may present a secondary argument (*experior* 'I experience', *mereor* 'I deserve', *reminiscor* 'I remember', *obliviscor* 'I forget', *patior* 'I suffer' and *vereor* 'I fear'). I propose a synchronic analysis of both the first group, along the lines of Gianollo (2010, 2014), and of the second group in Section 3.4.3.

The second widespread feature is related, instead, to the possible interpretations that the Middle morphology can have when a deponent verb is involved. As has been shown in (7), deponent verbs can be transitive and can host an Accusative argument. A transitive verb with both a normal Agent/Causer external argument and an Accusative internal one should be able to be passivized. Deponent verbs, instead, in spite of being Active, cannot be passivized<sup>36</sup>. This observation has been challenged by Embick (2000), who produces an example of a passivized deponent (Embick 2000: 194, ex. 11):

(14)
Ab amicis hortaretur. (Prisc. gramm. II, 8, p.387, 1.2)

forget'), that have a productive use in Latin, see Haverling (2000) and Section 2.2.1. The productivity of this morpheme that derives new change of state denominal and deadjectival verbs plays a relevant role and interacts with the productivity of deponent verbs, constraining the productivity of deponents (Section 3.3.5).

<sup>36</sup> A simple solution would be to say that the passive form of a deponent would be undistinguishable from the active form, being present in both the active and the passive derivation. However, this is not a proper solution: nothing prevents an ambiguous use of a specific morpheme or of a specific diathesis. For example, the active diathesis can derive both an anticausative structure and a causative structure in Italian:

i. La barca affonda.

<sup>&#</sup>x27;The boat sinks.'

ii. Lui affonda la nave.

<sup>&#</sup>x27;He sinks the boat.'

In Latin, moreover, as shown in Section 2.1.1, the Middle morphology can be present in an anticausative structure (ex. (4)), in a passive one (ex. (2)) and in a reflexive one (ex. (5)).

from friends.ABL urge.3<sup>RD</sup>SG.SUBJ.IPFV.MID 'He was urged by friends.'

This example is taken from a late grammarian, Priscianus (VI cent. CE), who quotes a sentence from Varro. To deduce from this single example that deponents in general can be passivized is not adequate. Even if Priscianus quoted Varro faithfully, this would only prove that *hortor* 'I exhort', during the early I cent. BCE, could be passivized, not that all deponents could. The appearance of a passive form can be explained in a principled way, starting from the synchronic analysis of this verb that I will present in Section 3.4.3. Even taking into consideration this single occurrence, it is a fact that the overwhelming majority of deponent verbs do not present passive occurrences. This fact must be explained and derived from a coherent analysis of these verbs.

In sum, the class of verbs identified by means of the two characteristics presented above (consistent presence of the Middle morphology and lack of a proper and transparent Middle interpretation) presents two widespread features:

- The presence of an overt agent (except for a small group of inherited verbs).
- The lack of a passive variant.

## 1.3 Argument structure

In this thesis I analyze the verbal alternations related to the Middle morphology in Latin, starting from the alternations that are considered idiosyncratic and not coherently analyzable, the deponent ones. The Middle morphology affects the number and kind of arguments related to a specific verbal event. It is able to create anticausatives, in which the agent is suppressed (see example (4)); passives, in which the agent is demoted and not prominent as in the Active variant (see example (2)); reflexives, in which the agent is identified with an internal argument (see example (5)) and impersonals, in which the agent is interpreted as arbitrarily given (see example (6)). In this section, I present the most relevant and recent approaches to the study of argument structure that have been proposed in the literature and specify my approach.

A theory of argument structure conceptualizes the relations between the verbal element and the number and kind of arguments that can be present in the actual syntactic structures involving that verbal element. A possible initial hypothesis about these relations could be to propose a "one-to-one" exclusive relationship between the verbal element and a specific syntactic argument structure. This means that each verb would have a specific argument structure, and each argument structure a

specific verbal element. This situation would produce something similar to a linguistic multiverse: since there are potentially infinite verbs, there is a potentially infinite number of argument structures, each one related to a specific verb. If this were true, there would be nothing more to understand; the linguistic endeavor would be to describe each possible argument structure evidenced in the natural languages. However, it is not difficult to dispute this "one-to-one' approach. It is possible, for example, to have a "one(verb)-to-many(argument structures)" situation (examples from Italian):

```
Gianni ha corso.
     Gianni has ran
     'Gianni ran.'
(16)
     Gianni ha corso la
                            maratona.
     Gianni has ran
                        the marathon
     'Gianni ran the marathon.'
(17)
     Gianni è corso a
                          casa.
     Gianni is ran
                       to home
     'Gianni ran home.'
(18)
     Но
                        il
                rotto
                            vaso.
     have.1stSG broken the vase
    'I broke the vase.'
```

(15)

(19)

Il

vaso si

'The vase broke.'

the vase self is broken

è rotto.

These examples show that there is something more to say with respect to the relationship between the syntactic argument structure and the verbal forms. Sentence (15) describes an event of running performed by *Gianni*. This kind of event is usually called activity, a dynamic action performed by an agent in control of the dynamicity of the event. The event is not directed toward a location/state but describes an activity performed by an argument. However, sentence (16), even if

it contains the same verbal element, describes a somewhat different event. In this case, the event of running performed by Gianni is constrained by the second argument, la maratona 'the marathon'. The running event goes on as long as the marathon, which can be considered the limit of the activity. Therefore, the focus in (16) is shifted. It is not on the action of running itself but on the more complex event of doing a marathon; correre makes explicit the way in which the agent is doing it. Sentence (17) describes a third kind of event. The verb is still the same, *correre* 'to run', but the event described is a change of location, not an activity. The focus, in this case, is on the fact that Gianni is a casa 'at home', a spatial location, while correre describes the way he gets home. In other words, the event implies a final resultative state describing the final location of Gianni: a casa 'at home'. Sentences (18) and (19) confirm the fact that the same verbal element can be used in more than one syntactic argument structure. In these two cases, the same verb, rompere 'to break', is used in a causative structure (18) and in an anticausative one (19). The first describes a causative event in which an agent, a covert 1st singular pronominal element, causes the vase to be broken, while the second describes a change of state in which the vase ends up being broken, without implying the presence of someone who broke the vase. The second event is compatible, in fact, with the PP da solo 'by itself'.

The most relevant observation is that these "one-to-many" relationships are not idiosyncratically related to a specific verb. It is possible to generalize the existence of categories of verbs behaving in a similar way. This step allows for a strong simplification and opens up the possibility of deriving structured classes of verbs.

We can observe the same "one-to-many" relationship observed for It. *correre* 'to run' for other verbs:

(20)

Gianni ha saltato. Gianni has jumped 'Gianni jumped.'

(21)

Gianni ha saltato 10 metri. Gianni has jumped 10 meters 'Gianni jumped 10 meters long.'

(22)

Gianni è saltato sul letto. Gianni is jumped onto the bed 'Gianni jumped on the bed.'

Examples (20), (21) and (22) correspond to examples (15), (16) and (17). *Nuotare* 'to swim', *strisciare* 'to crawl', *andare* 'to go', *camminare* 'to walk', *salire* 'to ascend' and other verbs exhibit part or all of this paradigm<sup>37</sup>.

The similarities between different verbs go beyond the specific category of the movement verbs. There are many verbs which describe causative events that look very similar to the event described by *rompere* 'to break', as seen in (18) (repeated here as (24)):

(23)

Gianni ha bruciato la bistecca. Gianni has burned the steak 'Gianni burned the steak.'

(24)

Gianni ha rotto il vaso Gianni has broken the vase 'Gianni broke the vase.'

(25)

Gianni ha incastrato il capo. Gianni has framed the boss 'Gianni framed the boss'

The three verbs *bruciare* 'to burn', *rompere* 'to break' and *incastrare* 'to frame' have very different meanings. The key point here is that, going beyond the lexical/encyclopedic meaning, they all describe the same kind of causative event. In each case, there is someone that acts in such a way that someone/something ends up in a specific state, may that state be being *bruciato* 'burned', *rotto* 'broken' or *incastrato* 'framed'. In each case the agent modifies the secondary argument in a specific way, causing its state to change. Other verbs, instead, do not describe this kind of change of

- i. ??Gianni è camminato a casa.
  - 'Gianni walked home.'
- ii. ?Gianni è nuotato fuori dall grotta velocemente.

For a syntactic account of these alternations and of the fact that in some languages (e.g., the Germanic languages) the change of location variant is much more acceptable than in others (e.g., the Romance languages) see Talmy (1991), Mateu and Acedo-Matellán (2012) and Acedo-Matellán and Mateu (2013, 2016).

<sup>37</sup> For some Italian speakers the change of location variant is not available for verbs like *nuotare* 'to swim' and *camminare* 'to walk', while for other speakers it is acceptable:

<sup>&#</sup>x27;Gianni swam quickly out of the cave.'

state event. For example, *correre* 'to run' and *saltare* 'to jump' in (15) and (20) do not describe any change in the state of a specific argument: they only describe an activity performed by an agent.

The fact that many verbs share the same event type shows that there is a general semantics of the event that goes beyond the lexical meaning of the verb. This observation calls for an ontology of the linguistically relevant events<sup>38</sup>. The lexical verbs are organized in general classes. The meaning of the lexical verbs forming a specific class relates in a specific and usually consistent way with argument structure.

Scholars have taken a variety of approaches to solve these issues in a principled way. One of the most relevant problems is to find the correct boundary between the idiosyncratic meaning of the verbs and the grammatically relevant meaning encoded by the syntactic structure: we need a list of universal events that allow for the building of the entire set of possible argument structures attested in natural languages (on this issue, see Ramchand 2015b). Once we compile a list of the universally relevant events, another relevant issue is that we must then understand where this relevant meaning is encoded. Is it encoded in the lexical elements and reflected by the syntactic component or is it part of the syntactic-semantic mechanism and the verbs are devoid of any relevant/grammatical meaning? In other words, does the speaker derive the syntactic event structure starting from a highly specified lexicon projecting the relevant events or does she build the event structure autonomously from the lexical elements, which are then paired with the autonomously built event structure<sup>39</sup>? How can the different accounts deal with the variation observed in (20)-(22)? In the next paragraphs I propose a brief outline of the various approaches.

One of the first approaches to argument structure was proposed by the Generative Semantics field in the 1960s. In this approach, which relies on the D(eep) structure vs. S(urface) structure opposition, argument structure is a syntactic realization independent from the requests of the lexical verb. The lexical verb is the actual Surface realization of the syntactic structure, but the meaning of the verb is conveyed by the Deep syntactic structure. The English verb *kill*, for example, is analyzed as the Surface realization of the complex Deep syntactic structure "CAUSE to DIE". The verb is

- i. John runs
- ii. John runs the marathon
- iii. John runs home

<sup>38</sup> The different kinds of events are cross-linguistically attested. For example, English shows an alternation that is similar to the one observed for Italian movement verbs:

<sup>39</sup> The pairing between lexical elements and syntactic event structures can be achieved by different means. I will propose, following the categorization of Haspelmath (1993), a fluid usage based pairing (see Section 2.2.6), in which the use of a specific lexical item drives the categorization of that lexical item under a certain category that is then paired with a set of possible syntactic event structures. I call this pairing "fluid" because it allows for frequent recategorizations of the lexical items. Since this recategorization does not tamper with the grammatically relevant meanings but only with a usage based and porous categorization (the speaker does not have to modify a lexical item endowed with features that allow for the projection of the events), the lexical verbs are predicted to be flexible.

decomposed in more primary elements that build its final meaning. The phonological verb *kill*, then, is nothing more than the S-structure realization of a D-structure composed by the more basic CAUSE to DIE elements (see Fodor 1970 for a reaction to this proposal). This approach proposes a first attempt to explicitly express the boundary that divides the grammatically relevant meaning and the idiosyncratic one. The primary and relevant meaning comes from the syntactic component, not from the lexical item, which is simply an S-structure reflection of the first one.

In the late 1970s and 1980s, argument structure began to be analyzed through the syntactic mechanism called 'the Projection Principle' (Jackendoff 1972, Chomsky 1981). In this framework (known as Government and Binding, from Chomsky 1981) the lexical item selects for the number and kind of arguments by means of subcategorization frames. A lexical verb, *kill*, for example, subcategorizes for two arguments (two NPs in this case<sup>40</sup>) and projects these arguments in the syntactic positions made available by X' theory: the specifier position and the complement position. In this framework the relevant information – the subcategorization frames – is stored in the lexicon and projects onto the syntax. This approach struggles when faced with variations like (20)- (22): It. *correre*, 'to run', following this approach, should have more than one subcategorization frame, since it can appear in more than one syntactic structure. To overcome this problem, which would lead to an undesirable proliferation of subcategorization frames, the standard solution is to adopt lexical rules that, operating on the lexical elements directly in the lexicon, modify the basic subcategorization frame creating the other, derived, ones.

The approach presented in the previous paragraph has been frequently labeled "projectionist" or "lexicalist", meaning that the lexical unit carries the burden of structuring the verbal event and the number of arguments. This lexical unit, then, projects into syntax. Levin and Rappaport-Hovav (1995, 2005) build on the conclusions drawn from this approach and present a more structured proposal. The subcategorization frames are rethought in light of the proto-roles proposed by Dowty (1989, 1991) and restructured in order to include an ontology of primary meanings that were absent in the Government and Binding approach<sup>41</sup>. The system is organized on two levels: a lexical-semantic one and a lexical-syntactic one. At lexical-semantic level, the verbal entry is internally structured, as one can see in the lexical-semantics of the Spanish verb *romper* 'to break' (example from Koontz-Garboden 2009):

(26) [[romper]] =

<sup>40</sup> A verb can also subcategorize for a PP. E.g., En. wait subcategorizes for a PP object.

<sup>41</sup> In the Government and Binding approach there is no event decomposition in primary concepts like CAUSE or STATE. The various verbs select for a specific syntactic configuration with a specific number of arguments.

 $\lambda x \lambda y \lambda s \lambda e \text{ [Ty [CAUSE(v, e) " EFFECTOR(v, y) " BECOME(e, s) " THEME(s, x) " not-whole(s) ]]}$ 

The primary events that build this lexical-semantic entry are CAUSE and BECOME. The verb romper calls for an event (e) describing a THEME argument (x) coming to be in the state 'notwhole' (s) because of a CAUSE event (v). In the CAUSE event (v) another argument (EFFECTOR) is involved (y). The actual syntactic reflection of the lexical-semantics is the lexical-syntactic level, the level at which the real argument structure is built. The lexical-semantic level and the lexical syntactic level are differentiated for good reason, as illustrated by the examples in (20)-(22). From a Lexicalist point of view, the lexical entry for [[saltare]] 'to jump', is one. This single lexicalsemantic entry gives rise to three different actual syntactic argument structures: a "one-to-many" relationship. The mapping between the lexical-semantic level and the lexical-syntactic one, then, is not trivial and a differentiation between the two levels is needed. The solution proposed by the Lexicalist approach to solve this "one-to-many" mapping strongly resembles the solution adopted by the Government and Binding approach: lexical rules. Lexical rules act on specific classes of lexical-semantic denotations and derive secondary lexical-semantic entries. These derived lexicalsemantic entries, then, map to the actual lexical-syntactic level, giving rise to the observed variation. In sum, in the Lexicalist approach the boundary between the grammatically relevant meaning and the idiosyncratic meaning is constituted by an ontology of primary concepts, like CAUSE and BECOME. This semantically relevant meaning is, as in the Government and Binding approach, stored in the lexicon. The syntax is the mirror image of the lexical-semantic entries. This approach accounts for the observed variation by means of a series of lexical rules.

In the 1990s the Constructivist framework developed, a theoretical approach that reconsiders the proposals posited by Generative Grammar in the 1960s (Hale and Keyser 1993, 2002<sup>42</sup>; Marantz 2005, 2013b; Borer 2005; Ramchand 2008; Harley 2011; Mateu and Acedo-Matellán 2012; Acedo-Matellán and Mateu 2013; Borik and Mateu 2014, Cuervo 2014a, 2015)<sup>43</sup>. In this framework, the

<sup>42</sup> A further differentiation is in order, as Jaume Mateu correctly pointed out to me. Hale and Keyser propose an approach that underlines the relevance of the structural constraint for the realization of the verbal argument structure (they propose a set of structures that should constrain the possible verbal phrases that may occur in a natural language, meaning that argument structure is constrained by syntax), but they do not divorce functional structure and lexical items. In their analysis, it is the lexical item that projects into syntax. An approach like the one proposed by Borer or Harley, on the other hand, fully divorces the semantic content of the lexical items from the syntactic derivation. The syntactic derivation is driven by the subsequent merge of functional heads and the lexical items do not project in any sense.

<sup>43</sup> A note on this term: we must distinguish between the syntactic Constructivist approach and the cognitive approach, known as Construction Grammar (Goldberg 1995). In the syntactic approach the event structures are built in syntax by means of the sequential merging of syntactic heads (taken from a small universal set). In Construction Grammar, instead, there is no syntactic mechanism: the constructions are treated as unitary, cognitively relevant, elements, syntax is not relevant to their make-up.

meaning of the lexical verb (the encyclopedic meaning) is divorced from the meaning of the event. There is an ontology of universal syntactic heads, and the event meaning is derived by means of the sequential merge of these heads. The lexical verb is adjoined to this autonomous structure and does not project events or arguments. For example, in sentence (15)-(17), the idiosyncratic meaning of the lexical verb correre 'to run' does not project the relevant syntactic argument structure in which it is present. The argument structures are made available by the syntactic component, mediated by some language specific constraints on the availability of these structures, and are not grammatically related to the *correre* lexical entry. The speaker creates the relevant meaning starting from the syntactic heads, merged together. The lexical entry is adjoined to these heads but does not modify the syntactic skeleton made available by the syntactic component. In this approach, then, since there is no primary eventive meaning derived from the lexical entry, the three structures in (15)-(17) are not derived one from the other: the three structures in (15)-(17) are made equally available by the syntactic computation, independent of the lexical entry related to the verb *correre*. The lexical entry is a cluster of encyclopedic meanings arbitrarily associated to it and is not a structured entity. However, the idiosyncratic meaning of the lexical verb (*correre*) must have some sort of relevance, or each lexical element could be present in each eventive syntactic structure. A possible solution is to propose that, even if a specific lexical element does not project the event and the arguments related to it, must still be compatible with the event itself. In other words, the lexical-encyclopedic semantics of a specific verbal element is not compatible with each possible argument structure. For example, the lexical-encyclopedic meaning arbitrarily associated with the lexical verb to die is not compatible with a causative syntactic structure.

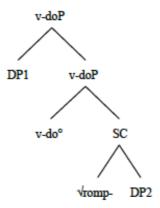
(27)

\*John died Mary.

Let us review the differences between the Lexicalist and Constructivist approaches. While both approaches have an ontology of universally available events, the difference is the domain at which these ontological elements are manipulated. In the Lexical approach, these elements are manipulated at a pre-syntactic Lexical level that then projects into syntax, while in the Constructivist approach these ontological elements are directly manipulated at the syntactic level. The Constructivist approach does not consider the Lexicon a relevant mechanism of event construction, reserving event construction to the syntactic component. To see these two different mechanisms in action, one can compare the Lexicalist derivation in example (26) with a Constructivist one. The Lexicalist derivation involves as a starting point a complex lexical entry:

[[romper]]. This complex lexical entry already provides the speaker with the input needed to derive the syntactic structure. In a possible Constructivist derivation of the same sentence (on the basis of a similar example in Mateu (2014) p.3 ex. 4) the same event is built by means of the sequential merging of two syntactic phrases, a resultative/stative one (S(mall)C(lause)), in which an argument (DP2) is directly related with the state described by the lexical element √romp-<sup>44</sup>, and a dynamic one (v-doP<sup>45</sup>), that introduces into the derivation a dynamic event of "doing", in which another argument (DP1), the "doer", is introduced:

(28)



The event semantics is the same described for the lexical structure in (26). The difference is that in this case it is built by means of the syntactic merge of different elements and by means of the structural relations instantiated between these elements. In the Lexicalist derivation, instead, the event is built by means of the structured denotation of the lexical entry: syntax just mirrors this denotation. The structural relations are relevant in a purely syntactic approach. The BECOME event, for example, is not an autonomous phrase, but is derived by embedding a stative phrase (SC) under a dynamic one (v-doP). The embedding of a stative SC event under a doing dynamic one leads to a change of state interpretation: the doing event brings the state into existence. Another important difference is that the syntactic heads proposed are autonomous one from the other, meaning that each phrase can occur by itself. For example, the CAUSE part of the denotation of [[romper]] in (26) cannot occur by itself, as a CAUSE event without a caused one is meaningless. Its Constructivist corresponding phrase, instead, v-doP, is fully autonomous. A v-doP denotes a dynamic controlled event that, by itself and without an embedded stative phrase, derives a simple

<sup>44</sup> For the root's status see the next paragraph.

<sup>45</sup> For a deeper analysis of the  $v^{\circ}$  see Section 2.2.1 .

activity event (e.g., John swims).

Up to this point I have focused on the creation of the general meaning of the event. Let us now take a look at the verb itself and at the mechanisms that create its actual morphophonological form. There are two relevant possibilities: Incorporation and Conflation (Mateu and Acedo-Matellán 2012; Haugen 2008, 2009). The mechanism of Incorporation derives the verbal form starting from an element already present in the syntactic derivation, incorporating it into the nearest verbal head. This option is supported with many examples in Hale and Keyser (2002):

(29) John shelved the books.

Example (29) describes a locative relation between a Figure (*books*) and a Ground (a shelf). The verb is formed by means of the Incorporation of the nominal Ground itself *shelf*  $\rightarrow$  *shelved* into the verbal head. The lexical element that forms the verb is an argument of the event itself.

In many cases it is impossible to derive the verb by Incorporation of an argument of the event. For example, the Italian verb *correre* 'to run' cannot be derived from the corresponding noun *corsa* 'a run'. The same is valid for *dormire* 'to sleep', whose corresponding noun, *dormita* 'a sleep', is derived from the verb itself<sup>46</sup>. In these cases the verb is built by means of the Conflation of a Root element ( $\sqrt{}$  henceforth) into the verbal head. Conflation means that the  $\sqrt{}$  is directly adjoined to a verbal head<sup>47</sup>. In the two cases just presented, It. *correre* 'to run' and *dormire* 'to sleep', the  $\sqrt{}$ s conflate into the verbal head v-do°:

```
    v-do° + √corr- ('run') → a controlled dynamic "doing" event of running.
    v-do° + √dorm- ('sleep') → a controlled dynamic "doing" event of sleeping.
```

The relevant fact is that the Conflation mechanism provides the verbal head with an additional lexical-encyclopedic meaning coming from the  $\sqrt{}$ , but the event remains the same, as in both cases we are still dealing with the same v-doP event. This v-doP, by itself, derives an activity event meaning 'to run' and 'to sleep'; if the same v-doP, instead, is merged with other phrases, the final interpretation changes.

<sup>46</sup> A case of nominalization. For the nominalization process see Alexiadou (2001) and Harley (2009).

<sup>47</sup> For a different approach in which  $\sqrt{s}$  can project their own XP ( $\sqrt{P}$ ) see Harley (2014a, 2014b), for an argument against that proposal see Alexiadou (2014).

The status of the  $\sqrt{}$  is a major point of debate in the Constructivist framework<sup>48</sup>. Up to this point I have uncritically adopted a version in which the  $\sqrt{}$  is devoid of any information that is relevant for the syntactic and phonological component, but there are at least three different approaches (for an overview, see Harley 2014a and the other papers in the same issue of *Theoretical Linguistics*). In the first approach, the  $\sqrt{}$ , as already presented, may be considered devoid of any phonological and semantic-syntactic features readable by the other components of the grammar (syntax and phonology). In the second approach, the  $\sqrt{}$  may be considered devoid of semantic-syntactic features but endowed with phonological instructions. In the third approach the  $\sqrt{}$  may be considered endowed with semantic-syntactic instructions too. Harley (2014a) introduces into the syntactic derivation completely unspecified  $\sqrt{}$ s<sup>49</sup>. Syntax, thus, can only "see" an unspecified element that, in principle, could be used in any syntactic derivation. There is no narrow syntactic constraint on the use of a specific  $\sqrt{}$ s it can be used in any syntactic environment. However, the use of specific  $\sqrt{}$ s must be constrained in some way: an internally caused verb (labeling from Haspelmath 1993), ex. *bloom*, cannot be merged in a causative derivation:

(31) \*John bloomed the flowers.

In the same vein, an externally caused verb (ex. kill) cannot enter a change of state derivation<sup>50</sup>:

(32) \*John kills.

Even if the  $\sqrt{\ }$  is not readable by the syntactic and semantic components, there must be a constraint that allows the speaker to use a specific  $\sqrt{\ }$  only in specific environments. In this approach this constraint comes from the post syntactic LF computation. A  $\sqrt{\ }$ , being semantically and phonologically empty, is identified with a number, for example  $\sqrt{\ }77$ . Since it enters the derivation as a number, it does not constrain in any possible way the syntactic and semantic components (or the phonological one). This numbered  $\sqrt{\ }$  is related, post-syntactically, to a specific lexical-encyclopedic semantics. This semantics is paired with the syntactic structure resulting from the derivation. The LF provides a specific interpretation for each syntactic environment listed in the lexical-

<sup>48</sup> In the Lexicalist approach the notion of the  $\sqrt{}$  is not relevant, since the syntactic structure is built starting from complex lexical entries and does not involve  $\sqrt{}$ s.

<sup>49</sup>  $\sqrt{s}$  are identified by numbers and neither phonology nor semantics enters the derivation. E.g.,  $\sqrt{77}$  = "throw".

<sup>50</sup> With the intended meaning [John goes to be killed/dead].

encyclopedic semantics related to that  $\sqrt{.}$  The next example has been adapted from Harley (2014a):

```
(33)

LF instructions (List 3^{51})

\sqrt{77} \longleftrightarrow "vomit" /[ v [ [ ]\sqrt{\text{[up]P]}]]vP

\sqrt{77} \longleftrightarrow "a light blanket" / [ n [ ]\sqrt{\text{[np]P]}}]

{... other meanings in other contexts ...}

\sqrt{77} \longleftrightarrow "throw" elsewhere
```

If  $\sqrt{77}$  is merged in a syntactic environment listed with a specific meaning, it will be interpreted in that specific way paired with that syntactic environment. If it is not, it will be interpreted as "throw". This accounts for the semantic variability related to the use of specific  $\sqrt{s}$ . The fact that  $\sqrt{77}$ , instead, is not compatible with an anticausative structure, for example (\*the table throws), derives from the fact that the lexical-encyclopedic semantics associated with  $\sqrt{77}$  does not get along well with the general anticausative semantics coming from the syntactic derivation. The relevant conclusion, then, is that a specific  $\sqrt{s}$  is not syntactically constrained. Sentences (31)-(32) are not ungrammatical, as a Lexicalist approach would predict<sup>52</sup>, they are just semantically odd: the  $\sqrt{s}$  lexical-encyclopedic semantics does not match the syntactic derivation in which the  $\sqrt{s}$  has been merged. It is always possible, in principle, to allow for the specific lexical-structure pairing in specific contextual environments. Harley (2014a) accounts for the variability in the use of a specific  $\sqrt{s}$  stating that the  $\sqrt{s}$  itself does not constrain the syntactic environment in which it can appear, and she accounts for the restrictions in the  $\sqrt{s}$  distribution by means of the post-syntactic  $\sqrt{s}$  lexical-encyclopedic semantics.

The approach proposed by Harley (2014a) posits completely devoid  $\sqrt{s}$ . Other approaches do not. The approach proposed by Borer (2005, 2014), for example, provides  $\sqrt{s}$  with phonological content. Borer agrees with Harley's assertion that the  $\sqrt{s}$  enters the derivation without any semantic or syntactic input, but she disagrees about the  $\sqrt{s}$  phonological status. She claims that the  $\sqrt{s}$  enters the derivation with a specific phonological template. This approach can stand only if we accept that  $\sqrt{s}$  suppletion does not exist. In Italian, for example, the verb *andare* 'to go' shows two different stems, *and*- and *vad*-:

(34)

<sup>51</sup> List 1:  $\sqrt{s}$  numbers ( $\sqrt{1}$ ,  $\sqrt{2}$ ,  $\sqrt{12}$ ,  $\sqrt{77}$  etc...). List 2:  $\sqrt{s}$  phonetics. List 3:  $\sqrt{s}$  semantics.

<sup>52</sup> In that model, as we have seen, the Lexical entry maps into syntax, and syntax cannot deviate from that specific mapping, a deviation would result in an ungrammatical structure.

1<sup>ST</sup>SG.PRS: vado; 2<sup>ND</sup>SG.PRS: vai; 3<sup>RD</sup>SG.PRS: va; 1<sup>ST</sup>PL.PRS: andiamo; 2<sup>ND</sup>PL.PRS: andate; 3<sup>RD</sup>PL.PRS: vanno; INF: andare; PTCP.PST.M.SG: andato, etc.

There is no possible phonological rule connecting one stem to the other. The only possibility, following this approach, is to state that there are two different  $\sqrt{s}$  and that they just happen to be in complementary distribution, not forming, thus, a unitary element in the speaker's mind. With respect to the constraints imposed by the  $\sqrt{s}$  to the syntactic event derivation, Borer's approach is similar to the approach proposed by Harley: the post-syntactic encyclopedic meaning constrains the possible occurrences of the specific  $\sqrt{s}$ .

Ramchand (2008) proposes yet a different Constructivist approach that does not comprehend the notion of  $\sqrt{}$ . She proposes, in a Constructivist fashion, a small ontology of argument projecting heads: Res(ultative)°, Proc(ess)° and Init(iator)°. These heads are responsible for event construction and for the arguments projected in the derivation. Res° projects a Resultee, Proc° an Undergoer and Init° an Initiator<sup>53</sup>. In her system, in addition, there is a Full Lexicalization requirement: each head must be lexicalized, meaning there must be an overt lexical element for each eventive head. In her system there are no  $\sqrt{}$ s, just lexical elements specified for the events that can lexicalize (see the example below). The lexicalization is realized by means of a "spanning" mechanism (Svenonius 2012): a lexical element lexicalizes a specific chunk ("spans") of the syntactic tree, according to the Superset Principle (Caha 2009). The Superset Principle states that a lexical element can lexicalize a syntactic chunk/span only if its features contain the features of the syntactic span, meaning that its features are a superset of the features of the syntactic span it is going to lexicalize. The competition between lexical elements that are equally able to lexicalize a specific chunk is won by the lexical element with fewer unused features.

A phonological exponent is inserted into a node if its lexical entry has a (sub)-constituent that is identical to the node (ignoring traces). (Caha 2009, p.55)

The verb *die*, for example, is lexically specified by these features:

(35) die: [proc; res]

<sup>53</sup> There are many more possibilities in her system that are not shown here. It is possible, for example, to merge an XP directly below Proc°, leading to an Undergoer-Path event (see Ramchand 2015a: 21).

*Die*, thus, will be able to lexicalize a chunk/span containing the head Res° and the head Proc°, but not a span containing the head Init°, which is not contained in its feature matrix. It is quite clear that, in this model, the syntactic derivation is not entirely autonomous from the features of the lexical element. There are two relevant differences between this approach and the Lexicalist one.

The first is the absence, in Ramchand's proposal, of an autonomous Lexicon capable of modifying the lexical elements. The second is the fact that the final event is derived by means of a small array of functional syntactic heads that is not simply the mirror image of a structured lexical entry.

In this Section I presented the approaches to argument structure that are most relevant for the purposes of this thesis. In Section 2.2.1, instead, I will specify the framework I will adopt in my analysis of argument structure variations related to Middle morphology and deponent verbs in Latin.

## 2. The Latin Middle morphology

In this Section I provide an analysis of the Latin Middle morphology, generalizing a single and unitary function for its relevant uses. To that end, I will first describe the Latin Middle morphology from a crosslinguistic perspective, proposing a parallel between its distribution and the distribution of the SE 'self' pronoun in Italian and German (based on Schäfer 2008)<sup>54</sup>. Second, I will scrutinize the most relevant hypotheses about the diachronic derivation that led to the formation of the actual phonological form of Latin Middle morphology<sup>55</sup>. Building on the conclusions drawn from the crosslinguistic and diachronic description of Latin Middle morphology I will then propose a formal syntactic analysis.

## 2.1 A cross-linguistic and diachronic perspective

#### 2.1.1 The distribution of the Middle morphology in Latin

Latin Middle morphology usually has an oppositional use. This means that, in many cases, a specific verb alternates between an Active form and a Middle form, which entails a predictable change in the structure of the event. There are four relevant cases: the passive alternation, the anticausative alternation, the reflexive alternation and the impersonal alternation<sup>56</sup>.

The passive alternation is exemplified in (36):

(36)

A me Lesbia amata mea est. (Catull. 87, 2) from me Lesbia.NOM love.PST.PTCP.NOM.SG mine.NOM.SG is

'My Lesbia has been loved by me.'

The derivation in (36) presents a demoted external argument: the Agent. This argument does not pick up the Nominative case, as it would in an Active derivation. The Nominative case is picked up by the only argument that has not been demoted: the internal one, the Patient, *Lesbia*. This argument agrees with the finite verb. The Agent is interpretively present, meaning that the linguistic

<sup>54</sup> I follow the labeling proposed by Schäfer (2008). This label refers to the pronominal reflexive elements with no specification of number or gender.

<sup>55</sup> For a view on the historical development of the Middle voice in IE, see Lazzeroni (1990).

<sup>56</sup> While many scholars add the benefactives to the set of the uses of the Middle (see Grestenberger 2014), I do so because I consider the benefactive occurrences as a subset of the reflexive uses: in both cases the external agentive argument is identified with an internal one. I will analyze this specific case when I analyze the deponents which involve the presence of an Accusative argument (Sections 3.4.3).

expression entails that there is someone that loves *Lesbia*. The Agent, in this case, is introduced into the derivation by means of a prepositional phrase (*a me* 'from me'), but it could be entirely absent as well without affecting the passive interpretation of the Middle-marked structure. The relevant observation is that in a passive derivation, the external argument, the Agent, even if it is syntactically demoted, is always interpretively present.

The anticausative derivation is exemplified in (37):

(37)

Africano illi superiori coronam sibi in convivio ad caput adcommodanti,

cum ea saepius rumperetur,

while it.NOM.F.SG many.times break.3<sup>RD</sup>SG.SUBJ.IPFV.MID

P. Licinius Varus: "noli mirari" inquit "si non convenit; caput enim magnum est!". (Cic. de orat. 2, 250)

'While Africanus, during the dinner, was putting back again on his own head the crown, since it (the crown) kept on breaking, P. Licinius Varus said: "You shouldn't wonder that it doesn't fit. In fact, you have a big head!"

Just as in (36), here the internal argument agrees with the finite verb and there is no syntactic projection of the external argument, the Agent. The internal argument, the Patient, is the only one remaining. However, there is a clear difference, between the two examples: in (37) the external argument is not interpretively present, and the event is perceived as happening by itself, without an argument initiating it, while in (36) the external argument is interpretively present and the event is perceived as having someone/something that initiates it<sup>57</sup>.

The reflexive derivation is exemplified in  $(38)^{58}$ :

(38)

Abditur Orion. (Cic, *Arat.* 462, 26) hide.3<sup>RD</sup>SG.PRS.MID Orion 'Orion hides himself.'

<sup>57</sup> In this specific case it is also syntactically realized.

<sup>58</sup> In Latin it was also possible to use a pronominal element (*se* 'self') to derive a reflexive construction. The *se* 'self' reflexives were much more common than the -*r* ones. The reason for the minor frequency of the Middle reflexives will be explained in more depth in Section 2.2.5.

In this case, the internal and the external arguments are identified, and the element that initiates the event is the same element that ends up being hidden: *Orion*. In (38), just as in (36) and (37), the internal argument agrees with the verb. The external argument, just as in the passive derivation, is interpretively present. The difference between (38) and (36) is that in (36), the external argument is interpreted as being someone/something outside the linguistic expression, while in (38) it is an argument belonging to the linguistic expression, the internal one.

The last use of the Latin Middle morpheme is in the impersonal construction:

```
Itur ad te Pseudole. (Plaut. Pseud. 453)
go.3<sup>RD</sup>SG.PRS.MID to you.acc Pseudolus.VOC
'Let us go to you, Pseudolus!'
```

In this case, there is no internal argument, as the verb *eo* 'I go' does not allow for it<sup>59</sup>. The external argument, instead, is interpretively present. The reference of this argument is usually labeled as arbitrary (Cinque 1988). In this case, the arbitrary argument is contextually interpreted as the people pronouncing the sentence. This case is different from (36): only in this case the external argument has an arbitrary interpretation and only in this case the internal argument is absent and a monoargumental verb like *eo* 'I go' can be used with the Middle morphology.

#### 2.1.2 SE 'self' pronominal elements in Italian and German, a similar distribution

As already noted, the distribution of the Latin Middle morphology is not similar to the distribution of the Passive structure in Italian, German or English. Its distribution is much more similar to the distribution of the Italian and German SE 'self' pronominal elements.

The SE pronoun, in Italian and German, can be used to derive anticausatives and reflexives:

```
(40)

Il vaso si è rotto cadendo dal tavolo.

the.vase SE is broken falling off.the table

'The vase broke falling off the table.'

(41)
```

<sup>59</sup> As I will show later (Section 3.4.3), the final location may be seen as a secondary argument, but it does not agree with the finite verb. This means that for the descriptive purposes of this Section it is not relevant.

```
Gianni si è colpito volontariamente!

Gianni SE is hit on purpose
'Gianni hit himself on purpose!'

(42)

Die Temperatur veränderte sich.
the temperature changed SE
'The temperature changed.'

(43)

Hans wäscht sich.
Hans washes SE
'Hans washes himself.'
```

Examples (40) and (42) have the same characteristics example (37). The same can be said with respect to (41)-(43) and (38).

In Italian, the SE pronoun can also be used to derive passives and impersonals<sup>60</sup>:

```
La mela si mangerà domani!
the apple SE eat.3<sup>RD</sup>SG.FUT tomorrow
'The apple will be eaten tomorrow!'

(45)

Si è andati a casa sua.
SE is gone.PST.PTCP.PL to home his
'We went to his house.'
```

In (44), the external argument is not syntactically present and the internal argument (*la mela*) agrees with the verb, just as in (36), while both (45) and (39) show an arbitrary external argument and no internal argument. There is a strong difference between (36), the Latin passive, and (44), the Italian SE-marked passive: in the Latin case, the Agent can be merged into the derivation by means of a prepositional phrase, while the same cannot occur in the Italian case.

The issue of the impersonal construction in Italian and in other Romance languages has been deeply scrutinized in the literature<sup>61</sup>. SE impersonals are not present in every Romance language

<sup>60</sup> A terminological note: with the term "passive", I refer to a structure in which an agent is interpretively present but syntactically demoted (Givón 2009). The standard Italian passive, the Italian SE structure with a passive interpretation and the Latin one, following this definition, are all passives.

<sup>61</sup> See Burzio (1981, 1986), Cinque (1988), Dobrovie-Sorin (1998, 2007), D'Alessandro (2007), Roberts (2010b),

and, even when they are present, their range of possible uses is highly variable<sup>62</sup>. It has been noted, moreover, that the impersonal function of the SE pronoun developed later compared to the anticausative and reflexive one in the Romance languages (Pescarini 2015, 2016; Cennamo 1993, 1999). This evidence calls for a differentiation between the analysis of the impersonals and of the other structures, an issue that goes beyond the scope of this thesis. For a general analysis of the *si* 'self' pronoun in Italian see Manzini (1986).

Leaving aside the impersonal constructions, there is still a core of possible uses of the Latin Middle morphology that overlaps with the uses of It. *si* 'self' and Germ. *sich* 'self': anticausatives, reflexives and SE-marked passives.

### 2.1.3 A brief overview of the diachronic analysis of the -r morpheme

The parallel between Latin Middle morphology and Italian and German SE pronouns points toward a reflexive origin of the former.

Initial analyses posited a reflexive diachronic derivation of the Latin -r form (Bopp 1866<sup>63</sup>):

(46) amatu-se > amatu-re > amatu-r

Bopp hypothesized that the reflexive pronoun se was the original Middle ending. The change -se > -re would have happened due to rhotacism, a phenomenon widely attested in early Latin (noted by Romans themselves; Varro. ling. 7, 26). The final -e, then, would have dropped, leaving only the -r behind. This hypothesis is fairly weak because of the lack of comparative depth. The discovery of similar -r forms in languages which did not know any form of rhotacism (Oscan and Celtic languages, examples in Claflin 1927) has proved this theory wrong.

A subsequent theory (Zimmer 1890; Ernout 1909) tried to link the -r not to a reflexive pronoun but to an indefinite impersonal element ('man' hypothesis<sup>64</sup>). This hypothesis requires the impersonal use of -r to be the core meaning of the morpheme. Hittite and Thocarian are two languages with -r verbal forms which do not have any relation to the impersonal. These languages, then, explicitly contradict Zimmer's proposal. Thocarian shows, instead, a relevant reflexive use of -r (examples from Claflin 1927: 172):

Pescarini (2015, 2016) and MacDonald (2017).

<sup>62</sup> See Pescarini (2016) for an overview of this problem in the context of the Northern Italian dialects.

<sup>63</sup> Vol III, § 476.

<sup>64</sup> From the German impersonal pronoun man.

```
(47)
Ayit-r.
'he gives to himself.'

Hittite, moreover, provides more data supporting the "reflexive hypothesis":

(48)
Naḥasarriya-ndari.
'they fear.' (It. 'si impauriscono.')

(49)
Es-ari.
'he sits.' (It. '(lui) si siede.')
```

These examples prove that it is plausible to propose an initial reflexive/anticausative use for the -r morpheme<sup>65</sup>: this distribution is shared by the occurrences of th -r morpheme in Latin, Hittite, Thocarian and Oscan. The impersonal use seems to be derived<sup>66</sup>.

Even if the data point to an anticausative and reflexive use of this morpheme, an actual phonological reconstruction has not found any relevant consensus. Marstrander (1919) proposes a derivation from case-forms of an abstract noun, Hrozný (1917) proposes a derivation from a neuter nominal suffix and Claflin (1927) proposes a vague derivation from a reflexive pronoun<sup>67</sup>.

# 2.1.4 A brief overview of the diachronic analysis of the other personal endings, of the infinitive and of the perfect

The Latin Middle morphology is more complex than the simple instruction "add -r to the standard personal endings". Both the  $2^{nd}$  singular and plural and the infinitive endings do not show

<sup>65</sup> See Luraghi (2012) for a deeper analysis of the valency alternation in Hittite. She proposes, due to the high frequency of *media tantum*, to analyze the Hittite Middle as a conjugation marker, which defines a semantic class of verbs. For an analysis of the Old Indo-Aryan patterns, mainly with respect to the Labile patterns (the valency alternation which do not follow from any phenotypical difference in the verbal form, see Section 2.2.5 and 2.2.6), see Kulikov (2014).

<sup>66</sup> Vendryes (1913: 135) notes this for Gothic: "Il est intéressant de signaler qu'en gotique, où le passif sort de l'ancien moyen, se trouve inversement le passage du tour personnel au tour impersonnel lorsque le verbe l'actif gouverne un autre cas que l'accusatif."

<sup>67</sup> She recognizes the vagueness of her proposal and explicitly states that the actual origin of the -r is not an interesting problem: "As regards the problem of the ultimate origin of the medio-passive suffix r, from the point of view of the present inquiry as to the nature of the Latin passive, this question, which will perhaps always be obscure, becomes immaterial." (Claflin 1927: 175).

any -r. The perfect, then, is completely different, being analytical (inflected *esse* 'to be' + past participle).

The 2<sup>nd</sup> person singular is not something like \**hortas-u-r*. It is realized, instead, by means of an alternating ending *-re/-ris*. The diachronic derivation of this ending has been widely confirmed (see Vineis 2005 for references):

(50) horta-se > horta-re > horta-ris

The form -\*se/-\*so is an ancient PIE  $2^{nd}$  person middle ending<sup>68</sup> (Skr. -se, Gr (dialectal) -oi, Goth. -za). The change -se > -re is due to rhotacism. The subsequent adjunction of -s is most likely analogical to the other Latin  $2^{nd}$  person endings in -s and the rising of -e- to -i- is a well-attested phenomenon. This derivation links the Latin  $2^{nd}$  person Middle ending directly to a common PIE Middle that supposedly had a reflexive/anticausative meaning.

The derivation of the 2<sup>nd</sup> plural ending (*horta-mini*), instead, is still quite obscure. A possible option, proposed by Bopp, is a derivation from a participial form plus an auxiliary (e.g., Gr. λεγόμενοί 'εστε). This form would have lost the auxiliary before the first Latin attestations.

The infinitive form is built by means of the adjunction of an -i to the active infinitive ending -se:

I (II and IV) conjugation: ama-se-i > ama-re-i > ama-r-i
 III conjugation: rumpĕ-se-i > rumpĕ-e-i > rump-i

The usual rhotacism applies and, supported by a vowel simplification process, derives the actual Latin forms, as (51) shows. It is worth noticing that an archaic infinitive form existed involving the *-r* morpheme: *-ier/-rier*.

The perfect forms, to conclude, are analytical. The perfect involves a past participle and an inflected form of *esse* 'to be' (e.g., *laudatus sum* 'I have been praised'). I consider the perfective forms, following Danckaert (2017: 130-133), as fully verbal from a synchronic point of view: these analytic forms represent a slot in the verbal inflectional paradigm (see Embick 2000 for an analysis of the Latin analytic perfect). The actual formal analysis of the analytic perfect in Latin is debated (see Embick 2000 for a proposal). The relevant point is the relationship that the Latin analytic

<sup>68</sup> This ending would have replaced an even older form, -\*to (Clackson 2007: 142-151).

perfect establishes between the inner resultative aspect (linked to the presence of a stative predication in the event-building phase) and the outer aspect, which characterizes the whole event as concluded. This issue will not be analyzed in this thesis, being beyond its scope.

## 2.2 The Latin Middle/-r morphology: a syntactic approach

### 2.2.1 The ontology of eventive heads, the Latin data

In Section 1.3 I presented the most relevant approaches to the analysis of the relations between the event, the arguments and the lexical part of the verb. Before going into detail I would like to introduce the general architecture of argument structure that I will adopt.

In my analysis, I follow the Constructivist framework. More specifically, I follow the Distributed Morphology approach (Halle and Marantz 1993; Embick and Noyer 2007; Harley 2005, 2011, 2014a; Marantz 2005, 2013b; Mateu 2014), in which the actual insertion of the morphological elements (usually called Vocabulary Insertion, VI) is post-syntactic and mediated by the features that are present on the syntactic heads: the morphological elements do not impose any syntactic constraint on the syntactic derivation (Halle and Marantz 1993, Embick and Noyer 2007).

If there is a strong consensus within DM about the fact that morphological elements do not project syntax and do not constrain the syntactic derivation, it is not possible to say the same with respect to the core formatives of the linguistic expressions, the  $\sqrt{s}$ . In this analysis I take a strong position on this issue, in order to see if it is adequate or not with respect to the analysis of the verbal argument structure in Latin:  $\sqrt{s}$  do not impose any restriction on the syntactic derivation, as  $\sqrt{s}$  are bundles of lexical-encyclopedic features. Consequently, since a syntactic head is always, clearly, syntactically relevant, I hypothesize that  $\sqrt{s}$  do not constitute syntactic heads and do not project  $\sqrt{P}$ s. If a  $\sqrt{P}$  is projected by a specific  $\sqrt{s}$ , the specific  $\sqrt{s}$ , then, has to be endowed with relevant syntactic features. If the  $\sqrt{P}$ , on the other hand, is considered autonomous and has a consistent feature content and semantic denotation autonomous from the  $\sqrt{s}$ , then it cannot be labeled  $\sqrt{P}$ . Its label will have to follow from its feature content and semantic denotation. In this work, then, there are no  $\sqrt{P}$ s (see Alexiadou 2014). In my analysis,  $\sqrt{s}$  adjoin to the functional syntactic heads by Conflation (Acquaviva 2008; Haugen 2009; Mateu and Acedo-Matellán 2012) and add their encyclopedic semantics to the head. The functional syntactic meaning of the head remains the same; the  $\sqrt{s}$  does not modify it.

It is quite clear that in the constructivist framework in general, and in this approach in particular, it is highly relevant to establish the array of functional heads that can project a phrase:

the event semantics is built by means of the sequential merging of these heads.

I hypothesize, following Cuervo (2014a, 2015), quite a small core of functional eventive heads. Each head denotes an event:

(52)

v-be°: stative event.

v-do°: dynamic controlled event.

v-go°: dynamic uncontrolled event.

The v-be° creates a stative event, a non-dynamic eventuality. This is not the only label that has been proposed in the literature. Ramchand (2008) calls this head res°, while other authors (see, e.g., Stowell 1981, Moro 1997) do without any head, proposing the direct merging of two XPs. This second approach labels the resulting phrase S(mall) C(lause) (see (28))<sup>69</sup>. The subject of this head is labeled HOLDER (of the state).

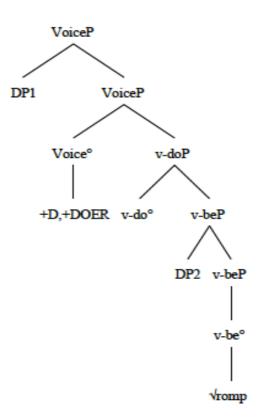
The dynamic heads specify the type of dynamic event we are dealing with. Following Cuervo (2014a, 2015), I adopt two kind of dynamic heads: v-do° and v-go°. The former conceptualizes a controlled dynamic event, while the latter conceptualizes an uncontrolled dynamic event. The subject of the controlled dynamic event is labeled DOER, while the subject of the uncontrolled dynamic one is labeled UNDERGOER. A different proposal with respect to the dynamic head has been put forward by Jim Wood (2015). In his system, there is only one v°, and the v-go°/v-do° (and possibly others) interpretations arise from the interpretation of the vP as a whole, from the interpretation of the  $\sqrt{\ }$  and of the arguments already merged. In Wood (2015), there is no explicit differentiation in the semantics of v°; the v-do°/v-go° differentiation comes from the interpretation of the entire vP. Wood's system explains the presence of different v° by means of the interpretation of other elements that are already there ( $\sqrt{\ }$ s and arguments), while Cuervo's system explicitly states the existence of different v° heads.

A compelling issue remains: how do we introduce into the derivation the actual arguments related to the eventive heads v-be°, v-go° and v-do°? Till now I have only mentioned the fact that these heads create a specific event and may merge with a complement XP and that each head is related to a specific ROLE. I still have not mentioned any syntactic mechanism that can introduce the actual HOLDER, UNDERGOER or DOER. The mechanism that introduces the arguments in

<sup>69</sup> A third relevant approach has been proposed, among others, by Ray Jackendoff (1972, 1983, 1990): the Localist Hypothesis. In this approach, spatial relations are the relevant core of the conceptualization of events. In light of this, the stative head could be seen as a Place head, in which a stative local relation exists between a Figure and a Ground (see also Acedo-Matellán 2016, Acedo-Matellán and Mateu 2013, 2016 and Mateu 2017).

the structure is related to the notion of Voice°. Voice° has been introduced in the literature by Kratzer (1996) in order to sever the external argument from the lower lexical verb phrase, VP, and from the projection of the internal argument<sup>70</sup>. In Kratzer (1996), Voice° is responsible for the actual projection of the external argument semantics (of the Agent, which in the present analysis is called DOER), and it is semantically integrated into the structure by means of Event Identification. In addition, as proposed, among many others, by Schäfer (2008), Voice° is endowed with a purely syntactic selectional feature, +D, requiring the merging of an overt +D element in its specified position (see Bruening 2013). Voice°, then, is the head that semantically and syntactically integrates the external argument in a verbal derivation. The example in (28), in light of the VoiceP proposal and of the use of a v-beP instead of a SC, becomes:

(53)



In (53), the DOER argument is introduced by Voice°, while the HOLDER argument is merged in the specifier of the v-beP. It is clear that there is an asymmetry between DP1 and DP2. The former is introduced by an autonomous head that carries a +D feature and introduces its ROLE,

<sup>70</sup> See Kratzer (1996) for an overview of the semantic evidence supporting this proposal.

while the latter is simply merged in the specifier position of the v-beP. VoiceP, in Kratzer's terms, carries the Agent features, the semantic denotation that allows for the merging of an Agent. It could be said, then, that Kratzer merges the dynamic event by means of Voice°. The VP, on the other hand, does not have any agentive features. In this framework there is no VP, intended as the lexical projection of the verbal element. Each head expresses a conceptualized event, may that event be stative, dynamic or of any other kind. It seems, then, that an overlap exists between the functions of Voice° and the functions of v-do°; both introduce into the derivation a dynamic event. It is tempting, then, to avoid the projection of Voice° and simply merge the DOER argument in the specifier position of v-doP. This way the overlap and the asymmetry between DP1 and DP2 disappear. There is a problem, though. Latin, as do many other languages, differentiates between the morphological elements that interact with the expression of the external argument and the morphological elements that lexicalize events. In Latin, as we have already seen, it is the Middle morphology that tampers with the actual projection of the external argument. On the other hand, in Latin there are many different morphological elements that mark the characteristics of the event, e.g., the  $-\bar{a}$  morpheme usually marks a dynamic controlled event (alienare 'to make something "alienus"  $\rightarrow$  'to give up something to someone else'), while the -sc morpheme marks a dynamic uncontrolled event (calesco 'I become hot'; see Section 2.2.1)<sup>71</sup>. The fact that there is a difference between the morphology that reflects a modification of the actual expression of the external argument and the morphologies that reflect the presence of a specific event in the event structure of a verbal expression and the fact that they can interact (e.g., alienatur 'it has been given up') is a hints to the presence of two different heads: the eventive heads and the head that is needed to actually introduce arguments. Given the proposed hypothesis, the only way to solve the asymmetry between the merging of DP1 and DP2 is to propose that DP2 is also introduced by means of the same argument-introducing head: VoiceP. Kratzer's VoiceP is endowed with an agent-introducing denotation and, consequently, is not adequate. If we want to propose that each argument is introduced by the same argument-introducing head, we need to generalize the function of VoiceP, in order to make it capable of introducing every possible argument. Such a proposal has been put forward by Wood and Marantz (2017). They propose to extend to the entire set of arguments the use of an autonomous head that semantically and syntactically introduces the actual argument. They call

<sup>71</sup> Latin speakers, in some cases, create compounds with *facio* 'I do', to mark a causative event (e.g., *cale-facio* 'I make something hot, I heat something up') or with the shortened variant *fico* 'I do' (e.g., *laeti-fico* 'I make someone happy'). See Mocciaro and Brucale (2016) for a coherent description of the different causativization mechanisms that are present in Latin. The relevant point, with respect to the issue under analysis, is that the causative elements (*facio* and *fico*) must be considered the proper realization of a v-do°, while the -ā morpheme is an elsewhere element, meaning that it usually marks a v-do° only because other elements are not available (it is not marked for an hypothetical [+do] feature).

this head i\*°. The features of this head include the features already proposed for Voice°, as well as additional features. This head:

(54)

- (a) is endowed with a D selectional feature: it selects for an XP of the kind DP.
- (b) has no categorial feature 72: it picks up the categorial feature of the XP it merges with.
- (c) closes off the extended projection of the XP it merges with: there can be only one argument for each head.
- (d) is endowed with unvalued  $\phi$  features: these features must be checked in its m-command domain.
- (e) In Nominative-Accusative languages, the last i\*° in the vP provides, by means of φ feature checking, Nominative case. Accusative case is dependent (Spathas et al. 2015, Sigurðsson 2004). An inherent case always overrides the syntactic case assignation (see the Case assignment algorithm in Section 2.2.4).

The syntactic feature make up of this head, then, is {[cat:\_\_] [S:D]}. This notation means that this head has no categorial feature, [cat\_\_], and that it selects (S) for an element of the kind D. If this head merges with an XP categorized as v-doP it will pick up the v-do categorial feature: {[cat: v-do] [S:D]}. The resulting phrase, then, will be labeled v-do\*P, following the proposed categorization. The syntactic [S: D] selectional feature is still there and selects for a DP. The DP is merged and the extended projection of the v-doP is closed off.

Semantically, this head introduces a contextually defined ROLE, depending on the phrase it merges with:

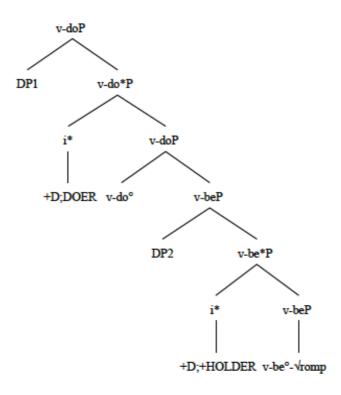
```
(55)
[[i^*]] \leftrightarrow [[\lambda x \lambda e. DOER (x,e)]] / \_v-doP
[[i^*]] \leftrightarrow [[\lambda x \lambda e. UNDERGOER (x,e)]] / \_v-goP
[[i^*]] \leftrightarrow [[\lambda x \lambda s. HOLDER (x,s)]] / \_v-beP
```

This head, i\*°, is contextually interpreted in a different way each time it is merged with a specific phrase. An i\*°, merged with a v-doP, will be interpreted as a standard Voice° and will introduce into the derivation the semantics of the DOER. On the other hand, the same head, merged with a v-

<sup>72</sup> The fact that this head has no label is relevant; otherwise, it would project its own label and would not project an argument related to the phrase with which it merges.

beP, will be interpreted as introducing the semantics of a HOLDER. We can see this more clearly in example (56), which is a reformulation of examples (53) and (28).

(56)



In (56) there is no difference anymore between the two DPs; both are merged by means of the same head, i\*°. Following the Case algorithm proposed in (55)(e), the higher DP gets the Nominative case, since it values the  $\varphi$  features of the higher argument-introducing head. The lower DP gets the dependent case (Accusative).

Let us now see whether or not Latin provides hints confirming the existence of the eventive functional heads proposed. Latin is morphologically rich when it comes to the morphological specification of the event structure. This happens more clearly when the verbal derivation does not begin with a Conflated  $\sqrt{}$  but with an Incorporated XP. This is quite expected: a derivation starting with an XP should be more coherent with respect to the verbalizing morphology than a  $\sqrt{}$ -based derivation<sup>73</sup>. The data from Latin confirm this higher coherence. The denominal and deadjectival verbs consistently show specific morphological elements in relation to specific event meanings<sup>74</sup>. In

<sup>73</sup> I am not saying that a non-denominal derivation never shows consistent patterns with respect to the presence of event-related morphemes. The point is that the chances that a synchronic denominal derivation is consistent are usually higher. For this reason, in this Section, I focus on the denominals.

<sup>74</sup> I consider as denominal/deadjectival a verb whose phonological make up is completely predictable starting from an existing noun/adjective. This is more complex when it comes to a corpus language like Latin, since there may be subtle differences that cannot be controlled. It has to be clear that I am looking at synchronic processes in which the

these environments it is possible to observe two productive morphemes: -sc and  $-\bar{a}$ . The first morpheme is present only when the denominal derivation involves an uncontrolled dynamicity, leading to a change of state of the argument; the other one, instead, is present in the other cases in which some kind of dynamicity is involved<sup>76</sup>.

- Dynamic v-go° derivation: -sc → acerbesco T become sour', altesco T become tall', vanesco T disappear', vehementesco T become violent', gravesco T become heavy', hebesco T become blunt', herbesco T become grassy', calvesco 'I grow bald'.
- Dynamic unspecified derivation:  $-\bar{a} \rightarrow alieno/alienare$  'I alienate', aspero/asperare 'I dry up', aequo/aequare 'I equalize'.

#### Schematically:

- $-sc \leftrightarrow [v-go^{\circ}] / [v-goP [v-go^{\circ}] [v-beP [v-be^{\circ}-x^{\circ}] [XP [x^{\circ}]]]]$
- $-\bar{a} \leftrightarrow [v-go^{\circ}/v-do^{\circ}] / elsewhere$

Given the Subset Principle, the -sc morpheme always outcompetes the other one when it comes to a denominal/deadjectival derivation involving a v-goP. It has to be stressed that this rule is valid only when the verbal derivation involves the Incorporation of an XP. When the derivation does not involve the Incorporation of an XP but the Conflation of a  $\sqrt{\ }$ , this rule is no longer valid. It is of note that the vowel preceding the -sc morpheme is not always -e. There are cases in which the denominal -sc derivation involves a different vowel: gemmasco 'I grow sprouts', puellasco 'I become a child', longisco,'I become long', callisco 'I become dull'. The sub-rules leading to the presence of one vowel or the other are not relevant in this context<sup>77</sup>. There are few exceptions to this rule. An example is lucrifacio 'I take advantage from something'. In this case, the denominal derivation,

noun is actually part of the syntactic derivation of the verb; I am not looking at diachronic issues. A further problem is the direction of the derivation (noun  $\rightarrow$  verb or verb  $\rightarrow$  noun), which is not always clear. Luckily, Latin is quite transparent when it comes to the morphological nominalizing or verbalizing elements, and I have taken into consideration only those cases in which the direction of the derivation is clear.

<sup>75</sup> The -sc morpheme is also present in a relevant number of non-denominal/deadjectival verbs. In some of those cases too it is used productively by Latin speakers. By means of its presence, they signal a specific event structure. Clear examples are *edormisco* 'I sleep off something', *amasco* 'I fall in love' and *cupisco* 'I strongly desire'. Each of these verbs alternates with a "-sc less" version: *dormio* 'I sleep', *amo* 'I love' and *cupio* 'I desire', with a fairly consistent relation between the -sc version and the "-sc less" one. The analysis of the reasons behind the presence of the -sc morpheme in these environments go beyond the scope of this Section, which focuses only on the denominal derivations (see Bertocci and Pinzin 2017). For more about the diachronic evolution of this morpheme in Italian and in Romance languages in general see Maurer (1951), Blaylock (1975), Kobayashi (1988) and Allen (1995).

<sup>76</sup> Haverling (2000) deeply analyzes these verbs, also with respect to their interaction with the Latin prefixes and to their aspectual characteristics.

<sup>77</sup> See Bertocci and Pinzin (2017) for a proposal with respect to this issue.

starting from *lucrum* 'income', involves a v-doP embedding a v-beP: 'I act so that something is an income'. In this case, the v-do° is realized by means of *facio* 'I do' and not by means of the  $-\bar{a}$  morpheme<sup>78</sup>. The DM machinery takes care of these cases by means of lexically specific sub-rules.

There is a third relevant event-related morpheme in Latin: the  $-\bar{e}$ . This morpheme is clearly visible in many Latin stative verbs.

Stative derivation: -ē → algeo 'I am frozen, cold', ardeo 'I am on fire', areo 'I am dry', caleo 'I am hot', candeo 'I am white, white-hot', doleo 'I am in pain', ferveo 'I am boiling', floreo 'I am in bloom'.

This morpheme, however, is no longer productive in Early and Classical Latin. All the verbs in which it appears had already been present since the III-II cent. BCE, with no new subsequent productions. This is confirmed by the fact that there are no denominal/deadjectival verbs formed by means of the  $-\bar{e}$  morpheme. Synchronically, then, this morpheme is lexically restricted to a class of verbs, and the rule of insertion has to take this into consideration:

• 
$$-\bar{e} \leftrightarrow [\text{v-be}^{\circ}] / \{\sqrt{\text{cal-}}, \sqrt{\text{alg-}}, \sqrt{\text{ferv-}}...\}$$

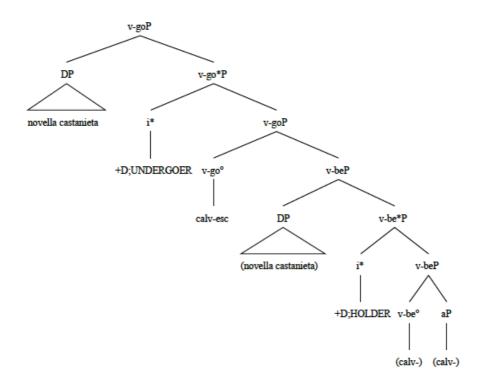
The  $-\bar{e}$  morpheme, then, appears whenever a v-be° head is involved in the derivation and the derivation itself starts from the Conflation of one of the listed  $\sqrt{s}$ . An interesting point that I will not analyze further is that if a  $\sqrt{s}$  takes the stative  $-\bar{e}$  morphology, it also usually enters into a specific paradigm: ex. *alg-e-o* 'I am cold', *alg-esc-o* 'I become cold/frozen', *alg-or* 'chill', *alg-id-us* 'chilly'. The class of these  $\sqrt{s}$ , then, had to be strongly and coherently present in the mind of the Latin speaker. The child, exposed to these consistent linguistic data, generalizes the existence of such a class.

Let us go through the two different denominal -sc and  $-\bar{a}$  derivations. The -sc morphology, as already noted, is highly specific when it comes to denominals, appearing only in [v-goP [v-beP]] syntactic environments. These verbs, then, describe a change of state; the argument undergoes a change and acquires a property related to the nominal/adjectival element that forms the verb itself. The argument, after the event takes place, changes, acquiring a new property (or advancing on the scale denoted by that property).

<sup>78</sup> This is the only case with *facio* 'I do'. All the other verbs composed by means of compounding with *facio* 'I do' are √-based, e.g. *calefacio* 'I heat up something'.

(57)

Novella castanieta calvescunt. (Colum. 4, 33) new.nom.pl chestnut.forests.nom grow bald.3<sup>RD</sup>PL.PRS.ACT 'New chestnut forests grow bald.'



The DP *novella castanieta* 'new chestnut forests' takes the HOLDER role in the lower part of the derivation. It then moves to the higher part of the derivation and acquires the UNDERGOER role<sup>79</sup>. The verbal element is formed via Incorporation of the adjectival element into the v-be°<sup>80</sup>. The verbal element then moves to the v-go°, where it gains the -*sc* morphology<sup>81</sup>. The adjectival element is part of an aP, a phrase headed by a categorizing a° head, which categorizes the  $\sqrt{}$  as adjectival

<sup>79</sup> It is not a standard assumption to hypothesize that arguments can move within the argument structure. This is a point I will re-visit in Section 2.2.6.

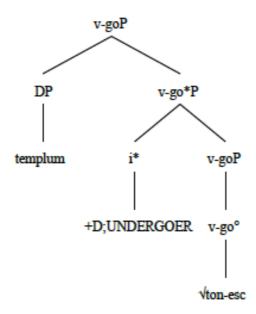
<sup>80</sup> Mateu (2017) proposes a different account of the Latin -sc verbs. He agrees on the identification of the v-go° as the relevant dynamic head involve in the derivation of the Latin inchoatives, but disagrees in the characterization of the lower part of the structure as a v-beP. He proposes to analyze the lower part of the derivation as a Central Coincidence Relation Phrase (Hale and Keyser 1993, 2002) in which the argument acquires the FIGURE role with respect to the GROUND element, the nominal part of the structure, in the complement position of the CcpP. It has to be noticed that my v-be° stands for a general stative identification relation, a relation between two entities in a spatial frame. In this respect, my v-be° is similar to the Ccp° head proposed in Mateu (2017). The relevant point discussed in this Section, anyway, concerns the higher dynamic part of the derivation, v-goP, not the lower part, since this work focuses on the realization of the arguments related to the higher dynamic part of the eventive derivation.

<sup>81</sup> A brief clarification on the notation used in the syntactic diagrams. I am not suggesting that the -sc element is actually phonologically merged in v-go°. This assumption would go against the standard assumption of the DM framework that the actual phonological spell-out comes after syntax. The notation used in the syntactic tree wants to be iconic. From a strict DM point of view, as we have said, the v-go° gets a sc- spell-out when it is present in a specific syntactic environment that involves an aP/nP result.

before the verbal derivation<sup>82</sup>. This analysis presupposes the existence of a v-go° differentiated from the v-do°. The Latin data provide support for the hypothesis that the ontologically relevant dynamic heads are two and not one (see Marantz 2005, 2013b; Wood and Marantz 2017; Schäfer 2017; Spathas et al. 2015). Further evidence for this analysis is the fact that the *-sc* morpheme is also used, even if less productively, to derive monoeventive v-go° verbs as opposed to monoeventive v-do° verbs: *lambo* 'I lick' vs. *lambisco* 'I lick', said of water on a riverside, *tono* 'thunder', also used to mean 'to speak loudly' vs. *tonesco* 'rumble', 'resound':

(58)

Tonitribus templum tonescit. (Varro, *Men.* 56) thunders.ABL temple.NOM resounds.3<sup>RD</sup>SG.PRS.ACT 'The temple resounds because of the thunder.'



In this case, the  $\sqrt{\text{conflates directly into the v-go}^{\circ}}$ , where it finds the -sc morphology. The only argument, templum 'temple', acquires the UNDERGOER role.

The  $-\bar{a}$  morpheme, on the other hand, being unspecified with respect to the kind of dynamic event involved, could be used, in principle, to derive both a v-go° and a v-do° derivation. The Subset Principle forces the speaker to use the more specific morpheme available in the relevant environment: in a denominal v-go° derivation the -sc morpheme, then, always outcompetes the  $-\bar{a}$ 

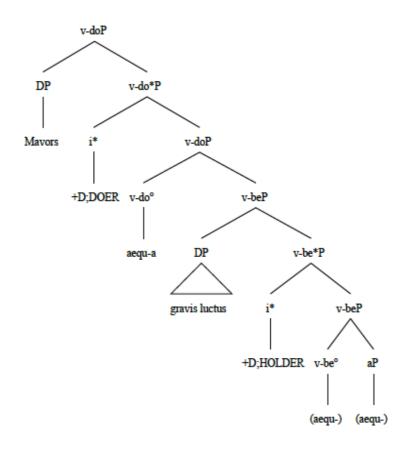
<sup>82</sup> Mitrović and Panagiotidis (2017) propose to eliminate the a $^{\circ}$  categorizing head, substituting it with a complex [ $v^{\circ}$  +  $n^{\circ}$ ] head (in the spirit of Chomsky 1970). The derivation of the adjectival category, then, would include both a verbal and a nominal part. The verbal part, taken from the point of view of this thesis, could be identified as the v-be $^{\circ}$ .

morpheme. Descriptively, the  $-\bar{a}$  morphology, when it comes to productive denominal/deadjectival derivations, is always present when a v-do° is present. It is important to emphasize that this analysis does not treat the  $-\bar{a}$  morpheme as a thematic vowel (a morphological place holder that classifies a verbal derivation as belonging to a specific class). Following this analysis, the  $-\bar{a}$  is a standard morpheme, a specific morphophonological output of a specific syntactic head. Sentence (59) is an example of a denominal causative event. In this case, the lexical verb is formed starting from the adjective *aequus* 'equal, fair'.

(59)

Iam gravis aequabat luctus
by.then severe.ACC.PL match.3<sup>RD</sup>SG.IPFV.ACT mournings.ACC
Mavors. (Verg, *Aen*, 10, 755)
Mars.NOM

'By then Mars matched the severe mournings (of both).'



The lower part of the derivation goes on as in (57). The stative eventive head v-be° is merged with an aP (aequ-, 'fair, equal'), giving rise to a v-beP with the meaning 'to be aequ-'. The aP

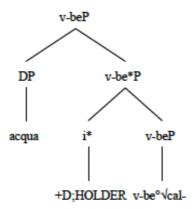
Incorporates into the v-be°, providing it with morphophonological content. The argument-introducing head, i\*°, allows for the merging of the HOLDER of the state of being *aequ*- 'fair, equal', the DP *gravis luctus* 'severe mournings'. The higher part of the derivation is different. A different head, v-do°, is merged, and, consequently, the semantics of the event is also different. In this case, there is a controlled dynamic event, v-doP, that leads to the rise of the state described by the v-beP. The event, then, is causative. The DOER argument, *Mavors* 'Mars', is merged by means of the usual argument-introducing head, i\*°. This last operation closes the derivation of the event.

The  $-\bar{e}$  morpheme is not productive in Early and Classical Latin, but on a specific group of  $\sqrt{s}$  it consistently appears whenever the event describes a stative event. The class of the verbs marked by this morpheme includes, among others, *algeo* 'I am frozen' / 'cold', *ardeo* 'I am on fire', *areo* 'I am dry', *caleo* 'I am hot', *candeo* 'I am white, white-hot', *doleo* 'I am in pain' \*83, *ferveo* 'I am boiling', *floreo* 'I am in bloom' etc:

(60)

Aqua calet: eamus nunc intro, ut water.Nom is.hot. $3^{RD}$ SG.PRS.ACT go. $1^{ST}$ PL.SUBJ.PRS.ACT now in so.that laves. (Plaut. *Bacch*. 105) wash. $2^{ND}$ SG.SUBJ.PRS.ACT

'The water is hot: let us go in so that you can wash.'



In this case, the derivation is not deadjectival. Since every denominal/deadjectival derivation, to be considered as such, has to be synchronically productive, and the morpheme  $-\bar{e}$  is not productive, it follows that there are no denominal/deadjectival derivations involving the  $-\bar{e}$ 

<sup>83</sup> This verb also acquires a transitive meaning 'I put someone in pain' and a dynamic-intransitive 'I complain'.

morpheme. The  $\sqrt{(\sqrt{\text{cal-}})}$  directly Conflates into the v-be° and adds its encyclopedic semantics to the stative grammatical meaning of the head itself<sup>84</sup>. The result of this operation is the complex head  $[\text{v-be°} \ \sqrt{\text{cal}}]$ , that denotes a stative event of being (in relation with the encyclopedic meaning of)  $\sqrt{\text{cal}}$ . This stative head takes a DP argument by means of the argument-introducing head i\*°, that in the v-beP context introduces a HOLDER role. It would be possible to object that, in these cases, synchronically, the speaker does not recognize the  $-\bar{e}$  as a morpheme, since there is no record of an active use of this morpheme by Latin speakers. Taking this objection seriously, then,  $cal\bar{e}$ - should be analyzed as the specific phonological form that  $\sqrt{\text{cal}}$  takes when it is merged in a stative verbal derivation. The relevant point is to understand whether the  $-\bar{e}$  morpheme is stored in the speaker's mind as a specific and contextually constrained morphological realization of v-be° or not. In any case, even if the answer were negative, there is substantial evidence that such a stative morpheme was previously active, given its presence within a group of  $\sqrt{\text{s}}$  that have a consistent relation with the stative verbal derivation.

A final note on the  $-\bar{e}$  derivations: these verbs always denote Davidsonian states. Davidsonian states do not only describe the fact that an entity is in a stative relation with a specific property (as, for example, *John is tall*, which simply puts John within the entities which are in possession of the property denoted by *tall*), but also the fact that this relation is eventive, meaning that it has a specific location in time and space:

(61) John is sleeping.

The fact that these Latin structures denote Davidsonian states is confirmed by the fact that these stative verbs can be modified by temporal and spatial adverbial modifiers:

(62)

Late longe-que transtros nostros fervere. (Naev. *trag.* 52) widely long-and transoms.ACC our.ACC.PL be.boiling.INF.PRS.ACT 'Our foams boiled widely and for a long time.'

We have seen that Latin confirms the existence of at least three eventive heads: v-go°, v-do° and v-be°. This is supported by the fact that Latin shows the presence of three specific morphemes,

<sup>84</sup> The  $\sqrt{\ }$  cannot be analyzed as a nominal element (nP or aP) that incorporates into the head v-be°, since the corresponding adjective is *cal-id-us* 'boiling' and the corresponding noun is *cal-or-em* ('heat.ACC').

-sc,  $-\bar{e}$  and  $-\bar{a}$ , which correspond to the derivation of v-go° verbs, v-be° verbs and v-do°/v-go° verbs. The last morpheme,  $-\bar{a}$ -, is the most productive. It is unspecified with respect to the exact type of verbal dynamic head involved. The production of new denominal/deadjectival verbs follows an incorporation mechanism (Acedo-Matellán and Mateu 2013; Haugen 2008, 2009).

In the next Sections, I propose an analysis of the Latin Middle morphology.

### 2.2.2 The core of the Middle morphology: anticausatives, reflexives and passives

Let us briefly recap the main descriptive characteristics of the Latin Middle morphology from the point of view of its distribution and historical evolution. The distribution of this morphology overlaps almost completely with the distribution of the SE element in Romance languages and German. The differences, as already noted (Section1.1.3), are related to the use of this morphology in the impersonal and passive structure; German does not use the SE element to derive impersonal constructions and the same can be said about Old Italian (Pescarini 2016, Cennamo 1993, 1999). The impersonal use of SE is a late development. The core use of the Middle morphology and of the SE element is the derivation of anticausatives, reflexives and middle-passives<sup>85</sup>. The data that we have about the presence of the *-r* morphology in other languages (e.g., Hittite, Tocharian and Celtic; see Claflin 1927) point toward the same analysis: the core function of the *-r* morpheme is to derive anticausatives, reflexives and passives. The same can be said about the 2<sup>nd</sup> person form *-rel-ris*, which is directly derived from a secondary PIE middle form used to derive the same set of constructions. No conclusion, however, has been made regarding the historical reconstruction of the original element from which the *-r* derived; a derivation from a reflexive pronoun has been proposed (Claflin 1927) but is highly speculative.

To properly define the Middle morphology, one has to understand what anticausatives, reflexives and passives have in common and if it is possible to propose a unitary definition of the Middle morphology that applies to these three different interpretations. In this section I explain the general descriptive features of these three structures, comparing the Latin, Italian and German cases.

The term anticausative does not refer to a specific structural feature but to a relation between the structural features and the characteristics of the lexical verb. An anticausative verbal structure is a change of state structure that involves a  $\sqrt{}$  that can also be present in a causative derivation (e.g., En. *break*). The relevant structural features of an anticausative derivation, then, are the features of a

<sup>85</sup> Some languages, like Ancient Greek, Hebrew, Arabic, Fula, Icelandic, present both the Middle morphology and a more specialized Passive one. For an analysis see Alexiadou and Doron (2012). Since Latin does not show a specific morphological element for the Passive interpretation I do not deepen this issue.

change of state derivation. In a change of state derivation, a single overt argument ends up being in a specific state because of a dynamic event that it does not control. This argument, then, is the HOLDER of that state. In a causative derivation, instead, there are two overt arguments: the argument that ends up being in a specific state and the argument that initiates the dynamic controlled event that brings the state into existence. The first argument is the HOLDER of the state, while the second is the DOER that controls the dynamic event. In a change of state derivation, the single overt argument agrees with the finite verb and gets Nominative case. In a causative derivation, instead, the DOER agrees with the finite verb and gets Nominative case, while the HOLDER gets Accusative case. In Italian, German, Modern Greek and Latin (data from Schäfer 2008), there are two kinds of anticausatives: those which include an overt marker in the anticausative alternant and those that do not. The first kind of anticausatives is usually defined as "marked", while the latter as "unmarked". The unmarked anticausatives are often called Labile (Gianollo 2014, Kulikov 2014, Cennamo et al. 2015). The overt marker is the Middle morphology in Modern Greek, the SE pronominal element in Italian and German and may be both the Middle morphology and the SE pronominal element in Latin. Let us see some examples for the SE-marked, the unmarked and the Middle marked derivations<sup>86</sup>.

SE-marked anticausatives:

```
(63)
    Il
         telefono si
                        è
                           rotto.
    the phone
                   SE is broken
    'The phone broke.'
(64)
    Gianni ha rotto
                         il
                             telefono.
    Gianni has broken the phone
    'Gianni broke the phone.'
(65)
    Die Tür öffnete sich.
    the door opened SE
    'The door opened.'
(66)
    Johann öffnete
                            die Tür.
    Johann open.3<sup>RD</sup>SG.PST the door
```

<sup>86</sup> I do not report Modern Greek examples (see Spathas et al. 2015).

```
'Johann opened the door.'
(67)
     Lutamenta
                  scindent
                                       se. (Cato, agr. 128)
     plasters.NOM crack.3<sup>RD</sup>PL.FUT.ACT self
    'The palasters will crack.' (ex. (12a) from Cennamo et al. 2015)
(68)
     Scindunt
                         proceres
                                      Pergamum. (Plaut. Bacch. 1053)
     crack.3<sup>RD</sup>PL.PRS.ACT nobles.NOM Pergamum.ACC
    'The nobles destroy Pergamum.'
Unmarked anticausatives:
(69)
     La nave è affondata.
     the ship is sunk
    'The ship sank.'
(70)
     Gianni ha affondato la nave.
     Gianni has sunk
                            the ship
    'Gianni sank the ship.'
(71)
     Die Oberfläche verdreckte.
     the surface
                      dirtied
    'The surface got dirty.' (ex. (17a) from Schäfer and Vivanco 2016)
(72)
     Das Kind verdreckte die Oberfläche.
     the child dirtied
                             the surface
    'The child dirtied the surface.' (ex. (17b) from Schäfer and Vivanco 2016)
(73)
     Irae
                 leniunt. (Plaut. Mil. 583)
     angers.NOM soothe.3<sup>RD</sup>PL.PRS.ACT
    'Anger soothes.' (ex. (19a) from Cennamo et al. 2015)
(74)
                              lenit. (Ov. fast. 4, 597)
     Iuppiter
                   hanc
```

```
Juppiter.NOM this.ACC soothe.3<sup>RD</sup>SG.PRS.ACT 'Juppiter soothes this (love pain).'
```

#### Middle-marked anticausatives:

(75)

In aure quoque interdum rumpitur cartilago. (Cel. *Med.* 8, 6) in ear.ABL also sometimes break.3<sup>RD</sup>SG.PRS.MID cartilage.NOM 'Also in the ear the cartilage breaks sometimes.'

(76)

Olli somnum ingens rumpit pavor. (Verg. *Aen.* 7, 458) he.DAT sleep.ACC great.NOM.SG break.3<sup>RD</sup>SG.PRS.ACT fear.NOM 'A great fear breaks his sleep.'

As will be clear later (Sections 2.2.5 and 2.2.6), the use of the unmarked, SE-marked or Middle-marked strategy does not affect the fact that we are dealing, in each case, with the same alternation and with the same event structure: a change of state structure vs. a causative one. The relevant fact is that the change of state structure "loses" the DOER argument while maintaining the HOLDER argument. The Middle morphology, the target of this investigation, is a way of achieving the deletion of the DOER argument.

The second structure in which the Latin Middle morphology can be involved is the reflexive structure. I adopt a broad notion of reflexivity: a structure is labeled reflexive if there is an identification between a DOER argument and a lower one<sup>87 88</sup>. The relevant fact about reflexives is that, just as in the case of anticausatives, there is only one referential argument. In the case of reflexives, the only argument acquires both the DOER role and a lower one, while in the case of anticausatives it does not<sup>89</sup>. The verb agrees with the only referential argument present, as in the anticausative structure. In Latin, the reflexive structures are always marked and the marking element may be the Middle morphology or the SE pronoun<sup>90</sup>. In Italian and German, the reflexives

<sup>87</sup> The concept of reflexivity is different from the concept of anticausativity. It does not refer to an active-reflexive relationship, it is valid by itself. The concept of reflexivity, then, is not relational.

<sup>88</sup> This definition also covers also the low benefactives (low applicatives, Pilkkänen 2008), in which the benefactive argument is merged in a lower position and is coreferential with the DOER argument. We will see in Sections 3.3.3 and 3.3.4 that these structures are relevant for the analysis of a specific type of deponent.

<sup>89</sup> In Section 2.2.6 I propose that also in the case of anticausatives the only argument covers two thematic ROLES: the HOLDER and the UNDERGOER.

<sup>90</sup> This is not true for every language. In English, for example, there are some constrained cases in which the reflexive structure is not marked:

i. John washes

are always marked by means of a SE pronoun. Let us see some examples.

SE-marked reflexives:

poliuntur. (Plaut. Poen, 217)

 $smooth.3^{RD}SG.PRS.MID$ 

```
(77)
    Luca si è colpito.
    Luca SE is hit.PST.PTCP
    'Luca hit himself'
(78)
    Thomas sich umbringt.
    Thomas SE kills
    'Thomas kills himself.'
(79)
    Ita vorsipellem se
                           facit. (Plaut. Amph. 121)
    so changing.ACC self do.3<sup>RD</sup>SG.PRS.ACT
    'So he changes whenever he wants.' (lt. 'So he makes himself changing')
Middle-marked reflexives:
(80)
                  semper ornantur
                                               lavantur
                                                                   tergentur
    quae
```

The reflexive construction, then, different from the anticausative one, involves a DOER.

'Who always adorn, wash, scrub and smooth themselves.'

who.nom.pl.f always adorn.3<sup>RD</sup>PL.PRS.MID wash.3<sup>RD</sup>PL.PRS.MID scrub.3<sup>RD</sup>PL.PRS.MID

The third environment in which the Middle morphology can be present is the passive structure. In a passive structure, the DOER argument is demoted and an internal argument becomes the more prominent element, agreeing with the finite verb<sup>91</sup>. The demoted DOER is always interpretively present and referentially disjunct from the lower argument that agrees with the finite verb. The first characteristic differentiates the passive structure from the anticausative one, in which the DOER argument is entirely absent. The second characteristic differentiates the passive structure from the

<sup>91</sup> This definition belongs to the functionalist field (see Gildea 1997, 2014; Givón 2009), in which the identification of different functions that go beyond the formal syntactic and semantic computation is relevant. This definition, in this context, is only needed in order to clarify the domain of the analysis; it has no impact on formal analysis, that will differentiate the various "passive" structures from a formal point of view.

reflexive one, in which the DOER argument is referentially identified with the lower argument. In Latin, a passive structure is always marked by the Middle morphology. In Italian, instead, there are two different possibilities: to use a SE-marked structure or an analytic participial structure composed by an inflected *essere* 'to be' or *venire* 'to come' and a past participle. The DOER argument, in the Latin passive Middle-marked structure, can be syntactically present as an agentive PP. In Italian, it can only be present in an analytic passive structure and not in a SE-marked one. This difference has been explored by Schäfer (2017), taking into consideration the Modern Greek Middle data vs. the Romance data.

Following are examples of the SE-marked Italian passive:

```
Si sono affittate due camere oggi (*da Marco).
self are rent.PST.PTCP two rooms today (*by Marco)
'Two rooms have been rented today (*by Marco).'
```

Middle marked Latin passive:

(82)

```
In hos ergo exitus varius ille secatur in those.ACC then results.ACC various.ACC.PL that.NOM.SG cut.3<sup>RD</sup>SG.PRS.MID lapis. (Sen. Contr. 2, 1, 12) stone.NOM 'That stone, then, is cut in those various shapes.'
```

In (81), the DOER is interpretively present, since there is actually someone in the real world who rented the houses. The same can be said about the Latin sentence in (82). However, the DOER argument, in (81), cannot be introduced by means of an agentive PP, like *da Marco* 'by Marco'.

After this brief overview, we now turn to how these structures are analyzed in the literature and what the literature proposes about the SE pronouns/Middle morphology.

# 2.2.3 Anticausatives, reflexives and middle-passives, a complex cohabitation: Anticausatives as reflexives (Koontz-Garboden 2009)

The main problem in the analysis of anticausatives is to formalize the actual role of the SE

element/Middle morphology and to find a coherent explanation for the marked/unmarked alternation. Connected to this problem is the issue of the reflexive/anticausative cohabitation: since these two structures show the same morphology/pronoun, does this morphology/pronoun have the same syntactic and semantic role in both cases?

Many scholars have tried to directly link the use of SE in anticausatives and the use of SE in reflexives. Some scholars have informally suggested this link (e.g., Lakoff 1971; Siewerska 1984; Haspelmath 1990), while others have provided formal analysis (e.g., Reinhart 1996; Chierchia 2004; Koontz-Garboden 2009). Koontz-Garboden (2009), in particular, working in a Lexicalist framework, proposes an explanation of anticausativization by means of a lexical reflexivization process. This reflexivization process affects the lexical semantics of a causative verb by identifying two arguments: the EFFECTOR and the THEME. An example of a lexical element with a causative lexical-semantics is (26), repeated here as (83):

```
(83)  [[romper]] = $$ \lambda x \lambda y \lambda s \lambda e [\prod v [CAUSE(v, e) " EFFECTOR(v, y) " BECOME(e, s) " THEME(s, x) " not-whole(s) ]]
```

The insertion of a reflexivizing operator during the derivation forces EFFECTOR and THEME to identify one with the other. In his words "The reflexivization operator [...] can be formalized as in (11) (here (84)), where R is a variable ranging over arguments of the type of transitive verb." (Koontz-Garboden 2009: 83).

```
(84) The reflexivization operator: \lambda R \lambda x [R(x, x)]
```

If we apply this reflexivization operator to the denotation in (83), we end up with a series of events in which the EFFECTOR is also the THEME:

Some issues arise with respect to this analysis. This approach can explain why we have the same reflexive pronoun both in reflexives and anticausatives in Romance languages and German, but what could this approach say about a language like Latin, in which there is no sign of an actual reflexivizing pronoun, but only of a specific Middle morphology? This issue could be solved by proposing that the Latin Middle morphology is a reflexive operator. This hypothesis allows for a unified analysis of both reflexives and anticausatives. The passive structure, on the other hand, would remain problematic: a reflexive analysis would not apply, since the main characteristic of the passive structure, as already seen, is the fact that the DOER argument, even if it is demoted, is still interpretively present and referentially disjunct from any internal argument. A reflexivizing approach like the one proposed by Koontz-Garboden (2009) is forced to divorce the use of the Middle morphology in the passives from the use of the Middle morphology in the anticausatives and reflexives. The final issue is related to the unmarked anticausatives. In the unmarked anticausative derivation ((69), (71) and (73)), no reflexivizing pronoun or Middle morphology is present. A first solution could be to propose that the reflexivizing operator is present also in the unmarked case, the only difference being the fact that it is covertly projected. A second solution would be to say that in the unmarked cases, the EFFECTOR argument is completely absent from the lexical-semantics of the verb, and the derivation goes on without it<sup>92</sup>. This approach would predict a difference between the marked anticausative derivation and the unmarked one: the former includes an EFFECTOR while the latter does not. Koontz-Garboden (2009) does not make any claim with respect to this problem (see Koontz-Garboden 2009: 102), leaving the issue open.

The facts shown in Sections 2.1.1 and 2.1.2 about the distribution of the SE pronoun, the Middle morphology and the absence of marking in the anticausative, reflexive and passive derivations, then, are only partially explained by this approach. There seems to be a larger consonance among the three derivations, particularly in the Latin case, where the Middle morphology marks all three<sup>93</sup>.

<sup>92</sup> This implies that the causative variant would be derived by means of a causativizing element that adds a causative semantics to an otherwise change of state derivation.

<sup>93</sup> Manzini and Savoia (2011) and Manzini et al. (2016) clearly explain that it is necessary to take into account a larger set of data from different languages, and that there is a larger consonance between these structures that usually recognized. They propose a different approach to the SE pronoun in Italian and connect it to the Greek and Albanian Middle morphology, looking also at the data coming from the perfective paradigm. They analyze the SE pronoun

# 2.2.4 Anticausatives, passives and reflexives within a typology of Voice (Schäfer 2008, 2017)

Schäfer (2008, 2017) proposes a different analysis of the reflexive/anticausative/passive interaction. He starts from the analysis of the anticausative derivation and tests the SE-marked anticausatives against the unmarked ones. The target of the investigation is to discover if there is a consistent difference between the two classes. He first shows that the effects on the telicity/atelicity of the event that Folli and Harley (2005) identified for Italian - claiming that SE-marked anticausatives would imply telicity while unmarked ones would not - are inconsistent and idiosyncratic (Schäfer 2008: 12-29). The lower resultative part of the change of state derivation is the same in both cases. He shows, then, that the structure of SE-marked anticausatives does not involve the hidden semantics of an external argument controlling the event nor a causative semantics in general (Schäfer 2008: 54-72)<sup>94</sup>. This analysis leads to the conclusion that the event semantics is the same in both anticausative derivations and that the SE element does not seem to be relevant for the final interpretation, since, in its absence, the derivation has exactly the same semantics<sup>95</sup>. These outcomes are problematic for an approach like the one proposed by Koontz-Garboden (2009): if unmarked and marked anticausatives are semantically indistinguishable and marked anticausatives are reflexives, then unmarked anticausatives should be reflexives as well, just as all the other non-alternating change of state verbs like It. *morire* 'to die' or *nascere* 'to be born'. The presence of an EFFECTOR argument, in these cases, does not seem plausible.

Before continuing the analysis, I will make a brief note with respect to labeling. In this Section, in order to be consistent with his original proposal, I adopt the labeling used by Schäfer. A first difference with respect to the eventive template laid out in Section 2.2.1 is that he follows the standard notation Voice° (Kratzer 1996) and does not use of the generalized argument-introducing

and the other morphological elements, as incorporated +D elements that occupy the inner position of the argument structure, forcing a generic/arbitrary/reflexive analysis of the outer argument. Their proposal, then, treats the SE pronoun and the various morphologies as elements that occupy an argumental position. Also Embick (2004) proposes an analysis in which the syncretism that regards passives, reflexives and anticausatives follows from a single morpho-syntactic characteristics of the derivation: the absence of the outer argument. This approach follows Marantz (1984) and is not highly dissimilar from the proposal put forward in Schäfer (2008, 2017), that I present in the next Section.

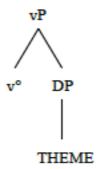
<sup>94</sup> Whether the external argument is an Agent or an EFFECTOR, as in Koontz-Garboden (2009), is not relevant, as the agentivity/causation tests show that it is completely absent.

<sup>95</sup> There is only one difference, the Affectedness/Causer Dative construction in German. In German, a Dative attached to a SE-marked anticausative derivation can only be interpreted as an Affectedness Dative, while a Dative attached to an unmarked anticausative derivation can be interpreted as a Causer Dative as well. Schäfer does not relate this difference to the event semantics of the two derivations; he relates this difference to the fact that the Causer Dative is merged upon the SE pronoun that derives the anticausative interpretation (see below). This position forces this Dative element to bind the SE pronoun, that, then, cannot receive the expletive interpretation needed to coherently derive an anticausative (Schäfer 2008, pp.269-276).

head i\* proposed in Wood and Marantz (2017). The other relevant difference is that he uses a single verbalizing v°. The notation vP, then, always denotes the entire verbal event, with all the internal arguments inside and the external argument, introduced by Voice°, above.

We have just seen that the SE pronoun, in Schäfer's proposal, does not have semantic import and does not modify the final semantics of the event: between marked and unmarked anticausatives there is no semantic difference. The anticausative event semantics proposed in Schäfer (2008, 2017) is the same both for marked and unmarked anticausatives and involves a single  $v^{\circ}$  whose argument is a THEME, which is in a specific state.

(86)



The derivation in (86) is proposed by Schäfer (2008, 2017) to account for the unmarked anticausative derivations. The only argument is the THEME, and there is no VoiceP. Given that, as previously stated, the presence of the SE pronoun does not correspond to a modification in the event semantics, the relevant issue is to understand its role in the derivation. In Schäfer's analysis, the SE element is a non referential pronoun used to fulfill the +D syntactic requirement of Voice<sup>96</sup>. This Voice<sup>96</sup>, given what we have said about the semantic difference between the marked and unmarked anticausatives, should be semantically null and re-project the semantic denotation of the vP. There are two main elements in his proposal: the SE pronoun and the typology of Voice<sup>9</sup>. We will address each in turn.

The fact that SE is a non-referential pronoun is widely accepted: without a proper binder, it is not possible to use it to identify an element in a possible world<sup>97</sup>:

<sup>96</sup> This selectional feature corresponds to the +D selectional feature of i\*°.

<sup>97</sup> When a proper binder is present, it is the binder which receives the referential interpretation, not the SE element. This is valid also for the impersonal constructions marked by a SE pronoun.

i. Quan s'és simpàtic. (Catalan)When SE is nice'when you are nice.'

ii. Quando si è simpatici. (Italian)

```
*Sich ist schön.SE is beautiful
```

(88)

\*Sè è bello. SE is beautiful

A SE pronoun is a bundle of unvalued  $\varphi$  features  $(u\varphi)^{98}$ :

(89) 
$$SE = DP, u\varphi$$

Voice° is the second ingredient. This head has three relevant features: a +D feature, as already stated (Section 2.2.1), a +Agent feature (that roughly corresponds to +DOER) and a set of unvalued φ features. The +D feature is syntactic and allows for the merging of a +D phrase (DP). The +Agent feature, on the other hand, is semantic, and introduces the thematic role of the external argument. Starting from these assumptions that are already present in the literature on Voice°, he analyzes all logical possibilities and hypothesizes a set of possible Voices. These different Voices, or the mechanism that creates them, should be considered universally given by UG. From Schäfer (2017, p.143):

(90)

- (a) transitive active Voice:  $\{\lambda x \lambda e[agent(e, x)], D\} \rightarrow Causatives$  and SE-marked reflexives.
- (b) intransitive active-existential Voice:  $\{\lambda \in \Gamma \in [x[agent(e, x)], \emptyset\} \to Middle-marked passives$  and Middle-marked reflexives.
- (c) transitive inactive Voice:  $\{\emptyset, D\} \rightarrow SE$ -marked anticausatives.
- (d) intransitive inactive Voice:  $\{\emptyset, \emptyset\} \to Middle$ -marked anticausatives.

In this case, there are many options available. The SE pronoun may just mark the absence of a syntactically projected argument, and the real argument is arbitrary (Arb) and endowed with a specific interpretation (Cinque 1988). Another option is to allow the binding of the SE pronoun by a discourse operator, which provides it with the correct interpretation. As already underlined in Section 2.1.2, the impersonal constructions are outside the scope of this thesis. 98 The  $\varphi$  features correspond to person number and gender.

when SE is nice

<sup>&#</sup>x27;When you are nice.'

- (e) transitive active-existential Voice:  $\{\lambda \in [\kappa[agent(e, x)], D\} \rightarrow SE$ -marked passives.
- (f) intransitive active Voice:  $\{\lambda x \lambda e[agent(e, x)], \emptyset\} \rightarrow periphrastic passives.$

The syntactic +D feature may be present or absent. It creates, alternatively, a syntactically transitive (+D) or intransitive (Ø) derivation. The semantic +Agent feature may be present, absent or existentially bound. It creates, alternatively, a semantically active (+Agent), inactive (Ø) or active-existential (∃) derivation. These 3 + 2 possibilities create a set of 6 potential Voices that should give rise to all the various possible Voice alternations observed previously: SE-marked anticausatives, Middle-marked anticausatives, unmarked anticausatives, SE-marked passives, Middle-marked passives, SE-marked reflexives and Middle-marked reflexives<sup>100</sup>.

It is important to note that the set of unvalued  $\varphi$  features of Voice has the same function of the set of unvalued  $\varphi$  features of i\*°: it provides arguments that do not have an inherent case with Nominative and Accusative case. This happens, as previously stated, by means of a probe-goal mechanism in which the unvalued  $\varphi$  features probe for a suitable candidate for valuation (for an element with interpretable  $\varphi$  features) in the m-command domain. The first argument that valuates them acquires Nominative case, while the second argument (without inherent case), if present, acquires Accusative case (Schäfer 2017: 135):

(91)

- (a) A DP is realized at PF with dependent Case (ACC) if a different DP has valued the accessible phase head (Voice) via AGREE.
- (b) A DP that is not realized with dependent Case appears with default Case.
- (c) Inherent/lexical Case takes precedence over default and dependent Case.

<sup>99</sup> This variant of Voice will not be relevant for the present discussion. Schäfer calls this head "passive input Voice". In Italian and German, this head is used in the standard passive derivation, both with and without an agentive PP. Without an agentive PP, the +Agent feature is existentially bound by a Passive head (Pass°) merged on top of Voice (see Collins 2005); this operation creates a secondary "type b)" situation, a secondary active existential Voice. With an agentive PP, instead, the +Agent feature is assigned to the PP itself, and no Pass° is merged. In both cases the morphophonological output is a Passive morphology. We cannot merge a SE element in this environment, since the SE element is only compatible with a +D Voice (its only purpose is to deactivate the +D feature as without it the SE would be meaningless). The SE element and the λxλe[agent(e, x)] semantics could appear together only with the transitive active Voice. In this case, the SE element would acquire a +Agent feature, and an agentive PP would remain with no Role, since the +Agent Role is absorbed by the SE element: the SE element in Romance languages is not compatible with a PP agentive phrase.

This head, following this approach, is present also in Latin and derives the Middle-marked passive construction with the agentive PP. The morphophonological output of this head is the standard Latin Middle morphology (the Middle morphology is the output of an inactive Voice, see below). Since the Latin Middle morphology is not a SE pronoun it does not block the assignment of the +Agent feature to the agentive PP: the agentive PP is compatible with the Middle morphology.

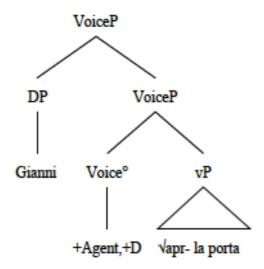
<sup>100</sup>Since the target of this thesis is the Latin Middle morphology, I will not analyze the analytic passives. The German and Romance analytic passives have been analyzed in Schäfer (2017).

In the following paragraphs I detail the typology of Voice proposed by Schäfer, analyzing each type. Since the focus will be on the VoiceP, I leave aside, for now, the issues regarding the lower part of the derivation, vP.

We will first examine an agentive derivation, in which the transitive active Voice ( $\{\lambda x \lambda e \{Agent(e,x)\}\}$ , D) is involved:

### (92) (Italian)

Gianni apre la porta. Gianni opens the door 'Gianni opens the door'

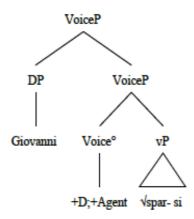


The vP derives a dynamic event (v°) that involves the state "being open" predicated of the DP  $la\ porta$  'the door'. The transitive active Voice° introduces into the derivation the Agent thematic role (+Agent) related to the dynamic event and the syntactic requirement for the merging of an argument (+D). The DP Gianni, then, satisfies the +D feature, being merged in spec,VoiceP, and takes the +Agent thematic role. As previously noted, Voice° has a third characteristic: it has a set of unvalued  $\phi$  features. These u $\phi$  get valued by the DP Gianni, the first DP in its m-command domain. This DP, following the algorithm in (91), acquires Nominative case. Following the same algorithm, the other DP,  $la\ porta$  'the door', acquires Accusative case (dependent case).

Schäfer (2008) also proposes using the transitive active Voice to derive the Italian and German reflexives. Following his proposal, the SE element, i.e., a bundle of unvalued  $\varphi$  features, is merged

in the internal argument position within the vP (the syntactic position of *la porta* 'the door'). The Agent, instead, is merged in the usual spec, VoiceP position. The Agent, c-commanding the SE pronoun, binds it and valuates its  $\varphi$  features.

(93)
Giovanni si spara.
Giovanni SE shoots
'Giovanni shoots himself.'



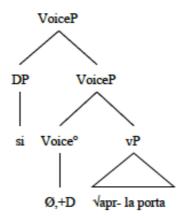
The German reflexives offer clear evidence for the low merging point of the SE pronoun and for the high merging point of the referential DP. First is the auxiliary selection: reflexive verbs select the standard auxiliary used in the active causative structures, e.g., haben 'to have'. The referential DP, moreover, can stay in situ, in a position that is allowed only for the arguments merged in spec,VoiceP (see Pitteroff and Schäfer 2014). The Romance languages in general and Italian in particular do not respond well to the tests proposed: the reflexives select the essere 'to be' auxiliary that is usually used when the derivation involves a vP internal argument that agrees with the finite verb, while the test on the DP position is not adaptable. These few indications seem to show that the Romance reflexives behave differently from the German one: it seems that the referential DP is merged in the vP internal position, while the SE pronoun is merged in spec,VoiceP. The identification, then, would be realized by means of a transitive active-existential Voice, whose characteristics I will examine below. Some scholars (Sportiche 2014, Doron and Rappaport-Hovav 2007) have proposed semantic tests to identify the initial merging position of the referential DP in Romance reflexives. These tests seem to prove that the referential DP actually merges in spec,VoiceP, confirming Schäfer's proposal. The issue of the reflexives marked by a

reflexive pronoun is far from settled and, since it is not orthogonal to the present discussion, I will not analyze it further.

The transitive inactive Voice  $\{\emptyset, D\}$  is present in the Italian (and German) marked anticausative derivation, as seen in example (94):

(94)

La porta si apre. the door SE opens 'The door opens.'



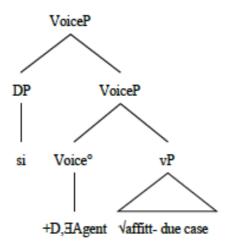
The vP is the same both in (94) and (93). The difference is the feature make-up of VoiceP. In (94), Voice° is syntactically transitive (+D), as before, but semantically intransitive (or inactive,  $\emptyset$ ). This means that it allows for the merging of a +D element but does not assign any thematic role to the argument. The semantic denotation of the derivation, then, does not change with the merging of Voice° and the projection of VoiceP; this phrase is semantically null. The final semantic denotation, consequently, is the same we have already observed for the unmarked anticausative derivation in (86). This does not hold for the syntactic part: Voice° is syntactically transitive and calls for the merging of a DP in the syntactic position of the external argument. The SE pronoun (si 'self') is the only element that can be merged in this position: being a DP, it satisfies the syntactic +D requirement of Voice° and, being non-referential, it does not create thematic problems. SE, as we have said, carries a set of unvalued  $\varphi$  features, that agree with the unvalued  $\varphi$  features of Voice. This agreement does not provide a valuation for the unvalued  $\varphi$  features of Voice (both sets of  $\varphi$  features are unvalued): Nominative case is not assigned. Voice°, then, probes further into its m-command domain to get a valuation. The DP la porta 'the door' provides a valued set of  $\varphi$  features.

This DP provides a value for the unvalued  $\varphi$  features of Voice° and, indirectly, for the SE element that is already in agreement with Voice°. Consequently, the DP *la porta* gets Nominative case and the SE element, being the second DP in the derivation, gets Accusative case (at least in German, see the data in Schäfer 2008). This analysis provides an explanation for the alternation between SE-marked and unmarked anticausatives without implying a different semantics. The only difference between marked and unmarked anticausatives is entirely syntactic; the SE-marked project a VoiceP, while the unmarked do not. The reason behind this difference in syntactic make-up will be analyzed below.

The transitive active existential Voice is used in the Italian SE-marked passive derivation:

(95)

Oggi si sono affittate due camere. today SE are rent.PST.PTCP.F.PL two rooms 'Two rooms have been rented today.'



In this derivation, the SE element has the same relevance it has in the marked anticausative derivation: it fulfills the +D requirement of Voice°. The difference is that in this case, Voice° is not expletive ( $\emptyset$ ) and introduces into the derivation an existentially bound variable. Since the Agent is existentially bound, there is no open variable to be fixed, and the derivation goes on. The existentially bound variable is interpreted as an input "there is an Agent", with the exact identification of the Agent following from the context<sup>101</sup>. SE does not get any thematic role, since there is no open position for a thematic role to be assigned. The  $\varphi$  features on Voice get their

<sup>101</sup>It is possible, as we will see in Section 2.2.5, to contextually identify the existentially bound Agent with a DP already present in the derivation. This possibility gives rise to a contextual reflexive interpretation.

valuation in the usual way, probing in their m-command domain till the lower DP (*due case* 'two houses'). This DP, following the Case algorithm in (91), gets Nominative case. Finally, the  $\varphi$  features of SE are valued by means of the sharing mechanism already demonstrated and SE gets Accusative case once the other DP gets Nominative.

Let us now see the derivations in which an intransitive Voice $^{\circ}$  is involved, i.e., the derivation in which the +D feature is inactive ( $\emptyset$ ).

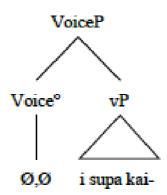
The intransitive inactive Voice  $(\emptyset, \emptyset)$  is involved in the Modern Greek marked anticausative derivation. Both Modern Greek and German/Italian have marked anticausative derivations. The difference depends on the element used to mark the derivation: the Middle morphology in Modern Greek, a SE element in Italian and German. The SE element is an actual pronoun merged to fulfill the +D feature of a syntactically transitive but semantically inactive Voice°, as we have seen (ex. (94)). The Middle morphology, on the other hand, is the morphological output of a Voice° in which the +D feature is inactive  $(\emptyset)$ :

(96)

I supa kaike.

The soup. NOM burnt.MID

'The soup burnt.'



The DP i supa 'the soup' is merged in the lower part of the event derivation, in the stative event (i supa is the HOLDER of the state of being burned). Voice° is of type ( $\emptyset$ ,  $\emptyset$ ) meaning that there is no thematic role to be assigned. The output of a Voice° in which the +D feature is inactive ( $\emptyset$ ) is the Middle morphology (-ke). Voice° has still-unvalued  $\varphi$  features and probes its m-command domain looking for a suitable DP: i supa 'the soup' is the only possibility. The DP i supa 'the soup', consequently, gets Nominative case. Voice°, in this case, is entirely null, both from the syntactic

and semantic point of view. Middle-marked anticausatives differ from SE-marked anticausatives only with respect to the features of Voice, which in the first case is entirely null, while in the second case is syntactically transitive.

The intransitive active-existential Voice is present in the Modern Greek Middle-marked passive derivations:

(97)

To vivlio diavastike. the book read.MID 'The book is being read.'



The derivation in (97) is very similar to that of (95). The main difference is that, in this case, Voice° does not carry a +D feature and no non-referential pronoun merges to fulfill it. The morphological output of a Voice head in which the +D feature is not present ( $\emptyset$ ) is, as we have seen in (96), the Middle morphology (that in this specific Modern Greek case is -ke). The Nominative case is assigned the usual way, through Voice agreement. The same intransitive active-existential Voice is also used to derive the reflexive interpretation. The only difference between the passive interpretation and the reflexive one is that the existentially bound Agent is identified, in the first case, with an element external to the derivation, while in the second case it is identified with an already-merged argument. A deeper analysis of the Middle-marked reflexives will be presented in Section 2.2.5.

As the last head, intransitive active Voice, is not relevant in the context of the present discussion, I will not analyze the derivations in which it is present<sup>102</sup>.

<sup>102</sup>See fn. 99 for a small overview of the issues related to this Voice configuration.

We have proposed a brief overview of the actual syntactic environments in which the six Voice heads proposed by Schäfer are used. There are two points that are relevant for the present work. The first point is the definition of the Modern Greek Middle morphology: it is the morphological output of an argument-introducing head whose syntactic +D requirement is inactive (Ø). This allows the various uses of this morphology – passive, anticausative and reflexive – to be unified: in each case, the Middle is the output of a syntactically inactive Voice°, and the different uses depend on the semantic part of Voice°. In Sections 2.2.5 and 2.2.6 I will use this definition to explain the distribution of the Latin Middle morphology and I will then propose a different analysis of the Middle-Voice interaction based on the Latin data.

The second point is that we have a unified analysis of the anticausative structures. In Schäfer's proposal, as we have seen, each anticausative structure is characterized by a common feature: the semantic denotation of the vP is not further modified by other elements within the first phase (the phase in which the event is built, Ramchand 2008), the derivation of the event. The fact that an anticausative is SE-marked, Middle-marked or unmarked derives from the presence vs. absence of Voice and, if Voice is present, on the type of Voice involved.

Example (98) shows absence of Voice°:

```
(98)

La barca affonda.

the boat sinks

'The boat sinks.'
```

Examples (99) and (100) show projection of a semantically null Voice°. This Voice° may be syntactically null (Middle morphology) or syntactically transitive (SE pronoun merged to fulfill the +D requirement):

```
(99)

I supa kaike.

The soup. NOM burnt.MID

'The soup burnt.'

(100)

La porta si apre.

the door SE opens

'The door opens.'
```

It is clear, now, why no semantic difference exists between marked and unmarked anticausatives; the former involves an expletive Voice° that reprojects the semantics of the complement (vP) without modifying it, while the latter does not involve any Voice° at all, deriving the event without it. The semantic denotation does not change.

This formalization of the different types of Voice° takes care of only a part of the problem. The remaining issue is to understand why with some verbs the anticausative structure can be derived avoiding the projection of Voice°, while with some others a null Voice° is projected. What is the reason behind this different behavior? Schäfer, following Haspelmath (1993), Alexiadou and Anagnostopoulu (2004) and Alexiadou, Anagnostopoulu and Schäfer (2006), accounts for this difference by means of the categorization of the √ element that forms the verb. Following Haspelmath (1993), he assumes a distinction between different categories of  $\sqrt{s}$ , a distinction driven by our real world knowledge (encyclopedic knowledge) about the various uses of the single  $\sqrt{.}$  The fact that a  $\sqrt{}$  belongs to a specific category is not ontological; it is usage-based. The use of a  $\sqrt{}$ determines the categorization of that  $\sqrt{\ }$ . The categorization of a  $\sqrt{\ }$ , then, relies on the linguistic input provided to the speaker<sup>103</sup>. Here is a list of the categories proposed, ordered from the least spontaneous to the most spontaneous: agentive  $\sqrt{s}$  (ex. murder) < externally caused  $\sqrt{s}$  (ex. destroy) < cause unspecified  $\sqrt{s}$  (ex. break) < internally caused  $\sqrt{s}$  (ex. blossom). The category of the  $\sqrt{s}$ constrains the syntactic constructions in which it can be present<sup>104</sup> (see the description of the Constructivist approach in Section 1.3). A  $\sqrt{}$  of the first two categories cannot be merged in a change of state derivation but only in a causative derivation. A cause unspecified  $\sqrt{\ }$ , instead, can be merged both in a causative derivation and in a change of state derivation. An *internally caused*  $\sqrt{\phantom{a}}$ , finally, is fully intransitive and cannot project an external argument: it can only be merged in a change of state derivation  $^{105}$ . The behavior of similar  $\sqrt{s}$  can vary across different languages. For example, in English, the externally caused  $\sqrt{destroy}$  does not alternate between a causative use and a change of state use<sup>106</sup>:

<sup>103</sup>However, as I propose in Section 4, this is not always true. In many cases there is much more syntax. The case of the self-benefactive √s is a clear example: their existence depends on the presence, in the linguistic system, of the Middle morphology, a morphosyntactic fact. Also the possibility of merging an activity √ as √walk in a change of location syntactic environment depends on the morphological characteristics of the language, as Acedo-Matellán (2016) shows. If the language has an autonomous morphological exponent for Path° it is be able to merge an activity √ in a change of location derivation, if the language lacks this autonomous morphological exponent, then the same configuration is not available.

<sup>104</sup>It is a loop: the fact that a specific  $\sqrt{}$  belongs to a specific category is derived from the actual use of the  $\sqrt{}$ , and the actual use of the  $\sqrt{}$  is based on the category it belongs to. This is the reason why the presence of a specific  $\sqrt{}$  in a specific category is not set once and for all: the  $\sqrt{}$ 's categorization keeps on changing.

<sup>105</sup>The cause unspecified  $\sqrt{s}$ , then, are the anticausative  $\sqrt{s}$ .

<sup>106</sup>See Marantz (2005) for an interesting analysis of the English verb *destroy*. He proposes to decompose the verb in two units, a stative one (*de*-) and a causative/dynamic one (*-stroy*). As Jaume Mateu pointed out to me, the different behavior of the Italian verb *distruggere* 'to destroy' may be seen in light of the well known verb-framed vs. satellite-

```
(101)
John destroys the book.
(102)
*The book destroys.
```

In Italian, instead, a very similar  $\sqrt{, distruggere,}$  can be present in both derivations:

```
Giovanni distrugge il libro.
Giovanni destroys the book
'Giovanni destroys the book.'

(104)

Il libro si è distrutto.
The book SE is destroyed
'The book got destroyed.'
```

This difference can be a reflection of a different categorization of a similar  $\sqrt{\ }$ , or of a different syntactic behavior of the entire externally caused category in Italian (and in French, Hebrew and Modern Greek) with respect to English (and German).

What I have just shown does not, however, solve the problem of the two different syntactic behaviors of the anticausative  $\sqrt{s}$ : all the anticausative roots are categorized as  $\sqrt{cause\ unspecified}$ . Consequently, the marked vs. unmarked opposition is not expected. Schäfer proposes to adopt a more fine-grained distinction internal to the *cause unspecified*  $\sqrt{s}$  category. He proposes drawing an additional line within this category, dividing the *more spontaneous cause unspecified*  $\sqrt{s}$  from the *less spontaneous* ones. This further subdivision allows him to explain the different behavior of the different verbs by means of their lexical-encyclopedic categorization. The *less spontaneous cause unspecified*  $\sqrt{s}$  are forced to merge Voice° in their syntactic derivation, while the *more spontaneous cause unspecified*  $\sqrt{s}$  do not have to. In more proper terms, the *less spontaneous cause unspecified* 

framed parameter (Talmy 1991, 2000; Acedo-Matellán and Mateu 2013; Acedo-Matellán 2016). Italian is verb framed (as Spanish, Hebrew and Modern Greek), meaning that, in a change of state/causative verbal phrase, the verbal  $\sqrt{}$  must realize both the stative head and the dynamic one. English, on the other hand, is satellite framed (as German), meaning that the stative part of the verbal phrase may be realized autonomously from the verbal  $\sqrt{}$  by a prepositional element. This (im)possibility of realizing two eventive heads by means of two different elements (verbal  $\sqrt{}$   $\rightarrow$  dynamic head; prepositional element  $\rightarrow$  stative head) may be a factor to consider when analyzing the different categorization of the  $\sqrt{}$ s in these languages. However, further studies need to be completed before proposing a reliable analysis.

 $\sqrt{s}$  are interpretable at LF (in the spirit of Harley 2014a) only in a syntactic environment in which there is Voice°, while the more spontaneous ones are interpretable also in a syntactic environment in which Voice° is absent.

### 2.2.5 The Latin Middle morphology within the typology of Voice°.

The Latin Middle morphology can be analyzed, following the DM approach, as the Modern Greek Middle morphology:

(105)

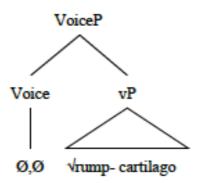
The Latin Middle morphology is the morphological output of a syntactically intransitive Voice $^{\circ}$  (a Voice $^{\circ}$  in which the +D feature is inherently  $\emptyset$ ).

Let us see if the Latin data fit this proposal. The Latin Middle morphology, as demonstrated in Section 2.1.1, is present in the anticausative, passive and reflexive derivations<sup>107</sup>.

The Middle-marked anticausative derivation uses the intransitive inactive Voice $^{\circ}$  {Ø, Ø}:

(106)

In aure quoque interdum rumpitur cartilago. (Cels. 8, 6) in ear.ABL also sometimes break.3<sup>RD</sup>SG.PRS.MID cartilage.NOM 'Also in the ear, sometimes, the cartilage breaks.'



The morphophonological post-syntactic output of the  $\{\emptyset, \emptyset\}$  configuration is the Latin Middle morphology (-r), as (106) predicts. The derivation follows exactly the same pattern observed for

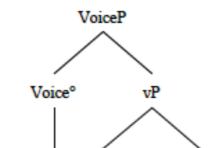
<sup>107</sup>The impersonal derivation will not be dealt with.

Modern Greek. Voice° head probes into its m-command domain in order to find a valuation for its uφ. It finds the DP *cartilago* 'cartilage' and agrees with it, providing it with Nominative case. From a semantic point of view, as in the case of Modern Greek, Voice° is completely expletive: the semantic output of VoiceP is the input itself, vP, meaning there is no change at all. The only relevant consequence of the use of this head is the presence of the Middle morphology. Following Schäfer, the unmarked anticausative derivation (see ex. (73)) presents no Voice° at all, as seen in the previous section. Both unmarked and marked anticausatives, then, have the same semantic denotation.

The passive derivation, instead, uses the intransitive active existential Voice,  $\{\lambda \in \exists x [agent(e, x)], \emptyset\}$ :

(107)

In hos ergo exitus varius ille secatur in those.ACC then results.ACC various.ACC that.NOM.SG cut.3<sup>RD</sup>SG.PRS.MID lapis. (Sen. *Contr.* 2, 1, 12) stone.NOM 'That stone, then, is cut in those various shapes.'



Ø,∃Agent √sec-ille lapis

Again, it follows from (105) that the morphophonological post-syntactic output of this Voice head is the Latin Middle morphology. The derivation in (107) proceeds as the derivation in (95). The Agent is existentially bound and contextually related to an argument outside the syntactic derivation. Voice° probes into its m-command domain and agrees with the DP *ille lapis* 'that stone'. The DP *ille lapis* 'that stone' gets Nominative case.

As was stated in Section 2.1.2, Latin and Modern Greek Middle morphologies can be used to

derive a reflexive structure<sup>108</sup>:

(108)

```
Quae semper ornantur lavantur tergentur who.Nom.Pl.F always adorn.3rdpl.prs.mid wash.3rdpl.prs.mid scrub.3rdpl.prs.mid poliuntur. (Plaut. Poen. 217) smooth.3rdsg.prs.mid 'Who always adorn, wash, scrub and smooth themselves.'

(109)

O Janis pli-thike.
The.Nom Janis wash-3rd sg.mid
```

'Janis washed.' (ex. (7) from Spathas et al. 2015)

The explanation that Schäfer provides for the reflexive interpretation of the SE-marked structures in Italian and German is that the SE pronoun is merged low, within the vP. This non-referential pronoun is then bound by the Agent, merged in the external argument position (see ex. (93)). This explanation is not adequate in these two cases as neither the Modern Greek example nor the Latin one involve an element that may be synchronically interpretable as a reflexive pronoun capable of being merged in an argumental position. The Middle morphology cannot be considered, synchronically, a reflexive pronoun<sup>109</sup>.

One key observation could help us understand what is going on with these Middle-marked reflexive structures: both in Latin and Modern Greek the list of verbs that can receive a reflexive interpretation by means of the Middle morphology is constrained. These verbs form the class of Naturally Reflexive Verbs (NRVs). The encyclopedic semantics of these verbs facilitates an interpretation in which the two arguments involved in the derivation are identified as the same argument. Pinkster (2015) includes into this class almost 700 Latin verbs, organized in different subclasses:

(110)

- (a) Verbs denoting physical treatment: e.g., *lavor* 'I wash myself', *ornor* 'I adorn myself', *unguor* 'I oil myself', *induor* 'I dress'.
- (b) Verbs denoting physical or mental changes: e.g., abdor 'I conceal myself', abscondor

<sup>108</sup>The fact that Latin may also use a SE pronoun to derive the reflexive interpretation is not relevant here. The SE structure is different from the Middle-marked structure and the Middle morphology, which is the target of our investigation.

<sup>109</sup>From a diachronic point of view, a derivation from a reflexive pronoun is plausible (see Section 2.1.3).

'I hide'.

(c) Verbs denoting changes in physical or social position: e.g, *alienor* 'I become averse to', *vertor* 'I turn myself, I come back', *iungor* 'I join forces', *socior* 'I associate myself with'.

For a list of NRVs in Modern Greek see Spathas et al. (2015).

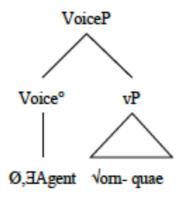
On the other hand, the Romance and German reflexive derivation with SE are not constrained, and in both cases the SE reflexive derivation is available with almost every  $\sqrt{\ }$ . This observation leads to the conclusion that the Middle-marked reflexive structure is highly dependent on the contextual lexical-encyclopedic semantics of the  $\sqrt{\ }$ .

Spathas et al. (2015), in order to address this problem, propose to merge, in the Latin/Modern Greek case, an intransitive active existential Voice°:

(111) 
$$\{\lambda e \exists x [agent(e, x)], \infty\}$$

We have already seen this head in the Middle-marked passive derivation (107). However, in this context, the same head provides a different interpretation: not a passive but a reflexive one:

(112)



At the level of VoiceP, the semantic output of this derivation is:

(113) 
$$\lambda e \exists x [agent(e,x)] (\lambda e [ornare(e) " quae(Theme,e)])$$

This is exactly the same output that a Middle-marked passive derivation has, and could be roughly paraphrased as "there is an Agent that decorates quae"110. Their proposal is based on the assumption that, given that the existentially bound Agent has to be contextually identified with a world entity, this entity may well be something either outside the linguistic derivation or within the linguistic derivation. The contextual identification of the existentially bound Agent with an entity outside the linguistic derivation gives as an output a passive interpretation, while the contextual identification of the existentially bound Agent with the internal argument gives as an output the reflexive one. I have underlined that this mechanism is contextual; the lexical-encyclopedic category of the  $\sqrt{}$  is part of the context. If the  $\sqrt{}$  is part of the NRVs category, the interpretation of the Middle structure will be forced toward the reflexive one, while if the  $\sqrt{}$  is part of the agentive category, the interpretation of the Middle structure will be forced toward the passive one. This explains why these Middle-marked reflexives are constrained; it depends on the fact that the identification mechanism that leads the Agent to be identified with the internal argument is contextual. In the German and Italian SE cases, instead, there is not such an issue: the identification of the SE reflexive pronoun with an available antecedent is syntactically driven and not contextually driven. This approach raises an ambiguity problem. The lexical-encyclopedic information coming from the  $\sqrt{\ }$  cannot be considered compulsory. It is possible to overcome the lexical-encyclopedic information of the  $\sqrt{1}$  in highly specific contexts or using specific items. For example, in Modern Greek, as they show, the reflexive interpretation of the intransitive active existential Voice in the context of an NRV can be overcome by specific contextual situations (see Spathas et al. 2015, ex. (81)). On the other hand, it is possible to force a reflexive interpretation with a non-Naturally Reflexive  $\sqrt{\ }$ . This can happen by means of a specific intensifier, the verbal prefix *afto*- 'self' (see Spathas et. al. 2015, ex. (118a)).

In Latin/Modern Greek, then, there is a contextually driven reflexivization that operates in absence of any reflexivization marker, while in Romance/German there is a syntactically driven reflexivization that operates by means of a reflexive marker (a SE pronoun). As we have shown, this accounts for the different productivity of the two constructions: in Latin/Modern Greek, productivity is constrained by contextual factors, while in Romance/German, the contextual constraint is not present since the reflexivization operation is syntactic.

The definition of the Latin Middle morphology provided in (105) manages to cover all

<sup>110</sup>For the purposes of this argumentation, I leave aside the issue of the interpretation of the wh- pronoun *quae* and treat it like a standard DP.

## 2.2.6 A proposal for the elimination of expletive Voice°.

In this Section, I adapt the typology of Voice° proposed above to the event structure adopted throughout the thesis. By doing so, I modify the typology itself, eliminating the stipulation of a threefold argument-introducing head (active, existential, expletive) in favor of a twofold one (active, existential).

As already seen, Voice° is responsible for the introduction of the external argument into the syntactic derivation. In Section 2.2.1 I have posited an alternative proposal for the introduction of the arguments into the derivation: the use of i\*° (Wood and Marantz 2017). i\*° is a generalized Voice°: Voice° introduces the Agent/Causer into the derivation, while i\*° introduces every argument of the derivation, not only the Agent/Causer, but also the Undergoer, the Holder, etc. It is not a complex step to substitute Voice° with i\*°: i\*°, just like Voice°, has a +D selectional feature, introduces the semantics of an argument and agrees with the DP argument, valuing its unvalued φ features. As for Case assignment, we have only to slightly modify the Case algorithm<sup>111</sup>:

(114)

- (a) A DP is realized at PF with dependent Case (Accusative) if a different DP has valued the accessible phase head (the last argument-introducing head) via AGREE.
- (b) A DP that is not realized with dependent Case appears with default Case.
- (c) Inherent/lexical Case takes precedence over default and dependent Case.

Following Schäfer (2017), this head may be semantically active ( $\lambda x \lambda e[ROLE(e, x)]$ ), existential ( $\lambda e\exists x[ROLE(e, x)]$ ) or expletive ( $\emptyset$ ). Each semantic type is paired with a syntactic selectional feature. This feature can be active ( $+D \rightarrow syntactic transitivity$ ) or inactive ( $\emptyset \rightarrow syntactic intransitivity$ ).

The active i\*° head introduces into the derivation the semantics of the external argument of the XP it merges with (see Section 2.2.1). The argument DP gets its ROLE by means of function application: the active i\*° introduces an open variable (x) which has a ROLE, and the argumental DP, then, substitutes the variable and acquires the specific ROLE. Active i\*° corresponds to the transitive active Voice when the +D feature is present (+D) and to the intransitive active one when

<sup>111</sup>It is relevant to note that I am analyzing a Nominative/Accusative language and not an Ergative/Absolute language. Ergative case has been analyzed as inherent by some scholars (Marantz 1991), while other proposed a different view (Deal 2016).

the +D feature is inactive  $(\emptyset)^{112}$ .

Existential i\*° introduces into the derivation an existentially bound variable (x) with a specific ROLE. In other words, the semantic input provided by this head is "there is an argument with this ROLE". There is no open variable to be fixed. The existential i\*° head corresponds to the transitive active existential Voice when the +D feature is present (+D), and to the transitive inactive existential one when the +D feature is inactive  $(\emptyset)$ .

The expletive i\*° head, finally, does not introduce any semantics; the final denotation of the phrase derived by merging expletive i\*° is the denotation of the phrase with which expletive i\*° merges. This head is projected only for syntactic reasons (in Schäfer's model, it is indirectly required by the lexical-encyclopedic semantics of the  $\sqrt{\ }$ ). This head corresponds to transitive inactive Voice when the +D feature is present, while it corresponds to intransitive inactive Voice one when the +D feature is inactive  $(\emptyset)$ .

In this Section, I address the stipulation that there is an expletive i\*°. In the proposed typology of argument-introducing heads, this head is only involved in the derivation of SE-marked and Middle-marked anticausatives. Since it does not provide an additional semantics and does not modify the denotation of the vP it merges with, this head is present for purely formal syntactic reasons. It alternates with the complete absence of Voice°, deriving unmarked anticausatives. There are three relevant characteristics of marked and unmarked anticausative derivations that can be explained by means of the stipulation of the existence of such a head: the fact that every change of state variant of an anticausative alternation shares a common feature, the fact that marked and unmarked anticausatives are semantically identical and the fact that anticausatives do not present any trace of an argument controlling the dynamic event. Any competing analysis must preserve the explanatory capacity of this hypothesis.

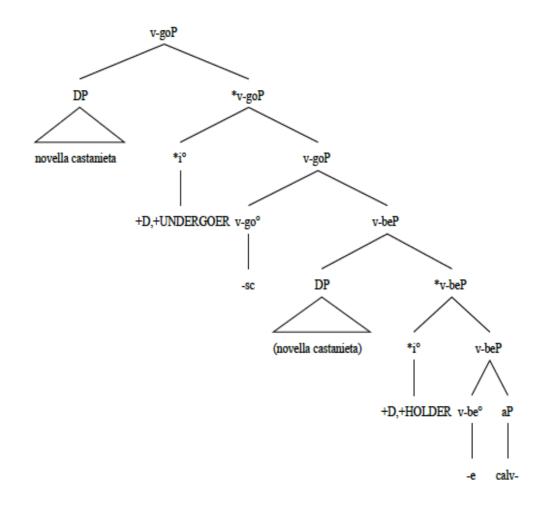
My alternative analysis starts from the assumption that  $v^{\circ}$  is not a single verbalizing head; there are different  $v^{\circ}$  depending on the event being denoted. The events denoted are considered ontological, meaning that they should be the building blocks available to any speaker (see Section 2.2.1). The set of heads presented include a stative one, v-be°, and two dynamic ones, v-do° and v-go°. v-do° denotes a controlled dynamicity, while v-go° denotes an uncontrolled dynamicity. There is morphological evidence in Latin to support this hypothesis. The *-sc* morpheme is the spell-out of a v-go° in specific contexts, while the  $-\bar{a}$  morpheme, unspecified with respect to dynamicity, spells out a v-do°.

Example (57), repeated here as (115), clarifies this issue.

<sup>112</sup>As already mentioned, I will not deal with this specific argument-introducing head. See fn. 99.

(115)

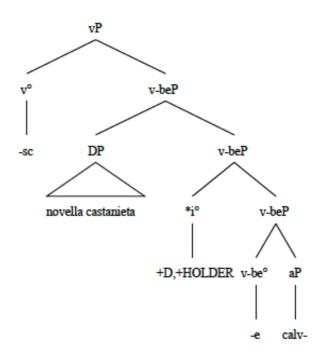
Novella castanieta calvescunt. (Colum. 4, 33) new.nom.pl chestnut forests.nom grow bald.3<sup>RD</sup>PL.PRS.ACT 'New chestnut forests grow bald.'



The -sc- morpheme, the morphological spell-out of v-go° in this specific syntactic environment (see Section 2.2.1), characterizes this derivation as a v-go° derivation, i.e., a derivation involving a dynamic uncontrolled event as the higher eventive head closing the event-building phase. The HOLDER DP, novella castanieta, externally merged in this position, moves to the higher v-goP and takes a double set of thematic features, HOLDER and UNDERGOER<sup>113</sup>. An alternative proposal could be to stay with the single v° hypothesis and to consider the -sc- element as the output of a v° that is not embedded under an argument-introducing head: a v° without an i\*°:

<sup>113</sup>The stipulation that an argument can move and acquire more than one thematic role is supported by independent data. See below.

(116)



However, this is not a viable option. As we have seen (see Section 2.2.1.), the -sc- element is also involved in the monoevental derivation of uncontrolled events from controlled ones, e.g., lambo 'I lick' vs. lambisco 'I lick (said of water on a riverside)' and tono 'I thunder, I speak loudly' vs. tonesco 'I rumble, resound' (Varro Men. 56). If the -sc- element signaled the absence of the v° external argument, no syntactic position would be available for the argument of these verbs, since these derivation are monoevental.

In the context of this proposal, a relevant assumption is that arguments can move<sup>114</sup>, as in (115). This assumption is supported by evidence coming from the controlled change of location verbs. In Italian, for example, *correre* 'to run' shows an argument structure alternation that I have already presented in (15)-(17) (here as (117)-(119)):

Gianni ha corso.
Gianni has ran
'Gianni ran.'

(118)

Gianni ha corso la maratona.
Gianni has ran the marathon

<sup>114</sup> See Ramchand (2008) for a similar proposal set in a partially different framework.

'Gianni ran the marathon.'

(119)

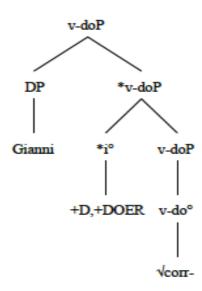
Gianni è corso a casa. Gianni is ran to home 'Gianni ran home.'

The derivation in (117) is monoevental; the event semantics involves an activity of running performed by the only argument, *Gianni*. In (117), the  $\sqrt{}$  directly conflates into v-do°, adding its encyclopedic semantics to the grammatical one provided by the eventive head:

(120) v-do° + $\sqrt{\text{run}} \rightarrow \text{a doing event of running}$ 

The DOER argument is licensed by the i\*°, as usual.

(121)

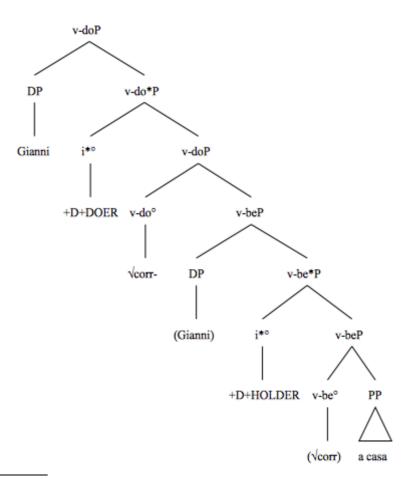


Example (118) is not relevant for our purposes, but of note is that the only difference between (117) and (118) is that in (118) the running event is measured by the DP *la maratona* 'the marathon'. The measure argument is merged in the v-do° complement position<sup>115</sup>. In Example

<sup>115</sup>In Section 3.4.3 I will deepen the concept of measure of the event, relating this concept to dynamic and stative events. The key point, in a few words, is that these DPs are not proper arguments. The only real arguments, identified as single entities, are the DPs introduced by the i\*°. These DPs, instead, are not conceived as single entities, but as sets of spatial and temporal points with respect to which the event is evaluated (as the Ground in a prepositional spatial predicate). *La maratona* 'the marathon', then, is not conceived as the single entity 'the

(119), on the other hand, the event described involves two subevents, a stative event and a doing one. The state can be paraphrased as "to be at home" The doing event, as before, can be summarized as "a doing event of running". The argument is both the HOLDER of the state and the DOER of the dynamic event: *Gianni* is at home and runs to be at home. *Gianni* is doing something (he runs), and the result is that *Gianni* is in the state of being *a casa* 'at home' The issue is how to conceive the mechanism that allows such an argument to take on two ROLES. There is no sign of a Middle/reflexive morphology in the structure, and to propose the presence of a covert operator that forces the identification of the argument merged low (as a HOLDER) with a higher variable (or the other way around, the identification of the argument merged high (as a DOER) with a lower variable) appears to be an *ad hoc* solution. A straightforward possibility is to allow movement of the low argument from its low merging position to the higher DOER position, where it re-merges:

(122)



marathon', but as a set of spatial and temporal points that constrain the doing event of running.

<sup>116</sup>In this context, I am not concerned with the internal structure of the state. It may well be that, in this case, the state is not formed by means of a single v-be° head but that it has to be decomposed in a PathP and a PlaceP (see Mateu 2008; Mateu and Rigau 2010; Acedo-Matellán and Mateu 2013, 2016; Acedo-Matellán and Real-Puigdollers 2015). 117The stative head, as graphically underlined in the subsequent tree, is realized by the verbal √, which covers both the stative and the dynamic part of the derivation. This is fully compatible with the characterization of Italian as a verb-framed language (see fn. 106).

This derivation, in a broad sense, is reflexive. The DOER and the HOLDER have the same reference. A clear difference between a reflexive derivation in which two arguments are distinct and related by means of a binding process and a reflexive derivation in which the argument moves is that the former can be interpreted as a proxy situation, while the latter cannot. In a proxy situation, the two related arguments are interpreted as two different entities, and the reflexive argument is a "proxy" of the referential DP, as in the famous "wax museum" example (Jackendoff 1992):

(123)

John saw himself at the museum

Here the meaning is that John sees a wax statue representing him. This interpretation is not available when the argument actually moves from the lower position to the higher one.

Returning to anticausatives, the tools that have just been displayed allow for a different proposal about anticausative alternation. Anticausative alternation is formed by a causative variant and a change of state variant. The causative variant of the anticausative alternation is characterized by the presence of a v-do° (controlled dynamicity) embedding a v-be° (stativity), while the change of state variant is characterized by a v-go° (uncontrolled dynamicity) embedding a v-be° (stativity). In the causative variant, there are two referentially distinct arguments, a DOER (v-doP) and a HOLDER (v-beP), while in the change of state variant, only one referential argument takes both the UNDERGOER role (v-goP) and the HOLDER role (v-beP). This is valid for each causative or change of state event, even outside anticausative alternation. Letting aside, for now, the argument-introducing heads, the causative and change of state derivations appear as follows:

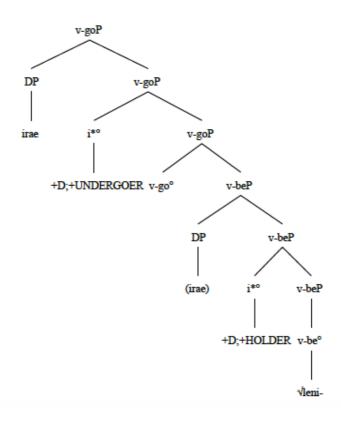
```
Causative: [v-doP [DP<sub>i</sub>] [v-doP [v-do°] [v-beP [DP<sub>j</sub>] [v-beP [v-be°]]]]]

Change of state: [v-goP [DP<sub>i</sub>] [v-goP [v-go°] [v-beP [DP<sub>i</sub>] [v-beP [v-be°]]]]]
```

The change of state variant of the anticausative alternation can be marked or unmarked, and the marked variant may be marked by a SE pronoun or by the Middle morphology. In the unmarked variant, the only argument moves from the HOLDER position to the UNDERGOER position, acquiring both roles. Both argument slots, HOLDER and UNDERGOER, are introduced by means of a semantically active and syntactically transitive i\*°. Let us turn to a Latin example:

(125)

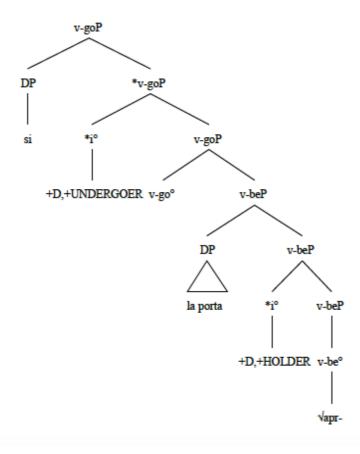
Irae leniunt. (Plaut. *Mil.* 583) angers.NOM soothe.3<sup>RD</sup>PL.PRS.ACT 'The anger soothes.'



In the marked variant, instead, the only argument stays low, in the HOLDER position, and acquires the UNDERGOER role by means of different mechanisms. In Italian, the marked variant is characterized by the presence of a SE pronoun: in this case, the HOLDER argument acquires the UNDERGOER role by means of a feature-sharing configuration. The type of i\*o used is the same, an active transitive one:

(126)

La porta si apre. the door SE opens 'The door opens.'

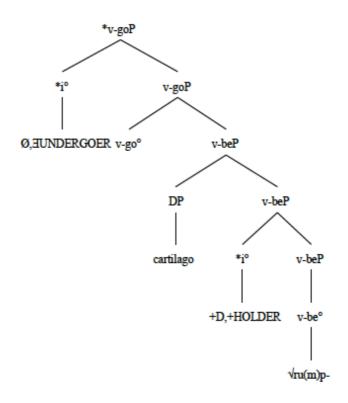


The derivation and the assignment of the UNDERGOER role to the internal argument *la porta* 'the door' continues as follows. The SE element (si) fulfills the +D requirement of i\*°. The SE element also acquires the UNDERGOER role. i\*° probes in its m-command domain to value its unvalued  $\varphi$  features. It agrees with SE. SE, however, cannot provide a valuation because its  $\varphi$  feature matrix is unvalued, just like the feature matrix of i\*°. The next available candidate in its m-command domain is the DP *la porta* 'the door'. This DP has a valued matrix of  $\varphi$  features and values the  $\varphi$  features of i\*°. The DP *la porta* 'the door', then, gets Nominative case. In this configuration, the DP *la porta* 'the door' shares its  $\varphi$  features valuation with i\*°, which, in turn, shares its features with SE. Consequently, SE and the DP *la porta* 'the door' indirectly share their features: SE shares its UNDERGOER role with *la porta*, which, in turn, shares its  $\varphi$  features with SE, providing the SE pronoun with a reference.

The Middle-marked variant, that appears in Latin and Modern Greek presents a different configuration involving a different argument-introducing head. This time, i\*° is not semantically active and syntactically transitive but semantically existential and syntactically intransitive.

(127)

In aure quoque interdum rumpitur cartilago. (Cels. 8, 6) in ear.ABL also sometimes break.3<sup>RD</sup>SG.PRS.MID cartilage.NOM 'Also in the ear, sometimes, the cartilage breaks.'



The argument stays low also in this case, in the phrase in which the  $\sqrt{}$  is conflated <sup>118</sup>. The difference with respect to the SE-marked anticausative derivation is that the higher argument-introducing head introduces an existentially bound argument:  $\lambda e \exists x [DOER(e,x)]$ . This existentially bound argument is contextually identified with the lower referential argument *cartilago* 'cartilage'. In a v-goP context, the existentially bound UNDERGOER is always identified with the internal argument, since the HOLDER of the state is contextually expected to also be the UNDERGOER of the dynamic event that brings that state into existence. The Middle morphology is the morphophonological output of the syntactically intransitive argument-introducing head.

This analysis allows for a reduction of the set of four argument-introducing head:

(128) active transitive:  $\{\lambda x \lambda e[ROLE(e, x)], D\} \rightarrow causatives$ , SE-marked anticausatives, SE-marked reflexives.

<sup>118</sup>The  $\sqrt{\ }$ , in this case, involves a nasal infix, whose analysis is a relevant issue in the indoeuropeanist debate. See Bertocci (2009) for an overview and a proposal that relates this nasal infix to causativity.

active intransitive:  $\{\lambda x \lambda e[ROLE(e, x)], \emptyset\} \rightarrow periphrastic passives.$ 

existential transitive:  $\{\lambda e \exists x [ROLE(e, x)], D\} \rightarrow SE$ -marked passives.

existential intransitive:  $\{\lambda \in Ax[ROLE(e, x)], \emptyset\} \rightarrow Middle-marked passives, Middle-marked$ 

marked anticausatives, Middle-marked reflexives.

The explanatory strength of Schäfer's proposal is maintained. Every anticausative structure shares a specific feature, the presence of a v-goP, the semantics of marked and unmarked anticausatives is exactly the same and there is never a DOER argument controlling the event. The variation depends on the means by which the HOLDER argument acquires the UNDERGOER role, feature-sharing configuration (SE-marked anticausatives), contextual identification of an existentially bound argument (Middle-marked anticausatives) and movement (unmarked anticausatives)<sup>119</sup>.

This account better explains the reason behind the fact that anticausatives and reflexives pattern together in many languages. It is possible to see that in (128), the reflexives and the anticausative always belong to the same group. The only characteristic that differentiates a reflexive structure from an anticausative structure is that the reflexive structure involves a controlled dynamic event (v-doP), while the anticausative involves an uncontrolled dynamic event (v-goP).

Despite the simplification proposed, the main conceptual problem behind anticausativity still stands. Why do we have three different syntactic structures for the same semantic event interpretation? These different structures, moreover, coexist in many languages. In Italian a change of state derivation of an anticausative may be derived either by movement (unmarked) or by a feature-sharing configuration (SE-marked). In Latin, the same structure may be derived by means of all of them: by movement (unmarked), by a feature-sharing configuration (SE-marked) or by a contextual identification of an existentially bound argument (Middle-marked)<sup>120</sup>. In Schäfer's

<sup>119</sup>There is an aspect of anticausativity that does not completely fit my proposal: Schäfer and Vivanco (2015) show that if a causative derivation is true, then the corresponding anticausative is also true (contra Koontz-Garboden 2009).

i. John broke the vase.

ii. The vase broke.

They conclude that the only way to account for this fact is to posit that the change of state variant is syntactically included into the causative one, meaning its structure is a subpart of the causative structure. In my account, the change of state structure is not included in the causative one, as the change of state structure is formed by a v-goP + a v-beP, and the causative structure is formed by a v-doP + a v-beP. Taking into consideration Cuervo (2014a, 2015) it is possible to propose a different explanation for this phenomenon. She argues that a v-doP+v-beP configuration entails a "become" event, even if a "become" event is not present. In other words, the causative semantics, "x acts in such a way that y is broken", entails "y becomes broken", even if there is no "become" event. The causative event "x acts in such a way that y is broken", then, entails the change of state structure, which can be paraphrased as "y goes in such a way that y is broken".

<sup>120</sup>For a complete list of examples of each of these possibilities see Section 2.2.2.

proposal, the marked anticausatives have an additional piece of syntactic structure, VoiceP. He thoughtfully proposes that the  $\sqrt{s}$  belonging to the *less spontaneous cause unspecified* category can only be interpreted when this head is projected, even if it is semantically expletive. The *more spontaneous cause unspecified*  $\sqrt{s}$ , instead, do not have this problem and are also interpretable in a contexts where no VoiceP is present. In the approach that I am presenting, this is not a viable solution: marked anticausatives and unmarked anticausatives have exactly the same number of syntactic heads, meaning they are syntactically and semantically identical. The difference depends on the fact that in the unmarked variant, the low argument moves to the UNDERGOER position, while in either the SE-marked or Middle-marked variant, it does not, and has to be linked to the UNDERGOER role by means of different mechanisms. Within such a hypothesis, the perspective shifts and the unmarked variant ends up having something more with respect to the marked one: it allows for the movement of the low argument to the high UNDERGOER position, while the marked variant does not. Relying on the categorization of the  $\sqrt{s}$  proposed by Haspelmath (1993) and updated by Schäfer (2008), one could propose that:

- The *internally caused*  $\sqrt{s}$  are compatible only with a v-go dynamic head<sup>121</sup> and allow for the movement of the internal argument to the UNDERGOER position.
- The *cause unspecified*  $\sqrt{s}$  are compatible both with a v-go and a v-do interpretation of the vP and are further subdivided into two categories:
  - $\circ$  The *more spontaneous cause unspecified*  $\sqrt{s}$  are compatible with both v-go and v-do dynamic heads and allow for the movement of the HOLDER to the UNDERGOER position.
  - $\circ$  The *less spontaneous cause unspecified*  $\sqrt{s}$  are compatible with both v-go and v-do dynamic heads and do not allow for the movement of the HOLDER to the UNDERGOER position.
- The *externally caused*  $\sqrt{s}$  and the *agentive*  $\sqrt{s}$  are compatible only with v-do dynamic heads and do not allow for the movement of a low argument to the DOER position<sup>122</sup>.

<sup>121</sup>When a v-do° is merged in a construction involving an *internally caused* √ it must be signaled by a specific marker. In Italian, this marker is the Light Verb *fare* 'to do'. For example:

i. Le rose sono fiorite. (the roses blossomed)

ii. Ho fatto fiorire le rose. (I brought the roses into blossom)

iii. \*Ho fiorito le rose.

The reason behind this is related to the fact that an *internally caused*  $\sqrt{}$  is not interpretable in a sentence in which there is a v-do, unless the v-do° is overtly lexicalized by an autonomous element, the LV *fare* 'to do'. An *internally caused*  $\sqrt{}$ , by itself, does not support a causative interpretation.

<sup>122</sup>Another group could be useful. As we have seen, the Italian verb correre 'run' is only compatible with a v-do

This categorization is partial. It does not take into account that Latin shows a threefold – not a twofold — distinction within the anticausative category. Italian, for example, has unmarked and marked anticausatives, while Latin has unmarked, SE-marked and Middle-marked anticausatives. The proposed distinction between marked and unmarked anticausatives seems to stand in Latin too. The *more spontaneous*  $\sqrt{s}$ , like *lenio* 'I soothe', *amplio* 'I grow larger' and *sedo* 'I calm down', are unmarked, while the less spontaneous  $\sqrt{s}$ , like *scindo* 'I divide' or *aperio* 'I open', are marked, both with the SE pronoun or with the Middle morphology (see Cennamo et al. 2015). However, there are grey areas; it seems that in many case the choice does not depend only on the  $\sqrt{s}$ , but also on the general context, including the grade of animacy of the subject and the more the subject is animate, the more a SE-marked form is used.

```
(129)
                                quoquam mutat. (Plaut. Amph. 273)
     Neque se
                    luna
     and.not self moon.NOM at.all
                                           change.3<sup>RD</sup>SG.PRS.ACT
    'And the moon does not change at all.' (ex. (12c) from Cennamo et al. 2015)
(130)
     In priore
                           verbo
                                                    prosodiae,
                                      graves
                                                                   quae
     in previous.ABL.SG word.ABL grave.NOM.PL accents.NOM which.NOM.PL
     fuerunt,
                       manent,
                                              reliquae
                                                             mutant. (Gell. 18, 12, 8)
     be.3<sup>RD</sup>PL.PRF.ACT remain.3<sup>RD</sup>PL.PRS.ACT other.NOM.PL change.3<sup>RD</sup>PL.PRS.ACT
    'In the former word, the accents that were grave remain so, the others change.' (ex. (19c)
    from Cennamo et al. 2015)
```

In (149), the subject, *luna* 'moon', is personified; it is treated by the author like an animate element, while in (150) the subject, *reliquae* (*prosodiae*) 'the other accents', is inanimate. It is the context, then, not simply the  $\sqrt{\ }$ , that forces the choice of a specific pattern. The  $\sqrt{\ }$ , being part of the context, plays a relevant role, but other factors should also be considered.

The analysis of factors behind the choice of the two marked patterns is more complex. There are relevant diachronic factors to take into consideration, such as that the corpus cannot be analyzed

We are dealing with an *internally caused*  $\sqrt{}$  that is only compatible with a v-do interpretation of the vP.

interpretation of the vP, but it also allows for the movement of the HOLDER to the DOER position, as in (122). Moreover, it does not allow for the external merge of a different DOER:

i. \*Ho corso Gianni a casa.I have run Gianni at home

as linguistically coherent: the SE-marked structure was much less used in the Early and Classical periods, while it – along with the unmarked pattern — spread in the Late and Medieval periods (Cennamo et al. 2015, p.686; Gianollo 2014). There are also synchronic factors, such as that different extra-linguistic contexts call for different forms: in technical works, the SE-marked strategy is more present, while in poetic works, it is almost never used. Each of these statements has to be further scrutinized by means of a quantitative survey of the Latin corpus, an endeavor that goes beyond the scope of this thesis.

Let us recap the various structures identified in Section 2.2.2, starting from Italian.

The agentive construction is derived by merging a non-deactivated standard i\*° with a v-doP.

(131)

Gianni ha rotto la sedia. Gianni has broken the.F.SG chair 'Gianni broke the chair.'

The reflexive construction is derived by merging a non-deactivated standard i\*° with a v-doP, like the agentive one; the difference is related to the fact that in this case the internal argument (usually a HOLDER) is a reflexive anaphoric (SE) pronoun and not an autonomous DP<sup>123</sup>.

(132)

Giovanni si lava. Giovanni SE washes 'Giovanni washes.'

The anticausative structure is derived merging a non-deactivated active  $i^*$ ° with a v-goP; in the unmarked anticausative structure, the internal DP argument (HOLDER) moves to the UNDERGOER position; in the marked anticausative structure, a SE pronoun is merged in the UNDERGOER position, fulfills the +D feature and shares the UNDERGOER role with the internal DP argument (HOLDER). The choice of one structure over the other is regulated by the categorization of the different  $\sqrt{s}$ , as I will point out in Section 4, is influenced by the morphosyntactic system of the language, which varies in a

<sup>123</sup>This is one of two possible analyses. The second one, as shown previously (Section 2.2.4), is to merge the referential DP in a low position and the SE pronoun in the DOER position. In this case, the identification between the two arguments is reached by means of a feature sharing configuration, such as the Italian SE-marked anticausative structure.

parametrizable way<sup>124</sup>. In this context, however, the relevant point is that all change of state structures present the same number and kind of verbal heads, a v-be° and a v-go°.

```
(133)

La barca affonda.

the boat sinks
'The boat sinks.'

(134)

La sedia si è rotta.

The.F.SG chair SE is broken
'The chair broke.'
```

The SE-marked passive construction is derived by merging a syntactically transitive and semantically existential i\*° with a v-doP; the SE pronoun fulfills the +D feature, while the identification of the existentially bound DOER is context-driven.

```
(135)
```

```
Oggi si sono vendute quattro macchine.
today SE are sold.F.PL four cars
'Four cars have been sold today.'
```

Let us now visit the Latin derivations.

The causative structure is derived, as in Italian, by merging a transitive active i\*° with a v-doP.

```
(136)
```

```
Olli somnum ingens rumpit pavor. (Verg. Aen. 7, 458) him.DAT sleep.ACC great.NOM break.3<sup>RD</sup>SG.PRS.ACT fear.NOM 'A great fear breaks his sleep.'
```

The Middle-marked reflexive structure is derived by merging a syntactically intransitive and semantically existential i\*° with a v-doP; the DOER role is contextually identified with the internal

<sup>124</sup>In this thesis I focalize the analysis on a single morphosyntactic parameter, the presence vs. absence of the Middle morphology. In Section 4 I will explicitly show how it influences the categorization of the lexical items. There are many other factors that, for reason of time and coherency, I do not analyze (e.g., the verb-framed vs- satellite-framed differentiation, see fn. 106).

```
DP^{125}
```

(137)

```
Quae semper ornantur lavantur tergentur who.NOM.PL.F always adorn.3<sup>RD</sup>PL.PRS.MID wash.3<sup>RD</sup>PL.PRS.MID scrub.3<sup>RD</sup>PL.PRS.MID scrub.3<sup>RD</sup>PL.PRS.MID 'Who always adorn, wash, scrub and smooth themselves.'
```

The unmarked anticausative structure is derived by merging a syntactically transitive and semantically active i\*° with a v-goP. In this context, this head introduces an UNDERGOER role; the internal DP argument (HOLDER) moves, just like in Italian, to the UNDERGOER position.

```
Irae leniunt. (Plaut. Mil. 583) angers.NOM soothe.3<sup>RD</sup>PL.PRS.ACT 'The anger soothes.'
```

The Middle-marked anticausative structure is derived by merging a syntactically intransitive and semantically existential i\*° with a v-goP; the UNDERGOER role is contextually identified with the internal HOLDER DP

```
In aure quoque interdum rumpitur cartilago. (Cels. 8, 6) in ear.ABL also sometimes break.3<sup>RD</sup>SG.PRS.MID cartilage.NOM 'Also in the ear, sometimes, the cartilage breaks.'
```

The Middle- marked passive construction is derived by merging a syntactically intransitive and semantically existential i\*° with a v-doP; the interpretation of the existentially bound DOER as an element external to the derivation is contextually driven.

```
(140)

In hos ergo exitus varius ille secatur
```

<sup>125</sup>The contrast between the Latin contextual reflexives and the Italian syntactic ones explains why in Latin the Middle-marked reflexive construction is much more constrained than in Italian.

in these.ACC.PL then results.ACC various.ACC.PL that.NOM.SG cut.3<sup>RD</sup>SG.PRS.MID lapis. (Sen. *Contr.* 2, 1, 12) stone.NOM 'That stone, then, is cut in these various shapes.'

The Latin Middle morphology, given the analysis proposed in this Section, can be defined as such:

(141)

The Latin Middle morphology is the morphological output of a syntactically intransitive argument-introducing head.

In the next Sections I will exploit this definition to analyze the verbs belonging to the deponent category, in order to prove that also in these cases the Middle morphology can be analyzed following the same definition provided here.

# 3. Deponent verbs

The class of deponent verbs have been defined following two criterion:

- Absence of Active occurrences.
- No apparent relation between the presence of the Middle morphology and a Middle-related interpretation (reflexive, passive, anticausative).

The class formed by the verbs that respond to either of these two criteria counts for approximately 330 items. This number falls to around 280 after removing the verbs that respond to only one of the two criteria (see Section 1.2). These verbs share two common features:

- The event in which they are merged involves an overt DOER (except for a small group of pure change of state verbs, like *morior* 'I die').
- They cannot be passivized.

In the next Sections, I review the main synchronic analyses proposed for the deponent category. I do not present the diachronic analyses, since the target of this thesis is to provide a synchronic account. Native speakers are not aware of the diachronic passages that lead to a specific use of a specific linguistic item. Because of this, a diachronic analysis would not be helpful in explaining why Latin speakers synchronically use these verbs only with the Middle morphology.

## 3.1 Deponents as idiosyncratic forms

The approaches to the issue of deponent verbs may be split in "idiosyncratic approaches" and "unitary approaches" Idiosyncratic approaches treat deponents as having the Middle morphology because of an idiosyncratic exception, while the unitary approaches try to unify the standard notion of Middle morphology with the analysis of deponents. In this Section, I review the idiosyncratic ones.

Lavidas and Papangeli (2007), focusing on Greek deponents, adopt a morphological solution to the problem. They propose an analysis that relies on the idiosyncratic characteristics of each verb. These idiosyncratic characteristics force the appearance of the Middle morphology without syntactic or semantic implications of the use of this morphology. In their view, deponent verbs have

<sup>126</sup>See Baerman (2007) and the papers in the same volume for a crosslinguistic overview of the concept of deponency.

the Middle morphology because these verbs enter in a morphological deponent template <sup>127</sup>. Each verb enters into this template because of lexical idiosyncratic reasons:

We take here the morphological approach to allow for a non-systematic view of the data, in the sense that the feature specification that accounts for deponent verbs is realized in a random way and possibly relies on the idiosyncratic properties of each verb. (Lavidas and Papangeli 2007: 120)

Deponent verbs, then, show the Middle morphology due to entirely morphological reasons, not syntactic or semantic ones. The syntax of deponents, which Lavidas and Papangeli (2007) do not analyze, should be considered, for example, a standard active syntax in the case of transitive deponents like *hortor* 'I exhort' or a change of state in the case of change of state deponents like *nascor* 'I am born'. The Middle morphology on deponents, then, does not appear for the same reasons for which it appears on Middle-marked reflexives, passives or anticausatives. The reason for its appearance must be searched within the lexical characteristics of each verb.

Xu et al. (2007), focusing on Latin, note that Latin deponent verbs are mainly denominals and analyze the Middle morphology, which they call Passive, as an oppositional marking element: the Latin speakers functionalize this specific morphology in order to overtly express a semantic distinction within the verbal system, the distinction between the *canonical active verbs* (unmarked) and the *non-canonical active verbs* (marked by the Middle)<sup>128</sup>. The Middle morphological feature is a reflection of a semantic distinction. The main issue in their analysis is that the exact meaning of *non-canonical active verb* is not entirely clear. There are many verbs that seem to be *non-canonical active verbs* and do not show any [+pass] feature in their derivations, such as *cresco* 'I grow up' and *fio* 'I become', etc..., while many deponent verbs appear to be canonical active verbs, such as *hortor* 'I urge' and *ancillor* 'I serve'.

Embick (2000) also analyzes deponents in Latin, but uses a Distributed Morphology framework. He analyzes the Middle morphology (that he calls Passive), similarly to the approach used here, as the post-syntactic morphological output of an argument-introducing head (vP in his model) which does not introduce an actual syntactic DP. Deponents, however, do not have the Middle morphology as a consequence of the presence of this specific head. He proposes allowing for the presence of an inherent [+pass] feature in the feature matrix of deponent √s. This inherent

<sup>127</sup>See Aronoff (2004) for an analysis of many similar cases, in which the morphological exponent follows from a paradigmatic template and not from a syntactic/semantic derivation.

<sup>128</sup>Gianollo (2010, 2014) proposes a similar analysis of a subset of deponents, the unaccusative ones. In her hypothesis these verbs are marked by the Middle morphology because the Middle morphology was used as a split intransitivity marker: it was used to differentiate unergatives and unaccusatives (see Section 3.4.3).

feature, if present on the  $\sqrt{\ }$ , forces the post-syntactic morphologic form to appear with the Middle morphology, irrespective of the syntactic derivation in which the  $\sqrt{}$  is involved. A deponent verb, then, is a verb whose  $\sqrt{\ }$  is inherently marked by a [+pass] feature that influences the entire derivation. The Middle morphology can be the output of a syntactic derivation in two ways: it can be present because the vP does not introduce an actual external argument, or it can be present because of a [+pass] feature inherent to the √ itself. Consequently, the syntactic derivation in which a deponent verb is present has nothing to do with the Middle morphology that appears on the verb itself, because, as we have said, the Middle morphology of deponent verbs is the morphophonological output of an inherent [+pass] feature that is present on a large number of roots  $(\sqrt{s})$ . He supports this claim by showing that certain deponent verb must be considered normal transitive verbs from the syntactic point of view, since they can be passivized. We have already seen in Section 1.2 that the existence of some cases of passivized deponents cannot be considered strong evidence. He considers the inherent [+pass] feature of these  $\sqrt{s}$  as syntactically active, since it influences the syntactic derivation. In his proposal, the Latin analytic perfect of the passive (see the table in Section 1.1), e.g., hortatus sum 'I exhorted', is the result of a syntactic blocking mechanism triggered by the [+pass] feature itself: the [+pass] feature freezes the lexical part of the verb in Asp°, preventing it from moving further to T°. T°, then receives an independent spell out by means of the esse 'to be' auxiliary. This configuration gives as an output the perfect analytic form, in which the aspectual part of the verb (hortatus) is separated from the tensed one (sum). This  $\sqrt{-}$ feature, then, is processed by the syntactic component that is simultaneously influenced by it.

## 3.2 Deponents as standard Middles

Other approaches in the literature deal with deponent verbs without assuming that the Middle morphology is present because of an inherent and idiosyncratic feature of the  $\sqrt{}$  or because the verb enters in a special and idiosyncratic morphological template. These approaches try to unify the standard use of the Middle morphology with the Middle morphology that is present on deponent verbs. This is exactly the kind of approach that I will justify in the following sections. Zombolou and Alexiadou (2013, 2014), for example, treat Modern Greek deponent verbs as standard instantiations of the Middle Voice morphology: they argue that the majority of these verbs is formed by lexically restrained anticausatives, passives and reflexives<sup>129</sup>. In other words, deponent verbs belong to the categories already analyzed in the previous sections. The only peculiarity that

<sup>129</sup>For an analysis of the Albanian deponents as standard Middles, with a specific focus on the denominal derivations, see Kallulli (2013).

they show is the absence of an alternating Active form. This absence is related to the lexical-semantics of the  $\sqrt{\ }$ , which is unable to be merged in a derivation in which the external argument, DOER or UNDERGOER, is syntactically and semantically projected. I will show the validity of this approach in the next sections , and I will propose a specific analysis for the Latin cases.

Another relevant syntactic approach to the issue of IE deponents has been proposed by Grestenberger (2014). She focuses on a subset of the deponents that I identified by means of the criteria proposed in Section 1.2: deponents that present an Accusative object and whose Nominative subject has clear control over the entire event (meaning that it is undoubtedly a DOER). She defines deponency as follows (Grestenberger 2014: 65):

(143)

In an active/non-active voice system, a deponent is a syntactically active verb whose surface subject is an agent and whose finite forms are morphologically non-active.

She treats the other deponents, as Zombolou and Alexiadou (2013, 2014), as lexically constrained verbs which are bound to appear only in syntactic Middle contexts. In all these cases, the Nominative argument is merged in a low thematic position, and the external argument position is marked as syntactically inactive. As just underlined, she analyzes a subset of the verbs that are the subject of my analysis, and for this reason I will present her proposal in the specific section dedicated to these verbs (Section 3.4.3), underlining the differences between our approaches.

Gianollo (2010, 2014), finally, conducts an in depth analysis of the set of the non-agentive deponents, the deponents that denote a change of state situation, such as *morior* 'I die' and *nascor* 'I am born'. I will present her proposal in Section 3.4.3, where I analyze these verbs.

## 3.2 Beyond idiosyncrasy

The idiosyncratic proposal assumes that there is a group of  $\sqrt{s}$  marked by a specific diacritic that influences the morphological spell-out, forcing the appearance of a Middle form. The first general problem with respect to this proposal is that it assumes that a  $\sqrt{s}$  can be marked by a syntactic feature <sup>130</sup>. This assumption is in open contradiction to the standard assumption of DM, which posits that  $\sqrt{s}$  are late inserted and do not constrain the syntactic derivation (Harley 2014a). Assuming the presence of a syntactic diacritic allows for an exception that cannot be adequately constrained within the assumed framework. From an acquisition point of view, moreover, this idea

<sup>130</sup>This must be considered a syntactic feature because it influences the subsequent derivation, as the Latin perfect analytic form shows.

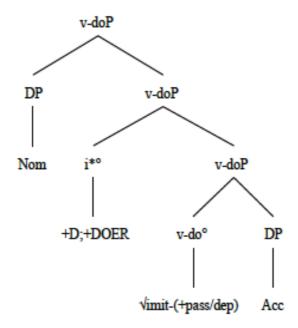
could only be implemented by means of a strong influence of the education system. A child that learns a specific language with a Middle/Active opposition generalizes the meaning of the Middle morphology by means of the oppositional uses of the morphology itself, coming up with a possibly unique definition, like the one proposed in (143). If she is faced with new linguistic input in which a verb appears with the Middle morphology, but the syntactic derivation is not in harmony with the presence of the Middle morphology, the obvious reaction would be a regularization. The deponent verbs, however, are not easily regularized; the Middle morphology is usually maintained<sup>131</sup>.

There is also a language specific problem. The class of Latin deponent verbs is not a closed class; it is continuously enriched by new formations, e.g., ancillor 'I serve', dominor 'I rule', lupor 'I make a prostitute of myself' aquor 'I fetch water', glorior 'I boast', famulor 'I serve' and architector 'I build'. If we want to maintain the idea that there is an inherent morphological feature in the feature matrix of the  $\sqrt{}$  of deponent verbs, we have to assume that this is also the case for new deponents. If the presence of an inherent feature on a  $\sqrt{}$  with a long historical derivation could be somehow justified, to admit that a speaker directly creates a new  $\sqrt{}$  with a specific syntactic diacritic that forces a feature mismatch between the syntactic derivation and the morphological output is more problematic. The only solution would be to propose analogy patterns, but the new deponent verbs belong to many different categories, with, for example, some being intransitives (aquor 'I fetch for water', glorior 'I boast') and others obligatorily hosting an Accusative argument (alumnor 'I educate', causor 'I give something as a reason'). Without a strong analogical pattern such a proposal is weak.

A final problem for the idiosyncratic approaches is the generalized lack of passive interpretations of the Middle morphology. These approaches assume that the derivation of a deponent verb like *imitor* 'I imitate' is a standard active derivation in which the Nominative argument is merged in the DOER position:

(144)

<sup>131</sup>In Part II we will see that the activizations are not frequent. Their frequency increases in Late and Medieval Latin, when the Middle morphology disappears, triggering a series of predictable changes. In the transition from Ancient Greek to Modern Greek, instead, where the Middle morphology does not disappear, deponents are maintained.



In such a syntactic derivation, nothing would prevent the projection of a syntactically intransitive and semantically existential  $i^*$ ° instead of the transitive and active one. The Middle morphology, then, would be both the output of the [+pass/dep] feature of the  $\sqrt{}$  and the output of the intransitive  $i^*$ °. There would be no feature mismatch, and the derivation would be able to go on without any issue. The fact that such cases do not occur (except for a single occurrence of *hortor* 'I exhort', see Sections 1.2 and 3.4.3) is not in line with the idiosyncratic approach.

This evidence supports a non-idiosyncratic analysis of these verbs. In the next Sections, I will provide a more reliable classification of the deponent verbs and I will justify the presence of the Middle morphology for each class I identify.

## 3.3 The productive core of deponents

In the previous sections I noted that there is a core of productive deponent verbs (as shown by Xu et al. 2007). These verbs are actively produced by Latin speakers from the III cent. BCE to the VI cent. CE (at least<sup>132</sup>). By "actively produced" I mean that these verbs are new formations whose first occurrence is evidenced after the first half of the II cent. BCE (see Flobert 1975). I consider as new productions only entirely new verbs, while I do not include in the class of the productive deponents the new prefixations of older deponents. This is justified by the fact that the Middle is

<sup>132</sup>New deponents arose after the VI cent. CE, but the authors belonging to this period can no longer be considered native Latin speakers.

already present in the unprefixed variant; the prefixation, then, is not connected to the presence of the Middle morphology<sup>133</sup>. A full list of productive deponents can be found in the Appendix. A short proviso: it is impossible to be completely sure that the first attested occurrence of a verb corresponds, more or less, to the date at which that specific verb has been used for the first time. However this reality does not prejudice the work (See Introduction, Section 2).

An example of a new morphological production is *ancillor* 'I serve', whose first occurrence can be found in Titinius (II cent. BCE):

(145)

Verum enim dotibus deleniti ultro etiam indeed conversely dowries.ABL softened.PST.PTCP.NOM.PL furthermore also uxoribus ancillantur (Titin. *com.* 70) wives.ABL serve.PRS.3<sup>RD</sup>PL.PRS.MID 'Softened by the dowries, they (the husbands) enslave themselves even more for the wives.'

It is quite clear that in this case, the verb has been created as a joke. The broke husband who does everything for his wife in order to have access to money from the marriage is a typical caricature of Roman comedies. Titinius uses this verb in order to convey the concept of voluntary enslavement and to relate the figure of the husband to a feminine semantics (the Latin noun *ancilla* 'maiden', from which the verb has been created, refers to a feminine entity).

A verb whose first occurrence dates to the I cent. BCE is *negotior* 'I trade (intr.)', from the noun *negotium* 'activity'. The first occurrence of this verb is in Livy:

(146)

Omnes per agros vicinas -que urbes everyone.NOM by fields.ACC near.ACC.PL -and cities.ACC negotiabantur (Liv. 5, 8, 3) trade.3<sup>RD</sup>PL.IPFV.MID 'Everyone was trading in the lands and in the near cities.'

This specific verb is most likely connected to the fact that the origin and meaning of the noun

<sup>133</sup>I have already pointed out that there is a class of verbs which alternates between a Middle-marked prefixed variant and an unmarked unprefixed variant. Even if, strictly speaking, this class cannot be considered deponent, I address it in Sections 3.4.1 and 3.4.2.

*negotium* 'activity', as opposed to *otium* 'rest', was a much-debated philosophical and rhetorical topic during the first half of the I cent. BCE.

Many denominal deponents do not survive over a long period of time; many of them occur only a few times, around 10 or even fewer. A relevant group, however, survives and spreads. The verb *imaginor* 'I imagine, dream' from *imago* 'image', is part of this group, appearing during the I cent CE, in Seneca:

(147)

Feneratores perdiderunt tabellas, quibus avaritia usurers.NOM lose.3<sup>RD</sup>PL.PRF.ACT files.ACC which.ABL greed.NOM falso laeta divitias imaginatur. (Sen. *dial.* 2, 6, 7) wrongly happy.NOM.SG riches.ACC imagine.3<sup>RD</sup>SG.PRS.MID 'The usurers lost their files, on which the wrongly glad greed dreams of riches.'

There are 2 occurrences of this verb in Seneca, 1 in Tacitus and 9 in Pliny the Young. The real growth, however, occurs at the end of the I cent. CE: from the II cent. CE to the VII cent. CE there are more than 100 occurrences.

With "non-productive" I refer to verbs whose date of first occurrence precedes the beginning of the attested Latin literature. An example of this kind of deponent is *nascor* 'I am born':

(148)

Alter decumo post mense nascetur second.NOM tenth.ABL.SG after month.ABL is.born.3<sup>RD</sup>SG.PRS.MID puer. (Plaut. *Amph*. 479) child.NOM 'And after the tenth month a second child is born.'

This verb is already attested in the III cent. BCE and has a PIE origin; it is not a new morphological production. All the verbs with this characteristic have been listed separately as non-productive deponents.

Since the class of the deponents is complex and, as we will see, includes different subclasses with different characteristics, I have decided to start from the productive core. A morphologically productive and growing class of verbs has to follow a synchronically definable rule, in which, as I stated in Section 3.2, the Middle morphology cannot be treated as a result of an idiosyncratic feature

of the  $\sqrt{}$ . In the next Sections I will identify the relevant characteristics of these verbs, and I will provide a generalization that justifies the presence of the Middle morphology on the productive deponent derivations.

### 3.3.1 The characteristics of the productive deponents.

The main characteristic of productive deponents is that these verbs are all denominals/deadjectivals. This can be seen in the following table, which includes the first occurrences of the deponent verbs in the various periods of Latin, distinguishing between the denominal/deadjectivals and the non-denominal/deadjectivals:

	Non-denominal/deadjectivals	Denominal/deadjectivals
Period		
I (Plautus-Ennius)	56	67
II (Terence-Varro)	4	28
III (Cicero-Ovid)	1	32
IV (Columella-Martial)	0	16
V (Apuleius-Tertullian)	0	7
VI (from Tertullian on)	0	34

As can be seen, basically all non-denominal deponents are already present in the first period (III cent. BCE-150 BCE ca.). The denominal/deadjectivals, instead, continue to grow. This occurs also in the last period (from the end of the II cent. CE on). There is only a small group of non-denominal/deadjectivals whose first occurrence is attested later than the 150 BCE ca.

We have just seen that the productive deponents are denominal/deadjectivals. This, however, is not the only feature that unifies this subset of deponents; these verbs share a common event structure feature as well. They are all agentive and dynamic, meaning that in their derivations a DOER (subject of the v-doP) is always involved. There are only a few exceptions to this generalization: *acedior* 'I am bothered', *aporior* 'I am in uncertainty', *pennor* 'I grow feathers', *periculor* 'I get in danger', *perplexor* 'I tangle', *radicor* 'I grow roots', *siliquor* 'I grow sprouts' and *tristor* 'I am sad'. In many cases, the verb is only attested once, e.g., *pennor* 'I grow feathers' in Dracontius (Drac. 1, 262), *periculor* 'I get in danger' in Festus (p.242 Müll.) and *perplexor* 'I tangle' in Plautus (Plaut. *Aul.* 259). Other verbs have just a few occurrences: *siliquor* 'I grow sprouts' is attested 3 times and only in Pliny the Elder (e.g., Plin. *Nat.* 17, 54, 3) and *acedior* 'I am

bothered' is attested 2 times, in St. Jerome (Hier. *in psalm*. 89, 3) and in St. Augustin (Aug. *spec*. 23, p.124). *Radicor* 'I grow roots', *tristor* 'I am sad' and *aporior* 'I am in uncertainty', instead, have many occurrences. *Tristor* 'I am sad' occurs basically only in the Late and Medieval period, like *aporior* 'I am in uncertainty', while *radicor* 'I grow roots' occurs also in the Classical period, from Columella on (Colum. 4, 2). All these verbs, being rare and not attested in the Classical period, cannot be taken into consideration. The only exception is *radicor* 'I grow roots', that also from a diachronic point of view behaves dissimilarly from the other denominal/deadjectival deponents, as I will show in Part II, Section 2.4.3.

Another relevant characteristic of the denominal/deadjectival deponents is the relation between the nominal element and the Nominative argument. The Nominative argument, that, as already seen, is in control of the event (it is a DOER), is also always related to the nominal/adjectival element that forms the verb. This happens in three possible ways: the Nominative argument can be identified with the nominal/adjectival element acquiring its characteristics, it can get in possession of the nominal/adjectival element or it can be the benefactive of a stative event in which another argument is involved as well as the nominal/adjectival element.

(149)

<u>Identification</u>: the Nominative argument acquires the characteristics of the nominal/adjectival element, i.e., it is identified with the nominal/adjectival element.

Examples: ancillor 'I serve', from ancilla 'servant', dominor 'I rule', from dominus 'master', famulor 'I serve', from famulus 'servant', furor 'I steal' from fur 'stealer'.

(150)

<u>Possession</u>: the Nominative argument is in possession of the nominal/adjectival element, i.e., it has the possession of the nominal/adjectival element.

Examples: aquor 'I get water', from aqua 'water', glorior 'I boast', from gloria 'glory', annonor 'I get stocks', from annona 'stocked grain', auctionor 'I hold an auction', from auctio 'auction', cibor 'I get food', from cibus 'food', copior 'I refuel', from copia 'supplies', frumentor 'I get wheat', from frumentum 'wheat', piscor 'I fish', from piscis 'fish', praedor 'I hunt', from praeda 'prey'.

(151)

<u>Possession+Identification</u>: The Nominative argument is the benefactive of a stative event in which another argument (marked by Accusative case) is involved, as well as the nominal/adjectival element. The Accusative argument is usually identified with the nominal/adjectival element.

Examples: *imaginor* 'I picture/imagine something', from *imago* 'image', *recordor* 'I remember', from *cor* 'heart', *mercor* 'I buy', from *merx* 'goods', *populor* 'I pillage', from *populus* 'army'<sup>134</sup>, *testor* 'call to testify', from *testis* 'witness'.

The existence of this direct relation between the nominal/adjectival element and the Nominative argument is highly relevant. The Nominative argument has the characteristics of a DOER, as it controls the dynamicity of the event, but it is also in a specific direct relation with a nominal/adjectival element, resulting in a stative relation. This is true for the first two groups; the third group presents different characteristics. The verbs belonging to this group appear in derivations in which there are two arguments: a Nominative one and an Accusative one. It is the Accusative argument, in this case, that seems to be related to the nominal/adjectival element, e.g., in *imaginor* 'I imagine something' from *imago* 'image', it is the Accusative "something" that acquires the characteristics of an *imago* 'image', not the Nominative argument, that is the "imagining" argument.

A deeper analysis of the relation between the Nominative DOER argument and the nominal/adjectival element is needed. By means of this analysis, in the next three sections, I will provide a syntactic and semantic justification for the presence of the Middle morphology on these verbs.

#### 3.3.2 The Identification denominal deponents

Identification denominal deponents are numerous within the subset of denominal/deadjectival deponents, totaling 88 out of the 175 cases of denominal/deadjectival deponents. As already pointed out in the previous section, the Nominative argument of these verbs has the DOER role. It is, however, also related in some way to the nominal/adjectival element. Let us see some actual examples, going through the various possibilities found in the data.

The identification may be with a persona or with a social role:

<sup>134</sup>Initial meaning: 'to have an army pass through something (e.g., a village)'.

(152)

Verum enim dotibus deleniti ultro etiam indeed conversely dowries.ABL softned.PST.PTCP.NOM.PL furthermore also uxoribus ancillantur. (Titin. *com.* 70) wives.ABL serve.3<sup>RD</sup>PL.PRS.MID 'Softened by the dowries they (the husbands) enslave themselves for their wives even more '

(153)

Dominatur corpore toto. (Lucr. 3, 276) rule.3<sup>RD</sup>SG.PRS.MID body.ABL entire.ABL.SG 'It rules over the entire body.'

(154)

Numquam poetor nisi si podager. (Enn. *sat.* 64) Never poetize.1<sup>st</sup>SG.PRS.MID unless if gouty.NOM.SG 'I never act like a poet, unless I'm gouty.'

The identification is not always with an actual social role or with a human-like element. In some cases, the identification is between the Nominative argument and an abstract element as a geometrical form. E.g., *circulor* 'I put myself in circles':

Totis vero castris milites circulari. (Caes. *civ.* 1, 64, 2)

all.ABL.PL sed camp.ABL.PL soldiers.ACC.PL circle.INF.PRS.MID

'In every camp the soldiers were speaking in circles.' (lit. 'putting themselves in circles.')

Within this class we can also place the few deadjectival deponent verbs that can be found in the Latin literature: blandior 'I seduce' from blandus 'charming', largior 'I donate' from largus 'generous', grator 'I rejoice' from gratus 'joyful' and recentor 'I renew myself' from recens 'new'.

(156)

Ita nostro ordini palam blandiuntur. (Plaut. *Cist.* 33) So our.DAT.SG order.DAT overtly flatter.3<sup>RD</sup>PL.PRS.MID 'So they flatter us in front of everyone.'

There is a key point with respect to the conjugation of these verbs that must be highlighted. *Grator* 'I rejoice' and *recentor* 'I renew myself' behave like the other denominal/deadjectival deponents and belong to the I conjugation, which shows the vowel in *a*-. This is quite expected, given that in Section 2.2.1 I underlined the fact that all the newly produced Latin verbs, when the derivation involves a v-do°, belong to this conjugation. The first two, instead, do not belong to the -*a* conjugation: both *blandior* 'I seduce' and *largior* 'I donate' belong to the IV conjugation in -*i*. This observation may lead us to exclude these verbs from the new Latin deponent denominal/deadjectival derivations. This hypothesis is confirmed by the fact that these two verbs may present, since their first occurrences, an Accusative direct object, while the other Identification denominal/deadjectival deponents do not. A further confirmation comes from the fact that these two verbs present Active forms quite early: already in Cato (II cent. BCE, *largior*) and Apuleius (II cent. CE, *blandior*):

```
Pecuniam largibo tibi. (Cato, orat.. 25, 2)
money.ACC donate.1<sup>ST</sup>SG.FUT.ACT you.DAT
'I will donate money to you.'

(158)

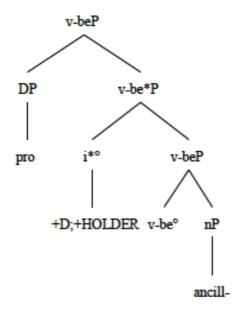
Cur ego blandirem si magiam confidebam? (Apul. apol. 87)
Why I charm.1<sup>ST</sup>SG.SUBJ.IPFV.ACT if magic.ACC believe.1<sup>ST</sup>SG.IPFV.ACT
'Why should I try to seduce if I believed in magic?'
```

In the second part of the thesis, where I analyze the diachronic evolution of the Identification denominal/deadjectival deponents, I show that many of these verbs undergo a process that leads to the loss of the structural characteristics of the denominal derivation (Part II, Section 2.4). These verbs appear to be well ahead on this diachronic path. A plausible hypothesis, then, is to delete these verbs from the proper denominal/deadjectival category.

Let us now go through the syntactic derivation of these verbs. These verbs are synchronically denominal. This means, following what I stated in Sections 1.3 and 2.2.1, that the morphophonological form of the verb is derived by means of an Incorporation process that integrates a nominal/adjectival element into the event derivation of the verb. The derivation, then, starts from an aP/nP<sup>135</sup>. The Nominative argument has to be Identified with this aP/nP. A stative identification head, like v-be°, can do the job. I take as a specimen the example in (132):

<sup>135</sup>The noun/adjective is not a defined specific entity, meaning that it cannot be analyzed as a DP.

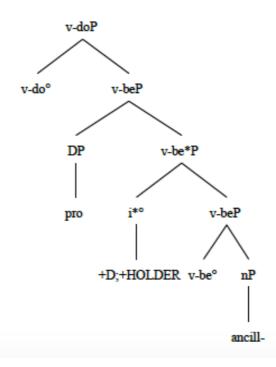
(159)



The nP (*ancill-*) merges with the stative head (v-be°). The nP is the measure of the stative relation, the element that constrains the "being". It is possible to conceive of this element as a set of points that constitute the scope of the "being". This configuration creates a v-beP that could be paraphrased as 'the stative event of being (related to the characteristics of) an *ancill-*'. The next step involves the merging of a transitive and active argument-introducing head i\*°. This head carries a +D feature and, in this context, introduces the semantics of the HOLDER of the state. Since the i\*° does not have a label, it re-projects the v-be label. This v-be\*P merges with a DP, a pronominal element with a specific set of features: 3<sup>rd</sup> person and plural. This DP satisfies the +D requirement of i\*° and acquires the +HOLDER role by function application. At this point, the derivation denotes the following stative event "pro is the HOLDER of the state of being (related to the characteristics of) an *ancill-*".

The final meaning of *ancillantur* is not stative, however; it is dynamic. We have said before that the Nominative argument is the DOER that controls the dynamicity of this event. The next step, then, is to add a dynamic v-do°:

(160)



The v-beP that we have already built merges with a v-do°, creating a controlled dynamic eventuality that leads to the stative relation. We merge, then, the argument-introducing head, i\*°. Recall the following:

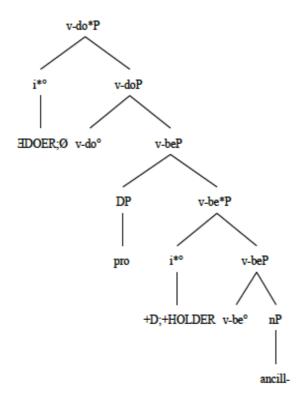
(161)

The Middle morphology is the morphological output of a syntactically intransitive argument-introducing head.

We want to justify the presence of the Middle morphology without referring to an inherent morphological feature. We want to explain the presence of the Middle morphology the same way we explain it in anticausatives, reflexives and passives. In order to do so we must also assume that in the case of denominal deponents the generalization in (161) will hold: we have to merge an intransitive i\*°. The only possible solution, then, is to merge an existential intransitive i\*°. An active intransitive i\*° would require some kind of "existentializer", just like the Pass° in Italian (see note 98), and Latin does not have such an element in its lexicon<sup>136</sup>.

<sup>136</sup>The need of an existentializer is due to the fact that a Ø selectional feature does not allow for the merging of an actual DP. This way, the standard semantic part,  $\{\lambda x \lambda e[DOER(e,x)]\}$ , would remain without an element able to assume the DOER role through function application. The only possible solution, then, is to merge an existentializing head, like Pass°, that creates a denotation in which the DOER is existentially bound (see Schäfer 2017). This kind of derivation, moreover, creates an environment in which the existentially bound DOER is referentially disjoint from the internal arguments. In the case of these deponents this solution would not be adequate.

(162)



The existentially bound DOER, then, has to be related to a real-world element. The real-world element, in this case, is the internal DP, the HOLDER. This is exactly the same kind of derivation that we have already seen for Latin Middle-marked reflexives. The DP argument, by means of this structure, then, gets the double set of features that is required for the correct interpretation of the verbal event. The proposed structure involves both a stative head and a dynamic head. A possible rough paraphrase of the event described in the previous structure is 'they enslave themselves for their wives'. The structure involves a change of state; the Nominative argument acquires the characteristics of the nominal element *ancilla* 'maiden'. This change of state is controlled by the argument itself, who acts on purpose. There is no entailment with respect to the time extension of the state, as the enslavement state may last as long as the contextual situation requires. The same happens with the Italian verb *schiavizzarsi* 'to enslave yourself':

(163)

Si schiavizzano per le loro mogli. self enslave.3<sup>RD</sup>PL.PRS for the.F.PL their wives 'They enslave themselves for their wives.'

In this sentence there is a controlled change of state, but the state is not final and has no endpoint: the event may be interpreted as lasting as long as the situation requires. This is shown by the fact that the temporal locution *per dieci anni* 'for ten years' is perfectly grammatical in this environment.

These denominal verbs occur only with the Middle morphology. This means that there is an exclusive contextual relationship between the internal argument and the existentially bound DOER. The relevant issue is to understand the reason behind this "deponent" behavior. There is nothing in this derivation that grammatically forces such a relationship. The existentially bound DOER could, in principle, be related to an element external to the derivation, as in the Latin Middle-marked passives. With the Middle-marked reflexive derivation the problem has been solved by means of the category of Naturally Reflexive  $\sqrt{s}$ . These  $\sqrt{s}$  are prone to be contextually interpreted as reflexives and, consequently, justify the reflexive interpretation of the existentially bound DOER. In this case, there is no Naturally Reflexive category to be invoked: the nP ancill- cannot reasonably be defined as an element that forces a specific reflexive interpretation. We must also notice that the possible causative construction 'x makes something an ancill-' would be perfectly meaningful and in some ways similar to En. to enslave or to It. schiavizzare 'to enslave'. Why can't the existentially bound DOER be interpreted as an external element, either by contextual identification (Middle-marked passives) or by the actual merging of a DP (causatives)? This issue also exists for some Italian denominal verbs. Impadronirsi 'to take possession, to seize' is derived from the noun padrone 'master, owner'. This verb can only be used in the reflexive form with SE, as seen in (164), and cannot be used in a causative construction, as illustrated in (165):

```
Si è impadronito del castello.
self is seize.PST.PTCP.M.SG of.the castle
'He took possession of the castle.'

(165)

*Io ho impadronito Giovanni del castello.
I have seize.PST.PTCP.M.SG John of.the castle
```

The reason for such asymmetry, again, is not strictly semantic, since the causative meaning "to make someone a master (of something)" is, in principle, available. A possible solution is to propose that the derivation of new verbs from a nominal basis can create idiosyncratic "verbalized nominal-syntactic event structure" relations, i.e., the possible occurrences of the specific nominal element in

a verbal derivation are restricted to a subset of the possible syntactic event structures<sup>137</sup>. This cannot be due to a grammatical feature of the nominal element, since it would not be adequate to endow an nP or an aP with a feature capable of influencing the syntactic verbal derivation. Why should an nP/aP be endowed with a verbal feature? It is more conceptually adequate to say that the specific nP/aP is only interpretable if it is merged in a specific environment. The lexical-encyclopedic constraint just described happens post-syntactically (in the spirit of Harley 2014a). The lexical-encyclopedic block can be diachronically overcome, and it happens quite frequently, as the causativization of denominal/deadjectival deponents that I will analyze in PartII, Section 2.4.1 show. An example is *famulor* 'I serve' from *famulus* 'servant':

```
Alimentis famuletur nostris. (Plin. Nat. 2, 63)
maintenances.ABL serve.3<sup>RD</sup> SG.SUBJ.PRS.MID our.ABL.PL
'(It) gives us our sustenance.' (lit. 'It made itself a servant with respect to our sustenance.')

(167)

Elementa ipsa famularet. (Tert, apol, 21, 17)
elements.ACC same.ACC.PL enslave.3<sup>RD</sup>SG.SUBJ.IPFV.ACT
'He subdued the elements themselves.'
```

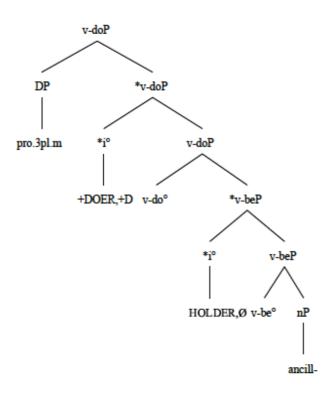
In (166), taken from Pliny the Elder (I cent. CE), there is a "standard" occurrence of an identification denominal deponent: *famulor* 'I serve'. The nominal basis is the noun *famulus* 'servant' and the meaning is "he acts in such a way that he is servant (with respect to our maintenances)". In (167), instead, taken from Tertullian (II-III cent. CE), the same nominal element is present in a causative derivation with the meaning "he acts in such a way that the elements are servants". The fact that we find these occurrences only with certain verbs and not with others is a simple accident. This "accident" can be explained taking each verb and analyzing its uses (e.g., social, pragmatic) and its relations with other similar verbs and structures.

A final note on the merging positions of the referential argument and the existentially bound argument. One could propose a second possible analysis in which the derivation is reversed: the

<sup>137</sup>In Section 4 I underline the fact that the denominal/deadjectival derivations are more constrained with respect to the √-based ones. For example, in Italian, if a √ is present in a SE-marked anticausative/change of state derivation, it is also present in a causative derivation (*Gianni ha rotto la sedia* 'Gianni broke the chair' vs. *la sedia si è rotta* 'The chair broke'). The same is not true if the verbal derivation involves a nominal/adjectival element as a formative (*Gianni si è arrabbiato* 'Gianni got angry'). This fact calls for a differentiation between denominal/deadjectival derivations and √-based derivations. As for the √-based derivations, I propose post-syntactic constraints (Section 4). These constraints work both synchronically and diachronically. The denominal/deadjectival derivations, instead, require a more in depth study in order to formalize an adequate proposal.

existential intransitive i\*° merges with the v-beP, while the standard i\*° merges with the v-doP:

(168)



The Middle morphology is still present, since there is an intransitive i\*° in the derivation, and the HOLDER and the DOER are contextually identified with each other. From a semantic point of view, the denotation of the derivation is the same. The only difference is related to the merging positions of the referential DP and of the existentially bound argument. The target, now, is to find as adequate reason for choosing one derivation over the other.

The second derivation, in which the referential DP is merged in the external argument position, resembles the analysis of the Icelandic figure reflexives proposed in Wood and Marantz (2017), as seen here:

(169)

Bjartur tróð -st gegnum mannÞröngina.

Bjartur.NOM squeezed -st through the.crowd

'Bjartur squeezed himself through the crowd.' (ex.(13) from Wood and Marantz 2017)

In Icelandic, as (169) shows, there is a -st morpheme derived from an old reflexive, which is

used to derive this kind of sentence, in which an internal argument is identified with the external one<sup>138</sup>.

In (169) there are two events: a stative one and a dynamic one. The stative event is "*Bjartur* through the crowd" and the dynamic event is "*Bjartur* squeezes (a doing event of squeezing)". The event decomposition is quite similar to the one we have seen for the identification denominal deponents; the difference is that in this case, the complement of the stative event (*gegnum mannPröngina* 'through the crowd') is not a verbalized nominal, and the verb is formed by conflating a specific  $\sqrt{\text{(whose actual morphophonological realization is } tróð$  'squeeze') directly into v-do°. The -st element, finally, is merged in order to deactivate the projection of the HOLDER argument (it is an expletive argument, in Wood's terminology) in the lower v-beP, creating the syntactic situation that allows for the identification between the HOLDER and the DOER. <sup>139</sup>

The main evidence that they propose in support of this analysis is that the Icelandic figure reflexives can be passivized by means of the impersonal passive construction:

(170)

það var troði-st gegenum mannþröngina.

EXPL was squeezed-st through the crowd

'There was squeezing through the crowd.' (ex. (15) from Wood and Marantz 2017)

The EXPL(etive) element in (170), which is always merged in the DOER position, substitutes for the referential DP *Bjartur*, clearly showing that the referential DP is merged in a high position, as the subject of the v-doP. If the referential DP were internal, the expletive element could not substitute for it, and the derivation would not be available.

I did not find cases of impersonal passives of deponents in Latin. This negative evidence (the only kind of evidence available when dealing with a corpus language) supports the claim that the Latin derivation of denominal deponents involves a low referential DP and a higher intransitive existential i\*°, not a high DP argument and a low intransitive i\*°<sup>140</sup>.

<sup>138</sup> For a deeper analysis of this element, see Wood (2014).

<sup>139</sup> See Wood and Marantz (2017, ex. (19)) for a complete syntactic and semantic derivation.

<sup>140</sup>Grestenberger (2014) claims that the lack of passive uses of deponent verbs is due to the fact that Latin does not have a dedicated Passive morphology that is spelled out by means of the Middle morphology. The same is also true for impersonal structures that use the Middle morphology. The fact that there are no impersonal or passive deponents would be linked, then, to a morphological clash: the same morphology for two different functions. This does not seem to be an adequate solution, as nothing prevents, in principle, the projection of a low intransitive existential argument-introducing head and a higher impersonal one. The spell-out of both heads would be the Middle morphology, which would be spelled out by means of a single Vocabulary Item. The structural and not morphological explanation proposed better accounts for the available data.

### 3.3.3 The Possession denominal deponents

The class of Possession denominal deponents is formed by approximately 60 verbs and they are all denominals. I have identified these verbs on the basis of the contribution of the nominal element to the final meaning of the event. In all cases there is a possessive relation between the Nominative argument and the nominal element. Let us turn to some examples.

The most straightforward kind of Possession denominal deponent is the one involving a concrete nominal element, like *piscor* 'I fish' from *piscis* 'fish', *praedor* 'I hunt' from *praeda* 'pray' or *aquor* 'I get water' from *aqua* 'water'.

```
(171)
                                        fuscina
     Ibi
            ut
                   piscabar
                                                      ici
     there when fish.1<sup>st</sup>SG.IPFV.MID harpoon.ABL hit.1<sup>st</sup>SG.PRF.ACT
     vidulum. (Plaut. Vid. 100)
     cofferacc
     'While I was fishing there, I hit the traveling-bag with my harpoon.'
(172)
     Tuus apparitor
                            de
                                   aratorum
                                                 bonis
                                                              praedabitur? (Cic. Verr. 2, 3, 182)
     Your secretary.NOM about farmers.GEN goods.ABL plunder.3<sup>RD</sup>SG.FUT.MID
    'Shall your secretary plunder the goods of the public farmers?' <sup>141</sup>
(173)
     Flumen
                erat [...]
                                                              Macedones
                                           auo
                                                        et
                                    ex
     river.NOM be.3<sup>RD</sup>SG.IPFV.ACT from which.ABL and Macedonians.NOM
                          aquabantur. (Liv. 44, 40, 4)
     et
           Romani
     and Romans.Nom take water.3<sup>RD</sup>PL.IPFV.MID
     'There was a river from which Romans and Macedonians were taking water.'
```

In these cases, the argument ends up being in possession of a specific real and concrete element of the world, may that element be a fish, prey or water.

The second kind of possession denominal deponent involves nouns referring to abstract elements, like *otior* 'I rest', from *otium* 'rest':

(174)

<sup>141</sup>*Arator* literally means 'the man who plows'. While its more general meaning is 'farmer', more specifically, this term identifies the farmers who work in the public fields assigned through public contracts. *Apparitor*, on the other hand, identifies the public servant who works under a specific public official.

```
Domesticus otior. (Hor. Sat. 1, 6, 128) at.home rest.1<sup>st</sup>SG.PRS.MID 'I rest at home.'
```

In this case, the possession is less explicit and concerns an abstract element. The argument takes on an abstract quality related to the noun. The meaning could be paraphrased as 'I get my rest at home'.

A third kind involves figurative possession, like *proelior* 'I fight' from *proelum* 'fight' or *scortor* 'I visit prostitutes' from *scortum* 'prostitute'. 142

```
Legiones in ipsis fluminis ripis proeliabantur. (Caes. Gall. 2, 23, 3) legions.NOM in same.ABL.PL river.GEN banks.ABL fight.3<sup>RD</sup>PL.IPFV.MID 'The legions were fighting upon the very banks of the river.'

(176)

Edunt bibunt scortantur. (Plaut. Pseud. 35) eat.3<sup>RD</sup>PL.PRS.ACT drink.3<sup>RD</sup>PL.PRS.ACT visit.prostitutes.3<sup>RD</sup>PL.PRS.MID 'They eat, drink and visit prostitutes.'
```

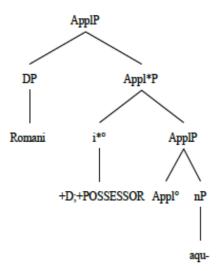
This third case involves a more abstract kind of possession. The argument does not own the actual referential element described by the nominal ('a fight' or 'a prostitute', in these two cases); it owns the event that is related to the specific noun, like in the English construction *I will have a fight*. This construction does not involve the actual possession of *a fight* but it involves the possession of the event related to the noun *fight*. The structure of the verb *proelior* 'I fight' involves an event in which the argument gets in a possessive relationship with *proelium* 'fight'. This kind of abstract possession, intuitively, does not seem to be related to the actual possession that we have seen before in (171)-(174). We actually need an abstract head that is able to provide us with the right kind of interpretation in each described case.

As in the Identification derivation, the various secondary arguments that can be present in the Possession derivation are marked by specific Oblique cases or by prepositions, as in (172), in which the secondary argument is marked by the preposition *de* 'from'. During the diachronic evolution of these verbs, many of these secondary arguments acquire a different status, becoming direct objects marked by Accusative case (see Part II, Section 2.4.2).

<sup>142</sup>There is also a secondary interpretation of this verb: 'I act like a prostitute'. This second interpretation is construed by means of an Identification derivation (Section 3.3.1).

How could we characterize the head that mediates this kind of relation between the Nominative argument and the verbalized nP? A viable possibility is to mark the low possessor DP as the subject of an Applicative phrase (a low applicative 143) of which the verbalized nP is the complement (see Pylkkännen 2008, Harley and Miyagawa 2016 and, for an argument against this view, Larson 2010). The Applo denotes a possessive semantics ("have") when it is merged low, directly with a nominal element. Taking (173) as an example, the lower part is:

(177)

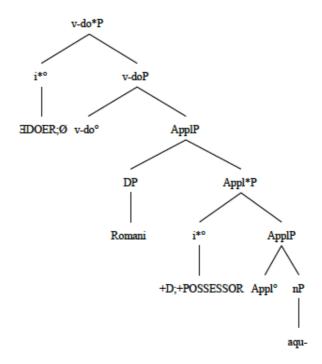


The Applo merges with the nP, creating an ApplP. The ApplP denotes the stative event of the possession of the nP *aqu*-. The next step is the merging of the standard i\*°, that, in the context of an ApplP merged with an nP, introduces into the derivation the POSSESSOR role. The merging of an actual DP (*Romani*) satisfies the +D feature and allows the assignment of the POSSESSOR role to the DP itself: 'there is a stative possessive event of having *aqu*-, and *Romani* is the POSSESSOR'. Again, as in the Identification derivation, there is a stative relation that links the Nominative argument to the verbalized nP.

The derivation, then, continues in line with the identification denominal deponents, with the v-do° merging with the ApplP and the insertion of an intransitive and existential argument-introducing head.

(178)

<sup>143</sup>As we will see later (Section 3.3.4), the difference between low and high applicative is not related to the semantic denotation of the Appl°; it is related to the element the Appl° merges with. When Appl° merges with a DP or an nP, there is a standard possessive relation. When Appl° merges with an event, there is a benefactive relation (see Larson (2010) for a semantic argument against the existence of the low Appl°).



The existentially bound DOER, then, is contextually related to the internal DP, Romani. The right contextual identification is reached by means of a lexical-encyclopedic post-syntactic constraint on the presence of the specific nP *aqu*- in a verbal derivation.

The simple statement that there are two different stative heads, v-be° and Appl°, and that these two heads carry both the identification meaning and the possessive meaning needs further refinement. These two heads, denoting the *have* and *be* relations, are more related than the proposed labeling may indicate (as already proposed by many scholars, among the others Benveniste 1966, Kayne 1991, 1993). The Possession denominal deponents describe dynamic events in which a specific argument ends up being in possession of something. This kind of semantics is reminiscent of the well-known *central coincidence relation* structures (Hale and Keyser 1993, 2002). These structures can be observed both in English and in Italian. In both cases the verbal derivation is denominal:

(179)

John saddled the horse.

(180)

Gianni ha imburrato il pane. Gianni has buttered the bread 'Gianni buttered the bread.' In (179), the sentence describes a situation in which a DOER, *John*, initiates a dynamic event that leads *the horse* to have a *saddle*. The same can be said with respect to the Italian sentence, in which a DOER, *Gianni*, initiates the dynamic event that leads *il pane* 'the bread' to have *burro* 'butter'. The relation between the two arguments is a spatial *inclusion* relation: *the horse* in (179) and *il pane* 'the bread' in (180) include, respectively, *saddle* and *burro* 'butter'. They are *with* these elements. The Latin sentences that we have already seen in this section describe similar situations: the various arguments are, e.g., *with* fish (*piscor* 'I fish'), *with* prey (*praedor* 'I hunt') and *with* water (*aquor* 'I get water')<sup>144</sup>. The difference is that, in the case of Latin deponents, the external and the internal arguments are the same referential element. The argument that gets possession of the verbalized nominal is the same element that controls the dynamicity of the entire event. Such an analysis may help us understand the more abstract examples presented in (174), (175) and (176). Possession does not have to be concrete; the only relevant notion is the notion of *inclusion* (Franco and Manzini 2017): the Nominative argument includes the characteristics of the nominal element that merges with the stative head.

The relation between the stative relation and the Possessive one is highlighted by the fact that the Possessive relation, in Latin, may also be achieved by means of a *be* predicate:

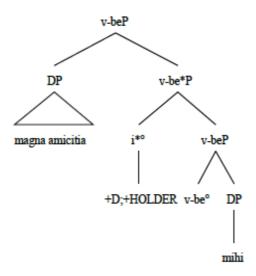
(181)

Mihi cum Murena magna amicitia est. (Cic. *Mur*. 4, 8) me.DAT with Murena big.NOM.SG friendship.NOM is 'I have a great friendship with Murena.'

This sentence denotes a Possession: the Dative argument, *mihi* 'to me', is in possession of the Nominative argument *magna amicitia* 'big friendship'. The Possessive relation, then, can be achieved, in Latin, by means of a v-be° merged with a Dative complement.

(182)

<sup>144</sup>See Rapoport (2014) for a similar approach.



This derivation, again, denotes an inclusion relation. The difference is that, in this case, the relation is reversed. The first v-beP, in this case, denotes a state that is measured and constrained by a Dative argument. It is the Dative case in this derivation that adds the specific feature that is able to transform an Identification relation into a spatial inclusion one. I will not analyze the Dative case and its relation with spatial predications further. The key point in this discussion is that there are many different clues that lead us to believe that the Possessive relation (have) is more strongly related to the Identification relation than the v-be° vs. Appl° labels indicate. Given this analysis, I will from this point forward call the Possessive head v-be/with° in order to distinguish it from the simple stative one, v-be°, hinting at a specific relation between the two.

#### 3.3.4 The Possession+Identification denominal/deadjectival deponents

The third kind of productive deponent involves two arguments, one of which is provided with Nominative case and the other with Accusative case. Since this set of deponent verbs involves Accusative arguments, it has always been taken as the main evidence in favor of the hypothesis that deponents are standard transitive verbs with a peculiar and idiosyncratic morphological feature. However, I will show that even in this case, a better explanation exists.

The first problem that arises when dealing with these verbs is that a clear and final list is quite complex to achieve. The main issue is that some deponents that are initially Possession or Identification denominal/deadjectival deponents start, at some point, to show an Accusative argument. For example, while *piscor* 'I fish' in Classical Latin and Early Latin, as we have seen (Section 3.3.3), does not have an Accusative argument, in Late Latin it occurs with Accusative

arguments:

(184)

Mittam, inquit, ad eos piscatores et send.1<sup>ST</sup>SG.FUT.ACT said.3<sup>RD</sup>SG.PRS.ACT to they.ACC.PL fishermen.ACC and piscabuntur eos. (Quodv. *liber promiss*. 3, 12) fish.3<sup>RD</sup>PL.FUT.MID they.ACC.PL
'I will send them fishermen, he said, and they will fish them.'

The presence of this Accusative argument has a diachronic explanation that will be developed further in Part II, Section 2.4.2. In any case, these kinds of verbs cannot be classified as Possession+Identification denominal/deadjectival deponents. How can we distinguish, then, between these two similar sets? A possible solution is to take into consideration the first occurrences of each verb: if the first occurrences of a clearly denominal/deadjectival verb already present an Accusative argument, then the verb can be considered part of the category of Possession+Identification deponents. If, instead, there is a visible diachronic change with respect to the presence of the Accusative argument, the specific verb has to be set apart and analyzed differently. However, this procedure has a flaw; it only applies to deponents whose first occurrence is attested after the first half of the II cent. BCE. For the presumably denominal/deadjectival deponents which are in evidence since the beginning of Latin literature, this solution does not work, since it is unclear whether they are actually new productions or the result of the evolution of a preceding Possession or Identification verb. There are six verbs that can be categorized as denominal/deadjectival verbs that undoubtedly are Possession+Identification deponents: alumnor 'I educate' from alumnus 'pupil', imaginor 'I imagine, I dream' from imago 'image', lucror 'I earn' from lucrum 'income', modulor 'I moderate' from modulus 'module, measure', mutuor 'I borrow' from *mutuus* 'borrowed, mutual' and *pigneror* 'I secure' from *pignus* 'warranty'.

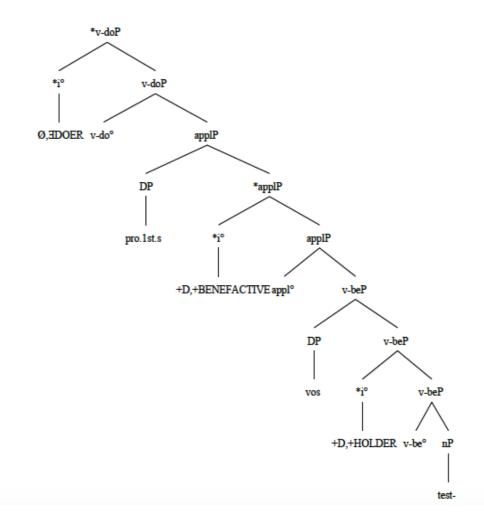
As previously stated, the verbs belonging to the first period are more complex: among them, fifteen verbs could be considered Possession+Identification denominal/deadjectivals. Among these fifteen, only a few clearly behave like Possession+Identification deponents: testor 'I call as a witness, I testify', from testis 'witness', mercor 'I buy' from merx 'goods' and recordor 'I remember' from cor 'heart'. As for the others, the relation between the meaning of the nominal/adjectival element and the final structural eventive meaning is not so straightforward: criminor 'I accuse' from crimen 'accusation', exsector 'I curse' from sacer 'cursed', fabricor 'I craft' from fabrica 'craftwork', machinor 'I contrive' from machina 'device', min(it) or 'I threat'

from *minae* 'threats', *miror* 'I admire' from *mirus* 'admirable', *muneror* 'I gift' from *munus* 'duty', *odoror* 'I sniff' from odor 'smell', *ominor* 'I foresee' from *omen* 'omen', *osculor* 'I kiss from *osculum* 'kiss', *perplexor* 'I tangle' from *perplexus* 'entangled', *precor* 'I pray' from *prex* 'prayer', *rimor* 'I search' from *rima* 'fissure', *scrutor* 'I search' from *scruta* 'trash', *sortior* 'I draw lots, I assign' from *sors* 'fate' and *stipulor* 'I demand a formal promise' from *stips* 'insurance'.

It is possible to understand the event structure of these verbs by looking at the relation between the final meaning of the event and the meaning of the nominal/adjectival element from which the final verb is derived. A clear example is *testor* 'I call as a witness, I testify' from *testis* 'witness'. The initial meaning is 'I call as a witness'; the meaning 'I testify' is secondary. This specific meaning can be coherently paraphrased as 'x acts in such a way that x has y as *testis*'. What follows is the structure that derives this meaning.

(185)

Vos, di patrii ac Penates [...] testor. (Cic. *Sull.* 86) you.ACC.PL gods.VOC national.VOC.PL and penates.VOC call.to.testify.1<sup>st</sup>SG.PRS.MID 'Oh gods of my country and Penates, I call you as witnesses.'



The first part of the derivation involves a v-beP, in which a DP, vos 'you' in this case, is the HOLDER of the state of being a witness. The second part of the derivation involves a v-be/withP, which introduces an inclusion relation between the v-beP in the complement position of the v-be/with° and the subject of the v-be/withP: the POSSESSOR. The subject, in this case, is a 1<sup>st</sup> person covert pronominal element. Following the usual labeling, I call this argument BENEFACTIVE (see Pylkkänen 2008) and not POSSESSOR. This different labeling follows from the slightly different role that the subject of a v-be/withP acquires when the v-be/with° is not merged with a referential entity but with an event. To be in possession of an event means that the event happens "for you" (without any bias toward a positive or negative interpretation). The fact that the possession of an event and the possession of an entity are related is proved by the fact that in Latin, both arguments can be marked by Dative case (see (181) and (201)). The difference between a POSSESSOR argument and a BENEFACTIVE one, then, is not related to a different head (in both cases a v-be/with° is present) but to a different complement: in the first case, the complement is an entity, while in the second case the complement is an event. The BENEFACTIVE argument, finally, gets a double set of thematic features, since it is contextually linked to the DOER

thematic role. The higher argument gets Nominative case by means of the usual mechanism: the last  $i^{*\circ}$  in the vP searches for the first available and referential DP in its m-command domain to valuate its unvalued  $\phi$ -features and provides it with Nominative case. The second argument, since it has no specific Oblique case on its own, gets Accusative case. The Middle morphology, as usual, is the output of the intransitive  $i^{*\circ}$ . The other possible meaning that this verb has, 'I testify, I swear', arises during the I cent. BCE. In this case the object is usually an infinitival sentence representing the content of the testimony. A possible interpretation is to maintain the structure in (185) substituting the internal Accusative argument with the infinitival/complement phrase: 'x acts so that x has something witnessed'. This second meaning is the meaning that is maintained when the verb is activated (see Part II, Section 2.2.4 for an analysis).

The validity of the proposed analysis is supported by the fact that the proposed structure is able to coherently connect the meaning of the nominal/adjectival element and the meaning of the final verb. For example mercor 'I trade' comes from merx 'goods'. The specific meaning of the verb can be derived by means of the BENEFACTIVE structure proposed: 'x acts in such a way that x has y as  $merx' \rightarrow$  'x trades y'. The elimination of the internal BENEFACTIVE projection would provide us with the simple causative meaning 'x acts in such a way that y is merx', that does not mean 'x trades y'. The Possession+Identification derivation manages to connect the presence of an actual nominal element to the final meaning of the verb, coherently integrating the Nominative and the Accusative argument.

## 3.3.5 Concluding remarks about denominal/deadjectival deponents

The denominal/deadjectival deponents present the Middle morphology for a syntactically coherent reason: the Nominative argument, initially merged in a low position in a specific relationship with the verbalized nP/aP, is contextually identified with the existentially bound DOER. In these structures, then, the Nominative argument gains a double set of thematic features: those related to its low merging position and the DOER ones.

There are three sets of denominal/deadjectival deponents, depending on the relation between the Nominative argument and the verbalized nP/aP. The first group is formed by the Identification verbs, in which the Nominative argument is identified with the relevant characteristics of the nP/aP. This relation is reached by means of a v-beP (Section 3.3.2). The second group is formed by the Possession verbs, in which the Nominative argument is in an inclusion relation with the nP/aP, meaning that it is in possession of its relevant characteristics. This relation is reached by means of a v-be/withP (Section 3.3.3). The third group is characterized by the presence of an additional

Accusative argument. It is formed by the Possession+Identification verbs, in which the Nominative argument is in an inclusion relation with a stative phrase containing the Accusative argument and the nP/aP. This relation is reached by means of a v-be/withP. The Accusative argument, in turn, is in an Identification relation with the relevant characteristics of the nP/aP. This relation is reached by means of a v-beP.

One of the characteristics of these verbs is the fact that they are basically all agentive, meaning that the higher argument with which the low-merged Nominative is contextually identified is always a DOER, the subject of a v-doP. It is highly unusual for the higher argument to be an UNDERGOER, the subject of a v-goP. This is unexpected. There is nothing in a denominal or deadjectival deponent derivation that may prevent the merging of a v-goP instead of a v-doP, whether the denominal/deadjectival derivation is an Identification, a Possession or a Possession+Identification. In Italian, in fact, it is possible to create new SE-marked denominal/deadjectival verbs that involve a v-goP in their derivation: e.g., arrabbiarsi 'to get mad' from rabbia 'anger'. As we will see in the next sections, moreover, the Latin nondenominal/deadjectival deponents do not show such a constraint. Among them, it is possible to find many non-agentive verbs. The constraint, then, is a language specific feature related only to the Latin productive denominal/deadjectival deponent derivations. This constraint can be explained with reference to the high productivity of a specific Latin morpheme we have already analyzed. As noted in Section 2.2.1, Latin presents a specific derivation for the v-goP change of state denominal/deadjectivals: the inchoative derivation. This derivation involves a specific morpheme, -sc, as the morphological output of the v-go°. Latin speakers, then, when they produce new denominal/deadjectival v-goP change of state verbs, go for the more specific morpheme, -sc, and never for the less specific one, -a. The use of the -sc morpheme forces the movement of the internal argument to the external UNDERGOER position, preventing the presence of the Middle morphology. Therefore, we do not find v-goP deponents, due to the productivity of the inchoative derivation.

# 3.4 The non-denominal/deadjectival deponents

As we have seen in Section 3.3, the productive derivation of deponents is denominal/deadjectival. There is, however, a set of non-denominal deponents that requires further analysis. The entire set of these non-denominal verbs is already present in the first period (III-II cent. BCE). The only common features that keep this category together are the fact that their derivation is not denominal/deadjectival and the fact that they fulfill at least one of the two criteria

proposed for the identification of deponent verbs. Before proposing an analysis, then, they must be differentiated in more coherent and restricted classes. I identified three major classes within the non-denominal/deadjectival deponents, on the basis of the presence vs. absence of an Active alternant and on the characteristics of this alternant:

(186)

The non-denominal/deadjectival deponents that do not alternate between a Middle form and an Active one (55 verbs in the first period).

(187)

The non-denominal/deadjectival deponents that alternate between a Middle form and an Active one without a clear meaning difference (18 verbs in the first period).

(188)

The non-denominal/deadjectival deponents that, with specific prefixes, alternate between a Middle form and an Active one with a clear meaning difference (5 verbs in the first period).

In the next Sections, I will analyze each class, starting from the third class, which presents the fewest number of verbs.

## 3.4.1 The third category

The third category is formed by verbs which alternate between a Middle and an Active form, but that, with a specific prefix, always appear with the Middle morphology. A clear example is *verto* 'I turn something' causative vs. *revertor* 'I turn myself, I return' autocausative/reflexive. A causative *reverto* (with the meaning of *verto*) is never attested and *revertor*, consequently, is considered a deponent verb, since it always appears with the Middle morphology. The prefixed form is built on the basis of the standard Middle form of *verto*, *vertor* 'I turn myself, I return'. The prefix *re*- has a negative meaning, underlining the fact that the subject cancels a previous action: the subject goes on and then comes back, and by doing so she cancels the preceding movement. A cross-linguistic example of such behavior is the Italian alternation between *tornare* 'to come back' vs. *ritornare* 'to come back'. The Middle morphology, in this case, derives a controlled change of state derivation, contrasting with the causative one of *verto* 'I turn'. The use of the Middle morphology is coherently justified. Another interesting example is the verb *verso* 'I turn' causative vs. *versor* 'I turn myself (in a location), I live (in a location)' controlled change of state. With

specific prefixes, ad-, a(b)-, circum-, con-, de-, inter-, ob-, tergi-, this verb is attested only with the Middle morphology. The prefixed forms, consequently, are considered deponents. For example, conversor has the comitative prefix cum- and means 'I turn myself (in a location) with someone'  $\rightarrow$  'I live with someone'. Other examples are sperno 'I separate' vs. aspernor 'I separate myself from someone'  $\rightarrow$  'I despise someone' and laeto 'I cheer up someone' vs collaetor 'I cheer up myself, I rejoice'. This kind of alternation does not involve only prefixes, but also suffixes, like the diminutive -cul in pando 'I stretch something' vs. pandiculor 'I stretch myself' Alexiadou (2013, 2014) have also identified this category of deponents in Modern Greek, e.g., \*apo-thrasino (Active) vs. apo-thrasinome (Middle) 'I get bold'. These verbs, just like denominal verbs, cannot be considered idiosyncratic forms with an inherent [+pass/dep] feature; the presence of the Middle morphology is justified by the syntactic structure in which these verbs are involved.

### 3.4.2 The second category

This category includes the verbs that alternate between a Middle form and an Active one without a clear meaning difference. These verbs are classically categorized as deponents because the Middle morphology does not seem to provide the structure with a specific Middle-related meaning. Examples of this kind of verb are: convivo/convivor 'I feast, I banquet' 146, ludifico/ludificor 'I jest someone', modero/moderor 'I temper something/one', morigero/morigeror 'I indulge with something/one', (com)murmuro/(com)murmuror 'I mumble', oscito/oscitor 'I yawn' ructo/ructor 'I burp', rumino/ruminor 'I ruminate, I rethink', scisc(it)o/scisc(it)or 'I inquire, investigate', screo/conscreor 'I hawk and spit', adsentio/adsentior 'I endorse', somnio/somnior 'I dream', venero/veneror 'I adore', adulo/adulor 'I flatter', alterco/altercor 'I fight, I quarrel', sacrifico/sacrificor 'I sail'.

For some of these verbs, the alternation is explainable in terms of an alternation between an activity variant and a change of state variant, whether controlled (v-doP) or not (v-goP). A clear example is *oscito* vs. *oscitor*:

<sup>145</sup>This verb recalls the Italian *stiracchiarsi* 'to stretch your limbs' vs. *stirare* 'to stretch something'. In Italian, this verb can be also causative, and it can occur with the diminutive suffix: *stiracchiare* 'to stretch something' (see Part II, Section 2.4.1).

<sup>146</sup>This verb is related to the noun *convivium* 'feast', but the actual derivation is deverbal *convivor* → *convivium*, not denominal *convivium* → *convivor*. This verb, then, is not denominal, but is linked to the verb *vivo* 'I live'.

<sup>147</sup>In this case, the Middle is restricted to the prefixed form, but the meaning does not change; the *con*-prefix underlines the resultative reading. Since the meaning does not overtly change this verb is placed in this category and not in the previous one (Section 3.4.1).

<sup>148</sup>The only occurrence of *sacrificor* is in Varro (*lat.* 9, 61, 105). In the passage he simply states that there is no difference between *sacrifico* and *sacrificor* and that his fellow Romans should use only *sacrifico* to simplify the paradigm. This statement is framed by the well-known debate between Analogists and Anomalists.

```
(189)
    Oscitat
                         in campis
                                                            cervice
                                         caput
                                                     from neck.ABL
    yawn.3<sup>RD</sup>SG.PRS.ACT in fields.ABL head.NOM
    revulsum. (Enn. frg. inc. 472)
    remove.PTCP.PST.N.SG
    'The head, removed from the neck, stands in the middle of the field with the moth wide
    open.'
(190)
             pandiculans
                                      oscitatur. (Plaut. Men. 834)
    Ut
    so.that stretch.PTCP.PRS.NOM.SG yawn.3<sup>RD</sup>SG.PRS.MID
    'So that he yawns when he stretches.'
```

Three other possible cases are *ructo* vs. *ructor* 'I burp', *commurmuro* vs. *commurmuror* 'I mumble' and *screo* vs. *conscreor* 'I hawk and spit'. In the latter case the controlled change of state variant is marked by a preposition, con-. This preposition can be linked to two different meanings, comitativity and resultativity/completeness. In this case the resultativity/completeness meaning is the only one that makes sense, and would confirm the presence of a stative event in the Middlemarked variant (see Acedo-Matellán 2010, 2016). These cases, then, fall within a standard alternation marked by the Middle morphology, that of activity vs. change of state.

The behavior of the other verbs belonging to this category cannot be explained by means of the described alternation. The remaining verbs, except for *alterco/altercor* 'I fight, I quarrel' and *convivo/convivor* 'I feast, I banquet', involve an Accusative argument in both the Active and Middle structure. It is impossible, then, to analyze these alternations as activity vs. change of state alternations. These verbs are *ludifico/ludificor* 'I jest someone', *modero/moderor* 'I temper something/one', *morigero/morigeror* 'I please', *rumino/ruminor* 'I ruminate, I rethink', *scisc(it)o/scisc(it)or* 'I inquire, *adsentio/adsentior* 'I endorse', *somnio/somnior* 'I dream', *venero/veneror* 'I adore', *adulo/adulor* 'I flatter', *sacrifico/sacrificor* 'I sacrifice', *savio/savior* 'I kiss' and *velifico/velificor* 'I sail'.

Let us see some examples:

```
(191)
```

Verbero, audes erum ludificari? (Plaut. *Amph.* 565) scumbag.voc dare.2<sup>ND</sup>SG.PRS.ACT master.ACC banter.INF.PRS.MID

```
'How dare you make fun of your master, scumbag?!'

(192)

Erum qui ludificas dictis master.ACC who.NOM.SG banter.2<sup>ND</sup>SG.PRS.ACT words.ABL delirantibus. (Plaut. Amph. 585)

delirious.ABL.PL
```

'You who make fun of your master pronouncing mad words!'

These two examples belong to the same author, the same work and the same dialogue. Even the character is the same. It is not possible, then, to call for diastratic, diatopic or diachronic differences. There has to be a synchronic explanation for this alternation. The difference between (191) and (192) is difficult to detect looking only at the Latin data, but crosslinguistically, similar alternations that can be used as a basis for analysis. These sentences directly recall some Italian alternations involving the SE pronoun:

```
Giovanni si mangia una mela.

Giovanni SE eat.3<sup>RD</sup>SG.PRS an apple 'Giovanni eats an apple (for/to himself).'

(194)

Giovanni mangia una mela.

Giovanni eat.3<sup>RD</sup>SG.PRS an apple 'Giovanni eats an apple.'
```

As in the Latin cases, the difference between these Italian sentences is not immediately clear. The semantic difference between (193) and (194) is almost imperceptible at first sight. There are contexts, however, in which only the sentence without the SE pronoun is acceptable:

```
*Giovanni si è mangiato l'ultima mela alla nonna.
Giovanni SE is eaten the.last apple to.the grandma
(196)
Giovanni ha mangiato l'ultima mela alla nonna.
```

Giovanni has eaten the last apple to the grandma 'Giovanni ate the last apple (for/to the grandma).'

Alla nonna 'to the grandma' in (196) introduces into the derivation an overt BENEFACTIVE argument: the eating of the apple happens in relation to the grandmother, which is affected by the event. The final contextual interpretation is that Giovanni stole an apple from his grandmother. Out of 8 speakers, sentence (196) is considered marginal by 3 and completely acceptable by 5. Every speaker, on the other hand, judges (195) as completely ungrammatical. The target is to understand what causes, in this context, the incompatibility between the SE pronoun and the BENEFACTIVE phrase. It has to be noticed that the incompatibility is restricted only to this specific use of the SE pronoun. In a standard SE-marked anticausative derivation there is no incompatibility between the presence of a BENEFACTIVE argument and the SE pronoun:

(197)

A Marco si è bruciata la zuppa. to Marco SE is burn.PST.PTCP.F.SG the soup 'It happened to Marco that the soup burned.'

Also in a SE-marked reflexive structure and in a SE-marked passive structure there is no incompatibility:

(198)

Alla nonna si è suicidato il pesce rosso. to.the grandmother SE is killed.himself.pst.ptcp.s.m the goldfish 'It happened to the grandma that the goldfish committed suicide.'

(199)

Ad un bambino si sono rubate due caramelle a scuola oggi. to a boy SE are stolen two candies at school today 'A boy has been robbed of two candies at school today.'

The incompatibility, then, is not due to the SE pronoun itself. A possible solution is to propose that this incompatibility is due to the specific role that the SE pronoun has in that specific context. The SE element introduces a BENEFACTIVE argument, identified with the Nominative argument

Giovanni. A second benefactive phrase, then, has no place in such a derivation; it would be incompatible with the first one, introduced by the SE pronoun. The difference between (190) and (191), then, is related to the presence vs. absence of a BENEFACTIVE argument identified with the Nominative one. In the first derivation, then, there is an additional argument that acquires the BENEFACTIVE role in the subjection position of a v-be/withP. The situation is the same in Latin. Even if the same incompatibility presented in (195) cannot be reproduced in Latin, since a corpus language does not offer ungrammatical sentences, it is still possible to provide partial evidence. Here are two examples involving *morigero/morigeror* 'I please'. Please'.

```
Ei vos morigerari mos bonus 'st. (Plaut. Capt. 197)

he.DAT you.NOM.PL please.INF.PRS.MID use.NOM good.NOM.SG be.3<sup>RD</sup>SG.PR.ACT
'It is a good habit for you to please him.'

(201)

Uxore nunc mihi morigero. (Plaut. Amph. 980)

Wife.DAT now me.DAT please.1<sup>ST</sup>SG.PRS.ACT
'Now I please my wife.'
```

These two examples, with (191) and (192), belong to the same author, which should be sufficient to avoid major diachronic issues. *Morigeror/morigero* 'I please' appears with an oblique Dative argument, present in both examples: *ei* 'to him' and *uxore* 'to the wife'. In (200), the verb appears in the Middle form (*morigerari* is the Middle form of the infinitive), while in (201) it appears in the Active form (*morigero*). In both cases a subject initiates the event, an Accusative *vos* 'you' in (200) and a Nominative 1<sup>st</sup> person singular *pro* in (201). In (201), is an additional argument is given: *mihi* 'to me'. *Mihi* 'to me' is a Dative pronoun that is coreferential with the subject 1<sup>st</sup> person singular *pro*. It is a BENEFACTIVE pronoun like It. *alla nonna* 'to the grandmother' in (196). The normative grammars of Latin call this element *Dative of interest* or *ethical*. In (200), on the other hand, no other arguments are given. The presence of this Dative when the verb is Active and its absence when the verb is Middle supports the hypothesis: the BENEFACTIVE Dative argument in (201) is the overt correspondent of the Middle morphology in (200). Consequently, the

<sup>149</sup>It is not relevant in this context to investigate the direction of the binding process if, in other words, the SE pronoun is merged in the DOER position and Giovanni in the BENEFACTIVE position or vice versa.

<sup>150</sup>It has to be noticed that the specific verb under analysis, morigero/morigeror 'I please', is a compound. This verb is formed by a verbal  $\sqrt{}$ ,  $\sqrt{}$ gero 'bring', conflated into the v-do' and a nominal part, mos 'good habit'. I do not consider this verb as a standard denominal verb because of the presence of the  $\sqrt{}$  ( $\sqrt{}$ gero). However, the overall analysis is not affected by this specific peculiarity.

Middle morphology is related to the insertion of a BENEFACTIVE argument. Within this class of verbs, then, the alternation between the Active form and the Middle form is due to the presence vs. absence of an internal BENEFACTIVE argument.

I have provided an analysis for these cases, but I have not yet provided an actual structure yet. Where is the v-be/with° merged? The BENEFACTIVE argument has to be related to the internal Accusative argument, it is not the BENEFACTIVE of the entire event, but is connected to the lower argument. This is clear from the Italian examples, in which the BENEFACTIVE can be present only if the internal argument is present as well.

(202)

Giovanni si mangia.

Giovanni SE eats

'Giovanni eats himself.'/'\*It happens to Giovanni that he eats.'

In (202), the BENEFACTIVE meaning of the SE pronoun is not available, meaning the sentence can only be interpreted as a reflexive statement in which the DOER, *Giovanni*, eats himself. It cannot mean that the general eating event happens for him<sup>151</sup>. The BENEFACTIVE argument, then, is merged under the v-doP. The v-be/withP, the phrase that introduces the BENEFACTIVE argument, cannot be merged directly with the internal argument, or the interpretation of the subject of the v-be/withP would be POSSESSOR and not BENEFACTIVE. In sentences (193) and (191) the DOER argument, the argument to which the BENEFACTIVE role is assigned, is not the actual POSSESSOR of the internal argument, *erum* 'master' in (191) and *la mela* 'the apple' in (193). The relevant interpretation in (193) is that the consumption of *la mela* 'the apple' happens in favor of Giovanni, while the salient meaning in (191) is that the fact that the master (*erum* 'master') is laughed at happens for the 2<sup>nd</sup> person subject. We are not dealing, then, with Possession cases, Inherent or not<sup>152</sup>. This is shown by contrasting the structures under analysis with the Possession structure in (203):

<sup>151</sup>These kinds of BENEFACTIVES, which are affected by the entire event and merged upon the v-doP, can only have a disjoint reference:

i. Il bambino mi mangia, finalmente! 'The child eats, finally!'

This sentence can be interpreted as a BENEFACTIVE statement in which a parent states that the eating event happens "for him/her".

<sup>152</sup>For an analysis of Inherent Possession as possessor rising from a syntactic position internal to the possessed DP see, among the others, Landau (1999) and Nakamoto (2010).

(203)

Gianni si è rotto il braccio (\*di Luca). Gianni SE is broken the arm 'Gianni broke his arm.'

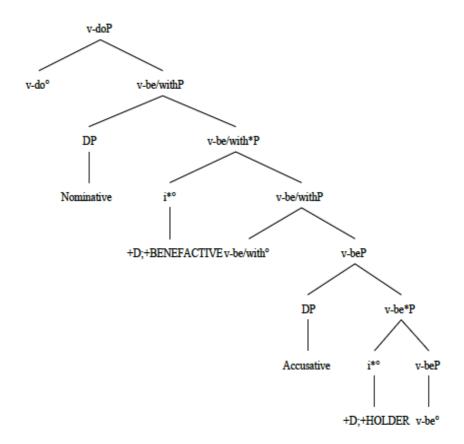
The object in (203), *il braccio* 'the arm', belongs to the argument that gains the DOER role, *Gianni*. The addition of another Possessor is ungrammatical. On the other hand, in the cases under analysis, (191) and (193), there is no implication that the object belongs to the argument that gains the DOER role. In the Italian example, it would be possible to add a further possession specification disjoint with the reference of the DOER:

(204)

Gianni si è mangiato la mela di Luca. Gianni SE is eaten the apple of Luca 'Gianni ate Luca's apple.'

In sum, the BENEFACTIVE phrase has neither a general interpretation as the BENEFACTIVE of the entire event nor a POSSESSOR interpretation. The BENEFACTIVE DP, then, is not merged above the v-doP or in direct contact with the Accusative DP. A possible solution could be to merge the v-be/with° with a stative phrase whose subject is the Accusative argument, which functions for both Latin and Italian.

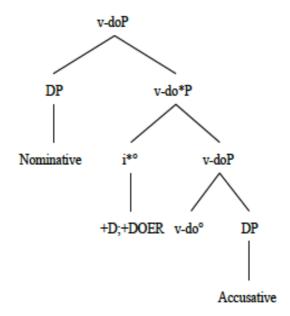
(205)



The higher part of the v-doP is not represented. Latin has an intransitive and existential argument-introducing head, and Italian has a transitive and active one.

To propose the presence in the derivation of a stative event is not problematic in this specific Latin case. The interpretation of the Accusative object as the subject of a lower stative phrase is already implicit in the morphological shape of the verb *ludificor* 'I jest someone', in which there is a *facio* 'I do' component that is usually present in causative environments, in which the Accusative argument is the subject of a lower state (e.g., *calefacio* 'I heat up something'). However, It. *mangiare* 'to eat' is more problematic. The Accusative argument of the consumption verbs, like It. *mangiare* 'to eat' or *bere* 'to drink', is usually conceived as the complement of the v-do°, representing the measure of the doing event (Marantz 2005).

(206)



The structure in (205) does not present the Accusative argument as merged in the v-doP complement position. It is, instead, in the subject position of a v-beP. This different position has to be mirrored by specific interpretive characteristics of the argument. In other words, since the argument is in two different positions, it will have two different interpretations. This prediction is borne out. The Accusative argument, when the BENEFACTIVE argument is present, is interpreted as completely consumed, while the same is not valid when the BENEFACTIVE argument is not present:

(207)

Giovanni ha mangiato la mela ma non è riuscito a finir-la. Giovanni has eaten the apple but not is managed to finish-it.F.SG 'Giovanni ate the apple but he did not manage to finish it.'

(208)

#Giovanni si è mangiato la mela ma non è riuscito a finir-la. Giovanni SE is eaten the apple but not is managed to finish-it.F.SG

While sentence in (208) is not semantically coherent, the correspondent in (207) is acceptable in the right context. This is relevant for some Latin verbs belonging to this category as well, such as *ruminor* 'I ruminate, I rethink', *somnior* 'I dream' and *adulor* 'I flatter'. These verbs, when Active, are consumption/activity verbs, and when Middles present the structure in (205) instead.

In this Section, I showed the structural relevance of the Active/Middle alternation with a specific subset of verbs in which this alternation is not usually conceived as structurally and semantically relevant. In the next Section, I will take into consideration, instead, the verbs which always occur with the Middle morphology in order to show that also in those cases the Middle morphology is syntactically and semantically justified.

## 3.4.3 The first category

The first category includes all the non-denominal/deadjectival deponents which always and only occur with the Middle morphology. The entire set of these verbs is already present at the beginning of the Latin literature; they are already there in the III cent. BCE. A large group of these verbs has been identified as having a clear Proto-Indo-European (PIE) origin. Many of these verbs are highly frequent: *conor* 'I try', *expergiscor* 'I wake up', *for* 'I speak', *fruor* 'I use', *gradior* 'I walk', *hortor* 'I urge', *loquor* 'I speak', *morior* 'I die', *nascor* 'I am born', *orior* 'I rise', *reor* 'I think', *sequor* 'I follow' and *utor* 'I use'. Because of their frequency, the occurrences of deponents of this class constitute a large part of the entire set of occurrences of deponents in general.

The verbs belonging to this large group are not homogeneous; there are many different classes. A first general distinction is between the verbs that never show a secondary accusative argument and the verbs which do:

- Monoargumental deponents: e.g., *nascor* 'I am born', *morior* 'I die', *gradior* 'I advance', *expergiscor* 'I wake up', *luctor* 'I fight' and *liceor* 'I make a bid'.
- Middle+Accusative deponents: e.g., *adipiscor* 'I reach', *experior* 'I try', *hortor* 'I exhort', *imitor* 'I imitate', *ulciscor* 'I vindicate, I take revenge', *vescor* 'I eat' and *venor* 'I hunt'.

I will analyze the monoargumental deponents first. Among them it is possible to find:

- Uncontrolled change of state verbs: *expergiscor* 'I wake up', *morior* 'I die', *irascor* 'I get angry', *nascor* 'I am born' and *orior* 'I rise'. <sup>153</sup>
- Controlled change of state verbs: *luctor* 'I fight' and *liceor/licitor* 'I make a bid'.
- Uncontrolled change of location verbs: *labor* 'I slip'.
- Controlled change of location verbs: gradior 'I advance', proficiscor 'I go away' and palor

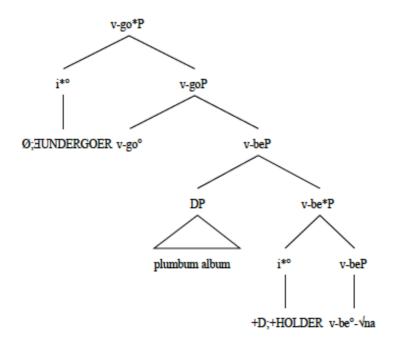
<sup>153</sup>There are two other change of state verbs which always appear with the Middle morphology, but their occurrences are less than 10 and they are therefore not considered in this analysis: *nantinor* 'I get busy' and *muginor* 'I hesitate'.

'I wander'. 154

It is noticeable that in this class the are non-agentive deponents. This kind of verb is basically never attested in the classes of denominal/deadjectival deponents that have been analyzed previously (see Section 3.3)<sup>155</sup>. In Section 3.3.5 I presented an explanation for the absence of non-agentive denominal/deadjectival deponents: the presence of the productive inchoative derivation with -sc. This block does not apply to the non-denominal/deadjectival deponents and, consequently, it is possible to find many non-agentive verbs. I label these verbs as "uncontrolled", meaning that the dynamic event that is present in these derivations is not controlled; it is a v-goP. Both change of state and change of location uncontrolled derivations involve, then, a v-goP. The only argument, the Nominative one, is initially merged in a lower stative, in which it acquires the HOLDER role. An example of an uncontrolled change of state derivation is nascor 'I am born':

(209)

Nascitur ibi plumbum album. (Caes. *Gall.* 5, 12, 5) is.born.3<sup>RD</sup>SG.PRS.MID there lead.NOM white.NOM.SG 'The white lead rises there.'



<sup>154</sup>Many change of location verbs present prefixed variants. I list only one entry for the entire set of possibilities. *Gradior*, for example, is usually used with specific motion prefixes like in-, de- and pro. When it is used with these prefixes the internal -a- vowel rises and becomes -e-  $\rightarrow gradior \rightarrow ingredior$ .

<sup>155</sup>The exceptions are listed in Section 3.3. The only relevant one, as noted, is radicor 'I grow roots'.

In this derivation the HOLDER of the state is contextually identified with the UNDERGOER of the dynamic event. As usual, the Middle morphology is the morphological output of the intransitive existential argument-introducing head. The  $\sqrt{}$  is directly adjoined to the v-be°, creating the state of 'being born"<sup>156</sup>.

The uncontrolled change of location derivations, like *labor* 'I slip', have the same structure. The Nominative argument is merged in a low position, as a HOLDER, and acquires the UNDERGOER role by means of contextual identification with the existentially bound UNDERGOER. The Middle is present as the output of the higher intransitive argument-introducing head.

The controlled variants, on the other hand, present a v-doP instead of a v-goP. An example of a controlled change of state derivation is *luctor* 'I fight'. Here is an example:

(210)

Qui luctantur cum leonibus. (Pompon. *Atell.* 176) who.NOM.PL fight.3<sup>RD</sup>PL.PRS.MID with lions.ABL 'Who fights with lions.'

Luctor is etymologically linked to PIE \*lug-to 'to bend'. PIE \*lug-to 'to bend' is a causative verb whose √ is merged in a causative derivation which involves a v-doP embedding a v-beP: 'x acts in such a way that y is bent'. The Middle gives rise to a controlled change of state interpretation (or autocausative), meaning that the "bending" and the "bent" arguments are referentially the same element: 'x acts in such a way that x is bent'. This autocausative interpretation is reached by means of an intransitive and existential argument-introducing head, which gives as a morphological output the Middle morphology. The Latin synchronic interpretation, 'to fight', is derivable from this autocausative structure: 'to bend yourself with...' → 'to fight with...'. The other argument, cum leonibus 'with lions', may be analyzed as the complement of the state of 'being bent', or as a higher comitative phrase<sup>157</sup>. The presence of the Middle morphology, again, is morphosyntactically justified: it is the output of the syntactically inactive and semantically existential i\*o that allows for the contextual identification of the DOER role with the argument merged in the complement position of the v-doo. However, it is of note that this verb, in Ennius and Plautus, occurs only with

<sup>156</sup>I have used  $\sqrt{na}$ - and not  $\sqrt{nasc}$ - because this specific  $\sqrt{}$  is not fully consistent throughout the paradigm. In the past participle, for example, it loses the -sc element (natus 'born'). This issue is not relevant in this context, since I do not follow Borer (2005), and I do not claim that the  $\sqrt{}$  is endowed with specific phonological characteristics. 157Davide Bertocci p.c.

the Active morphology; the Middle form appears by the end of the II cent. BCE:

(211)

Fortuna varia validis cum viribus luctant (Enn. *ann*. 9, 300) luck.ABL variable.ABL.SG strong.ABL.PL with men.ABL fight.3<sup>RD</sup>PL.PRS.ACT 'They fight against strong men with variable luck.'

The Middle and the Active forms do not coexist, prior to Ennius there are only Active forms (3 occurrences), and afterwards there are only occurrences of Middle forms. This verb in Late and Medieval Latin, as the Romance languages confirm (It. *lottare* 'to fight', Fr. *lutte* 'to fight'), is reanalyzed as an activity verb in which the stative part 'to be bent' is completely absent. In such a syntactic environment, the presence of the Middle morphology is not expected. This specific diachronic change may have surfaced in Early Latin and then survived undetected until it resurfaced in Late and Medieval Latin (see Part II, Section 3.5 for similar cases).

*Liceor*, the second controlled change of state verb, can be analyzed as 'I make myself available (for an offer)'  $\rightarrow$  'I make a bid' (De Vaan 2008). The Middle form is related to the Active one *licet* 'it is permitted/available', used only in the  $3^{rd}$  person singular and in the infinitival form *licere*.

The last relevant group in the monoargumental class is formed by the controlled change of location verbs, in which an argument willingly displaces itself in a specific location. The controlled change of location verbs are *proficiscor* 'I go forward', *gradior* 'I advance', *labor* 'I slip' and *palor* 'I wander'. These cases are similar to the controlled change of state verbs just analyzed; the difference is that the final state is a location:

(212)

Mnesilochus eccum maestus progreditur foras. (Plaut. *Bacch*. 611) Mnesilochus.NOM here sad.NOM.SG go.on.3<sup>RD</sup>SG.PRS.MID outside 'Here it is! Mnesilochus, sad, goes outside.'

In this specific case, there is an explicit location: *foras* 'outside'. The explicit location can be absent, however, with the state/location implied in the verb itself, as in It. *uscire* 'go out' 158. It is relevant to notice that the  $\sqrt{s}$  of these controlled change of location verbs determine the state by itself. The possible prefixes that may be present, e.g., *ex* 'out' and *ad* 'to', further specify the

<sup>158</sup>See Acedo-Matellán and Mateu (2013) for a complete analysis of the change of location in Latin and of the difference between a verb-framed language like Italian and a satellite-framed language like Latin or English. For the original typological observation, see Talmy (1985, 1991).

directionality of the movement but do not represent the final state, that is, as has already been mentioned, determined by the  $\sqrt{^{159}}$ . There are other change of location verbs, however, in which the final location of the argument, the locative state, is not determined by the  $\sqrt{}$  but by a specific prefix. A clear example is *ex-eo* 'I go out, I exit'. The verbal element, *ire* 'to march, to go', by itself, is never present in change of location structures; it can only conflate into a v-do°:

(213)

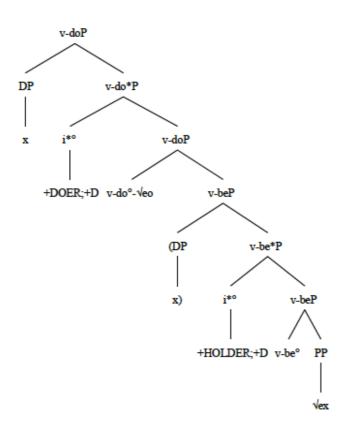
Tota nocte continenter ierunt. (Caes. *Gall.* 1, 26, 5)

whole.ABL.SG night.ABL continously go.3<sup>RD</sup>PL.PRF.ACT

'They marched the whole night.'

The change of location structure arises only if there is a prepositional element, such as *ex*'out', that realizes the stative part of the verb. The structural analysis of these compositional change
of location verbs, then, is different from the structural analysis of the controlled change of location
deponents, in which the  $\sqrt{}$  is conflated into the lower stative head.





<sup>159</sup>In some of these verbs, the prefix is lexicalized as part of the  $\sqrt{\ }$ , as in *proficiscor* 'I go on, forward'.

In other words, in a controlled change of location structure involving  $\sqrt{\text{grad}}$ , the argument is the HOLDER of the state of being *gressus* 'advanced', while in a verbal controlled change of location structure like the one proposed in (213), the argument is the HOLDER of the state of being *ex*- 'out', not the holder of the non-existing state of being \**itus* 'gone'. For a deeper analysis of the contribution of the prefixes to the final meaning of the verbs in Latin, see Acedo-Matellán (2010, 2016).

In all the cases analyzed up to this point the Middle morphology is syntactically and semantically justified within the proposed derivation. There is no need for an inherent morphological feature coming from the  $\sqrt{}$ . There is, however, a relevant issue with respect to this category of deponent verbs. In this proposal, I allow for movement of arguments. There would be no problem if the argument merged low, e.g., plumbum album in (209), moved to the higher thematic position in order to gain the second ROLE. If this were the case, the Middle morphology would not be present. Since the output of the two structures is the same, as underlined in Section 2.2.4 following Schäfer (2008), why does the Latin speaker choose the Middle-marked structure and not the unmarked one, in which the argument moves? In Section 2.2.5 and 2.2.6, where I analyzed anticausatives, the verbs that can be present both in a causative and an change of state structure, a similar issue arose. When a specific  $\sqrt{}$  alternates between a change of state structure and a causative one, the change of state structure can be either marked by the Middle morphology (or by the SE pronoun) or unmarked<sup>160</sup>. The presence vs. absence of the overt marking has been justified by looking at the categorization of the  $\sqrt{.}$  If a  $\sqrt{.}$  is high on the agentivity scale the change of state variant will be marked; if it is low on the agentivity scale, the change of state variant will be unmarked (Schäfer 2008, based on Haspelmath 1993). This approach may work for the oppositional cases, but it clearly fails with the non-oppositional cases that I am analyzing in this section. For example, the uncontrolled change of state  $\sqrt{s}$  belonging to the class under analysis, like the  $\sqrt{s}$  of nascor 'I am born' and the  $\sqrt{}$  of morior 'I die', clearly belong to the internally caused category, the category of √s that, in Italian, derives change of state structure without the SE pronoun. An example is fiorire 'to blossom'.

```
(215)

L' albero è fiorito.

the tree is bloomed
'The tree bloomed.'

(216)
```

<sup>160</sup>I leave aside the SE-marked option in order to simplify the argumentation.

\*L' albero si è fiorito. the flower SE is bloomed

The  $\sqrt{}$  of *nascor* 'I am born' and the  $\sqrt{}$  of *morior* 'I die', as the  $\sqrt{}$  of It. *fiorire* 'to blossom', cannot appear in any causative structure or, to be more precise, in any other structure at all: these  $\sqrt{}$ s always appear in a change of state derivation. While the natural expectation would be to observe an unmarked change of state derivation, the data contradict this expectation. The change of state derivation is marked by the Middle morphology. The same problem arises with respect to the controlled change of state verbs, as in this case as well the  $\sqrt{}$  can only appear in the specific environment in which the subject of the v-beP is also the subject of the v-doP.

In the analysis of these non-oppositional verbs one has to abandon the hypothesis that there is always a relation between Middle morphology and degree of agentivity: the Middle-marking, in these non-oppositional contexts, is not related to a higher degree of agentivity. This conclusion is not unexpected or in contradiction with the one proposed for the anticausatives (Section 2.2.6). The Middle morphology is not ontologically related to a higher degree of agentivity; it is only used to mark a higher degree of agentivity in certain oppositional contexts. There is nothing in the Middle syntactic structure by itself that marks a higher degree of agentivity. When a language is in possession of two (or more) different structures that give as a semantic output exactly the same denotation, the language can split the domains of application of the two structures, creating two coherent and separate sets. The specific criterion for the split may be, as already stated, the degree of agentivity: some  $\sqrt{s}$  are more agentive and some others are less agentive, and, consequently, one of the two structures (either the Middle-marked or the SE-marked) marks the first set, while the other (the Labile/movement) marks the second. This is what happens with the anticausative  $\sqrt{s}$ , categorized as cause unspecified in Sections 2.2.4 and 2.2.6. The √s under analysis, as already noticed, are not classified as cause unspecified. They are all internally caused, meaning that the event is conceived as having an internal cause, whether it is controlled (v-doP) or not (v-goP). The argument, then, in all these cases, always starts as internal (HOLDER) and then acquires the external argument features, UNDERGOER or DOER.

Abandoning, for good reason, an explanation based on agentivity, we then must posit a different one. As noted throughout this Section, these verbs always have only one argument: in classical terms, these verbs are intransitives. Gianollo (2010, 2014), looking at the intransitive category in general, proposes relating the presence of the Middle morphology on these verbs to the morphosyntactic marking of the split between intransitive unaccusatives and intransitive unergative

predicates<sup>161</sup>. The difference between unaccusativity and unergativity has been variously defined in the literature (Perlmutter 1978, Burzio 1981, 1986, Van Valin 1990, Levin and Rappaport Hovav 1995). The main observation is that there are two kinds of intransitive predicates: the ones in which the sole argument behaves like the subject of the transitive verbs, and the ones in which the sole argument behaves like the object of the transitive verbs. This is shown, in Italian, by a series of tests: among others, the *ne* pronominalization. The *ne* partitive pronoun can be used to refer to the object of transitives, (218) or to the subject of unaccusatives, (220), but not to the subject of unergatives, (222).

```
(217)
    Giovanni ha mangiato le mele.
    Giovanni has eaten
                             the apples
    'Giovanni ate the apples.'
(218)
    Giovanni ne ha mangiate quattro.
    Giovanni of has eaten
                                four
    'Giovanni ate four of them.'
(219)
    Gianni è uscito.
    Gianni is go.out.PTCP.PST.M.SG
    'Gianni went out'
(220)
    Ne sono uscite quattro.
    of are
              exit
                     four
    'Four of them got out.'
(221)
    Gianni ha
                  dormito.
    Gianni has slept.PTCP.PST.M.SG
    'Gianni slept.'
(222)
    *Ne hanno dormito quattro.
    of
          have
                 slept
                          four
```

Following the idea of Perlmutter (1978) and Burzio (1981, 1986), it is possible to characterize,

<sup>161</sup>For a different approach to the issue of IE unaccusativity, see Benedetti (2002).

in our framework, the notion of unaccusativity as a structural syntactic property. <sup>162</sup> Unaccusativity can be conceived of as a specific characteristic shared by many different intransitive syntactic structures. A structure is unaccusative when the argument that gets the most external ROLE is not firstly merged in the most external argumental position <sup>163</sup>. Conversely, a structure is unergative if the argument that gets the most external ROLE is directly merged in that position. This accounts for the similar behavior of the subject of the unaccusatives and of the object of the transitives, as in both cases they are merged in an internal structural position.

The analysis of Latin unaccusative deponents proposed by Gianollo (2010, 2014) relies on the marking of the differentiation between these two typologies of intransitive verbs. In her proposal, Latin actively marks the difference between unergatives and unaccusatives by means of the Middle morphology: if, in the syntactic structure, the argument that gets the most external ROLE is firstly merged in a lower position, the verbal output is Middle; if the argument that gets the most external ROLE is firstly merged in the external position, the verbal output is Active. It is a way of actively underlining a linguistic boundary perceived as relevant 164. This kind of marking is only valid for the verbal derivations based on  $\sqrt{s}$  and for the denominal/deadjectival derivations in which the argument gains the DOER role. It is not valid for the denominal/deadjectival derivations in which the argument gains the UNDERGOER role. In those cases, the Middle-marking is substituted by the use of the specific morpheme -sc. The marking of the unaccusative-unergative boundary is also present also in the Romance languages. The initial stages of the Romance languages mark the unaccusative-unergative split by means of the auxiliary selection, just as Italian still does: when an intransitive predicate is unaccusative the auxiliary is essere 'to be', while when an intransitive predicate is unergative the auxiliary is avere 'to have' 165 166. This linguistic boundary is also marked in the languages deriving from Latin, even if the initial marker, the Middle morphology, disappears. This is a further confirmation of its relevance in the linguistic system.

In the next paragraphs I analyze the class of the non-denominal/deadjectival

<sup>162</sup>For a semantic approach to the notion of unaccusativity, see Van Valin (1990).

<sup>163</sup>It does not matter if the most external position introduces the subject of a v-do° or of a v-go°. There are both controlled and uncontrolled unaccusatives:

i. Gianni è andato a casa.

<sup>&#</sup>x27;Gianni went home.'

Gianni è nato.
 'Gianni is born.'

<sup>164</sup>The Middle morphological marking is not the only way of underlining the boundary between these two categories. The use of a specific auxiliary is another possibility: It. *essere* 'to be' → unaccusatives, *avere* 'to have' → unergatives.

<sup>165</sup>This kind of marking is partial, meaning that it surfaces only with the perfect forms (e.g., *dorme* 'she sleeps" vs. *esce* 'she goes out') and not others (e.g., the past *ha dormito* 'she slept' vs. *è uscita* 'she got out').

<sup>166</sup>It is irrelevant that many Romance languages like French and Spanish lose this specific marking in the later stages, the key point is that all Romance languages initially conform to the Latin scheme (see Cennamo 1999, Batlle 2002).

Middle+Accusative deponents. The verbs belonging to this group are *a(di)piscor* 'I reach, obtain', *commentor* 'I think, discuss' and *(re)miniscor* 'I remember', *conor* 'I try, I make an effort', *experior* 'I experience', *fungor* 'I fulfill, accomplish', *hortor* 'I exhort', *medeor* 'I heal', *meditor* 'I judge', *(com)mentior* 'I lie', *mereor* 'I deserve', *metior* 'I measure', *nanciscor* 'I get', *opinor* 'I imagine', *paciscor* 'I make a deal', *patior* 'I tolerate, I bear', *quer(it)or*, 'I complain', *ulciscor* 'I avenge', *u(si)tor* 'I use' and *venor* 'I hunt'. The class of the Middle+Accusative non-denominal deponents is not homogeneous. Some of these verbs always encode the second argument by means of Accusative, accusative case, while some other verbs alternatively encode it by means of Accusative, Ablative, Dative or Genitive case, by means of a prepositional phrase or may not project any second argument at all. This characteristic is related to a second aspect. The past participle of the verbs that may encode the second argument by means of different cases or prepositions always agrees only with the Nominative argument and never with the Accusative one<sup>167</sup>. The past participle of the verbs, instead, that always encode the second argument by means of the Accusative case, agrees both with the Nominative argument and the Accusative one<sup>168</sup>.

Let us see two examples. An example of the "two agreement patterns" kind of verb is *adipiscor* 'I reach, I obtain'.

(223)

Moderati animi gloriam eo die adeptus balanced.gen.sg spirit.gen glory.acc that.abl day.abl obtained.nom.sg consul senatum dimisit. (Liv. 26, 26, 9) consul.nom senate.acc dismiss.3<sup>RD</sup>SG.PRF.ACT 'That day, once he had obtained glory for his balanced spirit, the consul dismissed the

(224)

Senate.'

Biennio continuo post adeptum imperium pedem two.year.ABL continuous.ABL.SG after obtained.ACC.SG command.ACC foot.ACC portam non extulit. (Svet. *Tib.* 38, 1) door.ACC not take.out.3<sup>RD</sup>SG.PRF.ACT

'For the two years after he obtained the command of the Empire he did not take a step out of the door.'

<sup>167</sup>I do not take into consideration the Absolute Participle structures, in which the past participle appears marked by Ablative case. I take into consideration only conjunct participles and adjectival ones.

<sup>168</sup>I use the term Nominative argument and Accusative argument in order to distinguish the two without resorting to more technical terms like HOLDER/POSSESSOR/DOER in order to avoid having to redefine the categorization of these arguments during the argumentation.

An example of a verb belonging to the "one agreement pattern" set is *molior* 'I move'. The past participle of this verb may only agree with the Nominative argument and never with the Accusative argument.

(225)

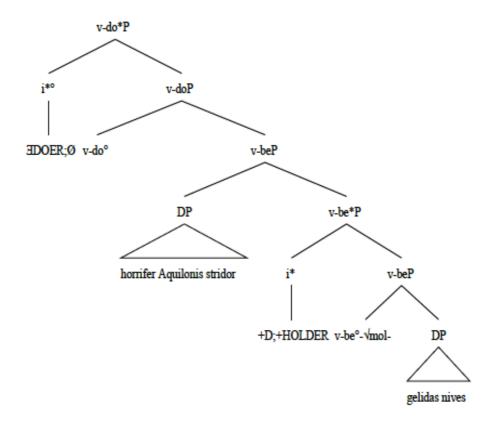
Agricola incurvo terram molitus farmer.NOM curved.ABL.SG soil.ACC move.PTCP.PST.NOM.SG aratro. [...] (Verg. georg. 1, 494) plow.ABL 'The farmer, once he moved the soil with the curved plow, [...].'

The two characteristics, together, point toward a straightforward solution. The verbs whose past participle agrees only with the Nominative argument and in which the second argument may be absent or not encoded by means of Accusative case are bieventive: their event structure involves a v-doP embedding a v-beP whose subject is the Nominative argument. The second argument, on the other hand, is in the complement position of the v-beP. On the other hand, the verbs whose past participle may agree with both arguments and in which the second argument is always present and encoded by means of Accusative case involve in their event structure three events: the higher dynamic one and two lower stative events, of which the Nominative and the Accusative arguments are the subjects.

Let us go through the analysis of the verbs of the first type, using as a specimen the verb *molior* 'I move'. In the case of *molior* 'I move', the Nominative argument is the subject of the state of being *molitus*, while the Accusative argument is the complement of the state.

(226)

Horrifer Aquilonis stridor gelidas molitur terrifying.Nom.sg Aquilon.gen screech.nom icy.acc.pl move.3<sup>RD</sup>SG.PRS.MID nives. (Acc. *trag.* 566) snows.acc 'The terrifying screech of the Aquilon moves the icy snow.'



This analysis may seem peculiar, but only because the usual translation misleads us. The translation of *molior* is usually 'I move', but a more proper paraphrase of the meaning of this verb would be 'I exert myself on something'  $\rightarrow$  'I move something'. *Molitus*, then, does not denote the state of being 'moved' but the state of being 'exerted'. The state of being exerted is referred to the Nominative argument, the argument which "moves", not to the Accusative one, the "moved" argument. For a more proper and complete analysis, see Part II, Section 3.4.10. The Accusative argument represents the measure of the exertion; it is not the subject of a state <sup>169</sup>. For this reason, the Accusative argument, just like the Accusative complement of a locative displacement verb like *prorripio* 'I carry out', cannot agree with the past participle <sup>170</sup>:

169

In Latin I have not been able to find such cases with consumption verbs, like edo 'I eat', which host incremental themes

<sup>170</sup> Past participle agreement in Latin is more constrained than, for example, in Italian. In Italian, the past participle may also agree with the complement of a v-doP event. This argument, being in the complement position of the v-doP phrase, is not the subject of a state (see the structure in (206)).

i. Giovanni mangia una mela.

<sup>&#</sup>x27;Giovanni eats an apple'

ii. Mangiata la mela, Giovanni è uscito.

<sup>&#</sup>x27;Having finished his apple, Giovanni went out'

(227)

Deinde se ex curia domum proripuit. (Sall. *Catil.* 31, 9) then self from curia.ABL home.ACC rush.out.3<sup>RD</sup>SG.PRF.ACT 'And then he rushed out from the curia and went home.'

The subject of the state of being *proreptus* 'carried out' is only the Nominative subject, not the Accusative location that measures the locative state.

The selection of the Accusative case to mark the complement of a state may look peculiar. In Italian, for example, the complement of a state, which represents the time/spatial extension of that state, is encoded by means of a specific preposition, usually *di* 'of':

(228)

Giovanni si è innamorato di te. Giovanni self is fall.in.love.PST.PTCP.M.SG of you 'Giovanni fell in love with you.'

The solution is related to the number of arguments in the structure. In the Italian sentence, there are three DP arguments: Giovanni, *di te* 'of you' and *si* 'self'. *Si* 'self' is the argument that takes the Accusative dependent case, meaning that *di te* 'of you' cannot be marked by Accusative case<sup>171</sup>. In the Latin sentence, instead, the DP arguments are only two, *horrifer Aquilonis stridor* 'the terrifying screech of the Aquilon' and *gelidas nives* 'icy snow'. The Middle morphology, being the post-syntactic output of the intransitive and existential argument-introducing head, cannot be considered a DP argument. The DP argument that is in the complement position of the v-beP is consequently able to acquire Accusative case.

Further proof in support of the proposed analysis is that *molior* 'I move' can appear without any second argument. The meaning of the event in this case is 'I make an effort, I exert myself'.

(229)

Vide-n ut misere moliuntur? (Plaut. Curc. 188)

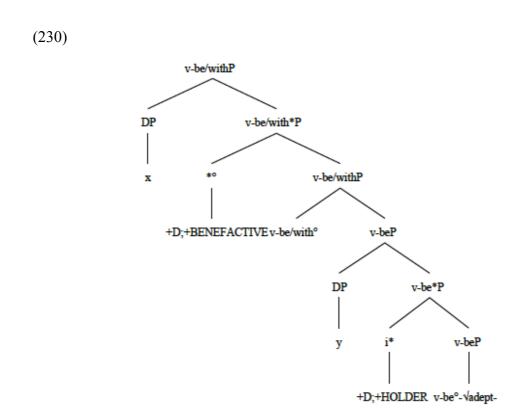
as Accusative arguments. This issue can only better understood with a larger dataset.

<sup>171</sup>The Italian SE-marked Benefactives, on the other hand, encode the second referential DP with Accusative case (see (193)). This is possible because in these cases the SE pronoun has an inherent Dative case, that overtly appears only when the BENEFACTIVE argument is a full DP, as *alla nonna* 'to the grandmother' in (196). This could be considered evidence in favor of the low merging position of the SE pronoun in the Italian benefactive structures, in agreement with Sportiche (2014).

see.2<sup>ND</sup>SG.IMP.ACT-not as desperately move.3<sup>RD</sup>PL.PRS.MID 'Don't you see how desperately they move?'

If the event structure of this verb involved a state whose subject is the Accusative argument, the Accusative argument would always be present, and we would not expect to find occurrences like (229). The verbs belonging to this category, then, are *controlled change of state verbs*, in which the possible secondary argument (Accusative or not) represents the measure of the state.

The case of *adipiscor* 'I get' is different. The second argument is always present and marked by Accusative case, and it is possible to find occurrences in which the past participle agrees with it. This evidence shows that in the syntactic derivation of this verb there are two low stative events with two subjects. The two events are a v-beP and a v-be/withP. The Nominative argument is the subject of the v-be/withP, while the Accusative argument is the subject of the v-beP. Both can agree with the past participle because both are subjects of a stative predication. Since it is not relevant for the present argumentation, I do not not represent the higher v-doP projection in the structure.



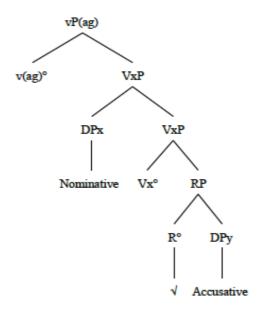
The verbs that behave like *adipiscor* 'I reach, I obtain', then, can be considered proper Benefactives: structures in which the Nominative argument is present in the lower part of the derivation as the BENEFACTIVE of an embedded state of which the Accusative argument is the

subject. Both arguments, being subjects of stative predications, may agree with the past participle.

However, the test is not always valid. In some cases, the verb lacks a past participle (e.g., medeor 'I heal'). In other cases, the situation is highly complex and the  $\sqrt{}$  is able to be merged in both syntactic derivations. I will analyze each case, one by one, in the second part (Section 3.3). There are also cases in which the analysis does not conform to one of the two proposed in this section. An example is reminiscor 'I remember', which can be analyzed in some cases as a change of state while in other cases as a controlled change of possession verb (like It.  $ricordarsi\ delle\ chiavi$  'to remember the keys' vs.  $ricordarsi\ le\ chiavi$  'to remember the keys'. See Part II, Section 3.4.2).

Laura Grestenberger (2014) proposes a different analysis of the Middle+Accusative deponents. In her thesis, while she splits these verbs in denominal/deadjectivals and non-denominal/deadjectivals, she proposes the same analysis for both categories. She defines the Middle morphology as the spell-out of a  $v^{\circ}$  (the head that introduces the Agent, both syntactically and semantically) whose specifier is not occupied by an actual DP. In other words, the Middle morphology is the spell-out of an Agent-introducing head in which there is no actual syntactic Agent, an analysis that is similar to the one proposed here. She wants to justify the Middle morphology without claiming that there is an inherent morphological feature of the  $\sqrt{}$  that projects it. Her solution is to propose that the Agent Nominative argument is actually merged in a low position, in the specifier of a verbalizing phrase headed by a verbalizing head, that she labels  $Vx^{\circ}$ . The Nominative argument, then, is not introduced in the specifier of the Agent-introducing head,  $v^{\circ}$ . The vP, consequently, has no DP in its specifier and spells-out a Middle-marked verb.

(231)



However, she shows that the Nominative argument of the deponent verbs is actually an Agent (Grestenberger 2014, Section 4.2). Why is it not merged in the Agent position, then? She solves the problem stipulating that the  $Vx^{\circ}$  is also able to provide the Nominative DP with the Agent role. This projection is headed by a specific verbalizing morphology that she exemplifies with Sanskrit *-ya-* in her model.

The relevant difference between her approach and mine is not structural. In both cases the Nominative argument of the deponent verbs is merged lower than the higher eventive head of the vP: v° in her case and v-do° in mine. In both cases, then, the Middle morphology is justified by the absence of a DP in the Agent/DOER structural position. The relevant difference, instead, is the denotation of the internal head in which the Nominative argument is merged. In her hypothesis the internal head is dynamic and introduces an Agent, while in my hypothesis, the internal head is stative and may introduce a HOLDER in the *molior* 'I move' cases or a BENEFACTIVE in the *adipiscor* 'I obtain' cases.

Her VxP, as just stated, is agentive, meaning that it introduces a specific Agent-related event. Why, then, is the Agent-introducing vP present as well? From a semantic point of view its projection is redundant. The Nominative argument already takes the Agent role in spec, VxP and the dynamicity is already projected by the same phrase. The vP is not needed as a verbalizer either, since she claims that the  $Vx^{\circ}$  is the verbalizer. If this second dynamic head is really present, then, it has to be somehow differentiated from the higher  $v^{\circ}$ ; otherwise, the stipulation of the lower  $Vx^{\circ}$  may be seen as an ad hoc solution to allow for the merging of the Nominative argument in a position that is lower than the standard Agentive one. She, in fact, proposes a differentiation

between the lower agentive VxP and the higher vP. The lower VxP would introduce, in her hypothesis, an *imperfective viewpoint* related to the creation of the present stem as opposed to the perfective one (Grestenberger 2014, p.165). While this claim, as she notices, may be partially supported by the diachrony of Vedic and Ancient Greek deponents, there is no trace of such an *imperfective viewpoint* in Modern Greek, Hittite or Latin deponents<sup>172</sup>. In a benefactive/change of state analysis, this problem does not arise, since the lower head introduces a stative event, while the higher v-doP introduces the dynamic event. The idea that the Nominative argument is related to a stative phrase is supported in Latin by the existence of participial sentences in which the Nominative argument agrees with the past participle, something that we do not observe when the Nominative argument is purely an Agent/DOER. Moreover, the idea that the Nominative argument is merged as the subject of a low stative predication allows me to capture the distinction between controlled change of state deponents, like *molior* 'I move' and benefactive deponents like *adipiscor* 'I obtain'.

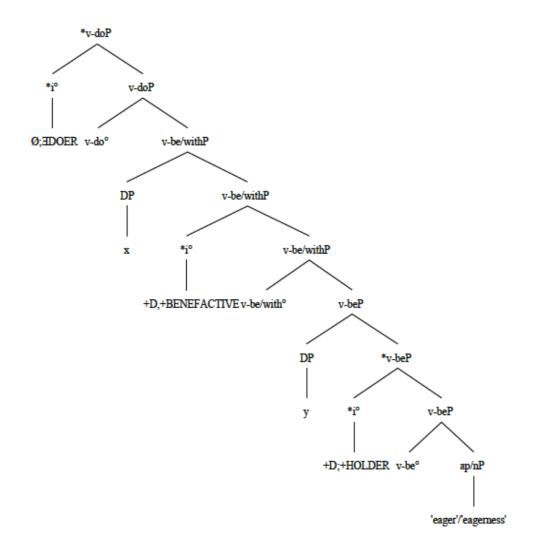
While in her approach, all the Accusative arguments of the Middle+Accusative deponents have the same position as complements of R(oot)P (see (231)), my approach differentiates between the Accusative arguments that are in the complement position of a stative v-beP and the Accusative arguments that are in the subject position of a secondary stative v-beP. Looking at her list of Latin deponents (Grestenberger 2014: 100-101) we can observe that the vast majority of them belongs to the molior 'I move' category, whether they are initially denominal (e.g., furor 'I steal', interpretor 'I explain', largior 'I distribute', machinor 'I contrive, I design', medicor 'I heal', min(it)or 'I threat', molior 'I move', percontor 'I question', periclitor 'I try', speculor 'I spy', and vador 'I bind by bail') or not (e.g., fungor 'I perform', liceor 'I make a bid', nanciscor 'I obtain, I get', queror 'I lament', utor 'I use' and venor 'I hunt'). Looking at her list it is also possible to find verbs which actually alternate between Middle and Active morphology, in the sense of the verbs of the third category, like a-spernor 'I separate myself from' vs. sperno 'I separate' (Section 3.4.1) or in the sense of the verbs of the second category, like *ludificor* vs. *ludifico* 'I make fun of' (Section 3.4.2). It is also possible to find Possession+Identification denominal/deadjectival deponents, whose analysis has been provided in Section 3.3.4: stipulor 'I bargain' and testor 'I call as a witness'. The remaining verbs in her list are: a(di)piscor 'I reach, I obtain', calvor 'I deceive', reminiscor 'I remember', conor 'I attempt', hortor 'I exhort', imitor 'I imitate', opperior 'I wait', solor 'I

<sup>172</sup>Moreover, as she notices in Grestenberger (2016), many synchronically deponent verbs diachronically derive from verbs for which an actual alternation was attested. The Middle form usually marked a benefactive or change of state derivation, while the Active one a causative derivation. It is plausible, then, to propose that, once the alternation is lost, only the benefactive/change of state derivation survives. The internal benefactive phrase is stative, not dynamic, even if we propose that the benefactive semantics is lost, the stativity of the internal phrase in which the Nominative argument is merged should be preserved.

console', *ulciscor* 'I vindicate, I take revenge', *for/fateor* 'I speak' and their variants, *loquor* 'I speak', *despicor* 'I despise' and *suspicor* 'I suspect', *tueor* 'I protect' and *sequor/sector* 'I follow'. *Reminiscor* 'I remember' and *ulciscor* 'I vindicate, I take revenge' have a Nominative argument clearly merged in a low stative predicative phrase, as It. *ricordarsi* 'to remember' and *vendicarsi* 'to take revenge'. These two verbs are complex and present different possible argument structures which will be analyzed in more depth in Part II, Section 3.4.2. *Adipiscor* 'I obtain', instead, falls within the benefactive category, as *hortor* 'I exhort', and *imitor* 'I imitate' (PartII, Section 3.3.1).

Let us take a look at the verb *hortor* 'I exhort', that, being frequently used to justify the idiosyncratic analysis of the entire class, is probably one of the most relevant Latin deponents. There are a variety of cognate forms of *hortor* 'I exhort' in other IE languages (De Vaan 2008), including Ancient Greek  $\chi \alpha i \rho \omega$  'I am glad', Sanskrit *háryati* 'to enjoy' and Old Irish *gor* 'pious'. The whole set of IE cognate forms shows a meaning related to the semantics of 'wish', 'desire to do something, eagerness' etc. A possible speculative option is to link the observed nominal/adjectival semantics to the actual semantics of the Latin verb. A possible solution is to hypothesize a Possession+Identification denominal derivation from a noun meaning 'eagerness, desire' or from an adjectival meaning 'eager, zealous':

(232)



In a rather informal way, the meaning of this structure could be paraphrased as 'x acts in order to have y eager (to do something)'. This structure, however, is not an adequate synchronic explanation for the Latin verb *hortor* 'I exhort', since in Latin there is no trace of a possible nominal/adjectival element related to the same  $\sqrt{}$ . My proposal is that, once the nominal element has been lost, the verb is reanalyzed as  $\sqrt{}$ -based, with the  $\sqrt{}$  directly conflated into the low v-be $^{\circ}$ . This conflation creates the stative event of 'being eager', of which the Accusative subject is still the HOLDER. This reanalysis does not cancel the denominal/deadjectival event structure and maintains the Nominative argument as the subject of a low stative v-be/withP describing the state of being the BENEFACTIVE of the v-beP. The benefactive argument is preserved, even when denominality is lost, and the Middle morphology is justified as the morphological output of the inactive i\*° merged with the v-doP. The structure, then, persists beyond the loss of the denominal part. The Middle morphology is preserved because the former syntactic denominal structure is preserved, regardless of the fact that the nominal element is not nominal anymore and that it has been reanalyzed as a  $\sqrt{}$ .

The structure survives and gives rise to the environment that justifies the presence of the Middle morphology.<sup>173</sup> These data point toward a stative analysis of the low phrase in which the Nominative argument is initially merged, not a dynamic analysis as the one proposed in Grestenberger (2014).

Within the remaining group of verbs, there are two sets that I will not analyze in this thesis: the "seeing" verbs (spicor/spector/speculor 'I see', tuor/tueor/tutor 'I look around' \rightarrow 'I take care') and the "speaking" verbs (for/farior/fateor 'I speak' and loquor 'I speak'). Seven other verbs will also be set aside: calvor 'I deceive', conor 'I try', solor 'I console', sequor/sector 'I follow', frustror 'I deceive' and ruspor 'I look for'. It has to be noticed that 2 of these verbs are very rare: calvor 'I deceive' and ruspor 'I look for'. Frustror has a deadverbial origin from frustra 'in vain', which can justify a low merging position of the Nominative argument. Conor 'I try' is usually linked to a PIE denominal derivation from a noun meaning 'effort, attempt' (De Vaan 2008; an analysis that could be similar to the one proposed fro molior 'I move something, I exert myself upon something'). Sequor 'I follow' and solor 'I console' also have a denominal PIE origin that could justify the presence of a low stative phrase. While a deeper analysis of the contexts in which these verbs appear would further our understanding us understanding of their syntactic and semantic structure, this will not be a focus of the present investigation.

<sup>173</sup>The notion of structural persistence is somehow obscure from a formal point of view. The setting of lexical categories, as I will point out in Section 4, may depend on the morphosyntactic component (see also Acedo-Matellán 2016). However, the content of the different categories comes from the external input, from the use of the different  $\sqrt{s}$  in the community of the speakers. In this sense, the notion of structural persistency can be clarified. Hypothesizing a continuity in the morphosyntactic component, the speaker acquires the use and the categorization of a specific  $\sqrt{s}$  from the input that comes from the community. There is, in this sense, a collective inheritance that shapes the use of each  $\sqrt{s}$ . Even if initial denominality is lost, then, the denominal structure can be maintained, giving rise to the observed patterns.

## 4. Beyond Latin, what lexicon can and cannot do

Latin deponents can only appear in specific Middle-marked structures. This constraint is related to the lexical-encyclopedic characteristics of their  $\sqrt{s}$ , which are interpretable only in a single and Middle-marked structure<sup>174</sup>. As emphasized throughout this work, the presence of the Middle morphology on the deponent verbs is syntactically and semantically justified in the derivation. Their idiosyncratic behavior is not related to the presence of the Middle, but to the fact that the contexts in which their  $\sqrt{s}$  can be interpreted are always Middle-marked. This is a lexicon-encyclopedic constraint. The deponent verbs, then, provide us with a set of data that can help us in the analysis of the relations between the lexicon and the syntactic/semantic component. The target is to understand how and if the influence of the  $\sqrt{s}$  is constrained. In other words, how specific can the context of interpretability of a  $\sqrt{s}$  be? The analysis necessarily goes beyond Latin in order to see if, in other languages the context of the idiosyncratic interpretation of the  $\sqrt{s}$  can be more or less constrained with respect to Latin and if this difference can be traced back to a syntactic parameter. In this analysis I concentrate on  $\sqrt{s}$ -derived verbs and disregard denominal and deadjectival derivations.

In Latin, it is possible to find  $\sqrt{s}$  that are constrained to appear in three Middle-marked contexts<sup>175</sup>.

First of all, there are verbs whose  $\sqrt{}$  is only interpretable in [v-goP [v-beP]] structures in which the Nominative argument is merged as the subject of the lower v-beP. In this class I include the change of state verbs: *expergiscor* 'I wake up', *nascor* 'I am born', *morior* 'I die', *orior* 'I rise', *irascor* 'I get angry', *labor* 'I slip' and *vereor* 'I fear'. One could define these verbs as having a  $\sqrt{}$  that is interpretable only in the structure represented in (233):

(233) 
$$\left[ v-go^{\circ \emptyset} \left[ v-be^{\circ +D} \right] \right]$$

In this simplified structure I mark the presence of a syntactically transitive or intransitive argument-introducing head by means of the apical notation +D (transitive) or  $\emptyset$  (intransitive), avoiding the representation of the complexity of the full structure. This structure represents a

<sup>174</sup>There are deponent  $\sqrt{s}$  that may be interpretable in more than one Middle-marked structure (see, e.g., Part II, Section 3.4.2) but the target of this section is the  $\sqrt{s}$  which are only interpretable in a single Middle-marked structure. It is relevant to notice that in a constructivist framework the existence of  $\sqrt{s}$  that can be present in more than one syntactic environment is not a relevant issue. Every  $\sqrt{s}$ , from a narrow syntactic point of view, can be merged in any possible eventive derivation. The relevant fact, in the perspective of this section, is that there are  $\sqrt{s}$  that are bound to a single syntactic environment. I am investigating if these environments are crosslinguistically consistent or if there is variation and, if there is variation, what the reason for this variation might be.

<sup>175</sup>For a full analysis of each verb belonging to these classes, see Part II, Section 3.

change of location event in which the argument DP is merged low and in which the higher argument-introducing head is intransitive  $(\emptyset)$ .

There are verbs, then, whose √ is only interpretable in [v-doP [v-beP]] contexts in which the Nominative argument is merged as the subject of the lower state, may that state be a location or related to the acquisition of a property. In this class I include the controlled change of state verbs and the controlled change of location verbs: *gradior* 'I advance', *proficiscor* 'I set out, I start', *palor* 'I wander, I am dispersed', *fungor* 'I fulfill, I accomplish', *medeor* 'I heal', *metior* 'I measure', *molior* 'I move', *nanciscor* 'I get', *(ex)ordior* 'I weave, I start speaking', *palpor* 'I caress', *praestolor* 'I wait', *queror* 'I complain', *suffragor/refragor* 'I support/I oppose', *ut(it)or* 'I use', *venor* 'I hunt' and *vescor* 'I eat'<sup>176</sup>. One could define these verbs as having a √ that is interpretable only in the structure represented in (234):

(234) 
$$\left[ v - do^{\circ \emptyset} \left[ DP v - be^{\circ + D} \right] \right]$$

A third class is formed by those verbs which can only appear in [v-doP [v-be/withP [v-beP]]] structures in which the Nominative argument is merged as the subject of the v-be/withP and the Accusative argument as the subject of the v-beP: *adipiscor* 'I reach, I obtain', *hortor* 'I exhort', *imitor* 'I imitate', *metior* 'I measure' and *reor* 'I think'. One could define these verbs as having a  $\sqrt{ }$  that is only interpretable in the self-benefactive structure represented in (235):

(235) 
$$\left[ _{\text{v-doP}} \text{ v-do}^{\circ \emptyset} \left[ _{\text{v-be/withP}} \text{DP}_{1} \text{ v-be/with}^{\circ + D} \left[ _{\text{v-beP}} \text{DP}_{2} \text{ v-be}^{\circ + D} \right] \right] \right]$$

The final group is formed by verbs whose √ is interpretable both in the context exemplified in (234) and in the context exemplified in (235): *meditor* 'I think', *opinor* 'I think', *paciscor* 'I make a bargain, I agree', *ulciscor* 'I vindicate, I take revenge', *reminiscor* 'I remember' and *obliviscor* 'I forget'. In the case of *ulciscor* 'I vindicate, I take revenge', there is a detectable meaning difference between the two derivations (see Part II, Section 3.4.21). In the other cases, the hypothetical presence of two possible structures is supported by the existence of different syntactic behaviors connected to the same verb.

It is not the case that every language allows for the same set of highly specific lexical-

<sup>176</sup>In Part II, I differentiate between the controlled change of state structures and the change of location structures on the basis of their diachronic behavior. For now, this differentiation is irrelevant.

encyclopedic constraints. Italian, for example, behaves in a somewhat different way.

In Italian, it is possible to find  $\sqrt{s}$  that can only be interpreted in either a [v-goP [v-beP]] structure or in a [v-doP [v-beP]] structure. These two structures represent an uncontrolled and a controlled change of state situation. Examples of verbs derived by this kind of  $\sqrt{s}$  are *morire* 'to die', *nascere* 'to be born', *fiorire* 'to bloom', *crollare* 'to collapse', *partire* 'to leave', *uscire* 'to go out' and *scendere* 'to come down'. In the structure in which these  $\sqrt{s}$  are obligatorily merged, the Nominative argument is merged as the subject of the state and then moves to the position of subject of the dynamic uncontrolled/controlled event.

(236) 
$$\left[ _{\text{v-go/doP}} \text{DP v-go/do}^{\circ + D} \left[ _{\text{v-beP}} \frac{\text{DP v-be}^{\circ + D}}{\text{DP v-be}^{\circ + D}} \right] \right]$$

On the other hand, it is not possible to find in Italian the third kind of  $\sqrt{}$  observed in Latin, those that can only be interpreted in a [v-doP [v-be/withP [v-beP]]] structure in which the subject of the v-be/withP is also the subject of the v-doP (self-benefactives). Every  $\sqrt{}$  that can be merged in a self-benefactive environment can also be merged in a standard benefactive environment and in a causative one in which the benefactive phrase is absent (e.g., *mangiarsi la mela* 'to eat the apple (for yourself)', *mangiargli la mela* 'to eat the apple (for him)' and *mangiare la mela* 'to eat the apple'). I am currently unaware of any Italian  $\sqrt{}$  that can only be merged in a self-benefactive environment<sup>177</sup>.

This crosslinguistic difference is general and differentiates the languages which have a morphological Middle from the languages which do not (see Grestenberger 2014: 196). The possibility of having  $\sqrt{s}$  that can only appear in self-benefactive contexts is related, then, to the presence of the Middle morphology. This does not mean that in Italian and in other languages which do not have this kind of  $\sqrt{s}$  the self-benefactive structure is unavailable. In Italian, for example, it is spelled-out by means of the SE pronominal element. Before proposing the structures and the analysis, I would like to remark a key point: the actual merging position of the SE pronoun – as the subject of the v-be/withP or as the subject of the v-doP – is not relevant for the present argumentation. The proposal that I am presenting would be adequate not only in a structure in which the SE pronoun is merged in the highest position (DOER) of the vP but also in a structure in which the SE pronoun is merged in a lower position (BENEFACTIVE). The key point, I contend, is that in Italian all three argumental positions are syntactically filled, while in Latin only two, this

<sup>177</sup>The only possible exception is *sobbarcarsi* 'to take on something'. This verb, however, is denominal from *barca* 'boat' and, as I note below, denominal verbs behave differently with respect to many characteristics.

happens irrespectively of the merging position of the SE pronoun. After this brief remark, let us take a look at the difference between the Middle-marked self-benefactive derivation and the SE-marked one, following the typology of the argument-introducing head previously presented (Section 2.2.1).

The Latin Middle-marked self-benefactives have the structure represented in (235), repeated here as (237).

(237) 
$$[_{v-do^{P}} v-do^{OO} [_{v-be/with^{P}} DP_{1} v-be/with^{O+D} [_{v-be^{P}} DP_{2} v-be^{O+D}]]]$$

In this structure, the higher argument-introducing head is syntactically intransitive and semantically existential. This configuration allows for the contextual identification of the existentially bound DOER with the internal subject of the v-be/withP (DP<sub>1</sub>).

The Italian self-benefactive structure is different. The Middle morphology is absent, and it is not possible to project a syntactically intransitive and semantically existential argument-introducing head. The only available structure is the SE-marked one<sup>178</sup>:

(238) 
$$\left[ v_{\text{-doP}} DP_1 v_{\text{-do}} \right] = \left[ v_{\text{-be/withP}} DP_{\text{SE}} v_{\text{-be/withP}} \right]$$

The Italian self-benefactive structure is not structurally different from a benefactive structure in which the benefactive argument and the DOER argument are not the same referential element:

(239) 
$$[ _{v-doP} DP_1 v-do^{\circ +D} [ _{v-be/withP} DP_2 v-be/with^{\circ +D} [ _{v-beP} DP_3 v-be^{\circ +D} ] ] ]$$

Also in this case the eventive heads are v-do°, v-be/with° and v-be°; there are three different DPs and three different transitive and active argument-introducing heads.

In Latin, instead, the benefactive structure in which the benefactive argument and the DOER are not the same referential element is different from the self-benefactive structure represented in (237), being that the non-self-benefactive structure is identical to the Italian one given in (239). It follows from these data that an Italian  $\sqrt{}$  is not able to impose an interpretive restriction on the self-

178

benefactive syntactic structure, being that the self-benefactive syntactic structures are identical to the non-self-benefactive ones. If a  $\sqrt{}$  is interpretable in a SE-marked self-benefactive structure, it is also interpretable in a benefactive structure in which the BENEFACTIVE argument is referentially disjoint from the DOER argument. A Latin  $\sqrt{}$ , on the other hand, is able to impose such an interpretive restriction, being that the self-benefactive structure in (237) is syntactically different from the non self-benefactive one in (239). In Latin, then, it is possible to have  $\sqrt{}$ s that are only interpretable in a self-benefactive environment. This difference, as initially predicted, relies on the availability of the Middle morphology as the spell-out of an intransitive and existential argument-introducing head.

This explanation, however, needs further refinement. As previously demonstrated, Italian presents a number of  $\sqrt{s}$  which are only interpretable in a single controlled/uncontrolled change of state syntactic environment, e.g, *morire* 'to die', *nascere* 'to be born' and *uscire* 'to go out'. In these cases, despite the absence of the Middle morphology, the  $\sqrt{s}$  is only interpretable in a single syntactic structure. The  $\sqrt{s}$ , then, has to be able to differentiate between a causative structure like (240) and controlled change of state structure like (236), repeated here as (241):

(240)
$$\left[ _{\text{v-doP}} \text{ DP}_{1} \text{ v-do}^{\circ + D} \left[ _{\text{v-beP}} \text{ DP}_{2} \text{ v-be}^{\circ + D} \right] \right]$$
(241)
$$\left[ _{\text{v-doP}} \text{ DP v-do}^{\circ + D} \left[ _{\text{v-beP}} \frac{\text{DP}}{\text{DP}} \text{ v-be}^{\circ + D} \right] \right]$$

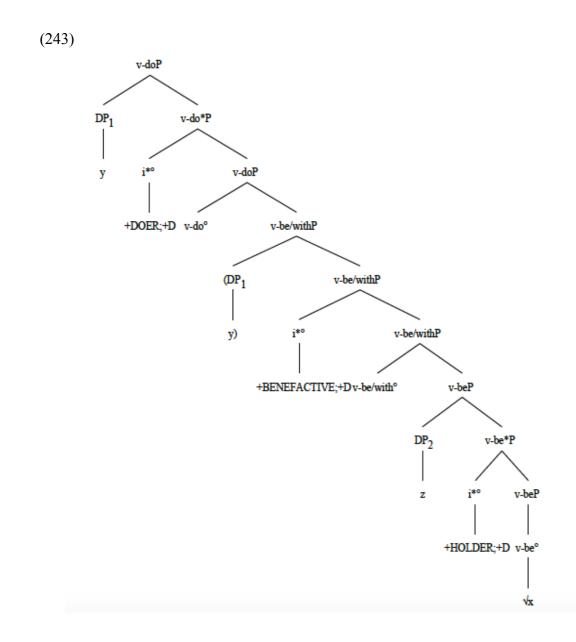
The relevant observation is that the structure in (241) is post-syntactically different from the structure in (240). The first structure involves two different DPs in two different structural positions, while the second one involves a single DP that moves from the low position in which it is the subject of the state to the higher one. The  $\sqrt{}$ , then, is capable of recognizing a post-syntactic difference between these two structures. This allows for the existence of a group of  $\sqrt{}$ s that are only interpretable in the second syntactic environment but not the first. This observation has diachronic consequences that I analyze in Part II, Sections 3.3 and 3.5. It should be possible also in Italian, then, to have  $\sqrt{}$ s that are only interpretable in a self-benefactive environment. In a structure in which the BENEFACTIVE DP moves from its low initial position to the higher one, the  $\sqrt{}$  would be able to post-syntactically differentiate a self-benefactive structure from a benefactive or a causative one. The problem is that it is not possible to build self-benefactive structures by means of such a syntactic movement. An Italian self-benefactive structure always involves a SE pronoun:

(242)

Gianni \*(si) è mangiato una mela.

Gianni \*(self) is eaten an apple

This follows from a case assignment issue. The most internal DP of a benefactive structure has to acquire Accusative case. Accusative case, following the algorithm in (114), is dependent on the assignment of Nominative case and is assigned to the second DP in the structure that does not already have an inherent case. A labile ("movement") self-benefactive structure would look like this:



Nominative case is assigned to the DP that valuates the up features of the higher argument-introducing head, the one that merges with the v-doP. Accusative case is assigned to the second unmarked DP. Assuming a copy theory of movement, in which the phrases move and leave behind a copy that is deleted at PF (Chomsky 1993, 1995, 2001), the second unmarked DP is not DP<sub>2</sub>, but the copy of DP<sub>1</sub>. In this case, the copy of DP<sub>1</sub> would prevent the assignment of Accusative case to DP<sub>2</sub>, that, without a case, cannot survive the derivation. A SE-marked structure does not have the same problem, since the BENEFACTIVE DP, the SE pronoun, is marked by inherent DATIVE case. This allows for the assignment of Accusative case to DP<sub>2</sub>. Given this, an Italian self-benefactive structure can only be built by means of a SE pronoun and, consequently, there cannot be  $\sqrt{s}$  that are only interpretable in a self-benefactive structure, given that if a  $\sqrt{s}$  is interpretable in a self-benefactive environment, as proposed above.

A final note on denominal/deadjectival derivations. The generalizations presented in this Section are valid only for the  $\sqrt{-}$ based verbs, they are not valid for the denominal/deadjectival ones. This is a consequence of the fact that I adopt an Incorporation mechanism for the denominal/deadjectival derivations. This means that a denominal/deadjectival verb is built starting from an already derived XP that has its own syntactic characteristics. I leave the issue of the constraints imposed by the denominal/deadjectival derivations open for further research.

Given these data, it follows that the idiosyncratic requirements of a specific  $\sqrt{}$  act at a post-syntactical level and not pre-syntactically. The cognitive capability of a Latin speaker and the cognitive capability of an Italian speaker cannot be conceived as different: the hypothesis that only Latin speakers can differentiate a self-benefactive structure from a standard benefactive and causative one and create  $\sqrt{}$ s that can only appear in a self-benefactive environment, is inadequate. Given this premise, if the lexical items were independent from the syntactic derivation and were able to influence it at a pre-syntactic level, as in a Lexicalist framework, we should find also in Italian a number of  $\sqrt{}$ s that are only present in a self-benefactive derivation. However, I just illustrated that this is not the case; only in Latin is it possible to find this kind of  $\sqrt{}$ . This feature, I showed, differentiates two groups of languages in general, not only Latin and Italian. The relevant characteristic that differentiates the group of languages that allow for the presence of the self-benefactive-only  $\sqrt{}$ s and the group of languages that do not, is that the former have the Middle morphology, while the latter do not. This feature, as I underlined, allows for the creation of a self-benefactive derivation that has a syntactic shape that differs from the syntactic shape of a standard benefactive or causative. This fact allows for the creation of a set of  $\sqrt{}$ s that are only interpretable in

a self-benefactive derivation. A morpho-syntactic feature influences the availability of a specific kind of  $\sqrt{\ }$ . Syntax, then, constrains the lexicon. This fact supports the strong Constructivist hypothesis: a  $\sqrt{\ }$  is a bundle of lexical-encyclopedic features that are not readable by the syntactic component.

## 5. Concluding remarks

Deponents are problematic because these verbs always present the Middle morphology and seem to have an active syntax. In this first part of the thesis I show that, given a coherent description of the Middle morphology and of the consequences of its presence, the existence of deponent verbs is fully predictable within the Latin linguistic system.

The Middle morphology is the morphological output of a syntactically intransitive and semantically existential argument-introducing head. This description, as I show in Sections 2.2.5 and 2.2.6, predicts its presence in the oppositional contexts: passives, reflexives and anticausatives.

(243)

In hos ergo exitus varius ille secatur in those.ACC then results.ACC various.ACC.PL that.NOM cut.3<sup>RD</sup>SG.PRS.MID lapis. (Sen. *Contr.* 2, 1, 12) stone.NOM

'The stone, then, is cut in those various shapes.'

(244)

Quae semper ornantur lavantur tergentur who.nomf.pl always adorn. $3^{RD}$ pl.prs.mid wash. $3^{RD}$ pl.prs.mid scrub. $3^{RD}$ pl.prs.mid poliuntur. (Plaut. Poen, 217) smooth. $3^{RD}$ pl.prs.mid

'Who always adorn, wash, scrub and smooth themselves.'

(245)

Africano illi superiori coronam sibi in convivio ad caput adcommodanti,

cum ea saepius rumperetur,
while it.NOM.F.SG many.times break.3<sup>RD</sup>SG.SBJV.IPFV.MID

P. Licinius Varus: "noli mirari" inquit "si non convenit; caput enim magnum est!". (Cic. *de orat.* 2, 250)

'While Africanus, during the dinner, was putting back again on his own head the crown, since it (i.e. the crown) kept on breaking, P. Licinius Varus said: "You shouldn't wonder that it doesn't fit. In fact, you have a big head!"'

(246)

Verum enim dotibus deleniti ultro etiam indeed conversely dowries.ABL softned.PTCP.PST.NOM.PL furthermore also uxoribus ancillantur. (Titin. *com.* 70)

wives.ABL.PL serve.3<sup>RD</sup>PL.PRS.MID

'Softened by the dowries, they (the husbands) enslave themselves even more for the wives.'

Deponents always appear with the Middle morphology: it does not have an oppositional function in these contexts. The lack of an Active variant does not entail, however, that the Middle morphology, in the context of a deponent verb, is a morphosyntactic quirk. In all the deponent derivations in which it appears, the Middle morphology is always the morphological output of a syntactically intransitive argument-introducing head, as in the oppositional cases. The most peculiar characteristic of deponents is not the fact that they can be present in Middle-marked derivations but the fact that they cannot be present in Active derivations. This constraint, I propose, is entirely lexical-encyclopedic: the  $\sqrt{}$  of a deponent verb is only interpretable in a specific Middle-marked derivation. Different deponents are categorized in different groups, depending on the specific Middle-marked context to which the specific  $\sqrt{}$  it tied. I first identified the two main groups, the productive denominal/deadjectival deponents and the non-denominal/deadjectival deponents, that are not productive.

The productive denominal/deadjectival deponents can be further split into three main groups: the Identification denominal/deadjectival deponents (Section 3.3.2), the Possession denominal/deadjectival deponents (Section 3.3.3) and the Possession+Identification denominal deadjectival deponents (Section 3.3.4). In all these cases the Nominative argument is merged low, as the subject of a stative phrase. In this stative phrase the Nominative argument is related with the nominal/adjectival element, i.e., the formative of the verb. This low stative argument, endowed with a stative ROLE, is then contextually identified with the higher dynamic existentially bound ROLE (usually a DOER, see Section 3.3.5) introduced by a syntactically intransitive and semantically existential argument-introducing head. In each of these denominal/deadjectival structures, then, the Nominative argument gains two thematic ROLES: a low stative one and a higher dynamic role. The characteristics of the lower stative phrase differentiate the three classes. The Identification denominal deponents present a low v-beP. The Nominative argument is the subject of the v-beP and the nominal/adjectival element is the complement of the v-beP. The Possession denominal deponents present a low v-be/withP. The Nominative argument is the subject of the v-be/withP and the nominal/adjectival element is the complement of the v-be/withP. The Possession+Identification deponents, finally, present a v-be/withP embedding a v-beP. The Nominative argument is the subject of the v-be/withP, the Accusative one is the subject of the v-beP and the nominal/adjectival element is the complement of the v-beP.

The non-denominal/deadjectival deponents, in the same vein, are characterized by the low merging position of the Nominative argument, that, as in the denominal/deadjectival cases, is then contextually identified with the higher existentially bound dynamic ROLE. Leaving aside the cases in which a partial alternation is attested and that can be analyzed as cases in which the Middle has an oppositional function (Sections 3.4.1 and 3.4.2), there are three different classes of nondenominal deponents, depending on the characteristics of the higher dynamic head and on the complexity of the lower stative system. There is a class of uncontrolled change of state deponents, in which the Nominative argument is merged as the HOLDER of a low state and then contextually identified with a higher existentially bound UNDERGOER, the subject of an uncontrolled dynamic phrase (v-goP). There is a class of controlled change of state deponents, in which the Nominative argument is still the HOLDER of a low state but is contextually identified with a higher existentially bound DOER, the subject of a controlled dynamic phrase (v-doP). In this second case the presence of an additional argument that may be marked by Accusative case (but also by prepositions or by a different Case) is frequently attested. This fact, given the characteristics of the Middle-marked structure and the algorithm for Case assignment proposed in Section 2.2.4, is fully predictable. Finally, then, there is a class of self-benefactive deponents. These verbs always appear with a secondary Accusative argument and present a peculiar agreement pattern with the past participle: both the Accusative argument and Nominative argument can agree with it. I propose an analysis in which there are two stative phrases, a v-be/withP and a v-beP. The v-be/withP embeds the v-beP, the Nominative argument is the subject of the v-be/withP and the Accusative one is the subject of the v-beP.

The relevant characteristic of deponent verbs, then, is not the syntax and semantics behind the presence of the Middle morphology, but the lexical constraint that forces the deponent  $\sqrt{s}$  to appear only in specific Middle-marked derivations. In the previous Section, I proposed a crosslinguistic comparison between Italian and Latin. In Italian and, as far as I know, in all the languages that do not have the Middle morphology, there are no  $\sqrt{s}$  that can only be present in a self-benefactive derivation. If a  $\sqrt{s}$  can be present in a self-benefactive derivation, it can also be present in a non-benefactive one. In Latin and in all the languages with Middle morphology, instead, there are  $\sqrt{s}$  that can only be present in a self-benefactive derivation, as shown in Section 4. This lexical asymmetry is relevant because, if the analysis is correct, it depends on syntax. The lexical class of the self-benefactive  $\sqrt{s}$  is only available if the morphosyntax of that specific language has the Middle morphology. The lexicon, then, is not able to autonomously create this class of verbs; its existence depends on a morphosyntactic feature.

# Part II

#### 1. Introductory remarks

In the first part of this thesis, I showed that Latin deponents are lexically constrained verbs that always appear with Middle morphology. The presence of the Middle morphology does not follow from an idiosyncratic morphological feature of the verbal  $\sqrt{\text{(Embick 2000)}}$ ; it follows from the actual syntactic and semantic structure. Deponent verbs, then, are not active verbs with a Middle morphology. In every deponent derivation the Middle is present because the higher argumentintroducing head is merged as syntactically intransitive and semantically existential, as in the standard Middle-marked passive, reflexive and anticausative derivations. The Nominative argument is merged in an internal position and then identified with the higher existentially bound argumental ROLE. There are many different classes of deponent verbs, depending on both the features of the low and high eventive phrases and the characteristics of the morphophonological formative of the verb. Considering the latter, deponents can be split into denominal/deadjectivals and nondenominal/deadjectivals. The denominal/deadjectivals can be further subdivided into Identification, Possession and Possession+Identification (see Part I, Section 3.3). In all the denominal/deadjectival deponent derivations the existentially bound external argument is a DOER (subject of the v-doP), with the exception of a small group of verbs whose most relevant element is radicor 'I root'. The non-denominal/deadjectivals can be further split in uncontrolled change of state/location verbs, controlled change of state/location verbs (with or without a secondary Accusative argument) and self-benefactives (see Section 3.4). The relevant characteristic of deponent verbs, then, is not the fact that the Middle is present, but the fact that the formative of the verb, a nominal/adjectival element or a verbal  $\sqrt{\ }$ , cannot appear in an Active environment in which the higher argumentintroducing head is syntactically transitive and semantically active. This block, I propose, is entirely lexical and depends on the lexical-encyclopedic features of the  $\sqrt{\ }$ . In other words, every deponent  $\sqrt{\ }$ is only interpretable in a specific derivation that involves a syntactically intransitive and semantically existential argument-introducing head. This is the characteristic that binds together all the verbs belonging to this class: the lexical-encyclopedic constraint on the interpretability of the formative of the verb. In the last Section of the first part, I showed that the availability of the class of self-benefactive deponents, whose  $\sqrt{}$  is only interpretable in a self-benefactive derivation, depends on the presence, in a specific linguistic system, of the Middle morphology.

This second part, instead, is devoted to the diachronic analysis of deponent verbs. The main target will be to examine the loss (or lack) of the lexical-encyclopedic constraint that binds the deponent formative ( $\sqrt{}$  or nominal/adjectival element) to be merged only in a Middle-marked derivation. The analysis will take into consideration the general loss of the Middle morphology in

Late and Medieval Latin in order to better understand the systematic consequences of this loss with respect to a class of verbs that should be bound to appear with it. With respect to the denominal/deadjectival class, an additional target will be to analyze the change that the nominal/adjectival element undergoes. As I will show, there is a lexicalization process that has specific consequences on the structural complexity of the derivation and on the lexical-encyclopedic constraints on interpretability of the formative of the verb. Finally an exploration of the existence of specific and class-related trends on diachronic change will provide further evidence for the synchronic classification provided in the first part.

#### 1.1 The set of data and the main philological issues

The dataset includes results from two databases: the entire set of occurrences of each deponent verb in the database *Library of Latin Texts* (A and B series) and the *Archivio della Latinità Italiana nel Medioevo* (ALIM), restricted to the Medieval period. The frame ranges from the III cent. BCE to the IX cent. CE. The IX cent. CE was chosen as an end point because from the X cent. CE on the Romance languages are already attested. In order to identify diachronic changes, specific criteria were followed. The most relevant criteria are the presence vs. absence of a direct Accusative object, the possibility of using an initially deponent verb with an Active morphology, semantic meaning variations and variations in the aspectual properties of the structure in which it is merged. I compared each characteristic of each occurrence with the characteristics of the first occurrences of the specific deponent verbs under analysis.

The key issue has been finding relevant data. In many cases, the verb completely disappears in Late Latin or is attested only a few times in one or two authors. Examples of this kind of verb are *siliquor* 'I grow pods' from *siliqua* 'pod', that is present only in Pliny the Old; *masturbor* 'I masturbate' from *manu turbare* 'to ruffle with hand', that is present only in Martial; *cornicor* 'I croak' from *cornix* 'crow', which is present only in Persius; *architector* 'I project buildings' from *architectus* 'architect', which is found only in Cicero and Vitruvius; and *baubor* 'I bark', which is found only in Lucretius. And to exemplify the rarity of some cases, the example of *cornicor* 'I croak' in Persius (below), is the only occurrence in Classical Latin. From this sole occurrence it is not possible to deduce something relevant.

Nec clauso murmure raucus nescio quid

neither closed.ABL.SG hum.ABL hoarse.NOM.SG not.know.1<sup>ST</sup>SG.PRS.ACT what.ACC.SG tecum grave cornicaris inepte (Pers. 5, 11) with.yourself heavy.ACC.SG croak.2<sup>ND</sup>SG.PRS.MID inappropriately 'And you, hoarse, do not inappropriately croak by yourself something that is annoying and obscure to me, mumbling lowly.'

Cornicor 'I croak' resurfaces only in the Medieval period as a Classical calque. For example, Everardus Yprensis (active in the second part of the XII c. CE), in the *Dialogus Ratii et Everardi*, copies the verse in (1) from Persius. He adds a second verse in which he uses the verb *cornicor* 'I croak' a second time contrasting the meaning of the first verse.

(2)

Nescio quid tecum grave cornicaris inepte

Nam non cornicor inepte sed meditor

Indeed not croak.1<sup>ST</sup>SG.PRS.MID inappropriately but meditate.1<sup>ST</sup>SG.PRS.MID apte (Euer. Ypr. *Dialogus Ratii et Everardi*, 245, 13)

properly

'You croak, by yourself and inappropriately, something that is annoying and obscure to me. Indeed, I do not croak inappropriately, but I meditate properly.'

These kinds of examples, unfortunately, are of no help to the present research: an exact copy of a Classical verse cannot show any sign of diachronic evolution. Therefore, out of more than 300 verbs, only about 190 can be analyzed, as the others have few occurrences or disappear and never reappear.

Another relevant criterion that further limits the set of available data is the geographical area of interest. The areas that I have considered as relevant for the present analysis are the areas in which the Romance languages are spoken, corresponding to central and southern France, Spain and Italy. I have also selected a few authors from the Balkan area, such as Hieronymus, because it is a common assumption that the language spoken in that area was highly influenced by the Italic variants. Importantly, all occurrences of deponent verb found in authors coming from the British Isles, Ireland (a relevant set of data, given that the Irish monks were essential for the tradition of the Latin manuscripts) and continental Germanic areas have been removed. A problem related to this selection process is that, in many cases, authors from the VI-IX centuries CE are bishops or abbots, who move around Europe, to spread the faith and improve their social status within the religious

hierarchy. In many cases, then, authors coming from the north of Europe started writing their major works in a southern region. A fairly clear example is Ratherius of Verona (c. 887/890 – 974 CE), who is born in Liege, moves to Italy (Verona, Pavia and Como) when he is 36 and writes his major works there. He is not a native speaker of a Romance language, but his works may be influenced by the fact that he lives for many years in an area where a Romance language is spoken. This problem cannot be easily solved, but I will mark all dubious cases throughout my analysis.

Two final notes. The first is that I am not a philologist. Consequently, I trust the critical editions at my disposal and I avoid philologically complex cases. In some cases, however, I will have no choice, given the absence of fully reliable occurrences of a specific deponent in Late or Medieval Latin. I will then provide these unclear cases, marking them as problematic, as stated above. The second point is that the relation between written Latin and spoken languages is not straightforward. Latin is a corpus language, and the corpus is written. A written source is usually highly influenced by normative biases: the authors were taught to write in a specific way, following specific grammatical rules. Therefor, we must necessarily take a critical approach to the texts. The fact that a deponent in the Late and Medieval period still follows its Classical use is not relevant. The only relevant occurrences are the exceptions - the asymmetries - since these cases cannot be considered the result of a normative bias. Only from these kinds of occurrences, then, is it possible to draw relevant conclusions.

## 1.2 Organizing the analysis

As already underlined, the major differentiation within the class of deponent verbs is between denominal/deadjectivals and non-denominal/deadjectivals. I first present a diachronic analysis of denominal/deadjectival deponents. This section is split into three subsections, including analyses of the Identification denominal/deadjectival deponents, the Possession denominal/deadjectival deponents and the Possession+Identification denominal/deadjectival deponents. This subdivision allows me to draw conclusions about both the diachronic evolution of the denominal/deadjectival deponents in general and about the specific evolution of each subclass.

The second section is devoted, instead, to the analysis of the non-denominal/deadjectival deponents. This section is organized in subsections, following the categorization proposed in the first part of the thesis. The main concern, in analyzing these kinds of verbs is, as mentioned previously, finding coherent and relevant diachronic paths within the various classes of non-denominal/deadjectival deponents.

In the last Section, finally, I propose an overview of the observed diachronic changes, relating

them to the loss of the Middle morphology and to other diachronic mechanisms.	

### 2. Denominal/deadjectival deponents, diachronically

The analysis of these verbs follows the categorization proposed in the first part of the thesis (Identification, Possession, Possession+Identification). This organization, as mentioned in the introductory section, is *a priori* with respect to the diachronic analysis, serving mainly as a means to organize the data. The conclusions drawn from the diachronic analysis may lead to a recategorization of the deponent verbs in different subclasses, based on the different diachronic evolutions that are observed. This possible scenario would not be in contrast with the categorization proposed in the first part: while that categorization was synchronic, this new categorization, instead, will be based on diachronic data.

The three subsections are organized following the date of first occurrence of the various verbs. I first analyze the verbs that are attested since the beginning of the Latin literature (III century BCE - 150 BCE), moving to the verbs firstly attested in the second part of the II century BCE, and so on, until the Late Latin period. In each case, I analyze only verbs that have more than ten occurrences. As mentioned before, I leave aside verbs that occur only once or twice in the work of one author.

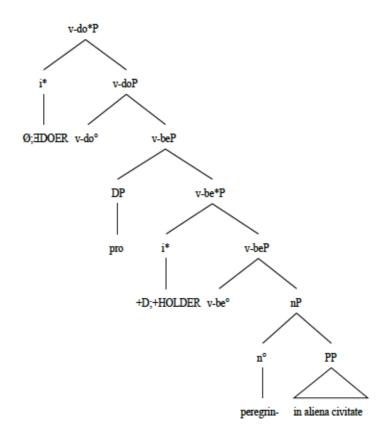
#### 2.1 Identification denominal/deadjectival deponents

The Identification denominal/deadjectival deponents are bieventive controlled change of state verbs.<sup>179</sup> This derivation involves, thus, a v-doP embedding a v-beP. This means that the Nominative argument, even if it is, by the end of the derivation of the global event, the actual DOER, is not directly merged in the DOER position. It is first merged in the lower HOLDER of the state position, in which it acquires the relevant characteristics related to the nominal/adjectival element that forms the verb. The nominal element is merged in the v-beP complement position.

An example of an Identification denominal/deadjectival deponent is *peregrinor* 'I wander' from *peregrinus* 'wanderer':

Ut peregrinari in aliena civitate. (Cic. *Rab. perd.* 28) as.if wander.INF.PRS.MID in foreign.ABL.SG city.ABL 'As if you were wandering in a foreign city'

<sup>179&</sup>quot;Controlled" means that there is a v-doP and not a v-goP. The dynamicity of the event is controlled by the external argument, which is labeled DOER.



The n° incorporates into the head of the v-beP and creates the verbal form. The HOLDER of the state, the Nominative argument, is contextually identified with the existentially bound DOER, thus gaining two roles in the derivation. As underlined in the first part, the state acquired by the HOLDER is not obligatorily terminal; it may describe a continuous action, as in the case of It. *schiavizzarsi* 'to enslave yourself' (See Part I, Section 3.3).

#### 2.1.1 III century BCE - 150 BCE

The Identification denominal/deadjectival deponents that are attested for the first time in this specific period and that have enough relevant occurrences are the following 17 verbs: *aemulor* 'I imitate' from *aemulus* 'imitator'; *arbitror* 'I observe, I think' from *arbiter* 'observer, judge'; *auspicor* 'I take the auspices' from *auspex* 'auspice'; *bacchor* 'I rave' from *baccha* 'bacchante'; *blandior* 'I seduce' from *blandus* 'seductive'; *columbor* 'I kiss like a pigeon, I smooch' from *columbus* 'pigeon' *gratulor* 'I rejoice' from *gratus* 'pleasant'; *interpretor* 'I explain' from *interpres* 'mediator'; *largior* 'I donate' from *largus* 'generous'; *manducor* 'I chew, I eat' from

<sup>180</sup>This translation does not work well with the first person, but I kept the first person to be in line with the other translations. The event described by the verb forces the presence of a plural subject, since the act of "kissing like pigeons" involves, at least, two participants.

manducus 'glutton'; medicor 'I heal' from medicus 'physician'; philosophor 'I philosophize' from philosophus 'philosophus 'philosophus 'philosophus 'I act as a lazy person' from piger 'lazy'; potior 'I seize' from potis 'able'; vagor 'I wander' from vagus 'rambling'; vaticinor 'I prophesy' from vates 'prophet'; and velitor 'I skirmish' from veles 'veles' [181].

The only verb in -cinor (from cano 'I sing'), vaticinor 'I prophesy' will not be taken into consideration. While it occurs often, the analysis of the suffix itself, -cinor, and of its relationship with the Middle morphology is not clear enough to allow me to set a valid benchmark for the diachronic analysis.

Within this group of verbs, 5 behave similar. These verbs are *bacchor* 'I rave' from *baccha* 'bacchante'; *columbor* 'I kiss like a pigeon, I smooch' from *columbus* 'pigeon', *gratulor* 'I rejoice' from *gratus* 'pleasant'; *philosophor* 'I philosophize' from *philosophus* 'philosopher', *velitor* 'I skirmish' from *veles* 'veles'. They do not evolve and maintain their initial eventive meaning and argument structure through the entire Latin period. The basic structure is exemplified in (5):

(4)

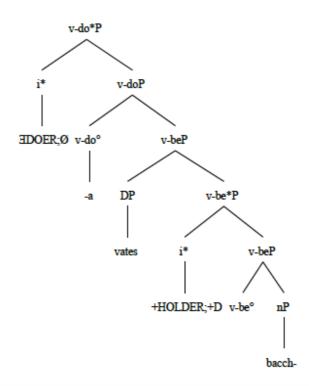
Quod mihi de filia et de Crassipede gratularis because me.dat of daughter.abl and of Crassipes.abl rejoice.2<sup>ND</sup>SG.PRS.MID agnosco humanitatem tuam. (Cic. *fam.* 1, 7, 11) recognize.1<sup>ST</sup>SG.PRS.ACT humaneness.ACC your.ACC 'I recognize your humaneness because you rejoiced for me about (my) daughter and Crassipes.'

(5)

In antro bacchatur vates. (Verg. *Aen.* 6, 78) in cave.ABL.SG rave.3<sup>RD</sup>SG.PRS.MID prophet.NOM.SG

<sup>181</sup>This refers to lightly armored soldiers who used to provoke the enemy by throwing small sharpened spears.

'The prophet raves in the cave.'



The relevant information is that the HOLDER of the state, the DP *vates* 'prophet', is contextually identified with the existentially bound DOER. This identification creates a reflexive interpretation in which the same element is both the argument starting the controlled dynamic event and the argument holding the state, which is the result of that controlled dynamic event.

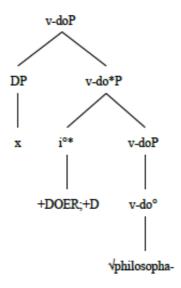
In these four cases, there is no diachronic change in the use of the verb and in the number and characteristics of the arguments that may be present. These verbs always have only one argument (i.e., they never accept a secondary Accusative argument, but, as in (6), they may accept an oblique one, *mihi* 'to me'<sup>182</sup>) and never occur with an Active morphology. There is only one exception: the verb *philosophor* 'I philosophize' is Active in Virgil the Grammarian.

Nihil aliud amare quam sempre nothing other.ACC love.INF.PRS.ACT than always philosophare. (Virg. gramm. *epist*. 2, p.126) philosophize.INF.PRS.ACT
'To love nothing else than to philosophize.'

<sup>182</sup>In Sentence (3) there is a secondary oblique argument, de filia et de Crassipede 'about my daughter and Crassipes'.

It is difficult to deduce something about this verb from this single example coming from a grammarian who probably lived in the VII century CE, particularly because it is unclear where he actually lived. A possible hypothesis is to link the absence of the Middle morphology to a reanalysis of the nominal element as a verbal  $\sqrt{}$ , directly merged into the v-do $^{\circ}$ :

(7)



If the  $\sqrt{}$  is directly conflated into v-do° and the double event structure is deleted, then the Middle morphology is not present. The DP argument is directly merged as the subject of the v-doP, the DOER. This diachronic change is due to the loss of the denominal structure and of the stative component of the event. The loss of the denominal derivation leads to the reanalysis of the formative of the verb as a  $\sqrt{}$ . The new  $\sqrt{}$ , then, loses the stative part: in our framework, this loss can be rephrased as a change in the post-syntactic interpretability conditions. The new  $\sqrt{}$  is compatible with a structure in which there is only a v-doP. This proposal is not *ad hoc*, since, as we will see in the next paragraph, this diachronic evolution is consistently attested (see Example (11) and Sections 2.4 and 2.5).

There are 3 verbs, on the other hand, that show relevant diachronic changes: *poetor* 'I poetize' from *poeta* 'poet', *blandior* 'I seduce, I soften' from *blandus* 'seductive', *manducor* 'I chew, I eat' from *manducus* 'glutton'. They initially appear only with the Middle morphology. *Poetor* 'I poetize' and *manducor* 'I chew, I eat' do not show any sign of a secondary Oblique argument (see (8) and (10)). *Blandior* 'I seduce, I soften', instead, usually has a secondary Oblique argument marked by Dative case (see (9)).

(8) si podager. (Enn. sat. 64) Numquam poetor nisi poetize.1<sup>ST</sup>SG.PRS.MID unless if gouty.NOM.SG 'I do not ever poetize, unless I am gouty.' (9) Voluptas sensibus blandiatur. (Cic. *ac*. 2, 139) nostris pleasure.NOM senses.DAT our.DAT seduce.3<sup>RD</sup>SG.PRS.SUBJ.MID 'Pleasure seduces our senses.' (10)Facile manducari aui potest. (Afran. com. 184) easily chew.INF.PRS.MID who.NOM can.3<sup>RD</sup>SG.PRS.ACT 'Who can easily chew.'

The initial structure is the one already observed in (4). The exact syntactic merging position of the oblique argument in (9) is not relevant. It is possible to hypothesize that we are dealing with a BENEFACTIVE argument or with an argument of the internal nP *bland(us)* 'caressing'. Diachronically, in each of these three cases, the evolution is similar: the verb starts occurring with an Accusative argument and Active morphology:

(11)Te falsa haec poetasse. (Lucif. Athan. 2, 9, 1.30) you.ACC false.ACC.PL these poetize.INF.PFT.ACT 'You have poetized these false things.' (12)Ut animos audientium blandiat. (Isid. etym. 3, 20, 14) so.that spirits.ACC hearers.GEN seduce.3<sup>RD</sup>SG.PRS.SUBJ.ACT 'With the intention of seducing the spirits of the hearers.' (13)Ouorum beneficio manducamus. (Petron. 56, 4) panem who.GEN.PL benefit.ABL bread.ACC chew.1stSG.PRS.ACT 'We chew bread for their benefit.'

The first example is from Lucifer of Cagliari (IV century CE) and the second is from Isidore of Seville (VI-VII century CE). *Blandior* 'I seduce' is already present as an Active form in Apuleius

(II century CE), but, in that case, there is no Accusative argument (Apul. *apol.* 87, 96). The third one, finally, is earlier and comes from Petronius (II century CE).

I propose that the observed diachronic change is related to the loss of denominality and to the reanalysis of the  $\sqrt{}$  as capable of being merged in an event formed by a single phrase, v-doP. I assume a theoretical paradigm in which structural Accusative and Nominative cases are assigned by the algorithm already seen in the first part (Part I, Section 2.2.4) and repeated here in  $(14)^{183}$ :

(14)

- a) A DP is realized at PF with dependent Case (Accusative) if a different DP has valued the accessible phase head (the last argument-introducing head) via AGREE.
- b) A DP that is not realized with dependent Case appears with default Case (Nominative).
- c) Inherent/lexical Case takes precedence over default and dependent Case.

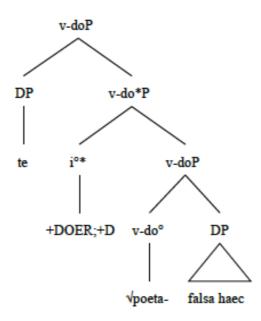
In a structure such as (4) there is no syntactic space for the merging of a second argument. The complement position of the v-do° is occupied by the v-beP and the v-beP subject position (HOLDER) is occupied by the sole argument of the structure, that, following (14), takes Nominative case. The complement position of the v-be°, finally, is occupied by the verbalized aP/nP.

In (11) and (12), on the other hand, there is an Accusative argument. The structure, then, should have a specific space for the merging of this argument. As seen previously, the presence of an Accusative argument is not impossible in a Middle marked structure (Part I, Section 3.4.3). The Middle structures with an Accusative argument have a BENEFACTIVE argument identified with the DOER and a second argument that is the HOLDER of a stative phrase. The first argument (DOER+BENEFACTIVE) gets Nominative case, while the second argument (HOLDER) gets Accusative case. In the case under analysis here, however, the BENEFACTIVE analysis is not available, since the Middle disappears as soon as the Accusative argument is present. There is a correlation between these two phenomena. I propose relating these two phenomena to the loss of the denominal/deadjectival structure, meaning that the nominal/adjectival formative of the verb is reanalyzed as a lexical  $\sqrt{}$ . Being a  $\sqrt{}$ , the formative of the verb does not take an argument position

<sup>183</sup>I acknowledge the fact that the occurrences of the Accusative morphological case do not always correspond to the occurrences of the Accusative structural case. The Accusative structural case is always realized at PF by means of the Accusative morphological case may be the realization of a different underlying syntactic derivation. In other words, it may be the PF realization of an inherent and not structural case (see Sigurðsson 2004, 2007). In these cases, however, the Accusative morphological case is the realization of an underlying Accusative structural case, meaning there is no sign of an inherent semantics of the Accusative argument.

anymore, as the nominal/adjectival element does in (4). The newly created  $\sqrt{}$  loses the stative part and is interpretable in a verbal event in which there is only a v-doP. The structure that I propose is exemplified in (15):

(15)



In this case, the structure is monoeventive, describing the activity of "poetizing". The Accusative argument (*falsa haec* 'these false things') measures the event of "poetizing". The algorithm in (14) predicts that the first argument, a *pro*, gets Nominative case, while the second one, the DP *falsa haec* 'these false things', gets Accusative case. The Middle morphology is not present anymore because the DOER argument is directly merged in the DOER position, and, consequently, the argument-introducing head is not syntactically intransitive ( $\emptyset$ ) and semantically existential ( $\exists$ ).

The diachronic evolution of these verbs is expected. As I will show in the next sections, many other verbs follow this path, in which the nominal element gets reanalyzed as a verbal  $\sqrt{}$  and gains the possibility of being merged in different structures. This reanalysis is not caused by a specific grammatical change in the structure of the language; it is cyclic. A verb is created as denominal/deadjectival, the nominal/adjectival part is reanalyzed as a  $\sqrt{}$  and, consequently, new structures arise. This change, then, is not language specific, but a general mechanism. This is proved by the fact that the lexicalization and the consequent birth of new structures happens in a different period for each denominal/deadjectival verb. There are verbs that present the first active occurrences in the II cent. BCE (e.g., *largior* 'I donate', see below), others in the I cent. BCE and so

on. This is expected only if we are dealing with a cycle that is specific to each lexical item.

That the reanalysis of the nominal/adjectival element as a  $\sqrt{}$  is not directly caused by external factors does not mean, however, that external factors do not come into play with respect to the definition of the new structural possibilities that arise following the lexicalization. The fact that, in Late and Medieval Latin, many denominal/deadjectival deponents that are controlled change of state verbs (meaning they are derived by merging a v-doP embedding a v-beP) are reanalyzed as pure activity verbs in which there is only one v-doP event, is related to the loss of the Middle morphology and to the relation of this loss with the Accusative marking of the argument that is in the complement of the state position (see Part I, Section 3.4.3). A related issue is that the reanalysis of the nominal element as a  $\sqrt{\text{does not always directly create an activity } \sqrt{\text{conflated into the v-do}^{\circ}}$ . There are many cases that present intermediate steps (see Section 2.4.2), in which the newly created  $\sqrt{}$  is initially merged in a bieventive structure in which the Middle is still present. The presence of an intermediate step is predictable: once the nominal/adjectival element is reanalyzed as a  $\sqrt{\ }$ , it may initially maintain the bieventive controlled change of state structure, in which the Nominative argument is merged in the HOLDER position and gains the DOER role by argument identification. The lexicalization of the nominal/adjectival element as a  $\sqrt{}$  frees the complement of the v-beP position, in which it is now possible to merge a secondary argument marked by Accusative case. This lexicalization creates, then, controlled change of state verbs with the same structural features of the *molior* 'I move' kind, analyzed in Part I, Section 3.4.3. The reanalysis of the  $\sqrt{}$  as capable of being conflated into the v-do° is a further step that is related, as I have just suggested and as I will show in Section 3.4, to the general loss of the Middle morphology. The three verbs analyzed in this paragraph skip this intermediate step.

Let us go back to the analysis of the Identification denominal/deadjectivals belonging to the III cent. BCE. *Gratulor* 'I rejoice' from *gratus* 'pleasant' is always attested with the Middle morphology until the *Regula monastica communis* attributed to St. Fructuosus of Braga (VII cent. CE). This work comes from the Spanish territories and can be dated to VII cent. CE. In this work, this verb appears with the Active morphology:

(16)

Hi de nostris gratulant they.NOM of our.ABL.PL rejoice.3<sup>RD</sup>PL.PRS.ACT detrimentis. (Ps. Fruct. *regul.* 2, 78) misfortunes.ABL 'They take pleasure from our misfortunes.'

In this case, the analysis proposed for the previous three verbs does not seem adequate. The verb gratulor 'I rejoice' is one of the few denominal/deadjectival deponents that describes an uncontrolled change of state event, not a controlled one. The structure, then, does not present a vdoP embedding a v-beP but a v-goP embedding a v-beP. This feature differentiates this verb from the three verbs just analyzed. As I will show with respect to other verbs (Section 3.3), the uncontrolled change of state verbs, whether they are denominal/deadjectival or not, tend to behave differently from a diachronic point of view. They usually maintain the initial change of state structure. Also in this case, the uncontrolled change of state structure is maintained, as the Nominative argument, hi 'they', undergoes a dynamic event that leads it to become gratu(lu)s 'joyful'. The presence of the Active morphology, then, cannot be related to the reanalysis of the  $\sqrt{\phantom{a}}$ and the rise of a monoeventive structure. The Active morphology, in this case, is related to the general loss of the Middle morphology. The Middle morphology is a means to relate the lower HOLDER argumental position to the higher UNDERGOER position. Other possible means to achieve the same result are the labile structure (see Gianollo 2014, Cennamo et. al. 2015), that is characterized, in my analysis, by the movement of the argument from the lower position to the higher one, and the SE pronoun. In this case, the labile structure takes the function of the Middle morphology. As I will explain more coherently in Section 3.3, the choice of the labile structure over the SE pronoun is not unexpected and is related to the absence of the causative alternant. When, on the other hand, the causative alternant is present (Section 3.4), the SE pronoun in much more likely to be used. Gratulor 'I rejoice' does not have a causative use and, consequently, the labile structure substitutes for the Middle-marked one.

There is a group of verbs, then, that show a different behavior. These four verbs are always initially marked by the Middle morphology and, since their first occurrences, may present a secondary Accusative argument: *aemulor* 'I imitate/compete' from *aemulus* 'imitator'; *arbitror* 'I observe, I think' from *arbiter* 'observer, judge'; *interpretor* 'I explain' from *interpres* 'mediator'; and *largior* 'I donate' from *largus* 'generous'.

(17)

Ut veteranorum virtutem aemularentur (*Bell. Afr.* 81, 2) so.that veterans.GEN virtue.ACC imitate.3<sup>RD</sup>PL.SUBJ.IPFV.MID 'To imitate the virtue of the veterans.'

The presence of the secondary Accusative argument is not obligatory. These verbs may occur

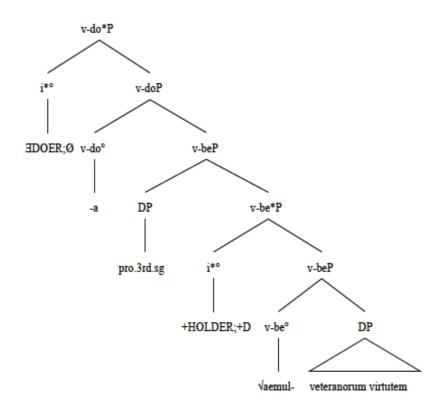
without it or with a secondary argument marked by a different Case or by a preposition.

(18)

Ne mecum aemuletur (Liv. 28, 43, 4) not me.with compete.3<sup>RD</sup>SG.SUBJ.PRS.MID 'So that he does not compete with me.'

In all these four cases, the origin is denominal/deadjectival. The initial meaning of the verb can be derived from a periphrasis like "I make myself an, e.g., arbiter/interpres/aemulus". A denominal/deadjectival structure such as the one proposed in (5), however, is not compatible with the presence of a secondary Accusative argument. A conceivable hypothesis is that these verbs are no longer denominal/deadjectival in Early Latin. While they were denominal/deadjectival, their derivation no longer involves an actual verbalized nP/aP. Their behavior, then, is comparable to the behavior of the controlled change of state non-denominal/deadjectival deponents presented in Part I, Section 3.4.3 that share their characteristics: the possibility of having a secondary Accusative argument and the consistent presence of the Middle morphology. Following this analysis, then, the Early Latin derivations of these verbs involve a √ that is directly conflated into the v-be°. The Nominative argument is the HOLDER of this state, while the Accusative argument is the complement of the state and measures it, providing it with specific boundaries.

(19)



The lexicalization of the nominal/adjectival element as a  $\sqrt{\ }$  already occurred in the Early period. The next step of the process is the loss of the lower stative part, with the  $\sqrt{\ }$  that becomes capable of conflating directly into the v-do°. This reanalysis leads to the loss of the Middle morphology. The first Active examples of the four verbs analyzed in this paragraph are quite early:

```
(20)
      Virtutes
                   aemulaveris (Apul. met. 1, 23)
      virtues.ACC imitate.2<sup>ND</sup>SG.FUT.PERF.ACT
     'You will imitate the virtues.'
(21)
      Et
          ideo
                     Enoch interpretat
                                                       'innovatus' (Ps. Cypr. mont. 5)
      and the same Enoch interpret. 3<sup>RD</sup>SG.PRS.ACT 'innovatus'
     'And, the same way, Enoch translates 'innovatus'.'
(22)
      Pecuniam largibo
                                        tibi (Cato, orat. 25, 2)
                  donate.1stsG.FUT.ACT you.DAT
     'And I will give you money.'
```

Aemulor 'I imitate/compete' is attested as an Active verb in the II century CE, *interpretor* 'I explain' in the III century CE and *largior* 'I donate' in the II century BCE. *Interpretor* 'I explain' does not take a direct Accusative argument, but the lexicalization of the √ is evident since the meaning of the verb in (21) is 'I translate'. This meaning is no longer directly linked to the meaning of the initial nominal element *interpres* 'mediator'. This early transition into an Active verb signals the fact that the cycle began earlier than with other denominal/deadjectival deponents. *Arbitror* 'I observe' is the only verb of this group that does not have Active occurrences¹84. Its event structure maintains the stative part.

Three verbs belonging to this period present a peculiar behavior: *auspicor* 'I take the auspices' from *auspex* 'auspice'; *pigr(it)or* 'I act as a lazy person' from *piger* 'lazy'; and *vagor* 'I wander', from *vagus* 'rambling'. All these verbs initially occur with the Active morphology:

```
Auspicat auspicium prosperum. (Naev. carm. frg. 4, 34) take.auspices.3<sup>RD</sup>SG.PRS.ACT auspice.ACC lucky.ACC.SG 'He takes good auspices.'
```

(24)

Post aetate pigret sufferre laborem. (Enn. *ann*. 16, 425) after age.ABL linger.3<sup>RD</sup>SG.PRS.ACT tolerate.INF.PRS.ACT work.ACC 'It is hard to tolerate the effort, after the right age.'

(25)

Incerte errans vagat. (Pacuv. *trag*. 302) doubtfully roaming wander.3<sup>RD</sup>SG.PRS.ACT 'He wanders, roaming doubtfully.'

By the end of the II cent. BCE, instead, all these verbs occur only with the Middle morphology:

(26)

Romulum auspicari solitum putas? (Cic. *div.* 2, 73)
Romulus.ACC take.auspices.INF.PRS.MID used.ACC think.2<sup>ND</sup>S.PRS.ACT
'Do you think that Romulus was used taking auspices?'

(27)

<sup>184</sup>There is only one occurrence of an Active *arbitrabunt* 'they will evaluate'. This occurrence comes from Nonius Marcellus, *de Compendiosa Doctrina*, VII, 470M. Nonius is quoting Plautus (*Stich.*, 44). This occurrence is isolated.

```
Scribere ne pigrere. (Cic. Att. 14, 1, 2)
write.INF.PRS.ACT not linger.2<sup>ND</sup>S.IMP.MID
'Do not hesitate to write me!'

(28)

Germani latius vagabantur. (Caes. Gall. 4, 6, 4)
Germans.NOM widely wander.3<sup>RD</sup>PL.IPFV.MID
'Germans widely wandered.'
```

These verbs began occurring as Actives again in Late Latin (see, for example, Prud. *cath.* 6, 29 for *vagor* 'I wander').

This alternation is not easily explainable. It seems that the Early period anticipates the Late and Medieval Active occurrences. There are other verbs that behave in similar ways in each of the three identified classes. In Section 3.3 and 3.4 I propose a possible approach to these complex cases based on the idea of Submerged Latin proposed by Prosdicimi (1978, 1991, 2004).

*Medicor* 'I cure', finally, behaves differently from the other verbs just presented. This verb is a denominal formation from *medicus* 'physician'. In the III cent. BCE, it occurs in both Active and Middle forms. In the III-II cent. BCE, the Middle occurrences always present an oblique argument (Dative), while the Active occurrences always present a direct Accusative argument:

```
(29)
     Quaeso
                      advenienti
                                              morbo
                                                            medicari
     for.God's.sake come.prs.ptcp.dat.sg disease.dat
                                                            cure.INF.PRS.MID
     iube. (Plaut. Amph. frg. 12)
     order.2<sup>ND</sup>SG.IMP
     'For God's sake, be sure to treat this disease at the outset!'
(30)
     Ego istum
                     lepide
                                 medicabo
                                                     metum. (Plaut. Most. 387)
           this.ACC completely cure.1stSG.FUT.ACT fear.ACC.SG
     'I will completely cure this fear.'
```

The Middle occurrences represent an Identification denominal deponent derivation, in which the existentially bound DOER is identified with the HOLDER of the state of being a *medicus* 'physician': 'x acts in order to be *medicus* (for y)'. The Active occurrence, instead, is resultative: 'x

makes y cured'<sup>185</sup>. The verbal  $\sqrt{(\sqrt{med})}$  is adjoined to the stative eventive head v-be° in order to create the state of "being cured". The Accusative argument (*istum metum* 'this fear') is the HOLDER of the state of "being cured". The stative event, then, is in the complement position of a v-doP, whose subject, the DOER, is the Nominative pronoun ego 'I'.

The Middle-Active alternation can be formally explained by hypothesizing an early reanalysis of the nominal element as a verbal  $\sqrt{}$  and the contiguous persistence of the denominal derivation. Latin speakers had two possibilities: they could create either an Identification denominal deponent derivation or a  $\sqrt{}$ -based derivation. The  $\sqrt{}$ -based derivation is causative, with the  $\sqrt{}$  directly merged in the v-be $^{\circ}$  and the Accusative argument that is the HOLDER of the state of being healed. These two possibilities coexist in the III- II cent BCE. The verb becomes even more problematic in the I cent. BCE: the Middle version, while previously occurring only with Datives, begins to occur with Accusative arguments:

(31)

Sed non Dardaniae medicari cuspidis ictum but not Dardan.GEN cure.INF.PRS.MID spear.GEN wound.ACC evaluit (Verg., *Aen.*, 7, 756) be.able.to.3<sup>RD</sup>SG.PRF.ACT 'But to treat the wound of a Dardanian spear was too much for him.'

This last possibility can be explained by proposing a reanalysis of the previous Identification denominal derivation in a  $\sqrt{-}$ -based derivation, in which the  $\sqrt{}$  now acquires the status of the  $\sqrt{}$  of a controlled change of state non-denominal/deadjectival deponent like *molior* 'I move' (see Section 3.4.10). The Accusative argument, then, is the complement of the v-beP, the measure of the state of being a healer. From the I cent BCE, then, there are two possibilities with respect to this verb: a causative one, in which the two arguments, Nominative and Accusative, are respectively the subject of a v-doP and a v-beP, and a controlled change of state one, formed on the basis of the class of the controlled change of state non-denominal/deadjectival deponents. The diachronic changes involving the verb *medicor* 'I heal' should be compared with the non-denominal/deadjectival verb *medeor* 'I heal, I cure', which I analyze in Section 3.4.7.

<sup>185</sup>When the verb is Active the Accusative argument is always present. This is a consequence of the fact that the structure is resultative, meaning the object is the subject of the subordinated state and cannot be omitted.

### 2.1.2 II century BCE

The Identification denominal/deadjectival deponents that are first attested in this period and that have enough relevant occurrences are: *ancillor* 'I serve' from *ancilla* 'servant'; *auxilior* 'I help' from *auxilium* 'help'; *dominor* 'I rule' from *dominus* 'master'; and *vilicor* 'I farm', from *vilicus* 'farmer'.

Within this group of verbs, one never changes: *auxilior* 'I help'. This verb behave as *bacchor* 'I rave' and *columbor* 'I smooth' from the previous section, always occurring with a Dative oblique argument. This argument may represent the element that receives help (Ter. *Heaut.* 5, 1, 50) or the element with respect to which the help is provided, as in (32).

```
Nec formidatis auxiliatur aquis. (Ov. Pont. 1, 3, 24) and.not fear.DAT.SG help.3<sup>RD</sup>SG.PRS.MID water.DAT.SG 'And it (the medicine) does not help with respect to the hydrophobia.'
```

I have been unable to find any relevant occurrence of different derivations involving a direct Accusative argument or an Active verbal form.

Ancillor 'I serve' is more interesting. The standard occurrences have the event structure exemplified in (5). This verb shows a single occurrence in which it is possible to observe a different structure. The verb, in this occurrence, is Active and takes an Accusative argument:

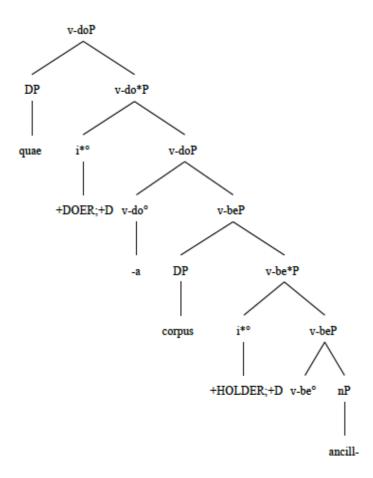
```
Quae corpus ancillat. (Ps. Cypr. singul. cler. 40) who.f.sg body.acc enslave.3<sup>RD</sup>SG.PRS.ACT 'Which enslaves the body.'
```

The diachronic evolution could be comparable with the one observed for other verbs, such as *poetor* 'I poetize' or *aemulor* 'I imitate'. Let us compare the two. I repeat here Example (20) as (34).

```
Virtutes aemulaveris (Apul. met. 1, 23)
virtues.ACC imitate.2<sup>ND</sup>SG.FUT.PERF.ACT
'You will imitate the virtues.'
```

Even if at first sight these two sentences seem to convey a comparable structural eventive meaning (i.e., both present two argument, a Nominative one and an Accusative one and both show an Active morphology), a closer look at the relation between the internal Accusative argument and the verb reveals a strong difference. In (33), the internal Accusative argument, *corpus* 'body', is the element that ends up being in the state described by the nominal part of the verb; it is the element that becomes an ancill- 'maiden, female servant'. In (34), instead, the internal Accusative argument, virtutes 'virtues', is not related to the nominal part of the verb, aemul- 'emulator': the sentence in (34) does not mean 'you will make the *virtutes* emulators' or something similar, but 'you will imitate the virtutes'. As already observed, the internal Accusative argument of (34) is the measure of the 'imitating' event, the complement of the v-do°, while the nominal part of the verb has been reanalyzed as a verbal  $\sqrt{\text{directly merged into the v-do}^{\circ}}$ . In ancillo 'I enslave someone', on the other hand, the nominal part of the verb is still highly relevant for the final eventive meaning of the structure, in relation with the Accusative argument. In this case, then, there is still a [v-doP [v-beP]] denominal structure, the same one already observed in (5). The relevant difference is that, in this case, the DOER is not identified with the HOLDER: the structure is a simple causative event with two different referential DPs merged in the two available argumental positions.

(35)



It follows that *quae* 'who' gets Nominative case, while *corpus* 'body' gets Accusative case. In this case, no  $\sqrt{}$  formation process has occurred, the derivation is still denominal.

The diachronic data tell us something relevant. In the first part, I concluded that the denominal/deadjectival deponents are characterized by a lexical block on the possibility of having a DOER that is different from the internal argument, HOLDER or POSSESSOR: the same referential DP has to gain both roles<sup>186</sup>. There are denominal/deadjectival verbs that can be present both in a causative structure like (35) and in a reflexive one like (5), denominal/deadjectival verbs that can be present only in a causative structure and denominal/deadjectival verbs that can be present only in a reflexive structure. The last type are deponents. When the lexical block on the disjoint reference of the two arguments disappears, the denominal/deadjectival verb, formerly a deponent, starts occurring in causative contexts. This is exactly what happens in the case of *ancillor* 'I serve'. The fact that it is possible to use *ancillor* 'I serve' in a causative context is a further confirmation of the fact that the bieventive autocausative analysis proposed in the first part is on the right track. This specific diachronic change, involving the loss of a lexical-encyclopedic constraint, is not isolated;

<sup>186</sup>As proposed in the first part, this block can be implemented in a usage-based framework like the one proposed by Haspelmath (1993).

there are other denominal/deadjectival deponents that behave in a similar way (see Section 2.4.1).

The last two verbs, *dominor* 'I rule' and *vilicor* 'I farm', behave exactly as *poetor* 'I poetize' from *poeta* 'poet', *blandior* 'I seduce' from *blandus* 'seductive' and *manducor* 'I chew, I eat' from *manducus* 'glutton'. These verbs are initially attested as standard Identification denominal/deadjectival deponents, in which the only possible additional argument is always Oblique or completely absent (*vilicor* 'I farm' never presents a secondary argument).

```
Dominatur in suos. (Cic. Cato, 38) rule.I3RDSG.PRS.MID in his.ACC.PL 'He rules his own men.'
```

The Active occurrences of *dominor* 'I rule' and the presence of an Accusative argument appear together:

```
Et dominabunt terram. (Vulg. Esdr. IIII, 12, 23) and rule.3<sup>RD</sup>PL.FUT.ACT earth.ACC 'And they will rule the world.'
```

The nominal element, reanalyzed as a  $\sqrt{\ }$ , is directly merged into the v-do $^{\circ}$ , the Nominative argument occupies the DOER position and the Accusative one, merged in the v-doP complement position, represents the measure of the domination.

The Active occurrences of *vilicor* 'I farm', instead, appear quite early, in Cato (II cent. BCE). This verb never presents either an oblique object, as already stated, or a direct Accusative argument. It shifts from a denominal deponent verb to an activity verb in which the nominal part is reanalyzed as a verbal  $\sqrt{\text{directly merged in v-do}^{\circ}}$ .

```
Antequam is vilicare coepit. (Cato, orat. 22, 51) before he.nom.sg farm.inf.prs.act begin.3<sup>RD</sup>sg.pft.act 'Before he began to farm.'
```

All occurrences that precede Cato present the Middle morphology, and all occurrences that

follow Cato present the Active one. This is a rare situation in the Latin corpus: usually the Middle occurrences, representing the Classical standard, do not disappear. In this case, the change happened before the I cent BCE, the Classical period.

## 2.1.3 I century BCE

The Identification denominal/deadjectival deponents first attested in this period with enough relevant occurrences are 10: aeditumor 'I guard' from aeditumus 'ward of a temple'; circulor 'I speak in circles' from circulus 'circle'; famulor 'I serve' from famulus 'servant'; gratificor 'I please' from gratus 'pleasant'; iuvenor 'I act like a boy' from iuvenis 'boy'; lenocinor 'I seduce' from leno 'pimp'; moechor 'I commit adultery' from moecha 'adulteress'; peregrinor 'I wander' from peregrinus 'wanderer'; rusticor 'I live in the countryside' from rusticus 'person from the countryside'; and testificor 'I testify' from testis 'witness'.

Five of these verbs never evolve and are always attested with a coherent and consistent number of arguments, morphological form and meaning: *aeditumor* 'I guard', *iuvenor* 'I act like a boy', *lenocinor* 'I seduce', *moechor* 'I commit adultery' and *rusticor* 'I live in the countryside'.

Three verbs, instead, behave as *ancillor* 'I serve' of the previous section: *circulor* 'I speak in circles', *famulor* 'I serve' and *gratificor* 'I please'. These verbs are initially standard Identification denominal/deadjectival deponents. As already seen, Identification denominal/deadjectival deponents are lexically constrained: they never allow the merging of two different referential arguments in the two thematic positions available in the structure (DOER and HOLDER).

(39)

Communes locos volvunt et in privato common.ACC.PL places.ACC meditate.3<sup>RD</sup>SG.PRS.ACT and in private circulantur. (Sen. *epist*. 52, 8) gather.in.circles.3<sup>RD</sup>PL.PRS.MID

'They read well-known pieces and in private say stupid things (lit. gather in circles)' 187

The lexical-encyclopedic constraint, in a subsequent phase, is lost, and these verbs start showing a causative structure:

<sup>187</sup>In this case, there has been a semantic reanalysis of the meaning of the verb. The act of *gathering in circles speaking about something* has been reinterpreted as the act of *speaking privately using low arguments, without a complex conceptual elaboration*. In the specific passage presented here, Seneca is presenting two kinds of people: those who speak fluently in public, reusing the words of the old rhetors without proposing anything new and relevant and those who elaborate new and deeper concepts, focusing on content and not only on form.

```
(40)
                        eius
                                     anuli
                                                et
                                                     orbiculum
                                                                        circulaverat
      Ipse
      he.himself.nom that.gen.sg ring.gen and little.circle.acc round.3<sup>RD</sup>SG.PLPRF.ACT
           palam
                        clauserat. (Apul. flor. 9, 21)
      and signet. ACC close. 3<sup>RD</sup>SG.PLPRF. ACT
     'He himself rounded the orbiculus and closed the signet of that ring.'
(41)
      Elementa
                                       famularet. (Tert. apol. 21, 86)
                     ipsa
      elements.ACC themselves.ACC enslave.3<sup>RD</sup>SG.PRS.ACT
     'He enslaved the elements themselves.'
(42)
      In qua
                         gratificavit
                                                                  in dilecto
                                                          nos
      in which.ABL.SG make.welcome.3<sup>RD</sup>SG.PRF.ACT us.ACC in beloved.ABL.SG
      filio
                suo. (Mar. Victorin. in Eph. 1, 1, 4)
      son.ABL his.ABL.SG
```

The syntactic and semantic structure, just as for *ancillor* 'I serve' in the previous section, remains the same, a v-doP + v-beP bieventive structure. The only difference is that, in this case, the speaker merges two different referential arguments in the DOER and HOLDER positions. Doing this, the speaker creates a causative event. In such an event structure the Middle morphology is absent, being that both argument introducing heads are syntactically transitive and semantically active.

"With respect to these things, he made us welcomed by means of his beloved son."

*Peregrinor* 'I wander' occurs as a Middle for the entire Classical and Late Latin periods, while in the Medieval period, it also occurs as an Active. The occurrences of Active *peregrino* 'I wander' are mainly attested in Alain de Lille, a French theologian who lived in Paris and in the south of France in the late XII cent. CE.

In caelo mente beata vivat et in heaven.ABL mind.ABL blessed.ABL.SG live.3<sup>RD</sup>SG.PRS.SUBJ.ACT and in terris peregrinet corpore solo. (Alan. *anticlaud*. 6, 361) in earth.ABL wander.3<sup>RD</sup>SG.SUBJ.PRS.ACT body.ABL only.ABL.SG 'May he live in the heaven with his blessed mind and may he wander along the earth only

with his body.'

These data point to a nominal  $\rightarrow \sqrt{\text{reanalysis}}$  in line with *dominor* 'I rule', *vilicor* 'I farm' and *poetor* 'I poetize': the nominal element becomes a verbal  $\sqrt{\text{directly adjoined to v-do}^{\circ}}$ . This allows for the direct merging of the argument in the DOER position and creates an activity/manner of motion verb (It. *pellegrinare* 'to wander' or Fr. *pérégriner* 'to wander'). These data, however, being late and from a single author, cannot be considered fully reliable. The fact that both Italian and French have an activity verb from the same  $\sqrt{\text{that means}}$  'to wander' and that does not belong to the unaccusative class or to the *si/se* marked class can be considered evidence in support of the proposed analysis.

### 2.1.4 I cent. CE

The Identification denominal/deadjectival deponents that are first attested in this period are 4: cocionor 'I sell' from cocio 'matchmaker'; cornicor 'I croak' from cornix 'crow'; nepotor 'I squander' from nepos 'waster'; and hospitor 'I live in a place as a guest' from hospes 'guest'. The first three do not allow an extensive analysis, as cocionor 'I sell' has only two occurrences in Quintilian, while cornicor 'I croak', with more occurrences, has only one occurrence in Classical Latin:

(44)

Nec clauso murmure raucus nescio quid neither closed.ABL.SG hum.ABL hoarse.NOM.SG not.know.1<sup>ST</sup>S.PRS.ACT what.ACC.SG tecum grave cornicaris inepte. (Pers. 5, 11) with.yourself heavy.ACC.SG croak.2<sup>ND</sup>SG.PRS.MID inappropriately 'And you, hoarse, do not inappropriately croak by yourself something that is annoying and obscure to me, mumbling lowly.'

The other occurrences are very late (XII cent. CE) and, as shown in Section 1, they are calques. There is no sign of coherent evolution. *Nepotor* 'I squander' has only three occurrences (Sen. *benef*. 1, 15, 3; Svet. *Cal.* 37, 1; Tert. *apol.*, 46, 72) and no sign of any evolution in argument structure or lexical meaning.

Hospitor 'I live in a place as a guest', on the other hand, has many occurrences that appear to be very coherent. It is not always easy to disentangle the initial active meaning and the possible

evolution of the verb: supposing a possible evolution similar to *hospitor* 'I live as a guest'  $\rightarrow$  *hospito* 'I host someone', the passive of *hospito* would be 'I am hosted by someone'. The passive of the supposed *hospito* 'I host someone', then, would have the same meaning of the initial *hospitor*. An example is Sentence (45):

(45)

Ad domum in qua hospitabatur reductus to home.ACC in which.ABL.SG live.as.guest.3<sup>RD</sup>SG.IPFV.ACT take.back.PST.PTCP.NOM diem clausit extremum. (Paul. Med. *vita Ambr*. 54, 3) day.ACC close.3<sup>RD</sup>SG.PRF.ACT last.ACC.SG 'Taken back to the house where he lived as a guest/was hosted he died.' (lit. 'closed his final day')

It is impossible to say whether (45) is an occurrence of the deponent *hospitor* 'I live as a guest' or of the passive of a possible *hospito* 'I host'. The fact that there are no relevant occurrences of Active *hospito* 'I host' may indicate that this verb never changes and that the right interpretation of *hospitor* is always 'I live as a guest' and not 'I am hosted'. Setting aside this issue, the Identification denominal/deadjectival deponents belonging to this group do not show clear signs of any diachronic change.

### 2.1.5 II cent. CE

The Identification denominal/deadjectival deponents that are first attested in this period are 5: galaticor 'I behave like a Galatian' from Galaticus 'Galatian'; graculor 'I act like a crow' from gracula 'crow'; pugilor 'I behave like a boxer' from pugil 'boxer'; rhetoricor 'I act like a rhetor' from rhetoricus 'rhetoric'; and virginor 'I act like a virgin' from virgo 'virgin'. In all these cases, from a diachronic point of view, we cannot make any clear claims. These verbs occur only once or twice in the Latin literature and, even if from a synchronic point of view they testify to the productivity of the denominal/deadjectival deponent derivation mechanism, they are not diachronically relevant.

### 2.1.6 From the III cent. CE on

The Identification denominal/deadjectival deponents that are first attested in this period are 12:

acedior 'I get bothered' from acedia 'sloth'; agricolor 'I farm' from agricola 'farmer'; benignor 'I enjoy' from benignus 'benignant'; (in)humanor 'I incarnate'; from humanus 'human' latruncolor 'I steal' from latrunculus 'thief'; maeretricor 'I prostitute myself' from maeretrix 'prostitute'; verbosor 'I act like a wordy person' → 'I speak a lot' from verbosus 'wordy'; iucundor 'I rejoice' from iucundus 'joyful'; tristor 'I become sad' from tristis 'sad'; malignor 'I act with a bad attitude toward someone/thing' from malignus 'malicious'; principor 'I reign' from princeps 'chief'; and vicinor 'I come closer' from vicinus 'near'.

Of these, seven do not have many occurrences and do not show signs of diachronic change: *acedior* 'I get bothered', *agricolor* 'I farm', *benignor* 'I enjoy', *(in)humanor* 'I incarnate', *latruncolor* 'I steal', *maeretricor* 'I prostitute myself' and *verbosor* 'I act like a wordy person'.

*Iucundor* 'I rejoice', *tristor* 'I become sad' and *vicinor* 'I come closer' present occurrences in which the verb is Active and the meaning of the syntactic structure is causative:

```
(46)
     Heac
                 multitudines
                                   solatiorum iucundant
                                                                            animam
     these.NOM multitudes.NOM solaces.GEN make.happy.3<sup>RD</sup>PL.PRS.ACT soul.ACC
     nostram. (Aug. epist. 41, 2)
     our.ACC.SG
     'And these many solaces make our soul happy.'
(47)
     Nec
               eam
                          tristavit. (Ildef. Tolet. de virg. 284, 1390)
     and.not that.ACC.F make.sad.3<sup>RD</sup>SG.PRF.ACT
     'And he (i.e. Christ) did not make her sad.'
(48)
```

Igitur postquam Nature vicinitati eum localis then after.that Nature.GEN proximity.ABL him local.NOM.SG vicinavit affinitas [...]. (Alan. *de planctu Naturae*, 16, 38) make.close.3<sup>RD</sup>SG.PRF.ACT affinity.NOM 'And then, after that, the local affinity made him close to Nature's proximity [...].'

It is important to clarify that all causative occurrences of *iucundor* 'I rejoice' come from Augustine, who lived in the north of Africa and not in an Italic, French or Spanish territory. All occurrences, moreover, are highly stereotyped, with the only allowed Accusative argument being *animam* 'soul'. The observed phenomenon does not constitute evidence for a stable diachronic

evolution of the verb, but further highlights the fact that the causativization of a denominal/deadjectival deponent is possible.

*Tristor* 'I become sad' not only occurs as an Active in a causative environment, but also as an Active in this non-causative context:

(49)

Non pro se sed pro membris suis tristasse usque ad not for self but for body.part.abl his.abl.pl be.sad.inf.prf.act till to mortem. (Paul. Aquil. contra Felic. 3, 5)

'He has not been sad till he died for himself, but for his body.'

The analysis of this occurrence is not straightforward. The Middle-marked verb *tristor* 'I sadden' is used in uncontrolled change of state derivations in which the Nominative argument gains the state described by the adjectival part. In this case, it is not clear if the described event involves a change of state or a simple durative state; the verb, then, may be translated as 'he did not sadden till death [...]' or as 'he has not been sad till he died [...]'. The second interpretation would justify the absence of the Middle morphology, given the fact that the event would include a single stative event. The first interpretation would require a labile structure, in which the Nominative argument, merged in the HOLDER position, moves to the higher UNDERGOER position. I leave this question open for further analysis.

*Principor* 'I rule' never appears with a direct Accusative argument; it always occurs with Ablative or prepositional arguments. It has only one relevant Active occurrence, in Arnobius Iunior:

(50)

Ecce rex iustus regnabit et principes cum and.so king.NOM rightful.NOM.SG rule.3<sup>RD</sup>SG.FUT.ACT and princes.NOM with iudicio principabunt. (Arnob. Iun. *confl.* 2, 16, 1.1162) intelligence.ABL rule.3<sup>RD</sup>PL.FUT.ACT

'And so the rightful king will reign and the princes will rule judiciously.'

In this case, the sentence is composed of two almost identical parts: *ecce* [...] *regnabit* and *principes* [...] *principabunt*. The symmetry between the two colons is patent, and the fact that the first verb is Active may have led the author to this isolated Active use of the verb *principor* 'I rule'.

*Malignor* 'I act with a bad attitude toward someone/thing' always occurs in the Middle form and with an oblique argument (usually in + Ablative). The only exception is a specific recurrent context in which it has an Accusative complement and Active morphology:

(51)

Super populum tuum malignaverunt

Over people.ACC your.ACC maliciously.conceive.3<sup>RD</sup>PL.PRF.ACT consilium. (Vulg. *Psalm*. 82, 4)

idea.ACC

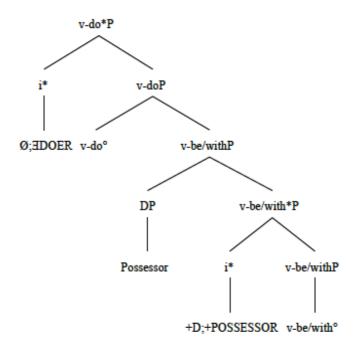
'They designed a malicious plan against your people.'

This passage can be found many times in many commentaries of the Psalms (e.g., it is present in the commentaries of both Augustin and Jerome). This means that it is not an *hapax legomenon*; the occurrence is solid. The interpretation cannot be causative, since the sentence does not mean 'they turn the *consilium* into a malicious thing'. The only option is 'they maliciously conceived an idea/plan'. In this case, the adjectival element is no longer a final state; it is a manner modification of a v-do $^{\circ}$ , a  $^{\vee}$  element. This occurrence conforms to the pattern attested for *poetor* 'I poetize', *blandior* 'I seduce' and other verbs.

# 2.2 Possession denominal/deadjectival deponents

The initial syntactic derivation in which these verbs are involved is a bieventive structure in which there is a v-be/with stative event and a v-doP. The subject of these two events (DOER and POSSESSOR) is the same referential element:

(52)



# 2.2.1 III cent. BCE - 150 BCE

In the period from the III cent. BCE to the first half of the II cent. BCE I traced the first occurrence of 14 relevant Possession denominal/deadjectival deponents: nugor 'I joke' from nugae 'jokes'; scortor 'I frequent prostitutes' from scortum 'prostitute'; stipendior 'I receive a salary' from stipendium 'salary'; verecundor 'I feel ashamed' from verecundia 'shame'; vitulor 'I rejoice' from Vitula, the goddess of happiness; insidior 'I ambush' from insidiae 'ambush'; piscor 'I fish' from piscis 'fish'; argutor 'I chatter' from argutiae 'quip'; ioc(ul)or 'I joke, I play' from iocus 'joke'; praedor 'I plunder' from praeda 'plunder'; tumultuor 'I fidget' from tumultus 'turmoil'; fabulor 'I chatter' from fabula 'chat'; lamentor 'I complain' from lamentum 'complaint'; and odoror 'I smell' from odor 'smell'.

Of these 14 verbs, 5 do not evolve and are always attested with a consistent argument structure involving only one argument: *nugor* 'I joke', *scortor* 'I frequent prostitutes', *stipendior* 'I receive a salary', *verecundor* 'I feel ashamed' and *vitulor* 'I rejoice'.

In other cases, however, it is possible to observe the evolution already proposed for *poetor* 'I poetize', the lexicalization of the nominal element as a  $\sqrt{:insidior}$  'I ambush'; *piscor* 'I fish'; *argutor* 'I chatter'; ioc(ul)or 'I joke, I play'; *praedor* 'I plunder'; and *tumultuor* 'I fidget'. In each of these cases, the verb initially appears with the Middle morphology and without a direct Accusative argument.

```
(53)
         Inertis
                             homines
                                         fortissimis
                                                           viris
                                                                     insidiari. (Cic. Catil. 2, 10)
         incapable.NOM.PL men.NOM strongest.DAT.PL men.DAT ambush.INF.PRS.MID
         'The incapables undermine the strongest men.'
   (54)
         Tuus
                     apparitor
                                          de
                                                               bonis
                                                 aratorum
         your.NOM understrapper.NOM from farmers.GEN goods.ABL
         praedabitur. (Cic. Verr. 2, 3, 182)
         plunder.3<sup>RD</sup>SG.FUT.MID
         'Your understrapper will steal from the goods of the farmers.'
   (55)
                       argutarier? (Plaut. Amph. 349)
         Pergin
         go.on.2<sup>ND</sup>SG chatter.INF.PRS.MID
         'Are you still going on blathering?'
    Diachronically, I observed a denominal/deadjectival \rightarrow \sqrt{-based} evolution that reduces the
bieventive Possession denominal/deadjectival deponent derivation to a monoeventive √-based
derivation in which the verbal \sqrt{} is directly adjoined to the head of the v-doP:
   (56)
         Ouid
                                                       molestus? (Petron. 46, 1)
                     iste
                               argutat
         what.ACC this.NOM chatter.3<sup>RD</sup>SG.PRS.ACT annoying.NOM.SG
         'What is this annoying man saying?'
   (57)
         Adtuli
                              ea
                                               quae
                                                                 praedavit
         bring.1<sup>st</sup>SG.PRF.ACT that.ACC.PL.N
                                               which.ACC.PL.N plunder.3<sup>RD</sup>SG.PRF.ACT
         populus. (Lucif. reg. apost. 2, 43)
```

Qui iocaverit. (Isid. *reg. monach.* 17, 114) who.NOM joke.3<sup>RD</sup>SG.FUTPRF.ACT 'Who will have played.'

'I brought those things that the people plundered.'

(59)

people.NOM

Nec tumultuare nec commoveri sunt ausi. (Amm. 16, 12, 17) neither fidget.INF.PRS.ACT neither move.INF.PRS.MID are dare.PST.PTCP.NOM.PL 'And they did not dare fidget or move.'

(60)

Et mittam piscatores et piscabunt and send.1 $^{\rm ST}$ SG.FUT. ACT fishermen.ACC and fish.3 $^{\rm RD}$ PL.FUT.ACT eos ( $Frg.\ Ar.\ in\ Luc.\ fol.\ ms.\ 162v,\ 25$ ) them

'And I will send fishermen and they will catch them fishing.'

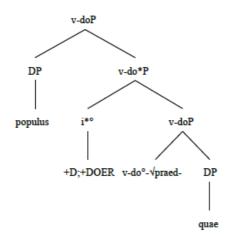
(61)

Et potestatem abeant [...] in ipso lago and permission.ACC have.3<sup>RD</sup>PL.PRS.ACT in same.ABL lake.ABL piscare (*Regii Neapolitani Archivi Monumenta*, 2, 2.206, p. 66; 986 CE) fish.INF.PRS.ACT

The two Active occurrences of *piscor* 'I fish' are philologically problematic. The first comes from the *Fragmenta Ariana*, a work whose author, geographical location and period are obscure. The second comes from the Royal archives of Naples. In this case, while the geographical location and period (even the exact year) of this work are certain, the problem is that the occurrence, dated at the X cent. CE, is late. I have not been able to find other interesting occurrences of Active *pisco* 'I fish' without similar problems.

The result of the diachronic evolution is the structure shown in (62) (taking as a specimen the sentence in (57)).

(62)



Even if the final reanalysis is the same, the data highlight some differences between these 6 verbs. The first observation is that in some cases the monoeventive √-based derivation hosts a direct Accusative argument, while in some other cases it does not, depending on the meaning of the verb. *Iocor* 'I joke, I play' and *tumultuor* 'I fidget', for example, never show a secondary argument at all, neither Oblique nor Accusative<sup>188</sup>. In some cases, the initial Oblique argument can be maintained: Active *insidio* 'I ambush', for example, appears with an Accusative argument only once, in a medieval anonymous gloss to the Psalms (*Anonymi Glosa Psalmorum ex traditione seniorum*, 48, 6), while in all other cases it appears with a Dative argument, as in (53):

(63)

Qui dolose [...] insidiabant ei usque ad who.NOM.PL willfully ambush.3<sup>RD</sup>PL.IPFV.ACT he.DAT till to mortem (Epiphan. *in evang*. 38, p.8) death.ACC 'Who ambush them till death.'

The persistence of the Dative is most likely the result of the influence of the Classics on the Late Latin and medieval writers, who were not native speakers.

A second observation is that the presence of an Accusative argument is not always directly related to the presence of the Active morphology. If with *argutor* 'I chatter' the presence of the Accusative argument is always directly related to the Active morphology, other cases are not so straightforward. *Praedor* 'I plunder', for example, presents occurrences in which the Middle coexists with an Accusative argument two centuries prior to the first Active occurrences. This verb, as I said, is initially a Possession denominal/deadjectival deponent with secondary Oblique arguments, but, during the I cent. CE, it starts occurring with direct Accusative arguments:

(64)

Dum socios magis quam hostes praedatur. (Tac. *ann.*, 12, 49, 1) while partners.ACC more then enemies.ACC plunder.3<sup>RD</sup>SG.PRS.ACT 'While he plunders his allies more then his enemies.'

<sup>188</sup>*Iocor* 'I joke' has a few occurrences in Cicero with an Accusative argument: 'I say something joking' (e.g., Cic. *Fam.* 7, 13, 2). *Tumultuor* has only one occurrence with an Accusative argument, and, in that occurrence, the meaning is clearly causative: 'I make something chaotic' (Plin. *Nat.* 2, 174).

The same can be observed, in the II cent. CE, for piscor 'I fish':

(65)

```
Et piscabuntur illos, homines scilicet. (Tert. adv. Marc. 4, 440) and fish.3<sup>RD</sup>PL.FUT.MID them men.ACC certainly 'and they will fish them, men certainly.'
```

As regards the Identification denominal/deadjectival deponents, I pointed out in the previous sections that there are different steps in the diachronic change that these verbs undergo. The verb is initially denominal/deadjectival, and it is not able to host an Accusative argument. When the verb is reanalyzed as  $\sqrt{-}$ based and the derivation is no longer perceived as denominal/deadjectival, the complement position of the lower stative part becomes free. This position, then, can be occupied by a secondary argument that, if simply denoting the measure of the state, is marked by Accusative case. The argument can be marked by Accusative case because it is the second argument in the derivation, given that the Middle morphology is not an argument of the derivation  $^{189}$ . The derivation of these verbs, then, follows a precise path: the nominal/adjectival element is initially reanalyzed as a  $\sqrt{-}$ , allowing for the presence of a secondary Accusative argument in the complement of the state position; subsequently, there is a further reanalysis of the  $\sqrt{-}$  that loses its stative part and directly conflates into the v-do $^{\circ}$ . Only the second stage implies the loss of the Middle morphology. This second diachronic change is related to the general loss of the Middle morphology in Late Latin (see Section 3.5).

Fabulor 'I chatter' and lamentor 'I complain', finally, have a complex relationship with the basic noun from which they are derived. In both cases the verb is attested both with an Accusative argument and without additional arguments:

(66)

```
Quid loquar? Quid fabulabor? (Plaut. Capt. 435) what.ACC say.3<sup>RD</sup>SG.FUT.MID what.ACC chatter.3<sup>RD</sup>SG.FUT.MID 'What will I say? What will I tell?'
```

(67)

<sup>189</sup>The SE pronoun in the SE-marked controlled change of state derivations that are present in Italian, on the other hand, is an actual pronoun and acquires Accusative case. For this reason, the complement of the state, in Italian, cannot be marked by Accusative dependent case, since the Accusative dependent case has already been assigned to the SE pronoun. The same happens in the labile structure, in which the Nominative argument is merged twice, in the low and high position. It leaves a copy in the low position that acquires dependent Accusative case.

Occepere aliae mulieres duae sic post me begin.3<sup>RD</sup>PL.PRF.ACT other.NOM.PL women.NOM two.NOM.PL so after me fabulari intersese. (Plaut. *Epid.* 236) chatter.INF.PRS.MID to.each.other 'Behind me, two other women started chattering like this among themselves.'

Both these verbs fall within the "saying verbs", whose analysis I left open in the first part of this work. The initial denominal derivation can be understood as a Possession derivation, in which the Nominative argument is in an inclusion relation with the nP, *fabula* 'story' *lamentum* 'complaint'. The possible presence of complement clauses may be explained by analyzing them as complements of the Possessive state that specify the kind of *fabula* 'story' or *lamentum* 'complaint'. Both verbs, diachronically, show Active forms, *lamentor* 'I complain' consistently after the V cent. CE and *fabulor* 'I chatter" only once, in Gennadius of Massilia (V cent. CE).

```
Et lamentabat Hieremias propheta pro and complain.3<sup>RD</sup>SG.IPFV.ACT Jeremiah.NOM prophet.NOM for Iosiam. (Vulg. Esd. III, 1, 32)
Josiah.ACC
'And Jeremiah cried for Josiah.'

(69)

Ut fabulat somniator. (Gennad. dogm. 6, p.90, 1.2)
as chatter.3<sup>RD</sup>SG.PRS.ACT dreamer.NOM
'As the dreamer chatters'
```

The case of *lamentor* 'I complain' can be understood as a  $\sqrt{}$  conflated into the v-do°, a hypothesis that is supported by the fact that a more appropriate translation of Active *lamento* is not 'I complain' but 'I cry', an activity verb. As for Active *fabulo*, while the data seem to support the same conclusion, the number of examples is insufficient.

Odoror 'I analyze (something) smelling (it)', finally, behaves similarly to the Identification denominal/deadjectival deponents arbtror 'I think', interpretor 'I interpret' and aemulor 'I imitate' (Section 2.1.1). It is attested since its first occurrences with the Middle morphology and with a possible Accusative argument. Its argument structure involves a v-doP, since its actual meaning is not simply 'smell' but 'analyze something smelling it', with a strong emphasis on the control of the

smelling event. When there is no Accusative argument the event involves a v-doP and a v-be/withP: 'x acts so that x gets in possession of the smell (*odor*)':

Vultures sagacius odorantur. (Plin. 10, 191)
vultures.NOM more.sharply smell.3<sup>RD</sup>PL.PRS.MID
'The vultures smell around more sharply.'

Such a structure would not allow for the presence of a direct Accusative argument, that is, instead, attested in (71):

Tu proiectum odoraris cibum. (Hor. *epod.* 6, 10)
you.NOM throw.PST.PTCP.ACC.SG smell.2<sup>ND</sup>SG.PRS.MID food.ACC
'You smell the food that has been thrown away.'

A possible explanation is to treat these occurrence as already involving a  $\sqrt{\ }$  element. The nominal element has already been reanalyzed as a  $\sqrt{\ }$ , setting free the complement position of the v-be/withP that can be filled by the Accusative DP that measures the state of 'having smell'. The two structures, the denominal and the non-denominal, coexist.

The same verb, in Gaudentius of Brescia (IV-V cent. CE), and also in Augustine of Hippo, Hilary of Poitiers, Cassiodorus and Gregory the Great, appears with the Active morphology and with the deponent meaning 'to investigate (something) smelling'.

Nares habent et non odorabunt. (Gaudent. serm. 21, 9, 29) nostrils.ACC have.3<sup>RD</sup>PL.PRS.ACT and not smell.3<sup>RD</sup>PL.FUT.ACT 'They have nostrils but they will not smell.'

In this case, the verbal  $\sqrt{ }$  has been reanalyzed as an activity  $\sqrt{ }$ , directly conflated into the v-doP. This  $\sqrt{ }$ , then, conflating into the v-doP, produces the event of 'doing an act of smelling'. The Nominative argument is directly merged in the DOER position, and the Middle morphology, consequently, is absent. The monoeventive activity structure can compare both with an Accusative DP (in the complement position of the v-doP) or without it. This final reanalysis, as already

underlined, is linked to the loss of the Middle morphology and to the presence of a possible Accusative argument (see Section 3.5).

This verb has also one occurrence, coming from the I cent. BCE, in which it is Active and causative:

Odorant aera fumis. (Ov. *met.* 15, 729)
make.smell.3<sup>RD</sup>PL.PRS.ACT airs.ACC smokes.ABL
'They make the air smell with smoke.'

This occurrence shows that the same nominal element that is present in a Possession deponent denominal derivation can also be present in a causative denominal derivation, in which the internal argument (*aera* 'airs') obtains the possession of the nominal argument (*odor* 'smell'), and the external argument (DOER) acts so that this state comes into existence.

### 2.2.2 II cent. BCE

Nine relevant Possession denominal/deadjectival deponents were found in the II cent. BCE: aquor 'I fetch water' from aqua 'water'; epulor 'I organize a feast' from epulum 'feast'; glorior 'I glorify myself' from gloria 'glory'; peculor 'I steal' from peculium 'money'; rixor 'I fight' from rixa 'fight'; sermocinor 'I talk' from sermo 'talk'; stomachor 'I become irritated' from stomachus 'irritability'; urinor 'I dive' from urina 'water'; and vociferor, 'I gaggle' from vox 'voice'.

Aquor 'I fetch water', glorior 'I glorify myself', peculor 'I steal' and stomachor 'I become irritated' do not present Active occurrences and are always attested without secondary arguments or with only Oblique arguments:

```
(74)
                                                           Macedones
     Flumen
                    erat [...]
                                   ex
                                          auo
                                                     et
     river.NOM.SG was.3<sup>RD</sup>SG.ACT from which.ABL and Macedonians.NOM
                          aquabantur. (Liv. 44, 40, 4)
           Romani
     et
     and Romans.NOM take water.3<sup>RD</sup>PL.IPFV.MID
     'There was a river from which the Romans and the Macedonians were taking water.'
(75)
     Scipio [...], cum stomacharetur
                                                              cum
```

```
Scipio.NOM when become.irritated.3<sup>RD</sup>SG.SBJV.IPFV.MID with Metello [...]. (Cic. de orat. 2, 267)

Metellus.ABL

'Scipio [...], becoming irritated with Metellus, [...].'
```

*Epulor* 'I host a feast/eat at a feast' is initially always attested with the Middle morphology and either without arguments or with Oblique arguments (e.g., Ablative  $\rightarrow$  'to feast *upon something*'):

```
Caesis gens est epulata iuvencis. (Verg. georg. 2, 537) killed.ABL.PL people.NOM is eaten.PST.PTCP.F.SG bulls.ABL 'The people feasted upon slaughtered bulls.'
```

In the subsequent centuries it is possible to find a few occurrences in which the verbal structure involving *epulor* 'I host a feast/eat at a feast' hosts an Accusative argument:

```
Carnem humanam epulabatur. (Hyg. fab. 125, 3, 12) meat.ACC human.ACC.SG eat.3<sup>RD</sup>SG.IPFV.MID 'He used to eat human meat.'
```

Except for Example (77), which comes from Hyginus (I cent. CE), the Accusative occurrences are attested in Christian authors, such as St. Ambrose (*Noe*, 15, 53).

The Accusative is first seen when the denominal derivation begins to disappear, setting the complement of the state position free. The Accusative argument is merged in the complement of the state position, representing the boundaries of the state of "having a feast" attributed to the Nominative argument. This reanalysis creates a non-denominal controlled change of state deponent.

In Late and Medieval Latin, finally, it is possible to find occurrences of Active epulo 'I feast/eat'.

Exosculatis-que et dignanter acceptis epulavit cum kissed.ABL.PL-and and kindly accepted.ABL.PL feast.3<sup>RD</sup>SG.PRF.ACT with eis. (Greg. T. *franc*. 5, 2)

they.ABL

'After he kissed and kindly welcomed them, he ate with them.'

At this point, there is a further step: the  $\sqrt{}$  is reanalyzed, loses the stative part and becomes capable of being conflated into the v-do $^{\circ}$ , creating an activity verb (see Section 3.5 for a possible analysis of the reason behind this reanalysis).

Sermocinor 'I talk' has only one Active occurrence, in Isidore of Seville (VI-VII cent. CE):

(79)

Aesopicae sunt, cum animalia muta inter se sermocinasse of.Aesop are when animals.NOM mute.NOM.PL among self talk.INF.PRF.ACT finguntur. (Isid. *etym.* 1, 40, 2) pretend.3<sup>RD</sup>PL.PRS.MID 'When the author pretends that mute animals talk to each other, the fable is called Aesopic.'

This occurrence involves a perfect infinitive, whose Middle form would be *sermocinata esse*. In this case, the structure is highly complex: it is a rising structure, in which the subject of the subordinated infinitival clause is raised to the subject position of the passive superordinated one, in agreement with the verb *finguntur* 'are pretended'. This highly complex construction might have led the author to use a more simple and synthetic verbal form, avoiding the use of the analytic one. This is the only occurrence of *sermocinor* 'I talk' in Isidore of Seville, I cannot compare other occurrences to see whether this verb appears consistently in the Active form.

*Rixor* 'I fight', *urinor* 'I dive' and *vociferor* 'I gaggle/talk' behave similarly. These verbs are all attested as Actives in Varro, while in all the other authors of the II-I cent. BCE they are only attested with the Middle morphology.

```
Nimirum [...] rixant. (Varro, Men. 454) certainly fight.3<sup>RD</sup>PL.PRS.ACT 'They certainly fight.'

(81)
```

Urinare est mergi in aquam. (Varro, *ling*. 5, 27, 126) dive.inf.prs.act is plunge.inf.prs.mid in water.acc

"Urinare" means to dive in water."

(82)

```
Item qui elati sunt ac vociferant the same who.nom.pl noble.nom.pl are and gaggle.3<sup>RD</sup>PL.PRS.ACT saepe [...]. (Varro, rust. 3, 9, 5) often 'And at the same time (you have to pick) the ones who have a noble noble and gaggle often [...].'
```

The initial meaning of these verbs, at least in the cases of *rixor* 'I fight' and *urinor* 'I dive' for the first two, is related to a Possession denominal derivation, "to make yourself with a fight/water"  $\rightarrow$  "to fight, dive". *Vociferor* 'I gaggle, I talk' is more complex, since it includes the verb *fero* 'I bring' in its morphophonological form. The initial derivation may be related to the inherent possession of the nominal element *vox* 'voice': "I bring my own voice"  $\rightarrow$  "I gaggle/talk" <sup>190</sup>.

No Active forms were found in the subsequent centuries., at least until the IV cent. CE, where an Active occurrence of *rixor* 'I fight' was found:

(83)

```
Si rixaverint duo [...] detrimentum if fight.3<sup>RD</sup>PL.FUT.PRF.ACT two damage.NOM patietur. (Lucif. Athan. 2, 5, 1.36) suffer.3<sup>RD</sup>SG.SUBJ.PRS.MID 'If two people fight, they will suffer damage.'
```

The first Active occurrence of *vociferor* 'I gaggle, I talk' after Varro comes from Gregory of Tours (VI cent. CE):

(84)

```
Ac vociferare coepit. (Greg. T. franc. 6, 31) and gaggle.INF.PRS.ACT start.3<sup>RD</sup>SG.PRF.ACT 'And he started talking.'
```

Urinor 'I dive' is much less common, with fewer than ten occurrences, and the only other

<sup>190</sup>In this case, the derivation would not be a Possession denominal one, but a more complex derivation involving inherent possession of the nominal element *vox* 'voice'.

Active occurrence comes from the Latin translation of a Greek essay on Physiology (VII cent. CE):

(85)

Urinat, descendens in profundum. (Physiol. rec. Y, 30, 4) dive.3<sup>RD</sup>SG.PRS.ACT go.down.PTCP.PRS.NOM.SG in depth.ACC 'He dives, going down deeply.'

In all these cases, the nominal element is reanalyzed as a √ merged in v-do°. The Active occurrences in Varro may be the result of an early reanalysis that emerged in his work but did not spread in the high literary register until the Late Latin period (see Sections 3.3 and 3.5 for a further development).

### 2.2.3 I cent. BCE

In the I cent. BCE 13 Possession denominal/deadjectival deponents occurred: manuor 'I steal' from manus 'hand'; latibulor 'I hide' from latibulum 'hideout'; spatior 'I wander' from spatium 'space'; pabulor 'I gaze' from pabulum 'pasture'; 'I root' from radix 'root'; argumentor 'I argue' from argumentum 'argument'; cavillor 'I quibble' from cavillus 'quibble'; nundinor 'I trade' from nundinae 'trading days'; auctionor 'I held an auction' from auctio 'auction'; negotior 'I trade' from negotium 'commercial activity'; consilior 'I take/provide counsel' from consilium 'counsel'; contionor 'I speak/gather in an assembly' from contio 'assembly'; and meridior 'I take a break' from meridies 'midday'.

As Possession denominal/deadjectival deponents, all these verbs, initially, conform to the bieventive structure presented previously, in which the lower argument (POSSESSOR) is contextually identified with the existentially bound DOER projected by the Middle argument-introducing head.

Of these 13 verbs, 3 - manuor 'I steal', latibulor 'I hide', spatior 'I wander' - do not show any sign of diachronic change. These three verbs always occur in the same contexts and with the same morphological characteristics.

*Pabulor* 'I gaze' and *radicor* 'I root', instead, occur two or three times with the verb in a causative environment, inserting a DOER that is referentially disjunct from the POSSESSOR of the v-be/withP.

(86)

```
Ignis iste vitalis bellum in homine fire.NOM this.NOM.SG vital.NOM.SG war.ACC in man.ABL radicaverit. (Aug. Iulian. 3, 715) root.3<sup>RD</sup>SG.SUBJ.PRF.ACT 'This vital fire planted the seeds of war in mankind.'
```

(87)

Ac tertio quoque fimo pabulandae sunt oleae. (Colum. 5, 9) but third.ABL also dung.ABL manure.GRDV.NOM.F.PL are olives.NOM 'And also during the third (period of the year) you must fertilize olives with dung.'

The occurrence from Columella, (87) involves a gerundive, an adjectival verbal form with a passive meaning "to be manured". This verbal form is only possible if the event in which it is involved presents two participants: a DOER that is not syntactically projected, and a lower argument, in this case, the POSSESSOR of the *pabulum* 'pasture', the olives (*oleae*). The two arguments must be referentially distinct. In both (86) and (87), then, the nominal element, *pabulum* 'pasture' and *radix* 'root', is used in a causative verbal structure. This shows that not only in the case of Identification denominal/deadjectival deponents (see Section 2.4.1), but also in the case of Possession denominal/deadjectival deponents, the speaker can cross the boundary between the denominal/deadjectival deponent derivation and the causative one, overcoming the lexical-encyclopedic block.

The Active occurrences of *radicor* 'I root' do not always have the causative meaning just presented ('I cause something to have roots'). There are occurrences in which the verb has the same meaning as in the deponent change of state derivations, 'I root/grow roots'.

(88)

Nec omnia quae plantata sunt and.not everithing.NOM.PL which.NOM.PL planted.NOM.PL are radicabunt. (Vulg. *Esd.* IIII, 8, 41) root.3<sup>RD</sup>PL.FUT.ACT 'And not everything that has been planted will root.'

Radicor 'I root' is one of the few denominal deponents involving an UNDERGOER and not a DOER in its derivation. This verb is involved in a dynamic uncontrolled change of state derivation, such as the derivation of nascor 'I am born' or morior 'I die'. The event structure, then, is

bieventive as in a standard Possession denominal/deadjectival deponent, but the higher event is not a v-doP but a v-goP. In (88) the event is still a dynamic uncontrolled change of state: a Possession denominal/deadjectival deponent bieventive structure in which a single argument gains a double set of thematic features, UNDERGOER and POSSESSOR. The difference, then, between this derivation marked by the Active morphology and the Middle-marked one is that in the Middle derivation, the DOER is contextually identified with the POSSESSOR of the *radices* 'roots', while in (88), the POSSESSOR is not contextually identified with the UNDERGOER role, but moves directly moves from its lower POSSESSOR position to the higher UNDERGOER position. The Middle morphology is not relevant anymore: the argument acquires its double set of thematic features by movement. This possibility is related to the spreading of unmarked v-goP change of state verbs in Late Latin, a phenomenon analyzed, among others, by Cennamo et al. (2015) and Gianollo (2014).

A final note on *radicor* 'I root'. Gregory the Great (VI cent. CE), in most cases, identifies the lower argument with the higher UNDERGOER thematic position by means of the Middle morphology, The only exception is this single occurrence, in which he uses the reflexive pronoun *se* 'self':

(89)

Nostris se mentibus invisibiliter radicavit. (Greg. M. *in Ezech.* 1, 7, 1.239) our.ABL self minds.ABL invisibly root.3<sup>RD</sup>SG.PRF.ACT 'He invisibly grew roots in our minds.'

This occurrence of the Active + se construction shows an interesting feature: it involves an agentive argument that controls the event, a DOER. The DOER is Christ, and he is in control of the event of planting roots in the minds of his followers. Gregory, projecting a v-doP instead of a v-goP, chooses to use the pronominal anaphoric element se 'self' instead of the Middle morphology. The higher degree of agentivity is connected with the choice of the se 'self' pronoun over the Middle morphology. As I have shown in the first part (Part I, Section 4), the presence of a SE-marked derivation, in a context in which the verb is non-denominal/deadjectival, is connected with the contiguous presence of a causative alternant. This fact can be explained by looking at the interpretability context of the  $\sqrt{\ }$ . If a  $\sqrt{\ }$  is interpretable in a SE-marked syntactic context, then it is also interpretable in a causative context, given that these two contexts are post-syntactically indistinguishable. I have also shown, with respect to Italian, that things are different for the denominal/deadjectival derivations, given that there are SE-marked verbs that do not have any

causative alternant (e.g., *arrabbiarsi* 'to get angry' and *impadronirsi* 'to seize'). In any case, there is an evident connection between the causative (v-doP) environment and the use of the SE pronouns. This piece of evidence from Gregory the Great support this assertion.

*Negotior* 'I trade' and *nundinor* 'I trade' have a similar meaning and similar diachronic developments. *Negotior* 'I trade', in its Classical occurrences, is always attested in the Middle form and does not have Accusative arguments:

```
Quintus Turius qui in Africa negotiatus
Quintus Turius who.nom.sg in Africa.abl trade.pst.ptsp.nom.sg
est. [...] (Cic. fam. 12, 26, 1)
is
```

'Quintus Turius, who traded in Africa [...].'

The same verb, in Late Latin, presents Middle+Accusative occurrences:

(91)

Per continentiam enim negotiaberis magnam by.means.of moderation.ACC indeed trade.2<sup>ND</sup>SG.FUT.MID great.ACC.SG substantiam sanctitatis. (Tert. *castit.* 10, 5) gist.ACC holiness.GEN

'You will trade a great gist of holiness by means of moderation.'

In the IX cent. CE, the verb finally presents Active occurrences:

(92)

```
Tunc surgens diluculo negotiavit, ut potuit, ipsa then rising dawn.ABL trade.3<sup>RD</sup>SG.PRF.ACT as can.3<sup>RD</sup>SG.PRF.ACT same.ABL.SG die navem ascendit. (Agnell. Liber pont. (Neon.) 30, 181) day.ABL ship.ACC get.on.3<sup>RD</sup>SG.PRF.ACT 'Then, getting up at dawn, he traded, as he could, and the same day he got on the ship.'
```

In Andreas Agnellus of Ravenna (IX cent. CE), all the occurrences of the verb under analysis are Active, without exception. This verb undergoes the usual diachronic nominal  $\rightarrow \sqrt{}$  lexicalization

development. The verb is initially always present in a Possessive denominal deponent derivation. The only argument gains two thematic roles (POSSESSOR and DOER), as seen in Example (90), and the verb is formed by the nominal element merged in the v-be/withP complement position. The nominal element, in Late Latin, is reanalyzed as a  $\sqrt{\ }$ , leaving the syntactic space for the merging of an Accusative argument as the measure of the state (see Example (91)). Finally (see Sentence (92)), the  $\sqrt{\ }$  is reanalyzed as an activity  $\sqrt{\ }$ , losing the stative part and acquiring the capability of being conflated into the v-doo<sup>191</sup>. *Nundinor* 'I trade' behaves in a similar way. The only difference is that the Accusative arguments appear much earlier, already in Cicero (*Phil.* 3, 10). Active *nundino* 'I trade' is present in Tertullian (*nat.* 2, 13; III cent. CE). Tertullian, however, comes from Carthage (North Africa) and not from a Romance territory. The first Active occurrence in an author who lived in a Romance territory comes from Isidore of Seville (VI-VII cent. CE):

(93)

Alienum-que nundinet corpus. (Isid. *etym.* 10, 63) other's.ACC-and trade.3<sup>RD</sup>SG.SUBJ.PRS.ACT body.ACC 'And he trades the body of someone else.'

Auctionor 'I held an auction' and consilior 'I take/provide counsel' do not complete the diachronic evolution that characterizes nundinor 'I trade' and negotior 'I trade'. Both these verbs initially behave like standard Possession denominal deponents: they never accept Accusative arguments and are only attested with the Middle morphology.

Ille bonis faveat-que et that.one.NOM good.DAT support.3<sup>RD</sup>SG.SUBJ.PRS.ACT-and and consiletur amice. (Hor. *ars.* 196) take.counsel.3<sup>RD</sup>SG.SUBJ.PRS.MID kindly 'May he support the good ones and provide advice kindly.'

In the Christian era, both verbs appear with Accusatives and with slightly different meanings: *auctionor* 'I trade something in an auction' and *consilior* 'I advise something':

(95)

<sup>191</sup>In Beatus of Liébana (VIII cent. CE) it is possible to find occurrences in which the Active form of the verb hosts an Accusative argument (Beatus Liebanensis et Eterius Oxoniensis, *adversus Elipandum*, 1, 53).

```
Qui pro exiguo pecuniae lucello se ipsum who.NOM for small.ABL money.GEN income.ABL self same.ACC auctionatur? (Ambr. Ioseph, 4, 20) trade.3<sup>RD</sup>SG.PRS.MID
'Who, in exchange for a small income, trades himself?'
```

(96)

Si nihil ex eo quod consiliatur if nothing from which.ABL which.ACC advise.3<sup>RD</sup>SG.PRS.MID efficiet. (Boet. *in herm. comm. sec.* 3, 9) do.3<sup>RD</sup>SG.PRS.ACT 'If he does none of the things that he advises to be done.'

In both cases, the nominal element is reanalyzed as a  $\sqrt{\ }$ , leaving the syntactic space for the merging of an Accusative argument. Neither verb presents, in my data, relevant Active occurrences<sup>192</sup>. *Contionor* 'I speak/gather in an assembly' behaves in a similar way, the only difference being that this verb, in addition to the standard meaning 'I gather/speak in an assembly', already accepts CP complements and pronominal Accusatives in the I cent. CE, providing the meaning 'I say x in an assembly'. This secondary use is much less common than the first one.

(97)

C. Cato contionatus est comitia haberi non Gaius Cato say.in.an.assembly.PTCP.PST.NOM.SG is rallies.ACC have.INF.PRS.MID not siturum. (Cic. *ad Q. fr.* 2, 5, 4) allow.FUT.PTCP.ACC.SG 'Gaius Cato said in front of an assembly that he would not allow the rallies to take place.'

Contionor 'I speak/gather in an assembly', like consilior 'I get/provide advice' and auctionor 'I held an auction', is never attested with the Active morphology.

*Meridior* 'I take a break' is a Possession denominal deponent from *meridies* 'midday'. This verb never takes Oblique or Accusative arguments. It has two Active occurrences. The first one is quite early and comes from Svetonius (I cent. CE):

(98)

<sup>192</sup>The only Active occurrences of *consilio* 'I advise' come from Christian of Stavelot (*exp. in Matth.* 22, 405), a monk who was born in Aquitaine in the IX cent. CE and worked near Liège, in Belgium.

Dum ea meridiaret. (Svet. *Cal.* 38, 3) while she.NOM take.break.3<sup>RD</sup>SG.SUBJ.IPFV.ACT 'While she was taking a break.'

The second one, instead, comes from Isidore of Seville (*etym.* 20, 3, 3; VI-VII cent. CE). The analysis of these two Active occurrences may follow the nominal  $\rightarrow$  v-do°- $\sqrt{}$  reanalysis already proposed in other cases. The occurrences are only two and come from two entirely different periods and geographical locations. Therefore, the data do not allow for a reliable analysis.

Argumentor 'I argue' and cavillor 'I practice jeering, I criticize' are saying verbs. Both these verbs have, since their first attestations, occurrences with a single Nominative argument and occurrences with a Nominative argument and a secondary one, usually an Accusative pronoun or a CP completive sentence. In both cases only these two possibilities are available, and in both cases, the Middle morphology is always present.

### 2.2.4 I cent. CE

There are seven diachronically relevant Possession denominal/deadjectival deponent whose first occurrence is attested in the I cent. CE: cibor 'I get food' from cibus 'food'; gesticulor 'I gesticulate' from gestus 'gesture'; libidinor 'I get pleasures' from libido 'pleasure'; luxurior 'I abound to excess/thrive' from luxuria 'splendor, ostentation'; praemior 'I get a prize' from praemium 'prize'; prooemior 'I open/begin' from prooemium 'opening part'; and trutinor 'I weigh' from trutina 'weight scale'.

Gesticulor 'I gesticulate', prooemior 'I open/begin' and libidinor 'I get pleasure' do not present Active occurrences and are always attested without an Accusative argument.

Cibor 'I get food' and praemior 'I get a prize' follow the causativization path already observed for many Identification denominal/deadjectival deponents and for the Possession denominal/deadjectival deponents pabulor 'I gaze' and radicor 'I root'. Initially, these two verbs are always attested in the Middle form and without any Accusative argument:

(99)

Atque ea genera quae intra septa villae and those.ACC kinds.ACC who.NOM within yard.ABL manor.GEN cibantur fere persecuti sumus. (Colum. 8, 10) get.food.3<sup>RD</sup>PL.PRS.MID almost present.PRF.PTCP.NOM.PL are.1<sup>ST</sup>PL

'And we have almost finished presenting those animals who get food within the yard of the manor.'

In St. Ambrose of Milan, it is possible to find Active occurrences of *cibor* 'I get food' with an Accusative argument. These occurrences have a causative meaning:

```
Cibavit eos ex adipe frumenti. (Ambr. inst. virg. 14, 91) feed.3<sup>RD</sup>SG.PRF.ACT they.ACC from fat.ABL wheat.GEN
'He fed them with the wheat's fat.'
```

In this case, the syntactic structure is the same structure presented for the standard Possession denominal/deadjectival deponent derivation. The only difference is that, in this case, the external argument (DOER) is referentially distinct from the internal one (POSSESSOR) and externally merged in the DOER position. The Middle morphology, consequently, is absent.

In the same author there is an occurrence in which the causative *cibo* 'I feed' is used with two Accusative arguments, or a double Accusative structure:

```
Quis nos cibabit carnem. (Ambr. spir. 1, prol. 3)

who.NOM we.ACC feed.3<sup>RD</sup>SG.FUT.ACT meat.ACC

'Who will feed us with meat?'
```

The first Accusative, *nos* 'us', represents the argument that gets food, the possessor of the food, while the other argument specifies the kind of food. In this case, a Possession+Identification derivation does not seem adequate. In a structure involving a stative v-be° event with the meaning 'carnem' ('meat') is food' and a superordinate stative v-be/with° event in which nos 'us' is the subject, the direct relationship between nos 'us' and carnem' meat' would no longer be present. The relationship between the eater and the food would be broken and the derivation would mean something like 'I act so that the carnem 'meat' is in the state of being cibus 'food' and I am the beneficiary of that state'. A key point is that carnem 'meat' is a kind of food. This is reminiscent of the case of En. dance, described by, among many others, Hale and Keyser (2002). Dance, as Hale and Keyser (2002) notice, is a denominal verb that can be translated as 'to do a dance'. This verb, usually, cannot host a direct Accusative argument in the complement position, given that the

complement position is already occupied by the nominal element that is verbalized during the syntactic derivation. The only DPs that can be present as Accusative objects are DPs referring to a subset of the nominal element *dance*, as *swing*, that is a kind of dance.

John danced a swing

The Latin case under analysis may be representative of the same phenomenon: a denominal verb in which the nominal part can be substituted by a DP representing a subset of the nominal itself: "x acts in such a way that y has food (that is *carnem* 'meat')", just as in (102), the meaning is "x does a dance (that is a swing)". The semantic and syntactic analysis of these kinds of structures, however, goes beyond the scope of the present work.

Finally, *luxurior* 'I abound to excess/thrive' is not as transparent as the other Possession denominal/deadjectival verbs that I have analyzed till now. This verb is attested, since the I cent. BCE, with the Active form *luxurio* 'I thrive'. The Middle occurrences begin to appear in the I cent. CE, which is the reason why the deponent form is categorized as belonging to the I cent. CE. The Middle occurrences and the Active occurrences initially show a certain degree of meaning differentiation, with the Active from meaning 'I thrive' and the Middle one, initially mostly attested in Seneca, meaning 'I abound to excess, I squander':

```
Luxuriat-que pecus. (Ov. fast. 1, 151)
thrive.3<sup>RD</sup> SG.PRS.ACT-and livestock.NOM
'And the livestock thrives.'

(104)

Quidam luxuriante filio luxuriari
someone.nom abound.to.excess.PTCP.PRS.ABL.SG son.ABL abound.to.excess.INF.PRS.MID
coepit. (Sen. Contr. 2, 6)
start.3<sup>RD</sup>SG.PRF.ACT
'Someone, since his son was abounding to excess, started abounding to excess.'
```

The Middle form is initially related to a [+human] argument, while the Active form is related to a [-human] one. This differentiation between [+human] and [-human] is an epiphenomenon. The real difference between these two kinds of occurrences is related to a v-go/v-do alternation, v-go →

Active, v-do  $\rightarrow$  Middle. The [+human] vs. [-human] phenomenon relates to the fact that [-human] arguments are usually present in dynamic uncontrolled events (v-goPs), while [+human] arguments are more likely to be involved in dynamic controlled events (v-doPs). The act of 'abounding to excess' is a controlled event in which the argument deliberately does something in order to have *luxuria* 'splendor, ostentation'. In Plautus, there is an occurrence of a verb with the same exact meaning of Seneca's *luxurior*: *luxor* 'I abound to excess, I squander', from *luxus* 'splendor' splendor'.

(105)

Luxantur, lustrantur, comedunt abound.to.excess.3<sup>RD</sup>PL.PRS.MID attend.brothels.3<sup>RD</sup>PL.PRS.MID devour.3<sup>RD</sup>PL.PRS.ACT quod habent. (Plaut. *Pseud*. 1105) what.ACC.SG have.3<sup>RD</sup>PL.PRS.ACT 'They abound to excess, attend brothels, devour what they have.'

Also in this case, the verb, which has the same agentive meaning but derives from a different noun (*luxus* vs *luxuria*), presents the Middle morphology. The event of 'thriving', on the other hand, is uncontrolled, it is something that happens to an argument without a specific control. If the event structure of *luxurior* 'I abound to excess, I squander' is patent (a controlled change of state event with a v-doP and a v-be/withP), the internal structure of the Active variant *luxurio* 'I thrive' is not so clear. Its argument structure could be analyzed as bieventive or monoeventive. More specifically, this verb could describe an uncontrolled change of state or a simple uncontrolled dynamic event of having *luxuria* 'splendor'. If the verb describes a change of state, the presence of the Active morphology is justified by movement: the lower argument moves from the subject position of the v-be/withP to the subject position of the v-goP. The uncontrolled change of state syntactic environment, as shown in Section 2.2.3 for the verb *radicor* 'I root', may allow for the movement of the argument without the necessary presence of the Middle morphology. If the event, instead, is constituted by a single functional head with a single subject, the absence of the Middle morphology does not even need to be explained. A possible piece of evidence that supports the

(106)

bieventive hypothesis comes from St. Ambrose:

Vel cum dura mitescunt, vel cum peccata

<sup>193</sup>The verb *luxor* 'I abound to excess' is attested only in this passage in the Latin literature; it is a *hapax legomenon*. For this reason, it was not analyzed in Section 2.2.1.

or when hard.things.NOM soften,3<sup>RD</sup>PL.PRS.ACT or when sins.NOM luxuriant. (Ambr. *in Luc.* 10, 423) thrive.3<sup>RD</sup>PL.PRS.ACT 'Or when the hard things become soft, or when the sins thrive.'

As shown in the first part (Part I, Section 2.2.1), the Latin -sk morpheme is the morphological realization of a v-go° and is present in change of state derivations. The first part of the sentence in (106), then, involves an uncontrolled change of state event. The parallel construction of the sentence leads to the hypothesis that the event has the same bieventive structure in the second half of the sentence. Since this hypothesis is based on the fact that the author uses the same structure in the first and second halves of the sentence, it cannot be considered fully reliable, given that it is based on stylistic evidence. The issue remains unsolved.

### 2.2.5 II cent. CE

In the II cent. CE I found the first occurrence of 3 Possession denominal/deadjectival deponents: *fornicor* 'I fornicate' from *fornix* 'fornix, brothel'; *geniculor* 'I kneel' from *geniculum* '(small) knee, knot'; and *modificor* 'I moderate' from *modus* 'measure'.

*Modificor* 'I moderate' shows the usual diachronic evolution. This verb, in all cases, initially appears with the Middle morphology and with Oblique (Dative) arguments:

(107)

Temperes et reparcas et temper.2<sup>ND</sup>SG.SUBJ.PRS.ACT and eschew.2<sup>ND</sup>SG.SUBJ.PRS.ACT and modificeris desideriis omnibus. (Fronto, *Verus*, 1, 5, 2) moderate.2<sup>ND</sup>SG.SUBJ.PRS.MID desires.DAT every.DAT.PL 'Temper yourself and eschew and moderate every desire.'

In Gregory the Great (VI cent. CE), instead, it is possible to find occurrences of Active *modifico* 'I moderate'. Each occurrence of Active *modifico* 'I moderate' appears, in this author, with an Accusative argument:

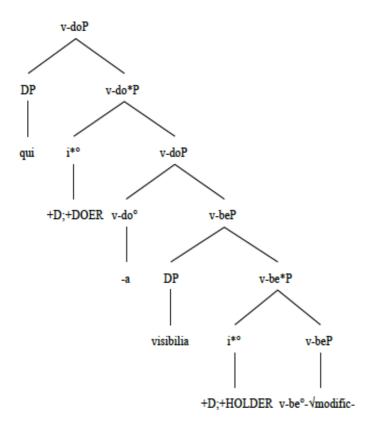
(108)

Quia qui invisibiliter visibilia

because who.NOM.SG invisibly visible.things.ACC modificat [...]. (Greg. M. *moral. epist.* 27, 21) moderate.3<sup>RD</sup>SG.PRS.ACT 'Because who invisibly moderate the visible things [...].'

The diachronic change involves the presence of an Accusative argument and the absence of the Middle morphology. The Accusative argument is never attested with the Middle version, while with the Active one is highly frequent, with only a few exceptions in which the secondary argument is still marked by Dative case. A possible proposal could be to consider the Active+Accusative occurrences as causatives, in which the internal position that was previously occupied by the Nominative argument is now occupied by the Accusative one. The structure no longer means 'I act in such a way that I have modus (with respect to something)' but 'I act in such a way that something is modified'. This different structure presupposes the reanalysis of the nominal element as part of the  $\sqrt{\phantom{a}}$ .

(109)



In this case, then, the argument that was previously a modifier of the core proposition, not being in a subject position, becomes the subject of the lower stative phrase. This specific diachronic change is not isolated; it is attested also for other verbs (see Section 3.5).

*Fornicor* 'I fornicate' is initially derived from a figurative meaning of the noun *fornix* 'fornix' that identifies the female reproductive organ and the brothels: 'I act so that I have *fornix*'.

```
(110)
```

```
Qui autem fornicatur in corpus suum who.NOM.SG instead fornicate.3<sup>RD</sup>SG.PRS.MID against body.ACC his.ACC peccat. (Tert. pudic. 16, 37) sin.3<sup>RD</sup> SG.PRS.ACT 'Who fornicates, commits a sin against his body'
```

Later, in the IV-V cent. CE, the same verb begins to appear with the Active morphology.

```
(111)
```

```
Isti sunt qui cum mulieribus maritatis these.NOM are who.NOM with women.ABL married.ABL.PL fornicaverunt. (Pseud. epigr. Vet. Test. visio Esd. 16) fornicate.3<sup>RD</sup>PL.PRF.ACT
```

The meaning does not change, but the figurative denominal derivation gets lost in favor of an activity reading in which the  $\sqrt{}$  is conflated into the v-do $^{\circ}$ . Around the IV-V cent. CE, moreover, the same verb, in the Active form, acquires a different meaning: 'I contaminate'.

```
Fornicare domum patris sui. (Itala deut. 22, 21) contaminate.INF.PRS house.ACC father.GEN own.GEN.SG
```

'To contaminate the house of your own father.'

The reanalyzed  $\sqrt{-}$  based derivation in (111) allows for a meaning shift and for the possibility of merging an Accusative DP (*domum patris sui* 'the house of your own father').

Finally, *geniculor* 'I kneel', finally, has only three relevant occurrences, each one different from the other:

(113)

Postquam Herculem tela defecerint se after Hercules.ACC arrows.NOM destroy.3<sup>RD</sup>PL.SUBJ.PRF.ACT self ingeniculasse. (Hyg. *astr.* 2, 6) kneel.inf.PRF.ACT 'And after the arrows destroyed Hercules, he kneeled.'

(114)

Aris dei adgeniculari. (Tert. *paenit.* 9, 8) altars.DAT god.GEN kneel.to.INF.PRS.MID

'To kneel in front of the altars of God.'

(115)

Nudus-que una manu ad mammam altera pudendis naked.NOM.SG-and one.ABL.SG.F hand.ABL to breast.ACC other.ABL.SG.F pudenda.DAT adhibita ingenicularet. (Hist. Aug. *Heliog*. 5, 4) use.PST.PTCP.ABL.SG.F kneel.3<sup>RD</sup>SG.SUBJ.IPFV.ACT

'Naked, with one hand covering his breast and the other covering his pudenda, he kneeled.'

These three occurrences represent all the possible ways in which Latin can build a controlled dynamic change of state. In each case, the argument whose state changes is also the argument initiating the event (DOER). In example (113) (Hyginus, I cent. CE<sup>194</sup>), the *se* 'self' anaphoric pronoun is merged in the HOLDER position of the state 'to be on the knees', while the coreferential argument that binds the anaphoric pronoun is merged in the DOER position. In example (114) (Tertullian, II cent. CE), the HOLDER and DOER position are related by means of the Middlemarked contextual identification between the existentially bound DOER and the referential HOLDER. In example (115) (Scriptores Historiae Augustae, IV cent. CE), finally, the argument merged in the HOLDER position directly moves to the DOER position, without any morphological marking or reflexive pronoun (labile option, Gianollo 2014). Being that these are the occurrences available, a reliable diachronic analysis cannot be proposed.

#### 2.2.6 From the III cent. CE on

The Possession denominal/deadjectival deponents with enough relevant occurrences whose

<sup>194</sup>The deponent verb *geniculor* 'I kneel' is categorized as belonging to the II cent. CE because the occurrence of the I cent. CE is Active and not Middle.

first attestation belongs to the III cent. CE or to the subsequent centuries are *crapulor* 'I get drunk' from *crapula* 'drunkenness'; *solacior* 'I get relief' from *solacium* 'relief'; *contumelior* 'I insult' from *contumelia* 'insult'; *querelor* 'I complain' from *querela* 'complaint'; and *aporior* 'I doubt' from *aporia* 'doubt'.

Crapulor 'I get drunk' and solacior 'I get relief' are always attested with the Middle morphology and with only Oblique or prepositional arguments:

```
Solaciari in omnibus debeat. (Greg. M. epist. 4, 27, 10) get.relief.INF.PRS.MID in every.ABL.PL must.3<sup>RD</sup>SG.SUBJ.PRS.ACT 'He has to get relief in each one of these things.'
```

Aporior 'I doubt, I am in trouble' is similar to *crapulor* 'I get drunk' and *solacior* 'I get relief', usually occurring with the Middle morphology and with Oblique or prepositional arguments. There are only two Active occurrences. The first one is present in the Vulgate, and presents an Accusative object, *terram* 'earth'. The exact interpretation of this passage is not entirely clear:

```
Et aporiant vitam super terram. (Vulg. Esd. IIII, 16, 23) and get.in.trouble.3<sup>RD</sup>PL.PRS.ACT life.ACC over earth.ACC 'For many of those who live on the earth shall perish by famine.'
```

The meaning of the nexus *aporiant vitam* seems to be 'they are in trouble with respect to life, they perish'. In any case, again, the presence of an Accusative argument is related to the absence of the Middle morphology. A possible tentative analysis of this case is to consider the denominal derivation 'I get troubles' as reanalyzed as a  $\sqrt{-}$ -based derivation in which  $\sqrt{apori}$ -, meaning 'to risk' or something similar, is directly merged into v-do°. The Accusative complement DP would be interpreted as the measure of the risking event. The second Active occurrence comes from Peter Cantor (XII cent. CE). Being so late, this occurrence is not relevant for the present analysis.

Contumelior 'I insult' has only two relevant occurrences. The first is in Peter Chrysologus (IV-V cent. CE), who lived in the north of Italy and was the Bishop of Ravenna. This occurrence shows the typical characteristics of the Possession denominal/deadjectival deponents: the Middle morphology and an Oblique argument (auctori 'to the author'):

```
Non contumelientur auctori. (Petr. Chrys. serm. 11, 22) not insult.3<sup>RD</sup>PL.SUBJ.PRS.ACT author.DAT 'And they should not insult the author.'
```

The second occurrence, present in Epiphanius Latinus, who presumably lived during the V-VI cent. CE (the actual compilation containing his works comes from the VII-VIII cent. CE, probably from an Italian territory), shows, instead, an Accusative argument and the Active morphology.

```
Et qui talem scandalizaverit [...] et and who.Nom such.ACC shock.3<sup>RD</sup>SG.FUT.PRF.ACT and contumeliaverit [...]. (Epiphan. in evang. 61, p.167) insult.3<sup>RD</sup>SG.FUT.PRF.ACT

'And who will have shocked [...] and insulted such a person [...].
```

The presence of the Accusative argument and of the Active morphology leads to hypothesize that this is another case of the usual nominal-based derivation  $\rightarrow \sqrt{-}$  based derivation reanalysis. The lack of other occurrences does not allow for a more precise account.

Querelor 'I complain' has only one Middle and two Active occurrences. The Middle occurrence is present in Arnobius the Younger (V cent. CE) and comes with a prepositional argument introduced by the preposition de 'about, of':

(120)

Ac memorans praeterita bona de malis praesentibus and remembering old.things.ACC good.ACC.PL of evils.ABL of.today quaerelatur. (Arnob. Iun. *in psalm*. 76, 3) complain.3<sup>RD</sup>SG.PRS.ACT 'And, remembering the good things from the previous ages, he complains about the present evils.'

The only two relevant Active occurrences, instead, come from Andreas Agnellus of Ravenna (IX cent. CE)<sup>195</sup>:

<sup>195</sup>There is a late occurrence in Peter Cantor (XII cent. CE), which is beyond the relevant time frame of this work.

(121)

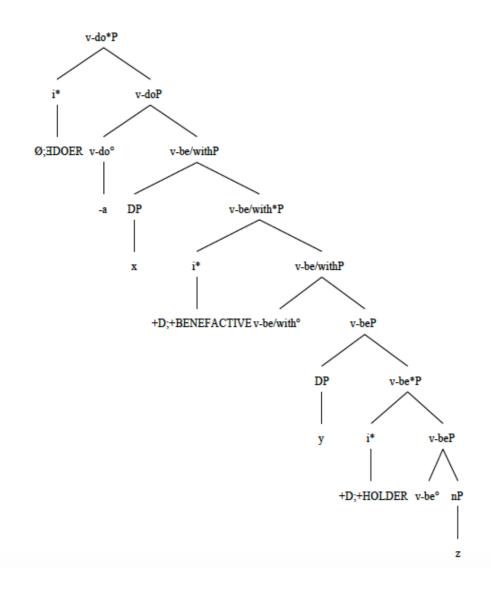
Etiam et super exarchum hunc also and over exarch.ACC this.ACC querelabimus. (Agnell. *liber. pont. (Theod.)* 3, 104) complain.1<sup>ST</sup>PL.FUT.ACT 'And we will also complain about this exarch.'

In this case, it is also possible to hypothesize a nominal  $\rightarrow \sqrt{\text{reanalysis}}$  in which the  $\sqrt{\text{,}}$  merged into the v-doP, inherits and synthesizes the complex bieventive [v-doP [v-be/withP]] meaning. In this case, again, lack of data does not allow for a reliable conclusion.

# 2.3 Possession+Identification denominal/deadjectival deponents

While the other two kinds of denominal/deadjectival deponents involve a single stative event embedded under the v-doP, the Possession+Identification denominal/deadjectival deponents involve, since their first occurrence, a double stative event embedded under the superordinate doing event. Given the fact that there are as many subject argumental positions as there are events present in the structure, these verbs host an obligatory secondary Accusative argument in addition to the Nominative one. The Accusative argument (y) is merged lower in the sentence, and it is the HOLDER of the v-beP in which the verbalized nominal/adjectival element (z) is merged as a complement. The Nominative argument (x), instead, is the BENEFICIARY of the v-be/withP that has the v-beP in the complement position. The BENEFICIARY is contextually identified with the existentially bound DOER introduced by the Middle-marked argument-introducing head merged with the v-doP.

(122)



### 2.3.1 III century BCE - 150 BCE

The Possession+Identification denominal/deadjectival deponents attested in the period going from the III cent. BCE to the first half of the II cent. BCE are 16: ominor 'I foresee' from omen 'omen'; precor 'I pray' from prex 'preach'; stipulor 'I demand on the basis of a formal commitment' from stips 'penalty, monetary insurance'; criminor 'I accuse' from crimen 'accusation'; min(it)or 'I menace' from minis 'menace'; ex(s)ecror 'I curse' from sacer 'cursed'; fabricor 'I build' from fabrica 'workshop of an artisan'; machinor 'I build, plot' from machina 'device'; mercor 'I trade' from merx 'goods'; recordor 'I remember' from cor 'heart'; osculor 'I kiss' from osculum 'little mouth, kiss'; miror 'I wonder, admire' from mirus 'amazed'; rimor 'I split' from rima 'slit'; scrutor 'I search' from scruta 'rag'; sortior 'I distribute' from sors 'part obtained by means of a draw'; and testor 'I call someone as a witness, I testify' from testis

'witness'.

Ominor 'I foresee' and precor 'I pray' are always attested with the Middle form and with an Accusative argument. Precor 'I pray', even if it does not have any relevant Active occurrence, is a peculiar verb, appearing in many different constructions: precor + Dative (or pro + Ablative)  $\rightarrow$  'I pray for the benefit of x';  $precor + Accusative \rightarrow$  'I pray someone' (e.g., a God), or 'I pray in order to have something'; precor + Double Accusative  $\rightarrow$  'I pray someone in order to have something'. The analysis of these different structures and of the ways in which they can be derived will not be addressed here.

Stipulor 'I demand something on the basis of a formal commitment', with respect to *ominor* 'I foresee' and *precor* 'I pray', has a very similar diachronic behavior: the unprefixed verb is never attested with an Active form and can be analyzed as 'I act so that I have something as an insurance'  $\rightarrow$  'I demand something' <sup>196</sup>.

```
Si is stipulatus est id ipsum [...]. (Cic. leg. 2, 53) if he demand.PST.PTCP.NOM.SG is it.ACC same.ACC.SG 'If he demanded that specific thing [...].'
```

The only difference between this verb and the previous ones is that this verb has a prefixed form, *adstipulor*, that has some Active occurrences in Ildefonsus of Toledo (VII cent. CE) and in Paulinus II of Aquileia (*contra Felicem*, 3, 26; VIII cent. CE):

```
Adstipulavi quod dixi. (Ildef. Tol. virg. Mar. p.221, l.1164) confirm.1<sup>st</sup>SG.PRF.ACT what.ACC say.1<sup>st</sup>SG.PRF.ACT 'I confirmed what I said.'
```

The clear meaning shift from 'I act so that I have x as an insurance' to 'I approve, confirm something' and the Active morphology testifies to the fact that the nominal element *stips* 'penalty, monetary insurance' is no longer part of the verbal derivation that is now  $\sqrt{-}$ based. The nominal  $\rightarrow$   $\sqrt{-}$  lexicalization allows for a reanalysis of the verbal meaning that diverges from the meaning of the

<sup>196</sup>There are some cases, mainly in Plautus (e.g., *Cist.* 375), in which the verb does not appear with an Accusative argument. In those cases, the verb means 'to get promises, insurances' and, consequently, it is possible to hypothesize a different and simpler eventive structure in which there is only a v-be/withP: 'I act so that I have insurance (*stips*)'. This verb should then fall within both the Possession and the Possession+Identification classes. This situation is not unexpected.

initial nominal element.

Fabricor 'I build', machinor 'I build, plot', mercor 'I trade', testor 'I testify' and recordor 'I remember' have a similar diachronic behavior. All of these verbs are initially attested only with the Middle morphology and with an Accusative argument, conforming to the Possession+Identification structure in (122):

```
Ii qui signa fabricantur. (Cic. off. 1, 41, 147) they.NOM who.NOM.PL statues.ACC build.3<sup>RD</sup>PL.PRS.MID 'Those who build statues.'

(126)

Quod machiner inveniam-que. (Lucr. 3, 944) that.ACC build.1<sup>ST</sup>SG.SUBJ.PRS.ACT find.1<sup>ST</sup>SG.SUBJ.PRS.ACT 'That I build and find.'
```

Fabricor 'I build' and recordor 'I remember' are the first verbs of this subgroup attested with the Active morphology. They are already attested as Actives in the I cent. BCE. Fabrico 'I build' is present in Ovid, Horace and Vitruvius, while recordo 'I remember' is present in Quadrigarius:

```
Qui organa fabricant. (Vitr. 5, 4)
who.NOM.PL musical.instruments.ACC build.3rdpl.PRS.ACT
'Who build musical instruments.'

(128)

Patria eum recordavit. (Quadr. hist. 55)
homeland.NOM him remember.3rdsG.PRF.ACT
'His homeland remembered him.'
```

The Active occurrence of *recordo* 'I remember' in Quadrigarius comes from the work of Nonius Marcellus (IV-V cent. CE), *de compendiosa doctrina*. The fact that this occurrence comes from a later source may cast some doubt on the actual presence of Active *recordo* 'I remember' in the I cent. BCE. In this century, there are no other occurrences of Active *recordo* 'I remember'. The

next Active occurrence comes from the Ilias Latina, attributed to Baebius Italicus (I cent. CE):

(129)

Hesionae nomen casus-que recordat. (Homer. 626)
Hesion.GEN name.ACC fall.ACC-and remember.3<sup>RD</sup>SG.PRS.ACT
'He remembers Hesion's name and the way she died.'

The analysis of *recordor* 'I remember' should be compared with the analysis of similar non-denominal/deadjectival verbs, such as *reminiscor* 'I remember, *obliviscor* 'I forget' (see Sections 3.4.2 and 3.4.12).

The first Active occurrences of *testor* 'I call as a witness, testify' and *machinor* 'I build' appear in the IV cent. CE, in Maximus of Turin and Lucifer of Cagliari:

(130)

Contestat ergo dominum non sui causam esset testify.3<sup>RD</sup>SG.PRS.ACT then master.ACC non his.GEN fault.ACC be.3<sup>RD</sup>SG.SUBJ.IPFV baptizatum. (Max. Taur. 13b, 21) baptized.ACC.SG 'Consequently, he said that it was not his fault that the master got baptized.'

(131)

Ista qui fuerit machinare that.ACC.SG.F who.NOM.SG be.3<sup>RD</sup>SG.SUBJ.PRF build.INF.PRS molitus. (Lucif. *moriend*. 9, 13) begin.PST.PTCP.NOM.SG 'Who began building that thing.'

Mercor 'I trade', lastly, has its first Active occurrence in the VII cent. CE, in Julian of Toledo:

(132)

Cui simulare mortem vitam mercasse who.dat.sg fake.inf.prs.act death.acc life.acc trade.inf.prf.act probatum est. (Iulian. Tol. *Wamb*. 19, 505) prove.pst.ptcp.acc.sg is

'For whom it has been proved that faking his own death allowed him to trade his own life.'

All of these verbs, except for *testor* 'I, call as a witness, I testify', retain their initial meaning. *Testor*, instead, acquires a new and partially different meaning. Its meaning is no longer related to the noun *testis* 'witness' and evolves into a saying verb with a specific nuance: it expresses the fact that the reported speaker strongly believes in his words, similarly to En. *to swear*. The reanalysis of the nominal-based derivation of *testor* 'I call as a witness, testify' into the  $\sqrt{-based}$  derivation of (con/ad)testo 'I swear' allows for the reanalysis of the general meaning of the verb.

Criminor 'I accuse', min(it)or 'I menace', ex(s)ecror 'I curse', rimor 'I split, search', scrutor 'I search' and miror 'I wonder, admire' show the same pattern of Active/Middle occurrences: all of these verbs are attested as Actives already in the III-II cent. BCE.

```
(133)
     Erum
                  ut
                        servos
                                       criminaret
                                                                   apud
     master.ACC that servants.NOM accuse.3<sup>RD</sup>SG.SUBJ.IPFV.ACT at
     erum. (Plaut. Pseud. 491)
     master.ACC
     'That the slave started denouncing his master to his master.'
(134)
     Cum incultos
                          pervestigians
                                                     rimarem
     while wild.ACC.PL explore.PRS.PTCP.NOM.SG search.1<sup>ST</sup>SG.SUBJ.IPFV.ACT
     sinus. (Pacuv. trag. 71)
     bays.ACC
     'While, exploring, I was wandering through the wild bays.'
(135)
     Mirum
                          facies,
                                                fatue.
                                                          si stud
                                                                       nimium
     wonderful.ACC.SG make.2<sup>ND</sup>SG.FUT.ACT fool.voc if this.ACC too.much
     mirabis
                             diu. (Pomp. Atell. 108)
     admire.2<sup>ND</sup>SG.FUT.ACT long
     'Oh fool, if you admire this for too long, you will make it wonderful.'
```

In the same period, however, the same verbs are attested as Middles<sup>197</sup>. The general meaning of the two variants is the same:

<sup>197</sup>*Rimor* 'I split, search' is consistently attested as Middle from the I cent. BCE on. In the III-II cent. BCE there is only one clear occurrence of a Middle form, in Ennius (*ann.* 11, 366).

```
(136)
      Hanc
                  metui.
                                                       criminaretur
                                       ne
                                             me
      this.ACC.F fear. 1<sup>ST</sup>SG.PRF.ACT that me.ACC accuse. 3<sup>RD</sup>SG.SUBJ.IPFV.MID
      tibi. (Ter. Eun. 854)
      you.DAT
     'I feared that, that he could denounce me to you.'
(137)
      Loca
                   rimatur. (Ov. trist. 5, 14, 31)
      places.ACC search.3<sup>RD</sup>SG.PRS.MID
     'He explores the places.'
(138)
              illud
      Nam
                         animus
                                                      miratur. (Plaut. Bacch. 528)
                                      meus
      indeed that.ACC spirit.NOM mine.NOM.SG admire.3<sup>RD</sup>SG.PRS.MID
```

It is important to note that the rate between Actives and Middles is not always the same. *Criminor* 'I accuse', for example, has 4 occurrences in the III-II cent. BCE. Of these 4 occurrences, 3 are Actives and 1 is Middle. However, in the Classical age, from Livy on, this verb is always attested as Middle. The next Active occurrence is attested in Arnobius the Younger (V cent. CE), a Late Latin Christian author:

```
Si quorundam caecum criminamus if someone.GEN.PL blind.ACC.SG accuse.1<sup>ST</sup>PL.PRS.ACT errorem [...]. (Arnob. Iun. Confl. 2, 16, 1.1162) mistake.ACC

'If we accuse the blind mistake of someone [...].'
```

Min(it)or 'I menace', ex(s)ecror 'I curse', rimor 'I split, search' and scrutor 'I search' behave in a slightly different way. The Early Active occurrences (one or two per verb) come from Late Latin authors quoting passages from Early Latin authors. The other coeval Early Latin occurrences always have the Middle morphology. This leads to a possible differentiation between criminor 'I accuse' and the other verbs: while criminor 'I accuse', with a fair level of certainty, is Active in Early Latin, the picture is not clear for other verbs. In each case, however, just as for criminor 'I accuse', each verb presents Active occurrences in Late Latin, if not before, such as rimor 'I split,

search', which is attested as Active in the *Ilias Latina* and in Phaedrus (Phaedr. 3, 10, 47; I cent. CE)<sup>198</sup>:

(140)

Undique rimabant inimico corpora ferro. (Homer. 454) from.everywhere split.3<sup>RD</sup>PL.IPFV.ACT hostile.ABL.SG bodies.ACC iron.ABL 'The enemies tore apart bodies with their swords everywhere.' (lit. 'with their hostile swords')

Minitor 'I menace' is attested as Active in Ambrose of Milan (IV cent. CE):

(141)

Minitabat Esau quod post obitum patris fratrem menace.3<sup>RD</sup>SG.IPFV.ACT Esau.NOM that after death.ACC father.GEN brother.ACC occideret. (Ambr. *Iac.* 2, 4, 14)

 $kill.3^{\text{RD}}\text{SG.SUBJ.IPFV.ACT}$ 

'After his father died, Esau threatened to kill his brother.'

Ex(s)ecror 'I curse' is attested as Active in Petrus Chrysologus (IV-V cent. CE):

(142)

Intelligentiam insipientium execravit. (Petr. Chrys. *serm*. 113, 23) cleverness.ACC ingnorants.GEN curse.3<sup>RD</sup>SG.PRF.ACT 'He cursed the cleverness of the ignorants.'

Scrutor 'I search' is attested as Active in Aponius (V cent. CE):

(143)

Omnia scrutavit cor meum. (Apon. 1, 558) everithing.ACC search.3<sup>RD</sup>SG.PRF.ACT heart.NOM my.ACC.SG 'My heart analyzed everything.'

The Late Latin analysis, in all these cases, is the same. The nominal element is reanalyzed as a

<sup>198</sup>It is also Active in Gregory of Tours, in Gregory the Great and in many other authors

verbal  $\sqrt{\ }$ . The verbal  $\sqrt{\ }$ , detached from the meaning of the initial nominal/adjectival element, is compatible with a direct conflation into the v-do°. The lack of the obligatory projection of the internal v-be/withP, that was previously obligatorily present, is connected with the loss of the Middle morphology (i.e., as the reanalysis of the controlled change of state  $\sqrt{\ }$ s as activity  $\sqrt{\ }$ s). This follows from the fact that a language without the Middle morphology is not allowed to have  $\sqrt{\ }$ s that are only interpretable in a self-benefactive structure, as underlined previously (Part I, Section 4). I develop this idea further in Section 3.5.

*Miror* 'I admire', finally, has an additional characteristic. All the Active occurrences of this verb, in addition to the one already presented in (135), have the prefix *ad*-:

```
Admirabam quod erat (Greg. T. franc. 7, 22) admire.1<sup>ST</sup>PL.IPFV.ACT what.ACC was.3<sup>RD</sup>SG.IPFV.ACT 'I admired what it was.'
```

The only unprefixed Active occurrence presents an overt *se* 'self' pronoun marking the BENEFACTIVE argument:

```
Cum secum visionem miraret [...]. (Ursin. Locog. Passio St. Leod. 26, 7) when self.with vision.ACC admire.3<sup>RD</sup>SG.SUBJ.IPFV.ACT 'When he admired by himself the vision [...].'
```

In this case, there has been a lexical differentiation. The unprefixed form is still bound to appear with a BENEFACTIVE argument, whether that argument be an overt *se* 'self' pronoun or marked by the presence of the Middle morphology, while the prefixed form (*admiro* 'I admire') loses this constraint. In both cases, however, the benefactive constraint is lost in all the Romance derivations of these two lexical items (e.g., It. *ammirare* 'to admire', Sp. *mirar* 'to look, to watch').

If the Late Latin occurrences are quite straightforward, given the consistency of the attestations, the Early Latin Active occurrences presented previously are more troublesome. Such a peculiar pattern, with the Active occurrences coming up in the III-II cent. BCE, disappearing in Classical Latin, and reappearing in Late Latin in not expected. A possible analysis could take into consideration the notion of *latino sommerso* ('submerged Latin') proposed by Prosdocimi (1978, 1981, 2004). The Latin sources that it is still possible to observe are one small part of the entire

Latin written production. Moreover, the written production, the only testimony that we have, is a small part of the entire Latin production. There were, clearly, many different oral registers and social, diatopic and diastratic differentiations that are now completely lost. Prosdocimi's notion of latino sommerso refers to these lost varieties. These lost varieties have to be stipulated, since Latin was no different from a contemporary natural language. Prosdocimi identifies many Romance elements that cannot be explained, starting from the Classical Latin elements. In order to explain their existence, one has to posit a "submerged" ancestor (see Prosdocimi 1978, 1991, 2004). The existence of these varieties could explain the peculiar behavior of these verbs in the III-II cent. BCE. In examining the kinds of authors in which these Active forms are present, it is of note that Plautus, Pacuvius, Pomponius and Publilius Syrus are all related to theatre. Plautus is the most important author (with Terence) of fabulae palliatae, a specific kind of comic representation whose name comes from *pallium*, the Latin name of a Greek-style cloak. Pomponius is the author of many atellanae (atellan farces), farcical comedies with ridiculous and stereotyped characters whose name comes from the Oscan city of Atella. Publilius Syrus is the author of many sententiae (short sentences, usually quotations or mottos) and mimes, trivial comic representations. Pacuvius, being a dramatist, is the only author who did not pen comedies or comic representations. One of the main characteristics of Latin comic theatre is the use of low linguistic registers and different peripheral Latin varieties. In these kinds of works, then, it is possible to identify some of the various submerged variants of Latin that were undoubtedly present. The written records of the subsequent centuries, instead, are mainly high-style literary works, such as epic and didactic poems, odes, public speeches and histories. The fact that it is possible to find Active variants in III-II cent. BCE comic representation and not in the stylistically higher subsequent works is not unexpected, then: the examples in (133)-(135) may be emergences of the submerged variants of Latin, in which these verbs have already been reanalyzed.

#### 2.3.2 II cent. BCE

The first occurrence of only one relevant Possession+Identification deadjectival deponent was found in the II cent. BCE: *mutuor* 'borrow' from *mutuus* 'borrowed'.

*Mutuor* 'I borrow' occurs with the Active morphology in the IV cent. CE:

(146)

Subtilitatem enim ab Academia mutuatur. (Cic. *fat.* 3) wit.ACC in.fact from Academy.ABL borrow.3<sup>RD</sup>SG.PRS.MID

'In fact, he borrows his wit from the Academy'

(147)

Ne quis nos putet ex illius fontibus so.that.not someone.NOM us.ACC think.3<sup>RD</sup>SG.SUBJ.PRS.ACT from his sources.ABL mutuasse quae dicimus. (Hier. *in Is.* 5, 18, 2) borrow.INF.PRF.ACT what.ACC.PL say.1<sup>ST</sup>PL.PRS.ACT 'So that someone does dot think that we borrowed the things we say from his sources.'

The usual reanalysis from an adjectival based derivation to a  $\sqrt{}$  based one also occurs in this case.

### 2.3.3 I cent. BCE

In the I cent. BCE, 3 relevant Possession+Identification denominal deponents: were found *causor* 'I provide something as an excuse' from *causa* 'reason, motivation'; *lucror* 'I earn' from *lucrum* 'income'; and *modulor* 'I moderate' from *modulus* 'module, rhythm'.

Causor 'I provide something as an excuse' does not appear with the Active morphology until the VII cent. CE, in Ildefonsus of Toledo (*de virg. Mariae*, 150, 54). While these Active occurrences are too late to be considered here, the second Active occurrence, from Alain de Lille (XI-XII cent. CE), is interesting, because it presents a completely shifted meaning: not 'I provide something as an excuse' but 'I cause something':

```
Causaverunt dii celum et terram. (Alan. Lill. summ. 1, 2, 2, 58) cause.3<sup>RD</sup>PL.PRF.ACT gods.NOM sky.ACC and earth.ACC
```

Lucror 'I earn' and modulor 'I moderate', instead, present some Active causative occurrences since the V cent. CE:

```
Poenam suam lucraverat. (Aug. epist. 108, 34.2, 4) punishment.ACC his.ACC.SG earn.3<sup>RD</sup>SG.PPRF.ACT 'He earned his own punishment.'
```

'The gods created the sky and the earth.'

(150)

Mens [...] dei modulavit [...] continentiam mind.NOM God.GEN moderate.3<sup>RD</sup>SG.PRF.ACT moderation.ACC corporis. (Chalc. *comm*. 2, 304) body.GEN 'God's mind modulated the moderation of the body.'

In this case, the usual diachronic reanalysis causes the denominal derivation to be reinterpreted as a  $\sqrt{\ }$ -based derivation. In both cases it is possible to hypothesize that the nominal-based  $\rightarrow \sqrt{\ }$ -based reanalysis happens much before these occurrences. The initial Possession+Identification denominal derivation is reinterpreted as a Benefactive  $\sqrt{\ }$ -based derivation, in which the Middle marks the presence of a BENEFACTIVE argument. The loss of the Middle morphology, finally, causes the loss of the possibility of having  $\sqrt{\ }$ s that are only interpretable in a self-benefactive derivation. Consequently, each of the previously self-benefactive  $\sqrt{\ }$ s also begin to appear without the benefactive phrase, as the proposed examples show, entering into a standard benefactive/active alternation.

#### 2.3.4 I cent. CE

In the I cent. CE, a single verb belonging to the Possession+Identification type was found: *imaginor* 'I imagine' from *imago* 'image'. The meaning of this verb is initially 'x behaves in such a way that x has y as an image'. It consequently always occurs with an Accusative argument and with the Middle morphology.

(151)

Quibus avaritia falso laeta divitias imaginatur. (Sen. *dial.* 2, 6, 7) which.ABL.PL greed.NOM falsely happy riches.ACC imagine.3<sup>RD</sup>SG.PRS.MID 'With which the happy greed thinks she will earn riches.'

In Aulus Gellius the same verb has an Active occurrence:

(152)

Speculum in loco certo positum nihil mirror.NOM in place.ABL specific.ABL.SG placed.ACC.SG nothing

```
imaginet. (Gell. 16, 18, 3)
reflect.3<sup>RD</sup>SG.PRS.ACT
'A mirror, placed in a specific place, does not reflect any image.'
```

In this case, the meaning of the verb is 'to provide something as an image'. The structure is causative, the subject of the lower stative phrase is, in this case, *nihil* 'nothing'. The benefactive reading is absent because this event does not involve any kind of possession of the stative phrase by the Nominative argument, which is directly merged in the DOER position.

The other occurrences of this verb are always marked by the Middle morphology until Isidore of Seville, when an Active occurrence appears:

```
Priora mala [...] imaginamus. (Isid. sent. 3, 6, 11-12) previous.ACC.PL bad.things.ACC imagine.1<sup>st</sup>PL.PRS.ACT 'We recollect in our minds the bad things from our past.'
```

In this case, the meaning of the verb is similar to the one proposed for the denominal deponent in (151). An analysis in line with the one proposed for Gellio's occurrence would not be adequate here. Isidore, in his works, uses the Middle form *imaginor* 'I imagine' many times:

```
Imaginamur ea quae per corpum imagine.1<sup>ST</sup>PL.PRS.MID that.ACC.PL which.ACC.PL through body.ACC sentimus. (Isid. etym. 7, 8, 38) feel.1<sup>ST</sup>PL.PRS.MID

'We recollect in our minds those things we feel by means of our body.'
```

The initial denominal derivation is lost, in favor of a  $\sqrt{-}$ based one. The subsequent loss of the Middle morphology causes the appearance of the Active occurrences, since the class of the self-benefactive  $\sqrt{s}$  disappears. It is relevant to note that in one of the Middle occurrences he uses the Middle and the pronominal element se 'self' together:

```
Somnia quae cogitans animus sibi imaginatur. (Isid. sent. 3, 6, 10b)
```

dreams.ACC which.ACC.PL thinking spirit self.DAT imagine.3<sup>RD</sup>SG.PRS.ACT 'The dreams that our soul, thinking, imagines.'

The co-occurrence of an overt reflexive pronominal element in the BENEFACTIVE position and the Middle morphology should not be allowed, given that they both perform the same function: to link the BENEFACTIVE and the DOER. Importantly, however, this occurrence does not involve an overt BENEFACTIVE pronoun whose reference is disjunct from the reference of the DOER; the Latin se 'self' pronoun is an anaphor and is bound by the DOER itself. In this case, there is no referential clash between the internal overt pronoun and the BENEFACTIVE-DOER; this is a case in which the benefactivity of the structure is doubly marked. This double-marking further supports the hypothesis that the Middle morphology has already been lost at this stage. In other words, the Middle morphology is not transparent anymore; it is a residue. The author, then, to create a benefactive structure, uses the se 'self' pronoun. The Middle morphology is still present only because of a grammatical bias, in other words, meaning that Isidore has been taught to use it with this verb.

Gregory the Great also uses a similar construction marked by the se 'self' element:

```
Ita sibi saepius imaginata praesentia so self.DAT often imagine.PST.PTCP.F.SG.NOM presence.NOM mens [...]. (Greg. M. epist. 11, 44, 4)
```

(156)

mind.NOM

'Our mind, having often remembered (your) presence, [...].'

The difference here is that the verb is a past participle. The participle construction is headed by the DP *praesentia* 'presence', with which the participle agrees in case, number and gender (even if *mens* 'mind', the subject of the superordinated sentence, also has the same set of features)<sup>199</sup>. From this single occurrence the relevant conclusion is that Gregory, in this case, uses the overt *se* 'self' pronoun to mark the BENEFACTIVE argument, just as Isidore did in (155).

The Possession+Identification denominal/deadjectival deponents which first occur as such no longer appear after this point. In the following centuries there are only new Possession deponents or Identification deponents, and no new Possession+Identification deponents.

<sup>199</sup>It is not an occurrence of absolute participle: *sibi*, which is part of the participle construction, refers to the DP *mens* 'mind', which is external to the participial structure.

# 2.4 The diachronic data from the denominal/deadjectival deponents

The denominal/deadjectival deponents may follow different diachronic paths. In this section, I present the diachronic changes that are not related to the general loss of the Middle morphology in Latin. I will analyze the diachronic changes that depend on the loss of the Middle morphology only after the analysis of the non-denominal/deadjectival deponents, since they are affected by those changes as well.

#### 2.4.1 Causativization

Some denominal/deadjectival deponents acquire, diachronically, the possibility of creating an Active causative structure. Given the premises provided previously, this is expected. Denominal/deadjectival deponents are lexically constrained reflexives (DOER and HOLDER/POSSESSOR are always referentially linked). When this lexical constraint is lost, the same denominal/deadjectival structure acquires the possibility of being construed with two referentially disjunct arguments.

- <u>Identification</u>: *ancillor* 'I serve' from *ancilla* 'servant'; *circulor* 'I speak in circles' from *circulus* 'circle'; *famulor* 'I serve' from *famulus* 'servant'; *gratificor* 'I please' from *gratus* 'grateful'; *iucundor* 'I rejoice' from *iucundus* 'joyful'; *odoror* 'I smell' from *odor* 'smell'; *tristor* 'I become sad' from *tristis* 'sad'; and *vicinor* 'I come closer' from *vicinus* 'next'.
- <u>Possession</u>: tumultuor 'I fidget' from tumultus 'turmoil'; pabulor 'I gaze' from pabulum 'pasture', radicor 'I root' from radix 'root'; cibor 'I get food' from cibus 'food'; praemior 'I get a prize' from praemium 'prize'; and odoror 'I analyze something smelling it' from odor 'smell'.
- Possession+Identification: imaginor 'I imagine' from imago 'image'.

From a syntactic point of view, these verbs do not undergo any relevant change. The presence of denominal/deadjectival verbs that alternate between a causative and an autocausative/reflexive structure is fully expected. The only shift that these verbs undergo is a re-categorization from the class of reflexive-constrained verbs into the class of non reflexive-constrained verbs. The speaker enlarges the number of matchings between the specific denominal/deadjectival verbs and the syntactic structures in which they can be present, adding the causative structure to the mix. This specific change is not related to the loss of the Middle morphology.

The causative Identification derivation derives the eventive meaning 'x acts in such a way that y is aP/nP'. The causative Possession derivation, instead, derives a 'providing' eventive meaning: 'x acts in such a way that y has aP/nP'. The Possession+Identification deponents behave in a different way. In these cases, the lexical-encyclopedic constraint on the interpretation of the verbalized nominal is the fact that there must always be a v-be/withP embedding the stative phrase in which the nominal/adjectival element is present. The loss of this constraint leads to the possibility of projecting a causative derivation with only two arguments, avoiding the projection of the benefactive phrase. The meaning of this derivation has to be different from the meaning of the previous Possession+Identification derivation, given that an eventive phrase is absent. I have been able to find only one case, *imaginor* 'I imagine' in (152), in which the meaning of the derivation is 'x creates an image of something' and not 'x imagines something'. In all the other cases in which the benefactive phrase is lost (e.g., *lucror* 'I earn' from *lucrum* 'income'), the Possession+Identification meaning is maintained, meaning that something else happened. I present these cases in the next section.

### 2.4.2 The lexicalization of the nominal/adjectival element

In this section, I list all the cases in which the denominal/deadjectival verbs lose the denominal/deadjectival part and become  $\sqrt{-}$ based verbs. This diachronic reanalysis is evident in both the Identification and the Possession classes.

- Identification (9): poetor 'I poetize', from poeta 'poet'; blandior 'I seduce' from blandus 'seductive'; manducor 'I chew, I eat', from manducus 'glutton'; dominor 'I rule' from dominus 'master'; vilicor 'I farm' from vilicus 'farmer'; peregrinor 'I wander' from peregrinus 'wanderer'; tristor 'I become sad' from tristis 'sad'; principor 'I rule' from princeps 'chief'; and malignor 'I act with a bad attitude toward someone/thing' from malignus 'bad'.
  - Verbs in which the denominal/deadjectival stage is not fully attested (5): aemulor 'I imitate/compete' from aemulus 'imitator'; arbitror 'I observe, I think' from arbiter 'observer, judge'; interpretor 'I explain' from interpres 'mediator'; and largior 'I donate' from largus 'generous'.
  - Verbs with the Active-Middle-Active pattern (3)<sup>200</sup>: auspicor 'I take the auspices', from

<sup>200</sup>These verbs are firstly attested as Actives, then as Middle denominal/deadjectivals and finally, again, as Actives. I linked this behavior to the notion of *latino sommerso* (submerged Latin) proposed by Aldo Luigi Prosdocimi (Sections 3.3 and 3.5).

auspex 'auspice'; pigr(it)or 'I act as a lazy person', from piger 'lazy'; and vagor 'I wander', from vagus 'rambling'.

- Possession (12): insidior 'I ambush' from insidiae 'ambush'; piscor 'I fish' from piscis 'fish'; argutor 'I chatter' from argutiae 'quip'; ioc(ul)or 'I joke, I play' from iocus 'joke'; praedor 'I plunder' from praeda 'plunder'; tumultuor 'I fidget' from tumultus 'turmoil'; epulor 'I organize a feast' from epulum 'feast'; negotior 'I trade' from negotium 'trade, occupation'; nundinor 'I trade' from nundinae 'trading days'; meridior 'I take a break' from meridies 'midday'; modificor 'I moderate' from modus 'measure, rhythm'; fornicor 'I fornicate' from fornix 'female reproductive organ, whoredom'; and querel(l)or 'I complain' from querel(l)a 'complaint'.
  - Verbs in which the denominal/deadjectival stage is not fully attested (1): medicor 'I cure' from medicus 'medicine'.
  - <u>Verbs with the Active-Middle-Active pattern (3)</u>: *rixor* 'I fight' from *rixa* 'fight'; *urinor* 'I dive' from *urina* 'water'; and *vociferor* 'I gaggle/talk' from *vox* 'voice'.

In all these cases, a lexicalization process leads the nominal element to be reinterpreted as a  $\sqrt{}$  element. In the Identification and the Possession cases, the consequence of this lexicalization is the possibility of merging a direct Accusative argument in the complement position of the v-beP or of the v-be/withP. This step is attested for many denominal/deadjectival deponents.

Initially, the Identification and Possession denominal/deadjectival deponents involve a secondary Oblique DP/PP in their structures:

(157)

Tuus apparitor de aratorum bonis your.NOM understrapper.NOM from farmers.GEN goods.ABL praedabitur. (Cic. *Verr.* 2, 3, 182) plunder.3<sup>RD</sup>SG.FUT.MID 'Your understrapper will plunder from the goods of the farmers.'

Subsequently, instead, they start showing a direct Accusative argument.

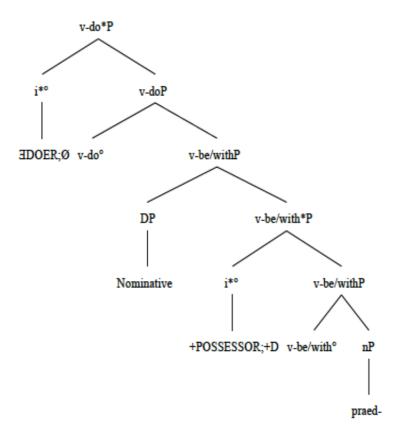
(158)

Flamma praedatur dapes (Sen. *Oed.* 557) flame.NOM plunder.3<sup>RD</sup>SG.PRS.MID food.ACC.PL

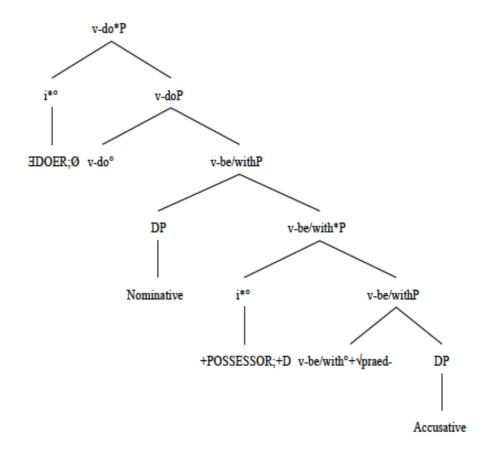
'The flame steals the food.'

The subsequent structures exemplify the process:

(159)



(160)



In the first structure, there is no syntactic space in the complement position of the v-beP. In fact, the only possible secondary arguments are introduced by prepositions such as de 'from', that do not introduce the actual element that the Nominative argument plunders/hunts, but the general entity from which it gains the *praedam* 'plunder', which is the actual complement of the stative phrase. In the second structure, instead, the nominal element is absent and the formative of the verb is a  $\sqrt{\sqrt{\text{praed-}}}$  that is conflated into the stative possessive head. This allows for the merging of a DP in the complement position of the v-be/withP. The DP, in this case, is the actual element that represents the *praeda* 'plunder'; it substitutes for the nominal element *praeda* 'plunder' of the preceding derivation. This argument, merged in the complement of the state position, is unmarked and gains dependent Accusative case. This second derivation is exactly the same as was proposed for the controlled change of state non-denominal/deadjectival deponents in the first part (Part I, Section 3.4.3). The denominal/deadjectival deponents, then, end up in the same class of non-denominal/deadjectival verbs like *fungor* 'I fulfill, I accomplish'.

It is of note that in some cases the denominal/deadjectival verb is on the verge of lexicalization

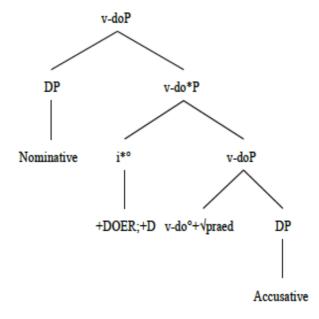
since its first occurrences. Clear examples are *aemulor* 'I imitate' and *medicor* 'I cure'. The key point is that all these verbs have their first occurrences in the III-II cent. BCE, while all the denominal/deadjectivals that appear in the I cent. BCE or in the subsequent centuries conform to the proposed lexicalization path. A possible hypothesis is that, in this case, we are observing only a select time frame of their occurrences, meaning the initial stages belong to a previous period for which we do not have data.

Many of these verbs undergo a further reanalysis, with the  $\sqrt{}$  of these verbs being reanalyzed as an activity  $\sqrt{}$ , directly conflated into the v-do $^{\circ}$ .

(161)

Adtuli ea quae praedavit bring.1stsg.prf.act that.acc.pl.n which.acc.pl.n plunder.3rdsg.prf.act populus (Lucif. reg. apost. 2, 43) people.nom

'I brought those things that the people plundered.'



This further reanalysis is an upward reduction of the structure (Roberts and Roussou 2003). The derivation in which these  $\sqrt{s}$  are involved loses the stative part and, consequently, the Middle marking. This diachronic change, as already underlined, is related to the loss of the Middle morphology and involves the entire class of the non-denominal/deadjectival controlled change of state verbs. I will further discuss the consequences of the loss of the Middle morphology in the final section, after the analysis of the non-denominal/deadjectival deponents.

The case of the Possession+Identification deponents is somewhat different. In this case, the Accusative argument is the subject of a v-beP phrase, while the Nominative argument is the subject of a v-be/withP, contextually identified with an existentially bound DOER. The Accusative argument, then, is already there in the denominal/deadjectival structure, and its presence does not tell us anything about a possible reanalysis of the nominal/adjectival element as a  $\sqrt{}$ . Many Possession+Identification deponents, however, are finally reanalyzed as activity verbs or as causative verbs which have the same meaning of the previous Possession+Identification denominal/deadjectival derivation<sup>201</sup>. In both cases, the Middle morphology is absent. Following is a list of these verbs:

- Possession+Identification (10): stipulor 'I demand something on the basis of a formal commitment' from stips 'penalty, monetary insurance' (only prefixed: adstipulor); fabricor 'I build' from fabrica 'workshop of an artisan'; machinor 'I build, plot', from machina 'device'; mercor 'I trade' from merx 'trading goods'; testor 'I testify' from testis 'witness'; recordor 'I remember' from cor 'heart'; odoror 'I analyze something smelling it' from odor 'smell'; lucror 'I earn' from lucrum 'income'; modulor 'I moderate' from modulus 'module, rhythm'; and imaginor 'I imagine' from imago 'image'.
  - Verbs with the Active-Middle-Active pattern (6): criminor 'I accuse', from crimen 'accusation'; min(it)or 'I menace' from minis 'menace'; ex(s)ecror 'I curse' from sacer 'sacred, outcast'; rimor 'I split, search' from rima 'fissure'; scrutor 'I search' from scruta 'garbage, rags'; and miror 'I wonder, admire' from mirus 'wonderful'.

Given that the benefactive non-denominal/deadjectival deponents also go through the same diachronic change, and that this change is related to the loss of the Middle morphology (as the reduction of the controlled change of state deponents just presented), I analyze them after the non-denominal/deadjectivals (see Section 3.5).

### 2.4.3 Middle-marked → SE-marked / Labile derivations

In some cases a substitution/cooccurrence of the Middle morphology with the *se* 'self' pronoun or with the Labile option was observed.

<sup>201</sup>This diachronic change is then different from the pure causativization of *imaginor* 'I imagine' observed in the previous section. In that case, the denominal derivation was preserved, and the meaning of the causative structure was 'x acts in such a way that y is an image'  $\rightarrow$  'x provides an image of y'. The active causative of *lucror* 'I earn', instead, does not mean 'x acts in such a way that y is an income'  $\rightarrow$  'x makes y an income'; it still means 'x earns y'. This means that the idea that the income comes in favor of the Nominative argument is still preserved.

Following is a list of the denominal/deadjectival deponents for which the *se* 'self' pronoun occurred as a marker of the coreference between the external (DOER or UNDERGOER<sup>202</sup>) and the internal argument (BENEFACTIVE, POSSESSOR, HOLDER). All of these verbs, before the occurrences listed in this section, appear only with the Middle morphology<sup>203</sup>.

- <u>Identification (1)</u>: gratulor 'I rejoice' from gratus 'joyful'<sup>204</sup>.
- <u>Possession (3)</u>: radicor 'I root' from radix 'root'; cibor 'I get food' from cibus 'food'; and geniculor 'I kneel' from geniculus 'knee'.
- <u>Possession+Identification (3)</u>: *imaginor* 'I imagine' from *imago* 'image'; *mutuor* 'I borrow' from *mutuus* 'borrowed'; and *miror* 'I admire' from *mirus* 'wonderful'.

These are two examples of these structures:

```
(162)
```

```
Postquam Herculem tela defecerint se after Hercules.ACC arrows.NOM destroy.3<sup>RD</sup>PL.SUBJ.PRF.ACT self ingeniculasse. (Hyg. astr. 2, 6) kneel.inf.PRF.ACT 'And after the arrows destroyed Hercules, he kneeled.'
```

(163)

```
Se in illis abluit et cibavit. (Paol. Nol. epist. 23, 31) self in those.ABL wash.3<sup>RD</sup>SG.PRF.ACT and feed.3<sup>RD</sup>SG.PRF.ACT 'He washed and fed himself in those.'
```

These two verbs maintain the change of state event structure and include a final state ('to be on one's knees/to have food'). The *se* 'self' element intervenes as a substitute of the Middle morphology. In other words, in these cases, the structure is maintained; the only change is how the "one argument two roles" situation is realized.

Radicor 'I root' and geniculor 'I kneel' present Labile occurrences, in which the internal argument directly moves to the external argument position. These two verbs are the only ones, within the denominal/deadjectival deponents, which present labile occurrences. Both verbs, in their

<sup>2020</sup>nly in the case of radicor 'I root'.

<sup>203</sup>Only *cibor* 'I get food' occurs previously with the Active morphology, but in those structures, the eventive meaning is causative (see Section 2.4.1 for the causative/deponent cohabitation).

<sup>204</sup>The case of gratulor 'I rejoice' is dubious; see Section 2.1.1.

Labile options, derive change of state structure in which the higher dynamic head is a v-go°. They follow the diachronic change that also includes the non-denominal/deadjectival uncontrolled change of state deponents, as I will show in Section 3.5.

It is relevant to note that the Identification and Possession deponents that present SE-marked occurrences do not present occurrences in which they are merged in an activity or causative predicate. They always maintain their change of state event structure. The three Possession+Identification deponents, on the other hand, also present occurrences with a causative or activity eventive structure (see the previous section). The presence of a  $\sqrt{\phantom{0}}$  both in an activity/causative predicate and in a benefactive one is obligatory when the benefactive alternant is marked with the SE pronoun (see Part I, Section 4 and Section 3.5).

### 2.4.4 No change

Many denominal/deadjectivals undergo no change change in their argument structure. It is possible to find this kind of verb in each of the previously presented categories:

- Identification (26): bacchor 'I rave' from baccha 'bacchante'; columbor 'I kiss like a pigeon, I smooch' from columbus 'pigeon'; philosophor 'I philosophize' from philosophus 'philosopher'; velitor 'I skirmish' from veles 'veles'; auxilior 'I help' from auxilium 'help'; aeditumor 'I guard' from aeditumus 'ward of temple'; iuvenor 'I act like a boy' from iuvenis 'boy'; lenocinor 'I seduce' from leno 'pimp'; moechor 'I commit adultery' from moecha 'adultress'; rusticor 'I live in the countryside' from rusticus 'person from the countryside'; cocionor 'I sell' from cocio 'matchmaker'; cornicor 'I croak' from cornix 'crow'; nepotor 'I squander' from nepos 'waster'; galaticor 'I behave like a Galatian' from Galaticus 'Galatian'; graculor 'I act like a crow' from gracula 'crow'; pugilor 'I behave like a boxer' from pugil 'boxer'; rhetoricor 'I act like a rhetor' from rhetoricus 'rhetoric'; virginor 'I act like a virgin' from virgo 'virgin'; acedior 'I get bothered' from acedia 'sloth'; agricolor 'I farm' from agricola 'farmer'; benignor 'I enjoy' from benignus 'benignant'; (in)humanor 'I incarnate' from humanus 'human'; latruncolor 'I steal' from latrunculus 'thief'; maeretricor 'I prostitute myself' from maeretrix 'prostitute'; and verbosor 'I act like a wordy person' from verbusus 'wordy'.
- Possession (17): nugor 'I joke' from nugae 'jokes'; scortor 'I frequent prostitutes' from scortum 'prostitute'; stipendior 'I receive a salary' from stipendium 'salary'; verecundor 'I feel ashamed' from verecundia 'shame'; vitulor 'I rejoice' from Vitula, the goddess of happiness; aquor 'I fetch water' from aqua 'water'; glorior 'I glorify myself' from gloria

'glory'; peculor 'I steal' from peculium 'money'; stomachor 'I become irritated' from stomachus 'irritability'; manuor 'I steal' from manus 'hand'; latibulor 'I hide' from latibulum 'hideout'; spatior 'I wander' from spatium 'space'; gesticulor 'I gesticulate' from gestus 'gesture'; libidinor 'I get pleasures' from libido 'pleasure; prooemior 'I open/begin' from prooemium 'opening part'; crapulor 'I get drunk' from crapula 'drunkenness'; and solacior 'I get relief' from solacium 'relief'.

• <u>Possession+Identification (2)</u>: *ominor* 'I foresee' from *omen* 'omen'; and *precor* 'I pray' from *prex* 'preach'.

Most of these verbs have very few occurrences, sometimes fewer than ten or even five. The lack of a diachronic change, given the exiguity of the occurrences, is not unexpected: in many cases, these verbs are created by a specific author for expressive reasons and disappear with the author itself or in a few decades (e.g., *philosophor* 'I philosophize' or *crapulor* 'I get drunk'). Of this group, only two verbs are still consistently attested in the Romance languages: *gesticulor* 'I gesticulate' (It. *gesticolare*) and, more importantly, *precor* 'I pray' (It. *pregare*). It. *gesticolare* is attested in the XVII cent. CE and is a direct calque of the Latin verb *gesticulor* 'I gesticulate'; given this, it is not relevant. It. *prego* 'I pray', instead, is historically derived from Lat. *precor* 'I pray'. Lat. *precor* 'I pray', moreover, is not a marginal verb, but is frequent and relevant. Only with respect to *precor* 'I pray', then, is the absence of Active occurrences not expected. A more precise analysis of this verb may uncover its peculiarities.

# 3. Non-denominal/deadjectival deponents, diachronically

The analysis of the denominal/deadjectival deponents focused both on the different periods in which each verb is firstly attested and on their semantic-syntactic characteristics (Identification, Possession, Possession+Identification). This subdivision is not possible for the non-denominal/deadjectival deponents: they are all already present since the beginning of the Latin literature, with their first occurrences dating from the XII Tables to the first half of the II cent. BCE and not beyond. Given this difference, I organize this section following the semantic-syntactic subdivisions presented in the first part (Section 3.4.3), setting aside the subdivision based on the period of first occurrence.

Two methodological notes. First, I do not deal, in this section, with the alternating non-denominal/deadjectival deponents, meaning the verbs which are consistently attested both with the Active and the Middle morphology in Early and Classical Latin<sup>205</sup>. This choice simplifies the analysis and allows me to focus on a more coherent set of verbs characterized by a common peculiarity, i.e., the lexical-encyclopedic constraint on the possibility of being merged in a non-Middle structure. Second, I take into consideration only verbs that have enough occurrences in the relevant period (III cent. BCE − IX cent. CE). Verbs such as *ringor* 'I growl' or *ruspor* 'I search', which have fewer than 10 finite occurrences, will not be analyzed<sup>206</sup>. Nor will I take into consideration the verbs for which I do not have a reliable synchronic analysis: the "saying" verbs (*fateor* 'I confess', *for* 'I speak', *farior* 'I speak' and *loquor* 'I speak'); the "seeing" verbs (*speculor* 'I observe', *con/despicior* 'I look' and *tueor* 'I look around, I take care'); and four other unrelated verbs (*cunctor* 'I linger', *frustror* 'I deceive', *patior* 'I suffer' and *sequor* 'I follow'). Considering the fact that *fateor* 'I confess', *for* 'I speak' and *farior* 'I speak' are related, as *speculor* 'I observe' and *con/despicior* 'I look', I exclude in total 8 √s.

In the first part I demonstrated that the non-denominal/deadjectival deponents which never alternate between Active and Middle belong to different categories. I will also use those categories in this part of the analysis, distinguishing the change of state class (e.g., *nascor* 'I die' and *morior* 'I am born'), the change of location class (e.g., *egredior* 'I go out' and *conor* 'I advance, go') and the bigger Middle+Accusative class. The last class involves all the deponent verbs which consistently show the presence of an Accusative argument. Within the analysis of the Middle+Accusative class, I propose further verb-by-verb differentiations, given the fact that, as already shown in Part I,

<sup>205</sup>There are some non-denominal/deadjectival biargumental deponents which present a few Active occurrences in Classical Latin, I include these verbs in this section, being the presence of Actives not consistent.

<sup>206</sup>The non-denominal/deadjectival deponents that I will non take into consideration for lack of attestations are *calvor* 'I deceive', *musinor* 'I brood', *nantinor* 'I am upset', *quadruplor* 'I behave like an informer', *ringor* 'I growl' and *ruspor* 'I search'.

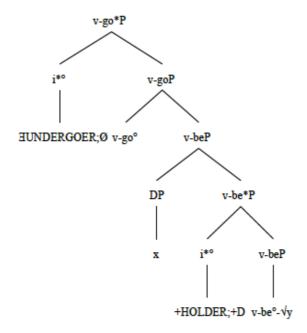
Section 3.4.3, not all the Middle+Accusative deponents show the same behavior. In the first Part I discussed a different class of Middle+Accusative non-denominal/deadjectival deponents: the class of the "former denominal/deadjectivals". For these verbs, the presence of the Middle morphology is synchronically justified by the same mechanisms that justify its presence on the "standard" Middle+Accusative verbs; however, diachronically, these verbs were denominal/deadjectivals or deadjectivals and undergo the same structural reanalysis that characterizes the actual Latin denominal/deadjectival deponents, a √-formation process (see Section 2.4.2). For this reason, in the first part they were treated in a different subsection. In the present analysis, however, I examine the diachronic change, which is observed from the Classical period on, meaning the previous stages are disregarded. As these verbs already fully belong to the class of Middle+Accusative verbs in the Classical period, there is no reason to differentiate them.

# 3.1 Change of state deponents

Six change of state deponents belong to the non-denominal/deadjectival category: *expergiscor* 'I wake up', *irascor* 'I get angry', *morior* 'I die', *nascor* 'I am born', *obliviscor* 'I forget' and *ori(sc)or* 'I rise'.

Five of these verbs - expergiscor 'I wake up', irascor 'I get angry', morior 'I die', nascor 'I am born', ori(sc)or 'I rise' - show a clear synchronic change of state structure: the Nominative argument acquires a specific state (v-beP) because of an uncontrolled dynamic event (v-goP). The argument is both the HOLDER of a specific state (e.g., for expergiscor 'I wake up', the state of being awake, and for nascor 'I am born' the state of being born) and the UNDERGOER of a dynamic uncontrolled event that leads to that state. The linking between these two structural thematic positions is reached by means of the Middle morphology which, setting the UNDERGOER argument as existentially bound, allows for its contextual identification with the HOLDER.

(164)



I have already pointed out in Part I, Section 3.4.3 that the Middle morphology, when a  $\sqrt{ }$  that can only appear in a change of state event is involved, may be seen as a morphological marker defining the relevant linguistic boundary between unaccusatives and unergatives (Gianollo 2010, 2014). In this section, I collect the diachronic data regarding the change of state deponents, looking at possible event structure modification (different eventive meanings), the use of either the SE-marked or the Labile structure instead of the Middle-marked one and the characteristics of the perfective forms.

*Expergiscor* 'I wake up' shows a consistent event structure throughout the Latin literature. It always occurs with the Middle morphology and with only one argument, the animate element that wakes up. There is only one occurrence in which the Middle morphology is absent, in Pomponius Bononiensis (II-I cent. BCE):

Ne quis miretur [...] ut si quis

Not someone.NOM be.amazed.3<sup>RD</sup>SG.SUBJ.PRS.MID that if someone.NOM

dormitaret expergisceret. (Pomp. *atell*. 4)

sleep.lightly.3<sup>RD</sup>SG.SUBJ.IPFV.ACT wake.up.3<sup>RD</sup>SG.SUBJ.IPFV.ACT

'No one should be amazed [...] by the fact that someone who was sleeping lightly may wake up.'

This occurrence, however, still describes a change of state situation in which a single argument

acquires both the HOLDER role (of the state of being awaken) and the UNDERGOER role (of the uncontrolled dynamic event that leads to the state). This occurrence, then, has to be considered a Labile case, in which the argument moves from the lower position (HOLDER) to the higher one (UNDERGOER). This occurrence, however, is isolated. A general change (Middle  $\rightarrow$  Labile) in the encoding of the "one argument two roles" situation with respect to this verb cannot be confirmed by this single piece of evidence. It is also of note that no occurrences were found in which an Active or Middle *expergiscor* 'I wake up' cooccurs with a *se* 'self' pronoun in an argumental position and that no perfective forms of this verb occur in Pomponius.

*Morior* 'I die' is consistently involved in change of state structures in which the low and high thematic positions are related to each other by means of the Middle morphology. There is only one occurrence in the database that presents an Active morphology in the relevant period under analysis; it is in the *anonimi glosa psalmorum ex traditione seniorum* (VII cent. CE, possibly south of France; psalm. 103, 26).

```
(166)
```

```
Suggerebat ei blasphemare deo et suggest.3<sup>RD</sup>SG.IPFV.ACT he.DAT insult.INF.PRS.ACT god.DAT and morire. (Glos. Psalm. 103, 26) die.INF.PRS.ACT 'He suggested him to insult god and die.'
```

As in the case of *expergiscor* 'I wake up', here the event structure does not change; it is still a change of state. The Middle morphology disappears, and the Labile mechanism takes over. No occurrences of this verb were found in which a *se* 'self' pronoun is used to convey the change of state meaning.

*Irascor* 'I get angry' has more Active occurrences with respect to *expergiscor* 'I wake up' and *morior* 'I die'. Of the four Active occurrences, the first one, again, comes from Pomponius Boniniensis:

```
Noli quaeso irascere. (Pomp. atell. 30) not.want.2<sup>ND</sup>SG.IMP.ACT ask.1<sup>ST</sup>SG.PRS.ACT get.angry.INF.PRS.ACT 'Please, do not get angry!'
```

This is the only occurrence of an Active *irasco* 'I get angry' in the Classical period. All other occurrences come from Late or Medieval Latin:

```
(168)
      Parvulus
                      irascere
                                              non novit. (Epiphan. Lat. in. evang. 27, 43, 22)
      little.boy.nom get.angry.inf.prs.act not know.3<sup>rd</sup>sg.prf.act
     'As a little boy he was not able to get angry.'
(169)
                           quod irascetis? (Agnell. Liber Pont. (Theod.) 121, 294)
      Quid est hoc
      what is this.NOM that get.angry.2<sup>ND</sup>PL.FUT.ACT
     'What is this fact that you will get angry?'
(170)
      Et fratribus
                          irascit. (Beat. Lieb. in Apoc. 8, 3, 6)
      and brothers.DAT get.angry.3<sup>RD</sup>SG.PRS.ACT
     'And he gets angry with his brothers.'
```

With these cases, as in the previous cases, the event structure is still a change of state: there is a state, 'to be angry', and an uncontrolled dynamic event that leads to that state. The Nominative argument is the subject of both phrases. The eventive meaning is maintained, but the morphological form changes (Middle → Active). The Labile mechanism, again, is chosen to substitute the Middle morphology.

While this is the only occurrence of irasco(r) 'I get angry' in Agnellus of Ravenna – there are no Middle forms – more occurrences can be found in Beatus Liebanensis. In all the other non perfective cases he uses the Middle form, while in the perfective cases he uses the analytical form.

```
Et iratus est draco in mulierem, et and angered is snake.NOM against woman.ACC and abiit [...] (Beat. Lieb. in Apoc. 6, 12, 17) go.away.3<sup>RD</sup>SG.PRF.ACT
'And the snake got angry at the woman, and went away.'
```

Nascor 'I am born' and orior 'I rise' behave like irascor 'I get angry', and Active occurrences were recorded for both verbs. For nascor 'I am born', the first one is attested in Early Latin, in

Cato:

(174)

```
Ubi germen nascere coeperit. [...] (Cato agr. 151, 4) when sprout.NOM be.born.INF.PRS.ACT begin.3<sup>RD</sup>SG.FUTPRF.ACT 'When the sprout starts growing [...].'
```

This occurrence is highly peculiar, since in the exact same book and in the same context the author usually uses the Middle form *nasci* 'to be born':

```
Simul herbae coeperint nasci [...]. (Cato agr. 48, 2) as.soon.as herbs.nom begin.3<sup>RD</sup>PL.FUTPRF.ACT be.born.INF.PRS.MID 'As soon as the herbs will begin to grow [...].'
```

The only relevant difference between the two contexts is the reverse position of the infinitival form with respect to the finite verb. In (172), the infinitival precedes the finite form, while in (173) the infinitival follows the finite form. The only other context in which these two forms appear together in Cato presents the same characteristics of (173), with the Middle infinitival form following the finite form (Cat. *agr.* 161, 3). This behavior is unexplained<sup>207</sup>. This single Classical occurrence is followed by other Active occurrences in Late and Medieval Latin:

```
Quem voluerat sic nasceret which.ACC want.3<sup>RD</sup>SG.PPRF.ACT so be.born.3<sup>RD</sup>SG.SUBJ.IPFV.ACT cecus. (Hymn. Hisp, 25, 5) blind.NOM.SG 'Whom he wanted to be born blind.'
```

It has to be noticed that, in the Hymnodia Hyspanica, the perfect form is still the analytic form with *esse* 'to be'.

However, these issues go beyond the scope of the present research.

<sup>207</sup>There may be prosodic issues to analyze in this case. The entire sentence is highly symmetric and rhythmic:

*i. ubi semen satum siet, stramentis operiri; ubi germen nascere coeperit, tum demi.* (Cato, *agr.* 151, 4) 'When the seed opens, cover it with straw; when the germ starts to grow, then take it away.'

(175)

Ex utero matris caecus fuit natus. (Hymn. Hisp. 25, 17) from womb.ABL mother.GEN blind.NOM.SG was born 'He was born blind from his mother's womb.'

In hymn 25 of the Hymnodia Hispanica the only present occurrence of the verb is marked by the Active morphology, while the perfect forms are analytic and select the *esse* 'to be' auxiliary.

The proposed analysis is the same proposed previously: the Labile mechanism takes over and substitutes for the Middle morphology. The perfective forms are still analytic because the event structure is still the same, with the Nominative argument merged in a low stative position.

*Orior* 'I rise' follows a similar path. In the case of this verb, all Active occurrences come from the Late or Medieval period.

(176)

Qui nos orire facit ad who.NOM we.ACC rise.INF.PRS.ACT do.3<sup>RD</sup>SG.PRS.ACT to lucem. (Beat. Lieb. *apoc*. 6, 2, 11) light.ACC 'Who make us rise to the light.'

The Active occurrences of *orior* 'I rise' are mainly infinitival forms, in many cases following a causative verb like *facio* 'I do'. The use of the explicit causative *facio* 'I do' with *orior* 'I rise' is firstly attested in Tertullian (II cent. CE).

```
Et solem suum oriri facit. (Tert. adv. Marc. 4, p.544) and sun.ACC his.ACC.SG rise.INF.PRS.MID do.3<sup>RD</sup>SG.PRS.ACT 'And he makes his sun rise '
```

This example shows that the co-occurrence of the causative *facio* 'I do' with *orior* 'I rise' does not justify, by itself, the loss of the Middle morphology. The loss of the Middle morphology is autonomous from the presence of the overt causative and is related to the use of the Labile mechanism instead of the Middle one to link the two argumental positions (HOLDER and

UNDERGOER). In the *Fragmenta Ariana*, belonging to the IV cent CE, the infinitival *orire* 'to rise' is embedded under the verb *commendo* 'I present, I recommend' (Frg. Ar. *Luc.* fol. ms. 9v, 1.14). This is the only occurrence of *orio(r)* 'I rise' in this work.

In each of the authors/works in which there is an Active occurrence of this verb, there are also many other Middle occurrences, which follow the usual Middle pattern:

```
Sed questio oritur [...]. (Beat. Lieb. apoc. 3, 3, 17) but problem.NOM rise.3<sup>RD</sup>SG.PRS.MID
'But a problem arises [...].'
```

Also in this case, the perfective forms are always analytic and no occurrences of a *se* 'self' structure was found in which the change of state meaning is conveyed by the reflexive pronoun itself.

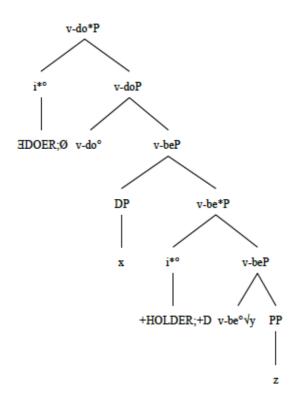
There is a strong consistency in the diachronic behavior of the verbs belonging to this class. Each of the uncontrolled change of state verbs analyzed in this section present Active occurrences in Late Latin. Each of these Active occurrences maintains the change of state event structure. Finally, each of these verbs never occurs with a SE pronoun or presents a synthetic perfective form.

## 3.2 Change of location non-denominal/deadjectival deponents

I found 5 change of location non-denominal/deadjectival deponents: (*pro*)ficiscor 'I go on'; (*e*)gredior 'I come, I advance'; labor 'I slip'; and (dis)palor 'I wander'<sup>208</sup>. In all these cases, with the exception of labor 'I slip', the movement is controlled, meaning that in the structure there is a v-doP. The possible prepositional prefixes are part of the stative phrase and specify the final state in which the argument ends up after the movement. For example, in *e-gredior* 'I exit' the movement leads the argument into the state of being *ex-* 'out'. For a deeper analysis of the prepositional prefixes in Latin, see Acedo-Matellán (2010, 2016) and Acedo-Matellán and Mateu (2013, 2016).

(179)

<sup>208</sup>In this initial list I did not focus on the prefixes. *Gradior* and *labor*, for example, have many different prefixes specifying, for example, the exact kind of movement and the directionality.



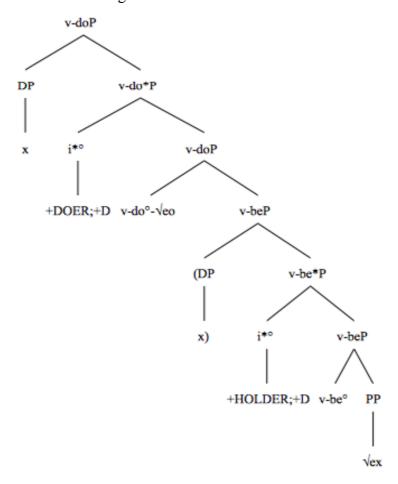
In all these verbs, the  $\sqrt{(\sqrt{y})}$  in the previous structure) realizes the stative head. The argument is, e.g., in the state of being *gressus* 'advanced', *lapsus* 'slipped'. The possible prefix further specifies the state with a specific location or directionality; it does not realize by itself the final locative state, which is realized by the  $\sqrt{.}$  This differentiates these verbs from other change of location verbs, such as *ex-eo* 'I exit'. In *exeo* 'I exit', the final state is represented by the prepositional prefix *ex* 'out', while the verbal  $\sqrt{.}$  ire 'to go' conflates into the v-do° and does not represent by itself the final state. This follows from the fact that *gradior* 'I come, I advance', even if the locative prefix is absent, still presents the Middle morphology and the change of location meaning. This is shown by the following example, in which the unprefixed *gradior* 'I come, I advance' verb is the parallel of the prefixed *ad-eo* 'I come'.

(180)

Inde Autumnus adit, graditur simul then Autums.NOM come.3<sup>RD</sup>SG.PRS.ACT come.3<sup>RD</sup>SG.PRS.ACT at.the.same.time Euhius Euan. (Lucr. 5, 743)
Euhius.NOM Euan.NOM

*Exeo* 'I exit', on the other hand, shows a change of location meaning only if a prefix (or an explicit final location, e.g., *ad Caesarem* 'to Caesar') is present; the pure verb *eo*, by itself, means 'I march, I go':

Tota nocte continenter ierunt. (Caes. *Gall.* 1, 26, 5) whole.ABL.SG night.ABL continously go.3<sup>RD</sup>PL.PRF.ACT 'They marched the whole night.'



Given this analysis, in these verbs, the relevant element that encodes the final location/state is the  $\sqrt{}$ . The prefix, instead, further specifies the change of location/state. This conclusion leads to a redefinition of the eventive semantics of these verbs, that, by themselves, do not imply a real spatial displacement of the argument, but a change of state of the argument. *Gradior* 'I come, I advance', then, encodes a controlled change of state in which the argument gains the state of being *gressus* 'advanced' and *labor* 'I slip' encodes the same eventive semantics (the argument gains the state of being *lapsus* 'slipped'). The spatial location can be adjoined to the structure in the complement

position of the stative phrase<sup>209</sup>.

In Late and Medieval Latin, the verb *gradior* 'I come, I advance' presents some Active occurrences. In each case, the verb is preceded by a prepositional prefix.

```
Si episcopus exinde egredire noluerit [...]. (Greg. T. franc. 9, 10)

If bishop.NOM then go.out.INF.PRS.ACT not.want.3<sup>RD</sup>SG.SUBJ.PRF.ACT

'If the bishop, then, does not want to get out [...].'

(183)

Progredis animo, cum appetis. (Iul. Tol. antic. (alt.) 142)

go.on.2<sup>ND</sup>SG.PRS.ACT soul.ABL when aspire.2<sup>ND</sup>SG.PRS.ACT

'When you aspire, you improve your soul.'
```

The same authors still frequently use the standard Middle forms: the synthetic present and the analytic perfect.

```
Noli timere sed si vis
do.not.2<sup>ND</sup>SG.IMP fear.INF.PRS but if want.2<sup>ND</sup>SG.PRS.ACT
egredi [...]. (Greg. T. franc. 3, 14)
go.out.INF.PRS.ACT
'Do not fear, but if you want to go out [...].'

(185)

Cum autem egressus fuerit [...]. (Greg. T. franc. 3, 14)
when instead go.out.PST.PTCP.NOM.SG be.3<sup>RD</sup>SG.FUT.PRF
'When he will be out [...].'
```

There are no occurrences of *se* 'self' pronouns with this verb. In this period (VI-VII cent. CE), in which the Middle morphology was on the verge of being lost, the presence of Active occurrences is not surprising. As argued previously, there are three strategies to link two argumental positions in Latin: the Middle, the *se* 'self' pronoun and movement. If the Middle is lost, but the 'one argument two roles' eventive meaning is still maintained, the speakers adopt one of the other two possibilities. The choice, as in the case for the change of state verbs of the previous section, falls on

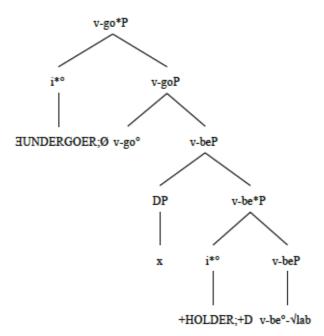
<sup>209</sup>Or it can be adjoined in a different location, e.g., an adjunct to a higher phrase (see Acedo-Matellán 2016). The exact structural location of the prepositional modifier is not relevant in this context.

the movement strategy and not on the se 'self' one.

Labor 'I slip' behaves differently. This verb has an Active counterpart in Classical Latin: labo 'I waver'. This alternant has not been considered as such by Latin grammarians, who list labor 'I slip' as belonging to the deponent class. A possible reason may be the fact that labo 'I waver' belongs to the Ist conjugation, while labor 'I slip' belongs to the IIIrd. This difference, however, should not hide the fact that, in both cases, the √ involved is the same. The difference regards the syntactic event structure: labor 'I slip' involves two events, a v-goP and a v-beP, while labo 'I waver' involves only the higher one (the only argument undergoes the dynamic uncontrolled event of wavering).

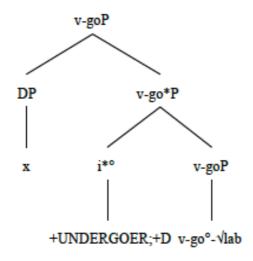
(186)

Tanta moles labitur ex alto. (Acc. *trag.* 391) so.much.NOM.SG mass.NOM slip.3<sup>RD</sup>SG.PRS.MID from above 'Such a big mass falls from above.'



(187)

Sed tarda trementi genua labant. (Verg. *Aen.* 5, 431) but late.NOM.PL tremble.PRS.PTCP.DAT.SG knees.NOM waver.3<sup>RD</sup>PL.PRS.ACT 'But the late knees were wavering for the one who is trembling.'



This  $\sqrt{\ }$ , as the Italian  $\sqrt{\ }$  for *correre* 'I run', alternatively encodes the directionality of a spatial dislocation or simply a manner of movement:

Giovanni è corso a casa
Giovanni is run.PST.PTCP at home
'Giovanni ran home'

(189)

Giovanni ha corso
Giovanni has run.PST.PTCP
'Giovanni ran.'

From a diachronic point of view, this verb is not relevant. In the data at my disposal, occurrences of this verb with the meaning 'I slip' always use the Middle morphology, the number and characteristics of the arguments are always the same and there is no trace of *se* 'self' pronominal forms.

*Proficiscor* 'I go away' incorporates the final location, the prefixed pronominal element *pro*. This verb is different from the other two, as the  $\sqrt{}$  element,  $\sqrt{}$  fac-, is not part of the lower stative predication but is merged in the higher v-doP, conflated into the v-do $^{\circ}$  head. The pronominal element *pro*-, instead, is conflated into the v-be $^{\circ}$ , creating the state of 'being *pro*-'. The *-sc* morpheme, in this case, does not realize the v-go $^{\circ}$  as in the cases analyzed in the first part (Part I, Section 2.2.1). The *-sc* morpheme is inherited and not synchronically active. The argument is both the HOLDER of the state and the DOER that controls the entire complex event. The two positions

are linked, as usual, by means of the Middle semantic configuration.

(190)

Inde oratio proficiscatur. (Cic. *Manil.* 4) from.here speech.NOM go.3<sup>RD</sup>SG.SUBJPRS.MID 'From here the speech can proceed.'

This verb has an Active counterpart lacking the -sc morpheme: proficio 'I advance, progress, grow'.

(191)

Loci opportunitate proficit. (Caes. *Gall.* 2, 23, 2)

place.GEN favor.ABL advance.3<sup>RD</sup>SG.PRS.ACT

'He progressed because of the favor of the place.' ('He took advantage of the good place.')

The first attestation of *proficio* 'I advance' is in Lucilius (II cent. BCE):

(192)

Neque proficit hilum. (Lucil. 1375) and not advance.3<sup>RD</sup>SG.PRS.ACT nothing 'And he does not advance at all.'

This verb is a new production. This new production is built by adjoining the verb *facio* 'I do' and the prefix, just as the other derived change of location verbs presented previously (e.g., *ad-eo* 'I come'). The absence of the Middle morphology, then, is expected in these cases, given the structure in (181). *Proficiscor* 'I advance', instead, is present since Plautus (see, for example, Plaut. *Merc*. 939); it is not a new Latin derivation. This allows for an analysis along the lines of *gradior* 'I come, I advance', in which the Latin speaker directly conflates the entire  $\sqrt{(\sqrt{\text{profic-}})}$  into the stative head. This accounts for the different behavior of the two verbs.

The verb *proficiscor* 'I go away' has two relevant Active occurrences without the Middle morphology in the Early period. Both occurrences come from a comedy:

(193)

Obsecro, licet complecti prius quam

```
beg.1<sup>ST</sup>SG.PRS.ACT permit.3<sup>RD</sup>SG.PRS.ACT hug.INF.PRS.MID before than proficisco. (Plaut. Mil. 1329)
go.away.1<sup>ST</sup>SG.PRS.ACT
'I beg you, you should hug me before I go away!'

(194)

Hortatur hominem quam primum ut exhort.3<sup>RD</sup>SG.PRS.MID man.ACC as soon so.that proficisceret. (Turpil. com. 81)
go.away.3<sup>RD</sup>SG.SUBJ.IPFV.ACT
'He exhorts the man to leave as soon as possible.'
```

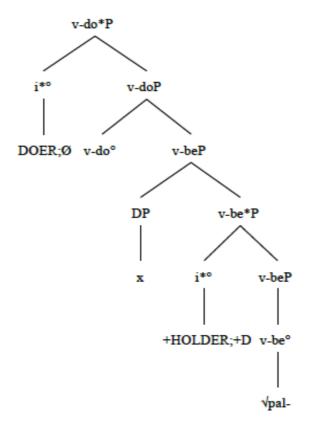
In both cases, the event structure is still a bieventive change of location. The early Latin Active occurrences, coming from comedians, recall the early Active occurrences of denominal/deadjectival verbs, such as *auspicor* 'I take the auspices' from *auspex* 'auspice'; *pigr(it)or* 'I act as a lazy person' from *piger* 'lazy'; and *vagor* 'I wander' from *vagus* 'rambling' (see Sections 2.1.1, 2.2.1 and 2.3.1). In both cases the analysis could be the same. The comedians use a diatopically/diastratically different variety of Latin, in which the 'two roles one argument' situation is not achieved by means of the Middle but by means of the Labile mechanism: the argument, merged in a low and stative argument position, moves to the external and dynamic argument position. This possibility resurfaces in the Late and Medieval period.

```
Exilio proficiscant. (Paen. Min. Hubert. 51, 274) exile.ABL go.3<sup>RD</sup>PL.SUBJ.PRS.ACT 'They should go into exile.'
```

Palor 'I wander' is a change of state/location verb. Da Vaan (2008), following the etymology proposed by Weiss (1993), proposes a derivation from a change of location verb involving the prefix \*pe- (Hit. pe 'away, thither', but its real existence is debatable). This etymology could be linked to the meaning of the Latin verb: 'I make myself \*pe- ('away')'  $\rightarrow$  'I wander'. The change of state/location eventive meaning would be coherent with the presence of the Middle morphology. The PIE prefix, in Latin, is no longer transparent, but the meaning of the  $\sqrt{\phantom{0}}$  still includes the displacement semantics. In Latin, then, the verb has been reanalyzed as a  $\sqrt{\phantom{0}}$  verb including a locative displacement of the argument:

(196)

Vagi-que per agros palantur. (Liv. 5, 44, 5) wandering.NOM.PL-and through fields.ACC wander.3<sup>RD</sup>PL.PRS.MID 'And they, lost, wandered through the fields.'



The PP *per agros* 'through the fields' further specifies the location of the wandering, locating it in a definite space. The fact that the initial displacement semantics, historically derivable from \**pe*, is still relevant, is confirmed by the fact that the Latin verb, from Cornelius Sisenna on (I cent. BCE), begins to appear with the prefix *dis*- 'away', an overt and transparent displacement prefix:

Tanto plures passim dispalantur. (Sis, *hist*. 134) such.ABL many.people.NOM everywhere wandered.away.3<sup>RD</sup>PL.PRS.MID

'This way, many people straggle everywhere.'

The lack of transparency of the displacement semantics is reinforced by means of the merging of the new displacement prefix, dis- 'away'. This verb, diachronically, does not show any specific

evolution. It never co-occurs with a *se* 'self' pronoun, it is never Active and it always presents the same change of location eventive meaning.

This class, as with the class of the change of state deponents, shows a strong diachronic consistency. In each case, with the exception of *palor* 'I wander' and labor 'I slip', there are Active occurrences. In each case an Active occurrence is present, the change of location event structure is maintained. Finally, there are no cases of SE-marked structures or synthetic perfects.

# 3.3 Interim conclusion, the loss of the Middle morphology and the Labile mechanism.

In the two previous sections I analyzed the change of state and change of location verbs. These verbs never present an Accusative object, a feature that differentiates them from the Middle+Accusative deponents that I analyze in the next section. These verbs behave in a fairly consistent way from a diachronic point of view. If they show a diachronic change, this diachronic change involves the presence of the Active morphology instead of the Middle one and the preservation of the initial bieventive change of state/location structure. This means that, both in Middle and Active occurrences, the Nominative argument gains a double set of thematic features; the features: related to the stative event (HOLDER) and the features related to the higher dynamic one (DOER or UNDERGOER). As proposed in the first part, Latin has three structures that provide as an output a situation in which a single referential argument gains a double set of thematic features: the Middle structure, the Labile (or "movement") structure and the SE-marked one. All the verbs analyzed in the two previous sections initially present only the Middle option. I demonstrated that in Late and Medieval Latin there are occurrences in which the choice falls on the Labile option. However, there are no cases, instead, in which the choice falls on the SE-marked structure. There is a reason behind this phenomenon.

The Early/Classical linguistic system presents a class of  $\sqrt{s}$  that are only compatible with a Middle-marked change of state/location derivation. These  $\sqrt{s}$  are interpretable only in a derivation in which there is a single DP that is merged in the subject of the state position, while the subject of the dynamic event position (DOER or UNDERGOER) is set as existentially bound. The linguistic system changes in the Late and Medieval period when the Middle morphology disappears. When the Middle morphology disappears and the linguistic system relies on two structures that can substitute for it: the SE-marked structure and the Labile structure. The two structures, however, are not equivalent. The SE-marked structure involves the merging of two different DPs, the referential

DP and the SE pronoun, with the referential DP taking Nominative case and the SE pronoun taking Accusative case<sup>210</sup>. The labile structure, instead, does not involve the merging of two different DPs. There is only one DP that moves from the low stative position to the higher one. The relevant point is that the SE-marked structure is post-syntactically indistinguishable from a bieventive derivation in which there are two different referential DPs. If the  $\sqrt{}$  checks for the compatibility of its lexical-encyclopedic semantics with the syntactic derivation post-syntactically, it follows that a  $\sqrt{}$  that is compatible with a SE-marked structure will also be compatible with a structure in which there are two referentially distinct arguments. The labile derivation, instead, is post-syntactically different from a derivation in which there are two DPs merged in two different positions. It follows that a  $\sqrt{}$  that is compatible with such a structure will not necessarily be compatible with a structure in which there are two referentially distinct arguments<sup>211</sup>. Once the Middle morphology is lost, then, the class of the change of state/location  $\sqrt{}$ s, which are not compatible with a structure in which there are two referentially distinct DPs, will not adopt the SE-marked structure: it will adopt the labile one.

It is of note that some change of state/location  $\sqrt{s}$  are merged in a labile structure already in Early and Classical Latin. The entire set of these occurrences comes from comedians - Plautus, Turpilius and Pomponius – with one exception being an occurrence from Cato (see (172)). A possible hypothesis is to link these occurrences to an early loss of the Middle morphology, that, in the non-standard stylistic register and in the peripheral areas (Pomponius, for example, comes from *Bononia*, nowadays Bologna, in the northern part of Italy) is already lost in the III-II cent. BCE.

## 3.4 Middle+Accusative non-denominal/deadjectival deponents

Twenty-two non-denominal/deadjectival deponents were found whose syntactic structure may host an Accusative argument and which fit the criteria proposed in the introductory section: *apiscor* 'I reach, obtain'; *commentor* 'I think, discuss'; *(re)miniscor* 'I remember'; *conor* 'I try, I make an effort'; *experior* 'I experience'; *fungor* 'I fulfill, accomplish'; *hortor* 'I exhort'; *medeor* 'I heal';

<sup>210</sup>These two facts - the presence of two different DPs and the fact that the two acquire different structural cases - are independent of the choice between a high or low merging position of the SE pronoun (see Part I, Sections 2.2.4 and 2.2.5). The choice between these two possibilities, in the context of the present analysis, is irrelevant.

<sup>211</sup>The proposed formulation predicts that every √-based verb that is compatible with a SE-marked structure is also compatible with a structure in which there are two referentially distinct arguments, but does not say anything about the incompatibility of the Labile structure with a structure in which there are two referentially distinct arguments. A √-based verb which has a Labile variant can be incompatible with a variant in which there are two referentially distinct arguments, but does not have to: e.g., It. *affondare* 'to sink' and *affogare* 'to drown' have both a Labile and an Active causative variant with two referentially distinct arguments. The prediction that every √-based verb which is present in a SE-marked change of state derivation is present in a causative derivation too has to be refined. There is a group of √-based verbs, around 25, which can only be present in a SE-marked change of state derivation. The most notable examples are *pentirsi* 'to regret', *dolersi* 'to complain', *dimettersi* 'to resign'. Many of these verbs are former denominals, meaning that there is a regularity in this group. In order to better explain these facts, a larger set of data and more specific tests are needed.

meditor 'I judge'; (com)mentior 'I lie'; mereor 'I deserve'; metior 'I measure'; nanciscor 'I get'; opinor 'I imagine'; paciscor 'I make a deal'; palpor 'I caress'; patior 'I tolerate, I bear'; praestolor 'I wait'; quer(it)or; 'I complain'; ulciscor 'I avenge'; u(si)tor 'I use'; and venor 'I hunt'. In this section, I analyze each of these verbs both synchronically and diachronically. This is necessary because, in order to propose a proper diachronic analysis, I have to set an initial benchmark. This section, for clarity reasons, is subdivided in different subsections, with each subsection devoted to the analysis of a single verb or of a group of interrelated verbs.

#### 3.4.1 A(di)piscor 'I reach, I obtain'.

'Allow me to reach the man.'

Adipiscor 'I reach, I obtain', at first sight, could be categorized as a locative verb. It seems to describe the final coincidence of an argument with respect to a specific location reached by means of a movement, even if the movement is figurative. The presence of a locative phrase is apparently confirmed by the fact that there are variants of *apiscor* which include a locative prefix: *ad-ipiscor* 'I reach, obtain', *in-di-piscor* 'I reach, obtain'<sup>212</sup>. The peculiarity of this verb with respect to the other change of location verbs analyzed in the previous section is the consistent presence of an Accusative object:

Sine me hominem apisci. (Plaut. *Epid*. 668) allow.2<sup>ND</sup>SG.IMP me.ACC man.ACC reach.INF.PRS.MID

The Accusative is not generally linked to an argument that represents a spatial location. In Latin, however, Accusative case can be used to mark an argument representing a final location:

(199)

Deinde se ex curia domum proripuit. (Sall. *Catil.* 31, 9) then self from curia.ABL home.ACC rush.out.3<sup>RD</sup>SG.PRF.ACT 'And then he rushed out from the curia and went home.'

Many other change of location verbs, moreover, show the possibility of hosting a direct

<sup>212</sup>*Indipiscor* 'I reach, obtain' is not derived from *in-+apiscor* but from [*in+d(e)*]+*apiscor*, as the presence of the -*d*-would otherwise not be justified. The -*de* element is a PIE deictic particle that can be found in many Latin prepositional elements: e.g., *unde* 'whence', *inde* 'thence' and *deinde* 'then'.

#### Accusative argument:

(200)

Germani munitiones nostras egressi [...]. (Caes. *civ.* 3, 52, 2) Germans.NOM defenses.ACC our.ACC.PL exit.PST.PTCP.NOM.PL 'The Germans, avoided our defenses [...].'

There is a relevant difference, however, between the real locative+Accusative occurrences and the occurrences of *apiscor* 'I reach', a difference that already arose in the first part (Part I, Section 3.4.3) and that regards the past participle agreement patterns. The past participle of a locative predicate cannot agree with the location/Ground, even if it can be marked by Accusative case; it can only agree with the subject of the stative phrase, the Figure, as (200) shows. The case of *apiscor*, *adipiscor* and *indipiscor* 'I reach, obtain', instead, is different. The past participle may agree both with the supposed Figure argument, as in (201), and with the supposed Ground, as in (202).

(201)

Moderati animi gloriam eo die adeptus balanced.GEN.SG spirit.GEN glory.ACC that.ABL day.ABL obtained.NOM.SG consul senatum dimisit. (Liv. 26, 26, 9) consul.NOM senate.ACC dismiss.3<sup>RD</sup>SG.PRF.ACT 'That day, once he had obtained glory for his balanced spirit, the consul dismissed the Senate.'

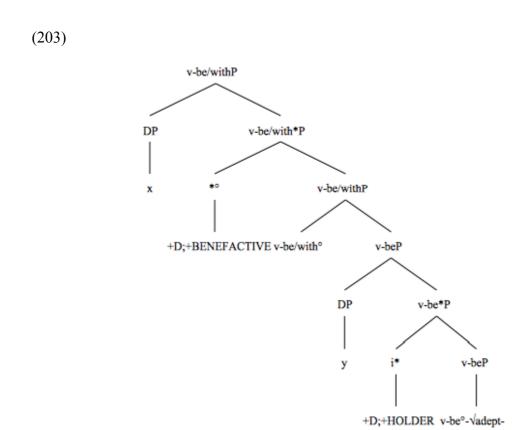
(202)

of the door.'

Biennio continuo post adeptum imperium pedem two.year.ABL continuous.ABL.SG after obtained.ACC.SG command.ACC foot.ACC portam non extulit. (Svet. *Tib.* 38, 1) door.ACC not take.out.3<sup>RD</sup>SG.PRF.ACT
'For the two years after he obtained the command of the Empire he did not take a step out

This different behavior leads to the conclusion that *adipiscor* 'I reach, I obtain' is not a change of location verb, and that, consequently, the Accusative argument of *adipiscor* 'I reach, I obtain' is not a Ground. The Latin past participle ending in *-tus* agrees with the subject of a stative predication. For this reason, the Ground in (200) cannot agree with the stative past participle

egressus 'gone out'. As the structure proposed in (179) shows, the Ground is in complement position and is not the subject of a state. The other DP, the one that in the finite structure acquires Nominative case, is the subject of the state of being egressus and, consequently, it is able to agree with the past participle. However, in the case of adeptus 'obtained', both the argument that in a finite structure acquires Nominative case and the one that acquires Accusative may agree with the past participle adeptus 'obtained'. In the first part I proposed solving this problem by building a structure in which both arguments are subjects of a stative predication, the Nominative one is the subject of a v-be/withP, while the Accusative one is the subject of a v-beP.



There are two different states in this derivation: the state of being obtained (v-beP) and the state of having something obtained (v-be/withP). The past participle *adeptus* 'obtained' can describe both states. The two states have two different subjects, a HOLDER and a BENEFACTIVE, and both elements may agree with the past participle *adeptus* 'obtained'<sup>213</sup>. The structure, consequently, is not a change of state/location, but a more complex benefactive one.

There is something more to say about the past participle patterns observed. The two participles

<sup>213</sup>The interpretation of the past participle of *adipiscor* 'I get' as eventive (usually called a conjunct participle, as it describes a full event) is only available when the most external argument agrees with the participle, as in Example (201). The fact that a past participle agreeing with the most internal argument cannot be interpreted as eventive but only as an adjectival participle specifying a specific noun is predictable, just as the fact that a past participle agreeing with the most external argument can only be interpreted as eventive (see below).

in (201) and (202) are different. The first describes an event of obtaining something and agrees with the subject of the main sentence, while the second describes the state of being *adeptus* 'obtained' and behaves like an adjective, agreeing with a noun within the participle phrase. I call the first one eventive and the second one adjectival. In the derivation of an eventive participle there is a v-doP, while in the derivation of an adjectival one there is not (for a similar proposal about the eventive past participle, see Grestenberger 2014: 211). The relevant observation is that when the past participle agrees with the Nominative subject, the interpretation is always eventive and the Accusative argument is obligatorily present, while when the past participle agrees with the Accusative argument, the interpretation is always adjectival. This asymmetry follows from the structure provided in (203). The verb *adipiscor* 'I obtain' has two stative events within its structure. The lower one can be isolated by the remaining structure, yielding the desired adjectival interpretation. The higher one, however, cannot exist without the lower one, given that a Benefactive/Possessive phrase without the complement of the Benefactivity/Possession is not acceptable. This means that a structure in which the past participle agrees with the BENEFACTIVE argument always includes the lower stative v-beP, whose subject is the HOLDER of the state. The HOLDER of the state has to acquire a Case to be syntactically justified. The higher dynamic head provides this argument with Accusative case. It follows that when the past participle agrees with the subject of the v-be/withP, the derivation will always be eventive, otherwise the HOLDER would not receive Accusative case. When, on the other hand, the past participle agrees with the Accusative subject, the eventive interpretation is not available, being that the  $\sqrt{}$  of this verb is compatible only with a benefactive event (i.e., an event including a v-be/withP). The adjectival past participle, instead, not being eventive, does not have such a problem.

Diachronically, the verb *adipiscor* 'I obtain' presents some Active occurrences starting from the VI-VII cent. CE. The occurrences are mainly present in Isidore of Seville, in the Hymnodia Hispanica and in Beatus of Liébana:

(204)

Nullatenus adipiscere potest quod appetit. (Isid. *sent.* 3, 5, 5-6) in.no.way reach.INF.PRS.ACT can.3<sup>RD</sup>SG.PRS.ACT what.ACC want.3<sup>RD</sup>SG.PRS.ACT 'He is not able by any means to reach what he wants.'

(205)

Adipiscere voluit omnipotentiam per reach.INF.PRS.ACT want.3<sup>RD</sup>SG.PRF.ACT omnipotence.ACC through rapinam. (Beat. Lieb. (Ox) *Adv. Elip.* 2, 37)

```
robbery.ABL 'He wanted to reach omnipotence by robbery.'
```

Of the 7 occurrences of the past participle of *adipiscor* 'I reach' in Isidore, 6 show agreement with the object and not with the subject, as in (206):

(206)

```
Voluptas [...] rei adeptae delectatio (est) (Isid. diff. 574) pleasure.NOM thing.GEN reached.GEN.SG enjoyment.NOM (is) 'The pleasure is the enjoyment of the obtained thing.'
```

This rate is inverse with respect to the rate of past participle agreement found in Classical Latin, where the past participle-subject agreement is much more common. This fact and the presence of Active occurrences points toward a diachronic evolution that leads *adipiscor* 'I reach, obtain' to lose the obligatory projection of a benefactive phrase. The  $\sqrt{}$  for *adipiscor* 'I reach, obtain' in Isidore and in the other authors just presented can be merged into a non-benefactive event, in which the Nominative argument is directly merged in the DOER position. Such a structure would predict the absence of the Middle morphology and the past participle-object agreement pattern. The loss of the obligatory projection of the benefactive phrase is connected to the general loss of the Middle morphology, as I will show in Section 3.5.

Finally, I did not find any occurrence of a *se* 'self' pronoun used to mark the benefactive internal position of a structure involving the  $\sqrt{\text{ for } adipiscor}$  'I reach, obtain'.

*Indipiscor* 'I reach, I obtain' and *apiscor* 'I reach, I obtain' have a few occurrences (11 finite occurrences for *indipiscor* and 23 for *apiscor*), and both disappear in the II cent. CE. They are not suitable for diachronic analysis.

# 3.4.2 *Comminiscor* 'I imagine, I invent', *reminiscor* 'I remember' and *commentor* 'I think about'.

The group of verbs analyzed in this section is connected to the same PIE  $\sqrt{*mn-ti/to}$ . These verbs are *comminiscor* 'I imagine, I invent', *reminiscor* 'I remember' and *commentor* 'I think about'. The last one is derived from the older *comminiscor* 'I imagine, invent'. Event if it is possible to hypothesize a common diachronic derivation from an ancient noun/adjective related to the semantic sphere of the mind/remembrance, the synchronic derivation cannot be considered

denominal/deadjectival. I firstly analyze the most frequent of these verbs, *reminiscor* 'I remember'. In the Classical period, this verb has the possibility of hosting a direct Accusative argument or an Oblique argument (Genitive or de 'of' + Ablative), as we will see for *obliviscor* 'I forget' (see Section 3.4.12).

```
Illos reminiscor dies. (Acc. trag. 346)
those.acc remember.1<sup>st</sup>SG.PRS.MID days.ACC
'I remember those days.'

(208)

Sin [...] reminisceretur veteris incommodi. (Caes. Gall. 1, 13, 3)
if.not remember.3<sup>RD</sup>SG.SUBJ.IPFV.MID old.GEN.SG drawback.GEN
'If the will not [...], they will remember the previous drawbacks.'
```

The analysis of the difference between these two structures relies on the analysis of *obliviscor* 'I forget' that I will propose in Section 3.4.12. *Obliviscor* 'I forget' has a past participle form, while *reminiscor* 'I remember' does not have such a form. The existence of a participle form allows for the presence of sentences that support an analysis of the sentences in which the secondary argument is marked by Genitive/de as change of state predicates, in which the Genitive/de argument is in the complement position of a v-beP, while the sentences with an Accusative argument belong to the benefactive kind, in which the Accusative argument is the subject of a v-beP (see the examples (277) and (279)) . *Reminiscor* 'I remember' has a meaning similar to *obliviscor* 'I forget' and follows the same diachronic path. This may be a hint that the structures in which *reminiscor* 'I remember' is present are the same ones that I propose for *obliviscor* 'I forget'.

Diachronically, *reminiscor* 'I remember' shows some Active occurrences in Late and Medieval Latin.

```
Similitudinem autem [...] reminiscimus. (Isid. sent. 1, 13, 8a)
similitude.ACC instead remember.1<sup>ST</sup>PL.PRS.ACT
'We remember instead a similitude.'

(210)

Non oportet reminiscere peccati affectum. (Isid. sent. 2, 24, 1)
not is.good.3<sup>RD</sup>SG.PRS ACT remember.INF.PRS.ACT sin.GEN desire.ACC
```

'It is not the right thing to do to remember the desire that the sins provoke.'

As in the case of *obliviscor* 'I forget', the Late and Medieval Active occurrences always present an Accusative argument, never an argument marked by Genitive case or by the preposition *de* 'of'. This behavior is attested also for the Italian verb *ricordare* 'I remember'. This verb may alternate between an Accusative argument and an argument introduced by *di* 'of', but only when the verb co-occurs with the *se* 'self' pronoun. When the *se* 'self' pronoun is absent, only an Accusative can be present.

(211)

Mi sono ricordato il tavolo. me.DAT am forgotten the.M.SG table 'I forgot the table.'

(212)

Mi sono ricordato del tavolo. me.DAT am forgotten of.the.M.SG tavolo 'I forgot the table.'

(213)

Ho ricordato il tavolo. have.1<sup>ST</sup>SG.PRS remember.PST.PTCP the table 'I remembered the victory.'

(214)

\*Ho ricordato del tavolo. have remembered of the table

In the Active occurrences, the Nominative argument is directly merged as the subject of the higher dynamic head, while the Accusative argument is the subject of the state of being remembered: 'It happens to x a dynamic event that leads to the fact that y is remembered' (see the structure in (284)). The  $\sqrt{}$  of this verb, then, loses the obligatory projection of the benefactive argument in Late and Medieval Latin, as I proposed for *adipiscor* 'I reach, I obtain' in the previous section.

Comminiscor 'I imagine, I invent' occurs almost exclusively with an Accusative argument<sup>214</sup>:

<sup>214</sup>There is only one occurrence with an argument introduced by the preposition *de* 'of', occurring in Scribonius Largus (Scrib. Larg. *praef.* 25).

(215)

Fabricare quidvis, quidvis comminiscere. (Plaut. *Asin*. 102) plot.2<sup>ND</sup>SG.IMP.MID what.you.want what.you.want invent.2<sup>ND</sup>SG.IMP.MID 'Find out or invent what you want!'

Only a few occurrences of a past participle form have been found, excluding the analytic forms of the perfect. I found no cases of eventive participles and only a few cases of adjectival participles in agreement with the Accusative argument, as shown in (216).

(216)

Commenta funera narrat. (Ov. *met*. 6, 565) invent.PST.PTCP.ACC.PL burials.ACC narrate.3<sup>RD</sup>SG.PRS.ACT 'He narrates made up burials.'

The data do not contradict the benefactive analysis, in which the Nominative argument is merged in the subject position of a v-be/withP and the Accusative argument in the subject position of a v-beP. From a diachronic point of view, however, this verb is not relevant, as it disappears in Late Latin.

Commentor 'I think' appears with both Accusative and Oblique arguments (introduced by de 'of', see (219)) and without any secondary argument.

(217)

Incipiunt commentari aliquid. (Cic. *fin.* 5, 15, 42) start.3<sup>RD</sup>PL.PRS.ACT think.INF.PRS.MID something.ACC 'They start thinking about something.'

(218)

Commentabar declamitans [...] saepe cum M. Pisone. (Cic. *Brut.* 310) think.1<sup>st</sup>SG.IPFV.MID reciting often with M. Piso.ABL 'I often used to think, reciting, with M. Piso.'

The past participle may agree only with the Nominative argument:

(219)

De populi Romani libertate commentati [...]. (Cic. Phil. 3, 36)

```
of people.GEN Roman.GEN.SG freedom.ABL think.PST.PTCP.NOM.PL 'Having thought about the freedom of the Roman people [...].'
```

This pattern conforms to the pattern observed for the controlled change of state verbs like *molior* 'I move' or *fungor* 'I fulfill', in which the Nominative argument is merged as the subject of a v-beP and the possible Accusative/Oblique argument is merged in the complement position of the same stative phrase.

Diachronically, this verb has Active occurrences in Late and Medieval Latin:

```
Cum eius natalem aruspices commentarent [...] (Hist Aug. Alex. 13, 6) when his birth.ACC haruspices.NOM commentate.3<sup>RD</sup>PL.SUBJ.IPFV.ACT 'When the haruspices commented on his birth [...].'

(221)

Haec formans verba commentat these.ACC forming words.ACC commentate.3<sup>RD</sup>SG.PRS.ACT "quid [...]?". (Iul. Tol. Wamb. 14, 370) what [...]'

'Forming these words he commentates "what [...]?".'
```

These occurrences show a clear meaning shift, with *commento* now meaning 'I commentate'. The verb loses the stative part of the derivation in which the Nominative argument was initially merged, and the Nominative argument is now directly merged into the DOER position. This kind of reanalysis is present in all the controlled change of state deponents. It is related to the loss of the Middle morphology and to the consequences of this loss on Case assignment. I will go through this proposal in Section 3.5.

#### 3.4.3 Experior 'I try'

Experior 'I try', is related to pario 'I give birth, I produce', with the adjunction of the prefix exthat provokes the rising of the vowel /a/ to /e/ (Latin ablaut). The role of the prepositional prefix exis not entirely clear. This prefix is frequently used to convey either the meaning of completeness (e.g., ebibo 'I drink up') or a directionality towards the outside (e.g., egredior 'I exit'). The presence of the prefix is undoubtedly related to the change in meaning between pario 'I give birth, I

produce' and *experior* 'I try'. The adjunction of this prefix allows for semantic modification leading to the different meaning of *experior* 'I try' with respect to *pario* 'I give birth'. This issue requires further analysis.

In the Early and Classical period this verb always occurs with the Middle morphology and usually occurs with an Accusative complement (an Accusative argument or an entire finite or infinitive clause)<sup>215</sup>.

(222)

An ego experior te cum vim maiorem? (Plaut. *Bacch*. 1168) or I try.1<sup>st</sup>SG.PRS.MID you.ACC with strength.ACC bigger.ACC.SG 'Or should I try you with more strength?'

The past participle may agree with the Nominative subject:

(223)

Vos et cyclopea saxa experti [...]. (Verg. *Aen*, 1, 200) you.NOM.PL and cyclopic.ACC.PL stones.ACC try.PST.PTCP.NOM.PL 'You, who have tried also the stones of the Cyclops [...].'

In one occurrence, however, the past participle agrees with the internal object, with the "tested" argument.

(224)

Proinde venena et artes tam feliciter expertas then poisons.ACC and skills.ACC so happily try.PST.PTCP.ACC.PL verteret in Agrippinam. (Tac. ann. 3, 17, 2) direct.3<sup>RD</sup>SG.SUBJ.IPFV.ACT against Agrippina.ACC 'Then she directed toward Agrippina her poisons and the skills that she has already successfully tested.'

This occurrence is different from the occurrence of *adipiscor* 'I reach, I obtain' in which the past participle agrees with the most internal argument. While in that case, the past participle had an

<sup>215</sup>There is only one possible occurrence in Plautus in which it seems to occur with an Oblique argument, in Plautus (Plaut. *Cist.* 221). There are some philological issues, however, with respect to this passage; the verb may be interpreted as *expeto* 'I ask, I demand' and not as *experior* 'I test'.

adjectival interpretation, in this case, given the presence of the adverb *feliciter* 'happily', the past participle has to be interpreted as eventive. With respect to the interpretation of the past participle, I have already underlined the fact that a benefactive deponent is not expected to present eventive past participles in agreement with the internal argument, only adjectival ones. The benefactive analysis, then, is not adequate for this verb. The other possibility, the controlled change of state analysis, is adequate for all the standard occurrences and for the occurrences in which the past participle agrees with the "testing" argument, but fails, as the benefactive one, when faced with (224). The problem, in this case, is the syntactic position of the Accusative argument. If it is merged in the complement position of the stative event of which the Nominative argument is the HOLDER, then it should not be able to agree with the past participle. Let us set aside this issue for the moment and look at the diachronic data.

Diachronically, this verb has some Active occurrences in Late and Medieval Latin. The relevant occurrences are present in Leander of Seville, Gregory of Tours and Caesarius of Arles, and all occurrences involve an infinitive verbal form.

```
(225)
                    voluit [...]
     Oui
                                        causam
                                                     experire
                                                                     humanae
     who.nom.sg want.3<sup>RD</sup>SG.PRF.ACT reason.ACC try.INF.PRS.ACT human.GEN.SG
     infirmitatis. (Caes. Arel. serm. 191, 1, 4)
     weakness.GEN
     'Who wanted [...] to experience the reason of the human weakness.'
(226)
                                            debemus, [...]. (Greg. T. franc. 8, 30)
     Verum tamen iam experire
     instead then
                      now try.inf.prs.act must.1<sup>st</sup>pl.prs.act
     'But instead, now, we have to try [...]'
```

The *Thesaurus Linguae Latinae* lists some other Active occurrences in which the verb is not an infinitive, e.g., Iul Vict. *rhet*. 4, 2, p. 387, 15 and Greg. T. *dorm*. 2, p. 763, 2. The *Thesaurus* lists a set of other uncertain Active occurrences, the oldest dating to Varro (Varro *ling*. 8, 24). The Active occurrences are compatible with an analysis in which the Nominative argument is directly merged in the DOER position, while the Accusative argument is the subject of a lower stative predication: "x acts in such a way that y is tested", as It. *sperimentare* 'to test'. The verb, then, is reanalyzed as a causative verb in which the Nominative argument is no longer the HOLDER of the state of gaining experience of something (the Accusative argument). This reanalysis is related, as already stated

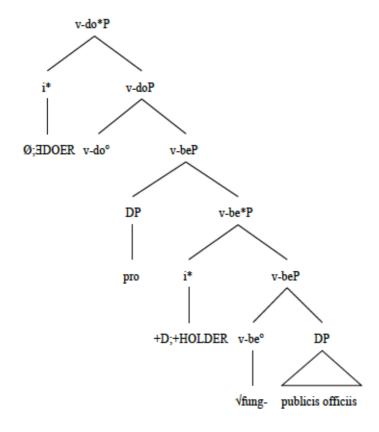
with respect to *commentor* 'I think', to the general loss of the Middle morphology. In the Late and Medieval period, then, such a diachronic change is expected. In Section 3.3 I proposed an early loss of the Middle morphology in the peripheral and substandard varieties already in the III-II cent. BCE. This hypothesis would justify the unexpected example in (224), which dates to the end of the I cent. CE. This occurrence could represent an early emergence of the Active causative variant in which the Accusative argument is the subject of a low v-beP and the Nominative one is directly merged in the DOER position.

#### 3.4.4 Fungor 'I fulfill, accomplish'

Fungor 'I fulfill, I accomplish' is mainly used as an intransitive. The secondary argument is usually introduced by the Ablative case and refers to the element with respect to which the Nominative argument is *functus* 'terminated, fulfilled'. The PIE  $\sqrt{}$  is related to the meaning 'to be used' (cfr. De Vaan 2008). In Latin, the meaning can be derived from a change of state derivation meaning 'I act in order to be *functus* ('done') with respect to something'  $\rightarrow$  'I fulfill a duty'.

(227)

Et publicis fungitur officiis. (Liv. 9, 6, 6) and public.ABL.PL fulfill.3<sup>RD</sup>SG.PRS.ACT duties.ABL 'And he fulfills the public duties.'



In all these occurrences, in which the secondary argument is an Ablative DP, the verb is involved in a change of state structure, not a benefactive one. This analysis is confirmed by the agreement pattern of the past participle, that only agrees with the Nominative argument, and by the existence of a prefixed variant with *de*-. This variant is mainly used without secondary arguments, with the meaning 'to be finished'  $\rightarrow$  'to be free of duties' / 'to die'<sup>216</sup>. The prefix does not add a further argument, as often occurs in Latin (*dormio* intr. vs. *edormio* tr., see Acedo-Matellán 2016); it underlines the completeness of the event: 'to be completely *functus* (with something)'. The preposition, then, modifies the state of being *functus*, providing it with a completeness semantics. The presence of the preposition allows for a more frequent absolute use of the verb. The unprefixed variant, on the other hand, is much less frequently used without a complement, whether it be Ablative or Accusative.

I placed this verb in the Middle+Accusative class because there are also occurrences in which the secondary complement is an Accusative argument. These occurrences are mainly attested in Early Latin, but some rare cases are also present in Medieval Latin:

<sup>216</sup>However, this variant is also attested with Ablative complements (see Cic. Verr. 1, 6, 175).

```
Ut munus fungaris tuom. (Plaut. Trinum. 1)
so.that duty.ACC fulfill.2<sup>ND</sup> SG.SUBJ.IPFV.MID your.ACC.SG
'So that you fulfill your duty.'

(229)

Dum abbatis fungeretur officium. (Greg. T. franc. 8, 31)
while abbot.GEN fulfill.3<sup>RD</sup>SG.SUBJ.IPFV.MID duty.ACC
'While he was serving as an abbot.'
```

The Early Latin occurrences are quite consistent, as until the end of the II cent. BCE, the verb is always used with an Accusative complement, while from the I cent BCE on, the verb sometimes occurs with an Ablative complement. It seems that there are no relevant differences among the two structures, except for the Case marking, as in both cases, the meaning is the same. *Fungor* 'I fulfill, I accomplish', diachronically, except for the Accusative/Ablative alternation, does not show relevant variations. There are no relevant Active occurrences and no *se* 'self' occurrences. The verb, moreover, becomes increasingly used in a stereotyped manner, almost always in conjunction with *munere* 'duty', *officio* 'duty' or *sacerdotio* 'priesthood'.

Other verbs show a similar behavior. One example is *utor* 'I use' (Section 3.4.21), which alternates between the presence of an Accusative secondary argument and an Ablative one, and, also in that case, with the two variants not showing a relevant semantic difference.

#### 3.4.5 Hortor 'I exhort'

Hortor 'I exhort' usually appears with a direct Accusative argument that represents the exhorted element. Frequently, an additional sentential argument (mainly an infinitival sentence or a subordinated sentence introduced by ut) indicates the content of the exhortation.

```
Hortatur hominem quam primum ut proficisceret. (Turp. com. 81) exhort.3<sup>RD</sup>SG.PRS.ACT man.ACC as soon so.that leave.3<sup>RD</sup>SG.SUBJ.IPFV.ACT 'He exhorts the man to leave as soon as possible.'
```

The two arguments are not always present, as the content of the exhortation may be missing. Monoargumental uses, however, in which the only argument is the "exhorting" Nominative, are never attested. The same pattern is valid also for the frequent prefixed forms *adhortor* 'I exhort' and *cohortor* 'I exhort'.

The past participle usually agrees with the "exhorting" Nominative argument and occurs in conjunct participle structures.

```
Hortatus -que coniuratos [...] ut [...] (Liv. 34, 25, 8) exhort.PST.PTCP.NOM.SG -and conspirators.ACC so.that 'Having exhorted the conspirators to [...], he [...].'
```

It is of note that the frequency of the prefixed variants of *hortor* 'I exhort' is much higher with the participial structures. In other words, the participial structures are usually built with *adhortor* 'I exhort' and *cohortor* 'I exhort', while the finite structures are usually built with *hortor* 'I exhort'. This is simply a tendency, however, and not a clear cut differentiation.

Only one Early occurrence was found in which the past participle agrees with the "exhorted" Accusative argument.

```
Exercitum suum [...] cohortatum eduxit army.ACC his.ACC.SG exhort.PST.PTCP.ACC.SG lead.3<sup>RD</sup>SG.PRF.ACT foras. (Cato, orig. 5, 11) out 'He carried out his exhorted army.'
```

The participle, in this sentence, has an adjectival interpretation. In Late and Medieval Latin there are other other similar occurrences in which the past participle does not agree with the "exhorting" argument. These occurrences, however, are variations of the Absolute Ablative pattern, a pattern that for *hortor* 'I exhort' is not attested in Classical Latin and surfaces only in the Late and Medieval periods (e.g., Greg. T. *franc*. 2, 30)<sup>217</sup>. I do not take into consideration this kind of Ablative occurrence, since its syntax is different and would require a specific investigation.

The lack of frequent past participles agreeing with the "exhorted" argument does not allow, in this case, for a clear benefactive analysis. A controlled change of state analysis, however, along the lines of *fungor* 'I fulfill, I achieve', is not appealing either, given the fact that this verb usually

<sup>217</sup>Only in Gregory the Great (*past.* 3, 8) can an occurrence be found in which the past participle agrees with the internal argument and is not an Absolute Ablative case.

appears in a structure with three arguments and the Middle morphology, the "exhorting" argument, the "exhorted" one and the content of the exhortation. A simple structure like the one proposed for *fungor* 'I fulfill I achieve' would not accommodate a third argument, the content of the exhortation, unless it is treated as a higher phrasal adjunct and not as a low argument. The etymological evidence supports the benefactive analysis. As already noted in the first part (Part I, Section 3.4.3), many IE languages present an element related to the same  $\sqrt{}$ ; these elements usually mean in a general sense 'wish, will, eagerness' or 'wishful, eager'. This meaning could be related to the meaning of *hortor* 'I exhort' by means of a denominal/deadjectival benefactive structure: 'x acts in such a way that x has y willing/eager (to do z)'. Such a structure would accommodate for the three objects and would provide a justification for the presence of the Middle morphology.

In Late and Medieval Latin this verb is attested with the Active morphology in many relevant authors, including Gregory of Tours, Epiphanius Latinus, Julian of Toledo, Beatus of Liebana and Autpert Ambrose<sup>218</sup>.

(233)

Me magis ad hoc cohortare debuerant. (Greg. T. *franc*. 8, 15) me.ACC more to this exhort.INF.PRS.ACT must.3<sup>RD</sup>PL.SUBJ.IPFV.ACT 'They had to exhort me more to do this.'

In all these authors, the verb also appears with the Middle morphology. It is possible to hypothesize that the obligatoriness of the projection of the Benefactive phrase got lost in Late and Medieval Latin and, consequently, occurrences can be found in which the Nominative argument is directly merged in the DOER position and the Accusative argument is maintained in the HOLDER position. The meaning of these derivations would be 'x acts in such a way that y is exhorted (to do z)'. The loss of the obligatoriness of the projection of the benefactive phrase is consistent with the loss of the Middle morphology, as will be shown in Section 3.5.

Two Active occurrences are present also in Classical Latin.

(234)

Hos cohortarent uti maturarent. (Quadrig. *hist*. 54) those.ACC exhort.3<sup>RD</sup>PL.SUBJ.IPFV.ACT so.that hurry.3<sup>RD</sup>PL.SUBJ.IPFV.ACT 'They exhorted those (men) to hurry.'

<sup>218</sup>It is possible, I hope, to find some sub-generalizations for each author that may be able to justify the presence/absence of the Middle. In Beatus of Liébana, for example, only one occurrence shows the Active morphology and it is the only occurrence in which the verb is prefixed with *ex*-.

(235)

```
Me negotium meum agere exhortavit me.ACC work.ACC my.ACC.SG do.INF.PRS.ACT exhort.3<sup>RD</sup>SG.PRF.ACT mathematicus. (Petron. 76, 10) mathematician.NOM 'The mathematician exhorted me to do my job.'
```

These two occurrences could represent, as argued previously, evidence for an early loss of the Middle morphology.

#### 3.4.6 Imitor 'I imitate'

*Imitor* 'I imitate' is always used with a secondary Accusative argument:

(236)

```
Imitabor nepam. (Plaut. Cas. 443) imitate.1<sup>st</sup>SG.FUT.MID scorpion.ACC 'I will imitate the scorpion.'
```

The past participle, *imitatus* 'imitated', may agree both with the Nominative argument and with the Accusative internal argument:

```
(237)
```

```
Interdum, faciem liquidarum imitatus aquarum, flumen meanwhile aspect.ACC liquid.GEN.PL imitate.PST.PTCP.NOM.SG waters.GEN river.NOM eras. (Ov. met. 8, 736) be.2<sup>ND</sup>SG.IPFV.ACT
```

'Meanwhile, having imitated the aspect of the liquid waters, you were a river.'

(238)

```
Nec abest imitata voluptas. (Ov. met. 9, 481) and.not is.away.3<sup>RD</sup>SG.PRS.ACT imitate.PST.PTCP.NOM.SG pleasure.NOM 'And the faked pleasure is not missing.'
```

The cases of the past participle in which the participle agrees with the Accusative argument are all adjectival cases. Given the consistent presence of the internal Accusative argument and the fact

that it can agree with the past participle, I propose a benefactive structure with a double stative event, a v-be/withP and a v-beP. The Nominative argument is merged as the subject of the v-be/withP, whose complement is the v-beP, as was already proposed for verbs such as *adipiscor* 'I obtain', *reminiscor* 'I remember' and *comminiscor* 'I invent'. The Nominative argument, then, is contextually identified with the higher existentially bound DOER.

The etymology may confirm this analysis. De Vaan (2008) proposes a derivation from a verb  $*im\bar{a}$ -je/o meaning 'to copy'. The name imago 'image' would be derived from this verb as well. The frequentative version with the suffix -it derives the Latin verb imitor 'I imitate', which can be understood as a frequentative benefactive 'x repeatedly copies y for himself'  $\rightarrow$  'x imitates y'.

There is a single Active occurrence in Early and Classical Latin found in Livius Andronicus. The actual source for Livius Andronicus are quotes from later authors, which in this case is Nonius Marcellus (IV cent. CE).

```
Si malos imitabo, tum tu [...]. (Andr. trag. 1) if bad.things.ACC imitate.1<sup>ST</sup>SG.FUT.ACT then you.NOM 'If I will imitate bad behaviors, then you [...].'
```

In Late and Medieval Latin, this verb shows a relevant number of Active occurrences. Following is an example from Isidore of Seville:

```
In quantum possumus exempla sanctorum in how.much can.1<sup>ST</sup>PL.PRS.ACT examples.ACC saints.GEN imitemus. (Isid. eccl. off. 1, 21) imitate.1<sup>ST</sup>PL.SUBJ.PRS.ACT 'Let us imitate as much as we can the example of the Saints.'
```

Other occurrences of Active forms come from Beatus of Liebana (*in apoc.* 2, 1, 64), Caesarius of Arles (*serm.* 210, 4) and Andrea Agnellus of Ravenna (*Liber pont. (Iohann.)* 45). The Active occurrences can be analyzed as structures in which the v-be/withP is absent and the Nominative argument is directly merged in the DOER position. The presence of frequent Active occurrences after the loss of the Middle morphology is expected (Section 3.5).

#### 3.4.7 Medeor 'I heal' and meditor 'I think'

Medeor 'I heal' and meditor 'I think' derive from the same PIE  $\sqrt{\ }$ , \*med-. De Vaan (2008) derives meditor 'I think' from the passive past participle of medeor 'I heal', \*meditos' to be a judge'. In the Classical period, the verb medeor 'I heal' usually appears with a Dative complement or, much less frequently, with a complement introduced by contra 'against'.

```
Ut medeantur amori. (Ov. met. 9, 652) so.that heal.3<sup>RD</sup>PL.SUBJ.PRS.MID love.DAT 'In order to cure love.'
```

The same verb rarely appears with a direct Accusative complement.

Quas paulo mederi possis. (Ter. *Phorm.* 822) which.ACC.PL.F a.bit heal.INF.PRS.MID can.2<sup>ND</sup>SG.SUBJ.PRS.ACT 'Which you can heal a bit.'

Medeor 'I heal' does not have, in Early and Classical Latin, a past participle form. Consequently, the past participle test is not useful in this case. The fact that the secondary argument is usually marked by Dative case or introduced by a preposition points toward a bieventive analysis in which the Nominative argument is merged in the subject position of a v-beP, and the Accusative argument is merged in the complement position of the same phrase, as already proposed for *fungor* 'I fulfill, I accomplish', *experior* 'I try' and *commentor* 'I think'. The original value of the PIE  $\sqrt{\ }$  may be helpful. De Vaan (2008) proposes, as already pointed out, a derivation from \*med-. The meaning of this  $\sqrt{\ }$  gravitates around the semantic field of 'measure, measured'. It is possible to hypothesize an initial meaning similar to 'to act in order to be measured with respect to something (e.g., a disease, a sick person)'  $\rightarrow$  'I cure the disease'. The bieventive structure is preserved by the derived  $\sqrt{\ }$ .

Diachronically, from Gregory of Tours on, this verb begins to appear with the Active morphology.

(243)

Qui hunc vulnere medere possint. (Greg. T. *franc*. 8, 31) who.nom.pl this.acc wound.acc heal.inf.prs.act can.3<sup>RD</sup>Pl.SUBJ.prs.act 'Who can heal this wound.'

This passage is part of direct speech in which a woman tries to help a wounded man. She tells him there are good physicians that can cure his wound. *Vulnere* 'wound' does not have the Classical Latin Accusative ending –*em*. There is little doubt, however, given the inflection of the pronoun (*hunc*), about the fact that *vulnere* is Accusative. This is further confirmed by the fact that Gregory of Tours uses *medeor* 'I heal' with Accusative complements in his work:

(244)

[...] remedia, qua cicatrices peccatoris vulgi remedies.ACC.PL by.which scars.ACC sinful.GEN.SG people.GEN mederentur. (Greg. T. *franc*. 9, 21) heal.3<sup>RD</sup>PL.SUBJ.IPFV.MID '[...] the remedies with which they could heal the scars of the sinful people.'

Gregory of Tours uses medeo(r) 'I heal' as a standard active verb. The  $\sqrt{\ }$  is reanalyzed as causative: the Nominative argument is directly merged in the DOER position, and the Accusative argument is the subject of the state of being cured. The same state of affairs can be observed in Autpert Ambrose (VIII cent. CE, *in apoc.* 7, 15, 1).

*Meditor* 'I think' appears in many different derivations. First, even though this is a rare occurrece, it can appear without any secondary complement:

(245)

Multis modis meditatus egomet mecum many.ABL.PL ways.ABL think.PST.PTCP.NOM.SG I me.with sum. (Plaut. *Bacch*. 384) am
'I meditated by myself in various ways.'

It, less frequently, appears with infinitival or completive clauses as complements or with a direct Accusative.

(246)

```
Silvestrem tenui Musam meditaris avena. (Verg. ecl. 1, 2) sylvan.ACC.SG light.ABL.SG Muse.ACC think.2<sup>ND</sup>SG.PRS.MID flute.ABL 'You meditate a sylvan song with your light flute.' (lit. 'meditate a silvan Muse.')
```

Less frequently, finally, it appears with prepositional arguments introduced by *de* 'of' or *ad* 'to' (Cic. *fam*. 2, 3, 1).

The past participle may agree with the internal argument, the argument upon which the Nominative argument reflects.

(247)

Meditata mihi sunt omnia mea incommoda, think.pst.ptcp.nom.pl me.dat are all.nom.pl my.nom.pl problems.nom erus si redierit. (Ter. *Phor*. 248) master.nom if come.back.3<sup>RD</sup>SG.FUT.PRF.MID
'I have already figured out all the troubles that I will have when the master comes back.' (lit. 'all the troubles are meditated to me if the master comes back')

The past participle, then, may also agree with the argument who is in control of the thinking event.

(248)

Exercuit iras Inachiae Iuno pestem show.3<sup>RD</sup>SG.PRF.ACT wraths.ACC Inachia.GEN.SG Juno.NOM ruin.ACC mediata iuvencae. (Verg. *georg*. 3, 152) think.PST.PTCP.NOM.SG.F heifer.GEN 'Juno, having planned the ruin of the Inachian heifer, showed her wrath.'

The double agreement pattern of the past participle leads to the possibility of a Benefactive structure such as the one proposed previously for *adipiscor* 'I obtain', in which the two arguments, the Nominative and the Accusative, are merged in the subject position of two different stative events, a lower v-beP and a higher and superordinated v-be/withP (see example (287)). The subject of the v-be/withP, then, is contextually related to the semantically existential DOER role signaled by the Middle morphology. A rough and intuitive paraphrase could be 'x acts in such a way that x

has y meditatus'. This is further confirmed by the presence of the Dative pronoun mihi 'to me'. However, the proposed analysis does not perfectly agree with the data. If the  $\sqrt{}$  for meditor 'I think' is only capable of being merged in a benefactive structure, then, there should be no occurrences of meditor 'I think' in which the Nominative argument is the only argument present in the derivation<sup>219</sup>. The example in (245) clearly shows that absolute uses are attested. A further proof that the proposed structure does not exhaust the attested possibilities is the existence of prepositional arguments introduced by de 'of' or by ad 'to'. These arguments are usually linked to complement positions and never to the subject position of a v-beP. There is a relevant piece of data that may help us in this context. I have shown that the past participle may agree with the Nominative argument (see (248)). In that example, the past participle is followed by the Accusative argument, pestem 'ruin'. As stated previously, if the structure involves a v-beP + a v-be/withP, the presence of the Accusative argument should be obligatory, since the projection of the v-be/withP entails the projection of the v-beP and of its subject, the Accusative argument. The example in (249), on the other hand, shows a different pattern.

(249)

Qui venit ut noceat, semper who.Nom.sg come.3<sup>RD</sup>SG.PRS.ACT so.that hurt.3<sup>RD</sup>SG.SUBJ.PRS.ACT always meditatus venit. (Publil. Q 58) think.PST.PTCP.Nom.sg come.3<sup>RD</sup>SG.PRS.ACT 'who comes with the intention of hurting (someone), always comes with a plan.'

In this case, the past participle agrees with the "thinking" argument, but there is no Accusative argument in the structure. This piece of evidence seems to show that the  $\sqrt{}$  for *meditor* 'I think' can appear in two different eventive structures: in the benefactive structure proposed previously, in which the projection of the Accusative argument is obligatory, and in a controlled change of state structure, in which the Nominative argument is merged in the subject position of a v-beP, holding the state of being *meditatus* 'prepared, well thought' and is contextually identified with the subject of the higher v-doP (DOER). Such a structure conforms to the absolute/de/ad occurrences attested for this verb and to the participial structure in (249). This analysis is the same that I proposed for *reminiscor* 'I remember' and that I will propose for *obliviscor* 'I forget', which can be present both in a controlled change of state derivation and in a benefactive one.

The √ for this verb, then, is highly complex. It may be merged in either the Benefactive 219This prediction derives from the fact that the v-be/withP cannot exist without the internal complement. A possessive relationship without a Possessee (may that Possessee be a DP or a v-beP) would be meaningless.

structure or the controlled change of state structure. This means that the same  $\sqrt{\ }$ , when it is merged with a v-be $^{\circ}$  embedded under a v-be/withP, is related to the argument upon which someone reflects, while when it is conflated into a v-be $^{\circ}$  merged under a v-doP, it is related to the "thinking" argument. The solution may come from the etymology. The etymology is related, as already proposed, to the meaning 'well measured'. This kind of meaning can be reasonably connected, in a "thinking" event, both to the "thinking" argument and to the argument upon which someone reflects.

In Medieval Latin, *meditor* 'I think' is frequently attested with the Active form.

```
(250)
      Hos
                  libros
                                                  coeperunt. (Isid. eccl. off. 1, 12)
                              meditare [...]
      these.ACC books.ACC think.INF.PRS.ACT begin.3<sup>RD</sup>PL.PRF.ACT
     'They began to reflect upon these books.'
(251)
                                               in cella
                                                             noviciorum ubi
      Postea autem sit
              instead is.3<sup>RD</sup>SG.SUBJ.PRS.ACT in cell.ABL novices.GEN where
      then
      meditent
                                 et
                                      manducent
      think.3<sup>RD</sup>PL.SUBJ.PRS.ACT and eat.3<sup>RD</sup>PL.SUBJ.PRS.ACT and
      dormiant. (Bened. reg. 58, 5, 1)
      sleep.3<sup>RD</sup>PL.SUBJ.PRS.ACT
     'And then there must be place in the cell of the novices where they can meditate, eat and
     sleep.'
```

These occurrences present the entire set of complements already present in Classical Latin: Accusative complements, *de/ad* prepositional complements and no complement. For example, in (251) the verb is used without any secondary complement and describes the pure activity of meditating. These Active occurrences, then, are different from the Active occurrences attested for *reminiscor* 'I remember' and *obliviscor* 'I forget' (Section 3.4.2 and 3.4.12). In those cases, the Active occurrences are attested only with a complement introduced by the *de* 'of' preposition. Those Active occurrences, however, still involved a change of state, from the state of not remembering to the state of remembering, or vice versa. For those cases, then, I proposed a bieventive analysis for the Active cases, in which the *de* 'of' argument is merged in the complement position of the stative v-beP, embedded under a higher v-goP. In these Active cases, instead, the event involves an activity – the continuous activity of meditating – meaning there is no change of

state. The  $\sqrt{}$  of the verb is directly merged in the v-do $^{\circ}$ , and the possible secondary argument is in the complement position of the v-doP.

#### 3.4.8 Mereor 'I earn, I deserve'

*Mereor* 'I earn, I deserve' alternates between the Middle and the Active form and, ever since its first occurrence, always occurs with an Accusative complement.

(252)

Meream deorum divitias mihi. (Plaut. *Men.* 217) earn.1<sup>st</sup>SG.SUBJ.PRS.ACT gods.GEN wealths.ACC me.DAT 'May I earn all the wealth of the gods!'

(253)

Quid merear, quam ob rem mentiar? (Plaut. *Most.* 987) what.ACC earn.1<sup>st</sup>SG.SUBJ.PRS.MID what for thing lie.1<sup>st</sup>SG.SUBJ.PRS.MID 'What would I earn? Why should I lie?'

In this case, the presence vs. absence of the Middle morphology is an evident benefactive vs. non-benefactive alternation. When the verb appears with the Middle morphology, the Nominative argument is merged as a BENEFACTIVE, as the subject of a v-be/withP. However, when the verb appears with the Active morphology, the Nominative argument is merged in the external argument position.<sup>220</sup> A further confirmation of this hypothesis comes from the fact that, in many cases, the Active occurrences appear with an overt benefactive pronoun, a clear example being (252). A quick survey of the occurrences in Plautus confirms this tendency:

(254)

Neque ille sibi mereat Persarum and.not that.one.nom self.dat earn.3<sup>RD</sup>SG.SUBJ.PRS.ACT PERSIANS.GEN montis. (Plaut. *Stich*. 24)

mountains.ACC

<sup>&#</sup>x27;And he would not earn the mountains of the Persians.'

<sup>220</sup>I leave aside the issues regarding the stative vs. non-stative interpretation of these predicates. The 'I earn' translation underlines a possible dynamicity, while the translation 'I deserve' underlines the stativity. Given the constructivist framework, however, the √ forming the verb *mereor/mereo* may be understood as being able to be merged in both a stative structure and a dynamic one. More tests are needed to disambiguate the many occurrences of this verb (as taking into consideration the prefixed variants, this verb has more than 5500 occurrences from the III cent. BCE to the IX cent. CE).

The fact that it is possible to find Active occurrences without a SE pronoun or a BENEFACTIVE argument since the Early period is of note. The non-benefactive reading of this verb, in which the v-be/withP is absent, is always possible.

The past participle agreement conforms to the pattern already observed for benefactive verbs; it may agree both with the earned object and with the earning subject:

```
(255)
     Ob
              meritam
                              noxiam. (Plaut. Trinum. 23)
     beacuse deserved.ACC.F fault.ACC.F
     'Because of the deserved fault.'
(256)
     Neque ulla
                          virtute
                                     tam longam
                                                       fortunae
                                                                   indulgentiam
     and.not any.ABL.SG virtue.ABL so
                                          long.ACC.SG fortune.GEN indulgence.ACC
     meritus, [...]. (Vell. 2, 80, 1)
     deserved.NOM.SG
     'And he, not having deserved by means of any virtue such a long Fortune's indulgence,
     [\ldots].
```

From a diachronic point of view, there is not much to say with respect to this verb. Already in the III cent. BCE it is a  $\sqrt{-}$ -based verb already able to appear in both a benefactive and a non-benefactive structure, alternating between the Middle and the Active morphology. While the co-occurrence with overt benefactive se 'self' pronouns is already possible in the early stages, the presence of overt benefactive pronouns is an Early Latin feature. No occurrence of this pattern was found in the subsequent centuries, though the cooccurrence of the Middle morphology and the overt benefactive pronoun was present in the works of some Medieval authors.

```
Mihi soli ut mereor. (Petr. Dam. epist. 1, 10) me.dat only.dat so.that earn.1<sup>st</sup>SG.PRS.MID 'So that I earn only for me.'
```

This case is controversial, since the pronoun *mihi* 'to me' is clearly in a left peripheral position, possibly as a focalized element. A strong indicator of the feasibility of this proposal is the fact that

it precedes the complementizer ut 'so that'.

It is possible to conclude that this verb has never been a deponent, meaning a verb which always appears with the Middle morphology, at least in a specific period. This verb, instead, alternates since its very first occurrences. A key point for further analysis is that all the occurrences in which the BENEFACTIVE argument is marked by a SE pronoun and the verb is Active belong to the Early period. After the end of the II cent. BCE up until the Medieval period, all the benefactive occurrences are marked by the Middle morphology. In the Medieval period, finally, it is possible to find cases in which the benefactive occurrences are marked both by the Middle morphology and by a SE pronoun. This behavior is not unexpected. There is a connection between the Early period and the Late and Medieval periods with respect to the behavior of many verbs. I believe this is connected to loss of the Middle morphology, which in the Medieval period is complete, and in the III-II cent. BCE is present in peripheral or substandard Latin variants.

#### 3.4.9 Metior 'I measure'

*Metior* 'I measure', attested since Cato, is always used with a direct Accusative argument that represents the element being measured.

(258)

Vinum emptoribus quo modo metiaris. (Cat. *agr*. summ. 5) wine.ACC buyers.DAT this way measure.2<sup>ND</sup>SG.SUBJ.PRS.MID 'So that you can measure the wine for the buyers.'

The past participle is able to agree with the Nominative argument, the "measurer":

(259)

known stars.'

Nos, freta sideribus notis distantia mensos, we.acc waves.acc stars.abl known.abl.pl distant.acc.pl measure.pst.ptcp.acc.pl sors tulit. (Ov. *trist.* 1, 5b, 17) destiny.nom take.3<sup>RD</sup>SG.PRF.ACT 'The destiny took us once we had already measured waves that were distant from the

I have been able to find an occurrence of an adjectival past participle agreeing with the

"measured" argument.

(260)

Qui quia mensa spatia conficiunt which.NOM.PL because measure.PST.PTCP.ACC.PL spaces.ACC produce.3<sup>RD</sup>PL.PRS.ACT menses nominantur. (Cic. *nat. deor*. 2, 69) months.NOM call.3<sup>RD</sup>PL.PRS.MID 'Which are called months because the produce measured periods.'

The obligatory presence of the direct object and the presence of an adjectival past participle agreeing with the "measured" argument point toward a Benefactive solution, in which the Accusative object is the HOLDER of the state of being *mensus* 'measured', while the Nominative one is both the BENEFACTIVE of the state and the DOER that initiates the whole event.

Diachronically, this verb is not of particular interest. While no relevant Active occurrences were found, there are passive occurrences (e.g., Vulg. *Ier.* 33, 22)<sup>221</sup>. The presence of possible Passive occurrences in Late Latin is not unexpected and is in line with the diachronic path that all the other benefactive deponents follow: because of the loss of the Middle morphology, the obligatory projection of the v-be/withP is lost and, consequently, causative occurrences begin to appear.

#### 3.4.10 Molior 'I move'

*Molior* 'I move' usually appears with a direct Accusative argument.

(261)

Horrifer Aquilonis stridor gelidas molitur terrifying.NOM.SG Aquilon.GEN screech.NOM icy.ACC.PL move.3<sup>RD</sup>SG.PRS.MID nives. (Acc. *trag.* 566) snows.ACC

'The terrifying screech of the Aquilon moves the icy snow.'

<sup>221</sup>The *Thesaurus* (TLL) reports two passive occurrences in Caesar (Caes *Gall.* 1, 16, 5 and 1, 23, 1). Both occurrences, however, involve the impersonal *oportet* 'it is needed' introducing the infinitival form *metiri*. In both cases, the most natural and coherent analysis does not involve a passive interpretation for *metiri*, but the usual one.

i. Frumentum militibus metiri oporteret. (Caes. *Gall.* 1, 16, 5) 'It was a necessity to measure the wheat for the soldiers.'

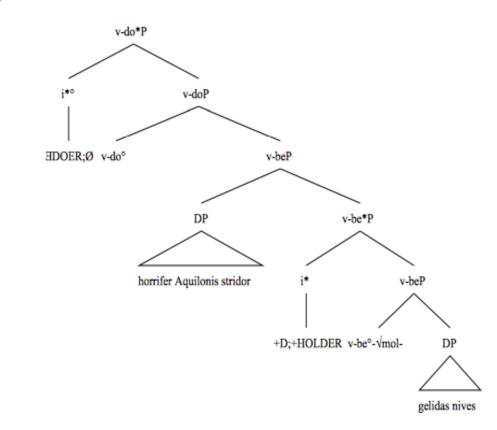
It also appears, though rarely, without any secondary argument.

(262)

Vide-n ut misere moliuntur? (Plaut. *Curc*. 188) see.2<sup>ND</sup>SG.IMP.ACT-not as desperately move.3<sup>RD</sup>PL.PRS.MID 'Don't you see how desperately they move?'

Here, the transitive occurrence is translated as 'to move'. It is important to note, however, that a more proper translation would be 'I exert myself upon something'. This interpretation of the event allows for a better understanding of the relationship between the transitive cases and the intransitive ones, in which the Accusative complement looks like the measure of the effort of the DOER, which is the subject of the subordinated stative phrase, the element which is *molitus* 'moved, exerted'.





Unsurprisingly, no occurrences of past participles of *molior* 'I move' agreeing with the moved object, the Accusative one, were found in the Early and Classical period<sup>222</sup>. I found only

<sup>222</sup>The past participle of *molo* 'I grind' has the same form of the past participle of *molior* 'I move', *molitus*. The past participle of *molo* 'I grind' agrees only with the Accusative object. These occurrences, obviously, have been eliminated from the analyzed data.

occurrences of past participles agreeing with the Nominative argument.

(264)

```
Agricola incurvo terram molitus farmer.NOM curved.ABL.SG soil.ACC move.PST.PTCP.NOM.SG aratro. [...] (Verg. georg. 1, 494) plow.ABL 'The farmer, once he moved the soil with the curved plow, [...].'
```

The verb *molior* 'I move' has many different prefixed variants. The most relevant ones are with de, ab and ad. These variants do not differ from the unprefixed verb for number and kind of arguments, as in each case the possible arguments are two: a Nominative and an Accusative. Only admolior 'I build, I try' behaves like molior 'I move' and may appear with only the Nominative argument, while the other two variants obligatorily occur with an Accusative argument. The prefixes do not interfere directly with the event structure; they further specify the direction of the effort of the Nominative argument<sup>223</sup>. However, the fact that the presence of the Accusative argument is obligatory with de and ab is relevant. A possible hypothesis is that the prepositional prefix comes directly from the secondary argument, as an introducing preposition incorporated into the main verb. In this case, then, the presence of the preposition would imply the presence of the secondary argument. With ad, the data are more complex. The Accusative argument is not obligatory, but in each occurrence of admolior there is a secondary argument (and in one case the secondary argument is a directional prepositional phrase introduced by a second ad, Plaut. Rud. 598). While this issue merits further analysis, there seems to be a fairly consistent correlation between the presence of the prepositional prefixes and the obligatory presence of a secondary argument.

Diachronically, it is possible to observe a progressive activation of this verb. *Demolior* 'I demolish' is the first verb that shows Active occurrences already in the Classical period.

(265)

Et tamen non demolio rostra. (Varro *Men*. 591) and however not destroy.1<sup>ST</sup>SG.PRS.ACT rostrums.ACC 'However, I do not demolish the rostrums.'

<sup>223</sup>They do not behave like *ex*- in *e-dormio* 'I sleep off something', that allows the merging of an additional Accusative argument that would not be allowed without the prefix (see Acedo-Matellán 2016).

This verb is built similarly as *de-struo* 'I pull down'. In *de-struo*, the adjunction of the preposition *de* reverses the meaning of the basic verb: *struo* 'I build'  $\rightarrow$  *de-struo* 'I pull down'. The adjunction of this preposition entails some kind of reversion. In this case, I hypothesize, the reversion is referred to the lower Accusative argument, which measures the efforts of the Nominative argument, the subject of the v-beP, not by its mass but by the absence of its mass, i.e., by its physical absence. This hypothesis is further supported by the fact that the verb may also initially mean 'I avert x from me' (see Plaut. *Bacch*. 384). The subsequent reinterpretation follows the similar verb *de-struo* 'I destroy', in which the Accusative argument is the subject of the state of being *de-structus* 'destroyed'. As with the case of *demolior* 'I demolish', the Accusative argument begins to be interpreted as the subject of the lower v-beP. The v-beP, then, loses the initial connection with the Nominative argument and with the semantics related to 'effort/exertion', and the Active occurrences of this verb end up having this causative semantics: 'x acts in such a way that y is *demolitus*'. The fact that adjectival participles describing the state of being *demolitus* 'demolished' exist only in Late Latin confirm this hypothesis (see, e.g., Apul. *Socr.* 9, 19, 2).

The unprefixed verb, though rarely, does appear with the Active morphology in the Medieval period.

```
(266)

Haec [...] labore molieram. (Paul. Nol. epist. 32, 18)

these.ACC effort.ABL move.1<sup>ST</sup>SG.SUBJ.IMPV.ACT

'I moved these things with my own effort.'
```

In this case as well, the Active occurrence has a causative semantics 'to move'. Which means that the initial complement of the v-beP begins to be interpreted as the subject of the v-beP, with a Nominative argument that is consequently directly merged in the DOER position.

# 3.4.11 Nanciscor 'I get'

Since its first occurrence, *nanciscor* 'I get' usually appears with a direct Accusative argument.

```
Ubi siem vestitum hunc nactus. (Ter. Eun. 553) where am.1<sup>st</sup>SG.SUBJ.PRS dress.ACC this.ACC get.PST.PTCP.NOM.SG 'Where I got this dress.'
```

In many cases, the Accusative argument represents a location.

(268)

Requiescendum spatium nacti. (Sis. *hist*. 31) sleep.gndv.ACC.SG place.ACC get.PST.PTCP.NOM.PL 'Having reached a resting place.'

This case resembles the case of adipiscor 'I reach, obtain'. It seems to be a change of location reinterpreted as a possession: to be in a locative relationship with a Ground  $\rightarrow$  to be in a possessive relationship with a Possessee. I showed that adipiscor 'I reach, obtain' cannot be synchronically interpreted as a change of location; it is a benefactive construction with two different stative events whose subjects are, respectively, the Nominative and the Accusative arguments. This is proved by the agreement possibilities that the past participle shows with the Nominative and the Accusative argument (see Section 3.4.1 and Part I, Section 3.4.3). The case of *nanciscor* 'I get' is different, as the past participle agrees only with the Nominative subject, as in Example (268). Given this pattern, I propose a bieventive structure with a superordinated dynamic event and a subordinated stative phrase which delivers the possession meaning. The Nominative argument is the only argument that is the subject of a stative phrase and, consequently, the only argument that may agree with the past participle. This analysis interprets the structure as a  $\sqrt{-}$ based change of possession event with the Nominative argument as the Possessor and the direct Accusative argument as the Possessee. The same  $\sqrt{}$  may have initially been used in a change of location structure which related a Figure (the Nominative argument) and a Ground (the Accusative argument). There is no benefactive structure here, meaning there is no structure in which there are two stative subevents, a v-beP and a vbe/withP, with the higher one being the v-be/withP.

This pattern is fairly consistent. There is only one author, in the Classical period, who presents different data: Hyginus Mythographus. Of his five uses of *nanciscor* 'I get', four have a past participle agreeing with the Nominative subject, confirming the hypothesis. One peculiarity with respect to these occurrences is the presence of an Ablative argument.

(269)

Occasione Iphigenia nacta [...] navem opportunity.ABL Iphigenia.NOM get.PST.PTCP.NOM.SG.F ship.ACC ascendit. (Hyg. Myth. 106, 6, 19)

get.on.3<sup>RD</sup>SG.PRF.ACT 'Iphigenia, as soon she had an opportunity, got on the ship.'

The participle *nacta* 'reached' may be interpreted both as an Ablative in agreement with *occasione* 'opportunity' or as a Nominative in agreement with Iphigenia. The first interpretation would lead to the interpretation of the phrase as an Ablative Absolute. The presence of the Nominative subject within the supposed Ablative Absolute phrase, however, is not standard, given that the Ablative Absolute is usually completely unrelated to the main sentence. The second interpretation would lead to an analysis in which the usual Accusative argument is substituted by an Ablative one. In four occurrences, Hyginus uses this verb in this specific frame, in conjunction with *occasione* 'opportunity' and related to a feminine Nominative subject. There is only one other occurrence in which Hyginus uses this verb. This fifth occurrence is, apparently, a passive structure with a prepositional agent introduced by the preposition *ab* 'from'.

(270)

Qui ab Apolline nacti sunt interfecti. (Hyg. Myth. 28, 2, 5) who.nom.pl from Apollo.abl get.pst.ptcp.nom.pl are kill.pst.ptcp.nom.pl 'Who, once found, have been killed by Apollo'

In this passage, Hyginus is telling the story of Otos and Ephialtes, the sons of Aloeus, who tried to climb to the heaven piling mountains one on top of the other and were killed by Apollo. The past participle *nacti* agrees with the plural Nominative argument, referring to Otos and Ephialtes. However, the key point is that it is Apollo who found Otos and Ephialtes, which means that the past participle cannot be interpreted as in (268), referring to the argument who "gets" the second argument. The past participle has to be interpreted as referring to the argument that ends up in possession of the first argument. A further problem is the interpretation of the prepositional agent *ab Apolline* 'by Apollo': is it the agent of the *interficere* 'to kill' event or the agent of the *nancisci* 'to get' event? Whichever interpretation one may choose, it is evident that Hyginus uses this verb in a different way with respect to the Classical and Early standard uses. Hyginus stands out as an exception in an otherwise consistent environment.

It is possible to find a similar example in Late Latin in Gregory of Tours:

(271)

Clausis autem ex more usteis, a custodibus non est

```
close.PST.PTCP.ABL.PL instead as usual doors.ABL from wards.ABL not is nanctus. (Greg. T. franc. 2, 7) get.PST.PTCP.NOM.SG 'Once, as usual, the doors have been closed, he has not been spotted by the wards.'
```

Here as well the interpretation is passive. The prepositional agent, in this case, has to be interpreted as the agent of the *nancisci* 'to get' event. The subject in agreement with *nanctus* is the argument that is reached/attained, not, as in Classical Latin, the argument that reaches/attains something. Other occurrences with a similar behavior can be found in Gregory of Tours (*ibid*. 6, 13; *ibid*. 8, 15), and in these cases, the structure seems causative and strongly resembles the Italian verb *raggiungere* 'to reach'.

### 3.4.12 Obliviscor 'I forget'

Obliviscor 'I forget' has been diachronically related to a causative/change of state alternation \*oblivīre 'to make x smooth/erased' vs obliv(sc)i 'to become smooth/erased → to forget' (de Vaan 2008). This verb may appear both with an Accusative secondary argument and with a Genitive one. The perfect form appears more frequently with the Accusative, while the present form occurs more often with the Genitive:

```
Oblitus sum omnia. (Plaut. Bacch. 790)

forget.PST.PTCP.NOM.SG am everything.ACC.PL

'I forgot everything.'

(273)

Si veteris contumeliae oblivisci vellet. (Caes. Gall. 1, 14, 3)

If old.GEN.SG offense.GEN forget.INF.PRS.MID want.3<sup>RD</sup>SG.SUBJ.PRS.ACT

'If he wants to forget the old offense.'
```

The pattern, however, is not quite so neat and consistent. There are occurrences of direct Accusative arguments with the -sc- form of the present and occurrences of Genitive arguments with the analytic perfect form:

(274)

```
Obliviscor iam iniurias tuas, Clodia. (Cic. Cael. 50)
forget.1<sup>ST</sup>SG.PRS.ACT already offenses.ACC your.ACC.PL Clodia
'I already forget your offenses, Clodia.'

(275)

Iam essem oblitus severitatis
already be.1<sup>ST</sup>SG.SUBJ.IPFV.ACT forget.PST.PTCP.NOM.SG strictness.GEN
meae. (Cic. Sull. 45)
my.GEN.SG
```

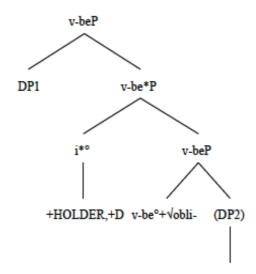
The lack of any clear pattern does not allow for a definite conclusion. This issue can be addressed in future research.

The past participle may agree with the Nominative argument:

Miserae oblitae molli sub veste poor.GEN.SG forget.PST.PTCP.GEN.F.SG soft.ABL.SG under dress.ABL locatum. (Catull. 65, 21) placed 'Placed under the soft dress of the poor and forgetful (girl).'

In this case, the past participle agrees with the "forgetting" subject and no complement is present. This fact – that the possibility of having a Genitive complement and the diachronic derivation – shows that this verb can be analyzed as a controlled change of state deponent, in which the Nominative argument is the subject of the state of being "forgetful" and the possible secondary argument is in the complement position of this state.

(277)



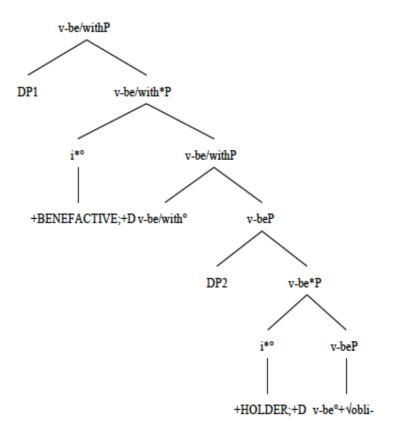
The data, however, show that this verb is more complex. The past participle is also able to agree with the "forgot" argument and, in this case, there is also a Dative argument that represents the argument which forgets:

(278)

Nunc oblita mihi tot carmina. (Verg. *ecl.* 9, 51) now forget.PST.PTCP.NOM.N.PL me.DAT all Songs 'By now I have already forgotten all songs.'

In this case, the Dative marking of the "forgetting" argument and the fact that the "forgot" argument agrees with the past participle points toward a different analysis, in which the "forgot" argument is the subject of the state of being "forgot", while the "forgetting" argument is the beneficiary of that state.

(279)



All the occurrences in which the secondary argument is encoded by means of Genitive case or by means of the preposition de 'of' represent cases of the first structure, in which the "forgetting" argument is the subject of a state of being *oblitus*. The subject of a state is never encoded by Genitive case or by a de 'of' preposition. The cases in which, instead, the secondary argument is encoded by means of Accusative case are less transparent. They could represent cases of the first derivation as well as cases of the second one: both the complement of a state and the subject of a state can be marked, in Latin, by Accusative case (see Section 3.4.1 and Part I, Section 3.4.3).

Obliviscor 'I forget' has some Active occurrences in Medieval Latin.

```
Ut eadem obliviscerem. (Greg. T. franc. 7, 22)
so.that the.same.ACC.PL forget.1<sup>ST</sup>SG.SUBJ.IPFV.ACT
'In order to forget the same things'

(281)

Qui caelestia obliviscit. (Beat. Lieb (Ox.) Elip. 1, 104)
who.nom.sg heavenly.ACC.PL forget.3<sup>RD</sup>SG.PRS.ACT
```

'Who forgets the heavenly things.'

There is a correlation between the presence of an Accusative argument and the Active morphology: whenever the verb appears with the Active morphology, the secondary complement is marked by Accusative case. However, the reverse does not hold: the presence of an Accusative argument does not imply the presence of the Middle morphology, as (274) shows. This pattern reminds of It. *dimenticare* 'to forget'. When this verb appears without the *se* 'self' pronoun, the secondary argument cannot be marked by the *di* 'of' preposition but can only appear with Accusative case.

```
Ho dimenticato la macchina.

have.1<sup>ST</sup>SG.PRS forget.PST.PTCP the car
'I forgot my car'

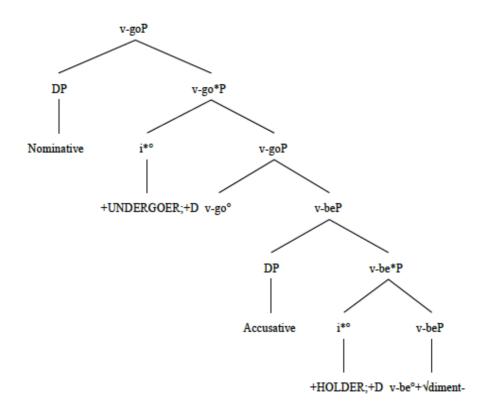
(283)

*Ho dimenticato della macchina.

have.1<sup>ST</sup>SG.PRS forget.PST.PTCP of.the car
```

Sentence (282) has *avere* 'to have' as an auxiliary. The presence of this auxiliary is related, in Standard Italian, to a structure in which the Nominative argument is not internal. These Italian sentences can be understood as bieventive structures in which the Accusative argument, which is obligatorily present, is the subject of the state of being forgot, while the Nominative argument is directly merged in the higher position, as in the case of *rompere* 'to break'. The difference between *rompere* 'to break' and *dimenticare* 'to forget' is that, in the second case, the dynamic event that leads to the final state is not controlled; it is a v-goP.

(284)



A rough translation of this structure could be "it happens to x something that leads to the fact that y is in a state of being forgot". If the Latin cases with Active morphology behave like the Italian ones, the absence of the Middle morphology is predictable. I noted in Part I, Section 4 that the presence of a structure with a benefactive phrase, in a language in which there is no Middle morphology, directly implies the presence of an alternant in which the benefactive phrase is absent. The loss of the Middle morphology, then, plays an important role: the Active occurrences attested in Late and Medieval Latin are related to the loss of the Middle morphology (see Section 3.5).

#### 3.4.13 Opinor 'I think'

*Opinor* 'I think' appears since its first occurrence with an Accusative argument. The past participle agreement patterns resemble the patterns found for *adipiscor* 'I reach, I obtain'. There are occurrences in which the past participle agrees with the subject of the thinking event and occurrences in which it agrees with the object of the thinking event.

(285)

Ita sunt exorsi non ad suum pertinere officium so are rise.PST.PTCP.NOM.PL not to their pertain.INF.PRS.ACT office.ACC opinati. (Quint. *Inst.* 1, proem. 4) think.PST.PTCP.NOM.PL

'And so they rebelled, because they did not think that it pertained to their duties.'

(286)

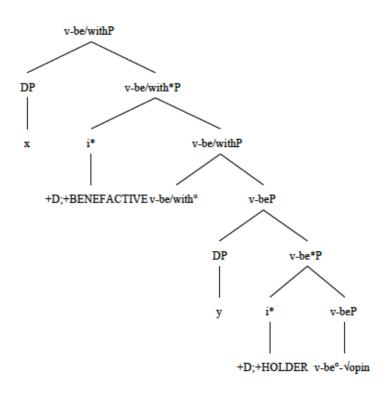
Adhibenda illa ornamenta rerum [...] sive nec use.GRDV.NOM.PL that.NOM.PL decorations.NOM things.GEN or not opinata [...]. (Cic. part. 73, 19)

think.PST.PTCP.NOM.PL

'Those things that adorn the speech ought to be used [...] whether not expected (lit. thought) [...]'

The verb *opinor* 'I think' is built by means of the subsequent merging of two stative eventive heads: a v-beP, describing the state of being *opinatus* 'thought', and a v-be-withP, roughly describing the state of having something *opinatus*. There are, consequently, two possible subjects for the past participle.

(287)



The complete event also includes a dynamic part leading to the states described, though this is not represented in the syntactic tree in order to make the simplify it. It is possible to conclude that the  $\sqrt{\text{ for } opinor}$  'I think' is involved in a benefactive eventive structure, which helps explain the fact that it always presents the Middle morphology.

*Opinor* 'I think', however, does not always appear with a direct Accusative argument. It may appear in a monoargumental structure:

(288)

```
Et quidem, cur sic opinetur, rationem and certainly because so think.3<sup>RD</sup>SG.SUBJ.PRS.MID reason.ACC subicit. (Cic. div. 2, 87) subdue.3<sup>RD</sup>SG.PRS.ACT 'And he certainly subdues (bends) the reason, given that he thinks so.'
```

The occurrences of *opinor* 'I think' without either a direct Accusative argument or a subordinated sentence (in many cases an infinitival) are few. In the Classical period, fewer than 10 occurrences were found. In this case, the monoargumental structure may be analyzed as involving a two state predicate describing the event of acting in such a way as to have an opinion (v-doP + v-be/withP), excluding the subordinated v-beP in which the other argument, the HOLDER of the state of being *opinatus*, was merged in the previous analysis. The noun *opinio* 'opinion' is diachronically derived from *opinor* 'I think'. It is possible to suppose, however, a denominal backformation on the basis of *opinio* 'opinion': 'x acts is such a way that x has an *opinio*'. There is a final pattern in which the verb *opinor* 'I think' may be found, with a *de* 'of' + Ablative complement. This pattern is even rarer than the previous one and is attested only in the Late Latin period.

(289)

```
Opinemur de statu et qualitate urbis think.1<sup>ST</sup>PL.SUBJ.PRS.MID of state.ABL and quality.ABL city.GEN illius. (Lact. inst. 3, 3, 9) that.GEN.SG 'Let us think about the state and quality of that city.'
```

This may be seen as a modification of the previous monoargumental pattern, the only difference being the adjunction of a specification argument in complement position of the v-

be/withP: 'x acts in such a way that x has an opinio of y'.

Diachronically, I have been able to observe only a single Active form, found in the Hymnodia Hispanica (VII cent. CE ca.):

(290)

```
Non hoc potiri distraendo opines. (Hymn. Hisp. 164, 71) not this.ACC seize.INF.MID stretching think.2<sup>ND</sup>SG.SUBJ.PRS.ACT 'Do not think that you will get it using your strength.'
```

In this case, the  $\sqrt{}$  is directly conflated into v-do $^{\circ}$ , providing the activity event of 'thinking'.

# 3.4.14 Ordior 'I weave, I start speaking'

Ordior 'I weave, I start speaking' usually appears with a direct Accusative argument, but there are occurrences in which it appears with an infinitival complement, with a prepositional complement (introduced by de 'of') or without any secondary complement.

```
(291)
     Machinam
                     ordiris
                                          novam. (Pacuv. trag. 379)
     machinery.ACC weave.2<sup>ND</sup>SG.PRS.MID new.ACC.SG
     'You come up with a new piece of machinery.'
(292)
     De qua
                      disputare
                                          ordimur. (Cic. Brut. 22)
     of which.ABL discuss.INF.PRS.ACT weave. 1stpl.PRS.MID
     'Of which we planned to discuss.'
(293)
     Unde
                  ordiri
                                     rectius
                                                   possumus
     from.where weave.INF.PRS.MID more.rightly can.1stpl.PRS.ACT
     quam [...]? (Cic. Tusc. 5, 13, 37)
     than
     'Is there a better source for us to weave than [...]?'
```

The past participle agrees only with the Nominative subject and, interestingly, in many occurrences of the conjunct (eventive) participle there is no Accusative argument and the verb is

monoargumental.

```
Sic orsus, Apollo [...] (Verg. Aen. 9, 656) this.way weave.PST.PTCP.NOM.SG Apollo.NOM 'Apollo, having started this way, [...].'
```

Given this evidence, I propose categorizing this verb as belonging to the same class of *fungor* 'I fulfill, I achieve'. The structure in which the  $\sqrt{}$  of this verb is merged, then, is bieventive and includes a v-beP merged under a v-doP. The Nominative subject is both the HOLDER of the state of being *orsus* 'ordered' and the DOER that brings that state into existence. The Accusative/prepositional/infinitival secondary argument is merged in the complement position of the v-beP and constitutes the measure of the order in which the Nominative argument is located: for example, Sentence (297) could be paraphrased as 'you make yourself ordered as far as the new pice of machinery (*machinam novam*) is concerned'  $\rightarrow$  'you plan a new machinery'.

From a diachronic point of view, it is possible to observe some Active occurrences in Medieval Latin . The most relevant ones come from Gregory of Tours and Isidore of Seville.

```
(295)
     De hoc
                   viro [...] plura
                                              memoranda
                                                                  sunt, genus
     of this.ABL man.ABL many.things.ACC to.be.remembered are
                                                                        kind.ACC
                        ordire
                                        placet. (Greg T. franc. 2, 8)
     mores-que
     manners.ACC-and tell.INF.PRS.ACT is.right
     'There are many things that we should remember about this man, I'd like to talk about the
     kind of man he was and about his manners.'
(296)
     Hanc [...] telam
                           ordisse [...]
                                               perhibent. (Isid. etym. 19, 20, 1)
     this.acc.sg web.acc weave.inf.prf.act tell.3<sup>RD</sup>PL.prs.act
     'They say that he weaved this web.'
```

The first occurrence shows a general meaning that is different from the verb's initial meaning. Here, the meaning shifts to 'tell something' and is no longer directly related to the initial 'I put myself in order with respect to something'. In this case, the same  $\sqrt{}$  is used in a different eventive structure in which the Nominative argument is directly merged in the DOER position, the subject

position of the v-doP whose meaning is 'to tell'. In the second occurrence, the meaning is still 'to weave', but the whole bieventive meaning that was present before is now compressed into a single event. In other words, in (296), the  $\sqrt{\text{(vord-)}}$  provides the 'weaving' semantics, while in (291), the 'weaving' interpretation derives from the composition of the stative event 'to be ordered' with the higher v-doP and the DP/PP/CP complement. The new verbal  $\sqrt{\text{subsumes}}$  the eventive semantics that in the Classical structure is derivable from the entire bieventive syntactic derivation. This reanalysis is related, as usual, to the loss of the Middle morphology and to the consequences of this loss on the predicates that have an Accusative argument.

#### 3.4.15 Paciscor 'I make a deal'

Paciscor 'I make a deal' shows two different patterns. The first pattern, frequent in the I cent. BCE, involves the verb in the Middle form and an Accusative complement. The meaning is 'to agree on x'. X, the Accusative argument, is usually an amount of money:

(297)

Hanc mercedem unam pro eo munere paciscor. (Liv. 26, 50, 7) this.ACC.SG payment.ACC one.ACC.SG for that.ABL duty.ABL agree.1<sup>ST</sup>SG.PRS.MID 'I bargain this single payment for that duty.'

The second pattern, attested mainly in the Early and Late stages, does not involve an Accusative argument. In these occurrences, the event may include only a single argument or a secondary argument introduced by either the Ablative case or a preposition.

(298)

Pacisci cum illo paulula pecunia potes. (Plaut. *Bacch.* 865) agree.INF.PRS.MID with that.one.ABL little.ABL.SG money.ABL can.2<sup>ND</sup>SG.PRS.ACT 'You can agree with that guy on a small amount of money.'

(299)

Fit [...] spes [...] clementiae, non palam, ne happens.3<sup>RD</sup>SG.PRS.ACT hope.NOM mercy.GEN not open so.that.not paciscamur, sed [...]. (Quint. *inst.* 9, 2, 90) agree.1<sup>ST</sup>PL.PRS.MID but 'A sort of hope for mercy arises, not an overt one, so that we do not agree, but [...].'

In both structures, the Middle is present. The difference is that in the first structure, there is an Accusative argument. I propose adopting the benefactive structure for cases like (297), with two stative phrases one on top of the other (roughly: [x acts in such a way that [x has [y pactum 'in agreement']]]). For cases like (298) and (299), instead, I propose adopting a different structure, with only one stative event: [x acts in such a way that [x is pactum 'in agreement']]. The possible additional argument introduced by the Oblique case may further specify the content of the agreement, adding it by means of a PP/Ablative DP.

The past participle agreement patterns conform to this hypothesis. There are occurrences in which an eventive past participle agrees with the argument that controls the event of *pacisci* 'to make a deal', and there are other occurrences in which a stative and adjectival past participle agrees with the argument which is in a state of being agreed with.

```
Aedificat muros pactus pro moenibus build.3<sup>RD</sup>SG.PRS.ACT walls.ACC agree.PST.PTCP.NOM.SG for walls.ABL aurum. (Ov. met. 11, 199) gold.ACC 'He builds the walls, having agreed on an amount of gold for the building of the walls.' (301)

Thalamos ne desere pactos. (Verg. Aen. 10, 649) marriage.rooms.ACC not abandon.2<sup>ND</sup> SG.IMP.PRS agree.PST.PTCP.ACC.PL 'Do not abandon the agreed-upon marriage.'
```

The usual restriction with respect to the use of the conjunct participle applies here as well: the eventive participle is only available when the participle agrees with the most external stative subject, the BENEFACTIVE of the v-be/withP on top of the v-beP, while the adjectival past participle is available only in agreement with the HOLDER of the state. Hypothetically, given the monoargumental structure in which this  $\sqrt{ }$  can be merged, the conjunct participle should also be available without an internal Accusative argument. This prediction is borne out:

```
Nec umquam de mercedibus pactus. (Svet. gram. 7, 1)

And.not ever about payments.ABL agree.PST.PTCP.NOM.SG
```

'And he never agreed on the amount of money (for his lessons).'

There are some Active occurrences, all belonging to the Early period. Two occurrences come from Naevius. The others, all involving a 2<sup>nd</sup>sg present imperative form (*pacisce* 'make a deal!'), come from Plautus.

(303)

Sicelienses paciscit obsides ut
Sicilians.ACC pacify.3<sup>RD</sup>SG.PRS.ACT hostages.ACC so.that
reddant. (Naev. *carm. frg.* 7, 42)
give.back.3<sup>RD</sup>PL.SUBJ.PRS.ACT
'He pacifies the Sicilians so that they give back the hostages.'

In this specific case, the meaning of the event is different. The Accusative argument, *Sicelienses*, does not bear the same thematic role as *hanc mercedem unam* 'this single payment' in (297). The *Sicelienses* are not part of the deal made by the DOER; instead, they end up being in a pacified state by means of the actions of the DOER. The structure, then, is causative in this case: [x acts in such a way that [y is *pactum*]]. Being that the external argument is directly merged as a DOER, the Middle morphology is absent.

Diachronically, apart from the Early stages, no trace of other Active occurrences or relevant se/sibi + paciscor patterns was found.

# 3.4.16 Palpor 'I caress'

Palpor 'I caress' can be considered a deponent verb only in the Early period, as already from Manilius (I cent. BCE) it occurs almost exclusively with the Active morphology. The Early occurrences in which it appears with the Middle morphology are few and almost entirely in Plautus' comedies, with other occurrences found in Horace (*serm.* 2, 1, 20). There is a clear difference between the Middle occurrences and the Active occurrences. When the verb appears with the Middle morphology, the secondary argument is Dative (or absent), and when it appears with the Active morphology, the secondary argument is Accusative.

(304)

Quam blande mulieri palpabitur. (Plaut. Amph. 507)

```
how gently woman.DAT caress.3<sup>RD</sup>SG.FUT.MID
'How gently he will caress his woman.'

(305)

Ille manu [...] poterit [...] palpare lupos. (Manil. 5, 701)

he.NOM hand.ABL can.3<sup>RD</sup>SG.FUT.PRF.ACT caress.INF.PRS wolves.ACC
'He will be able to caress the wolves.'
```

The past participle, never attested before the II cent. CE, can be found in Tertullian (with around 20 total occurrences). In subsequent occurrences, its interpretation is adjectival: *palpatus* 'caressed' (e.g., see Euseb. Verc. *de Trin.* 3, 375).

The early Middle-marked occurrences may be seen as controlled change of state derivations in which the Nominative argument enters in a specific state with respect to the secondary argument. In this case, the possible secondary argument is marked by Dative case, a phenomenon that opccurs with four other verbs, as well: medeor 'I heal', praestolor 'I wait', suffragor 'I support' and refregor 'I oppose'. In all four cases, with the possible exception of praestolor 'I wait', the Dative marks the argument which receives (or not, as in *refragor*) something: a cure, a caress or a vote. This means that these cases are different from the cases in which the Oblique secondary argument is marked by Genitive/de 'of'. In those cases, the secondary argument is simply the measure of the state, while in these cases, it has an additional terminative semantics. This issue requires further analyses, taking into consideration the verbs which present a secondary argument marked by Ablative case, fungor 'I fulfill' and utor 'I use'. This verb, already in the I cent. BCE, is present in Active derivations in which the Nominative argument is directly merged in the higher DOER position as the subject of the v-doP. Since the lower stative phrase is absent, the Dative argument disappears with it. The Active derivations in which this verb is merged, such as (305), are activities, meaning that they are monoeventive derivations in which the Nominative argument is the subject of the v-doP and the Accusative argument is its complement. This is compatible with the usual reanalysis of the controlled change of state deponents (Section 3.5).

#### 3.4.17 Praestolor 'I wait'

Praestolor 'I wait' does not have many occurrences in the Early and Classical period, with only 16 occurrences found until Apuleius (II cent. CE). This verb, moreover, appears in different structures, occurring with a secondary Dative argument, an Accusative argument or without any argument.

```
(306)
     In Formiano
                               tibi
                                         praestoler. (Cic. Att. 2, 15, 3)
     in Formian.forum.ABL you.DAT wait.1st SG.FUT.MID
     'I will wait for you in the Formian forum.'
(307)
     Te
                            praestolabar. (Plaut. Cas. 577)
                ecastor
     you.ACC for.Castor wait.1<sup>ST</sup>SG.IPFV.MID
     'Oh God! I was waiting for you!'
(308)
     Ego
             illam
                       illic
                               video
                                                  praestolarier. (Plaut. Epid. 217)
                               see.1stsG.PRS.ACT wait.INF.PRS.MID
     I.NOM she.ACC there
     'I see her waiting there.'
```

A further complication is the presence of two Early Latin Active occurrences in Livius Andronicus and Turpilius (com. 153).

```
Servis praestolabas? (Andr. trag. 25) servants.DAT wait.2<sup>ND</sup>SG.IPFV.ACT 'Were you waiting for the servants?'
```

Examining past participle agreement is not an option because there are no past participles in the Early and Classical periods. The first occurrence comes from Apuleius (*met.* 3, 3).

The etymology itself is controversial. De Vaan (2008) proposes starting from the PIE  $\sqrt{*stel}$ , which derives, for example, Gr.  $\sigma t \in \lambda \lambda \omega$  'I put in order'. The derivation would start, then, from something like 'I put myself in order (with respect to someone)'  $\rightarrow$  'I wait for someone'. It is important to note that the majority of these occurrences involve a Middle+Accusative structure. The Middle+Dative structures are attested only in the I cent. BCE. In the Early stages only the Middle+Accusative pattern and the Active+Dative pattern (very rare) occur. The Middle+Accusative occurrences conform to the proposed interpretation, in which the Accusative argument is merged in the complement position of the v-beP, whose subject is the Nominative argument, subsequently contextually identified with the higher existentially bound DOER. The Active+Dative occurrences, instead, may be a signal of an early reanalysis of the verb, whose  $\sqrt{\ }$ 

could also be merged, even if rarely, in a monoeventive v-doP derivation. In these cases, the event would consist of a simple v-doP, with the Nominative argument directly merged in the subject DOER position. The Dative argument is the argument with respect to which the "waiting" event is performed. Later Middle+Dative occurrences can be analyzed along the same lines as the Middle+Accusative Early occurrences, with a change in the encoding of the secondary argument from Accusative to Dative.

Some Active occurrences reemerge in Late and Medieval Latin.

(310)

Praestolamus eventum rei. (Hier. *vita Malchi*, 9, 58) wait.1<sup>st</sup>PL.PRS.ACT event.ACC thing.GEN 'We wait for the thing to happen.'

The interpretation of this sentence is not entirely clear. The Accusative *eventum* 'event' seems to be the secondary complement, also in light of the fact that Jerome always encodes the secondary argument of *praestolor* 'I wait' with the Accusative case also in the Middle occurrences. Additionally, as in the Early Active cases, the  $\sqrt{}$  is directly conflated into the v-do $^{\circ}$ , and the two arguments occupy the DOER position (1st person plural null pronominal element) and the complement of the v-doP position (*eventum rei*).

This verb shows, after the first occurrences in which it appears with the Middle morphology and a possible secondary Accusative argument, a change in two directions. We see a reduction of the bieventive derivation to a monoeventive activity and a possible change in the encoding of the secondary argument from Accusative to Dative.

#### 3.4.18 Queror 'I complain'

Queror 'I complain' alternates with an intensive form with -it, queritor 'I complain loudly'. The first form may appear both with a Nominative and an Accusative argument or with only the Nominative one.

(311)

Verum ego meas queror fortunas. (Plaut. *Asin*. 515) but I my.ACC.PL complain.1<sup>ST</sup>SG.PRS.MID fates.ACC 'On the other hand, I complain about my fate.'

(312)

Et latere ex omni dulce queruntur aves. (Ov. *amor*. 3, 1, 4) and side.ABL from every.ABL gently lament.3<sup>RD</sup>.PL.PRS.ACT birds.NOM 'And from every side the birds gently sing.'

On the other hand, *queritor* 'I complain loudly', on the other side, can only appear in a monoargumental structure, with the Nominative argument. The -*it*- variant, however, has only three occurrences in the relevant period, and will not be taken into consideration.

*Queror* 'I complain' has a prefixed counterpart, *conqueror* 'I complain'. The prefixed verb may also appear both with and without a direct Accusative argument:

(313)

Meam pauperiem conqueror. (Plaut. *Aul.* 190) my.ACC.SG poverty.ACC complain.1<sup>st</sup>SG.PRS.MID 'I complain about my poverty.'

(314)

Quinam homo hic ante aedis nostras [...] who.ever man.NOM here in.front houses.ACC our.ACC.PL queritur [...]? (Plaut. *Aul.* 726) complain.3<sup>RD</sup>SG.PRS.ACT 'Who ever is the man who complains here, in front of our house?!'

The past participle can only agree with the argument who complains, not with the possible object of the complaining.

(315)

Haec in contione questus ex provincia these.ACC in assembly.ABL complain.PST.PTCP.NOM.SG from province.ABL fugit. (Caes. *civ.* 1, 30, 5) run.away.3<sup>RD</sup>SG.PRF.ACT 'Once he complained about those things in the assembly, he ran away from the province.'

The past participle agreement pattern and the frequency of the monoargumental structures such as (314), in which, in some cases, the possible target of the complaint is embedded by means of an

overt preposition (*de* + Ablative; e.g., Cic. *Fam.* 1, 4, 3), point toward a bieventive analysis with a single stative event and a dynamic event leading to the stative event.

The diachronic analysis of this verb is complex. The main problem is the fact that a different verb, *quaero* 'I search', from the II cent. CE on, loses the diphthong /ae/ and becomes *quero*. The two forms, then, are indistinguishable, and the analysis has to be done occurrence by occurrence, trying to disentangle, for each occurrence, if the verb means 'I search' or 'I complain'. In my corpus, I found no occurrence of Active *quero* with the meaning 'I complain', nor did I find any occurrence in which a *se* 'self' pronoun is used to convey the Middle meaning. The search, however, must be further refined in future research.

# 3.4.19 Reor 'I think'

*Reor* 'I think' always appears with a complement, whether it be an explicit infinitival sentence or a pronominal element referring to an event<sup>224</sup>.

```
Qui me Amphitruonem rentur esse. (Plaut. Amph. 975) who.nom.pl me.acc Amphitrio.acc think.3<sup>RD</sup> pl.prs.mid be.inf.prs 'Who think that I am Amphitrio.'
```

The past participle may agree both with the 'thinking' argument and with the internal argument.

```
Nos abiisse rati [...]. (Verg. Aen. 2, 25)

we.ACC go.away.INF.PRF.ACT think.PST.PTCP.NOM.PL

'Having thought that we went away, [they...].'

(318)

Spes iubet esse ratas. (Hor. epist. 1, 5, 17)

desire.ACC order.3<sup>RD</sup>SG.PRS.ACT be.INF.PRS think.PST.PTCP.ACC.PL

He brings to life the desired thoughts (lit. 'It orders to the desired thought to be real.')
```

The complement is obligatory, and the past participle may agree with both complements. The

<sup>224</sup>There are also occurrences in which it seems to occur by itself without a complement, e.g., *ut reor* 'as I think' (Prop. 3, 3, 38). In these occurrences as well, however, the sentence refers to a preceding event introduced by *ut* 'as'.

verb follows the benefactive pattern; it presents, then, two stative events and two arguments, which are both subjects of the two stative events. The Nominative argument is the subject of the higher v-be/withP, while the secondary argument is the subject of the lower v-beP. The Nominative argument, then, gets a second thematic role by means of contextual identification with the higher existentially bound DOER. This analysis is supported by the etymological data. This verb is supposedly linked to a  $\sqrt{}$  meaning 'to count'. The attested meaning, 'to think', may be derived from the first one by adding a benefactive phrase: 'x acts in such a way that x has y counted'  $\rightarrow$  'x thinks about y'.

From a diachronic point of view, there is nothing to conclude. No relevant Active occurrences or occurrences in which the pronominal element *se* 'self' is used to convey a "two roles one argument" interpretation have been found. The lack of Active occurrences is not unexpected, given that the attestations of this verb, frequently used in the Early and Classical period, strongly decrease from the IV-V cent. CE on.

# 3.4.20 Suffragor 'I support' and refragor 'I oppose'

Suffragor 'I support' and refragor 'I oppose' usually appear with a Dative complement and behave similarly to palpor 'I caress'.

```
(319)
```

Et simul L. Valerio suffragabatur. (Liv. 39, 41, 4) and at.the.same.time L. Valerius.DAT support.3<sup>RD</sup>SG.IPFV.MID 'And, at the same time, he supported Lucius Valerius.'

(320)

Sine sollertia suis consiliis refragantur. (Vitr. 6, 1, 10) without alacrity.ABL his.DAT advices.DAT oppose.3<sup>RD</sup>PL.PRS.MID 'They opposed their advice without alacrity.'

The past participle of this verb is not frequent, with the first example coming from Cicero.

(321)

Laudandum esse si eius dignitati suffragatus praised be.INF.PRS.ACT if his position.DAT support.PST.PTCP.NOM.SG viderer. (Cic. *dom.* 27)

```
see. 1<sup>st</sup>SG.SUBJ.IPFV.MID
```

'It has to be praised the fact that it looks like I have supported his position.'

Even if infrequent, cases in which the past participle agrees with the Nominative argument, the "supporter", were found, while cases in which the past participle agrees with the internal argument, the "supported" element were not found.

Active cases are found in Early Latin, and in all these cases, the secondary argument, if present, is marked by Accusative case.

(322)

Dictaturam omnibus animis et studiis dictatorship.ACC every.ABL thoughts.ABL and efforts.ABL suffragaverunt. (Sis. *hist.* 132) support.3<sup>RD</sup>PL.PRF.ACT 'They supported the dictatorship with every thought and effort.'

It is possible to find other Early Active occurrences in which the secondary argument is absent (see also Priap. 21, 1):

(323)

Refragant primo, suffragabunt post. (Pompon. *Atell.* 105) oppose.3<sup>RD</sup>PL.PRS.ACT initially support.3<sup>RD</sup>PL.FUT.ACT after 'They initially oppose, then they will support.'

The Active occurrences reemerge in Late Latin (e.g., Isid. sent. 1, 10, 2), following the same pattern.

The Middle pattern conforms to the analysis already proposed for *palpor* 'I caress', in which the Nominative argument is merged as the subject of a low v-beP state (able to be paraphrased as 'to be in support/opposition'), and the Dative argument represents the element that receives the support/opposition. The Nominative argument is then contextually identified with the higher existentially bound DOER. The fact that the structure in which these verbs are present is bieventive may be confirmed by a possible etymology that derives this verb from the composition of *sub* 'under' / *re*- 'against' with *fra(n)go* 'I break, I shout' (de Vaan 2008). The stative part is the prepositional prefix (*sub* or *re*), and the initial meaning of the verb may be paraphrased as 'I

shout/break in order to be *sub/re* for someone'.

The Active occurrences involve a Nominative argument that is directly merged in the DOER position. The lower stative part is absent, and the Accusative argument is merged in the complement position of the v-doP. The Active occurrences begin to appear in the II cent BCE. The pattern is identical to that observed in many prior cases: the Late and Medieval Active occurrences are preceded by Early Active occurrences. The Active occurrences are related to the loss of the Middle morphology, which is complete in the Medieval period and has already happened in substandard variants of Latin in the Early period.

### 3.4.21 *Ulciscor* 'I take revenge, I vindicate'

*Ulciscor* 'I take revenge, I vindicate' usually appears with an Accusative argument. This verb is puzzling, since the Accusative argument may represent both the element upon which the Nominative argument wants to take revenge and the element in favor of which the Nominative argument wants to operate its revenge.

```
Ut Sugambros ulcisceretur. (Caes. Gall. 4, 19, 4)
so.that Sicambri.ACC take.revenge.3<sup>RD</sup>SG.SUBJ.IPFV.MID
'In order to take revenge upon the Sicambri.'

(325)

Laeti sociorum ulciscimur umbras. (Verg. Aen. 3, 630)
happy.NOM.PL allies.GEN vindicate.1<sup>ST</sup>PL.PRS.MID shadows.ACC
'We gladly vindicate the shadows of our allies.'
```

The occurrences of past participle agreement do not include any case in which the past participle agrees with the internal argument; it always agrees with the argument in charge of the vindicating/taking revenge event.

```
Ego ultus iniurias Nicomedem [...]

I.NOM take.revenge.PST.PTCP.NOM.SG offenses.ACC Nicomede.ACC expuli. (Sall. epist. Mithr. 11)

oust.INF.PRS.MID
```

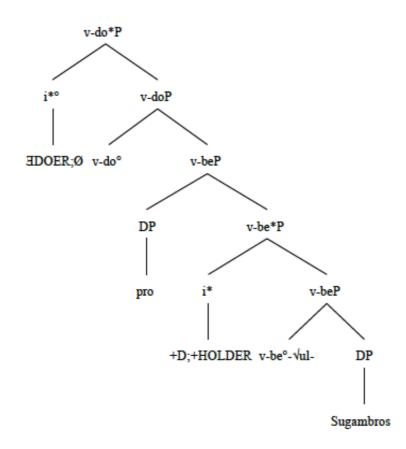
'Once I had vindicated the offenses, I ousted Nicomede.'

(327)

Ultus avos Troiae [...]. (Verg. *Aen.* 6, 838) vindicate.PST.PTCP.NOM.SG ancestors.ACC Troy.GEN 'Having vindicated his Trojan ancestors [...].'

The two different interpretations of *ulciscor*, 'I vindicate/take revenge', come from two different syntactic structures. The interpretation 'I take revenge' involves a bieventive predicate in which the Nominative argument is both the HOLDER of the state of being vindicated and the higher DOER. The Middle morphology, as usual, allows for the contextual identification of the two positions. The Accusative argument is in the complement position of the v-beP whose subject is the Nominative argument. The complement is the measure of the state itself, the measure of the revenge. The Nominative argument, then, is in a state of being vindicated with respect to the element denoted by the Accusative complement<sup>225</sup>.

(328)



<sup>225</sup>The presence of Accusative arguments in the v-beP complement position is not usual but has been attested, as explained previously for *queror* 'I complain'.

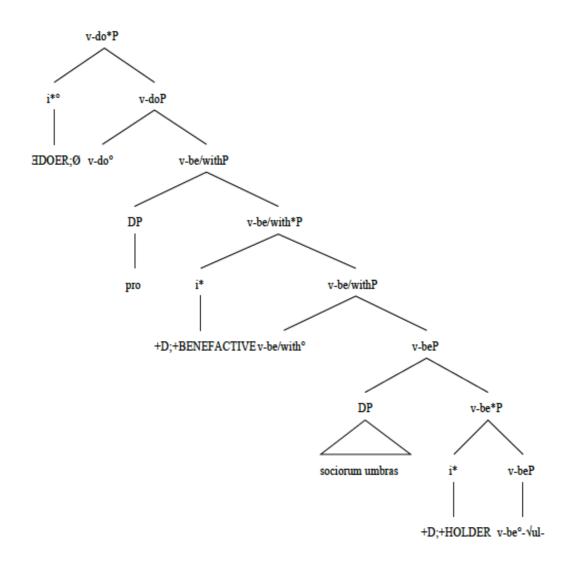
This structure is the same structure proposed for, e.g., *reminiscor* 'I remember' and *obliviscor* 'I forget' (see Section 3.4.2 and 3.4.12). Also in the case of *ulciscor* 'I take revenge', even if more rarely, there are cases in which the secondary argument, in the complement position of the v-beP, is marked by the Genitive/*de* 'of' preposition. In these cases, the meaning of the verb is always, as expected, 'I take revenge' and not 'I vindicate':

(329)

Dum ulciscar de inimico meo. (Tert. *ieiun*. 288, 14) so.that take.revenge.1<sup>ST</sup>SG.SUBJ.PRS.MID of enemy.ABL my.ABL.SG 'So that I take revenge upon my enemy.'

The second interpretation of *ulciscor*, 'I vindicate', derives from a different structure. The HOLDER of the state of being vindicated, in this case, is not the Nominative argument, but the Accusative. *Sociorum umbras* 'the shadows of the allies', in (325), ends up being in the state of being vindicated, a state brought into existence by the controlled dynamic action performed by the Nominative argument, a 1<sup>st</sup>pl null pronominal element, in this case. The presence of the Middle morphology is justified by the fact that the Nominative argument is not directly merged into the DOER position but in a lower BENEFACTIVE position (the subject position of a v-be/withP whose complement is the state of being vindicated and whose subject is the Accusative argument). The structure of *ulciscor* 'I vindicate', then, is the same proposed for, e.g., *adipiscor* 'I obtain', and for some occurrences of *reminiscor* 'I remember' and *obliviscor* 'I forget'.

(330)



A further confirmation that the proposed benefactive analysis proposed is justified is the occurrence, in Ennius, of an Active *ulcisco* with the meaning 'I vindicate'.

(331)

Nisi patrem materno sanguine exanclando ulciscerem. (Enn. *trag.* 147) if.not father.ACC motherly.ABL blood.ABL spilling vindicate.1<sup>ST</sup>SG.SUBJ.IPFV.ACT 'Unless I vindicate my father spilling my mother's blood.'

This occurrence can be explained by taking into consideration the structure in (330). The absence of the Middle morphology can be accounted for by eliminating the internal v-be/withP stative event and merging the Nominative argument directly into the DOER position. This way, the resulting structure is a pure causative in which the Middle morphology has no role to play, being that the DOER argument is directly merged into the external position.

These two proposed structures help explain the two different meanings *ulciscor* has in Latin and the differences in the overt realization of the arguments such as, for example, the fact that only the 'I take revenge' structure can host an Oblique argument introduced by Genitive/de 'of'. The past participle agreement patterns presented in (326) and (327), on the other hand, cast some doubt on the analysis. The structure proposed in (330) presents an internal stative v-beP event whose subject is the Accusative argument. Given the argumentation proposed for the previous cases, it is expected that cases of internal argument-past participle agreement can be found, such as for, e.g., *adipiscor* 'I obtain' (see (202)). However, no such cases were present in my database. The absence of such cases does not constitute positive evidence against the proposed analysis, even if it does call for an explanation. This issue merits further studies.

Active occurrences do appear in Medieval Latin, with many of them appearing in in Gregory of Tours. For example:

(332)

Nisi prius se de adversariis ulciscerent. (Greg. T. *franc*. 5, 15) unless before self of enemies.ABL take.revenge.3<sup>RD</sup>PL.SUBJ.IPFV.ACT 'Unless they, before, take revenge on the enemies.'

The secondary argument, in this case, is introduced by the *de* preposition, and the meaning of the verb is 'I take revenge (upon something)'. The relevant point here is the presence of the pronominal element *se* 'self', which is used to convey the same eventive meaning that was previously conveyed by the Middle morphology. The fact that the specific eventive meaning 'I take revenge' is conveyed by the Accusative pronoun, *se*, and not the Dative one, *sibi*, is a further confirmation that the structure for 'I take revenge' does not involve a BENEFACTIVE argument, usually introduced by means of *sibi*, but a HOLDER argument, as proposed in (328)<sup>226</sup>. It is of note that in Gregory of Tours there are other occurrences in which this verb co-occurs with the *se* 'self' pronoun. In all other cases, however, the verb also appears with the Middle morphology.

(333)

Neque se de inimiciis ulcisci possint. (Greg. T. *franc*. 10, 3) and not self of enemies. ABL take.revenge.INF.PRS.MID can. 3<sup>RD</sup>PL.SUBJ.PRS.ACT 'And they could not even take revenge on their enemies.'

<sup>226</sup>It his of note that in Late Latin the *se* vs. *sibi* competition is far more complex than the simple Dative vs. Accusative one. For a deeper analysis see Cennamo (1993) and Cennamo et al. (2015).

These co-occurrences signal the fact that, in this Late period, the exact semantics and syntax behind the presence of the Middle morphology is no longer transparent. The author is influenced by the grammatical bias of the Classical norm and, consequently, is forced to use the Middle morphology with this verb. On the other hand, the presence of the Middle morphology needs to be reinforced by a transparent element, *se* 'self', able to convey the desired semantics. This clash causes the observed double marking. In addition to this issue, a key point is that, in the case of *ulciscor* 'I take revenge', the Classical bieventive structure is maintained. There are two major changes, however: first, the appearance of the SE pronoun, and second, the change in the morphological encoding of the secondary argument, from Accusative to prepositional (introduced by the preposition *de* 'of'). Both changes are related to the general loss of the Middle morphology (see Section 3.5).

Finally, Gregory of Tours also presents Active causative occurrences in which the Accusative argument is the subject of the state of being vindicated.

```
Si eius necem ulciscere non valemus. (Greg. T. franc. 8, 5) if his death.ACC vindicate.INF.PRS.ACT not be.able.1<sup>ST</sup>PL.PRS.ACT 'If we are not able to vindicate his death.'
```

In these cases, the v-be/withP, that in (330) justified the presence of the Middle morphology, is absent and, consequently, there is no Middle morphology or SE pronoun. Given the benefactive analysis and the interaction of the benefactive structures with the general loss of the Middle morphology, this outcome is predictable (see Section 3.5).

#### 3.4.22 *Ut(it)or* 'l use'

*Ut(it)or* 'I use' usually appears with an Ablative secondary argument, but it is also possible to find occurrences in which the secondary argument is marked by Accusative case.

```
Ut ea potestate [...] uteretur. (Cic. ad Q. fr. 1, 1, 11) so.that that.ABL power.ABL use.3<sup>RD</sup>SG.SUBJ.IPFV.MID
'In order to use that power.'

(336)
```

```
Profecto uteris ut voles operam certainly use.2<sup>ND</sup>SG.FUT.MID as want.2<sup>ND</sup>SG.FUT.ACT work.ACC meam. (Plaut. Poen. 1087) my.SG.ACC 'You will certainly take advantage of my work as you like.'
```

The past participle may agree only with the Nominative argument and not with the secondary Ablative/Accusative argument:

```
Multo pulmento usi [...]. (Cato, orig. 3, 7) much.ABL.SG food.ABL use.PST.PTCP.NOM.PL 'Having employed a great amount of food [...].'
```

The interpretation does not seem to vary greatly between the occurrences in which the secondary argument appears with the Accusative and the occurrences in which it appears with the Ablative. Both the possible encoding of the secondary argument with the Ablative case and the fact that the past participle may only agree with the Nominative argument leads to the proposal of a bieventive structure, such as the one proposed for fungor 'I fulfill, I accomplish' or experior 'I experience'. The Ablative/Accusative argument is merged in the complement position of the v-beP, while the subject of the v-beP is the Nominative argument. The head of the v-beP hosts the  $\sqrt{}$  of the verb, creating a configuration in which the Nominative argument is the HOLDER of the state of being usus with respect to the Ablative/Accusative complement<sup>227</sup>. Further research could examine the reasons behind the use of Ablative case as a marker of the secondary argument. There seem to be three main ways to mark the secondary argument: Genitive/de 'of' (reminiscor 'I remember', commentor 'I think', obliviscor 'I forget', opinor 'I think', ordior 'I weave', paciscor 'I agree', ulciscor 'I take revenge', queror 'I complain' and meditor 'I think'), Dative (praestolor 'I wait', palpor 'I caress', suffragor 'I support', refragor 'I oppose' and medeor 'I heal') and Ablative (fungor 'I fulfill, I accomplish', utor 'I use' and vescor 'I eat', see Sections 3.4.4, 3.4.22 and 3.4.25). The use of Genitive/de is the unmarked option. The use of Dative entails a terminative semantics (Section 3.4.16). The use of Ablative, instead, is less clear. In order to provide a reliable solution, a more general analysis of the use of the various cases in Latin is needed, an issue we will

<sup>227</sup>The diachronic analysis proposed by Tichy (2002) stresses the role of benefactivity, analyzing this verb as derived from a verb meaning 'to fetch'. The presence of the Middle would be justified by the addition of a benefactive argument 'to fetch in your own interest' → 'to use'. The synchronic data at my disposal, however, do not show any sign of a possible benefactive analysis.

not address here but leave for further investigations.

No relevant Active occurrences of this verb or occurrences in which a *se* 'self' pronoun is used in substitution of the Middle morphology were found. The only attested Actives are future imperative forms used in prescriptive contexts such as (338).

(338)

Vas oblinito: post dies XXX aperito et vase. ACC cork.  $2^{ND}$  SG. IMP. FUT. ACT after days. ACC 30 open.  $2^{ND}$  SG. IMP. FUT. ACT and utito. (Cato, agr. 126) use.  $2^{ND}$  SG. IMP. FUT. ACT 'Cork the vase: after thirty days open it and use it.'

The corresponding Middle form would be, in this case, *utitor*, which can be found in Cato. The example in the following paragraph is an occurrence in which, in exactly the same context, the

Middle form is used:

(339)

Oblinito amphoram et post dies XXX cork.2<sup>ND</sup>SG.IMP.FUT.ACT amphora.ACC and after days.ACC 30 aperito et utitor. (Cato, agr. 127) open.2<sup>ND</sup>SG.IMP.FUT.ACT and use.2<sup>ND</sup>SG.IMP.FUT.MID 'Cork the amphora and after thirty days open it and use it.'

The presence of this alternation is unexpected, and is another avenue for further research.

### 3.4.23 Venor 'I hunt'

*Venor* 'I hunt' may appear with a direct Accusative complement or without any complement. Both patterns are well attested.

(340)

Sed tu precipue curvis venare theatris. (Ov. *ars* 1, 89) but you.NOM especially curved.ABL.SG hunt.2<sup>ND</sup>SG.IMP.MID theatre.ABL 'But hunt mainly in the curved theaters!'

```
I modo, venare leporem. (Plaut. Capt. 184) go.2<sup>ND</sup>SG.IMP.ACT now hunt.2<sup>ND</sup>SG.IMP.MID hare.ACC 'Leave right now and hunt the hare!'
```

The past participle agrees only with the Nominative argument, the hunter.

(342)

Mille feras Phoebe silvis venata thousand beasts.ACC Phoebe.NOM woods.ABL hunt.PST.PTCP.NOM.SG redibat. (Ov. *fast*. 2, 163) return.3<sup>RD</sup>SG.IPFV.ACT 'Phoebe, after having hunted a thousand beasts around the forest, returned.'

The pattern looks coherent and points toward a bieventive analysis. The Nominative argument is the HOLDER of a lower state and the possible Accusative argument is merged in the complement position of that state. The etymology supports this hypothesis, as the verb is supposedly derived from a nominal  $\sqrt{}$  meaning 'hunt' or from an adjectival  $\sqrt{}$  meaning 'hunting, searching' (De Vaan 2008). The lower stative phrase, then, denotes the state of 'being hunting/searching'. The

Diachronically, there are only two Active occurrences. Both occurrences belong to the treatise on the Psalms made by Saint Jerome (V cent. CE), and both show an infinitival form.

Accusative argument measures the 'hunting' state, providing it with definite boundaries.

```
Qui animam nostram venare conantur. (Hier. in psalm. 90, 14) who.nom.pl soul.acc our.acc.sg hunt.inf.prs.act try.3<sup>RD</sup>pl.prs.act
```

The Active occurrences are the result of a reanalysis of *venor* 'I hunt' as a simple activity verb with only one eventive phrase, v-doP.

#### 3.4.24 Vereor 'I fear'

'Who try to hunt our soul.'

Vereor 'I fear' usually appears, since the Early period, with an Accusative complement, a

complement clause (infinitival or introduced by *ne*, the Latin negative complementizer) or without any secondary argument. Other rare options are Dative/Genitive/de 'of' complements.

```
(344)
      Ut
              me veretur (Plaut. Mil. 1266)
      so.that me fear.3<sup>RD</sup>SG.PRS.MID
     'So that he fears me.'
(345)
                                               interrumpere. (Plaut. Trinum. 1149)
      Dum sermonem vereor
      while speech.ACC fear.1<sup>ST</sup>SG.PRS.MID interrupt.INF.PRS
     'While I am afraid that I will interrupt the speech.'
(346)
      Hic
                   vereri
                                      perdidit. (Plaut. Bacch. 158)
      this.NOM.SG fear.INF.PRS.MID lose.3<sup>RD</sup>SG.PRF.ACT
     'He lost the sense of fear.'
```

The past participle agrees only with the "fearing" argument, the Nominative.

```
Iuppiter, exemplum veritus, derexit [...] (Ov. fast. 6, 759)

Jupiter.NOM example.ACC fear.PST.PTCP.NOM.SG direct.3<sup>RD</sup>SG.PRF.ACT

'Jupiter, being afraid of the example, directed [...].'
```

Ino cases were found in which the past participle agrees with the internal argument. The fact that in such a psychological verb the Nominative argument is the subject of an internal state of being *veritus* 'afraid' is not unexpected. The other argument, the one usually marked by Accusative case (when it is a DP and not an entire CP), is the measure of the event of being afraid, the element that constrains the state, binding it to a specific quantity. In order to justify the presence of Middle morphology, it must be the case that the subject of this state is also the subject of a higher projection, a v-doP or a v-goP. However, this verb appears to be stative 'I am afraid'. With a purely stative derivation, in which there is only one stative event and, consequently, only one argumental position, the presence of the Middle morphology would not be justified. I propose that the derivation includes in the derivation a higher dynamic phrase, a v-goP. This derivation would derive an uncontrolled change of state event in which the Nominative argument, contextually identified

with the existentially bound UNDERGOER, undergoes a dynamic change leading to the "to be afraid" state. This derivation would be similar to It. *impaurirsi* 'to get scared'. The existence of a passive occurrence in which this verb has the causative meaning 'to make someone afraid' serves as support for this hypothesis.

(348)

Malunt metui quam vereri se ab prefer.3<sup>RD</sup>PL.PRS.ACT fear.INF.PRS.MID than fear.INF.PRS.MID self.ACC from suis. (Afran. com. 34)

his.abl.pl

'They prefer to be feared than to be scared by their own men.'

In this case, the verbal event is causative. There is an argument, the agentive PP *ab suis* 'by his own men', that causes the second argument, *se* 'self', to enter into a state of fear. It. *impaurirsi* 'to get scared' behaves similarly: it is possible to use it in a causative environment *impaurire qualcuno* 'to scare someone' and in the correspondent passive *essere impauriti da qualcosa* 'to be frightened by something'. If the verb *vereor* 'I fear' were a change of state, the presence of a possible causative counterpart would be expected; it would be a causative vs. anticausative alternation, a highly frequent pattern. If *vereor* 'I fear', instead, were interpreted as a stative verb, then the presence of a causative alternant would not be expected. Latin stative verbs, such as *caleo* 'I am hot', show an additional element when causativized: *caleo* 'I am hot' vs. *calefacio* 'I heat up'.

There is a prefixed variant of *vereor* 'I fear': *revereor* 'I stand in fear of someone/something'. In this case, the secondary argument is always present and marked by Accusative case. There are no cases of *revereor* 'I stand in fear of someone/something' in which the secondary argument is an entire sentence, infinitival or not. The *re*- prefix implies the presence of an entity, a DP. Also in this case, the past participle *reveritus* 'afraid' never appears in agreement with the secondary Accusative argument. The contribution of this prefix to the final meaning of the verb requires further analysis<sup>228</sup>.

Vereor 'I fear' and revereor 'I stand in fear of someone/something' do not show relevant diachronic changes. There is only one Active occurrence and no se 'self' occurrences.

<sup>228</sup>The only fact that seems evident is that this prefix does not behave like other Latin prefixes which introduce a further predication and, consequently, a further argument in the structure, like *ex-* in *e-dormio* 'I sleep off something' (Acedo Matellàn 2016). This prefix does not seem to predicate something about the internal Accusative argument. It seems that it functions to further specify the *vereor* 'I fear/get scared' event, providing it with an additional feature (probably related to the higher aspectual part of the derivation).

```
(349)
```

Qui gloriatur in substantiam, paupertatem who.NOM boast.3<sup>RD</sup>SG.PRS.MID in money.ACC poverty.ACC vereat. (Def. Loc. *scint*. 58, 23) fear.3<sup>RD</sup>SG.SUBJ.PRS.ACT 'Who boasts for his wealth, should fear poverty.'

With respect to this verb, then, the diachronic analysis does not provide any insight.

#### 3.4.25 Vescor 'I eat'

Vescor 'I eat' may appear in different syntactic contexts: with an Accusative complement, an Ablative complement or without any complement.

(350)

Eandem vescatur dapem. (Acc. *trag*. 217) the.same.ACC eat.3<sup>RD</sup>SG.SUBJ.PRS.MID banquet.ACC 'May he eat the same banquet.'

(351)

Ne liceret eo cibo vesci. (Enn. *frg. var.* 9) lest allow.3<sup>RD</sup>SG.SUBJ.IPFV.ACT that.ABL food.ABL eat.INF.PRS.MID 'So that it is not allowed to eat that food.'

(352)

Vescebatur-que et ante cenam. (Svet. *Aug.* 76, 1) Eat.3<sup>RD</sup>SG.IPFV.MID-and and before dinner.ACC 'And he used to eat also before dinner.'

The verb does not present any form of past participle and the usual test is not applicable. Active causative occurrences of this verb can be found in Tertullian and Jerome (Hier. *adv. Iovin.* 2, 15), and mean 'I feed someone'.

(353)

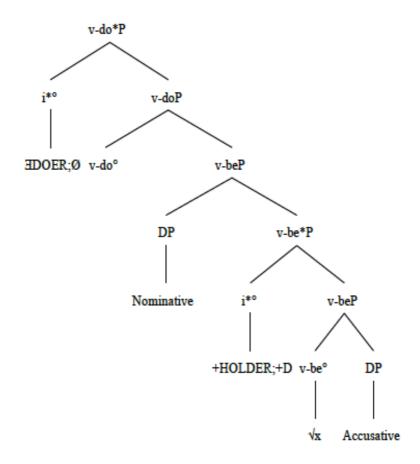
Quis nos vescet carne. (Tert. *ieiun*. 279, 20) who.NOM we.ACC feed.3<sup>RD</sup>SG.FUT.ACT meat.ABL 'Who will feed us with meat?'

The presence of causative occurrences in which the "fed" argument is different from the "feeding" argument, and the fact that there is so much variability in the encoding of the possible secondary argument, indicate a bieventive [v-doP [v-beP]] explanation, in which the Nominative argument, in the Middle version, is the subject of a v-beP meaning 'to be fed' and then is contextually identified with the higher existentially bound DOER. The secondary argument is merged in the v-beP complement position. The Middle version, then, means [x acts so that [x is fed (with y)]]. Starting from this analysis, the Active causative occurrences are derived by merging two different DPs in the two subject positions.

# 3.5 Dealing with the loss of the Middle morphology

The Middle+Accusative deponents can be subdivided into two main groups: the controlled change of state deponents and the benefactives. In both cases, as demonstrated here, the presence of an Accusative argument is allowed. In the case of the controlled change of state deponents the Accusative argument is the complement of the low state and may alternate with an Oblique argument. The possible Oblique argument may be marked by Genitive, Ablative or Dative case or by a preposition, usually *de* 'of'. In the case of benefactive deponents the Accusative argument is the subject of a low state and never alternates with an Oblique argument. Both structures allow for the presence of an Accusative argument. Let us see the controlled change of state structure first.

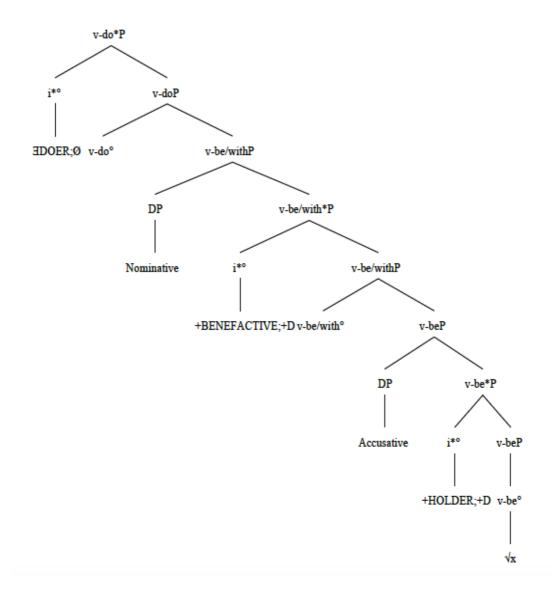
(354)



The DP in the complement position of the v-beP is able to take Accusative case when there is no additional semantics and it represents only the measure of the state. The mechanism that allows for the assignment of Accusative to the most internal DP follows from the valuation of the uφ features of the higher argument-introducing head, the i\*° merged with the v-doP (see (14)). These features check for an adequate DP in the m-command domain of the head. The first DP they find is the subject of the v-beP, which acquires Nominative case, while the second unmarked DP, consequently, acquires dependent case, Accusative. If the second argument is already marked by an Oblique case that provides it with an additional semantics, such as the terminative flavor connected with the Dative argument that we observed for *palpor* 'I caress', *suffragor* 'I support', *refragor* 'I oppose', *medeor* 'I cure' and possibly for *praestolor* 'I wait', Accusative case is not assigned.

The benefactive structure, on the other hand, involves a larger stative part, with two stative heads.

(355)



Here the assignment of Accusative case goes on as before, with the uφ features of the higher i\*° checking for a suitable DP in the m-command domain of the head. The difference, in this case, is the position of the Accusative DP. It is the subject of a v-beP. The relative positions of the Nominative and Accusative arguments, however, are the same as before. Consequently, the higher argument (BENEFACTIVE) takes Nominative case, while the lower one (HOLDER) takes Accusative case.

I propose that the following verbs be analyzed as purely controlled change of state verbs: commentor 'I think'; experior 'I try; fungor 'I fulfill, I accomplish'; medeor 'I heal'; molior 'I move'; nanciscor 'I get'; ordior 'I weave, I start speaking'; palpor 'I caress'; praestolor 'I wait'; queror 'I complain'; suffragor 'I support'; refragor 'I oppose'; ut(it)or 'I use'; venor 'I hunt'; vereor 'I fear'; vescor 'I eat'. The purely benefactive verbs, instead, are adipiscor 'I obtain, I reach'; comminiscor 'I invent'; hortor 'I exhort'; imitor 'I imitate'; mereor 'I deserve'; metior 'I

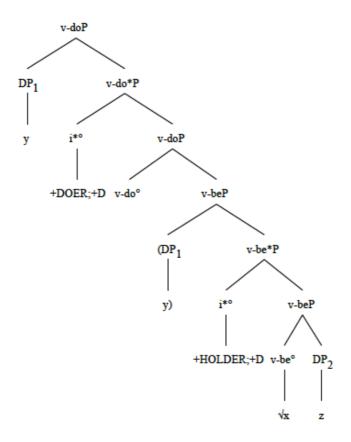
measure' and *reor* 'I think'. There is a group of verbs, finally, that alternates between the two structures: *meditor* 'I think'; *reminiscor* 'I remember'; *obliviscor* 'I forget'; *opinor* 'I think'; *paciscor* 'I agree, I make a bargain' and *ulciscor* 'I vindicate, I take revenge'. It is important to note the fact that many Identification and Possession denominal/deadjectival deponents, as soon as they lose the nominal part, are reanalyzed as controlled change of state deponents capable of hosting an Accusative argument (see Section 3.4.2). The same can be said about the Possession+Identification denominal/deadjectival deponents, that, as soon as they lose the nominal/adjectival part, are reanalyzed as benefactive deponents. In the case of the Possession+Identification deponents, however, there is no overt diachronic change that can uncover the point at which this occurs, as underlined in Section 3.4.2.

In the section regarding the change of state/location deponents, I demonstrated that the loss of the Middle morphology, in their cases, does not lead to a change in the event structure. The event structure remains bieventive, built by the subsequent merging of a stative event and a dynamic event. These verbs, when the Middle morphology disappears, consistently adopt the labile "movement" structure, in which the internal argument, the subject of the state, moves to the external argument position. The choice of the labile structure over the concurrent SE-marked structure is predictable, given that the labile structure is the only one that allows for the lexical-encyclopedic idiosyncratic behavior of these √s to be maintained (Section 3.3).

In the case of the Middle+Accusative deponents, instead, I observed highly frequent reanalyses of the event structure. All the benefactive deponents start showing an Active causative structure in which the v-be/withP is absent, while all the change of state deponents start showing an Active monoeventive structure that involves only a v-doP or an Active bieventive causative structure. These diachronic changes, such as the appearance of the labile structure with the change of state/location verbs, are related to the loss of the Middle morphology.

Let us first examine the controlled change of state derivation. When the Middle morphology disappears, there are two structures in the linguistic system that can take over its duties: The labile structure ("movement") and the SE-marked structure. Both, however, are incompatible with the assignment of Accusative case to the complement of the v-beP.

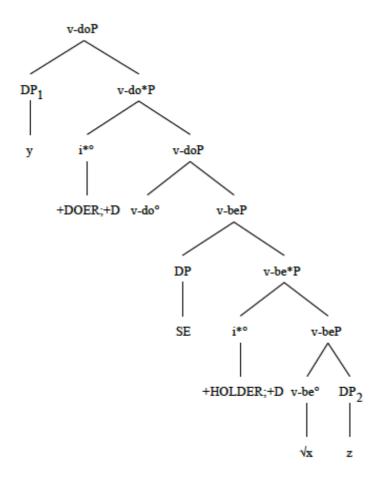
(356)



In the labile structure, the subject of the state,  $DP_1$ , moves from its low merging position to the subject position of the v-doP. It leaves behind a copy in the low position, a copy that is deleted at Phonological Form (Chomsky 1993, 1995, 2001). When the higher argument-introducing head checks for a DP that is able to valuate its up features in its m-command domain finds the higher copy of  $DP_1$ .  $DP_1$ , consequently, acquires Nominative case. The second unmarked DP in the derivation is the lower copy of  $DP_1$ . As a result, the copy of  $DP_1$  blocks the assignment of Accusative case to  $DP_2$ .

The SE-marked derivation, whether the SE pronoun is merged in the subject position of the v-beP or in the higher subject position of the v-doP, also blocks the assignment of Accusative case to the lower DP<sub>2</sub>, since Nominative and Accusative case are assigned to both DP<sub>1</sub> and the SE pronoun (see Part I, Sections 3.4.3 and 4).

(357)



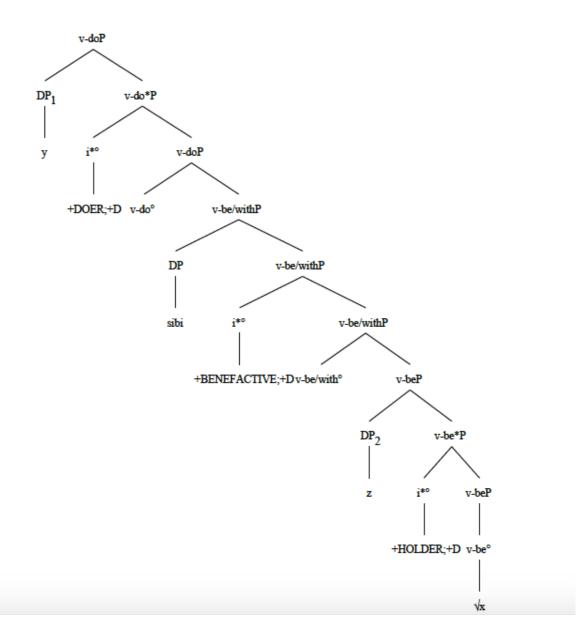
A controlled change of state structure, then, in a language in which the Middle morphology is absent, is not able to assign Accusative case to the complement of the v-beP. The controlled change of state verbs analyzed in the previous sections, however, present an Accusative argument. There are three possible ways to deal with this problem. The first is to provide the complement of the v-beP with a specific preposition that assigns its own case to the internal argument, the preposition de 'of' in Latin. The second is to maintain the Accusative marking of DP<sub>2</sub> and delete the lower stative phrase, creating a derivation that only involves a v-doP. The third is to reinterpret the low DP<sub>2</sub> as the subject of the stative phrase, creating a causative structure in which DP<sub>2</sub> is still marked by Accusative case, but in which the Nominative argument is no longer the subject of the state. Each of these options is attested. Reminiscor 'I remember' and obliviscor 'I forget', in their controlled change of state variant, start using the de 'of' preposition to mark the lower argument. On the other hand, many verbs, on the other side, such as commentor 'I think', experior 'I try', palpor 'I caress' and utor 'I use', are reanalyzed as monoeventive and maintain the Accusative marking of the lower argument. This option, in some cases, entails a change in the general meaning of the verb:

commentor 'I think', for example, shift its meaning to 'I commentate'. Finally, some verbs follow the third option, such as *medeor* 'I cure'. It is possible to conclude that the loss of the Middle morphology provokes the loss of the class of controlled change of state verbs in which the internal argument is marked by Accusative case. The second option is the more frequent and conforms to the analysis of the diachronic syntactic change proposed in Roberts and Roussou (2003); it is an upward reduction of the structure, in which the lower stative event is lost and the higher dynamic event is maintained. It is key to note that, diachronically, the reduction always concerns the lower part of the structure, never the higher part: a dynamic structure never becomes a stative structure.

The benefactive verbs behave differently. In these cases, the choice of the SE-marked structure does not entail the impossibility of marking the most internal argument, the subject of the v-beP, with Accusative case<sup>229</sup>. This follows from the fact that the SE-marked structures involve a SE pronoun that is marked by Dative case (*sibi* 'to self').

(358)

<sup>229</sup>The labile structure is not available with the benefactives. This is the result of two factors: the lower DP of the benefactives is the subject of a v-beP and cannot be marked by a specific preposition like *de* 'of' and, in the labile derivation, the lower copy of the higher argument would block the assignment of Accusative case to the lower DP (see Part I, Section 4).



The SE pronoun, being marked by Dative case, does not block the assignment of Accusative case to  $DP_2$ .  $DP_2$  is still the second unmarked DP in the structure and, consequently, is able to acquire Accusative case. However, all verbs which, in Classical Latin, are only interpretable in a self-benefactive derivation, start showing a causative variant in Late and Medieval Latin, in which the benefactive phrase is absent. The only exception is *reor* 'I think' (Section 3.4.19). This is also the case for the denominal/deadjectival Possession+Identification verbs analyzed in the first part and follows from the analysis of the self-benefactives presented in Part I, Section 4. The use of a SE-marked derivation to derive the self-benefactive structure entails the presence of a non self-benefactive variant and of a causative variant in which the benefactive phrase is absent. This follows from the fact that a  $\sqrt{}$  that is interpretable in a SE-marked benefactive derivation will also be interpretable in a non self-benefactive derivation, given that the two derivations are post-

syntactically identical.

The proposed analysis explains the alignment variations and the structural changes that the various classes of deponent verbs undergo in Late and Medieval Latin. The loss of the Middle morphology provokes a domino effect that is predicted by the adopted theory and confirmed by the available data. The general alignment variations that occur in Late and Medieval Latin, analyzed by, among others, Cennamo (1993, 1999. 2009) and Gianollo (2010, 2014), may have a similar explanation. While this would allow for a coherent explanation of what occurs in the Romance area regarding the verbal categories in the period ranging from the III cent. CE to the IX cent. CE, this is a larger and more complex issue that will require further research.

The last issue I want to address is the dating of the loss of the Middle morphology. Already in Section 3.3 I pointed out that in III-I cent BCE, labile occurrences of change of state/location verbs are usually present in Middle-marked derivations. In a strongly coherent linguistic system, in which the Middle morphology is vital, we would expect consistency in the marking of the change of state/location derivation with respect to a specific  $\sqrt{.}$  In a system in which, instead, the Middle morphology is losing strength, this kind of discrepancy would be normal. In the case of the controlled change of state deponents it is also possible to observe some peculiar behaviors already in the III-I cent. BCE. Some verbs, such as, for example, refragor 'I oppose', suffragor 'I support' and demolior 'I demolish', present Active occurrences, and these Active occurrences are mainly present in the same authors which present the labile occurrences of the change of state/location verbs. These authors, as already underlined, may have represented in their works a Latin variant in which the Middle morphology was already on the verge of being lost. In addition, the marking of the argument in the complement of the state position may be revealing. The shift to an Oblique marking is one of the possible ways to deal with the loss of the Middle morphology in a controlled change of state derivation that presents an argumental complement of the state. Fungor 'I fulfill, I accomplish', for example, in the Early stages, marks the argument in the complement of the state position with Accusative case, while, from the I cent. BCE on, the Ablative case takes over. The data are not consistent enough to allow us to conclude that a general loss of the Middle morphology occurred already in the III-I cent. BCE, as the creation of new denominal/deadjectival deponents would not be expected if the Middle morphology were absent. The data, however, are strong enough to give us the latitude to propose an early loss of the Middle morphology in some peripheral variants of Latin, both from a diatopic and diastratic point of view. This would help explain the complete loss of the Middle morphology in the entire Romance area: in the submerged variants of Latin, as Prosdocimi (1978, 1991, 2004) would label them, this morphology was already absent, and two other structures - the labile ("movement") structure and the SE-marked structure - had

already taken over, causing a general readjustment of the linguistic system.

# **Conclusions and open issues**

In this thesis I analyzed, both synchronically and diachronically, the set of Latin verbs that always present the Middle morphology. These verbs, called *deponents*, have often been described as morphosyntactically idiosyncratic, meaning that different scholars proposed to divorce the morphosyntactic computation in which these verbs are involved from their actual morphophonological form (e.g., Embick 2000, Xu et al. 2007). In the first part of the thesis, I show that this is not an adequate solution and that the presence of the Middle morphology on these verbs is morphosyntactically justified: there is not a divorce between the morphophonological form and the morphosyntactic computation of these verbs. Following Schäfer (2008, 2017) and Spathas et al. (2015), I proposed to analyze the Middle morphology as the morphological output of a syntactically deactivated argument-introducing head (i\*°, following Wood and Marantz 2017). This means that the presence of the Middle morphology is related to the absence of a syntactically projected argument. I identified different classes of deponents and I showed that, in each case, the presence of the Middle morphology corresponds to the absence of a syntactically projected argument, the most external one (DOER or UNDERGOER). Consequently, the Nominative argument of a deponent verb is always merged in an inner position: subject of a stative phrase (HOLDER) or subject of a stative inclusion phrase (POSSESSOR or BENEFACTIVE, depending on the characteristics of the element in the complement position of the stative inclusion phrase, an entity or an event).

From the crosslinguistic point of view, I compare the classes of Latin deponents with similar classes of Italian verbs. Latin and Italian show relevant crosslinguistic differences with respect to the presence of certain classes. In Latin it is possible to find verbs that are only present in selfbenefactive derivations or in controlled change of state derivations in which a second argument, merged in the complement of the state position, is marked by dependent Accusative case. In Italian, instead, these verbs do not exist. This crosslinguistic difference, I propose, is related to the presence of the Middle morphology in the linguistic system. A v-doP+v-beP bieventive structure may involve three DPs, the subject of the v-doP (DOER), the subject of the v-beP (HOLDER) and an optional DP merged in the complement of the state position. The Middle morphology allows for the projection of an existentially bound (H) and syntactically absent (Ø) DOER. In a controlled change of state derivation (molior aliquid 'I exert myself upon something'), the existentially bound DOER is identified with the subject of the state (HOLDER) that, consequently, acquires two thematic roles. The derivation, then, involves three semantically relevant arguments (DOER, HOLDER and complement of the state) but only two of them are syntactically projected. As far as the syntactic component is concerned, there are only two DPs in the structure. This fact, adopting an analysis in which Nominative and Accusative case are assigned by means of an agreement procedure with the uφ features of the higher argument-introducing head during the syntactic derivation (Spathas et al.

2015), allows for the assignment of Accusative case to the DP that is in the complement of the state position. In a language like Italian, in which the Middle morphology is absent, if a thematic ROLE is semantically present (existential or not) it must be syntactically projected too<sup>230</sup>. This means that, whichever mechanism is used to convey the fact that a single referential argument gains two thematic ROLES (SE pronoun or movement), the syntactic structure will always include two syntactic arguments (the SE pronoun and the copy of the moved DP). This fact precludes the assignment of Accusative case to a third DP merged in the complement of the state position.

The Middle morphology also interacts with self-benefactives. Only a language with the Middle morphology has verbs that can only be present in a self-benefactive derivation. This depends on the fact that a Middle-marked self-benefactive structure is post-syntactically different from a standard benefactive one, in which the benefactive argument is referentially disjoint from the external argument. The former includes two syntactically projected arguments, while the latter includes three syntactically projected arguments. A specific  $\sqrt{\ }$ , then, is able to pose an interpretability constraint that selects only for the self-benefactive structure, excluding the benefactive one. In Italian, instead, the self-benefactive structure is derived by means of a SE pronoun. The SE pronoun occupies the same structural position occupied by a referentially disjoint benefactive argument<sup>231</sup>. This means that a self-benefactive derivation and a benefactive one are post-syntactically indistinguishable and, consequently, a  $\sqrt{\ }$  cannot pose an interpretability constraint that selects only for the self-benefactive derivation and excludes the benefactive one.

The Middle-language vs. non-Middle-language opposition is also relevant for the diachronic analysis. The Italian linguistic system derives from Latin. If the analysis proposed in the Part I is correct, the Late and Medieval stages should provide us with the diachronic data that fill the gap between a system that has the Middle morphology and a system that does not have the Middle morphology. The diachronic analysis performed in the Part II of the thesis shows that deponents follow different path of change, depending on the class they belong to. The attested changes, starting from the formalization provided in Part I, are predictable.

Acedo-Matellán (2016) clearly shows that the attested crosslinguistic variation regarding the encoding of transition predicates (satellite-framed languages vs. verb-framed languages, Talmy 2000) is related to the morphophonological component. The head encoding transition, Path°, has its

<sup>230</sup>The analytic passives are not comprehended in this analysis. This is explicitly stated in Part I, Section 2.1.2. In a derivation involving an analytic passive, the external argument is syntactically absent but semantically present (Collins 2005, Schäfer 2017, Manzini et al. 2016). The main characteristic of the analytic passive, anyway, is that the semantically present external argument cannot be identified with an argument projected lower in the derivation. This means that, the analytic passive cannot be used in the syntactic environments that are relevant in this context and that it works differently from the Middle morphology.

<sup>231</sup>The Italian self-benefactives are always derived by means of a SE-marked structure and never by means of a "movement" one (see Part I, Section 4).

own morphophonological exponent in some languages, while in other languages it has no autonomous morphophonological exponent. In the first kind of languages, then, Patho can be spelled out by itself, giving as an output a satellite-framed environment in which the verb and the Path element can be separated. In the second kind of languages, instead, Patho, morphophonologically defective, can only be spelled out if it is strictly adjacent to v°, giving as an output a verb-framed environment in which the Path component is always unified with the verbal element<sup>232</sup>. In the analysis proposed in this thesis, crosslinguistic variation is explained by means of the presence/absence of the right morphophonological exponent (Middle morphology) for the syntactically deactivated argument-introducing head. As in Acedo-Matellán (2016), also in this case crosslinguistic variation depends on the morphophonological component. It has to be noticed that, in both cases, the presence/absence of a morphophonological exponent does not influence the presence/absence of a syntactic head; it may influence the locus of its final realization (autonomous Path° vs. conflation of Path° and v°; Acedo-Matellán 2016) or the presence/absence of a variant of the specific head (syntactically deactivated (Ø) vs. non-syntactically deactivated (Ø); here). Path° is both present in satellite framed languages and verb-framed languages, as i\*o is present both in Middle-languages and non-Middle-languages. This proposal supports a view that considers the functional skeleton as universally given. Crosslinguistic variation, consequently, regards the spellout, the interface between the functional skeleton and the morphophonological realization.

There are many issues that I have only partially addressed and that require further analyses. A first issue regards the sample of languages that I used. I propose a differentiation between languages that have the Middle morphology and languages that do not have it, analyzing the linguistic facts that follow from this parameter. The claims made about the consequences of the presence/absence of the Middle morphology have been checked only with respect to a small sample of languages. A larger sample would provide more insights, in order to see if this parameter stands as it is, if it has to be refined or if it has to be entirely dismissed and substituted by a more explanatory one.

Another point that can be further analyzed is the denominal/deadjectival vs. non-denominal/deadjectival opposition. The opposition between denominal/deadjectival verbs and  $\sqrt{\ }$  based verbs has been the core of the synchronic and diachronic analysis of the denominal/deadjectival deponents. The lexicalization of the nominal/deadjectival element as a  $\sqrt{\ }$  leads to the possibility of directly merging an Accusative DP in the position of the complement of the state. This proves that there is a syntactic difference between a denominal/deadjectival derivation and a  $\sqrt{\ }$ -based one. This claim is supported by the diachronic data: all the bieventive

<sup>232</sup>Latin is satellite framed, but of different kind. The Path° component is autonomous, but it is always prefixed onto the verbal element. See Acedo-Matellán (2016) for details.

Identification and Possession denominal/deadjectival deponents initially present only Oblique or prepositional arguments. Some of them, later, start presenting Accusative arguments. This process, as I pointed out in Part II, Section 2.4.2, does not depend on a single external factor as the loss of the Middle morphology. This is clear from the fact that this change is not related to a specific period: there are denominal/deadjectival verbs that start showing an Accusative argument already in the II cent. BCE (e.g., largior 'I donate') and others that present this change in the I cent. CE or later (e.g., praedor 'I plunder'). This change, then, is lexically specific. I analyzed the denominal/deadjectival derivation as cases of incorporation, while the non-denominal/deadjectival ones as cases of conflation (Haugen 2008, Acedo-Matellán and Mateu 2013, 2016). This difference is not only relevant in these Latin cases. In Italian, for example, there is a clear difference between the denominal/deadjectival derivation and the  $\sqrt{-}$ based ones. If a  $\sqrt{-}$ based verb is able to appear in a change of state derivation marked by the presence of a SE pronoun, is also usually able to be present in a causative derivation in which there are two referentially disjoint DPs; e.g., rompersi 'to break' (intr.) vs. rompere 'to break' (tr.)<sup>233</sup>. This is not true if the verb is denominal/deadjectival and not √-based. There are many denominal/deadjectival verbs that can only appear in a SE-marked change of state derivation: e.g., innamorarsi 'to fall in love' from amore 'love' vs. \*innamorare 'to make someone fall in love', impadronirsi 'to seize (something)' from padrone 'owner' vs. \*impadronire 'to make someone the owner of something'. It seems that, compared with a  $\sqrt{-based}$ verb, a denominal/deadjectival verb is more constrained with respect to the syntactic environments in which it can be present. This difference may well depend on the fact that a  $\sqrt{}$  imposes postsyntactic interpretability constraints on the derivations in which it can be present, while a verbalized nominal/adjectival element behaves differently. A denominal/deadjectival derivation starts from a phrasal element, an nP/aP, that has already been derived. This phrasal element has its own compositional semantics that has to be taken into consideration. A  $\sqrt{\ }$ , on the other hand, does not bring into the derivation any grammatically relevant semantics. I reserve the discussion of these facts for future researches.

A point to be better investigated is the diachronic process that leads to rise of the Middle morphology. From the diachronic point of view, the presence of the Middle morphology can be seen as a grammaticalization. The -r morpheme can be analyzed as an incorporated non-referential pronoun that was initially merged in the subject position in order to satisfy the +D selectional feature of the argument-introducing head. The incorporation of the pronoun led to the rise of the

<sup>233</sup>There are approximately 25 exceptions to this observation, e.g., aggrapparsi 'to cling', arrendersi 'to give up' dolersi 'to complain', allearsi 'to form an alliance', imbattersi 'to run into', defilarsi 'to go away stealthily', dimettersi 'to resign'. The majority of these verbs is derived by the prefixation of a verb with a causative alternant, as dimettersi from mettere 'to put'. Also in these cases, then, the presence of an additional morphological element, the prefix, poses stronger constraints with respect to the unprefixed and monomorphemic √-verb.

observable morphology. This way, the diachronic process would conform to a spec-to-head reduction (Roberts and Roussou 2003) and the Late and Medieval Latin use of a SE pronoun could be seen as the beginning of a new cycle. However, as underlined in Part I, Section 2.1.3, the diachronic data related to the IE -r morpheme are not conclusive. Moreover, the Latin Middle paradigm of the present includes endings that do not show the -r morpheme, the  $2^{nd}$ sg and  $2^{nd}$ pl. A further problem is the fact that the paradigm of the perfect presents an analytic form (past participle + esse 'to be'). In order to give reason of the facts regarding the paradigm of the perfect one should be firstly address the issue regarding its formal derivation (see Part I, Section 2.1.4). This target is beyond the scope of this thesis and is left open for future researches.

# Appendix

# Lists of the deponent verbs

The lists in this Appendix comprehend the Latin verbs that, for a consistent and relevant period, are only attested with the Middle morphology. Consequently, the non-denominal deponents belonging to the second and the third class (Part I, Sections 3.4.1 and 3.4.2) are not comprehended. The verbs are divided int denominal/deadjectivals and non-denominal/deadjectivals. The denominal/deadjectivals are further split into Identification, Possession and Possession+Identification deponents. The non-denominal/deadjectival, on the other hand, are split following the event structure proposed: change of state, change of location, controlled change of state and benefactive deponents. When a verb has more than one interpretation, it is present in more than one category.

# Denominal/deadjectival deponents:

#### Identification

Acedior: 'I am morose, I peevish'. From Gr. ακηδία.

Aeditu(m)or: 'I take care of a temple'. From aeditimus/aedituus 'the keeper of a temple'.

Aemulor: 'I imitate, I rival'. From aemulus 'imitator, rival'.

Agricolor: 'I cultivate a land'. From agricola 'farmer'.

Ancillor: 'I serve'. From ancilla 'maiden'.

Anxior: 'I get uneasy, anxious'. From anxius 'uneasy, anxious'.

Apricor: 'I busk in the sun'. From apricus 'under the sun'.

Arbitror: 'I am a hearer of something, I judge'. From arbiter 'hearer, judge'.

Architector: 'I project a building'. From architectus 'architect'.

Argutor: 'I prattle'. From argutus 'clever, sharp'.

Auspicor: 'I foretell looking at the birds in the sky'. From auspex 'bird inspector'.

Auxilior: 'I help'. From auxilium 'help, aid'.

Bacchor: 'I rave, I revel'. From baccha 'bacchant'.

Benignor: 'I rejoice'. From benignus 'kind'.

Blandior: 'I smooth'. From blandus 'caressing'.

Cauponor: 'I traffic'. From caupo 'tradesman'.

Circulor: 'I form a circle'. From circulum 'circle'.

Cocionor: 'I do the broker'. From cocio 'broker.

Columbor: 'I kiss, I smooth'. From columbus 'pidgeon'.

Comitor: 'I join myself to anyone as an attendant'. From comes 'attendant'.

Cornicor: 'I caw like a crow'. From cornix 'crow'.

Daemonizor: 'I act like a devil'. From daemon 'demon'.

Dominor: 'I seize'. From dominus 'master'.

Famulor: 'I serve'. From famulus 'servant'.

Fatuor: 'I am inspired'. From fatuus 'inspired'.

Fluidor: 'I become fluid, I melt'. From fluidus 'fluid'.

Furor: 'I steal'. From fur 'robber'.

Galaticor: 'I act lie a Galatian. From Galaticus 'Galatian'.

Graculor: 'I act like a jackdaw'. From graculus 'jackdaw'.

Graecor: 'I act like a Greek'. From Graecus 'Greek'.

Grat(ul)or: 'I rejoice'. From gratus 'joyful'.

Hariolor: 'I foretell'. From hariolus 'foreteller'.

Helluor: 'I devour'. From helluo 'glutton'.

Hospitor: 'I live as a guest somewhere'. From hospes 'guest'.

Humanor: 'I incarnate'. From humanus 'human'.

Interpretor: 'I interpret'. From interpres 'interpreter'.

*Iucundor*: 'I rejoice'. From *iucundus* 'joyful'.

*Iuvenor*: 'I wanton'. From *iuvenis* 'young man'.

Largior: 'I donate'. From largus 'generous'.

Latrunculor: 'I rob'. From latrunculus 'robber'.

Lenocinor: 'I flatter, I promote'. From leno 'pimp'.

Lurcor: 'I devour'. From lurco 'glutton'.

Malignor: 'I malignate'. From malignus 'evil'.

Manducor: 'I eat'. From manduco 'glutton'.

Medicor: 'I cure'. From medicus 'healer'.

Moechor: 'I commit adultery'. From moecha 'adulteress'.

*Moror*: 'I goof around'. From *morus* 'fool'.

Nepotor: 'I squander'. From nepos 'prodigal'.

*Novercor*: 'I act the step-mother to someone'. From *noverca* 'step-mother'.

Parasitor: 'I play the parasite'. From parasita 'parasite'.

Patrocinor: 'I patronize'. From pater 'father, patron'.

Peregrinor: 'I wander'. From peregrinus 'wanderer'.

Philosophor: 'I philosophize'. From philosophus 'philosopher'.

Poetor: 'I poetize'. From poeta 'poet'.

Potentor: 'I gain power'. From potens 'powerful'.

Principor: 'I rule'. From princeps 'first man, chief'.

Puellitor: 'I act like a child'. From puella 'female child'.

Pugilor: 'I fight with the fists'. From pugil 'boxer'.

Recentor: 'I renew myself'. From recens 'recent'.

Rusticor: 'I stay in the countryside'. From rusticus 'rural'.

Scurror: 'I play the buffoon'. From scurra 'a city buffoon'.

Subsidior: 'I act like a reserve'. From subsidium 'military reserve'.

Sycophantor: 'I deceive'. From sycophanta 'informer'.

Tricor: 'I trifle'. From trico 'mischiefmaker'.

Tristor: 'I sadden'. From tristis 'sad'.

Tuburcinor: 'I eat voraciously'. From tuber 'swallow'.

Vador: 'I call at trial'. From vado 'garant'.

Vag(ul)or: 'I wander'. From vagus 'roaming'.

Vaticinor: 'I predict, I foresee'. From vates 'foreseer'.

Velitor: 'I fight like a veles'. From veles 'lightly armored soldier'.

Verbosor: 'I speak a lot'. From verbosus 'a person who speaks a lot'.

Vicinor: 'I stay near'. From vicinus 'near'.

*Vilicor*: 'I live in the countryside'. From *vilicus* 'man who lives in the countryside'.

Virginor: 'I act like a young girl'. From virgo 'young girl'.

Vulpinor: 'I act like a fox'. From vulpes 'fox'.

#### **Possession**

Ampullor: 'I speak elaborately'. From ampulla 'flask'.

Annonor: 'I get supplies'. From annona 'supply'.

Aporior: 'I develop doubts with respect to something'. From aporia 'logic issue, doubt'.

Aquor: 'I get water'. From aqua 'water'.

Argumentor: 'I argument'. From argumentum 'argument'.

Auctionor: 'I held an auction'. From auctio 'auction'.

Cavillor: 'I joke'. From cavillus 'joke, motto'.

Cibor: 'I get food'. From cibus 'food'.

Commercior: 'I trade'. From commercium 'commerce'.

Consilior: 'I held a council'. From concilium 'council'.

Contionor: 'I held a speech in an assembly'. From contio 'assembly'.

Controversor: 'I debate'. From controversia 'debate'.

Copior: 'I get stocks'. From copia 'stock'.

Crapulor: 'I get drunk'. From crapula 'excessive wine-drinking'.

(Di)gladior: 'I fight'. From gladium 'sword'.

Epulor: 'I eat with someone at a banquet, I held a banquet'. From epulum 'banquet'.

Fabulor 'I narrate, I speak'. From fabula 'narration'.

Facetior: 'I joke'. From facetiae 'jokes'.

Ferior: 'I have holidays'. From feriae 'rest days'.

Fistulor: 'I play the pipe'. From fistula 'pipe'.

Fornicor: 'I fornicate, I go to a whoredom'. From fornix 'arch'.

Frumentor: 'I get grain supplies'. From frumentum 'grain'.

Geniculor: 'I get on my knees'. From geniculum 'knee'.

Glorior: 'I boast'. From gloria 'glory'.

Insidior: 'I undermine'. From insidiae 'traps'.

*loc(ul)or*: 'I jest'. From *iocum* 'joke'.

Itineror: 'I travel'. From itiner 'travel'.

Lamentor: 'I cry for someone'. From lamentum 'cry'.

Latibulor: 'I hide'. From latibulum 'hideout'.

*Libidinor*: 'I give myself to pleasures'. From *libido* 'pleasure'.

Lignor: 'I get wood'. From lignum 'wood'.

Lupor: 'I associate with lewd women'. From lupa 'prostitute'.

Lustror: 'I go to brothels'. From lustrum 'brothel'.

Luxurior: 'I thrive, I abound to excess'. From luxuria 'rankness, luxury'.

*Manticulor*: 'I steal'. From *manticula* 'little purse'.

Manuor: 'I steal'. From manus 'hand'.

Materior: 'I get wood'. From materia 'wood'.

*Meretricor*: 'I deal with harlots'. From *meretrix* 'harlot'.

*Meridior*: 'I rest'. From *meridies* 'midday (resting period)'.

Modificor: 'I measure'. From modus 'measure'.

Moror: 'I wait'. From mora 'delay'.

Nauculor: 'I sail'. From naucula 'ship'.

Negotior: 'I work'. From negotium 'occupation'.

Nidulor: 'I nest'. From nidulus 'nest'.

Nugor: 'I jest'. From nugae 'jokes'.

Nundinor 'I trade'. From nundinae 'trading days'.

Odoror: 'I smell'. From odor 'smell'.

Operor: 'I work'. From opera 'work'.

Otior: 'I rest'. From otium 'rest'.

Peculor: 'I steal'. From peculum 'money'.

Pennor: 'I get feathers'. From penna 'feather'.

Periclitor: 'I get in danger'. From periclum 'danger'.

Periculor: 'I get in danger'. From periculum 'danger'.

Perplexor: 'I get entangled'. From perplexum 'entangled'.

Pigneror: 'I get an insurance for something'. From pignus 'insurance'.

Piscor: 'I fish'. From piscis 'fish'.

Popinor: 'I attend taverns'. From popina 'tavern'.

Potior: 'I seize'. From potis 'power, possession'.

Praedor: 'I plunder'. From praeda 'prey, plunder'.

Praemior: 'I get an income'. From praemium 'prize'.

Proelior: 'I fight'. From proelium 'fight'.

*Proemior*: 'I start'. From *proemium* 'starting part of a literary work'.

Querellor: 'I complain'. From querella 'complaint'.

Racemor: 'I collect news'. From racema 'bunch of grapes'.

Radicor: 'I root'. From radix 'root'.

Ratiocinor: 'I calculate'. From ratio 'reckoning, account'.

Rixor: 'I fight'. From rixa 'fight'.

Ruror: 'I deal with agriculture'. From rus 'countryside'.

Scortor: 'I go often with whores'. From scortum 'whore'.

Sermocinor: 'I converse'. From sermo 'conversation'.

Siliquor: 'I grow pods'. From siliqua 'pod'.

Solacior: 'I take relief'. From solacium 'relief'.

Spatior: 'I wander'. From spatium 'space'.

Stipendior: 'I take a salary (from someone)'. From stipendium 'salary'.

Stomachor: 'I get in bad mood'. From stomachum 'bad mood'.

Stramentor: 'I get hay'. From stramentum 'hay'.

Taurobolior: 'I sacrifice a bull'. From taurobolium 'sacrifice of a bull'.

Tumultuor: 'I participate in a riot'. From tumultum 'riot'.

Urinor: 'I dive'. From urina 'water, liquid'.

Verecundor: 'I feel embarassed'. From verecundia 'bashfulness'.

Vermiculor: 'I am worm-eaten'. From vermiculus 'little worm'.

Verminor: 'I have itching pains'. From vermina 'stomach-aches'.

Vitulor: 'I rejoice'. From Vitula 'The goddess of happiness'.

#### Possession+Identification

Alumnor: 'I rise someone'. From alumnus 'pupil'.

Causificor: 'I make up something as an excuse'. From causa 'excuse, motivation'.

Causor: 'I make up something as an excuse'. From causa 'excuse, motivation'

Criminor: 'I accuse'. From crimen 'accusation'.

Dignor: 'I think worthy'. From dignus 'worthy'.

Exsecror: 'I curse'. From sacer 'cursed'.

Fabricor: 'I fabricate'. From fabrica 'workshop'.

Gratificor: 'I oblige someone'. From gratus 'pleasing'.

*Imaginor*: 'I imagine something'. From *imago* 'image'.

Lucror: 'I earn something'. From lucrum 'income'.

*Machinor*: 'I plot, I invent something'. From *machina* 'plort, machinery'.

*Mercor*: 'I buy something'. From *merx* 'goods'.

Minor: 'I threat'. From minae 'threats'.

Miror: 'I admire'. From mirus 'wonderful'.

*Modulor*: 'I moderate'. From *modulus* 'measure, rhythm'.

*Muneror*: 'I reward someone'. From *munus* 'obligation, duty, gift'.

*Mutuor*: 'I borrow something'. From *mutuus* 'borrowed'.

Ominor: 'I foresee something'. From omen 'omen'.

Osculor: 'I kiss'. From osculum 'kiss'.

Populor: 'I plunder'. From populus 'people, army'.

Precor: 'I pray'. From prex 'preach'.

(Re)cordor: 'I remember'. From cor 'heart'.

Rimor: 'I examine something'. From rima 'break, fissure'.

Scrutor: 'I investigate something'. From scruta 'garbage'.

Sortior: 'I draw something'. From sors 'casting, drawing'.

Stipulor: 'I demand something by means of a formal commitment'. From stips 'insurance'.

Technor: 'I plan something'. From techna 'trick, piece of craft'.

Testor: 'I call as a witness'.

Trutinor: 'I weight something'. From trutina 'libra'.

# Non-denominal/deadjectival deponents:

# Change of state

Defetiscor: 'I get tired'.

Expergiscor: 'I wake up'.

Irascor: 'I get angry'.

Morior: 'I die'.

Nascor: 'I am born'.

Nantinor: 'I get nervous'.

Orior: 'I rise'.

### **Change of location**

Gradior: 'I advance'.

Proficiscor: 'I advance'.

Labor: 'I slip'.

Palor: 'I roam, I wander'.

#### **Controlled change of state**

Comminiscor: 'I think'.

Commentor: 'I think'.

Experior: 'I test, I try'.

Frustror: 'I deceive'.

Fungor: 'I fulfill, I accomplish'.

Luctor: 'I fight'.

Medeor: 'I heal'.

Meditor: 'I think'.

Mentior: 'I lie, I deceive'.

*Molior*: 'I exert myself, I move something'.

Muginor: 'I dally, I hesitate'.

Nanciscor: 'I get, I obtain'.

Obliviscor: 'I forget'.

Opinor: 'I think'.

Opperior: 'I wait'.

Ordior: 'I weave, I start speaking'.

Pacificor: 'I make peace'.

Paciscor: 'I agree'.

Palpor: 'I caress'.

Praestolor: 'I wait'.

Quer(it)or: 'I complain'.

Reminiscor: 'I remember'.

Refragor: 'I oppose'.

Suffragor: 'I support'.

*Ulciscor*: 'I take revenge upon someone/something'.

Utor: 'I use'.

Venor: 'I hunt'.

Vereor: 'I feel reverence, I am afraid of'.

Vescor: 'I eat'.

#### Benefactive

A(di)piscor: 'I reach, I obtain something'.

Hortor: 'I urge, I exhort someone'.

*Imitor*: 'I imitate something'.

Meditor: 'I reflect upon something'.

Mereor: 'I deserve something'.

*Metior*: 'I measure something'.

Obliviscor: 'I forget'.

Opinor: 'I think upon something'.

Paciscor: 'I agree something'.

Reminiscor: 'I remember'.

Reor: 'I think'

Ulciscor: 'I vindicate someone'.

#### Not analyzed

Calvor: 'I deceive'.

Conor: 'I undertake, I try'.

Cunctor: 'I wait'.

Fateor/for/farior: 'I speak

Loquor: 'I speak'.

Patior: 'I suffer'.

Sequor: 'I follow'.

Spec(ul)or/spec(t)or: 'I look'.

Tueor: I behold, I watch'.

# References

#### **Text Editions**

All the text I used come from the *Library of Latin texts* (*A* and *B Series*), available at http://clt.brepolis.net/llta/pages/Search.aspx and http://clt.brepolis.net/lltb/pages/Search.aspx, or from the *Archivio della latinità italiana nel medioevo* (ALIM), available at http://www.alim.dfll.univr.it/. At the end of each bibliographical entry, there is a list of the quoted passages.

#### Accius

• Tragoediarum fragmenta: Ribbeck, O. (ed.). 1871. Scaenicae Romanorum poesis fragmenta, vol. I: Tragicorum fragmenta. 2<sup>nd</sup> ed. Leipzig: Teubner. (217; 346; 391; 566)

#### Aemilius Asper

• Ars grammatica: Keil, H. (ed.). 1868. Grammatici Latini, V. Leipzig: Teubner. (p.551, 1.15)

## Afranius, Lucius

• Comoediarum togatarum fragmenta: Ribbeck, O. (ed.). 1873. Scaenicae Romanorum poesis fragmenta, II: Comicorum fragmenta. 2<sup>nd</sup> ed. Leipzig: Teubner. (34; 184)

#### Agnellus, Andrea

• Liber pontificalis ecclesiae Ravennatis: Mauskopf Deliyannis, D. (ed.). 2006. Liber pontificalis ecclesiae Ravennatis. Turnholt: Brepols. (Iohann, 45; Neon. 30, 181; Theod. 3, 104; Theod. 121, 194)

#### Alain of Lille

- Anticlaudianus: Bossuat, R. (ed.). 1955. Anticlaudianus (Textes philosophiques du Moyen Age, I). Paris: librairie pholosophique J. Vrin. (6, 361)
- *De planctu Naturae*: Häring, N. M (ed.). 1978. *De planctu Naturae*. Spoleto: Studi medievali, terza serie 19,2. (16, 38)
- *Summa 'Quoniam homines'*: Glorieux. P. (ed.). 1953. Archives d'histoire doctrinale et littéraire du Moyen Âge 20. (1, 2; 2, 58)

#### Ambrose, Saint

- De Iacob et uita beata: Schenkl, C. (ed.). 1897. De Iacob, De Ioseph, De patriarchis, De fuga saeculi, De interpellatione Iob et David, De apologia David, Apologia David altera, De Helia et ieiunio, De Nabuthae, De Tobia. Salzburg: CSEL. (2, 4, 14)
- De institutione uirginis et sanctae Mariae uirginitate perpetua ad Eusebium. Gori, F. (ed.).
   1989. Tutte le opere di Sant'Ambrogio. Virginità e vedovanza. Opere morali. 2 voll.
   Milano/Roma: Bibl. Ambrosiana-Città Nuova. (14, 91)
- De Ioseph: Schenkl, C. (ed.). 1897. De Iacob, De Ioseph, De patriarchis, De fuga saeculi, De interpellatione Iob et David, De apologia David, Apologia David altera, De Helia et ieiunio, De Nabuthae, De Tobia. Salzburg: CSEL. (4, 20)
- De spiritu sancto: Faller, O. (ed.). De spiritu sancto libri tres, De incarnationis dominicae sacramento. Salzburg: CSEL. (1, prol. 3)
- Expositio euangelii secundum Lucam: Adriaen, M. (ed.). 1957. Expositio euangelii secundum Lucam. Fragmenta in Esaiam. Turnholt: Brepols. (10, 423)

#### **Ammianus Marcellinus**

• Rerum gestarum: Seyfarth, W., L. Jacob-Karau and I. Ulmann (eds.). 1978. Rerum gestarum libri qui supersunt. Leipzig: Teubner. (16, 12, 17)

#### Andronicus, Livius

• Tragoediarum fragmenta: Ribbeck, O. (ed.). 1871. Scaenicae Romanorum poesis fragmenta, vol. I: Tragicorum fragmenta. 2<sup>nd</sup> ed. Leipzig: Teubner. (1; 25)

#### Anonymi Glossa Psalmorum ex traditione seniorum

• Glossa Psalmorum ex traditione seniorum: Boese, H. (ed.). 1992-1994. Vetus Latina, Aus der Geschichte der lateinischen Bibel, 22 and 25. Freiburg: Herder. (103, 26)

#### Aponius (Apponius)

• *In Canticum canticorum expositio*: de Vregille, B. and L. Neyrand (eds.). 1986. *In Canticum canticorum expositio*. Turnholt: Brepols. (1, 558)

#### **Apuleius**

- Apologia: Helm, R. (ed.). 1963. Apulei Platonici Madaurensis Opera quae supersunt. Leipzig: Teubner. (87)
- Florida: Helm, R. (ed.). 1963. Apulei Platonici Madaurensis opera quae supersunt. Florida. Leipzig: Teubner. (9, 21)
- *Metamorphoses*: Helm, R. (ed.). 1955. *Apulei Platonici Madaurensis opera quae supersunt. Metamorphoseon libri XI*. Leipzig: Teubner. (1, 23; 3, 3)

#### Arnobius the Younger

- Commentarii in Psalmos: Daur, K. D. (ed.). 1990. Commentarii in Psalmos. Turnholt: Brepols. (76, 3)
- Conflictus cum Serapione: Daur, K. D. (ed.). 1992. Opera minora. Turnholt: Brepols. (2, 16, 1.1162)

#### Augustine, Saint

- Contra Iulianum: PL 044, 0637-0639. Downloadable at http://www.documentacatholicaomnia.eu/04z/z\_0354-0430\_Augustinus\_Contra\_Julianum.\_Admonitio\_MLT.pdf.html. Accessed 04/09/2017.
- Epistulae: Goldbacher, A. (ed.). 1895-1898. Epistulae 31-123. Salzburg: CSEL. (41, 2; 108, 34.2)

#### Beatus Liebanensis

• Commentarius in Apocalypsin: Sanders, H. A. (ed.). 1930. Commentarius in Apocalypsin. Papers and Monographs of the American Acad. in Rome, 7. Ann Arbor: University of Michigan Press. (2, 1, 64; 3, 3, 17; 6, 2, 11; 6, 12, 17; 7, 15, 1; 8, 3, 6)

#### Beatus Liebanensis et Eterius Oxoniensis

• Aduersus Elipandum libri duo: Löfstedt, B. (ed.). 1984. Aduersus Elipandum libri duo. Turnholt: Brepols. (1, 104; 2, 37)

#### Bellum Africum

• Klotz, A. (ed.). 1927. Cai Iulii Caesari Commentari Vol. III. Bellum Alexandrinum, Bellum Africvanum, Bellum Hispaniense, Fragementa. Leipzig: Teubner. (81, 2)

#### Benedictus of Nursia, Saint

• Regula: de Vogüé, A. (ed.). 1972. La Règle de saint Benoît, I. Revue d'histoire de l'Église de France 59, n°162. (58, 5, 1)

#### Boethius

• In librum Aristotelis Peri hermeneias commentarii: Meiser, C. (ed.). 1880. In librum Aristotelis Peri hermeneias commentarii. 2<sup>nd</sup> ed. Leipzig: Teubner. (3, 9)

#### Caesar

- De bello civili: Klotz, A. (ed.). 1950. C. Iuli Caesaris commentarii, vol. II: Commentarii belli civilis. Leipzig: Teubner. (1, 30, 5; 1, 64, 2; 3, 52, 2)
- *De bello Gallico:* Hering, W. (ed.). 1997. *Commentari rerum gestarum*. Stuttgart: Teubner. (1, 13, 3; 1, 14, 3; 1, 16, 5; 1, 23, 1; 1, 26, 5; 2, 23, 2; 2, 23, 3; 4, 6, 4; 4, 19, 4; 5, 12, 5)

#### Caesarius of Arles

• Sermones: Morin, G. (ed.). 1953. Sermones ex integro a Caesario compositi uel ex aliis fontibus hausti. Turnholt: Brepols. (191, 1, 4; 210, 4)

#### Cato

- *De agri cultura*: Mazzarino, A. 2<sup>nd</sup> ed. 1982. *Marci Porci Catoni de agri cultura*. Leipzig: Teubner. (summ. 5; 48; 126; 127; 128; 151)
- Orationum fragmenta: Jordan, H. (ed.). 1860. M. Catonis praeter librum De re rustica quae extant. Leipzig: Teubner. (22, 51; 25, 2)
- Origines: Jordan, H. (ed.). 1860. M. Catonis praeter librum De re rustica quae extant. Leipzig: Teubner. (3, 7; 5, 11)

#### Catullus

Carmina: Bardon, H. (ed.).1973. Catulli Veronensis Carmina. Leipzig: Teubner. (65, 21; 87, 2)

### Celsus, Aulus Cornelius

• *De medicina:* Daremberg, C. (ed.). 1891. *Auli Corneli Celsi De medicina libri octo*. Leipzig: Teubner. (8, 6)

#### Chalcidius

• *Commentarius in Platonis Timaeum*: Waszink, J. H. (ed.). 1975. Plato latinus, IV. London: Warburg. (2, 304)

#### Charisius

• Ars grammatica: Barwick, C. and F. Kühnert. 1964. Artis grammaticae libri V. Leipzig: Teubner. (p. 215, 1.11)

#### Cicero

- Academica priora sive Lucullus: Plasberg, O. (ed.). 1922. M. Tulli Ciceronis scripta quae manserunt omnia, 42. Leipzig: Teubner. (2, 139)
- Brutus: Malcovati, E. (ed.). 1970. M. Tulli Ciceronis scripta quae manserunt omnia, 4. Leipzig: Teubner. (22; 310)
- Cato maior de senectute: Simbeck, K. (ed.). 1917. M. Tulli Ciceronis scripta quae manserunt omnia, 47. Leipzig: Teubner. (38)
- *De divinatione*: Giomini, R. (ed.). 1975. *M. Tulli Ciceronis scripta quae manserunt omnia,* 46. Leipzig: Teubner. (2, 73; 2, 87)
- De domo sua ad pontifices oratio: Maslowski, T. (ed.). 1981. M. Tulli Ciceronis scripta quae manserunt omnia, 21. Leipzig: Teubner.
- *De fato*: Giomini, R. (ed.). 1975. M. Tulli Ciceronis scripta quae manserunt omnia, 46. Leipzig: Teubner. (3)
- De finibus bonorum et malorum: Schiche, Th. (ed.). 1915. M. Tulli Ciceronis scripta quae manserunt omnia, 43. Leipzig: Teubner. (5, 15, 42)
- De legibus: Müller, C. F. W. (ed.). 1905. M. Tulli Ciceronis scripta quae manserunt omnia, IV, 2. Leipzig: Teubner. (2, 53)
- De natura deorum: Ax, W. (ed.). 1933. M. Tulli Ciceronis scripta quae manserunt omnia, 45. Leipzig: Teubner. (2, 69)
- -De officiis: Atzert, C. (ed.). 1963. M. Tulli Ciceronis scripta quae manserunt omnia, 48. Leipzig: Teubner. (1, 41, 167)
- De oratore: Kumaniecki, K. (ed.). 1995. M. Tulli Ciceronis scripta quae manserunt omnia,
   3. Leipzig: Teubner. (2, 250; 2, 267)
- Epistulae ad Atticum: Shackleton Bailey, D. R. (ed.). 1987. M. Tulli Ciceronis Epistulae ad

- Atticum. Leipzig: Teubner. (2, 15, 13; 14, 1, 2)
- -Epistulae ad familiares: Shackleton Bailey, D. R. (ed.). 1988. M. Tulli Ciceronis Epistulae. Leipzig: Teubner. (1, 4, 3; 1, 7, 11; 2, 16, 6; 12, 26, 1)
- Epistulae ad Quintum fratrem: Shackleton Bailey, D.R. (ed.). 1988. M. Tulli Ciceronis Epistulae. Leipzig: Teubner. (1, 1, 11; 2, 5, 4; 3, 7, 1)
- In C. Verrem orationes sex: Klotz, A. (ed.). 1923. M. Tulli Ciceronis scripta quae manserunt omnia, 5. Leipzig: Teubner. (1, 6, 175; 2, 3, 155; 2, 3, 182)
- In L. Sergium Catilinam orationes: Reis, P. (ed.). M. Tullii Ciceronis Orationes in L. Catilinam quattuor Orationes in Catilinam. ed. Minor.1938. Leipzig: Teubner. (2, 10)
- In M. Antonium orationes Philippicae: Fedeli, P. (ed.). 1986. M. Tulli Ciceronis scripta quae manserunt omnia, 28. Leipzig: Teubner. (3, 36)
- Partitiones oratoriae: Friedrich, W. (ed.). 1907. M. Tulli Ciceronis scripta quae manserunt omnia, I, 2. Leipzig: Teubner. (73, 19)
- Phaenomena: Baehrens, E. (ed.). 1879. Poetae Latini Minores, I. Leipzig: Teubner. (462, 26)
- Pro C. Rabirio perduellionis reo oratio: Marek, V. (ed.). 1983. M. Tulli Ciceronis scripta quae manserunt omnia, 16. Leipzig: Teubner. (28)
- Pro lege Manilia (de imperio Cn. Pompei) oratio: Reis, P. (ed.). 1927. M. Tulli Ciceronis scripta quae manserunt omnia, 14. Leipzig: Teubner. (4)
- Pro L. Murena oratio: Kasten, H. (ed.). 1972. M. Tulli Ciceronis scripta quae manserunt omnia, 18. Leipzig: Teubner. (4, 8)
- Pro L. Sulla oratio: Kasten, H. (ed.). 1966. M. Tulli Ciceronis scripta quae manserunt omnia, 19. Leipzig: Teubner. (86; 45)
- *Pro M. Caelio oratio*: Maslowski, T. (ed.). 1995. *M. Tulli Ciceronis scripta quae manserunt omnia, 23*. Leipzig: Teubner. (50)
- Tusculanae disputationes: Pohlenz, M. (ed.). 1918. M. Tulli Ciceronis scripta quae manserunt omnia, 44. Leipzig: Teubner. (5, 13, 37)

#### Columella

Res Rustica: Lundström, V., A. Josephson and S. Hedberg (eds.). 1897-1968. L. Iuni
 Moderati Columellae opera quae exstant. Uppsala: Lundequistska bokhandeln. (4, 33; 5, 9;
 8, 10)

# Corpus Pseudepigraphorum latinorum Ueteris Testamenti

• *Uisio beati Esdrae*: Bogaert, P. M. (ed.). 1984. *Une version longue inédite de la "Visio beati Esdrae"*, in Revue Bénédictine, 94, p. 59-64. (16)

# Cyprianus Cartaginensis, Pseudo

- *De montibus Sina et Sion*: Hartel, W. (ed.). 1871. *Opera omnia (pars 3)*: Opera spuria. Indices. Praefatio. Salzburg: CSEL. (5)
- De singularitate clericorum: Hartel, W. (ed.). 1871. Opera omnia (pars 3): Opera spuria. Indices. Praefatio. Salzburg: CSEL. (40)

# Defensor Locagiacensis

• Liber scintillarum: Rochais, H. M. (ed.). 1957. Index biblicus in opera S. Bernardi. Turnholt: Brepols. (58, 23)

#### **Ennius**

- Annales: Vahlen, J. (ed.). 1903. Ennianae poesis reliquiae. Leipzig: Teubner. (inc. 472; 9, 300; 16, 425)
- Euhemerus siue Sacra historia: Vahlen, J. (ed.). 1903. Ennianae poesis reliquiae. Leipzig: Teubner. (9)
- Saturarum fragmenta: Vahlen, J. (ed.). 1903. Ennianae poesis reliquiae. Leipzig: Teubner. (64)
- Tragoediarum fragmenta: Vahlen, J. (ed.). 1903. Ennianae poesis reliquiae. Leipzig: Teubner. (147)

# **Epiphanius Latinus**

• *Interpretatio Euangeliorum*: Erikson, A. (ed.). 1933. *Sancti Epiphanii episcopi Interpretatio Evangeliorum*. Lund: Gleerup. (27, p. 43; 38, p.8; 61, p.167)

## Everardus of Ypres

• Dialogus Ratii et Everardi: Haring, N. M. (ed.). 1953. A Latin Dialogue on the Doctrine of Gilbert of Poitiers (in Medieval Studies, 15). Turnhout: Brepols. (p. 245, 1.13)

# Fragmenta Ariana

• Expositio euangelii secundum Lucam: Gryson, R. (ed.). 1982. Scripta Arriana Latina, I. Turnholt: Brepols. (fol. ms. 162v, 25)

#### Fronto

• Epistularium Frontonis: van den Hout, M. P. J. (ed.). 1988. Marci Cornelii Frontonis epistulae. Leipzig: Teubner. (Verus 1, 5, 2)

## Fructuosus of Braga

 Regula monastica communis: Campos Ruiz (ed.). 1971. Santos Padres españoles II. San Leandro, san Isidoro, san Fructuoso. Reglas monásticas de la España visigoda. Los tres libros de las "Sentencias". Madrid: Bibl. de Autores Christianos. (2, 78)

#### Gaudentius of Brescia

• Tractatus XXI: Glück, A. (ed.). 1936. Tractatus. Salzburg: CSEL. (21, 9, 29)

### Gellius

• *Noctes Atticae*: Hosius, C. (ed.). 1903. *Auli Gelli Noctium Atticarum libri XX*. Leipzig: Teubner. (16, 18, 3; 18, 12, 8)

#### Gennadius of Marsille

• Liber siue diffinitio ecclesiasticorum dogmatum: Turner, C. (ed.). 1906. Liber siue diffinitio ecclesiasticorum dogmatum. The Journal of Theological Studies, 7. (6, p.90, 1.12)

# **Gregory of Tours**

• *Historiarum libri X*: Krusch, B. and Wilhelm Levison (eds.). 1951. *Monumenta Germaniae Historica, Scriptores Rerum Merovingicarum, I, 1*. Hannover: Hahn. (2, 7; 2, 8; 3, 14; 5, 2; 5, 15; 6, 13; 6, 31; 7, 22; 8, 5; 8, 15; 8, 30; 8, 31; 9, 10; 9, 21; 10, 3)

# Gregory the Great

- Homiliae in Hiezechihelem prophetam: Adriaen, M. (ed.). 1971. Homiliae in Hiezechihelem prophetam. Turnhout: Brepols. (1, 7, 1.239)
- Moralia in Iob: Adriaen, M. 1979-1985. Moralia in Iob. Turnholt: Brepols. (27, 21)
- Registrum epistularum: Norberg, D. (ed.). 1982. Registrum epistularum. Turnholt: Brepols.

(4, 27, 10; 11, 44, 4)

#### **Homerus Latinus**

• *Ilias latina scilicet Iliados epitome latina*: Baehrens, E. (ed.). 1881. *Poetae Latini Minores, III*. Leipzig: Teubner. (454; 626)

#### Horace

- Ars poetica: Shackleton Bailey, D.R. (ed.). 1995. Quinti Horati Flacci opera. 3<sup>rd</sup> ed. Stuttgart: Teubner. (196)
- *Epistulae*: Shackleton Bailey, D.R. (ed.). 1995. *Quinti Horati Flacci opera*. 3<sup>rd</sup> ed. Stuttgart: Teubner. (1, 5, 17)
- *Epodi*: Shackleton Bailey, D.R. (ed.). 1995. *Quinti Horati Flacci opera*. 3<sup>rd</sup> ed. Stuttgart: Teubner. (6, 10)
- *Sermones* (Saturae): Shackleton Bailey, D.R. (ed.). 1995. *Quinti Horati Flacci opera*. 3<sup>rd</sup> ed. Stuttgart: Teubner. (1, 6, 128)

# Hyginus

Fabulae: Marshall, P. K. (ed.). 1993. Fabulae. Leipzig: Teubner. (28, 2, 5; 106, 6, 19; 125, 3, 12)

## Hyginus astronomus

• De astronomia: Viré, Gh. (ed.). 1992. De astronomia. Leipzig: Teubner. (2, 6)

# Hymnodia hispanica

• *Hymnodia hispanica*: Castro Sánchez, J. (ed.). 2010. *Hymnodia hispanica*. Turnholt: Brepols. (25, 5; 25, 17; 174, 71)

# Ildefonsus of Toledo

• De uirginitate sanctae Mariae: Yarza Urquiola, V. (ed.). 2007. De virginitate Sanctae Mariae, De cognitione baptismi, De itinere dese. Turnhout: Brepols. (p.221, l. 1164; p.284, 1.1390)

# Isidorus Hispalensis

- De differentiis uerborum (Liber differentiarum I): PL 83, c. 9-70. Downloadablae at: http://www.documentacatholicaomnia.eu/04z/z\_0560-0636\_\_Isidorus\_Hispaliensis\_\_Differentiarum\_Sive\_De\_Proprietate\_Sermonum\_Libri\_Duo\_MLT.pdf.html. Accessed 4/09/2017. (574)
- De ecclesiasticis officiis: Lawson, C. W. (ed.). 1989. Isidori Hispaliensis De ecclesiasticis officiis. Turnholt: Brepols. (1, 12; 1, 21)
- Etymologiarum siue Originum libri XX: Lindsay, W. M. (ed.). 1911. Isidori Hispaliensis episcopi Etymologiarum siue Originum libri XX. Oxford: Clarendon Press. (1, 40, 2; 3, 20, 14; 7, 8, 38; 10, 63; 19, 20, 1)
- Regula monachorum: Campos Ruiz (ed.). 1971. Santos Padres españoles II. San Leandro, san Isidoro, san Fructuoso. Reglas monásticas de la España visigoda. Los tres libros de las "Sentencias". Madrid: Bibl. de Autores Christianos. (17, 114)
- Sententiae: Cazier, P. (ed.). 1998. Sententiae. Turnholt: Brepols. (1, 10, 2; 1, 13, 8; 2, 24, 1; 3, 5, 5-6; 3, 6, 10b; 3, 6, 11-12)

## Jerome, Saint.

- *Commentarii in Isaiam*: Adriaen, M. (ed.). 1963. Commentariorum in Esaiam libri I-XI. Turnholt: Brepols. (5, 18, 2)
- *Tractatus LIX in psalmos*: Morin, G. (ed.). 1958. Tractatus sive homiliae in psalmos. In Marci evangelium. Alia varia argumenta. Turnholt: Brepols. (90, 14)
- *Vita Malchi*: Mierow, C. C. (ed.). 1946. *Classical Essays presented to J.A. Kleist*. St. Louis: The Classical Bulletin. (9, 58)

## Julian of Toledo

- Historia Wambae regis: Levison, W. (ed.). 1976. Sancti Iuliani Toletanae sedis episcopi opera. Turnholt: Brepols. (14; 370; 19, 505)
- Liber Anticimen, uersio altera: Martín Iglesias, J. C. and V. Yarza Urquiola. (eds.). 2014. Iuliani Toletani episcopi Liber Anticimen, Elogium Ildefonsi. Felicis Toletani episcopi Vita sancti Iuliani. Iuliani Toletani episcopi Fragmenta II. Pseudo-Iuliani Toletani episcopi Ordo annorum mundi, 2 vols., Turnhout, Brepols. (142)

#### Lactantius

• Diuinae Institutiones: Brandt, S. (ed.). 1890. Divinae institutiones et Epitome divinarum

# Livy

- *Ab urbe condita I-X*: Weissenborn, W. and M. Müller (eds.). 1932. *Titi Livi Ab urbe condita libri I–X*. Leipzig: Teubner. (5, 8, 3; 5, 44, 5; 9, 6, 6)
- *Ab urbe condita XXVI-XXVII*: Walsh, P. G. (ed.). 1989. *Titi Livi Ab urbe condita libri XXVI-XXVII*. Leipzig: Teubner. (26, 26, 9; 26, 50, 7)
- Ab urbe condita XXVIII-XXX: Walsh, P. G. (ed.). (1986). Titi Livi Ab urbe condita libri XXVIII-XXX. Leipzig: Teubner. (28, 43, 4)
- *Ab urbe condita XXI–XL*: Briscoe, J. (ed.). 1991. *Titi Livi Ab urbe condita libri XXXI–XL*. Stuttgart: Teubner. (34, 25, 8; 39, 41, 4)
- *Ab urbe condita XLI-XLV*: Briscoe, J. (ed.). 1986. *Titi Livi Ab urbe condita libri XLI–XLV*. Stuttgart: Teubner. (44, 40, 4)

# Lucifer of Cagliari

- De regibus apostaticis: Diercks, G. F. (ed.). 1978. Operae quae supersunt. Turnholt: Brepols. (2, 43)
- *Moriundum esse pro dei filio*: Diercks, G. F. (ed.). 1978. *Operae quae supersunt*. Turnholt: Brepols. (9, 13)
- Quia absentem nemo debet iudicare nec damnare siue de Athanasio: Diercks, G. F. (ed.). 1978. Lucifer Calaritanus. Operae quae supersunt. Turnholt: Brepols. (2, 9, 1.30; 2, 5, 1.36)

## Lucilius

• Saturarum fragmenta: Marx, F. (ed.). 1904. C. Lucilii Carminum reliqiae, I-II. Leipzig: Teubner. (1375)

#### Lucretius

- De rerum natura: Martin, J. (ed.). 1969. T. Lucreti Cari de rerum natura libri sex. Leipzig: Teubner. (3, 276; 3, 944; 3, 1063; 5, 743)
- Manilius
- Astronomica: Goold, G. P. (ed.). 1985. Astronomica. Leipzig: Teubner. (5, 701)

## Maximus of Turin

• Sermones: Mutzenbecher, A. (ed.). 1962. Collectio sermonum antiqua nonnullis sermonibus extrauagantibus adiectis. Leipzig: Teubner. (13b, 21)

#### Naevius

- *Belli Punici fragmenta*: Strzelecki, W. (ed.). *Belli Punici carmina quae supersunt*. 1964. Leipzig: Teubner. (7, 42; 4, 34)
- Tragoediarum fragmenta: Ribbeck, O. (ed.). 1871. Scaenicae Romanorum poesis fragmenta, I: Tragicorum fragmenta. Leipzig: Teubner. (52)

# Ovid

- Amores: Ehwald, R. (ed.). 1907. P. Ovidius Naso, vol. I. Leipzig: Teubner. (3, 1, 4)
- Ars amatoria: Ehwald, R. (ed.). 1907. P. Ovidius Naso, vol. I. Leipzig: Teubner. (1, 89)
- Epistulae ex Ponto: Richmond, J. A. (ed.). 1990. P. Ovidi Nasoni ex Ponto libri quattuor. Leipzig: Teubner. (1, 3, 24; 3, 9, 9)
- Fasti: Alton, E. H., D.E. Wormell and E. Courtney (eds.). 4th ed. 1997. Publi Ovidi Nasoni Fastorum libri sex. Leipzig: Teubner. (1, 151; 2, 163; 4, 597; 6, 759)
- Metamorphoses: Anderson, W. S. (ed.). 1981. P. Ovidi Nasoni Metamorphoses. Leipzig: Teubner. (6, 565; 6, 690; 8, 736; 9, 481; 9, 652; 11, 199; 15, 729)
- Tristia: Hall, J. B. (ed.). 1995. Tristia. Leipzig: Teubner. (1, 5b, 17; 4, 10, 91; 5, 14, 31)

## **Pacuvius**

• *Tragoediarum fragmenta*: Ribbeck, O. (ed.). 1871. *Scaenicae Romanorum poesis fragmenta, I*: Tragicorum fragmenta. 2<sup>nd</sup> ed. Leipzig: Teubner. (71; 302; 379)

### Paenitentialia minora Franciae et Italiae

• Paenitentiale Merseburgense: Kottje, R. (ed.). 1994. Paenitentialia Franciae et Italiae saeculi VIII-XI. Turnholt: Brepols. (51, 274)

#### Paulinus diaconus mediolanensis

• Vita Sancti Ambrosi: Bastiaensen, A. A. R. (ed.). 1975. Vite dei santi, III. Milano: Edizioni Valla. (54, 3)

## Paulinus of Nola

• Epistulae: Hartel, G. (ed.). 1894. Epistulae. Salzburg: CSEL 29. (23, 31; 32, 18)

# Paulinus of Aquileia

• Contra Felicem libri tres: Norberg, D. (ed.). 1990. Paulini Aquileiensis Opera omnia, I. Corp. Christ. Mediaevalis, 95. Turnholt: Brepols. (3, 5)

#### Persius

• Saturae: Hermann, C. F. (ed.).1881. Auli Persi Flacci Saturarum liber. Leipzig: Teubner. (5, 11)

#### Petronius

• Satyrica: Müller, K. (ed.). 1995. Satyricon reliquiae. Leipzig: Teubner. (46, 1; 56, 4; 76, 10)

## Petrus Damiani

• Epistulae CLXXX: Reindel, K. (ed.). 1983 – 1993. Die Briefe des Petrus Damiani, I-IV. München: MGH. (1, 10)

# Petrus Chrysologus

• Sermones: Olivar, A. (ed.). 1975. Collectio sermonum a Felice episcopo parata sermonibus extrauagantibus adiectis. Turnholt: Brepols. (11, 22; 113, 23)

### Physiologus latinus

• *Physiologus latinus (Uersio Y):* Carmody, F. J. (ed.). 1933-1944. University of California Publications in Classical Philology, Vol. XII. (30, 4)

#### **Plautus**

- *Amphitruo*: Goetz, G. and Fr. Schoell (eds.). 1922. *T. Macci Plauti Comoediae, I.* Leipzig: Teubner. (121; 273; 349; 479; 507; 565; 585; 611; 975; 980; frg. 12)
- Asinaria: Goetz, G and Fr. Schoell (eds.). 1922. T. Macci Plauti Comoediae, I. Leipzig: Teubner. (102; 515)
- Aulularia: Stockert, W. (ed.). 1983. T. Macci Plauti. Aulularia. Leipzig: Teubner. (190, 726)

- Bacchides: Goetz, G. and Fr. Schoell (eds.). 2<sup>nd</sup> ed. 1904. T. Macci Plauti Comoediae, II.
   Leipzig: Teubner. (105; 158; 384; 528; 611; 790; 865; 1053; 1168)
- Captivi: Goetz, G. and F. Schoell (eds.) 1904. T. Macci Plauti Comoediae, II. Leipzig: Teubner. (184; 197; 435)
- Casina: Goetz, G. and F. Schoell (eds.) 1904. T. Macci Plauti Comoediae, II. Leipzig: Teubner. (443; 577)
- Cistellaria: Goetz G. and Fr. Schoell (eds.). 1901. T. Macci Plauti Comoediae, III. Leipzig: Teubner. (33; 221)
- Curculio: Goetz G. and Fr. Schoell (ed.). 1901. T. Macci Plauti Comoediae, III. Leipzig: Teubner. (188)
- Epidicus: Goetz, G. and Fr. Schoell (eds.). 1910. T. Macci Plauti Comoediae, III. Leipzig: Teubner. (217; 236; 668)
- *Menaechmi*: Goetz, G. and Fr. Schoell (eds.). 1895. *T. Macci Plauti Comoediae, IV*. Leipzig: Teubner. (217; 834)
- *Mercator*: Goetz, G. and Fr. Schoell (eds.). 1895. *T. Macci Plauti Comoediae, IV*. Leipzig: Teubner. (939)
- *Miles gloriosus*: Goetz, G. and Fr. Schoell (eds.). 1895. *T. Macci Plauti Comoediae, IV*. Leipzig: Teubner. (583; 1266; 1329)
- *Mostellaria*: Goetz, G. and Fr. Schoell (eds.). 1927. *T. Macci Plauti Comoediae, IV*. Leipzig: Teubner. (387; 987)
- Poenulus: Goetz, G. and Fr. Schoell (eds.). 1896. T. Macci Plauti Comoediae, V. Leipzig: Teubner. (217; 1087)
- Pseudolus: Goetz, G. and Fr. Schoell (eds.). 1896. T. Macci Plauti Comoediae, VI. Leipzig: Teubner. (35; 273; 451; 453; 1105)
- Stychus: Goetz G. and Fr. Schoell (eds.). 1896. T. Macci Plauti Comoediae, VI. Leipzig: Teubner. (24; 44)
- *Trinummus*: Goetz G. and Fr. Schoell (eds.). 1896. *T. Macci Plauti Comoediae, VII*. Leipzig: Teubner. (1; 23; 1149)
- *Vidularia*: Goetz G. and Fr. Schoell (eds.). 1896. *T. Macci Plauti Comoediae, VII*. Leipzig: Teubner. (100)

# Pliny the Elder

• Naturalis historia: Ian, L. and C. Mayhoff (eds.). 1892-1909. Naturalis historia libri

*XXXVII*. Leipzig: Teubner. (2, 63; 9, 22; 10, 191)

# **Pomponius**

• Atellanarum fragmenta: Ribbeck, O. (ed.). 1873. Scaenicae Romanorum poesis fragmenta, II: Comicorum fragmenta. 2<sup>nd</sup> ed. Leipzig: Teubner. (4; 30; 105; 108; 176)

#### Priscian

• *Institutiones grammaticae*: Hertz, M. and H. Keil (eds.). 1855-1859. *Grammatici Latini, II-III*. Leipzig: Teubner. (p. 387, 1.2)

# **Publilius Syrus**

• Sententiae: Meyer, W. (ed.). 1880. Publilii Syry Sententiae. Leipzig: Teubner. (Q 58)

# Quadrigarius

• Annalium fragmenta: Peter, H, (ed.). 1967. Historicorum Romanorum reliquiae, I. 2<sup>nd</sup> ed. Leipzig: Teubner. (54; 55)

#### Quintilianus

• *Institutio oratoria*: Radermacher, L. and V. Buchheit (eds.). 1971. *Institutiones Oratoriae libri XII*. Leipzig: Teubner. (1, proem. 4; 9, 2, 90)

## Quodvultdeus

• Liber promissionum et praedictorum Dei: Braun, R. (ed.). 1976. Liber promissionum et praedictorum Dei. Lyon: Éditions du Cerf. (3, 12)

# Regii Neapolitani Archivi Monumenta

Regii Neapolitani Archivi Monumenta. (2, 2.206, p. 66). Available at http://www.alim.dfll.univr.it/Notarili/alimnot.nsf/
 (TestiPID)/2302119A37B124B5C1257BEE006BD422!opendocument. A c c e s s e d 04/09/2017.

#### Sallust

• De coniuratione Catilinae: Kurfess, A. (ed.). 1957. Catilina. Iugurtha. Fragmenta ampliora.

- Leipzig: Teubner. (31, 9)
- Orationes et epistulae ex Historiis excerptae: Kurfess, A. (ed.). 1957. Catilina. Iugurtha. Fragmenta ampliora. Leipzig: Teubner. (epist. Mithr. 11)

# Scriptores Historiae Augustae

- Alexander Seuerus: Hohl, E. (ed.). 1965. Scriptores Historiae Augustae, vol. I. Leipzig: Teubner. (13, 6)
- Antoninus Heliogabalus: Hohl, E. (ed.). 1965. Scriptores Historiae Augustae, I. Leipzig: Teubner. (5, 4)

## Seneca the Elder

• Controversiae: Hakanson, L. (ed.). 1989. L. Annaeus Seneca Maior, Oratorum et Rhetorum Sententiae, Divisiones, Colores. Leipzig: Teubner. (2, 1; 2, 6)

# Seneca the Younger

- *Dialogorum liber II*: De constantia sapientis: Hermes, E. (ed.). 1923. *Luci Annei Senecae Dialogorum libri VII*. Leipzig: Teubner. (2, 6, 7)
- Epistulae morales ad Lucilium: Hense, O. (ed.). 1938. L. Annaei Senecae ad Lucilium epistularum moralium quae supersunt. Leipzig: Teubner. (52, 8)
- *Oedipus*: Peiper, R. and G. Richter (eds.). 1902. L. Annaei Senecae tragoediae. Leipzig: Teubner. (557)

### Sisenna

Historiarum fragmenta: Peter, H. (ed.). 1967. Historicorum Romanorum reliquiae, vol. I. 2<sup>nd</sup>
 ed. Leipzig: Teubner. (31; 132; 134)

#### **Svetonius**

- *De grammaticis et rhetoribus*: Brugnoli, G. (ed.). 1972. *Praeter Caesarum librum reliquiae*. Leipzig: Teubner. (7, 1)
- De vita Caesarum: Ihm, M. (ed.). 1908. De vita Caesarum libri VIII. Leipzig: Teubner. (Aug. 76, 1; Tib. 38, 1; Cal. 38, 3)

#### **Tacitus**

• Annales: Heubner, H. (ed.). 1994. P. Cornelii Taciti libri qui supersunt, I. ed. corr. Leipzig: Teubner. (3, 17, 2; 12, 49, 1)

#### Terence

- Eunuchus: Fleckersein, A. (ed.). 1898. P. Terentii Comoediae. Leipzig: Teubner (460; 553; 854)
- Phormio: Dziatzko, C. (ed.). 1874. Ausgewählte Komodien des P. Terentius Afer: zur Einführung in die Lectuere der altlateinischen Lustspiele. Erstes Bändchen: Phormio. Leipzig: Teubner. (284; 822)

## Tertullian

- Apologeticum: Dekkers, E., J.G.P. Borleffs, R. Willems, R.F. Refoulé, G.F. Diercks and A. Kroymann (eds.). 1954. Quinti Septimi Florentis Tertulliani Opera, I. Turnholt: Brepols. (21, 17; 21, 86)
- *Adversus Marcionem*: Dekkers, E., J.G.P. Borleffs, R. Willems, R.F. Refoulé, G.F. Diercks and A. Kroymann (eds.). 1954. *Quinti Septimi Florentis Tertulliani Opera, I.* Turnholt: Brepols. (4, 440; 4, p.544)
- De exhortatione castitatis: Dekkers, E., J.G.P. Borleffs, R. Willems, R.F. Refoulé, G.F. Diercks and A. Kroymann (eds.). 1954. Quinti Septimi Florentis Tertulliani Opera, II. Turnholt: Brepols. (10, 5)
- *De ieiunio aduersus psychicos*: Reifferscheid, A. and G. Wissowa (eds.). 1954. *Opera, II*. Turnholt: Brepols. (279, 20; 288, 14)
- De paenitentia: Dekkers, E., J.G.P. Borleffs, R. Willems, R.F. Refoulé, G.F. Diercks and A. Kroymann (eds.). 1954. Quinti Septimi Florentis Tertulliani Opera, II. Turnholt: Brepols. (9, 8)
- De pudicitia: Dekkers, E., J.G.P. Borleffs, R. Willems, R.F. Refoulé, G.F. Diercks and A. Kroymann (eds.). 1954. Quinti Septimi Florentis Tertulliani Opera, II. Turnholt: Brepols. (16, 37)

## **Titinius**

• Comoediarum togatarum fragmenta: Ribbeck, O. (ed.). 2<sup>nd</sup> ed. 1873. Scaenicae Romanorum poesis fragmenta, II: Comicorum fragmenta. Leipzig: Teubner. (70)

# Turpilius, Sextus

• Comoediarum palliatarum fragmenta: Ribbeck, O. (ed.). 1873. Scaenicae Romanorum poesis fragmenta, vol. II: Comicorum fragmenta. 2<sup>nd</sup> ed. Lepzig: Teubner. (81)

# Ursinus Locogiacensis

• Passio sancti Leodegarii altera: Krusch, B. (ed.). 1957. Passio sancti Leodegarii altera. Turnholt: Brepols. (26, 7)

#### Varro

- *De lingua Latina*: Goetz, G. and F. Schoell (eds.). 1910. *Marci Terenti Varronis De lingua Latina quae supersunt*. Leipzig: Teubner. (5, 27; 8, 24; 9, 61)
- Res rusticae: Goetz, G. (ed.). 1929. M. Terenti Varronis Rerum rusticarum libri tres. Leipzig: Teubner. (3, 9, 5)
- Saturae Menippeae: Astbury, R (ed.). 1985. Saturarum Menippearum fragmenta. Leipzig: Teubner. (56; 454; 591)

## Velleius Paterculus

• Historiae Romanae: Watt, W. S. (ed.). 1998. Vellei Paterculi Historiarum ad M. Vinicium consulem libri duo. Leipzig: Teubner. (2, 80, 1)

# Victorinus, Marius

Commentarii in Epistulas Pauli ad Ephesios, ad Galatas, ad Philippenses: Gori, F. (ed.).
 1986. Commentarii in Epistulas Pauli ad Ephesios, ad Galatas, ad Philippenses. Salzburg:
 CSEL. (1, 1, 4)

# Virgil

- Aeneid: Ribbeck, O. (ed.). 1895. Aeneis. Leipzig: Teubner. (1, 200; 2, 25; 3, 630; 5, 431; 6, 838; 6, 78; 7, 458; 7, 756; 9, 656; 10, 649; 10, 755)
- Georgica: Ribbeck, O. (ed.). 1894. Bucolica et Georgica. Leipzig: Teubner. (1, 494; 2, 537; 3, 152)
- *Eclogae* (Bucolica: Ribbeck, O. (ed.). 1894. *Bucolica et Georgica*. Leipzig: Teubner. (1, 2; 9, 51)

# Virgilius Maro grammaticus

• Epistulae: Huemer, I. (ed.). 1886. Virgilius Maro grammaticus. Opera. Leipzig: Teubner. (2, p. 126)

## Vitruvius

• *De architectura*: Krohn, F. (ed.). 1912. *Vitruvii De architectura libri decem*. Leipzig: Teubner. (5, 4; 6, 1, 10)

## Vulgatam versionem, Biblia sacra iuxta

- *Liber Esdrae III*: Fischer, B., J. Gribomont, H.F.D. Sparks, W. Thiele and R. Weber (eds.). 1975. *Biblia sacra iuxta Vulgatam versionem*. 2<sup>nd</sup> ed. Stuttgart: Württembergische Bibelanstalt. (1, 32)
- *Liber Esdrae IIII*: Fischer, B., J. Gribomont, H.F.D. Sparks, W. Thiele and R. Weber (eds.). 1975. *Biblia sacra iuxta Vulgatam versionem*. 2<sup>nd</sup> ed. Stuttgart: Württembergische Bibelanstalt. (8, 41; 12, 23; 16, 23)
- *Liber Psalmorum iuxta Septuaginta*: Fischer, B., J. Gribomont, H.F.D. Sparks, W. Thiele and R. Weber (eds.). 1975. *Biblia sacra iuxta Vulgatam versionem*. 2<sup>nd</sup> ed. Stuttgart: Württembergische Bibelanstalt. (82, 4)

# Secondary literature

- Acedo-Matellán, Victor. 2010. *Argument Structure and the Syntax-Morphology Interface*. PhD thesis, Barcelona: Universitat de Barcelona.
- Acedo-Matellán, Victor. 2016. The morphosyntax of transitions. A case study in Latin and other languages. Oxford: Oxford University Press.
- Acedo-Matellán, Victor and Jaume Mateu. 2013. "Satellite framed Latin vs. verb framed Romance: A syntactic approach". *Probus* 25, 227-265.
- Acedo-Matellán, Victor and Jaume Mateu. 2016. "Argument structure and satellite-framedness in Latin: Evidence from unselected object constructions". In Paolo Poccetti (ed.). LATINITATIS RATIONES. Descriptive and Historical Accounts for the Latin Language. Berlin: De Gruyter. 149-169.
- Acedo-Matellán, Victor and Cristina Real-Puigdollers. 2015. "Location and locatum verbs revisited: Evidence from aspect and quantification" *Acta Linguistica Hungarica* 62, 111-140.

- Acquaviva, Paolo. 2008. "Roots and lexicality in Distributed Morphology". *LingBuzz*, lingbuzz/000654.
- Acquaviva, Paolo. 2014. "Distributing roots: Listemes across components in Distributed Morphology" *Theoretical Linguistics*, 40 (3/4), 277-286.
- Alexiadou, Artemis. 2001. Functional Structure in Nominals: Nominalization and Ergativity.

  Amsterdam: John Benjamins Publishing Company.
- Alexiadou, Artemis. 2014. "Roots don't take complements". *Theoretical Linguistics* 40 (3/4), 287-297.
- Alexiadou, Artemis and Elena Anagnostopoulu. 2004. "Voice Morphology in the Causative-Inchoative alternation: Evidence for a non-unified structural analysis of unaccusatives". In Artemis Alexiadou, Elena Anagnostopoulou and Martin Everaert (eds.) *The unaccusativity puzzle*. Oxford: Oxford University Press. 114-136.
- Alexiadou, Artemis, Elena Anagnostopoulu and Florian Schäfer. 2006. "The properties of anticausatives crosslinguistically". In Mara Frascarelli (ed.) *Phases of interpretation*. Berlin: Mouton de Gruyter. 187-212.
- Alexiadou, Artemis and Edit Doron. 2011. "The syntactic construction of two non-active voices: Passive and Middle". *Journal of Linguistics* 48, 1-34.
- Allen, Andrew. 1995. "Regrammaticalization and Degrammaticalization of the Inchoative Suffix" in Henning Andersen (ed.) *Historical Linguistics, 1993: Selected Papers from the 11th International Conference on Historical Linguistics,* Los Angeles, 16-20 August 1993. Amsterdam/Philadelphia: John Benjamins. 1-8.
- Anagnostopoulou, Elena. 2014. "Roots and domains". Theoretical Linguistics 40 (3/4), 299-310.
- Aronoff. Mark. 1994. *Morphology by itself, stems and inflectional classes*, Cambridge: The MIT Press.
- Baerman, Matthew. 2007. "Morphological typology of deponency", in Matthew Baerman, Greville G. Corbett, Dunstan Brown (eds.), *Deponency and morphological mismatches*. Oxford: Oxford University Press. 1-19.
- Baldi, Philip. 1999. *The foundations of Latin*. Berlin/New York: De Gruyter.
- Batlle, Mar. 2002. L'expressió dels temps compostos en la veu mitjana i la passiva pronominal. El procés de substitució de l'auxiliar 'ésser' per 'haver'. Barcelona: Institut d'Estudis Catalans / Publicacions de l'Abadia de Montserrat.
- Benedetti, Marina. 2002. "Radici, morfemi nominali e verbali: alla ricerca dell'inaccusatività indoeuropea", *Archivio Glottologico Italiano* 87, 20–45.

- Bertocci, Davide. 2009. "Nasal present and weak causativity: Evidence from Sanskrit and Latin", in Kateřina Ludová and Marie Žáková (eds.) *Early European Languages in the Eyes of Modern Linguistics*, Brno: Masaryk University. 37-46.
- Bertocci, Davide and Francesco Pinzin. 2017. "Towards a morpho-syntactic analysis of -*īscō* and -*āscō* verbs", paper presented at the *19<sup>th</sup> Intrnational Colloquium on Latin Linguistics* (Münich 24<sup>th</sup> 28<sup>th</sup> April 2017). Downloadable at https://www.icll2017.badw.de/fileadmin/user\_upload/Files/ICLL/Book\_of\_Abstracts\_ICLL\_2017.pdf. Accessed 31/08/2017.
- Blaylock, Curtis. 1975. "The Romance development of the Latin verbal augment -SK-", *Romance Philology* 28 (4), 434-444.
- Bopp, Franz. 1866. *Grammaire comparee des Langues Indo-Europeennes* traduite sur la deuxieme edition par M. Breal. Paris: Imprimerie impériale.
- Borer, Hagit. 2005. In Name Only. Structuring Sense (vol. 1). Oxford: Oxford University Press.
- Borer, Hagit. 2014. "Wherefore roots?". Theoretical Linguistics 40 (3/4), 343-359.
- Borik, Olga and Jaume Mateu. 2014. "Argument structure in morphology and syntax: An introduction". *Lingua* 141 (1), 1-7.
- Bruening, Benjamin. 2013. "By phrases in passives and nominals". Syntax 16 (1), 1-41.
- Burzio, Luigi. 1981. Intransitive Verbs and Italian Auxiliaries. PhD thesis., MIT.
- Burzio, Luigi, 1986. Italian Syntax, Dordrecht: Reidel.
- Caha, Pavel. 2009. *The Nanosyntax of Case*. PhD Thesis, University of Tromsø, http://munin.uit.no/bitstream/handle/10037/2203/thesis.pdf?sequence=1. Accessed 30/08/2017.
- Cennamo, Michela. 1993. The reanalysis of reflexives: A diachronic perspective. Napoli: Liguori.
- Cennamo, Michela. 1999. "Late Pleonastic Reflexives and the Unaccusative Hypothesis". *Transactions of the Philological Society* 97 (1), 103-50.
- Cennamo, Michela. 2008. "The rise and development of analytic perfects in Italo-Romance". In Thorhallur Eythórsson (ed.), *Grammatical change and linguistic theory: The Roosendaal Papers*. Amsterdam: John Benjamins. 115-142.
- Cennamo, Michela. 2009. "Argument structure and alignment variations and changes in Late Latin." In Jóhanna Bardal and Shobhana L. Chelliah (eds.), *The role of semantic, pragmatic, and discourse factors in the development of case*. Amsterdam/Philadelphia: John Benjamins. 307-346.
- Cennamo, Michela, Thórhallur Eythórsson, Jóhanna Barðal 2015. "Semantic and (morpho)syntactic constraints on anticausativization: Evidence from Latin and Old Norse-Icelandic". *Linguistics* 53 (4), 677-729.

- Chierchia, Gennaro. 2004. "A semantics for unaccusatives and its syntactic consequences". In Artemis Alexiadou, Elena Anagnostopoulou, and Martin Everaert (eds.), *The unaccusativity puzzle*. Oxford: Oxford University Press. 22-59.
- Chomsky, Noam. 1970. "Remarks on nominalization". In R. Jacobs and P. Rosenbaum (eds.), Readings in English Transformational Grammar. Waltham (Mass.): Ginn. 184-221.
- Chomsky, Noam. 1981. Lectures on Government and Binding, Dordrecht: Foris Publications.
- Chomsky, Noam. 1993. "A minimalist program for linguistic theory". In Kenneth Hale and Samuel J. Keyser (eds.), *The view from Building 20*, Cambridge (Mass.): The MIT Press. 1-52.
- Chomsky, Noam. 1995. The Minimalist Program, Cambridge (Mass.): The MIT Press. 1995.
- Chomsky, Noam. 2001. "Derivation by Phase", in Michael Kenstowicz (ed.), *Ken Hale: A Life in Language*, Cambridge (Mass): The MIT Press. 1-52.
- Chomsky, Noam. 2008. "On Phases", in Robert Freidin, Carlos P. Otero and Maria Luisa Zubizarreta (eds.), Foundational Issues in Linguistic Theory, Essays in Honor of Jean-Roger Vergnaud. Cambridge (Mass.): The MIT Press. 133-166.
- Cinque, Guglielmo. 1988. "On *si* constructions and the theory of *Arb*". *Linguistic Inquiry* 19 (4), 521-581.
- Clackson, James. 2007. *Indo-European Linguistics, an Introduction*, Cambridge / New York: Cambridge University Press.
- Claflin, Edith Frances. 1927. "The Nature of the Latin Passive in the Light of Recent Discoveries", *The American Journal of Philology* 48 (2), 157-175.
- Collins, Chris. 2005. "A smuggling approach to Passives in English". Syntax 8 (2), 81-120.
- Cuervo, María Cristina. 2014a. "Alternating unaccusatives and the distribution of roots". *Lingua* 141, 48-70.
- Cuervo, María Cristina. 2014b. "Arguments for a root". *Theoretical Linguistics* 40 (3/4), 375-387.
- Cuervo, María Cristina. 2015. "Causation without a cause". Syntax 18 (4), 388-424.
- D'Alessandro, Roberta. 2007. Impersonal si constructions. Berlin: De Gruyter.
- Danckaert, Lieven. 2017. *The development of Latin clause structure. A study of the extended verb phrase*. Oxford: Oxford University Press.
- Deal, Amy Rose. 2016. "Raising to Ergatives: remarks on applicatives of unaccusatives". *LingBuzz*, lingbuzz/003024.
- De Belder, Marijke. 2014. "Against conflation". Theoretical Linguistics 40 (3/4), 331-342.
- Delbrück, Bertold. 1897. Vergleichende Syntax der indogermanischen Sprachen II, Straßburg: Trübner.

- De Vaan, Michiel. 2008. Etymological Dictionary of Latin and the other Italic Languages, Leiden/Boston: Brill.
- Dobrovie-Sorin, Carmen. 1998. "Impersonal se Constructions in Romance and the Passivization of Unergatives". *Linguistic Inquiry* 29 (3), 399–437.
- Dobrovie-Sorin, Carmen. 2007. "The SE-anaphor and its role in argument realization". In M. Everaert, H. van Riemsdijk (eds.), *The Blackwell Companion to Syntax*, vol 4, Oxford: Blackwell.
- Doron, Edit and Malka Rappaport Hovav. 2007. "Towards a Uniform Theory of Valence changing Operations" in Yehuda N. Falk (ed.), *Proceedings of IATL 23*. Downloadable at https://www.iatl.org.il/?page id=125. Accessed 30/08/2017.
- Dowty, David. 1989. "On the semantic content of the notion of 'thematic role". In G. Chierchia, Barbara B.H. Partee and R. Turner (eds.), *Properties, Types, and Meaning II*. Berlin: Springer. 69-129.
- Dowty, Daniel. 1991. "Thematic proto-roles and argument selection". Language 67 (3), 547-619.
- Embick, David. 2000. "Features Syntax and Categories in the Latin Perfect" *Linguistic Inquiry* 31 (2), 185-230.
- Embick, David. 2004. "Unaccusative syntax and Verbal Alternations". In Artemis Alexiadou, Elena Anagnostopoulou and Martin Everaert (eds.), *The Unaccusativity Puzzle*, Oxford: Oxford University Press. 114-136.
- Embick, David and Rolf Noyer. 2007. "Distributed Morphology and the Syntax-Morphology interface". In Gillian Ramchand and Charles Reiss (eds.) *Oxford Handbook of Linguistic Interfaces*. Oxford: Oxford University Press. 289-324.
- Ernout, Alfred. 1909. "Recherches sur l'emploi du Passif latin à l'époque républicaine". *Memoires de la société linguistique de Paris* 15, 273-333.
- Ernout, Alfred and François Thomas. 1953. Sintaxe latine (deuxième èdition). Paris: Klincksieck.
- Faust, Noam. 2014. "One advantage and three challenges to a theory of roots as indices". *Theoretical Linguistics* 40 (3/4), 389-400.
- Flobert, Pierre. 1975. Les Verbs Déponents Latins, des origines à Charlemagne. Paris: Les Belles Lettres.
- Fodor, Jerry A. 1970. "Three reasons for not deriving 'kill' from 'cause to die". *Linguistic Inquiry* 1 (4), 429-438.
- Folli, Raffaella and Harley, Heidi. 2005. "Flavors of v". In Paula Kempchinsky, Paula and Roumyana Slabakova (eds.), *Aspectual Inquiries*. Berlin: Springer. 95-120.

- Franco, Ludovico and Maria Rita Manzini. 2017. "Instrumental prepositions and case: Contexts of occurrence and alternations with datives". *Glossa: a journal of general linguistics* 2 (1), p. 8.
- Gianollo, Chiara. 2010. "I verbi deponenti latini e l'unità della flessione in -r". *Incontri triestini di filologia classica* 8, 23-49.
- Gianollo, Chiara. 2014. "Labile verbs in Late Latin". Linguistics 52 (4), 945-1002.
- Giorgi, Alessandra. 2009a. *About the Speaker: Towards a Syntax of Indexicality*. Oxford: Oxford University Press.
- Giorgi, Alessandra. 2009b. "A Grammar of Italian Sequence of Tense". *University of Venice Working Papers in Linguistics* 19, 111-156.
- Giorgi, Alessandra, and Fabio Pianesi. 1997. *Tense and aspect. From Semantics to Morphosyntax*. Oxford: Oxford University Press.
- Giorgi, Alessandra and Fabio Pianesi. 2001. "Imperfect Dreams. The Temporal Dependency of Fictional Predicates.". *Probus* 13 (1), 31-68.
- Giorgi, Alessandra and Fabio Pianesi. 2002. "Sequence of Tense and the Speaker's Point of View Evidence from the Imperfect". *University of Venice Working Papers in Linguistics* 12, 31-81.
- Gildea, Spike. 1997. "Evolution of Grammatical relations in Cariban. How Functional Motivation precedes Syntactic change" in Thomas Givón (ed.) *Grammatical Relations, a Functionalist perspective*. Amsterdam/Philadelphia: John Benjamins. 155-198.
- Gildea, Spike. 2014. "Diachronic Typology of Passive in the Cariban Family". Handout presented at *Workshop: Voice systems in diachrony: a comparative perspective*. University of Pavia, Italy, 11 September.
- Givón, Thomas. 2009. *The Genesis of Syntactic Complexity*, Amsterdam/Philadelphia: John Benjamins.
- Goldberg, Adele E. 1995. Constructions: A Construction Grammar Approach to Argument Structure. Chicago: University of Chicago Press.
- Grestenberger, Laura. 2014. Feature Mismatch: Deponency in Indo-European Languages. Downloadable at http://nrs.harvard.edu/urn-3:HUL.InstRepos:12274624. Accessed 30/08/2017.
- Grestenberger, Laura. 2016. "Reconstructing Proto-Indoeuropean Deponents". *Indo-European Linguistics* 4 (1), 98-149.
- Hale, Kenneth and Samuel J. Keyser. 1993. "On argument structure and lexical expression of syntactic relations". In Kenneth Hale and Samuel J. Keyser (eds.), *The view from Building 20*, Cambridge (Mass.): The MIT Press. 53-110.
- Hale, Kenneth and Samuel J. Keyser. 2002. *Prolegomenon to a theory of argument structure*, Cambridge (Mass.): The MIT Press.

- Halle, Morris and Alec Marantz. 1993. "Distributed Morphology and the Pieces of Inflection". In Kenneth Hale and Samuel J. Keyser (eds.), *The view from Building 20*, Cambridge (Mass.): The MIT Press. 111-176.
- Harley, Heidi. 2005. "One replacement, Unaccusativity, Acategorial Roots and Bare Phrase Structure". *Harvard working papers in linguistics* 11.
- Harley, Heidi. 2009. "The morphology of nominalizations and the syntax of vP". In Monika Rathert and Anastasia Giannadikou (eds.), *Quantification, Definiteness and Nominalization*. Oxford: Oxford University Press. 320-342.
- Harley, Heidi. 2011. "A Minimalist Approach to Argument Structure." In Cedríc Boeckx (ed.), *The Oxford Handbook of Linguistic Minimalism*. Oxford: Oxford University Press. 426-447.
- Harley, Heidi. 2014a. "On the Identity of Roots". Theoretical Linguistics 40 (3/4), 225-276.
- Harley, Heidi. 2014b. "Reply to commentaries, "On the identity of roots". *Theoretical Linguistics* 40 (3/4). 447-474.
- Harley, Heidi and Shigeru Miyagawa. 2016. "Ditransitives". *LingBuzz*, lingbuzz/002870.
- Haspelmath, Martin. 1990. "The grammaticization of passive morphology". *Studies in Language* 14 (1), 25–72.
- Haspelmath, Martin. 1993. "More on the typology of inchoative/causative verb alternations.", in Bernard Comrie, Maria Polinsky (eds.) *Causatives and transitivity*. Amsterdam/Philadelphia: John Benjamins. 87-120.
- Haugen, Jason. 2008. *Morphology at the Interfaces. Reduplication and noun incorporation in Uto- Aztecan*. Amsterdam/Philadelphia: John Benjamins.
- Haugen, Jason. 2009. "Hyponymous objects and Late Insertion". Lingua 119 (2), 242-262.
- Haverling, Gerd. 2000. On sco-verbs, prefixes and semantic functions: a study in the development of prefixed and unprefixed verbs from early to late Latin. Göteborg: Acta Universitatis Gothoburgensis.
- Haverling, Gerd. 2010. "Actionality, tense and viewpoint", in Philip Baldi and Pierluigi Cuzzolin (eds.), *New perspectives on Latin syntax, vol. 2*, Berlin: De Gruyter. 277-523.
- Herman, Józef. 2002. "La disparition du passif synthétique Latin: Nouvel essai sur l'écrit et la parlé en Latin Mérovingien". *Etudis Romàinics* 24, 31-46.
- Hrozný, Friederich. 1917. Die Sprache der Hethiter, ihr Bau und ihre Zugehörigkeit zum indogermanischen Sprachstamm. Ein Entzifferungsversuch. Leipzig: Hinrich.
- Jackendoff, Ray, 1972. Semantic Interpretation in Generative Grammar. Cambridge (Mass.): The MIT Press.
- Jackendoff, Ray. 1983. Semantics and cognition. Cambridge (Mass.): The MIT Press.

- Jackendoff, Ray. 1990. Semantic Structures. Cambridge (Mass.): The MIT Press.
- Jackendoff, Ray. 1992. "Mme. Tussaud Meets the Binding Theory", *Natural Language and Linguistic Theory* 10 (1), 1–31.
- Kallulli, Dalina. 2013. "(Non-)canonical passives and reflexives: Deponents and their like". In Artemis Alexiadou and Florian Schäfer (eds.), *Non-canonical passives*. Amsterdam/Philadelphia: John Benjamins. 337-358.
- Kayne, Richard. 1991. "Romance clitics, verb movement and PRO". *Linguistic Inquiry* 22 (4), 647-686.
- Kayne, Richard. 1993. The Antisymmetry of Syntax, Cambridge (Mass.): The MIT Press.
- Kemmer, Suzanne. 1993. The Middle Voice, Amsterdam/Philadelphia: John Benjamins.
- Kobayashi, Kozue. 1988. "On the Formation of the Romance Inchoative Conjugation A New Theory". *Romance Philology* 41 (4), 394-408.
- Koontz-Garbooden, Andrew. 2009. "Anticausativization". *Natural Language and Linguistic Theory* 27 (1), 77–138.
- Kratzer, Angelika. 1996. "Severing the External Argument from its Verb". In Johann Rooryck and Laurie Zaring (eds.), *Phrase Structure and the Lexicon*. Berlin: Springer. 109-137.
- Kulikov, Leonid. 2014. "The decline of labile syntax in Old Indo-Aryan: A diachronic typological perspective". *Linguistics* 52 (4), 1139-1165.
- Labelle, Marie. 2014. "Roots in models of grammar". Theoretical Linguistics 40 (3/4), 401-414.
- Lakoff, Robin. 1971. "Passive resistance". In *Papers from the seventh regional meeting of the Chicago Linguistic Society*, Chicago: Chicago Linguistic Society. 141-162.
- Landau, Idan. 1999. "Possessor rising and the structure of VP". Lingua 107 (1), 1-37.
- Larson, Richard K. 2010. "On Pylkkänen's semantics for low applicatives". *Linguistic Inquiry* 41 (4), 701-704.
- Lavidas, Nikolaos and Dimitra Papangeli. 2007. "Deponency in the Diachrony of Greek" In Matthew Baerman, Greville G. Corbett, Dunstan Brown and Andrew Hippisley, *Deponency and Morphological Mismatches*, Oxford: Oxford University Press. 97-126.
- Lazzeroni, Romano. 1990. "La diatesi come categoria linguistica : studio sul medio indoeuropeo", In Tristano Bolelli and Saverio Sani (eds.), *Scritti scelti*, Pisa: Pacini editore. 52-71.
- Ledgeway, Adam, 2012. From Latin to Romance. Morphosyntactic Typology and Change. Oxford: Oxford University Press.
- Leumann, Manu, Karl Hoffman and Anton Szantyr. 1977. *Lateinische Grammatik (erster Band)*. München: C.H. Beck'sche Verlagsbuchhandlung.

- Levin, Beth and Malka Rappaport-Hovav. 1995. *Unaccusativity: At the Syntax--Lexical Semantics Interface*. Cambridge (Mass.): The MIT Press.
- Levin, Beth and Malka Rappaport Hovav. 2005. *Argument Realization*. Cambridge (Mass.): Cambridge University Press.
- Luraghi, Silvia. 2012. "Basic Valency Orientation and the Middle Voice in Hittite". *Studies in Language* 36 (1), 1-32.
- MacDonald, Jonathan. 2017. "An implicit projected argument in Spanish impersonal and passive *se* constructions.". *Syntax* 20 (4), 352-383.
- Manzini, M. Rita. 1986. "On Italian si". In Hagit Borer (ed.), *The syntax of pronominal clitics*. New York: Academic Press. 241-262.
- Manzini, Rita, Anna Roussou and Leonardo Savoia. 2016. "Middle-passive voice in Albanian and Greek. *Journal of Linguistics* 52 (1), 111-150.
- Manzini, M. Rita and Leonardo M. Savoia. 2011. "(Bio)linguistic variation: Have/be alternations in the present perfect". In Anna Maria di Sciullo and Cedric Boeckx (eds.), *The biolinguistic enterprise: New perspectives on the evolution and nature of the human language faculty*. Oxford: Oxford University Press. 222-265.
- Marantz, Alec. 1984. On the nature of grammatical relations. Cambridge (Mass.): The MIT press.
- Marantz, Alec. 1991. "Case and licensing". In Germán Westphal, Benjamin Ao and Hee-Rahk Chae (eds.) *Eastern States Conference on Linguistics*. Cornell University, Ithaca, NY: Cornell Linguistics Club. 234-253.
- Marantz, Alec. 1997. "No Escape From Syntax: Don't Try Morphological Analysis in the Privacy of Your Own Lexicon". *University of Pennsylvania Working Papers in Linguistics* 4 (2), 201-224.
- Marantz, Alec. 2005. *Objects out of the Lexicon! Argument-Structure in the Syntax*, Ms. MIT, http://web.mit.edu/marantz/Public/UConn/UConnHOApr05.pdf. Accessed 11/01/2016.
- Marantz, Alec. 2013a. "No escape from morphemes in morphological processing". *Language and Cognitive Processes* 28 (7), 905-916.
- Marantz, Alec. 2013b. "Verbal argument structure Events and participants". *Lingua* 130, 152-168.
- Marstrander, Carl Johan Svendrup. 1919. *Caractère Indo-Europeen de la Langue Hittite*, Oslo: Christiania.
- Martin, Fabienne and Florian Schäfer. 2014. "Causation at the Syntax-Semantics Interface". In Bridget Copley and Fabienne Martin (eds.), *Causation in Grammatical Structures*, Oxford: Oxford University Press.

- Mateu, Jaume. 2008. "On the l-syntax of directionality/resultativity: The case of Germanic preverbs". In Anna Asbury, Jakub Dotlačil, Berit Gehrke and Rick Nouwen (eds.), *Syntax and semantics of spatial P.* Amsterdam: John Benjamins. 221-250.
- Mateu, Jaume. 2014. "Argument Structure". In Andrew Carnie, Dan Siddiqi, Yosuke Sato (eds.), *The Routledge Handbook of Syntax*. New York: Routledge. 24-41.
- Mateu, Jaume. 2017. "State and change of state in Latin: A view from the lexicon-syntax interface". In E. Castroviejo, O. Fernández-Soriano and I. Pérez Jiménez (eds.). *Boundaries, Phases, and Interfaces. Case studies in honor of Violeta Demonte*. Amsterdam/Philadelphia: John Benjamins. 344-366.
- Mateu, Jaume and Victor Acedo-Matellán. 2012. "The Manner/Result Complementarity Revisited:

  A Syntactic Approach" in María Cristina Cuervo and Yves Roberge (eds.), *The End of Argument Structure?* Leiden: Brill. 209-238.
- Mateu, Jaume and Gemma Rigau. 2010. "Verb-particle constructions in Romance: a lexical-syntactic account". *Probus* 22 (2), 241-269.
- Maurer, Theodoro Henrique Jr. 1951. "The Romance Conjugation in -ēsco (-īsco) īre: Its Origin in Vulgar Latin". *Language* 27 (2), 136-145.
- Meillet, Sylvie, Guy Serbat and Marie-Dominique Joffrè. 1994. *Grammaire fondamental du latin. Le signifié du verbe*. Leuven: Peeters Publishers.
- Meiser, Gerhard. 1998. *Historische Laut- Und Formenlehre Der Lateinischen Sprache*. Darmstadt: Wissenschaftliche Buchgesellschaft.
- Migliori, Laura. 2014. "v as a field, evidence from the Latin verbal system", in *NELS 44*Proceedings of the 44<sup>th</sup> Meeting of the North-East Linguistic Society, Vol. 2. 25-38.
- Migliori, Laura. 2016a. "Alcune note diacroniche sull'ausiliazione perfettiva nei dialetti italiani centro-meridionali", in Lemaréchal, Alain/Koch, Peter/Swiggers, Pierre (eds.), *Actes du XXVIIe Congrès international de linguistique et de philologie romanes (Nancy, 15-20 juillet 2013)*. Strasbourg: Société de Linguistique romane/ÉLiPhi.
- Migliori, Laura. 2016b. *Argument structure, alignment and auxiliaries between Latin and Romance*. Utrecht: LOT Publications.
- Mitrović, Moreno and Phoevos Panagiotidis. 2017. The categorial anatomy of adjectives. Slides presented at RootsV (London, June 16-18, 2017). http://mitrovic.co/papers/RootsV\_slides.pdf. Accessed 27/06/2017.
- Mocciaro, Egle and Luisa Brucale. 2016. "Composizione verbale in latino: il caso dei verbi in -facio, -fico". In Paolo Poccetti (ed.), *LATINITATIS RATIONES Descriptive and Historical Accounts for the Latin Language*. Berlin: DeGruyter. 279-297.

- Moro, Andrea. 1997. The Raising of Predicates: Predicative Noun Phrases and the Theory of Clause Structure. Cambridge: Cambridge University Press.
- Nakamoto, Takeshi. 2010. "Inalienable possession constructions in French". Lingua 120, 74-102.
- Oniga, Renato. 2007. *Il latino. Breve introduzione linguistica*, 2<sup>nd</sup> ed., Milano: Franco Angeli.
- Panagiotidis, Phoevos. 2014. "Indices, domains and homophonous forms". *Theoretical Linguistics* 40 (3/4), 415-427.
- Perlmutter, David M. 1978. "Impersonal passives and the Unaccusative Hypothesis". In Jeri J. Jaeger, Anthony C. Woodbury, Farrell Ackerman, Christine Chiarello, Orin D. Gensler, John Kingstone, Eve E. Sweetser, Henry Thompson and Kenneth W. Whistler (eds), *Proceedings of Fourth Meeting of the Berkeley Linguistics Society*. Berkeley: The Berkeley Linguistics Sociaety. 157-89.
- Pescarini, Diego. 2015. Le costruzioni con si, italiani, dialetti e lingue romanze. Roma: Carocci.
- Pescarini, Diego. 2016. "La sintassi del si impersonale nei dialetti italiani settentrionali". In Éva Buchi, Jean-Paul Chauveau and Pierrel, Jean-Marie (eds.), *Actes du XXVIIe Congrès international de linguistique et de philologie romanes. (Nancy, 15-20 juillet 2013)*, vol. 2, Strasbourg: ÉLiPhi.
- Pinkster, Harm. 2015. *The Oxford Latin Syntax, Vol. I: The Simple Clause*, Oxford: Oxford University Press.
- Pinzin, Francesco. 2015. "VoiceP Deactivation and Deponency in Latin" *Annali di Ca' Foscari Serie Occidentale* 49, 423-452.
- Pinzin, Francesco. 2017. "Deposing Deponency: Latin non-denominal deponents are not grammatically idiosyncratic verbs". *Journal of Latin Linguistics* 16 (1), 11-42.
- Pinzin, Francesco. accepted. "Latin denominal deponents, a syntactic account.". In Francisco Ordóñez and Lori Repetti (eds.), *Romance languages and linguistic theory 13*. Amsterdam/Philadelphia: John Benjamins.
- Pitteroff, Marcel and Florian Schäfer. 2014. "The argument structure of reflexively marked anticausatives and middles, evidence from datives". In Hsin-Lun Huang, Ethan Poole and Amanda Rysling (eds.), *Proceedings of NELS 43*. Amherst (Mass.): GLSA. 67–78.
- Prosdocimi, Aldo Luigi. 1978. "Diachrony and Reconstruction: 'genera proxima' and 'differentia specifica'". In W.U. Dressler and W. Meid (eds.), *Proceedings of the XIIth International Congress of Linguists (Wien, 1977, August 28 September 2)*. Innsbruck: Innsbrucker Beiträge zur Sprachwissenschaft. 84-98.

- Prosdocimi, Ado Luigi. 1991. "Tra Romanzo e Indoeuropeo: il latino sommerso". In L. Vanelli and A. Zamboni (eds.), *Per Giovan Battista Pellegrini. Scritti degli allievi padovani, vol. 2*. Padova: Unipress. 517-643.
- Prosdocimi, Aldo Luigi. 2004. "Il latino sommerso". In A. L. Prosdocimi, *Scritti inediti e sparsi, vol. 3.* Padova: Unipress. 1609-1647.
- Pylkkänen, Liina. 2008. Introducing Arguments, Cambridge (Mass.): The MIT Press.
- Ramchand, Gillain Catriona. 2008. *Verb Meaning and the Lexicon. A First-Phase Syntax*, Cambridge: Cambridge University Press.
- Ramchand, Gillian Catriona. 2015a. "Event structure and verbal decomposition". https://www.academia.edu/9299784/Event\_Structure\_and\_Verbal\_Decomposition. Accessed 30/08/2017.
- Ramchand, Gillian Catriuona. 2015b. "Partitioning structural and conceptual meaning in verb semantics". Slides presented at *Roots IV*, (NYU June 29 July 2 2015). https://wp.nyu.edu/roots4/wp-content/uploads/sites/1403/2015/07/ramchand.pdf. A c c e s s e d 30/08/2017.
- Rapoport, Tova. 2014. "Central coincidence: The preposition With". Faits de Langues 44 (2), 159-173.
- Rappaport-Hovav, Malka. 2014. "Individuation criteria for roots". *Theoretical Linguistics* 40 (3/4), 429-437.
- Reinhart, Tanya. 1996. "Syntactic effects of lexical operations: Reflexives and unaccusatives". OTS working papers. Downloaded at <a href="http://www.let.uu.nl/~tanya.reinhart/personal/">http://www.let.uu.nl/~tanya.reinhart/personal/</a>. Accessed 06/12/2017.
- Roberts, Ian. 2010a. "Head Movement and the Minimalist Program", in C. Boeckx, (ed.), *The Oxford Handbook of Linguistic Minimalism*, Oxford: Oxford University Press. 426-447.
- Roberts, Ian. 2010b. Agreement and Head Movement, Cambridge (Mass.): The MIT Press.
- Roberts, Ian and Anna Roussou. 2003. Syntactic Change: A Minimalist Approach to Grammaticalization. Cambridge: Cambridge University Press.
- Schäfer, Florian. 2008. *The Syntax of (Anti)-Causatives- External Arguments in Change of state contexts*, Amsterdam/Philadelphia: John Benjamins.
- Schäfer, Florian. 2012. "Two types of external argument licensing the case of causers". *Studia Linguistica* 66 (2), 128-180.
- Schäfer, Florian. 2017. "Romance and Greek medio-passives and the typology of Voice". In R. D'Alessandro, I. Franco and Á. Gallego (eds.), *The Verbal Domain*, Oxford: Oxford University Press. 129-152.

- Schäfer, Florian and Margot Vivanco. 2016. "Anticausatives are weak scalar expressions, not reflexive expressions". *Glossa: a journal of general linguistics* 1 (1), p.18.
- Siewierska, Anna. 1984. The passive: A comparative linguistic analysis. London: Croom Helm.
- Sigurðsson, Halldór Á. 2004. "Icelandic non-nominative subjects: Facts and implications". In Peri Bhaskararao and Karumuri V. Subbarao (eds.) *Non-nominative subjects Vol 2*. Amsterdam/Philadelphia: John Benjamins. 137-159.
- Sigurðsson, Halldór Á. 2007. "Argument Features, Clausal structure ad the Computation", in Eric Reuland, Tanmoy Bhattacharya, Giorgos Spathas (eds.), *Argument structure*. Amsterdam/Philadelphia, John Benjamins. 121-158.
- Sigurðsson, Halldór Á. 2015. "Gender, a PF reflection of an edge linker". *LingBuzz*, lingbuzz/002467.
- Spathas, Giorgos, Artemis Alexiadou and Florian Schafer. 2015. "Middle Voice and reflexive interpretations: afto-prefixation in Greek". *Natural Language and Linguistic Theory* 33 (4), 1293-1350.
- Sportiche, Dominique. 2014. "Assessing unaccusativity and reflexivity, using focus alternatives to decide what gets which theta role". Linguistic Inquiry 45 (2), 305–321.
- Stowell, Timothy. 1981. Origins of phrase structure. Cambridge (MA): MIT dissertation.
- Svenonius, Peter. 2012. "Spanning". LingBuzz, lingbuzz/001501.
- Svenonius, Peter. 2014. "Generalized applicatives: Reassessing the lexical-functional divide". *Theoretical Linguistics* 40 (3/4), 439-446.
- Talmy, Leonard. 1985. "Lexicalization patterns: Semantic structure in lexical forms". In Timothy Shopen (ed.), *Language typology and syntactic description*, vol. 3. Cambridge: Cambridge University Press. 57-149.
- Talmy, Leonard. 1991. "Path to realization: A typology of event conflation". *Annual Meeting of the Berkeley Linguistics Society* 17, 480-519.
- Talmy, Leonard. 2000. *Toward a Cognitive Semantics, vol. 2: Typology and Process in Concept Structuring*. Cambridge, MA: MIT Press.
- Tichy, Eva. 2002. "Gr. οίσεν, Lat. ūtī. Glotta 78 (1/4), 179-202.
- van Craenenbroeck, Jeroen. 2014. "On diagnosing complement-taking roots". *Theoretical Linguistics* 40 (3/4), 361-373.
- Van Valin, Robert Jr. 1990. "Semantic parameters of split intransitivity". Language 66 (2), 221-60.
- Vendler, Zeno. 1967. Linguistics in Philosophy. Ithaca (NY): Cornell University Press.
- Vendryes, Joseph. 1913. "Les Formes Verbales en -R- du Tokharien et de l'Italo-Celtique". *Revue Celtique* 34, 129-124.

- Vineis, Edoardo. 2005. Il Latino. Bologna: Il Mulino.
- Weiss, Michael. 1993. Studies in Italic nominal morphology. Cornell: UNI Diss. Services.
- Weiss, Michael. 2009. *Outline of the historical and comparative Latin grammar*. Ann Arbor: Beech Stave Press.
- Wood, Jim. 2014. "Reflexive -st verbs in Icelandic". *Natural Language and Linguistic Theory* 32 (4), 1387–1425.
- Wood, Jim. 2015. "How roots do and don't constrain the interpretation of Voice", handout presented at *Roots IV*, NYUniversity, 29 Jun 2 Jul 2015, downloaded at http://wp.nyu.edu/roots4/wp-content/uploads/sites/1403/2015/07/wood.pdf. A c c e s s e d 30/08/2017.
- Wood, Jim. 2016. "The Accusative Subject Generalization". Syntax 20 (3), 249-291.
- Wood, Jim and Alec Marantz. 2017. "The interpretation of external arguments". In Roberta D'Alessandro, Irene Franco and Ángel Gallego (eds.) *The Verbal Domain*. Oxford: Oxford University Press.
- Xu, Zheng, Mark Aronoff and Frank Anshen. 2007. "Deponency in Latin", In Matthew Baerman, Greville G. Corbett, Dunstan Brown (eds.) *Deponency and morphological mismatches*. Oxford: Oxford University Press. 127-144.
- Zimmer, Heinrich. 1890. Über das italo-keltische passivum und deponens, Zeitschrift für vergleichende Sprachforschung 30, 224-292.
- Zombolou, Katerina and Artemis Alexiadou. 2013. "The canonical function of deponent verbs in Modern Greek". In Franz Rainer, Wolfgang U. Dressler, Francesco Gardani and Hans Christian Luschützky (eds.), *Morphology and Meaning. Selected papers from the 15<sup>th</sup> International Morphology Meeting, (Vienna, February 2012)*. Amsterdam/Philadelphia: John Benjamins.
- Zombolou, Katerina and Artemis Alexiadou. 2014. "Deponents in Greek: losing and creating active voice counterparts". Paper presented at workshop *Voice Systems in Diachrony: a Comparative Perspective* (Pavia, 11 September 2014).

Studente:

Francesco Pinzin

matricola: 956151

Dottorato:

Lingue, culture e società moderne e Scienze del linguaggio

Ciclo:

30°

Titolo della tesi :Stuck in the Middle. A morphosyntactic analysis of the deponent verbs from Latin to Romance

Abstract:In questa tesi propongo un'analisi sia sincronica che diacronica dei verbi latini che presentano obbligatoriamente la morfologia Media (deponenti). Dimostro come questo obbligo sia relazionato a diverse strutture sintattiche soggiacenti e, quindi, morfosintatticamente giustificato. Dimostro, inoltre, come sia la presenza stessa della morfologia Media all'interno del sistema linguistico latino a permettere la creazione delle diverse classi lessicali dei deponenti. La perdita di tale morfologia porta a una riorganizzazione delle classi lessicali verbali in latino tardo e medievale. Questa riorganizzazione, data l'analisi proposta, risulta prevedibile. Il fatto che un tratto morfosintattico come la morfologia Media condizioni la classificazione del lessico è un dato linguisticamente rilevante: supporta l'idea che sia la componente morfosintattica del linguaggio a precedere la suddivisione in classi lessicali e che non sia il lessico a determinare la struttura sintattica quanto, invece, la struttura sintattica a determinare il lessico.

In this thesis I propose a synchronic and diachronic analysis of the Latin verbs that obligatorily present the Middle morphology (deponents). I show that this constraint is related to different subjacent syntactic structures and, consequently, morphosyntactically justified. I show, moreover, that it is the presence itself of the Middle morphology in the Latin linguistic system that allows for the creation of the different lexical classes in which the deponents are subdivided. The loss of this morphology leads to a reorganization of the lexical classes in Late and Medieval Latin. This reorganization, given the proposed analysis, is predictable. The fact that a morphosyntactic feature like the presence of the Middle morphology influences the lexical classification is linguistically relevant. This proposal supports a theory in which the morphosyntactic component precedes the lexical classification: it is not the lexicon that determines the syntactic structure, it is the syntactic structure that determines that determines the lexical classification.

Firma dello studente