

**Marking the default : auxiliary selection in Southern Italian dialects** Torcolacci, G.

#### Citation

Torcolacci, G. (2015, March 24). *Marking the default : auxiliary selection in Southern Italian dialects. LOT dissertation series.* Retrieved from https://hdl.handle.net/1887/32580

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Author: Torcolacci, Giuseppe Title: Marking the default : auxiliary selection in Southern Italian dialects Issue Date: 2015-03-24

# Marking the Default

Auxiliary selection in Southern Italian dialects

Published by LOT Trans 10 3512 JK Utrecht The Netherlands

phone: +31 30 253 6111

e-mail: lot@uu.nl http://www.lotschool.nl

ISBN: 978-94-6093-167-3 NUR: 616

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## **Marking the Default**

## **Auxiliary selection in Southern Italian dialects**

Proefschrift

ter verkrijging van de graad van Doctor aan de Universiteit Leiden, op gezag van Rector Magnificus prof. mr. C.J.J.M. Stolker, volgens besluit van het College voor Promoties te verdedigen op dinsdag 24 maart 2015 klokke 13.45 uur

door

Giuseppe Torcolacci

geboren op 10 december 1981 te Fossombrone (Italië)

### Promotiecommissie

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Overige leden:	Prof. dr. Adam Ledgeway Dr. Bert Botma Dr. Diego Pescarini

This thesis was carried out within the VIDI-project 'Splitting and clustering grammatical information' (subproject 2, the syntax of splits in Southern Italian dialects), funded by the Netherlands Organization for Scientific Research (NWO) and awarded to Prof. dr. Roberta D'Alessandro (project number 276-70-021).

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#### Acknowledgements

This dissertation might not have existed if I hadn't grown up in a multilingual environment. For this reason, my biggest debt of gratitude goes to my family who, since my earliest childhood, gave me the possibility of understanding that more than one language can be learnt at the same time by a child.

My sincerest thanks go to my supervisors Roberta D'Alessandro and Marc van Oostendorp. Their steadfast intellectual support over the years of my doctoral studies made the achievement of this dissertation possible. I also thank Caterina Donati and Gloria Cocchi, whose teachings awoke my interests in Linguistics during my Master studies at the University of Urbino. I also thank Adam Ledgeway who, during my visit at the University of Cambridge, strongly influenced me in the passion for linguistic data. A special thanks goes to all those linguists who have advised me during my years as a Ph.D. student, and have given me important feedback on my work: Artemis Alexiadou, Elena Anagnostopoulou, Theresa Biberauer, Lisa Cheng, Jenny Doetjes, Irene Franco, Anikó Lipták, Maria Rita Manzini, Guido Mensching, Andrew Nevins, Diana Passino, Claudia Peverini, Cecilia Poletto, Ian Roberts, Johan Rooryck, Jason Rothman, Leonardo Maria Savoia, Michelle Sheehan and Jenneke van der Wal.

It goes without saying that the writing of this thesis has been highly influenced by the interaction with fellow Ph.D. students at LUCL. I thank my office-mate Laura Migliori, with whom I shared every single day of my doctoral studies. Our conversations about life and linguistics will never be forgotten! I also thank my neighbor office-mates Enrico Boone and Sara Lusini, who have been great colleagues over the years at LUCL. Sara helped me to acclimatize to life in The Netherlands, provided cheerful moral support and always made me feel at home. I thank Enrico particularly for being always ready to discuss even the most intricate linguistic issues. Likewise, I thank Linda Badan, Edoardo Cavirani, Claudio Di Felice and Marieke Meelen for the many happy moments we shared. I am also extremely grateful to Luigi Andriani and Norma Schifano for making me feel at home during my visit at the University of Cambridge. Last but not least, I thank Vicki Sunter for taking care of the proofreading of this dissertation, as

#### xii Acknowledgements

well as Kim Groothuis, who helped me to write the summary in Dutch (samenvatting in het Nederlands).

Finally, I would like to thank Athina Ioanna Leivadara, who has been an invaluable help throughout the last years of my doctoral studies. I will never forget her endless patience in discussing the ups and downs of this dissertation.

To the many other students, researchers and friends who have helped me on this journey, a heartfelt 'thank you'!

## Abbreviations

1	first person
2	second person
3	third person
act	active voice
Asp	Aspect
AspP	Aspect Phrase
aux	auxiliary
В	Be
CVC	Consonant-Vowel-Consonant
CIDs	Central Italian dialects
CN	Count Noun
coin	coincidence
cond	conditional mood
сор	copula
CSIDs	Central Southern Italian dialects
D	Determiner
DAC	Double Auxiliary Construction
Def/def	Definiteness
dem	demonstrative
dir	directional
DM	Distributed Morphology
DP	Determiner Phrase
EPP	Extended Projection Principle
ESIDs	Extreme Southern Italian dialects
Ev-sit	Event situation
expl	expletive
F	Feature
f(em)	feminine
G	Goal
Н	Have
IC	Indirect object Clitic
Indiv	Individuation

#### xiv Abbreviations

inf INFL/Infl InflP IPA LF m masc MN ms neut NIDS n nP NP NSIDS NumberP O obv OC P Part pass PF PIC pl PP pr Pr pr Pr prox Q QP RCA RE	infinitive Inflection Inflectional Phrase International Phonetic Alphabet Logic Form marked masculine Mass Noun millisecond neuter Northern Italian dialects little- <i>n</i> Northern Italian dialects little- <i>n</i> Phrase Noun Phrase Noun Phrase Northern Southern Italian dialects Number Phrase Object Object Object Clitic Phrase Participant passive voice Phonological Form Phase Impenetrability Condition plural Prepositional Phrase present tense Probe proximate Quantity Quantity Phrase Regressive Consonant Assimilation Referring Expression
ref	reference
ReflC RF	Reflexive Clitic Raddoppiamento Fonosintattico Syllable
S/σ	Syllable

Abbreviations xv

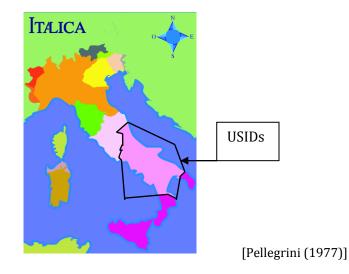
SC	Subject Clitic
sg	singular
SIDs	Southern Italian dialects
Spec	Specifier
SRC	Strong Rhyme Constraint
Subj	Subject
V	little-v
V	Verb
val	value
Vow	Vowel
vP	little-v Phrase
VP	Verb Phrase
Т	Tense
ТР	Tense Phrase
u	unmarked
ucoin	ucoincidence
UG	Universal Grammar
USIDs	Upper Southern Italian dialects
Utt-sit	Utterance situation
φ	person-number-gender
μ	mora

Introduction

#### **1. Introduction**

Upper Southern Italian dialects (henceforth USIDs) are a subset of Southern Italian dialects (henceforth SIDs) spoken in a region that stretches approximately from the southern Marche and southern Lazio at the northern side end, down to northern Salento (Taranto-Grottaglie-Ostuni line) and northern Calabria (Diamante-Cirò Marina line) in the south. This area is shown in the map in (1).

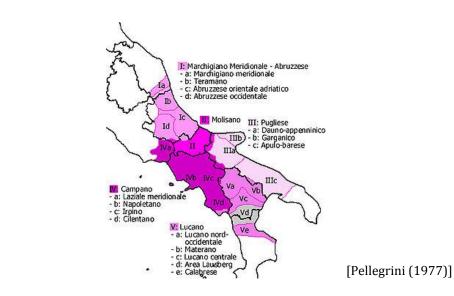
(1)



In this dissertation, we will make use of the term 'dialect' to refer to the local varieties spoken in Italy. The use of the term 'dialect' is purely conventional: the existing literature lacks a proper term to refer to these

languages. Dialects spoken in Italy, in fact, are fully-fledged languages (cf. Berruto, 1995; Marcato, 2002; Tortora, 2003; a.o.), which stem from Latin, in the same way as Standard Italian.

USIDs are split into small subgroups, illustrated in the map in (2).



Despite this subclassification, USIDs seem to share a number of syntactic, morphologic and phonological properties. From a morphosyntactic point of view, most USIDs, unlike other Italo-Romance dialects, display persondriven auxiliary selection, whereby the selection of BE/HAVE auxiliaries in the present perfect is sensitive to the person feature specification of the sentential subject. Generally, when the subject is 1<sup>st</sup> and 2<sup>nd</sup> person, both in the singular and the plural, the auxiliary selected is BE, whereas if the subject is 3<sup>rd</sup> person, singular or plural, the auxiliary chosen is HAVE (cf. Cocchi, 1995; Ledgeway, 2000; Manzini & Savoia, 2005; D'Alessandro & Roberts, 2010; Legendre, 2010; Loporcaro, 2010; a.o.). The paradigm in (3) illustrates these facts.

(2)

Introduction 3

(3) Amando	ola (Southern Marchigiano)	
SO	cca'mato/ppar'lato	BE.pr.1sg called/spoken
si	cca'mato/ppar'lato	BE.pr.2sg called/spoken
а	ca'mato/par'lato	HAVE.pr.3 called/spoken
simo	ca'mato/par'lato	BE.pr.1pl called/spoken
sete	ca'mato/par'lato	BE.pr.2pl called/spoken
		[Manzini & Savoia (2005), II: 684]

The BE/HAVE alternation outlined in (3) is not found in all USIDs. Some USIDs, in fact, choose BE only in the  $1^{st}$  and  $2^{nd}$  singular, leaving HAVE for the rest of the paradigm. Other dialects, instead, choose either BE or HAVE for the entire paradigm.

Another morphosyntactic phenomenon found in most USIDs is the threeway gender system for definite determiners and demonstratives. Apart from masculine and feminine, a large number of USIDs express neuter gender on definite determiners and demonstratives that precede (a subset of) mass nouns (cf. Rohlfs, 1966, 1968; Leonard, 1978; Andalò, 1991; Maiden, 1991, 1997; Penny, 1994; Ledgeway, 2009; a.o.). These facts are represented in (4), which shows periphrastic constructions composed of a definite determiner followed by a noun.

(4) Bitonto (Apulo-Barese)

rə p'pjɔn	the.neut.sg bread
u 'pre:vət	the.masc.sg. priest
la 'port	the.fem.sg. door

1<sup>st</sup> and 2<sup>nd</sup> singular BE in (3), as well as the neuter determiner in (4), are followed by a word featuring a double consonant in initial position. In the traditional literature, double consonants in word-initial position are considered as instances of *Raddoppiamento Fonosintattico* (henceforth RF), whereby geminate consonants are generated via external sandhi<sup>1</sup>. Traditionally, RF is taken to be a relic of the phonological process of

 $<sup>^{\</sup>rm 1}$  External sandhi is a phonological phenomenon that refers to a series of sound changes that occur at word-boundaries.

consonantal assimilation applying at external sandhi sites that took place in the period of transition from Vulgar Latin to southern Italo-Romance.

RF is not found only in USIDs, but is also attested in Standard Italian, Central Italian dialects (henceforth CIDs) and Extreme Southern Italian dialects (henceforth ESIDs). Northern Italian dialects (henceforth NIDs), on the other hand, do not feature RF.

Given the distribution of RF in (3) and (4), this dissertation will investigate why RF can be found only after a subset of auxiliaries and definite determiners and demonstratives within a paradigm. We will propose that RF that operates after a subset of present perfect auxiliaries and definite determiners and demonstratives in USIDs is a means of overtly expressing a specific morphosyntactic feature encoded on these elements. Hence, we will consider RF to be a phonological phenomenon that derives from purely morphosyntactic properties. A large amount of data from USIDs will be analyzed in order to shed light on the morphosyntactic nature of RF.

In addition to examining the nature of RF, this dissertation will consider whether the phenomenon of person-driven auxiliary selection (cf. (3)) and the three-way gender system of definite determiners and demonstratives (cf. (4)) are independent of each other or, conversely, if they are intertwined. We will propose that both phenomena are strictly related to each other. More precisely, we will argue that the BE/HAVE division in (3) and the three-way gender system of definite determiner and demonstratives in (4) derive from the application of a markedness principle. This markedness principle states that morphosyntactic  $\varphi$  features encoded on present perfect auxiliaries, definite determiners and demonstratives get marked at PF according to their degree of markedness. The same idea will be exploited for the overt marking of  $\varphi$  features on pluperfect auxiliaries.

#### 2. The structure of this dissertation

This dissertation is divided into two parts. Part one (cf. chapter 2) provides a typological survey of RF as attested after present perfect auxiliaries in USIDs. The same chapter also provides a discussion of the existing literature on RF, and an analysis of the typology of auxiliary selection in USIDs. Part two (cf. chapters 3, 4 and 5) focuses on the nature of RF. In this part, we will treat RF as not a purely phonological phenomenon, but rather as a phonological mechanism triggered by morphosyntactic requirements. More explicitly, we will claim that a given set of morphosyntactic features encoded on present perfective auxiliaries in USIDs needs to be overtly marked by means of RF. The same idea will be proposed for RF found after definite determiners and demonstratives.

#### 2.1 Part one – Chapter 2

Chapter 2 analyzes the phonological phenomenon of RF and the system of auxiliary selection in USIDs. We begin with an overview of RF, followed by a presentation of the typology of auxiliary selection in USIDs. Finally, we will consider the interplay between RF and the phenomenon of auxiliary selection in USIDs. This part will address the following research questions:

- i. Why is RF attested only with a subset of present perfect auxiliaries in USIDs?
- ii. Is RF found after a subset of present perfect auxiliaries in USIDs a purely phonological phenomenon?
- iii. Are the diachronic accounts of RF sufficient to explain its 'free' distribution after present perfect auxiliaries in USIDs?

It will be proposed that USIDs are split into two macro-areas. One macroarea corresponds to what will be called Northern Southern Italian dialects (henceforth NSIDs). This area includes Southern Marchigiano, Southern Laziale, Abruzzese, Molisano and Northern Campanian. The other macroarea corresponds to Central Southern Italian dialects (CSIDs), and comprises Apulian, Central and Southern Campanian, Lucanian and Northern Calabrian. The division between NSIDs and CSIDs is based on the different pattern of auxiliary selection displayed by these two groups of dialects. It will be shown, however, that the distribution of RF after present perfect auxiliaries in NSIDs and CSIDs is not uniform.

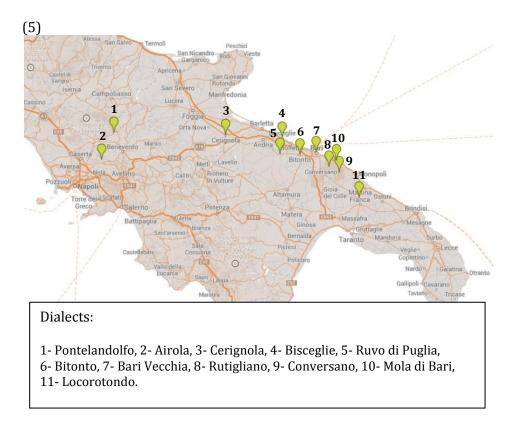
#### 2.2 Part two - Chapters 3, 4 & 5

In this part, it will be proposed that RF found after present perfect auxiliaries in USIDs is a means of overtly expressing a dedicated set of  $\phi$  features encoded on these elements. This analysis will be presented in chapter 3.

Chapter 4 will consider the overt marking of  $\varphi$  in CSIDs including an examination of the system of  $\varphi$  marking with present perfect and pluperfect auxiliaries. It will be shown that the overt marking of  $\varphi$  on present perfect and pluperfect auxiliaries depends on the application of a post-syntactic operation called *Default Marking*. It will be argued that *Default Marking* is also at play in the case of definite determiners and demonstratives in CSIDs. This investigation will be carried out in chapter 5. From a comparative point of view, we will also consider the system of  $\varphi$  marking with modals and lexical verbs in a small group of CSIDs.

#### 3. The data

This dissertation will investigate (i) periphrases composed of perfective auxiliaries followed by past participles; (ii) nominal constructions composed of definite determiners or demonstratives followed by a noun; (iii) paradigms of lexical verbs in the present indicative. A large amount of data from different USIDs will be used to adequately examine all these structures. Most of the dialects analyzed in this dissertation have been directly documented by the author through a period of data collection, or fieldwork, in southern Italy in spring 2012. Other dialect data are taken from different sources, referenced after each example. The map in (5) shows the geographic location of the dialects documented by the author for the purposes of this dissertation.



Most of the dialects in (5) are spoken in the south-eastern USID region, corresponding to the Apulo-Barese dialect area. The map in (5) also includes two Campanian dialects.

The fieldwork in Southern Italy was carried out as follows: the fieldworker, with the help of a written questionnaire, asked native speakers of the dialects under investigation to orally translate a number of paradigms and constructions into their dialects. All the interviews were recorded by the fieldworker using an audio device and transcribed later using IPA. Speakers were chosen according to their age and their degree of education. At the time of the interview, all the selected speakers possessed an undergraduate diploma, had a native competence of Standard Italian and of the dialect

spoken in their town, and were around 50/60 years of age<sup>2</sup>. For some dialects, younger speakers were also interviewed. The age restriction was selected because dialects in Southern Italy, as well as elsewhere in Italy, have been severely endangered by the daily use of Standard Italian in all contexts of communication in the last few decades (in the family, at school and with friends (cf. Manzini & Savoia (2005), I). In fact, the over-50 population in Southern Italy tends to use dialect more frequently than the younger population. Moreover, the data collection carried out for the purposes of this dissertation has revealed that the grammar of the dialects spoken by the over-50 population differs significantly from those spoken by the younger generation. The grammar of the dialect of younger speakers seems to be closer to that of Standard Italian. This appears, however, to be a tendency rather than an absolute, since many younger speakers of some SIDs opt for the same grammatical choices as the older generation.

Finally, it is important to note that the geolinguistic area in (5) was selected intentionally: dialects spoken in central Apulia are included in that transitional area sandwiched between USIDs and ESIDs. Morphosyntactic phenomena typical of USIDs behave differently in this area compared to what is observed in USIDs spoken further north. The same can be argued for those Campanian and Lucanian dialects spoken not far from the isogloss that separates USIDs from ESIDs.

<sup>&</sup>lt;sup>2</sup> I would like to express my heartfelt gratitude to all the people who have collaborated with me during my fieldwork in southern Italy in spring 2012. My acknowledgments go to the following speakers: Mr. Gabriele Palladino, Ms. Sabina Perugini (Pontelandolfo), Ms. Mirella De Sisto (Airola), Ms. Daniela Giordano (Cerignola), Mr. Demetrio Rigante (Bisceglie), Mr. Nicola Stragapede, Mr. Pietro Stragapede (Ruvo di Puglia), Mr. Francesco Sgaramella (Bitonto), Mr. Carmelo Angelico, Mr. Francesco Navarra, Mr. Mario Mancini (Bari Vecchia), Mr. Giuseppe Sorino, Mr. Pasquale Romito, Ms. Domenica Palumbo (Rutigliano), Mr. Mario Giannuzzi, Mr. Pasquale Locaputo, Mr. Vito L'Abbate, Ms. Maria Valerio (Conversano), Mr. Sabino Dattolo (Mola di Bari), Mr. Franco Basile (Locorotondo). In this dissertation, a small number of CIDs and NIDs have been documented. My aknowledgments go to Ms. Maria Angela Binda, Ms. Diana Virgilio (Rogeno), Ms. Domenica Aiudi, Mr. Massimo Bartolomeoli, Mr. Matteo Brunori (Isola del Piano), Mr. Ruben Bertini (Fano) and Ms. Sara Lusini (Siena) for the documentation of these dialects.

## Two types of split(ting): Raddoppiamento Fonosintattico and auxiliary selection in Southern Italian dialects

#### **1. Introduction**

The goal of this chapter is to investigate the distribution of *Raddoppiamento Fonosintattico* (henceforth RF) triggered by present perfect auxiliaries in USIDs.

RF is a phonological sandhi process attested in all SIDs, Sicilian and Sardinian included, as well as in Standard Italian and many CIDs. RF consists in the gemination of word-initial consonants provoked by a specific trigger (cf. (1)) (Fanciullo, 1983, 1986, 1997; Chierchia, 1986; Bertinetto & Loporcaro, 1988; Loporcaro, 1988, 1997a, 1997b; Vincent, 1988; Nespor, 1993; Passino, 2012; a.o.).

(1)

a.	Parlerà Carlo	[parle'ra <b>k'k</b> arlo]	'Carlo will speak'
b.	Andiamo a casa	[an'dja:mo a <b>k'k</b> a:sa]	'We will go home'

The examples in (1), taken from Standard Italian, indicate that both the oxytonic verb *parlerà* and the monosyllabic unstressed preposition *a* are able to trigger RF. RF can also be triggered by perfective active auxiliaries, when these occur in present perfect constructions. This is shown by the USID in (2), which illustrates that RF is triggered only by monosyllabic auxiliaries and not by those forms composed of more than one syllable. In (2), as well as in all the other paradigms in the remainder of this thesis, the gloss B refers to BE, whereas the gloss H, conversely, refers to HAVE.

(2) Poggio Imperiale (Apulo-Daunian Appennines)<sup>1</sup>

· ·	00	1 (1	
a.	SD	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.1sg called/spoken
	si	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.2sg called/spoken
	3	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.3sg called/spoken
b.	simə	ca'matə/par'latə	B.pr.1pl called/spoken
	sitə	ca'matə/par'latə	B.pr.2pl called/spoken
	sonnə	ca'matə/par'latə	B.pr.3pl called/spoken
			[Manzini & Savoia (2005), II: 720-721]

Differently from (2), where BE is the only form selected throughout the paradigm, a large number of USIDs opt for a different strategy of auxiliary selection. There, the choice of the auxiliary in the present perfect seems to be dependent on the person feature expressed on the sentential subject. If the subject is 1<sup>st</sup> and 2<sup>nd</sup> person (henceforth 1 and 2), BE is chosen, whereas if the subject is 3<sup>rd</sup> person (henceforth 3), HAVE is selected (cf. Rohlfs, 1969; Giammarco, 1973; Tuttle, 1986; Kayne, 1993; Cocchi, 1995; Manzini & Savoia, 2005; a.o.)<sup>2</sup>. We will refer to this phenomenon as person-driven auxiliary selection (cf. Cocchi, 1995; Ledgeway, 2000; Manzini & Savoia, 2005; D'Alessandro & Roberts, 2010), an example of which is given in (3).

<sup>&</sup>lt;sup>1</sup> The classification of all the dialects presented in this volume is faithful to the 'Carta dei Dialetti d'Italia' drawn up by Pellegrini (1977).

<sup>&</sup>lt;sup>2</sup> As will be discussed in §4, the selection of perfective active auxiliaries in USIDs strongly differs from that found in many Romance languages, i.e. Standard Italian, French, CIDs and NIDs, where the selection of BE or HAVE depends on the verbal class or *Aktionsart* of the past participle.

Two types of split(ting): RF and auxiliary selection in Southern Italian dialects 11

(3) Amandola (Southern Marchigiano)<sup>3</sup>

	,		
а	. SO	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.1sg called/spoken
	si	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.2sg called/spoken
	а	ca'mato/par'lato	H.pr.3 called/spoken
b	. simo	ca'mato/par'lato	B.pr.1pl called/spoken
	sete	ca'mato/par'lato	B.pr.2pl called/spoken
			[Manzini & Savoia (2005), II: 684]

The paradigm in (3), in contrast to that in (2), indicates that RF is triggered by a subset of monosyllabic auxiliaries. As a matter of fact, (3) shows that monosyllabic BE is able to trigger RF, the realization of which is excluded in the case of monosyllabic HAVE. A similar situation is observed for other USIDs, which do not display the canonical person-driven auxiliary selection of the type in (3). In these varieties, HAVE is the only auxiliary selected for all persons in the paradigm and RF is triggered only by 3sg HAVE and banned elsewhere.

(4) Mola di Bari (Apulo-Barese)

a.	а <del>јј</del>	'fattə/par'lə:tə/par'tʉ:tə	H.pr.1sg done/spoken/left
	а	'fattə/par'lə:tə/par'tʉ:tə	H.pr.2sg done/spoken/left
	(')a	<b>f'f</b> attə/ <b>pp</b> ar'lə:tə/ <b>pp</b> ar'tʉ:tə	H.pr.3sg done/spoken/left
b.	am	'fattə/par'lə:tə/par'tʉ:tə	H.pr.1pl done/spoken/left
	avet	'fattə/par'lə:tə/par'tʉ:tə	H.pr.2pl done/spoken/left
	an	'fattə/par'lə:tə/par'tʉ:tə	H.pr.3pl done/spoken/left

Given the data illustrated in (2)-(4), these are the questions that will be addressed in the following pages:

<sup>&</sup>lt;sup>3</sup> The dialect of Amandola is an USID, which is spoken at the border with CIDs. The BE/HAVE alternation depending on the person feature of the sentential subject is not restricted to USIDs, but also found in a small group of CIDs spoken in the centre and south of Le Marche, as well as in Eastern Lazio. For the geo-linguistic extension of the phenomenon of person-driven auxiliary selection in USIDs and a subset of CIDs, see §4.

- i. What is the typology of person-driven auxiliary selection in USIDs?
- ii. Is the variation affecting RF in (2)-(4) somehow determined by the type of auxiliary selected?

In order to answer these questions, a large amount of data will be analyzed. Moreover, several geolinguistic maps will be presented that show the microvariation affecting both the phenomenon of person-driven auxiliary selection and that of RF triggered by these items.

This chapter is organized as follows: in §2, the canonical theories referring to RF will be discussed. §3 will present a survey of the typological variation of RF triggered by present perfect auxiliaries in USIDs, while §4 will examine the microvariation affecting the phenomenon of person-driven auxiliary selection found in USIDs. There, some generalizations will be proposed in order to capture the interaction between the BE/HAVE alternation depending on the person feature of the sentential subject on the one hand and the triggering of RF provoked by these elements on the other. The conclusions will be drawn in §5.

#### 2. The theory of RF

#### 2.1 The nature of RF-triggers

As argued by Loporcaro (1997b), RF-triggers in Standard Italian can be of two different types. One class comprises oxytonic triggers, namely polysyllabic words stressed on the final syllable, as well as monosyllabic words perceived as stressed. These elements are thought to function as *regular RF-triggers*. The second type of RF-triggers, conversely, includes words that do not bear stress on the final syllable. Within this group, a subset of unstressed monosyllables and paroxytonic polysyllables are included. These items, also called lexical RF-triggers, are thought to be inherently endowed with the property of triggering gemination of the consonant they precede. Because of this idiosyncratic characteristic, these words are called *irregular RF-triggers*. The classification described here is shown in the table in (5). Two types of split(ting): RF and auxiliary selection in Southern Italian dialects 13

<u>(</u> )	Stanuaru Italiali		
a.	All polysyllabic	farò bene > [fa'rɔ <b>bb</b> εne]	<b>Regular</b> RF
	oxytones	'I will do well'	
b.	All stressed	sto bene > [s'tɔ <b>bb</b> εne]	
	monosyllables	'I am well'	
с.	Some unstressed	a lui > [a <b>l'l</b> ui]	Irregular RF
	monosyllables	'to him'	
d.	Some paroxytonic	come te > ['kome <b>t't</b> e]	
	polysyllables	ʻlike/as you'	
			(40051) 41

(5) Standard Italian

[Translated from Loporcaro (1997b): 1]

As the table in (5) shows, polysyllabic oxytones in (5a) and stressed monosyllables in (5b) undergo the same mechanism of RF-licensing. There, it is stress that determines the realization of RF. Differently from (5a)-(5b), (5c)-(5d) show that the presence of RF in correspondence with unstressed monosyllables and paroxytonic polysyllables cannot be attributed to the presence of stress on the trigger. Contrary to Loporcaro (1997b), Korzen (1980), Basbøll (1989) and Sluyters (1990) suggest merging the stressed and unstressed monosyllables that trigger RF into a single class. As the authors point out, if the presence of stress corresponds to the requirement for provoking RF, every monosyllable which induces RF must be stressed. In Standard Italian, for instance, the preposition a, which consistently triggers RF, must be considered to be stressed. The preposition di, instead, which inevitably avoids RF, is defined as unstressed (cf. (6)).

a.	a casa	>	['a <b>k'k</b> asa]	[a] = stressed monosyllable
b.	at home di me of me	>	[di 'me]	[di] = unstressed monosyllable

Along the same lines as Korzen (1980), Basbøll (1989) and Sluyters (1990), Agostiniani (1992) classifies stressed and unstressed monosyllables able to trigger RF in the same group. In addition, the author suggests that monosyllables able to trigger RF are not intrinsically stressed but liable to be stressed in specific circumstances. For instance, the verb *dà* (give.pr.3sg)

in a sentence like *dà fastidio* (give.pr.3sg bother; '(s)he bothers'), differently from the preposition *da* in *da fastidio* ('from/of bother'), triggers RF since stress can be assigned only to the word *da* when it is a verb and not a preposition. Although this analysis has the advantage of considering monosyllables triggering RF as all being endowed with stress, it does not solve the problem of why only the verb *dà*, and not its homophonous preposition, can receive stress.

#### 2.2 Regular RF

Alongside Standard Italian, Tuscan, Roman, Corsican and Sassarese-Gallurese Sardinian are also claimed to display stress-determined RF. In order to explain the existence of this kind of RF, Saltarelli (1970, 1983), Vogel (1978, 1982), Chierchia (1986), Sluyters (1990) and Loporcaro (1997b) postulate that whenever a stressed vowel is present in word-internal or word-final position, a specific process of syllabic readjustment operates that affects the stressed syllable. The authors, focusing on the quantitative value of vowels and consonants in Standard Italian, assume that word-internal stressed vowels in open syllables must be long. As for the consonants which follow, these must be inevitably short<sup>4</sup>. In the opposite situation, namely when the stressed vowel is in a closed syllable and in word-internal position, no lengthening of the stressed vowel is obtained. The difference in quantity between a stressed vowel in open and closed syllables is given in (7a).

<sup>&</sup>lt;sup>4</sup> Rohlfs (1966) observes that the lengthening of stressed vowels occurring with open syllables in word-internal position does not systematically apply in the case of proparoxytones. Words like *attimo* 'moment' and *femmina* 'woman' indicate that whenever stress falls on the antepenultimate syllable, it is the first consonant of the next syllable that undergoes lengthening, and not the stressed vowel. The possibility of having 'internal gemination' (cf. Vincent, 1988) is also observed for a group of dialects spoken in the central-northern part of Le Marche, where antepenultimate open-syllables freely allow consonant lengthening, thus banning vowel spreading (cf. Senigallia [Central Marchigiano]: s'tu**pp**id 'stupid', 'mɛ**dd**ik 'doctor', 'fe**gg**ət 'liver'). These facts show that proparoxytones pattern together with oxytonic words in allowing the lengthening of the consonant, but do not pattern with paroxytones, which only trigger the spreading of the stressed vowel.

Two types of split(ting): RF and auxiliary selection in Southern Italian dialects 15

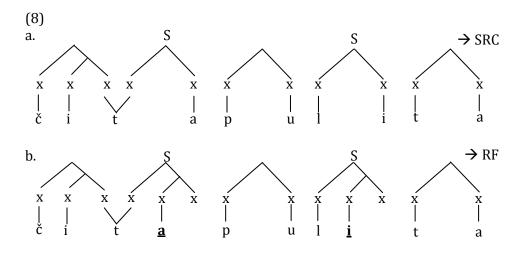
(7)

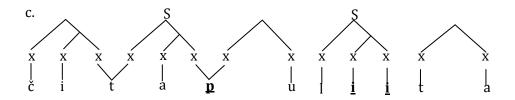
a. In word-internal position stressed V: (long) + C (short): ['ka:ne] (length of stressed V =  $\sim$ 200 ms), or stressed V (short) + C (long): ['kanne] (length of stressed V =  $\sim$ 100 ms);

b. In word-final position every stressed vowel is short (stressed V =  $\sim$ 100 ms) [Translated from Loporcaro (1997b): 9]

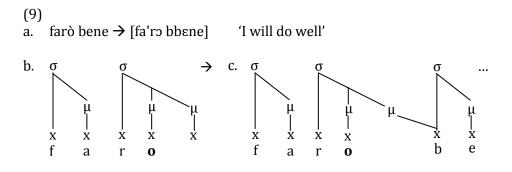
(7b) indicates that stressed vowels in word-final position are always short. Moreover, the situation in which a short stressed vowel in word-final position is followed by a short consonant is not tolerated by the phonotactics of syllable formation in Standard Italian. In order to avoid the violation of this phonotactic rule, consonantal doubling occurs and RF is attested.

In order to justify the presence of a long vowel in word-internal position, Chierchia (1986) proposes the *strong rhyme constraint* (SRC). According to this constraint, the rhyme of a tonic open syllable must be fortified, thus consisting of two temporal vocalic units. In the case of tonic final syllables, the mechanism of fortition is also expected to obtain. In this case, regressive lengthening (or spreading) of the consonant following the stressed vowel operates. The explanation of these facts is represented in (8).





Hayes (1989), introducing the Moraic Theory, proposes that phonological components are organized on three separate tiers. In his view, the higher tier corresponds to the syllable (= $\sigma$ ), the middle one to the mora (= $\mu$ ) and the lower one to the segment (=x). According to this theory, the process of RF would be understood as being induced by the realization of an extra moraic unit projected by the stressed syllable in word-final position in order to satisfy the SRC. This mora, being empty, must be filled by melodic material. There, the content of the extra moraic unit is phonetically satisfied by the consonant that follows and hence RF operates. The structure in (9) gives an example of how RF applies under the Moraic Theory approach *à la* Hayes.



The mechanism outlined in (9) would also apply to those monosyllables that are considered to bear stress (cf. Loporcaro, 1997b; Korzen, 1980; Basbøll, 1989; Sluyters, 1990; Agostiniani, 1992). In the case of the monosyllabic preposition a (cf. (6a)), for instance, RF would also be understood in the same way as (9), where an extra mora is projected by the stressed syllable.

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#### 2.2.1 Secondary stress

Waltereit (2004) observes that in Old Italian texts (specifically in Old Tuscan) RF is also attested after some clitics. (10) exemplifies this situation.

(10)

a. o.ra. se. **ll**a. met.te.va ... now ReflC.3sg OC.3sg.f put.3sg.past ['Cronaca di anonimo romano' (1357), in Waltereit (2004): 48]

 b. Io. te. IIo. p(ro).ve.re.i
 I IC.2sg OC.3sg.m prove.pr.cond. ['Ingiurie lucchesi' (1349), OVI, in Waltereit (2004): 53]

Waltereit (2004) claims that the presence of secondary stress in a sentence permits RF in Old Tuscan. Given the secondary stress assignment constraint formulated by Vogel & Scalise (1982) and Peperkamp (1998), which states that the first syllable in a sequence must be stressed and that syllables must be stressed alternatingly, we might expect RF to apply after any word endowed with secondary stress. In (10a), for instance, the first syllable of the string, namely *o*, is stressed. For this reason, the syllable following it cannot be stressed, meaning that the next syllable is alternatingly stressed. In this case, *se*, a reflexive clitic bearing phrasal secondary stress, can act as an optimal candidate for triggering RF. This analysis, however, seems to pose some problems regarding the presence of RF triggered by clitic elements. In fact, as many northern Tuscan dialects demonstrate, only a small set of subject clitics preceding a lexical verb in the present indicative is able to induce RF. The paradigm in (11) illustrates this situation.

(11) Pieve S. Lorenzo (Lunigiano)

i	'ðɔrmə	SC sleep.sg	'I sleep'
tə	'ðɔrmə	SC.2sg sleep.sg	'you sleep'
i	<b>d'd</b> ɔrmə / la 'ðɔrmə	SC sleep.sg/SC.3f sleep.sg	'(s)he sleeps'
	durmi'an	sleep.1pl	'we sleep'
	dur'mitə	sleep.2pl	'you sleep'
i	<b>d'd</b> ormənə / la 'ðormənə	SC sleep.3pl/SC.3f sleep.3pl	'they sleep'
		[Manzini & Savoia (2005), I: 112]	

Given the secondary stress assignment rule, the subject clitics /i/ and /tə/ preceding a 1 and 2sg verb would not be able to trigger RF since they precede a syllable, namely /'ðɔ/, endowed with primary stress. Indeed, RF is not found in this case. Crucially, RF is triggered by the subject clitic preceding the lexical verb specified for 3sg, whose primary stress falls on the first syllable. For this reason, we can conclude that the presence of secondary stress is not the only ingredient that allows RF to operate after the subject clitics in (11).

#### 2.3 Irregular RF

Stress-induced RF is attested only in Standard Italian, Tuscan, and some other central dialects, Corsican included. The process of irregular RF is instead found in a larger group of dialects, which stretches from Tuscany down to Sicily, including Sardinia and Corsica. The empirical generalization regarding RF is then that if only one type of RF is attested in a language, it must be the irregular one.

In this section, three different accounts will be explored in order to shed light on the mechanism underlying the realization of RF in those contexts in which it is not driven by stress. In the first place, the mechanism of regressive consonantal assimilation  $\dot{a}$  *la* Schuchardt (1874), Hall (1964), Loporcaro (1997b) and Waltereit (2004), a.o., will be discussed. Then, the phonological approach by Repetti (1991) will be examined. Finally, the prosodic and syntactic conditioning of RF will be taken into account.

#### 2.3.1 Regressive consonant assimilation

Regressive consonant assimilation (henceforth RCA) is a phonological process by which a sound in a consonant cluster influences the preceding one. RCA is often found in word-internal position in Standard Italian and is thought to originate from Vulgar Latin. The geminates in words like *otto* (eight), *letto* (bed) and *sotto* (under), for instance, are the result of the application of RCA word-internally. Indeed, the Latin counterparts of these words are OCTO, LECTUS and SUBTUS (pronounced *suptus*), respectively, where the voiceless stops /k/ and /p/ in the consonant cluster were assimilated to the next segment in the linear string, namely /t/, at a certain

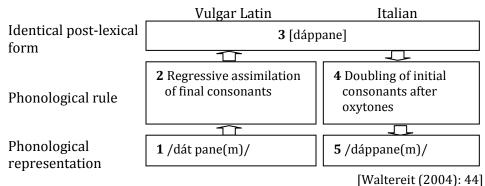
diachronic stage. According to Schuchardt (1874), Hall (1964) and Loporcaro (1997b), RCA also occurs in word-final position, since the interaction of two consonants at word boundaries also yields a geminate (cf. (12)). In the same way as RCA in word-internal position, RCA at word-boundaries is also thought to originate from Vulgar Latin.

(12) Standard Italian

a.	ET VIDET	>	e <b>[v:]</b> ede
	and see.pr.3sg		
b.	AD TE	>	a <b>[t:]</b> e
	to you.sg		

Waltereit (2004), following Schuchardt and Loporcaro, identifies a diachronic path along which the development of RCA-derived RF in Standard Italian is described (cf. (13)).

(13) From Latin consonant assimilation to Italian raddoppiamento



In 1, the word *dát*, ending in a consonant, precedes a word that also starts with a consonant. Given the process of RCA that took place in Vulgar Latin, the last consonant of *dát*, namely *t*, assimilates to the first one of the following word, thus leading to a geminate (stage 2). At the same time as RCA-derived RF starts to be productive, yet another phonological process is at work: the fall of consonants in word-final position (stage 3). For this reason, as suggested by Loporcaro (1997b), since (all) word-final

consonants disappeared, the speakers conceived the presence of RF as being driven by stress present on the trigger (stages 4 and 5)<sup>5</sup>.

Loporcaro (1997b) claims that RF triggered by paroxytonic words can also be analyzed as deriving from RCA at word-boundaries. These facts are illustrated in (14), where the last segments of the RF-trigger are assimilated to the first consonant of the following word.

(14)

a.	*QUOMODO+ET ME	> come <b>[m:]</b> e
	as and I; 'like myself'	
b.	*QUALE+QUID TEMPUS	> qualche <b>[t:]</b> empo
	every so and so; 'what kin	d of what time'

[Loporcaro (1997b): 23]

Given these facts, the presence of irregular RF can be explained on the basis of the application of RCA in the context CVC#CVC, which allegedly took place in diachrony<sup>6</sup>. Despite this assumption, Waltereit (2004) observes that many words triggering RF in Standard Italian ended in a vowel in Latin, as (15) shows.

(15)

a.	DE UBI	>	dove <b>[+RF]</b> = dove <b>[v:]</b> ai
	from where; 'where'		
b.	INFRA	>	fra <b>[+RF] =</b> fra <b>[l:]</b> ì
	below; 'amongst in'		
			[Adapted from Waltereit (20)

[Adapted from Waltereit (2004): 45]

<sup>&</sup>lt;sup>5</sup> The reason why the realization of RF at stage 4 is considered to be determined by stress relies on the assumption that after the loss of final consonants a significant number of RF-triggers were oxytones.

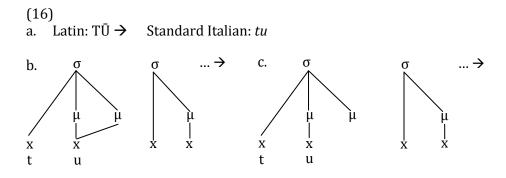
<sup>&</sup>lt;sup>6</sup> It must be noted that many words in Latin admitted a consonant in word-final position. Crucially, lexemes licensing RF in SIDs today mostly correspond to functional rather than lexical items: see, for instance, the contrast between the presence versus absence of RF in the case of the adjectival [no:v] (< Lat. NOUVEM) in (i) and the auxiliary [a] (< Lat. \*HA(BE)T) in (ii). In the former case, RF is never attested, whereas in the latter case RF can be found: Apulo-Barese i. 'no:v 'ka:sər(ə) 'nine houses'; ii. a **f'f**att(ə) '(s)he has done'.

The data in (15) suggest that the analysis proposed by Schuchardt, Hall and Loporcaro, which claims that RCA at word-boundaries is responsible for triggering RF, is incomplete.

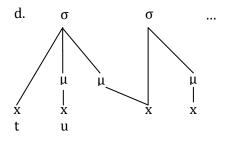
## 2.3.2 The moraic analysis

Repetti (1991) turns to Hayes' (1989) Moraic Theory and gives an account according to which the presence of regular and irregular RF derives from purely phonological facts. In both cases, an extra mora in word-final position, originally linked to a segmental unit, becomes free and thus available to trigger regressive spreading of the following consonant. This phonological process is claimed to have been active in the period of transition from Vulgar Latin to Standard Italian.

In Standard Italian, a stressed monosyllable such as tu 'you.sg' derives from the Latin form TŪ, where the vowel u was long (cf. (16)). According to Repetti, the segment u in coda position delinks from its original mora in the period of transition from Vulgar Latin to Standard Italian. For this reason, this mora remains free and regressive spreading of the next consonant applies in order to fill its content. As a result, RF takes place.

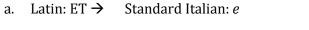


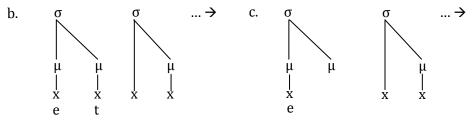




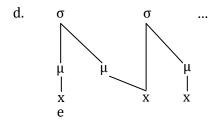
An irregular RF-trigger, according to Repetti, was also endowed with a strong rhyme in Latin since it admitted a consonant in coda position. This consonant was deleted in diachrony, thus leaving the mora with which it was originally associated empty. Because of the deletion of this segment, the free mora must be filled by another segment. At this point, regressive spreading of the following consonant applies, and RF is triggered (cf. (17))<sup>7</sup>.







<sup>&</sup>lt;sup>7</sup> Similarly to Repetti (1991), Passino (2012) proposes that irregular RF derives from the presence of an empty CV on the trigger. With reference to the preposition *a*, she claims that this word is endowed with an empty syllable, which in Latin hosted a consonant, namely [d]. The loss of melody that occurred during the transition from Latin to Southern Italo-Romance did not correspond to the loss of structural space (cf. Bafile, 2003): after [d] was lost, the final CV was not deleted. For this reason, regressive spreading of the following consonant in the linear string takes place and RF is attested.



All in all, the phonological representations in (16) and (17) suggest that a strict parallelism between regular and irregular RF-triggers holds: both elements are characterized by a strong rhyme.

## 2.3.3 Syntactic conditioning of RF

If the diachronic explanations outlined above were satisfactory, RF should always apply after an oxytonic word, as well as in the presence of a Latin etymon ending in a consonant (cf. Loporcaro, 1997b). On the contrary, on the basis of some Abruzzese data, Fanciullo (1983-1986) observes that irregular RF-triggers do not consistently force regressive spreading of the consonant that follows. An example is given below where the oxytonic adverb [c'cu] 'more', deriving from Latin PLUS, behaves as an RF-trigger in (18a) and not in (18b).

(18)

à.	[jess e	<b>c'c</b> u <b>ff</b> ɔrtə	də	te]	'he is stronger than you'
	he BE.pr.3	sg more strong	g tha	n you	
b.	[jess e	<b>ff</b> ort <b>cc</b> u	də	te]	'he is strong more than you'
	he BE.pr.3	sg strong more	e tha	n you	
					[Fanciullo (1983-1986): 88-90]

In (18a), when [c'cu] precedes the adjective, RF applies. In (18b), conversely, RF does not appear. Observe however that the copula BE is consistent in triggering RF both in (18a) and (18b). The difference in the distribution of RF in correspondence with BE and the adverb [c'cu] suggests that the mechanism underlying RF is not exclusively determined by the phonological structure of the trigger. In fact, as Fanciullo (1986) suggests, a

syntactic conditioning of the process is observed in (18). Furthermore, with reference to Standard Italian, it has been observed that the minimal pair in (19) admits RF only in the former case and not in the latter.

(19)
a. (mangerò [p:]anini)Φ 'I will eat sandwiches' will eat.1sg sandwiches
b. (mangerò)Φ (panini col salame)Φ 'I will eat salami sandwiches' will eat.1sg sandwiches with salami [Nespor (1993): 204]

The data in (18), as well as those in (19), suggest that RF should be considered to be a process that relies on both phonological and syntactic ingredients. Within the framework of Prosodic Phonology (cf. Nespor & Vogel, 1986; Selkirk, 1984), it has been assumed that RF applies within prosodic constituents. Nespor (1993) asserts that in the case of a noun branching with the verb (cf. (19a)), one phonological phrase is instantiated. Within a phonological phrase, RF can freely apply. In (19b.), conversely, the NP 'panini' branches independently of the verb, thus leading to the realization of two different phonological phrases. In this environment, RF cannot be triggered.

This last consideration, together with the examples in (18), serves to highlight that a theory that defines RF as a phenomenon strictly dependent on phonological requirements specified on the trigger is incomplete. With regard to RF triggered by monosyllabic southern Italian present perfect auxiliaries, the next section (cf. §3) will present a thorough investigation of what determines whether these elements trigger RF or not, and specifically whether these factors are exclusively phonological in nature.

# 3. The interaction between RF and auxiliaries: the dimension of variation

This section presents the variation affecting the distribution of RF triggered by present perfect BE/HAVE auxiliaries in USIDs, beginning with the variation affecting BE. In particularly, it will be shown that:

- i. Auxiliary BE allows the realization of RF only for some forms in the paradigm (cf. §3.1.1);
- ii. The presence of RF triggered by the auxiliary BE is categorically disallowed in some dialects (cf. §3.1.2);
- iii. In some USIDs, the auxiliary BE triggers RF only when it combines with a specific type of past participle (cf. §3.1.3);
- iv. In some USIDs, passive BE induces RF, whereas active BE disallows this mechanism (cf. §3.1.4).

With regard to the variation affecting RF in the case of auxiliary HAVE, it will be observed that:

- i. A group of USIDs categorically disallows the presence of RF with auxiliary HAVE (cf. §3.2);
- ii. RF in a subset of USIDs is triggered only if auxiliary HAVE bears a specific  $\varphi$  interpretation (cf. §3.2).

Throughout what follows, we will consider whether the phonological approaches to RF examined in the previous section are sufficient to do justice to the huge variation affecting RF triggered by present perfect auxiliaries in USIDs.

# 3.1 BE

# **3.1.1 Singular versus plural**

In (almost all) USIDs, monosyllabic auxiliary BE in the active voice allows  $RF^8$ . The examples in (20) and (21) below illustrate this situation. (20) reproduces the paradigm already given in (2).

<sup>&</sup>lt;sup>8</sup> As already mentioned in §1, auxiliary selection in USIDs does not function in the same way as Standard Italian, where the selection of the auxiliary is dictated by the semantico-syntactic properties of the past participle. This topic will be tackled in §4.

(20) Poggio Imperiale (Apulo-Daunian Appennines)

	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
a.	SD	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.1sg called/spoken
	si	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.2sg called/spoken
	3	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.3sg called/spoken
b.	simə	ca'matə/par'latə	B.pr.1pl called/spoken
	sitə	ca'matə/par'latə	B.pr.2pl called/spoken
	sonnə	ca'matə/par'latə	B.pr.3pl called/spoken
			[Manzini & Savoia (2005), II: 720-721]

(21) Bitonto (Apulo-Barese)

a.	SD	<b>f'f</b> attə/ <b>m'm</b> u(ə)rtə	B.pr.1sg done/died
	si	<b>f'f</b> attə/ <b>m'm</b> u(ə)rtə	B.pr.2sg done/died
	je	<b>f'f</b> attə/ <b>m'm</b> u(ə)rtə	B.pr.3sg done/died
b.	simə	'fattə/'mu(ə)rtə	B.pr.1pl done/died
	sitə	'fattə/'mu(ə)rtə	B.pr.2pl done/died
	jɔnnə	'fattə/'mu(ə)rtə	H.pr.3pl done/died

(20) and (21) clearly show that the presence of RF is limited to the singular paradigm. In fact, no plural BE auxiliary features RF. One might think that paroxytonic auxiliaries in the Apulian dialects observed above do not have the phonological requirement for triggering RF. In fact, the paroxytonic adverb *come* in these dialects does not license RF, as (22) shows.

(22) Bitonto (Apulo-Barese)						
'si:m	'ku:m	'kwə:n	e	g'gatt	'we don't stand each other'	
BE.pr.1pl	like	dogs	and	cats		

Despite this first tentative generalization, a further observation is required at this point. In most Apulian dialects, as well as in many other USIDs, paroxytonic demonstratives preceding mass nouns (cf. Rohlfs, 1969; a.o.) obligatorily trigger RF. This situation is illustrated in (23) with reference to the variety of Bitonto.

(23) Bitonto (Apulo-Barese)					
kuss/	ku:r	<b>p'p</b> ə:n	'this/that bread'		
this.neut	t./ that.ne	ut. bread			

The fact that RF is triggered by a paroxytonic demonstrative preceding a mass noun in the dialect of Bitonto, and is excluded in those cases in which BE is in the plural paradigm, leads to the following generalization, which is given in (24).

(24) Generalization I (tentative version)

- In USIDs, present perfect auxiliary BE in the active voice possesses the property of triggering RF in the singular paradigm;
- In USIDs, present perfect auxiliary BE in the active voice does not possess the property of triggering RF in the plural paradigm<sup>9</sup>.

<sup>&</sup>lt;sup>9</sup> This generalization also holds for the case in which RF is triggered by copulas in predicative constructions. In USIDs, as well as in all other Romance varieties, the morphological form of the copula corresponds to BE. In the singular paradigm, this element is able to trigger RF in a large number of USIDs: San Benedetto del Tronto [Southern Marchigiano] sɔ/ ʃi/ jɛ kkun'tintə (BE.cop.pr.1sg/ BE.cop.pr.2sg/ BE.cop.pr.3sg happy)[Manzini & Savoia (2005), II: 683]. Crucially, a number of dialects show that the triggering of RF by a copula is active only with some forms in the singular paradigm. Indeed, in the dialect of Castelvecchio Subequo [Western Abruzzese] RF is triggered by a 1 and 2sg copula, and not by a 3sg copula: so/ fi kkun'tientə (BE.cop.pr.1sg/ BE.cop.pr.2sg happy) versus e kun'tientə (BE.cop.pr.3sg happy) [Manzini & Savoia (2005), II: 692]. Moreover, in some Southern Marchigiano dialects, on a par with some Central Apulian and Campanian dialects, RF is triggered only by a 1 and 3sg copula: Amandola [Southern Marchigiano] so/ ɛ kkon'tentu (BE.cop.pr.1sg/ BE.cop.pr.3sg happy) versus si kon'tentu (BE.cop.pr.2sg) [Manzini & Savoia (2005), II: 684]; Santa Maria a Vico [Central Campanian] so/ ɛ kkun'tɛntə (BE.cop.pr.1sg/ BE.cop.pr.3sg happy) versus si kun'tɛntə (BE.cop.pr.2sg happy) [Manzini & Savoia (2005), II: 780]. In a handful of USIDs, however, RF is never found after a copula, as in the case of the variety of Torricella Peligna [Eastern Abruzzese]: so/ ſi/ ɣe 'ɣrɔssə (BE.cop.pr.1sg/ BE.cop.pr.2sg/ BE.cop.pr.3sg fat) [Manzini & Savoia (2005), II: 697], or is restricted to the 3sg copula only: Montenerodomo [Eastern Abruzzese] so/ fi 'yrossə (BE.cop.pr.1sg/ BE.cop.pr.2sg fat) versus **ye g'g**ruəssə (BE.cop.pr.3sg fat) [Manzini & Savoia (2005), II: 694]. This empirical evidence suggests that there is significant

## 3.1.2 Lack of RF

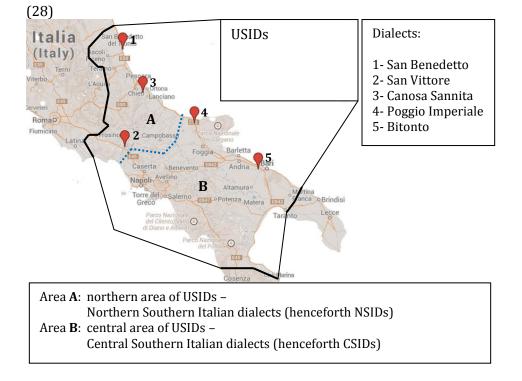
Although some USIDs allow the triggering of RF after BE in the singular paradigm (cf. (20) and (21)), there is one particular group of USIDs, exemplified in (25)-(27), in which this mechanism is disallowed.

(25) San Benedetto del Tronto (Southern Marchigiano)

so si	'vi∫tə/dər'mi:tə/ve'nutə 'vi∫tə/dər'mi:tə/ve'nutə	B.pr.1sg seen/slept/come B.pr.2sg seen/slept/come [Manzini & Savoia (2005), II: 682]
(26) San Vit sɔŋgə ʃi	tore del Lazio (Southern Laziale la'va:tə/rum'mitə/mə'nu:tə la'va:tə/rum'mitə/mə'nu:tə	e) B.pr.1sg washed/slept/come B.pr.2sg washed/slept/come [Manzini & Savoia (2005), II: 703]
(27) Canosa sɔ si	Sannita (Eastern Abruzzese) maɲ'ɲa:tə/mi'nu:tə maŋ'ɲa:tə/mi'nu:tə	B.pr.1sg washed.sg/come.sg B.pr.2sg washed.sg/come.sg [Manzini & Savoia (2005), II: 687]

As the map in (28) shows, the varieties of San Benedetto del Tronto (cf. (25)), San Vittore del Lazio (cf. (26)) and Canosa Sannita (cf. (27)) are spoken within the same geolinguistic area, which corresponds to the most northern area in which USIDs are spoken. The dialects of Poggio Imperiale (cf. (20)) and Bitonto (cf. (21)), on the other hand, are spoken in the central USIDs area.

variation in the distribution of RF triggered by a copula in predicative constructions.



The map in (28) proposes a geolinguistic division of USIDs based on the RF triggering properties of auxiliary BE. NSIDs are those varieties where active auxiliary BE is generally not able to trigger gemination, whereas CSIDs correspond to those varieties where RF is triggered by present perfect auxiliary BE, when this is a monosyllabic form in the singular paradigm<sup>10</sup>.

<sup>&</sup>lt;sup>10</sup> RF triggered by present perfect auxiliary BE in the singular paradigm is also attested for some NSIDs. More specifically, a group of varieties spoken around the area of transition between NSIDs and CIDs shows that active auxiliary BE in the singular paradigm is able to trigger RF: Amandola [Southern Marchigiano] **so/ si cc**a'mato/ **pp**ar'lato/ **vv**i'nuto (B.pr.1sg/ B.pr.2sg called/ spoken/ come) [Manzini & Savoia (2005), II: 684]; Popoli [Western Abruzzese] **so/ fi dd**ur'moitə (B.pr.1st/ B.pr.2sg slept) [Manzini & Savoia (2005), II: 688]. Moreover, in a set of dialects belonging to this transitional area, RF can be found with either 1 or 2sg BE. For instance, in the dialect of Sonnino, spoken in southern Lazio, 1sg BE is able to trigger RF, the realization of which is banned with 2sg BE: **so ll**a'vato/ **pp**ar'lato

The distinction between NSIDs and CSIDs will be maintained throughout this dissertation, since these two groups of dialects display different properties with regard to the morphosyntax of perfective auxiliation, as the following chapters will show.

# 3.1.3 RF and the phonological shape of the past participle

In one group of CSIDs, RF triggered by active auxiliary BE is generally found in those contexts in which this form precedes a past participle stressed on the first syllable. This is shown in (29) and (30), where (29) indicates that the presence of a past participle stressed on the first syllable allows RF and (30), on the other hand, shows that RF is banned in the context in which the stressed vowel of the participle is not adjacent to BE.

(29) Bisceglie (Apulo-Barese)

,	0 (1	,	
SD	* <b>(f)'f</b> attə		B.pr.1sg done
si	* <b>(f)'f</b> attə		B.pr.2sg done

(30) Bisceglie (Apulo-Barese)

-	5 (1)	
SD	ca'maitə/drəm'mi:tə/və'ni:tə	B.pr.1sg called/slept/come
si	ca'maitə/drəm'mi:tə/və'ni:tə	B.pr.2sg called/slept/come
		[Manzini & Savoia (2005), II: 721]

However, in some dialects spoken in Central Apulia, RF can be triggered by BE in the singular paradigm when the auxiliary combines with a past participle not stressed on the first syllable and is obligatory when the participle is stressed on the first syllable.

(B.pr.1sg washed/ spoken) versus si la'vato/ par'lato (B.pr.2sg washed/ spoken) [Manzini & Savoia (2005), II: 701]. Conversely, in the dialect of Secinaro, spoken in Western Abruzzo, the form triggering RF is 2sg BE and not 1sg BE: sɔ par'la:tə/ mə'nutə (B.pr.1sg spoken/ come) versus **fi pp**ar'la:tə/ **mm**ə'nutə (B.pr.2sg spoken/ come) [Manzini & Savoia (2005), II: 691].

(31) Conversano (Apulo-Barese)

a.	SD	(m)man'dʒe:t	B.pr.1sg eaten
	si	(m)man'dʒe:t	B.pr.2sg eaten
b.	SD	* <b>(f)</b> 'fatt	B.pr.1sg done
	si	* <b>(f)</b> 'fatt	B.pr.2sg done

Based on the empirical facts illustrated here, we propose the following generalization:

(32) Generalization II (tentative version)

- In a subset of CSIDs, present perfect auxiliary BE in the active voice obligatorily triggers RF in the singular paradigm only if the past participle that follows is stressed on the first syllable;
- In a subset of CSIDs, present perfect auxiliary BE in the active voice optionally triggers RF in the singular paradigm when followed by a past participle not endowed with stress on the first syllable.

# 3.1.4 Alternation in Voice: active versus passive BE

Biberauer & D'Alessandro (2006), looking at the Eastern Abruzzese dialect of Arielli, observe that the difference between active and passive voice in this dialect is signaled by means of RF, which is present only when BE is passive. In the case of active BE, conversely, RF is banned. (33) illustrates this situation.

(33	3) Arielli (Easter	n Abruzzese)	
a.	SD	'vistə	'I have seen'
	B.act.pr.1sg	seen	
b.	SD	<b>v'v</b> istə	'I am seen'
	B.pass.pr.1sg	seen	
			[Biberauer & D'Alessandro (2006): 87-88]

Following Chomsky (2001 *ff.*), the difference between defective and nondefective v derives from the PIC (Phase Impenetrability Condition) operating in the latter case and not in the former. The application of the PIC

determines the set of elements which are sent to Spell-Out together. In the presence of a non-defective v, the complement of v is sent to Spell-Out independently of v. In this situation, two phonological phrases are computed. This blocks the application of the RF phonological rule between the auxiliary, which, according to Biberauer & D'Alessandro, merges in T°, and the participle, which merges in V°. In the case of defective v, conversely, only one phonological phrase is computed as both v and its complement are sent to Spell-Out together. In this way, RF can apply between the passive auxiliary in T° and the participle in V°, as they belong to the same chunk (i.e. phonological phrase)<sup>11</sup>. The two syntactic structures discussed here are given in (34).

# (34)12

a.  $[_{TP}$  so  $[_{VP}$   $[_{VP}$  viste]]] (active): *viste* sent to PF independently of  $so \rightarrow$  no RF b.  $[_{TP}$  so  $[_{VP}$  so' $[_{VP}$  viste]]] (passive): *so viste* sent to PF together  $\rightarrow$  RF [Biberauer & D'Alessandro 2006: 92]

A similar approach is proposed by D'Alessandro & Scheer (2012) & (2013). In their view, the phase skeleton computed by syntax (i.e. presence of defective/non-defective v) might or might not be reflected by a mirror PIC operating at PF.

The facts observed with reference to the Eastern Abruzzese dialect of Arielli suggest that RF results from a series of mechanisms that are not exclusively phonological in nature.

<sup>&</sup>lt;sup>11</sup> Biberauer & D'Alessandro (2006) claim that it is inappropriate to assume the existence of a pair of homophonous BE auxiliaries in the lexicon of Ariellese. If this were true, then two types of BE auxiliaries would exist: one endowed with RF triggering properties and the other one not.

<sup>&</sup>lt;sup>12</sup> Evidence that passive *so* externally merges in a lower position than active *so* derives from the fact that only active BE, and not passive BE, can be followed by the *v*P-adverbial *ggià* (cf. Ggià so (???ggià) [v]viste da tutti quinde 'I am already seen by anyone' versus Ggià li so (ggià) viste cullù 'I have already seen him') [Biberauer & D'Alessandro (2006): 92].

## 3.1.5 Summary

The table in (35) presents a summary of the distribution of RF in the presence of the BE auxiliaries analyzed above. + indicates the presence of RF, whereas – signals the absence thereof.

(35)						В	E		
	Context	Dialec	t	Si	ngul	ar	]	Plura	l
				1	2	3	1	2	3
	cingularyc	(20)	Poggio Imperiale	+	+	+	-	-	-
	singular vs plural	(21)	Bitonto San Benedetto d. T.	+	+	+	-	-	-
	piurai	(25) (26)	San Vittore d. Lazio	-	-				
ıry		(27)	Canosa Sannita	-	-				
Auxiliary	stress on part: 1 <sup>st</sup> (1.σ) vs	(29) (30)	Bisceglie (-1. $\sigma$ )	+	+				
4	non 1 <sup>st</sup>	(31a)	Bisceglie $(1.\sigma)$ Conversano $(-1.\sigma)$	- +	- ±				
	syllable (-1.σ)	(31a) (31b)	Conversano (1.o)	+	+				
	active vs passive	(33)	Arielli	Pass + Act -					

(35)13

The table in (35) demonstrates that RF can never be found in the plural paradigm, but is restricted to the singular, where it is subject to microvariation.

<sup>&</sup>lt;sup>13</sup> BE, as an active auxiliary, is also attested in the 1 and 2pl in (25)-(27) and (33). In these dialects, 3p auxiliaries select HAVE. The dialects in (29)-(31), instead, exhibit the choice of HAVE for all persons in the plural paradigm. These facts are made explicit in the table in (73) below.

# **3.2 HAVE**

In the same fashion as the BE paradigms in (20) and (21) (cf. §3.1.1.), RF triggered by auxiliary HAVE in USIDs is attested only in the singular paradigm and is absent in the plural. More specifically, only a subset of HAVE auxiliaries in the singular paradigm licenses RF. This mechanism is attested for a large number of CSIDs (cf. (36)-(38)).

(36) Mola di Bari	(Apulo-Barese)
-------------------	----------------

a.	a <del>jj</del> /i	'fatt/par'tʉ:t	H.pr.1sg done/left
	а	'fatt/par'tʉ:t	H.pr.2sg done/left
	(')a	<b>f'f</b> att/ <b>pp</b> ar't <del>u</del> :t	H.pr.3sg done/left
b.	am	'fatt/par'tʉ:t	H.pr.1pl done/left
	a'vet	'fatt/par'tʉ:t	H.pr.2pl done/left
	an	'fatt/par'tʉ:t	H.pr.3pl done/left

(37) Airola (Central Campanian)

a.	addzə	'vistə/ve'nu:tə	H.pr.1sg seen/come
	а	'vistə/ve'nu:tə	H.pr.2sg seen/come
	а	<b>v'v</b> istə/ <b>vv</b> e'nu:tə	H.pr.3sg seen/come
b.	ammu	'vistə/ve'nu:tə	H.pr.1pl seen/come
	atə	'fatt/ve'nu:tə	H.pr.2pl seen/come
	annə	'fatt/ve'nu:tə	H.pr.3pl seen/come

(38) Albidona (Northern Calabrian)

-	-		
a.	ർട്ടം	ɣa'βa:tə/βə'nu:tə	H.pr.1sg washed/come
	3	ɣa'βa:tə/βə'nu:tə	H.pr.2sg washed/come
	3	<b>gg</b> a'βa:tə/ <b>bb</b> ə'nu:tə	H.pr.3sg washed/come
b.	mə	ɣa'βa:tə/βə'nu:tə	H.pr.1pl washed/come
	a'βəsə	ɣa'βa:tə/βə'nu:tə	H.pr.2pl washed/come
	nə	ɣa'βa:tə/βə'nu:tə	H.pr.3pl washed/come
			[Manzini & Savoia (2005), II: 784]

The paradigms in (36)-(38) show that RF is triggered by 3sg HAVE in these dialects, and is never attested in the case of 2sg HAVE. Moreover, in the

dialect of Mola di Bari in (36) RF is never attested when the auxiliary HAVE in the 1sg is /i/. It is important to remember, however, that 2 and 3sg HAVE in (36)-(38) share the same root. In contrast to many CSIDs, such as the dialects in (36)-(38), a large number of NSIDs, alongside a small group of CSIDs, do not display RF after 3sg HAVE, as shown in (39)-(42).

(39) San Benedetto del Tronto	(Southern Marchigiano)
-------------------------------	------------------------

а	'vi∫tə/dər'mi:tə/ve'nutə	H.pr.3sg seen/slept/come
		[Manzini & Savoia (2005), II: 682-683]

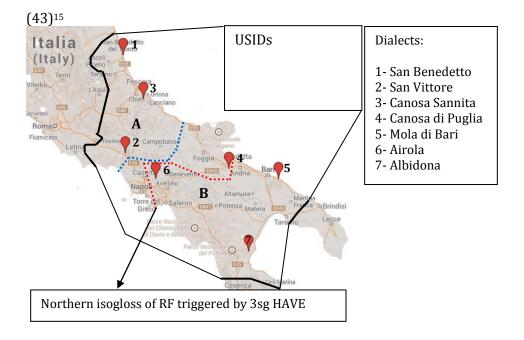
(40) San V	littore del Lazio (Southern Lazi	ale)
а	la'va:tə/rum'mitə/mə'nu:tə	H.pr.3sg washed/slept/come [Manzini & Savoia (2005), II: 703]

(41) Cai	iosa Sannita (Eastern Abruzzese	)
а	man'na:tə/mi'nu:tə	H.pr.3sg eaten/come
		[Manzini & Savoia (2005), II: 687]

(42) Canosa di Puglia (Apulo-Barese) o ca'mɛ:tə/dərmeutə/və'neutə H.pr.3sg called/slept/come [Manzini & Savoia (2005), II: 791]

The map in (43) illustrates the geolinguistic distribution of the dialects that allow RF triggered by 3sg HAVE. This group is made up of a large number of CSIDs, stretching from central/northern Apulia, in the east, and central Campania, in the west, up to the border with ESIDs. These dialects, as shown in the map in (28), are included in geolinguistic area B. Conversely, NSIDs, marked in (28) as part of geolinguistic area A, pattern together with a group of northern CSIDs in consistently never triggering RF in the case of 3sg HAVE<sup>14</sup>.

<sup>&</sup>lt;sup>14</sup> A caveat is required at this point. 3sg HAVE in CSIDs always allows RF, the occurrence of which is never restricted by the phonological properties of the past participle. In other words, whenever 1 and 2sg BE in CSIDs optionally trigger RF



Given these facts, we propose the following generalization:

(44) Generalization III (tentative version)

- In a large number of CSIDs, 3sg HAVE is the only form in the paradigm that triggers RF;
- In (all) NSIDs, as well as in a group of CSIDs spoken in the area of transition with NSIDs, no HAVE auxiliaries trigger RF.

depending on the presence or absence of stress on the first syllable of the past participle, 3sg HAVE in CSIDs obligatorily allows RF, independently of stress. <sup>15</sup> The isogloss of RF triggered by 3sg HAVE is based on data collected by the author and documented in Manzini & Savoia (2005). Moreover, it must be noted that Melillo (1976), focusing on a several morphosyntactic properties of Apulian dialects, identifies a small number of dialects spoken in the province of Foggia in which RF is triggered by 3sg HAVE (Melillo (1976), map 43). These facts are not shown in the map in (43).

# 3.2.1 Summary

The table in (45) illustrates a summary of the distribution of RF in the presence of present perfect HAVE in USIDs. As in (35), + signals the presence of RF triggered by HAVE, whereas – signals the absence of RF triggered by this form.

(45)	10					HA	VE		
	Context		Dialect	Si	ngul	ar	l	Plura	l
				1	2	3	1	2	3
	CSIDs	(36)	Mola di Bari Airola	-	-	+	-	-	-
ary	CSIDS	(38)	Albidona	-	-	++	-	-	-
Auxiliary	NSIDs & area of transition	(39) (40) (41)	San Benedetto d. T. San Vittore d. L. Canosa Sannita			-			
		(42)	Canosa di Puglia			-			

It is notable that RF can only be triggered by 3sg HAVE. This mechanism, however, is restricted to a specific geolinguistic area, and is not found in all USIDs.

# 3.3 RF and auxiliaries: the problems of the phonological approach

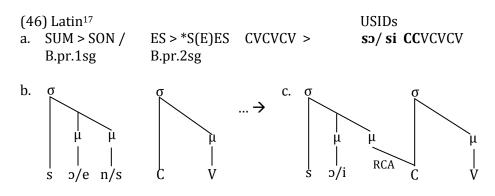
In this section, we consider whether the phonological approaches examined in §2.3 are sufficient for identifying the distribution of RF triggered by present perfect BE/HAVE auxiliaries in USIDs (cf. §3.3.1 and §3.3.2). Throughout the following discussion, it will be shown that these approaches

<sup>&</sup>lt;sup>16</sup> In the dialects in (39)-(42), HAVE is the form found in the 3pl and BE is attested in the 1 and 2 person, both in the singular and in the plural paradigm. These facts are reported in the table in (73) below.

are unable to explain the 'accidental' distribution of RF observed in the tables in (35) and (45).

#### 3.3.1 BE

Latin BE formatives in the present indicative all admitted a consonant in word-final position (cf. SUM, ES, EST, SUMUS, ESTIS, SUNT). Following Schuchardt (1874), Hall (1964) and Loporcaro (1997), we might assume that the presence of a consonant in word-final position of Latin BE would have favored the application of RCA in the diachronic evolution of this form from Latin to Southern Italo-Romance. For this reason, RF would be expected to result in all these cases.



Crucially, as extensively discussed above, RF in USIDs is triggered only by a subset of BE auxiliaries, namely by those of the singular paradigm (SUM >

<sup>&</sup>lt;sup>17</sup> The nasal –M in SUM is assumed to have turned into an –N in spoken Latin (cf. Tekavčić (1980)). Moreover, Meyer-Lübke (1894), Rohlfs (1969) and Tekavčić (1980) claim that 2sg BE in the evolution from Latin to Italo-Romance admitted an s, or the syllable *se*, before the Latin root e of ES. The authors claim that occurrence of s in this case is the result of an extension of s from SON to ES, due to a process of analogy. The same mechanism has been thought to apply in the case of 2pl BE, where the extension of s from SUMUS to ESTIS has led to the form \*SETIS. According to Vincent (1982), 2sg BE in the present indicative derives from the Latin present subjunctive \*SIS.

SON > **so** + **RF** versus SUMUS/SIMUS > **səmə** - **RF**)<sup>18</sup>. One would postulate that the absence of RF in the case of plural BE is to be attributed to the type of phonological feature(s) expressed on the *ultima*. This is to say that the presence of a voiceless alveolar fricative consonant, namely an [s], in word-final position would not have led to RF. However, the phonological representation in (46b) suggests that this is far from being true, since 2sg BE, which derives from \*S(E)ES, inevitably triggers RF regardless of the phonological features expressed on the *ultima*.

Furthermore, the triggering of RF by a word that allowed an *s* in word-final position is widely attested in Southern Italo-Romance, as shown in (47).

(47)	Latin	Apulo-Barese
a.	PLUS	> <b>ccu l'l</b> (o/u)ŋg(ə)
	more	more long
b.	NOS/VOS we/you.pl	> nu/vu (p)par'lə:m(ə)/ (p)par'lə:t(ə) we/you.pl speak.pr.1pl/speak.pr.2pl

As Loporcaro (1988) points out, RF triggered by final *s* is not as widespread as that triggered by final *t*. While RF triggered by –T seems to be found in many USIDs and has a consistent geographic distribution, RF triggered by – S occurs sporadically in USIDs and is mostly attested in Sardinian dialects. Contini (1986: 531), with reference to the dialect of Nughedo, spoken in north-western Logudoro, documents cases like [**sɔ p'p**oxxɔzɔ] (the.pl.masc. pigs) and [**sa d'd**ɛntɛzɛ] (the.pl.fem. teeth), where the phonological representation of the plural determiners corresponds to [sɔs] and [sas], respectively. In Sardinian dialects, RF triggered by –S can also occur after paroxytones, as in the case of ['tempu **m'm**alu] ('bad weather') (cf. Loporcaro (1988): 358), where the noun *tempu* possesses the requirement for licensing RF. Given these facts, it is natural to think that the triggering of RF is not strictly conditioned by the type of phonological feature expressed on the *ultima*. In fact, the occurrence of –S is not an obstacle for the

<sup>&</sup>lt;sup>18</sup> Recall that RF in USIDs can be triggered by paroxytonic words (cf. (23): Bitonto [Apulo-Barese] **kuss/ku:r p'p**ə:n). For this reason, the absence of RF in the case of a plural BE auxiliary would not hinge on the fact that RCA operated only with monosyllabic words ending in a consonant, but also with paroxytonic words that allow a consonant in final position.

application of RCA in Sardinian, and for this reason RF is found in this context<sup>19</sup>.

Repetti's (2001) Moraic Theory is also unable to account for the absence of RF after plural BE. Under that theory, it is unclear why both the segment *s* in word-final position and the mora originally associated with it were deleted in the case of plural BE, when after 2sg BE, only the segment was deleted, with the mora remaining active and triggering RF.

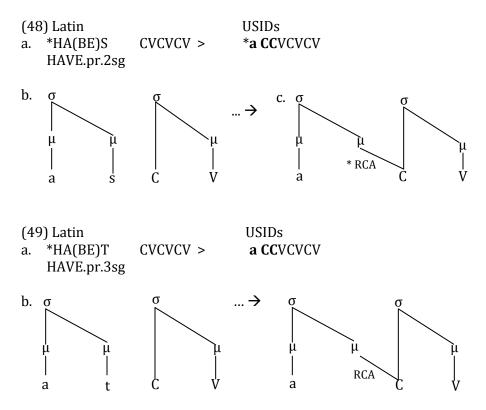
## 3.3.2 HAVE

Present indicative HAVE in Latin, in the same way as BE, allowed a consonant in word-final position, both in the singular and in the plural paradigm, with the exception of 1sg HAVE (Lat. HABEO). Crucially, one group of CSIDs, as observed in §3.2, displays a pattern whereby RF is triggered only by 3sg HAVE and is not found elsewhere<sup>20</sup>. This situation is

<sup>&</sup>lt;sup>19</sup> RF in some Sardinian dialects is also attested for words that allowed an *r* in final position: ['battɔ **k'k**anɛzɛ] (four dogs.pl), where *batto* derives from Latin QUATTUOR. Furthermore, Rindler-Schjerve (1984) observes that Sardinian is moving towards a system where total assimilation of final *s* is spreading among the younger generations.

<sup>&</sup>lt;sup>20</sup> At this point, we propose that a comparison is required between the occurrence of RF triggered by 3sg HAVE on the one hand, and RF triggered by lexical verbs on the other. In fact, as Lausberg (1939) observes, the presence of RF after 3sg lexical verbs is attested in a group of dialects spoken in northern Calabria-southern Lucania (Lausberg area): Colobraro [Southern Lucano] i. kándətə na kandzön  $\sim$  ii. kándə nna kandzón –sing.pr.3sg a song- '(s)he sings a song' (cf. Fanciullo, 1997). The same phenomenon is also found in Sardinian: iii. 'kantað una yan'tone sing.pr.3sg a song- '(s)he sings a song' ~ iv. 'kanta t'tɔrra -sing.pr.3sg again- '(s)he sings again' (cf. Molinu, 1992). As the minimal pairs in i.-iv. illustrate, RF is absent when the 3sg lexical verb displays a full form, and present when the ending expressing 3sg is absent. Moreover, Silvestri (2007) observes that in the variety of Verbicaro, spoken in northern Calabria, the alternation between a 3sg lexical verbs with a [õə] ending and one without, thus allowing RF, is connected to a different interpretation of the sentence (cf. 'trɛ:məðə ðu 'frwiddə versus 'trɛma ddu 'frwiddə -tremble.3sg from cold '(s)he trembles because of the cold'). In the former case, namely when the ending  $[\delta]$  is realized, the verb is emphasized, whereas in the latter case, namely when RF is found, the emphasis in on the PP-adjunct.

given in (48) and (49), where the triggering versus non-triggering of RF is shown by means of 2 and 3sg HAVE, respectively.



Following Schuchardt, Hall and Loporcaro, we might expect to find RF both in the case of 2 and 3sg HAVE. In fact, both auxiliaries stem from their Latin counterparts \*HA(BE)S and \*HA(BE)T, respectively, and RF is realized only in the latter case and not in the former.

In the previous subsection (cf. §3.3.1), we observed that RF can be triggered by those words that allowed the consonant *s* in word-final position (cf. (47)). This evidence suggests that the presence versus absence of RF in (48) and (49), respectively, cannot be attributed to the type of phonological feature expressed on the *ultima*. Furthermore, the occurrence of RF with 3sg HAVE cannot be exclusively linked to the presence of segment *t* realized at word-final position. In fact, in a large number of CSIDs, neither

monosyllabic and paroxytonic 3sg verbs trigger RF (cf. Mola di Bari: ('kudd) na m 'də nudd a m'mɛ -(he) not IC.1sg give.pr.3sg nothing to me 'he doesn't give me anything', where ['də] < Lat. DAT; ('kudd) 'kand tutt 'kaus -(he) sing.pr.3sg every thing 'he sings everything', where ['kand] < Lat. CANTAT). The absence of RF after a 3sg lexical verb versus its presence after 3sg HAVE suggests that the phonological approach attributing RF exclusively to the RCA rule is inappropriate.

Moreover, the Moraic Theory  $\dot{a}$  *la* Repetti also cannot explain why in the case of 2sg HAVE both the segment –S and the mora originally associated with it were deleted at a certain stage in the diachronic evolution of the language, whereas in the case of 3sg HAVE, conversely, this mechanism was not at play.

# 3.3.3 The interplay between RF and BE/HAVE

In some NSIDs, specifically those spoken in the transitional corridor between USIDs and CIDs, RF is found with 1 and 2sg BE, but is absent after 3sg HAVE. This is the case of the Amandola dialect in (50), previously illustrated in (3).

(50) Amandola (Southern Marchigiano)

a.	<b>SO</b>	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.1sg called/spoken
	si	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.2sg called/spoken
	а	ca'mato/par'lato	H.pr.3 called/spoken
b.	simo	ca'mato/par'lato	B.pr.1pl called/spoken
	sete	ca'mato/par'lato	B.pr.2pl called/spoken
			[Manzini & Savoia (2005), II: 684]

In contrast, in the Apulo-Barese variety of Locorotondo, spoken in the Itria valley, 1sg BE does not function as an RF-trigger. In this dialect, RF is found only after 3sg HAVE, as the paradigm in (51) shows.

(51) Locorotondo (Apulo-Barese)

· ·	,		
a.	SD	'dittə	B.pr.1sg said
	а	'dittə	H.pr.2sg said
	а	<b>d'd</b> ittə	H.pr.3sg said
b.	εmə	'dittə	H.pr.1pl said
	εte	'dittə	H.pr.2pl said
	o:nə	'dittə	H.pr.2pl said

If we were to consider RCA as the phonological rule feeding RF, we would claim that:

- i. In (50), only the segments -M/-N and -S on 1 and 2sg BE, respectively, are assimilated to the next consonant. -T on 3sg HAVE, on the other hand, does not undergo this process;
- ii. In (51), only the segment –T on 3sg HAVE is assimilated to the next consonant. On the other hand, –M/-N on 1sg BE and –S on 2sg HAVE, respectively, do not undergo this process.

The historical grammars of Italo-Romance attest that –T and –M were lost earlier than –S (cf. Tekavčić (1980), I: 200). While –M, which is claimed to have become –N, was maintained in some prepositions and 1sg BE (cf. CUM > CON (with), SUM > SON), the fall of –T applied in all cases and no traces of –T are found after 79 A.D. (cf. Tekavčić (1980), I: 207). After the loss of –T and –M/-N, -S was also lost, or turned into –J (cf. Standard Italian/Romanian (*h*)*ai* (HAVE.pr.2sg)), although it was maintained in some cases (cf. Spanish/NIDs (*h*)*as* (HAVE.pr.2sg)).

Taking these facts into account, the absence of RF after 3sg HAVE in the dialect of Amandola might be claimed to derive from the absence of the application of RCA at word-boundaries during the period in which –T was lost. It could further be assumed that RCA was productive during the period in which –M/-N and –S were susceptible to loss, and the presence of RF in this case might be attributed to this fact.

If this were true, we would not be able to explain why 3sg HAVE in (45), which derives from \*HA(BE)T, inevitably triggers RF, whereas 2sg HAVE, as well as 1sg BE, does not undergo this process.

With this in mind, we propose an alternative solution to capture the mechanism of RF triggered by present perfect auxiliaries in USIDs. More concretely, we propose that a strict phonological account, which relies on the reorganization of segmental units in word-final position triggering RF in the case of present perfect auxiliaries in modern USIDs, should be disregarded.

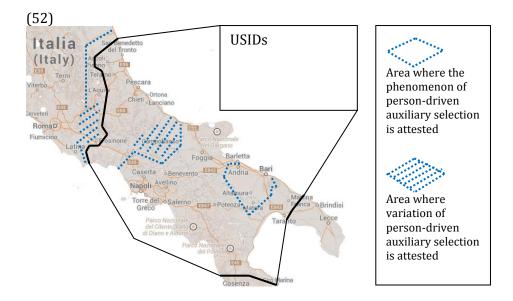
Our hypothesis, instead, consists in considering RF as a phonological device activated only in restricted circumstances, namely when a particular form of auxiliary, i.e. BE or HAVE, is endowed with a particular person feature specification. As the next section will show, USIDs are affected by a specific mechanism of auxiliary selection, whereby the choice of BE/HAVE in the present perfect is determined by the person feature specification encoded on the sentential subject. We will see that the type of auxiliary selected for a specific person in the paradigm determines the application of RF.

## 4. Auxiliary selection in USIDs

In contrast to other Romance languages, such as Standard Italian and French, where the selection of active BE/HAVE in compound tenses depends on the argument structure or *Aktionsart* of the participle (cf. Perlmutter, 1978; Burzio, 1986; Hubert & Rindler-Schjerve, 1987; Chierchia, 1989; Legendre, 1989; Van Valin, 1990; Loporcaro, 1998; Sorace, 2000; a.o.), a subset of USIDs, together with a group of dialects spoken in central Italy, display a special strategy for selecting present perfect auxiliaries. In the linguistic area which stretches from the central-southern Marche up to the province of Bari, in the east, and from central-southern Lazio up to Sannio and Lucania, in the west<sup>21</sup>, BE/HAVE auxiliary alternation seems to hinge upon the person feature specification encoded on the sentential subject. In these dialects, the selection of the auxiliary

<sup>&</sup>lt;sup>21</sup> 'This area mainly stretches along the Adriatic coast, from the southern Marche (the province of Ascoli) up to Abruzzo, and shrinks in the Peligna region and Molise, before irregularly reemerging in northern Apulia, more specifically in the province of Bari. The phenomenon also spreads west through the Aquilano-Reatino area, narrowing and excluding Umbria and Campania (except northern Campania). Moreover, the phenomenon is found in southern Lazio, including the provinces of Latina and Frosinone' (Translated from Cocchi 1995: 118).

patterns in such a way that BE is generally selected by 1 and 2 person subjects and HAVE by 3 person subjects. This very well studied phenomenon, which many linguists and dialectologists have referred to in recent years as person-driven auxiliary selection (cf. Cocchi, 1995; Ledgeway, 2000; Manzini & Savoia, 2005; D'Alessandro & Roberts, 2010; Legendre, 2010; Loporcaro, 2010; a.o.), seems to be attested only in these Romance dialects and is unattested elsewhere (cf. D'Alessandro & Roberts (2010: 46-47))<sup>22</sup>.



A large number of USIDs, however, are characterized by a mixed system of auxiliary selection, whereby the canonical BE/HAVE alternation thought to depend on the person feature specification of the sentential subject is attested only with accusative and unergative participles. With an unaccusative participle BE is the form selected for the whole paradigm.

<sup>&</sup>lt;sup>22</sup> Ledgeway (2012) observes that the phenomenon of person-driven auxiliary selection is also found in a set of dialects spoken in and around Olot, in the province of Girona, in northern Catalonia. Moreover, as Manzini & Savoia (2005) and D'Alessandro & Roberts (2010) point out, the person-based auxiliary selection is also attested for some dialects spoken in north-eastern Piedmont.

In the literature (cf. Manzini & Savoia, 2005; Legendre, 2010; a.o.), it has been pointed out that the selection of present perfect auxiliaries in USIDs is subject to substantial microvariation<sup>23</sup>. In what follows, we will offer an overview of this phenomenon.

## 4.1 Pattern one: BE with all persons

A small number of dialects spoken in the southern Marche, as well as many dialects spoken in and around Sannio, disallow the canonical BE-HAVE alternation sensitive to the person feature specification encoded on the sentential subject. Here, BE is the only form attested in the paradigm.

## 4.1.1 Lack of RF

A large number of dialects selecting BE throughout the paradigm never allow RF, as (53) and (54) demonstrate<sup>24</sup>.

<sup>&</sup>lt;sup>23</sup> The BE-HAVE alternation dependent on the type of person information expressed on the sentential subject is generally found with present perfect auxiliaries and excluded in the case of pluperfect auxiliaries. In the latter case, USIDs tend to choose only one form of auxiliary, either BE or HAVE, and no alternation of these two forms is attested within the same paradigm. The same situation is found with auxiliaries in the counterfactual. Only in some Abruzzese dialects, spoken along the Adriatic coast, does the person feature of the sentential subject influence the choice of the auxiliary in the pluperfect (Arielli [Eastern Abruzzese] **so**' ve/ **si**' ve –B.pr.1sg H.past/ B.pr.2sg H.past- '1/you had seen' versus **a**' ve viste –H.pr.3 H.past- '(s)he had seen' (cf. D'Alessandro & Ledgeway (2010): 205-206). For an overview of these data, see Manzini & Savoia (2005), II.

<sup>&</sup>lt;sup>24</sup> Giammarco (1973) argues that BE combining with transitive and unergative participles stems from the perfect of Latin deponent verbs. These verbs, which possess passive morphosyntax, required BE as a perfective auxiliary (cf. *proficiscor* 'I set out' versus *profectus sum* 'I have set out'). The presence of BE is also found in resultative constructions (*cenatusest* 'he has dined (and therefore he is full)'). Vincent (1982), on the other hand, claims that BE, which was the auxiliary with deponents in Latin, became restricted to deponents with patient/theme subjects in Late Latin and then to all unaccusatives. At the same time, Latin possessive constructions composed of HAVE followed by an NP and modified by a past participle were then reanalyzed as perfective constructions. Following Giammarco,

(53) Pescolanciano (Molisano)

(De	J I escoluir		
a.	soŋgə	man'nætə/mə'nu:tə	B.pr.1sg eaten/come
	si	man'nætə/mə'nu:tə	B.pr.2sg eaten/come
	ε	man'nætə/mə'nu:tə	B.pr.3sg eaten/come
b.	semə	man'nætə/mə'nu:tə	B.pr.1pl eaten/come
	setə	man'nætə/mə'nu:tə	B.pr.2pl eaten/come
	suə(nnə)	man'nætə/mə'nu:tə	B.pr.3pl eaten/come
			[Manzini & Savoia (2005), II: 759]
(54	4) Offida (So	outhern Marchigiano)	
a.	SO	dər'mitə/və'nu:tə	B.pr.1sg slept/come
	je	dər'mitə/və'nu:tə	B.pr.2sg slept/come
	3	dər'mitə/və'nu:tə	B.pr.3 slept/come
b.	semə	dər'mitə/və'nu:tə	B.pr.1pl slept/come
	setə	dər'mitə/və'nu:tə	B.pr.2pl slept/come
		-	[Manzini & Savoia (2005), II: 760]

# 4.1.2 Presence of RF

Differently from (53) and (54), the dialect in (55) displays RF triggered by those BE formatives that occur in the singular paradigm. (55) corresponds to the paradigms in (2) and (20).

(55)

Poggio Imperiale (Apulo-Daunian Appennines)

a.	SD	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.1sg called/spoken
	si	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.2sg called/spoken
	3	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.3sg called/spoken
b.	simə	ca'matə/par'latə	B.pr.1pl called/spoken
	sitə	ca'matə/par'latə	B.pr.2pl called/spoken
	sonnə	ca'matə/par'latə	B.pr.3pl called/spoken
			[Manzini & Savoia (2005), II: 720-721]

Tuttle (1986) claims that 1 and 2sg BE used with transitive and unergative participles derive from deponent verbs, and that later the auxiliary came to be the marker of person.

# 4.2 Pattern two: 1 and 2 person BE versus 3 person HAVE

The situation in which BE is the auxiliary selected with a 1 and 2 person subject, and HAVE with a 3 person subject is the most common pattern attested in Southern Marchigiano, Eastern Abruzzese and Southern Laziale.

## 4.2.1 Lack of RF

Most dialects belonging to this group feature the absence of RF in the singular paradigm. This situation is shown in (56)-(58).

C C	,	C C	0 )
a.	SD	'vi∫tə/dər'mi:tə/ve'nu:tə	B.pr.1sg seen/slept/come
	si	'vi∫tə/dər'mi:tə/ve'nu:tə	B.pr.2sg seen/slept/come
	∫emə	'vi∫tə/dər'mi:tə/ve'nu:tə	B.pr.1pl seen/slept/come
	∫etə	'vi∫tə/dər'mi:tə/ve'nu:tə	B.pr.2pl seen/slept/come
b.	a	'vi∫tə/dər'mi:tə/ve'nu:tə	H.pr.3 seen/slept/come
			[Manzini & Savoia (2005), II: 682-683]

(57) San Vittore del Lazio	(Southern Laziale)
----------------------------	--------------------

a.	soŋgə	la'va:tə/rum'mitə/mə'nu:tə	B.pr.1sg washed/slept/come
	∫i	la'va:tə/rum'mitə/mə'nu:tə	B.pr.2sg washed/slept/come
	semmə	la'va:tə/rum'mitə/mə'nu:tə	B.pr.1pl washed/slept/come
	se:tə	la'va:tə/rum'mitə/mə'nu:tə	B.pr.2pl washed/slept/come
b.	а	la'va:tə/rum'mitə/mə'nu:tə	H.pr.3.sg washed/slept/come
	annə	la'va:tə/rum'mitə/mə'nu:tə	H.pr.3.pl washed/slept/come
			[Manzini & Savoia (2005), II: 703]

(58) Canosa Sannita (Eastern Abruzzese)

a.	SD	man'natə/mi'nutə	B.pr.1sg eaten/come
	si	man'natə/mi'nutə	B.pr.2sg eaten/come
	semə	man'natə/mi'nutə	B.pr.1pl eaten/come
	setə	man'natə/mi'nutə	B.pr.2pl eaten/come
b.	а	man'natə/mi'nutə	H.pr.3. eaten/come
			[Manzini & Savoia (2005), II: 687]

Given the data in (56)-(58), we can propose the following generalization:

(59) *Generalization IV* (tentative version)

- A 1 and 2 person (singular and plural) subject is responsible for the selection of BE as an active auxiliary in the present perfect in a large number of USIDs. In these dialects, BE is the prototypical 1 and 2 person (singular and plural) auxiliary combining with a past participle of any kind;
- A 3 person (singular and plural) subject is responsible for the selection of HAVE as an active auxiliary in the present perfect in a large number of USIDs. In these dialects, HAVE is the prototypical 3 person (singular and plural) auxiliary combining with a past participle of any kind.

# 4.2.2 The presence of RF

Although many dialects selecting BE and HAVE as 1-2 and 3 person auxiliary, respectively, do not allow any instances of RF, a small number of dialects, mostly spoken at the border between NSIDs and CIDs, as well as some Apulo-Barese dialects, display RF that is triggered by (a subset of) auxiliaries in the singular. This situation is given in (60) and (61), where (60) is paradigm from the Amandola dialect previously presented in (3) and (50).

(60) Amandola (Southern Marchigiano)

a.	<b>SO</b>	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.1sg called/spoken
	si	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.2sg called/spoken
	а	ca'mato/par'lato	H.pr.3 called/spoken
b.	simo	ca'mato/par'lato	B.pr.1pl called/spoken
	sete	ca'mato/par'lato	B.pr.2pl called/spoken
			[Manzini & Savoia (2005), II: 684]

(°-		(	
a.	SD	<b>v'v</b> ɛistə/ <b>dd</b> ər'm૪:tə	B.pr.1sg seen/slept
	si	<b>v'v</b> ɛistə/ <b>dd</b> ər'm૪:tə	B.pr.2sg seen/slept
	а	<b>v'v</b> ɛistə/ <b>dd</b> ər'mɣ:tə	H.pr.3sg seen/slept
b.	səmə	'vɛistə/dər'mɤ:tə	B.pr.1pl seen/slept
	sətə	'vɛistə/dər'mɤ:tə	B.pr.2pl seen/slept
	an(n)ə	'vɛistə/dər'mɤ:tə	H.pr.3pl seen/slept

In (60), we see that RF is triggered exclusively by 1 and 2sg BE, whereas 3sg HAVE does not trigger RF. In (61), conversely, the triggering of RF is restricted to both BE and HAVE in the singular paradigm. It should be noted that the dialects in (60) and (61) are spoken in geographically distinct areas: the dialect of Amandola is spoken in the transitional area between NSIDs and CIDs, whereas the dialect of Bari Vecchia is spoken in central Apulia. From this observation, the following generalization can be proposed:

# (62) Generalization V (tentative version)

- RF can be triggered by 1 and 2sg BE, and not by 3sg HAVE, in those transitional dialects spoken in the northern USID region.
- RF can be triggered by 1 and 2sg BE, as well as by 3sg HAVE, in those transitional dialects spoken in the southern USID region.

# 4.3 Pattern three: 1 and 2sg BE versus HAVE elsewhere

The choice of BE as 1 and 2sg auxiliary and HAVE elsewhere is attested in many dialects spoken in western Abruzzo, northern Campania and central Apulia. In these dialects, 1 and 2sg BE commonly trigger RF.

(63) Popoli (Western Abruzzese)

	<i>, , , ,</i>	,	
a.	SO	<b>dd</b> ur'moitə	B.pr.1sg slept
	si	<b>dd</b> ur'moitə	B.pr.2sg slept
	а	dur'moitə	H.pr.3sg slept
b.	(a'v)emmə	dur'moitə	H.pr.1pl slept
	ave:tə	dur'moitə	H.pr.2pl slept
	annə	dur'moitə	H.pr.3pl slept
			[Manzini & Savoia (2005), II: 688-689]

(64) Bisceglie (Apulo-Barese)			
a.	SD	<b>f</b> 'fatt	B.pr.1sg done
	si	<b>f</b> 'fatt	B.pr.2sg done
	а	<b>f</b> 'fatt	H.pr.3sg done
b.	emm	'fatt	H.pr.1pl done
	avət	'fatt	H.pr.2pl done
	'onnə	'fatt	H.pr.3pl done
b.	<b>a</b> emm avət	<b>f'f</b> att 'fatt 'fatt	H.pr.3sg done H.pr.1pl done H.pr.2pl done

In the dialect of Popoli, RF is triggered only by 1 and 2sg BE, and not by 3sg HAVE. Like the dialect of Amandola in (60), this dialect is spoken in the transitional area between NSIDs and CIDs. Conversely, the Apulian dialect spoken in Bisceglie, like that of Bari Vecchia in (61), displays a pattern whereby RF is always triggered in the singular paradigm. The dialect of Bari Vecchia and Bisceglie are spoken in the same geolinguistic area.

# 4.4 Pattern four: 1 or 2sg BE versus HAVE elsewhere

A large number of dialects spoken in Molise, northern Campania, central/northern Apulia and Lucania generally select BE with either 1 or 2 singular subjects. In these dialects, the 3 person auxiliary is generally HAVE, which is also found throughout the plural paradigm<sup>25</sup>. The dialects in (65) and (66) illustrate this pattern.

<sup>&</sup>lt;sup>25</sup> In many dialects spoken in Sannio, as well as in Central Apulia and Campania, the 3sg auxiliary is not HAVE, but BE: Bitetto [Apulo-Barese] a<sub>JJ</sub>∂/ a/ ε ca'mɨt∂ - H.pr.1sg/ H.pr.2sg/ B.pr.3sg called (Manzini & Savoia (2005), II: 725); Rutigliano [Apulo-Barese] sɔ/ a/ ε (c)ca'm∂:t∂ -H.pr.1sg/ H.pr.2sg/ B.pr.3sg called. In

a.	εjə	ca'ma:tə/par'latə	H.pr.1sg called/spoken
	si	ca'ma:tə/par'latə	B.pr.2sg called/spoken
	а	ca'ma:tə/par'latə	H.pr.3sg called/spoken
b.	emə	ca'ma:tə/par'latə	H.pr.1pl called/spoken
	etə	ca'ma:tə/par'latə	H.pr.2pl called/spoken
	annə	ca'ma:tə/par'latə	H.pr.3pl called/spoken
			[Manzini & Savoia (2005), II: 714]

(66	) Conversand	o (Apulo-Barese)	
a.	SO	<b>f'f</b> att	B.pr.1sg done
	а	'fatt	H.pr.2sg done
	а	<b>f</b> 'fatt	H.pr.3sg done
b.	am	'fatt	H.pr.1pl done
	avet	'fatt	H.pr.2pl done
	an	'fatt	H.pr.3pl done

In (65), RF is never attested. In (66), on the other hand, RF is triggered only by 1sg BE and 3sg HAVE. 2sg HAVE is bare and no RF is triggered by this element.

# 4.5 Pattern five: HAVE with all persons

In a large number of CSIDs, including dialects spoken in central Apulia, central and lower Campania and Lucania, as well as in northern Calabria, RF is triggered by 3sg HAVE<sup>26</sup>. In these dialects, 2sg HAVE is bare and never

Torcolacci (2013), it is argued that the selection of BE as a 3sg auxiliary derives from the fact that 3p subjects, differently from 1 and 2p subjects, are semantically non-agentive (cf. Silverstein, 1976; Dixon, 1994). The lack of an agentive feature on these subjects would require the auxiliary HAVE, which is the prototypical 3sg auxiliary in USIDs, to be marked by means of BE.

<sup>&</sup>lt;sup>26</sup> According to Bentley & Eythórsson (2001), HAVE was the only auxiliary in the present perfect in the older stages of southern Italo-Romance. At a certain point in diachrony, the spread of BE occurred, triggered by a phonological factor, namely the presence of a syncretic exponent selected for 2sg and 3sg HAVE (cf. Rohlfs,

triggers  $RF^{27}$ . The dialects in (67)-(69), given in (36)-(38), illustrate this situation.

(67) Mola di Bari (Apulo-Ba	rese
-----------------------------	------

a.	a <del>jj</del> /i	'fatt/par'tu:t	H.pr.1sg done/left
	a (I) -	'fatt/par'tʉ:t	H.pr.2sg done/left
,	(')a	<b>f'f</b> att/ <b>pp</b> ar't <del>u</del> :t	H.pr.3sg done/left
b.	am	'fatt/par'tʉ:t	H.pr.1pl done/left
	a'vet	'fatt/par'tʉ:t	H.pr.2pl done/left
	an	'fatt/par'tʉ:t	H.pr.3pl done/left
(68	3) Airola (C	Central Campanian)	
a.	addya	'vistə/ve'nu:tə	H.pr.1sg seen/come
	a	'vistə/ve'nu:tə	H.pr.2sg seen/come
	a	<b>v'v</b> istə/ <b>vv</b> e'nu:tə	H.pr.3sg seen/come
b.	ammu	'vistə/ve'nu:tə	H.pr.1pl seen/come
ы.	atə	'fatt/ve'nu:tə	H.pr.2pl seen/come
	annə	'fatt/ve'nu:tə	H.pr.3pl seen/come
	anno		n.pr.spr seen/come
(69) Albidona (Northern Calabrian)			
a.	dӡә	ɣa'βa:tə/βə'nu:tə	H.pr.1sg washed/come
	3	ya'βa:tə/βə'nu:tə	H.pr.2sg washed/come
	3	<b>gg</b> a'βa:tə/ <b>bb</b> ə'nu:tə	H.pr.3sg washed/come
b.	mə	ya'βa:tə/βə'nu:tə	H.pr.1pl washed/come
	a'βəsə	ya'βa:tə/βə'nu:tə	H.pr.2pl washed/come
	nə	ya'βa:tə/βə'nu:tə	H.pr.3pl washed/come
	110	ja parto, po narto	[Manzini & Savoia (2005), II: 784]

1969). In the light of this, the authors claim that BE was introduced as an auxiliary for 2sg (cf. Hastings, 1996: 34), before spreading to both 1sg and 1 and 2pl, being thus reanalyzed as a verbal form marking person feature.

<sup>27</sup> RF triggered by 3sg HAVE is also attested for all ESIDs, including Salentino, central and southern Calabrian and Sicilian. 3sg HAVE also triggers RF in Sardinian and Corsican. In these dialects, however, 2sg HAVE is not bare, but rather expresses reference to 2sg by means of a morpho-phonological marker realized at word-final position: Rocca Imperiale [Northern Calabria]: eja la'va:ta -H.pr.2sg washed versus e lla'va:ta -H.pr.3sg washed (Manzini & Savoia (2005), II: 790).

Given the paradigms in (67)-(69), the following generalization can be obtained:

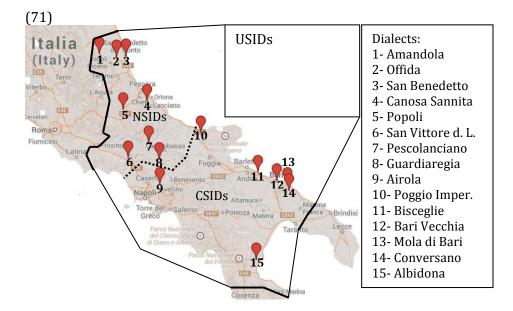
(70) Generalization VI (tentative version)

• RF is triggered exclusively by 3sg HAVE, and not by 2sg HAVE, in a group of CSIDs.

The generalization in (70) can be also extended to dialects that pattern in the same way as (66), where BE is selected as 1sg auxiliary and HAVE is the auxiliary selected with a 2 and 3sg subject.

# 5. Summary and conclusions

The map in (71) shows the geographic location of the dialects presented in the previous section.



Two types of split(ting): RF and auxiliary selection in Southern Italian dialects 55

So far in this chapter, we have observed that USIDs show a huge microvariation with regard to both the selection of present perfect auxiliaries and the distribution of RF triggered by these items. The typology of auxiliary selection in the present perfect within USIDs (cf. §4.1.-§4.5.) is summarized in the table in (72).

(72)		
Dialect	BE	HAVE
Pattern I (cf. (53)-(55))	All persons	
Pattern II (cf. (56)-(58) & (60)-(61))	$1^{st}$ and $2^{nd}$ (sg and pl)	3 <sup>rd</sup> (sg and pl)
Pattern III (cf. (63) & (64))	1 <sup>st</sup> and 2 <sup>nd</sup> (sg)	$3^{rd}$ (sg and pl), $1^{st}$ and $2^{nd}$ (pl)
Pattern IV (cf. (65) & (66))	Either 1 <sup>st</sup> or 2 <sup>nd</sup> (sg)	Either 1 <sup>st</sup> or 2 <sup>nd</sup> (sg), 3 <sup>rd</sup> (sg and pl), 1 <sup>st</sup> and 2 <sup>nd</sup> (pl)
Pattern V (cf. (67)-(69))		All persons

[Adapted from Torcolacci (2011); Migliori & Torcolacci (2012)]

Furthermore, (73) shows how BE/HAVE forms are distributed in the present perfect paradigms of the dialects presented in section 4. The occurrences of RF triggered by these auxiliaries are marked in grey.

(70)

(73)						
Dialect	Singular		Plural			
Pescolanciano (53)	BE	BE	BE	BE	BE	BE
Offida (54)	BE	BE	BE	BE	BE	BE
Poggio Imper. (55)	BE	BE	BE	BE	BE	BE
S. Benedetto (56)	BE	BE	HAVE	BE	BE	HAVE
S. Vittore d. L. (57)	BE	BE	HAVE	BE	BE	HAVE
Canosa San. (58)	BE	BE	HAVE	BE	BE	HAVE
Amandola (60)	BE	BE	HAVE	BE	BE	HAVE
Bari Vecchia (61)	BE	BE	HAVE	BE	BE	HAVE
Popoli (63)	BE	BE	HAVE	HAVE	HAVE	HAVE
Bisceglie (64)	BE	BE	HAVE	HAVE	HAVE	HAVE
Guardiaregia (65)	HAVE	BE	HAVE	HAVE	HAVE	HAVE
Conservano (66)	BE	HAVE	HAVE	HAVE	HAVE	HAVE
Mola di Bari (67)	HAVE	HAVE	HAVE	HAVE	HAVE	HAVE
Airola (68)	HAVE	HAVE	HAVE	HAVE	HAVE	HAVE
Albidona (69)	HAVE	HAVE	HAVE	HAVE	HAVE	HAVE

On the basis of the empirical evidence summarized in the table in (73), we have proposed some generalizations (tentative versions), which are given below:

A. *Generalization I* (cf. (24))

- In USIDs, present perfect auxiliary BE in the active voice possesses the property of triggering RF in the singular paradigm;
- In USIDs, present perfect auxiliary BE in the active voice does not possess the property of triggering RF in the plural paradigm.

B. Generalization II (cf. (32))

- In a subset of CSIDs, present perfect auxiliary BE in the active voice obligatorily triggers RF in the singular paradigm only if the past participle that follows is stressed on the first syllable;
- In a subset of CSIDs, present perfect auxiliary BE in the active voice optionally triggers RF in the singular paradigm when followed by a past participle not endowed with stress on the first syllable.

Two types of split(ting): RF and auxiliary selection in Southern Italian dialects 57

C. Generalization III (cf. (44))

- In a large number of CSIDs, 3sg HAVE is the only form in the paradigm that triggers RF;
- In (all) NSIDs, as well as in a group of CSIDs spoken in the area of transition with NSIDs, no HAVE auxiliaries trigger RF.
- D. Generalization IV (cf. (59))
  - A 1 and 2 person (singular and plural) subject is responsible for the selection of BE as an active auxiliary in the present perfect in a large number of USIDs. In these dialects, BE is the prototypical 1 and 2 person (singular and plural) auxiliary combining with a past participle of any kind;
  - A 3 person (singular and plural) subject is responsible for the selection of HAVE as an active auxiliary in the present perfect in a large number of USIDs. In these dialects, HAVE is the prototypical 3 person (singular and plural) auxiliary combining with a past participle of any kind.
- E. Generalization V (cf. (62))
  - RF can be triggered by 1 and 2sg BE, and not by 3sg HAVE, in those transitional dialects spoken in the northern USID region;
  - RF can be triggered by 1 and 2sg BE, as well as by 3sg HAVE, in those transitional dialects spoken in the southern USID region.
- F. Generalization VI (cf. (70))
  - RF is triggered exclusively by 3sg HAVE, and not by 2sg HAVE, in a group of CSIDs.

The list of generalizations above has led us to conclude that RF triggered by present perfect auxiliaries in USIDs is a phonological mechanism that is bound to the phenomenon of person-driven auxiliary selection. More specifically, we have observed that the triggering of RF by present perfect BE and HAVE is highly influenced by the type of person (and number) feature encoded on these two auxiliaries. For this reason, we have

considered the strictly phonological approaches outlined in §2 as untenable in any explanation of the 'free' distribution of RF triggered by present perfect BE and HAVE. In fact, these auxiliaries can trigger RF only if they bear a specific person feature specification and not if they are endowed with a given phonological representation that enables RF to be instantiated. In the next chapter, we will provide an analysis that can explain why RF can be triggered only by those BE/HAVE auxiliaries endowed with a specific type of person feature.

# RF and the overt marking of $\phi$ features

#### 1. Introduction

As discussed in chapter 2, the triggering of RF by present perfect auxiliaries in USIDs poses a serious challenge to the canonical theories of RF, which assume that this phenomenon derives from purely phonological requirements. Indeed, we have abandoned the idea that the triggering of RF by present perfect BE-HAVE auxiliaries in USIDs exclusively results from the phonological process of the regressive consonant assimilation (or RCA) rule active at word boundaries that is said to have taken place in the diachronic evolution from Latin to Southern Italo-Romance (cf. Schuchardt, 1874; Hall, 1964; Loporcaro, 1997b; a.o.). Furthermore, the idea adopted by Repetti (1991), in which she argues that the reorganization of segmental material at word-final position of a word feeds RF, has turned out to be insufficient, since it cannot justify the 'free' distribution of RF triggered by present perfect auxiliaries in the dialects examined in the previous chapter. In fact, the empirical evidence provided in the previous chapter has shown that only a subset of present perfect auxiliaries can license RF. It is usually 1 and 2sg present perfect BE that trigger RF in a group of CSIDs, as well as in some dialects spoken in the transitional area between NSIDs and CIDs (cf. (1)). Moreover, RF is obligatorily triggered only by 3sg present perfect HAVE in the central and southern CSID region (cf. (2)), and is not found elsewhere in the paradigm. These dialects, as explored in chapter 2, are spoken in the geolinguistic area in which the selection of present perfect auxiliaries is often sensitive to the person feature specification of the sentential subject (cf. Cocchi, 1995; Ledgeway, 2000; Manzini & Savoia, 2005; D'Alessandro & Roberts, 2010; Legendre, 2010; Loporcaro, 2010; a.o.).

#### (1) Amandola (Southern Marchigiano)

-		
SO	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.1sg called/spoken
si	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.2sg called/spoken
а	ca'mato/par'lato	H.pr.3 called/spoken
simo	o ca'mato/par'lato	B.pr.1pl called/spoken
sete	ca'mato/par'lato	B.pr.2pl called/spoken
		[Manzini & Savoia (2005), II: 684]

(2) Mola d	i Bari (Apulo-Barese)	
a <del>jj</del>	'fatt/par'lə:t/par'tʉ:t	H.pr.1sg done/spoken/left
а	'fatt/par'lə:t/par'tʉ:t	H.pr.2sg done/spoken/left
(')a	<b>f'f</b> att/ <b>pp</b> ar'lə:t/ <b>pp</b> ar'tʉ:t	H.pr.3sg done/spoken/left
am	'fatt/par'lə:t/par'tʉ:t	H.pr.1pl done/spoken/left
avet	'fatt/par'lə:t/par'tʉ:t	H.pr.2pl done/spoken/left
an	'fatt/par'lə:t/par'tʉ:t	H.pr.3pl done/spoken/left

Given the different distribution of RF observed in the paradigms in (1) and (2), two questions will be raised in what follows:

- i. Why is RF triggered only by 1 and 2sg BE, and not by other formatives, in the dialect in (1)?
- ii. Why is RF triggered by 3sg HAVE in the dialect in (2)?

In this chapter, it will be proposed that 1 and 2sg BE, as well as 3sg HAVE, license the projection of an empty mora at PF, the content of which is purely morphosyntactic. More specifically, we will argue that the mora projected by 1-2sg BE and 3sg HAVE at PF corresponds to a morpheme in morphology that expresses a specific morphosyntactic  $\varphi$  feature.

This chapter is structured as follows: in §2, we will consider the morphosyntactic nature of  $\varphi$  features encoded on pronouns and southern Italian perfective auxiliaries. §3 will shed light on the core properties of Distributed Morphology (cf. Halle & Marantz, 1993, 1994; a.o.), which is the framework we will refer to both in this and the following chapters. In later sections, we will consider the technical mechanism leading to the licensing

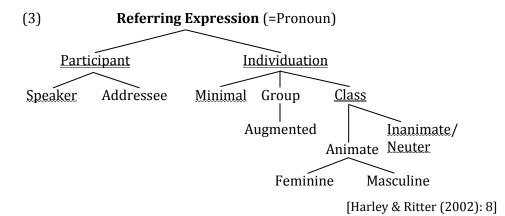
of RF by 1-2sg BE (cf. §4) and 3sg HAVE (cf. §5). §6 summarizes and concludes the chapter.

#### 2. The morphosyntactic nature of $\phi$

In this section, the morphosyntactic nature of  $\varphi$  features expressed on pronouns and southern Italian perfective auxiliaries will be analyzed. It will first be shown (cf. §2.1) that morphosyntactic features expressed on pronouns can be organized within a geometry (cf. Harley & Ritter (2002)). Secondly (cf. §2.2), we will argue that morphosyntactic features expressed on perfective auxiliaries in USIDs can be also structured within a geometric representation, as they can with pronouns.

#### 2.1 The nature and geometry of $\phi$ on pronouns

In a well-known article, Harley & Ritter (2002) build up a geometry in which morphosyntactic features such as Person, Number and Gender, i.e.  $\varphi$  features, are structurally organized. Within this geometry, the mother node dominating the relevant features corresponds to the terminal node called Referring Expression. In their view, Referring Expression is the equivalent of the morpho-phonological expression of a pronominal DP. Referring Expression branches into the [Participant] and [Individuation] nodes. The former is further specified as [Speaker] or [Addressee], expressing 1 or 2 person information, respectively. The latter, conversely, represents the feature that encodes number properties. [Individuation], in turn, can be further split into three nodes: [Group], [Minimal] and [Class]. [Group] refers to the plural value of a pronoun whereas [Minimal] refers to the singular one. We will leave aside the discussion related to [Class], which will be tackled in chapter 5. The geometry described here is illustrated by means of a hierarchical structure in (3).



The difference between [Speaker] and [Addressee], both further specifications of [Participant], and between [Minimal] and [Group], specifications of [Individuation], consists in the different type of markedness they inherit (cf. Harley & Ritter (2002)). [Speaker] and [Minimal] are the nodes that express a default value, whereas [Addressee] and [Group], on the other hand, express a marked one<sup>1</sup>. In the geometry in (3), the defaults are curly underlined<sup>2</sup>.

It is worth noting that the geometry in (3) does not include 3 person within the set of [Participant]. This is to say that according to the geometry in (3) a 3 person DP-pronoun must be considered as not being endowed with the feature [Participant]. This means, in practice, that a 3 person pronoun does not have a person specification. This idea has been proposed by several linguists in the last few decades. In fact, as Benveniste (1966), (1971) observes, there is a fundamental difference between 1 and 2 person, on the one hand, and 3 person on the other. As far as 1 and 2 person are concerned, Benveniste (1971: 217) observes that "Person' belongs only to I/you, and is lacking in <u>he</u>". In contrast, with reference to 3 person, Forchheimer (1953: 5-6) claims that "Whoever does not act a rôle in the

<sup>&</sup>lt;sup>1</sup> The technical reasoning leading to the assumption that [Speaker], and not [Addressee], and [Minimal], and not [Group], are treated as defaults will be explored in chapter 4.

 $<sup>^2</sup>$  As the geometry in (3) illustrates, [Inanimate/Neuter] also corresponds to the unmarked/default node within [Class]. The notion of default in the case of [Class] will be explored in chapter 5.

conversation either as speaker or as addressee remains in the great pool of impersonal, referred to as 'third person'''. This is to say that the dichotomy between 1 and 2 person on the one hand, and 3 person on the other consists in the fact that only 1 and 2 person are considered as speech act participants, whereas 3 person, crucially, is not (cf. Wundt, 1911; Schmidt, 1919; Jespersen, 1924; Bloomfield, 1933; Buehler, 1934; Forchheimer, 1953; Jakobson, 1971; a.o.). Furthermore, Forchheimer (1953) identifies a series of morphological distinctions between 1 and 2 person, as opposed to 3 person. Firstly, he observes that 3 person is often unmarked, relative to 1 and 2 person. He further notes that many languages do not have a 3 person pronoun, at least in the nominative form, whereas 1 and 2 person pronouns are always attested.

As far as 1 and 2pl pronouns are concerned, Benveniste (1966: 233-235) claims that "the uniqueness and subjectivity of 'l' contradict the possibility of pluralization: 'we' is not a multiplication of identical objects, but a fusion (*junction*) between 'l' and 'not-l'". From this observation, we might claim that the featural composition of a 1pl pronoun would be that of [Speaker] and [Group]<sup>3</sup>, whereas the featural composition of a 2pl pronoun would be that of [Addressee] and [Group]. The table in (4) illustrates the featural composition of a 1, 2 and 3 person pronoun, both in the singular and in the plural paradigm.

1sg	[Speaker]
2sg	[Addressee]
3sg	[Minimal]
1pl	[Speaker], [Group]
2pl	[Addressee], [Group]
3pl	[Group]

<sup>&</sup>lt;sup>3</sup> 1 person clusivity is attested in a wide range of languages, and corresponds to a grammatical distinction between the inclusion or exclusion of [Addressee] in a 1pl pronoun. Inclusive 'we', for instance, is treated as the conjunction of [Addressee], [Speaker] and [Group], whereas exclusive 'we' excludes the [Addressee]. 1 person clusivity is found in many Dravidian, Australian and Austronesian languages, and no European language outside the Caucasus makes this distinction grammatically. For this reason, we will treat a 1pl pronoun in our account as the combination of [Speaker] and [Group] only, with no reference to [Addressee].

ſ	4	)

The table in (4) shows that only 1 and 2pl pronouns are composed of the union of two morphosyntactic features, while others are endowed only with one morphosyntactic feature. This assumption differs from that put forward by Harley & Ritter (2002), whereby 1 and 2sg pronouns are treated as a combination of [Speaker]/[Addressee] and [Minimal], respectively<sup>4</sup>. In fact, as suggested in the table in (4), we assume that the only feature encoded on a 1sg pronoun corresponds to [Speaker], whereas that expressed on a 2sg pronoun is [Addressee]. This proposal relies on the observation put forward by Forchheimer (1953), according to which 1 and 2sg pronouns are taken to be syntactic objects that cannot be pluralized, thus implying that they are inherently singular.

# 2.2 Perfective auxiliaries in USIDs: $\boldsymbol{\phi}$ feature geometry and syntactic nature

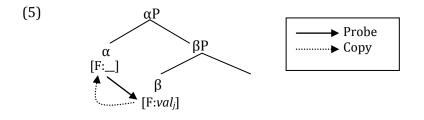
We have observed that the feature geometry in (3) has the advantage of structuring morphosyntactic  $\varphi$  features expressed on DPs within a geometry. At this point, the question that arises is whether syntactic auxiliaries in USIDs, after entering an Agree relation with the sentential subject, are also endowed with the same type of morphosyntactic features presented in (3)<sup>5</sup>.

In order to proceed with this investigation, we first need to introduce the operation *Agree*. Following Chomsky (2001: 5), *Agree* is understood as a syntactic operation taking place between  $\alpha$  (the probe) and  $\beta$  (the goal), where  $\alpha$ 's feature matrix contains [F:\_] and  $\beta$ 's contains [F: *val*<sub>i</sub>]. F is the

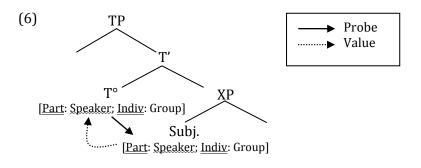
<sup>&</sup>lt;sup>4</sup> In their article, Harley & Ritter (2002) claim that Daga, a language spoken in Papua New Guinea, is a representative language with a minimum number of distinctive person and number features. They propose that in this language, 1sg pronouns are the combination of the default node branching below [Participant], namely [Speaker], and the default node branching below [Individuation], namely [Minimal]. They also claim that the featural make-up of 2sg pronouns corresponds to [Addressee] and [Minimal].

<sup>&</sup>lt;sup>5</sup> "Several major research questions now arise: the nature of the relationship between the geometry and the syntactic component, in particular with respect to agreement phenomena; [.....]; the representation of verbal morphological features such as aspect, tense and mood and their interaction with the nominal feature system; the spell-out of the geometry." [Harley & Ritter (2002): 516].

feature whereas  $val_j$  expresses its value. In order for *Agree* to take place, the interpretable value on  $\beta$ , namely  $val_{j,j}$ , must be copied into  $\alpha$ 's feature matrix. This mechanism is outlined in (5).

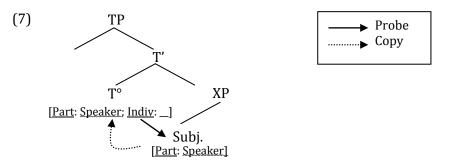


Agree, as sketched in (5), also obtains when  $\alpha$ , being the probe, hosts an auxiliary. In Romance, auxiliaries are thought to be merged in T°. Following Chomsky (1995), (2000) and (2001), T° is endowed with uninterpretable Person and Number features, which need to get valued against their corresponding interpretable features expressed on the goal<sup>6</sup>. In the case of a periphrastic construction composed of an auxiliary followed by a past participle, the auxiliary in T° enters an *Agree* relation with the DP-subject. Suppose that the subject is 1pl. In this case, the interpretable values encoded on the pronoun, as (6) shows, are [Speaker] and [Group]. After *Agree* takes place, these values are also fully specified on the auxiliary in T° (cf. (6)).



<sup>&</sup>lt;sup>6</sup> According to Chomsky (1999: 6), *Agree* is instantiated between a Pr(obe) and a G(oal) only if: a. Pr c-commands G; b. Pr and G are active, namely are endowed with Case feature; c. Pr matches G for feature F; d. G is interpretable for F.

On the other hand, if the auxiliary in T° enters an Agree relation with a DPsubject being 1sg, then the Number feature on the auxiliary remains underspecified. This is due to the fact that a 1sg pronoun only expresses [Speaker] and no Number feature is encoded on this element (cf. (7)). The underspecified value for Number feature expressed on the auxiliary in T° will be then interpreted as default at LF and PF.



The syntactic representations in (6) and (7) show that after *Agree* between an auxiliary and a pronoun is obtained, the morphosyntactic  $\varphi$  features expressed on a pronoun are also fully interpretable on auxiliaries. Given these facts, we propose that the morphosyntactic  $\varphi$  features encoded on auxiliaries are also structured within a geometric representation, as they are with pronouns. We claim that this geometry is identical to that represented in (3).

The question of the syntactic nature of auxiliaries in USIDs still needs to be considered. In our model, we propose that auxiliaries in these dialects correspond to syntactic objects that are not merged in T°, but in Infl°, and are composed of a bundle of  $\phi$  features and the feature Tense<sup>7</sup>.

The following sections will show that the morpho-phonological make-up of present perfect auxiliaries in USIDs is dependent on the type of  $\phi$  feature they encode<sup>8</sup>.

<sup>&</sup>lt;sup>7</sup> In chapter 4, it will be considered why auxiliaries in USIDs are not merged in T°, but rather in Infl° (cf. Ritter & Wiltschko, 2010).

<sup>&</sup>lt;sup>8</sup> This section will not consider whether the type of Tense feature expressed on present perfect auxiliaries in USIDs is able to condition their morpho-phonological shape. This survey will be carried out in chapter 4.

RF and the overt marking of  $\phi$  features 67

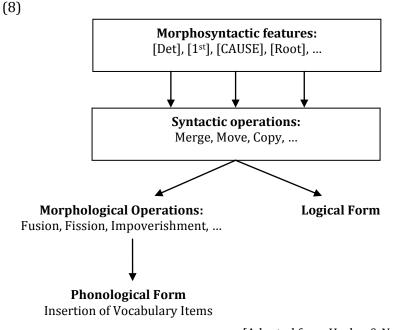
#### 3. The morphosyntactic nature of RF

grammar according to DM is illustrated in (8).

According to the framework of Distributed Morphology (henceforth DM), syntactic, or morphological, terminal nodes correspond to morphemes, which, in turn, are composed of a bundle of morphosyntactic features. Morphemes are purely abstract, thus devoid of any phonological content. The insertion of phonological pieces, or exponents, on morphemes operates in the phonological component, namely at PF, by means of a process called Spell-Out (cf. Halle & Marantz, 1993, 1994; Calabrese, 1994; Harley, 1994; Harris, 1994; Embick, 1995; Noyer, 1997; Harley & Noyer, 1999; a.o.). The DM model postulates the existence of a morphological component located between syntax and phonology. There, morphology-specific operations such as *Fusion, Fission, Impoverishment, Lowering* and *Local Dislocation*, among others, are thought to apply<sup>9</sup>. These operations manipulate the content and order of morphemes, thus determining the type and sequence of exponent(s) to be selected at PF. The organization of the

<sup>&</sup>lt;sup>9</sup> For a general overview of these post-syntactic operations, see Harley & Noyer (1999) and the references therein.





[Adapted from Harley & Noyer (1999): 2]

In the light of these facts, we propose that the triggering of RF by 1-2sg present perfect BE and 3sg present perfect HAVE (cf. (1) and (2)) derives from the overt marking of a morpheme encoded on these auxiliaries, whose content corresponds to a specific morphosyntactic  $\varphi$  feature. At PF, the overt marking of this morpheme is obtained by means of an empty mora realized in word-final position of the auxiliary, which inevitably triggers RF. In §4, we will focus on the triggering of RF by 1 and 2sg BE. There, it will be argued that 1 and 2sg BE encode a morpheme whose morphosyntactic content corresponds to [Participant]. The presence of this morpheme allows the projection of another Participant morpheme in the morphological component. At PF, this morpheme requires overt marking by means of a mora, which, in being devoid of melodic content, provokes RF. §5 focuses on the triggering of RF by 3sg HAVE. It will be proposed that 3sg HAVE encodes a morpheme expressing the feature [Minimal]. At PF, this morpheme requires overt realization by means of an empty mora, which inevitably triggers RF.

# 4. The triggering of RF by 1 and 2sg BE

#### 4.1 The data

Before considering the morphosyntactic nature of RF triggered by 1sg and 2sg BE, let us return to an analysis of the paradigmatic distribution of RF triggered by present perfect BE auxiliaries in USIDs.

In most USIDs, BE licenses the triggering of RF. The triggering of RF by BE is limited to those cases in which BE is in the singular and not when it expresses plural information. 1 and 2pl BE, indeed, never possess the requirement of licensing RF. The sample dialects in (9)-(11) illustrate the paradigmatic distribution of RF triggered by 1 and 2sg BE auxiliaries.

(9) Amandola (Southern Marchigiano)

<b>SO</b>	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.1sg called/spoken
si	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.2sg called/spoken
а	ca'mato/par'lato	H.pr.3 called/spoken
simo	ca'mato/par'lato	B.pr.1pl called/spoken
sete	ca'mato/par'lato	B.pr.2pl called/spoken
		[Manzini & Savoia (2005), II: 684]

(10) Poggio Imperiale (Apulo-Daunian Apennines)

SD	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.1sg called/spoken
si	<b>cc</b> a'matə/ <b>pp</b> ar'latə	B.pr.2sg called/spoken
3	cca'matə/ppar'latə	B.pr.3sg called/spoken
simə	ca'matə/par'latə	B.pr.1pl called/spoken
sitə	ca'matə/par'latə	B.pr.2pl called/spoken
sonnə	ca'matə/par'latə	B.pr.3pl called/spoken
		[Manzini & Savoia (2005): II: 720-721]
	<b>si</b> ε simə sitə	sicca'matə/ppar'latəεcca'matə/ppar'latəsiməca'matə/par'latəsitəca'matə/par'latə

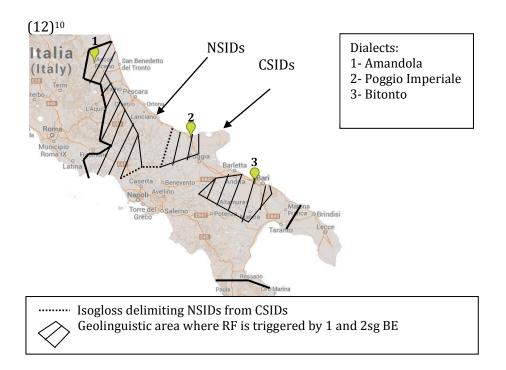
jɔnnə

(11	1) Bitont	to (Apulo-Barese)	
a.	SD	<b>f'f</b> attə/ <b>m'm</b> u(ə)rtə	B.pr.1sg done/died
	si	<b>f'f</b> attə/ <b>m'm</b> u(ə)rtə	B.pr.2sg done/died
	je	f'fattə/m'mu(ə)rtə	B.pr.3sg done/died
b.	simə	'fattə/'mu(ə)rtə	B.pr.1pl done/died
	sitə	'fattə/'mu(ə)rtə	B.pr.2pl done/died

'fattə/'mu(ə)rtə

The map in (12)	) shows the geographic lo	ocation of the diale	cts in (9)-(11).

H.pr.3pl done/died



<sup>&</sup>lt;sup>10</sup> The isoglosses delimiting the geolinguistic areas in (12) are based on the data presented in chapter 1, as well as on those published in Manzini & Savoia (2005: II). For this reason, the isoglosses in (12) should be taken as approximate.

The map in (12) clearly shows that the triggering of RF by 1 and 2sg BE is not attested in all USIDs, but rather in a subset of dialects including a group of CSIDs and dialects in the northern-western NSID area.

#### 4.2 1-2 person BE and the Participant feature

As discussed in chapter 2, a large number of USIDs opt for a particular strategy of auxiliary selection in the active voice, whereby BE is chosen in correspondence with a sentential subject that is 1 and 2 person (singular and plural) and HAVE, instead, corresponds to the form selected by a 3 person DP-subject. This pattern is illustrated in (13), previously given in (9).

(13) Amandola (Southern Marchigiano)

<b>SO</b>	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.1sg called/spoken
si	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.2sg called/spoken
а	ca'mato/par'lato	H.pr.3 called/spoken
simo	ca'mato/par'lato	B.pr.1pl called/spoken
sete	ca'mato/par'lato	B.pr.2pl called/spoken
		[Manzini & Savoia (2005), II: 684]

(13) suggests that BE and HAVE auxiliaries can be treated as exponents that overtly express a well-defined set of  $\varphi$ -features. The selection of BE seems to be restricted to the domain of [Participant], while HAVE is limited to the domain of [Individuation]. More precisely, BE is selected when the auxiliary, after entering an Agree relation with the subject, expresses a [Speaker]/[Addressee] feature and not, for instance, when it expresses [Minimal].

All BE auxiliaries in (13) are composed of a root, namely /s/, followed by an inflectional marker. The inflectional marker expresses both the valued set of  $\varphi$  features, as well as information for Tense. Unlike 1 and 2 person BE, 3 person auxiliaries do not realize /s/ as their root. In fact, in the dialect of Amandola in (13), 3sg HAVE is not preceded by the prefix /s/ (cf. a ca'mato –HAVE.pr.3 called-). However, there is a group of USIDs in which 3 person auxiliaries can be preceded by the prefix /j/, which is generally not attested

on 1 and 2 person BE auxiliaries in the present perfect. This is attested in the dialect of Bitonto in (11), reproduced here as  $(14)^{11}$ .

(14) Bitonto (Apulo-Barese)

SD	f'fatt/m'mu(ə)rt	B.pr.1sg done/died
si	f'fatt/m'mu(ə)rt	B.pr.2sg done/died
je	f'fatt/m'mu(ə)rt	B.pr.3sg done/died
<b>s</b> imə	'fatt/'mu(ə)rt	B.pr.1pl done/died
<b>s</b> itə	'fatt/'mu(ə)rt	B.pr.2pl done/died
<b>j</b> onnə	'fatt/'mu(ə)rt	H.pr.3pl done/died

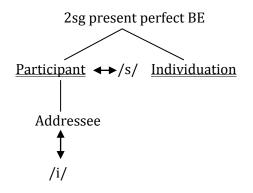
The presence of /j/ is attested in (14) both in correspondence with BE in the 3sg and HAVE in the 3pl plural. This observation leads us to assume that /s/ does indeed correspond to the exponent of [Participant].

In (15), we propose the composition of  $\varphi$  features encoded on 1 and 2 person BE in the dialects of Amandola and Bitonto in (13) and (14), respectively. (15a-a') illustrate to the composition of  $\varphi$  expressed on 1 and 2sg BE, whereas (15b-b'), on the other hand, illustrate the composition of  $\varphi$  on 1 and 2pl BE.

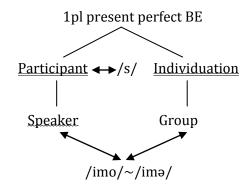
<sup>&</sup>lt;sup>11</sup> The occurrence of a palatal glide, or any other consonant, preceding a 3 person auxiliary is generally not found when the 3 person auxiliary is HAVE and corresponds to the root /a/. Nevertheless, in the dialect of Tufillo [Eastern Abruzzese], the consonant / $\chi$ / is selected as the prefix of 3 person HAVE:  $\chi$ a – HAVE.pr.3-. In this dialect, as in other USIDs, the root /s/ is selected only in the case of 1 and 2 person BE: sɔ/ si/ sɛmə/ sɛtə -BE.pr.1sg/ BE.pr.2sg/ BE.pr.1pl/ BE.pr.2pl- (Manzini & Savoia (2005), II: 690).

(15) a. 1sg BE = /so/~/so/ 1sg present perfect BE Participant  $\leftrightarrow$ /s/ Individuation Speaker  $\downarrow$ /o/~/o/

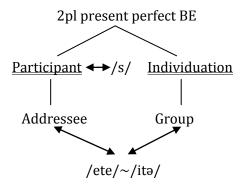
a'. 2sg BE = /si/



b. 1pl BE =  $/simo/\sim/simə/$ 



b.' 2pl BE = /sete/ ~ /sitə/



The advantage of the diagrams in (15) is that they show that 1 and 2p BE auxiliaries overtly express a morpheme that encodes [Participant]. This morpheme, which is the mother node of [Speaker] and [Addressee], corresponds to the root of the auxiliary. This assumption is in line with the proposal put forward by D'Alessandro & Ledgeway (2010) and D'Alessandro (2012), which consider /s/ as the root of 1 and 2 person BE in USIDs<sup>12</sup>.

 $<sup>^{12}</sup>$  The occurrence of /s/ as the root of 1 and 2 person BE is not restricted to those varieties spoken in the area where person-based auxiliary selection takes place.

#### 4.3 The post-syntactic encoding of Participant

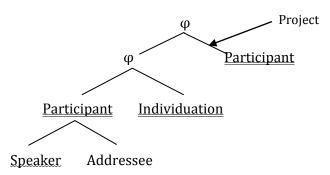
The presence of RF after 1 and 2sg BE in USIDs leads us to think that the morpheme expressing [Participant] is not only encoded on the root of these auxiliaries. In this subsection, we propose indeed that the morpheme expressing [Participant] on 1 and 2sg BE triggers the projection of an extra morpheme whose featural content also corresponds to [Participant]. The projection of an extra morpheme expressing [Participant] applies after syntax<sup>13</sup>, namely in the morphological component, and is limited to those cases in which BE expresses 1 and 2sg, and not when it expresses 1 and 2pl<sup>14</sup>. The encoding of a Participant morpheme does not occur in the case of 3 person auxiliaries. In fact, the [Participant] feature encoded on a 3 person auxiliary remains underspecified. This is to say that the post-syntactic encoding of a Participant] and [Speaker]/[Addressee], and does not express plural. (16) illustrates the post-syntactic encoding of a Participant morpheme is operative only if the auxiliary to the express plural. (16) illustrates the post-syntactic encoding of a Participant.

This situation is also attested in a number of NIDs, where /s/ is the prefix of 1 and 2 person BE only, and never occurs in the case of 3 person BE: Rogeno [Western Lombard] sɔ/ sɛ(t)/ sem/ sii –BE.pr.1sg/ BE.pr.2sg/ BE.pr.1pl/ BE.pr.2pl- versus ɛ/ ɛn –BE.pr.3sg/ BE.pr.3pl-; Isola del Piano [Northern Marchigiano] sɔ/ s(i/ɛ)/ sem/ set –BE.pr.1sg/ BE.pr.2sg/ BE.pr.1pl/ BE.pr.2pl- versus ɛ/ ɛn –BE.pr.3sg/ BE.pr.3pl-As a Western Lombard dialect, the dialect of Rogeno displays subject clitics, but for sake of clarity subject clitics preceding the inflected BE forms have been omitted. The dialect of Isola del Piano, however, despite being a NID, does not feature the subject clitics in its grammar (cf. Torcolacci, 2006).

<sup>&</sup>lt;sup>13</sup> Within the framework of DM, post-syntactic doubling operations are operative in the morphological component. An instance of doubling is found in Swedish. In this language, definite nouns overtly express the morpheme *–en* when they are preceded by an adjective. The morpheme *–en* morpho-phonologically coincides with the ending of the definite determiner in Swedish, which shapes as d*-en*: den gamla musen *–*the old mouse.def.- 'the old mouse' (cf. Embick & Noyer (2001): 581). Embick & Noyer (2001) asserts that *–en* appearing at the right-edge of the noun corresponds to the overt realization of a morpheme projected in the morphological component, whose function is to reduplicate the definiteness feature, namely Def, expressed in the determiner.

<sup>&</sup>lt;sup>14</sup> The reason why the morpheme [<u>Participant</u>] is not encoded on a 1 and 2pl auxiliary will be tackled in §4.4.

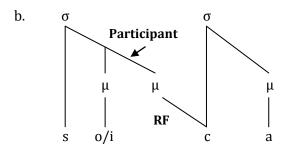
(16)<sup>15</sup> 1/2sg present perfect BE



At PF, the Participant morpheme encoded in the morphological component corresponds to a mora. This mora does not get filled by any independent segment. For this reason, regressive spreading of the next consonant in the linear string applies and RF is triggered (cf. Torcolacci, 2012; Torcolacci, 2014). The encoding of an empty mora expressing [Participant] on 1 and 2sg BE at PF is illustrated in (17).

# (17)

a. so/si cca'mato



<sup>&</sup>lt;sup>15</sup> According to the principle of *Syntactic Hierarchical Structure All the Way Down*, which corresponds to one of the core properties of DM, elements within syntax and morphology enter into the same types of constituent structures. This is to say that elements of both syntax and morphology are discrete, and can be diagrammed through binary branching trees (cf. Halle & Marantz, 1993, 1994).

To conclude, we have established that the triggering of RF by 1 and 2sg BE in a subset of USIDs results from the projection of a mora, the content of which is purely morphosyntactic. This mora corresponds to a morpheme projected in the morphological component, which expresses [Participant]. This morpheme reduplicates the featural content expressed on the root<sup>16</sup>. As for why RF triggered by 1 and 2sg BE has been historically reanalyzed as a way of overtly expressing [Participant], we will not try to account for this here, but will leave it aside for future research.

#### 4.3.1 Phonological restrictions on the overt marking of Participant

In one group of CSIDs, the triggering of RF by 1 and 2sg BE seems to be determined by the position of stress on the participle. If stress falls on the first syllable of the past participle, then RF obligatorily obtains. Conversely, if stress does not fall on the first syllable of the past participle, RF is absent or optional. This situation, previously discussed in chapter 2, is illustrated in (18) and (19).

<sup>&</sup>lt;sup>16</sup> As observed in chapter 2. Eastern Abruzzese, as well as many southern Marchigiano and southern Laziale dialects, display a lack of RF with 1 and 2sg BE. Focusing on the Eastern Abruzzese dialect of Arielli, Biberauer & D'Alessandro (2006) claim that the non-triggering of RF by active 1 and 2sg BE is determined by the application of the Phase Impenetrability Condition (PIC) operating at phase head level (cf. Chomsky 1995, 2000, 2001, 2004, 2005), which says that an (already) computed syntactic phase is no longer accessible for further computation. According to Biberauer & D'Alessandro (2006), the past participle and the active auxiliary BE in Eastern Abruzzese belong to two different syntactic phases. The former is merged in V° and the latter in T°. For this reason, they are spelled-out separately since they belong to two different spell-out domains. In contrast to Eastern Abruzzese, where past participles are thought to be merged in  $V^{\circ}$ , past participles and active BE auxiliaries in most CSIDs and northern NSIDs seem to be merged within the same syntactic phase. In these varieties, in fact, aspectual adverbs, which are merged higher than the phase head v, are linearly preceded by past participles: Bitonto [Apulo-Barese] so **f** fatt 'se:mb –BE.pr.1sg done always-. The fact that the past participle is merged higher than the aspectual adverb indicates that it is merged in the same syntactic phase as the auxiliary. For this reason, the past participle and the auxiliary are spelled-out together since they belong to the same spell-out domain. In this situation, RF can freely apply.

(18) Bisce so si	glie (Apulo-Barese) * <b>(f)'f</b> att/ca'maitə * <b>(f)'f</b> att/ca'maitə	B.pr.1sg done/called B.pr.2sg done/called
(19) Conve	ersano (Apulo-Barese)	

9) Conversano (Apulo-Barese)			
SD	* <b>(f)'f</b> att/ <b>(m)m</b> an'dʒe:t	B.pr.1sg done/eaten	
si	* <b>(f)'f</b> att/ <b>(m)m</b> an'dʒe:t	B.pr.2sg done/eaten	

Russo & Barry (2008), using phonetic rhythm measurements for some Campanian dialects (those of Ischia, Capri and Pozzuoli), claim that a large number of SIDs, similarly to languages like English and German, and unlike Standard Italian, display a stress-timed pattern. In stress-timed languages (cf. Lloyd, 1940; Pike, 1945), primary stress is thought to occur at roughly equal intervals, being insensitive to the number of unstressed syllables occurring in between. Given this property, stress-timed languages are often subject to vowel reduction (cf. Dauer (1983)).

With this in mind, we can establish that the lack of RF in the case of a past participle like /ca'maitə/ in (18) and its optionality in the case of /man'dʒe:t/ in (19) hinges on the position of primary stress. In both cases, primary stress is not adjacent to BE. For this reason, unstressed vowels, as well as double consonants not adjacent to it, tend to be reduced in these languages<sup>17</sup>. The non-obligatory occurrence of RF in the case of 1 and 2sg BE in (18) and (19) can thus be claimed to be dependent on purely phonological conditions.

Having presented the morphosyntactic nature of RF triggered by 1 and 2sg BE in USIDs, let us consider now why RF is not triggered by 1 and 2pl BE. This investigation will be carried out in the next subsection.

<sup>&</sup>lt;sup>17</sup> As extensively discussed in chapter 2, preposition *a* in CSIDs, as well as in all other USIDs, consistently triggers RF. In most CSIDs, preposition *a* triggers RF only when followed by a noun stressed on its first syllable. Otherwise, if *a* is followed by a noun that is not stressed on the first syllable, then *a* either optionally triggers RF, or never triggers it. This might due to the fact that double consonants realized at word-boundaries undergo reduction if not adjacent to primary stress: Conversano [Apulo-Barese] **a k'k** $\epsilon$ :s –to home- versus **a** (v)ve'n $\epsilon$ ttsj $\theta$ -to Venice-.

#### 4.4 The non-triggering of RF by 1 and 2pl BE

As illustrated in the previous subsections, RF is never triggered by 1 and 2pl BE in any USID. For sake of clarity, (20) and (21) provide two paradigms that demonstrate that RF is triggered only by 1 and 2sg BE, and not by 1 and 2pl BE.

(20) Amandola (Southern Marchigiano)

a.	<b>S</b> 0	cca'mato/ppar'lato	B.pr.1sg called/spoken
	si	<b>cc</b> a'mato/ <b>pp</b> ar'lato	B.pr.2sg called/spoken
b.	<b>s</b> imo	ca'mato/par'lato	B.pr.1pl called/spoken
	<b>s</b> ete	ca'mato/par'lato	B.pr.2pl called/spoken
			[Manzini & Savoia (2005), II: 684]

#### (21) Bitonto (Apulo-Barese)

a.	SD	<b>f'f</b> att/ <b>m'm</b> u(ə)rt	B.pr.1sg done/died
	si	<b>f'f</b> att/ <b>m'm</b> u(ə)rt	B.pr.2sg done/died
b.	<b>s</b> imə	'fatt/'mu(ə)rt	B.pr.1pl done/died
	<b>s</b> itə	'fatt/'mu(ə)rt	B.pr.2pl done/died

In chapter 2, we observed that the dialect of Bitonto displays RF after some bisyllabic words; these include demonstratives preceding mass nouns. The contrast between the non-triggering properties of RF by bisyllabic 1 and 2pl BE versus the presence of RF in the case of a bisyllabic neuter determiner in the dialect of Bitonto is given in (22).

(22) Bitonto (Apulo-Barese)

a.	sim	<b>(*f)</b> 'fatt	B.pr.1pl done
	sit	<b>(*f)</b> 'fatt	B.pr.2pl done
b.	kuss	* <b>(p)</b> 'pə:n	this.neut. bread
	kur	* <b>(p)</b> 'pə:n	that.neut. bread

In the dialect of Bitonto, as well as in other USIDs, demonstratives can also be specified for masculine singular. In the dialect of Bitonto, these forms are syncretic with those expressing neuter gender. It is worth noting that RF is

never triggered by a masculine singular demonstrative, whereas it is obligatory when the demonstrative is neuter: kuss \*(p)'pə:n -this.neut. bread- versus kuss (\*g)'gatt -this.masc.sg. cat-. With this in mind, we can put forward the hypothesis that the lack of RF after masculine singular /kuss/, versus its presence after neuter /kuss/, might be dependent on the featural composition of the demonstrative. In fact, there is no phonological distinction between the two determiners and a theory positing that the presence or lack of RF in this context relies on the phonological structure of the determiner would be inaccurate. We will return to this particular issue in chapter 5, where the presence versus lack of RF in the paradigm of definite D-elements will be explored.

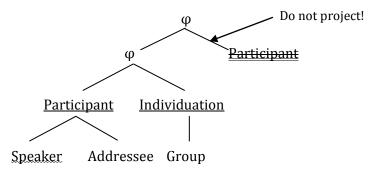
Given these facts, our hypothesis is that the absence of RF after 1 and 2pl BE is not dependent on the phonological structure of the auxiliary, but rather on a principle of markedness that says that a Participant morpheme cannot be encoded post-syntactically if [Participant] and [Individuation] express a different grade of markedness. More precisely, we claim that if [Individuation] bears the same type of markedness as [Participant], then a Participant morpheme can be encoded in morphology. Conversely, if [Individuation] does not bear the same type of markedness as [Participant]. then a Participant morpheme cannot be post-syntactically projected. In (23a), [Participant] and [Individuation] express the same grade of markedness, and for this reason the morpheme [Participant] can be projected in the morphological component. In (23b), on the other hand, the grade of markedness expressed by [Individuation] does not match with that expressed by [Participant]. There, in fact, [Individuation] is valued as [Group]. For this reason, no Participant morpheme can be post-syntactically encoded.

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# a. 1/2sg present perfect BE $\phi$ Project Project Participant Participant Individuation Speaker Addressee

#### b. 1/2pl present perfect BE

(23)



In chapter 4, we will propose that the uniformity of markedness expressed by morphosyntactic features encoded on perfective auxiliaries in USIDs feeds the application of the post-syntactic operation called *Default Marking*, according to which a given morphosyntactic  $\varphi$  feature gets overtly marked when combined with another feature expressing the same type of markedness.

#### 5. The triggering of RF by 3sg HAVE

In this section, we focus on the triggering of RF by 3sg HAVE. We will first show that 3 person auxiliaries –HAVE in a large number of USIDs- express the feature [Individuation] (cf. §5.1). In §5.2, it will be shown that RF triggered by 3sg HAVE corresponds to a way of overtly marking [Minimal].

# 5.1 HAVE and the Individuation feature

This session focuses on the morphosyntax of auxiliary HAVE in USIDs. We reproduce in (24) the present perfect paradigm of the variety of Amandola previously given in (1), (9) and (13).

(24) Amandola (Southern Marchigiano)

SO	cca'mato/ppar'lato	B.pr.1sg called/spoken
si	cca'mato/ppar'lato	B.pr.2sg called/spoken
а	ca'mato/par'lato	H.pr.3 called/spoken
simo	ca'mato/par'lato	B.pr.1pl called/spoken
sete	ca'mato/par'lato	B.pr.2pl called/spoken
		[Manzini & Savoia (2005), II: 684]

In the dialect of Amandola, the 3 person auxiliary is HAVE, while the 1 and 2 person auxiliaries are BE. The dialect obeys *Generalization IV* (tentative version) proposed in the previous chapter, according to which a 1 and 2 person subject is responsible for the selection of BE, whereas a 3 person subject is responsible for the selection of HAVE. Since /a/ in (24) is selected only by a 3 person auxiliary, we can advance the hypothesis that this exponent corresponds to the root of a present perfect auxiliary expressing the feature [Individuation].

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In the dialect of Amandola, no overt distinction is made between 3sg and 3pl HAVE. This is to say that the 3 person auxiliary /a/ of the dialect in (24) does not overtly express the contrast between [Minimal] and [Group].

# 5.2 The post-syntactic encoding of Minimal

In contrast with what we have just observed for the dialect of Amandola, a large group of USIDs shows that 3 person HAVE auxiliaries differ in their morpho-phonological make-up. While 3pl HAVE generally selects /n/ as the exponent for 3pl, 3sg HAVE only selects /a/, which licenses RF. As shown in chapter 2, the dialects that exhibit the triggering of RF by 3sg HAVE are a large group of CSIDs. In these varieties, HAVE is not only selected as the 3sg auxiliary, but is also found elsewhere in the paradigm. These facts are illustrated below in (26)-(29).

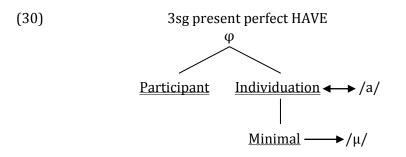
#### (26) Conversano (Apulo-Barese)

SD	f'fatt	B.pr.1sg done
а	'fatt	H.pr.2sg done
а	<b>f'f</b> att	H.pr.3sg done
am	'fatt	H.pr.1pl done
avet	'fatt	H.pr.2pl done
an	'fatt	H.pr.3pl done

(27) Mola di Bari (Apulo-Barese)		
a <del>ŋ</del> /i	'fatt/par'tʉ:t	H.pr.1sg done/left
a	'fatt/par'tʉ:t	H.pr.2sg done/left
(')a	f'fatt/ppar't <del>u</del> :t	H.pr.3sg done/left
am	'fatt/par'tʉ:t	H.pr.1pl done/left
a'vet	, 1	H.pr.2pl done/left
an	'fatt/par'tʉ:t	H.pr.3pl done/left
(28) Airola (	Central Campanian)	
addzə	'vistə/ve'nu:tə	H.pr.1sg seen/come
а	'vistə/ve'nu:tə	H.pr.2sg seen/come
а	<b>v'v</b> istə/ <b>vv</b> e'nu:tə	H.pr.3sg seen/come
ammu	'vistə/ve'nu:tə	H.pr.1pl seen/come
atə	'fatt/ve'nu:tə	H.pr.2pl seen/come
annə	'fatt/ve'nu:tə	H.pr.3pl seen/come
	a (Northern Calabrian)	
ർട്ടം	ɣa'βa:tə/βə'nu:tə	H.pr.1sg washed/come
3	γa'βa:tə/βə'nu:tə	H.pr.2sg washed/come
3	<b>gg</b> a'βa:tə/ <b>bb</b> ə'nu:tə	H.pr.3sg washed/come
mə	γa'βa:tə/βə'nu:tə	H.pr.1pl washed/come
a'βəsə	γa'βa:tə/βə'nu:tə	H.pr.2pl washed/come
nə	γa'βa:tə/βə'nu:tə	H.pr.3pl washed/come
		[Manzini & Savoia (2005), II: 784]

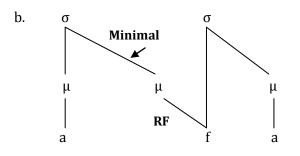
Similarly to RF triggered by 1 and 2sg BE, we propose that RF triggered by 3sg HAVE in the dialects in (26)-(29) derives from the application of a markedness convention applying in the morphological component, according to which [Minimal] must be overtly encoded.

RF and the overt marking of  $\phi$  features 85



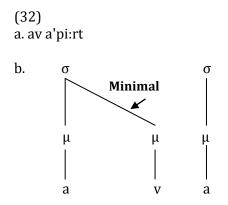
At PF, the morpheme expressing [Minimal] corresponds to a mora. This mora, empty of melodic content, requires the regressive spreading of the next consonant in the linear string, and therefore RF is attested (cf. Torcolacci, 2014).





In specific circumstances, the Minimal mora can be filled by an independent segment, namely a consonant. In this case, RF is not attested. This situation occurs when 3sg HAVE is followed by a past participle starting with a vowel: Mola di Bari [Apulo-Barese] av a'pi:rt -HAVE.pr.3sg opened- '(s)he has opened'. Conversely, the insertion of the consonant /v/ at the right-edge of HAVE is never attested when the auxiliary expresses 2sg: Mola di Bari [Apulo-Barese] a a'pi:rt -HAVE.pr.2sg opened- 'you.sg have opened'. 2 and 3sg HAVE in the dialect of Mola di Bari, as well as in the other varieties documented in (26)-(29), are syncretic. The presence of /v/ in the latter case would be in favor of our hypothesis, which considers /v/ as the overt

marking of [Minimal]. In fact, if we assume that the insertion of /v/ is dependent on the application of a phonotactic rule stating that the encounter of two vowels at word-boundaries is disallowed, then we would not be able to explain why this process is operative only with 3sg HAVE and not with 2sg HAVE.



To sum up, on this theory the filling of a Minimal mora on 3sg HAVE depends on the type of segment occurring in the initial position of the past participle: if this segment is a consonant, then RF operates. Otherwise, if this segment is a vowel, then /v/ is inserted.

As shown in the previous chapter, a group of Calabrian and Sardinian dialects display the presence of the segment /t/ when a lexical verb is valued for 3sg. In the absence of this segment, RF is obtained: i. kándətə na kandzōn; ii. kándə nna kandzón –(s)he sing.pr.3sg a song- '(s)he sings a song' (cf. Fanciullo, 1997)<sup>18</sup>. In the latter case, namely when RF is attested, we might think that an empty mora is projected in order to replace a morpheme expressing [Minimal]. In the former case, instead, the projected mora expressing [Minimal] is associated to the segment /t/, and for this reason RF is not triggered.

<sup>&</sup>lt;sup>18</sup> See Lausberg, 1939; Molinu, 1992; Fanciullo, 1997; Loporcaro, 1997b; Silvestri, 2007 for further references.

#### 6. Summary and conclusions

In this chapter, we have claimed that perfective auxiliaries in USIDs correspond to syntactic objects directly merged in Infl<sup>o</sup>, whose featural composition consists of Tense and a bundle of  $\varphi$  features. Following the feature geometry of pronouns  $\dot{a}$  la Harley & Ritter (2002), we have established that  $\varphi$  features encoded on perfective auxiliaries in USIDs are structurally organized in the same way as pronouns.

Furthermore, following a DM approach, we have assumed that the morphophonological shape of present perfect BE and HAVE auxiliaries in USIDs is determined by the type of morphosyntactic feature expressed on these elements. BE is the auxiliary that overtly expresses the feature [<u>Participant</u>] whereas HAVE is the auxiliary that morpho-phonologically expresses [Individuation].

In addition, we have observed that a subset of present perfect BE and HAVE auxiliaries in USIDs has the ability to trigger RF. More concretely, we have observed that:

- i. RF is triggered by BE if this auxiliary is in the 1 and 2sg;
- ii. RF is triggered by HAVE if this auxiliary is in the 3sg.

In both cases, we have argued that the presence of a morpheme endowed with a particular type of morphosyntactic feature triggers RF.

We have claimed that 1 and 2sg BE in a group of USIDs have to encode a Participant morpheme in the morphological component. This morpheme reduplicates the feature expressed on the root of 1 and 2sg BE, which, according to our analysis, expresses the feature [Participant]. At PF, the Participant morpheme corresponds to an empty mora, which inevitably triggers the regressive spreading of the next consonant in the linear string. For this reason, RF is triggered.

Our analysis has also considered the reason why a Participant morpheme is not overtly encoded on 1 and 2pl BE. These auxiliaries also express the feature [Participant] on the root. We have assumed that the non-triggering of RF by 1 and 2pl BE is the result of the application of a markedness convention operative in the morphological component, according to which a Participant morpheme cannot be encoded if [Individuation] is endowed with a marked value, e.g. [Group]. This is to say that a Participant

morpheme can be overtly marked if [<u>Individuation</u>] is underspecified and expresses the same type of markedness as [<u>Participant</u>].

Lastly, we have examined those cases in which RF is triggered by 3sg HAVE. The triggering of RF by 3sg HAVE has been claimed to derive from the overt marking of a morpheme endowed with the feature [Minimal]. This morpheme corresponds to an empty mora at Spell-Out, which, in the same fashion as 1 and 2sg BE, inevitably requires the regressive spreading of the first consonant of the past participle.

# The post-syntactic operation of *Default Marking*

#### 1. Introduction

This chapter focuses on the morpho-phonological markedness of  $\varphi$  inflection encoded on present perfect and pluperfect auxiliaries. The dialects under investigation here correspond to a subset of CSIDs, namely those dialects spoken in the geolinguistic area stretching from central Campania and Apulia up to the border with ESIDs.

These dialects, as observed in the previous chapters, generally select HAVE as the only present perfect auxiliary throughout the paradigm. This auxiliary, as (1) illustrates, allows the overt marking of  $\phi$  for all persons, except that expressing 2sg.

(1) Mola di Bari (Apulo-Barese)

(-)			
a.	а <del>јј</del>	'fatt/par'lə:t/par'tʉ:t	'H.pr.1sg done/spoken/left'
	а	'fatt/par'lə:t/par'tʉ:t	'H.pr.2sg done/spoken/left'
	(')a	<b>f</b> 'fatt/ <b>p</b> par'lə:t/ <b>p</b> par't <del>u</del> :t	'H.pr.3sg done/spoken/left'
b.	a <b>m</b>	'fatt/par'lə:t/par'tʉ:t	'H.pr.1pl done/spoken/left'
	av <b>et</b>	'fatt/par'lə:t/par'tʉ:t	'H.pr.2pl done/spoken/left'
	an	'fatt/par'lə:t/par'tʉ:t	'H.pr.3pl done/spoken/left'

The lack of overt marking of 2sg seems to be restricted to the specific case in which HAVE occurs in a present perfect construction. Indeed, in the dialect of Mola di Bari in (1), as well as in many other dialects belonging to the same geolinguistic area, 2sg is overtly marked by means of metaphony when the auxiliary appears in a pluperfect construction. In this type of construction, 1 and 3sg HAVE are not inflected and are overtly represented by means of a syncretic exponent (cf. (2)).

(2) Mola di Bari (Apulo-Barese)

a.	a'vp:v	'fatt/par'lə:t/par'tʉ:t	'H.past.1sg done/spoken/left'
	a'vi:v	'fatt/par'lə:t/par'tʉ:t	'H.past.2sg done/spoken/left'
	a'vp:v	'fatt/par'lə:t/par'tʉ:t	'H.past.3sg done/spoken/left'
b.	a'v <b>ɛmm</b>	'fatt/par'lə:t/par'tʉ:t	'H.past.1pl done/spoken/left'
	av <b>i:vər</b>	'fatt/par'lə:t/par'tʉ:t	'H.past.2pl done/spoken/left'
	av <b>e:vən</b>	'fatt/par'lə:t/par'tʉ:t	'H.past.3pl done/spoken/left'

With reference to the paradigms in (1) and (2), these questions will be addressed in what follows:

- i. What kind of mechanism allows the morphological marking of 2sg on HAVE in (2) versus the lack thereof in (1)?
- ii. Why are 1 and 3sg HAVE overtly marked in (1) and not in (2)?
- iii. Why would all plural HAVE auxiliaries in (1) and (2) have to be morphologically marked?
- iv. Is there a principle governing the morpho-phonological markedness of  $\varphi$  in (1), which opposes that in (2)?

We will answer each of these questions in turn. Put briefly, the approach that will be adopted in this chapter consists in defining the marking strategy of  $\varphi$  observed in (1) and (2) as deriving from the application of a post-syntactic operation called *Default Marking*. According to *Default Marking*,  $\varphi$  features encoded on perfective active auxiliaries get overtly realized at PF only if their grade of markedness matches that expressed by Tense. More concretely, we propose that if Tense expresses a default value, then only default, i.e. unmarked,  $\varphi$  features get overtly marked. On the other hand, if Tense expresses a marked value, then only marked, i.e. non default,  $\varphi$  features get overtly expressed. The term *Default Marking* will be justified by the fact that the uniformity of markedness between Tense and  $\varphi$  gives rise to a default, i.e. unmarked, configuration (based on Holmberg & Roberts, 2010).

The present chapter is organized as follows: we begin with a presentation of the traditional accounts referring to phonological, syntactic and morphological markedness (cf. §2). §3 will focus on the process of

morphological marking of  $\varphi$  realized on perfective active auxiliaries operating both in CSIDs and in other Romance languages. §4 will consider markedness as a linguistic concept driven by acquisitional facts. It will be proposed that features that are learnt early should be considered defaults, whereas those acquired later are marked (cf. Harley & Ritter, 2002). §5 will shed light on the substantive content of Infl°, which will be taken to be the syntactic head on which syntactic auxiliaries are merged. §6 will consider the post-syntactic mechanism of *Default Marking* that applies in the case of present perfect and pluperfect auxiliaries in a subset of CSIDs. From a comparative perspective, §7 will consider those cases in which the postsyntactic operation of *Default Marking* is operative outside CSIDs. §8 summarizes and concludes the chapter.

### 2. The theory of markedness

## 2.1 Overview

Markedness as a linguistic concept has gained in popularity since the early works on the topic by Trubetzkoy and Jakobson. It has attracted the attention of many scholars and researchers, mainly phonologists, and the theory has been approached in different ways. A detailed summary of these different approaches appears in Haspelmath (2006) and Hume (2011). In a nutshell, markedness is taken to be a mechanism that serves to stress or *single out* one element standing in opposition to another one or more within a set. The stressed/singled out element is generally thought to be the marked one, whereas the element(s) bearing no marked features is/are considered unmarked or *default* (cf. Trubetzkoy, 1939). One of the puzzles that has interested those working on the topic is whether markedness is dictated by a general universal principle (cf. Chomsky, 1965, 1986) or if it is the result of the confluence of external factors that interact with a specific grammar (cf. Lass, 1975; Comrie, 1983; Boersma, 1998; Hume, 2004; a.o.). In the former sense, markedness is understood to be part of Universal Grammar, whereas in the latter it is treated as not obeying any universal guiding principle.

Over the last few decades, the concept of markedness has been captured in the formal distinction between the set of features expressed by marked and unmarked members: marked categories are often said to bear [+marked]

features whereas unmarked or default categories encode [-marked] features. By and large, marked elements are considered complex, not frequent, not optimal and acquired late, whereas unmarked elements are considered simple, normal, predictable and acquired early.

As Chomsky & Halle (1968) point out, natural, thus unmarked, members are statistically more frequent and manifest more easily across languages than their marked counterpart(s). Many definitions have been given in the literature of the properties inherited by marked and unmarked elements. A summary appears in Hume (2011: 80), whose list is given in (3)<sup>1</sup>.

(3)

Unmarked	Marked
natural	less natural
normal	less normal
general	specialized
simple	complex
inactive	active
more frequent	less frequent
optimal	less optimal
predictable	unpredictable
acquired early	acquired late
more phonetically variable	less phonetically variable
articulatorily simple	articulatorily difficult
perceptually weak	perceptually strong
universal	language-specific
ubiquitous	parochial

Because the theory of markedness has been examined in several fields of linguistics, our aim now is to strictly focus on the general approaches that have been proposed in phonology (cf. §2.1.1), syntax (cf. §2.1.2) and morphology (cf. §2.1.3).

<sup>&</sup>lt;sup>1</sup> A similar list for marked/unmarked phonological properties appears in Rice (2007).

### 2.1.1 Phonological markedness

The concept of markedness in phonology dates back to the Prague School, notably to the work of Nikolai Trubetzkoy and Roman Jakobson. Trubetzkoy (1939) used the term markedness to capture the way sound oppositions are built in a specific language. In his view, a phonological opposition between nasal and non-nasal, for instance, is attributed to the presence versus absence of the feature nasality: an item endowed with the feature nasality is more marked than one which lacks this feature. A similar idea is proposed in Jakobson (1932). With reference to a closed set of consonants such as /m, n, b, d/, he postulates that the first two are considered marked in that they bear the property, or 'mark' of nasality, while the latter do not and are thus not considered marked. In this respect, nasal consonants are treated as more marked than /b, d/ because the 'mark' [+nasal] can be understood as being less frequent, articulatorily more difficult and more complex than the opposing plosives (cf. Jakobson, 1932; Jakobson & Pomorska, 1990; Hume, 2011; a.o.).

Later on, Chomsky & Halle (1968) proposed a different model of markedness, whose main goal was to distinguish between more and less natural segments and rules, as well as to distinguish between phonologically possible and impossible items (cf. Kean, 1975; Cairns & Feinstein, 1982; Mohanan, 1993; Calabrese, 1995; Steriade, 1995; Boersma, 1998). Moreover, Chomsky & Halle treat markedness as a universal principle that guides both the formation of phoneme inventories and the process of language acquisition. In their view, markedness is an evaluation metric that allows the child to select the simplest possible grammar(s) that he is exposed to during the process of language acquisition. Unmarked options are those that do not imply any cost for the child, while marked options are those that are more costly, thus complex, and for this reason they are statistically less frequent. In order to identify which grammatical options are marked or unmarked, the authors make use of the diacritics *m* and *u*, respectively. These diacritics are assigned to phonemes. Those specified for m are considered marked whereas those specified for u are unmarked.

The notion of complexity, according to Chomsky & Halle, can be further extended to lexical items. They propose that the complexity of a lexical item depends on the number of features that are not left unmarked in its matrix representation. This is to say that the item X is more marked than the item Y

if X bears a higher number of marked features than Y. For this reason, they claim that "adding an item to the lexicon, [...], is a matter of distinguishing the item from the neutral case, and from the other items already incorporated in the lexicon, by a minimal number of marked features" (cf. Chomsky & Halle, 1986: 403):

(4)  $\alpha$  [Fu, F<sub>1</sub>u];  $\beta$  [Fu, F<sub>1</sub>m];  $\gamma$  [Fm, F<sub>1</sub>m]

Among the items  $\alpha$ ,  $\beta$  and  $\gamma$  in (4),  $\alpha$  is considered the neutral or default case since both F and F1, which are the features in the matrix representation of  $\alpha$ ,  $\beta$  and  $\gamma$ , are both endowed with an unmarked value. F and F1 of  $\beta$  and  $\gamma$ , on the other hand, are marked, because they are added to the lexicon later than  $\alpha$ .

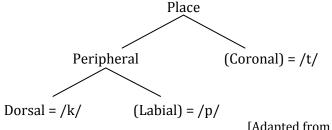
The theory of markedness as a process that guides languages acquisition is also the core idea put forward by Jakobson. Jakobson (1971) claims that marked features are those learnt after unmarked ones. Looking specifically at place of articulation, for instance, he says that coronals are learnt before dorsals. For this reason, they are thought to be unmarked, since they are generally acquired early<sup>2</sup>.

In recent years, markedness has been captured as a device that detects how contrast between phonological features is formally expressed (cf. Rice (2007)). Within the model of Modified Contrastive Specification (cf. Avery & Rice, 1989; Rice & Avery, 1991, 1993; Dyck, 1992; Rice, 1993; Walker, 1993; Wu, 1994), features are structurally organized within a geometric representation and the contrast between one feature and another is expressed by means of hierarchical structure. Features that are more embedded in the geometry are considered more marked than those that are less embedded. As far as the plosives /p, t, k/ are concerned, for instance, Avery & Rice (1989) propose that /t/ is underspecified for Place, and is therefore less embedded than /p/ and /k/, which, in turn, are specified for

<sup>&</sup>lt;sup>2</sup> Jakobson (1971) claims that sequences of sound acquisition must be seen as tendencies, and not absolutes. This observation is confirmed by the recent study on the acquisition of phonological features in Japanese put forward by Beckman *et al.* (2003). The authors observe that Japanese children tend to learn /k/ before /t/, thus suggesting that dorsals in this language are learnt before coronals. As a last remark, they propose that the term universal should be understood as dependent on frequency, thus relying on numerical tendencies, rather than on absolute rules.

Peripheral and Peripheral and Dorsal, respectively. These facts are represented by the structure in (5).

(5) Structure of Place node



[Adapted from Avery & Rice (1989)]

According to the geometric representation in (5), Coronal and Labial are unmarked nodes. These nodes are present in the underlying representation only if contrast with a marked feature branching below Place must be conveyed. Hence, the contrast between one feature and another in the geometry in (5) is reflected by the grade of markedness they express at a certain level of the representation<sup>3</sup>.

## 2.1.2 Syntactic markedness

The concept of syntactic markedness has not received as much attention as in phonology. Nonetheless, starting from Jakobson, several proposals have been put forward that aim to capture the meaning of markedness in syntax. Jakobson (1932, 1939, 1957) suggests that markedness is a principle that regulates lexical and grammatical meanings. Focusing on aspect in Russian, for instance, he claims that perfective aspect is marked as opposed to imperfective aspect, in that it expresses the absolute completion of an

<sup>&</sup>lt;sup>3</sup> The core of the model of Modified Contrastive Specification is that features are organized within constituents. This is to say that Place corresponds to a constituent and features are organized hierarchically within this constituent. Furthermore, Modified Contrastive Specification proposes that constituents can be hierarchically ranked. According to Rice & Avery (1991), place features are dependent on manner features: Air Flow > Sonority > Place.

event. Since imperfective is underspecified, thus non-committal, in terms of the completion of an event, it must be considered as unmarked.

Furthermore, Chomsky & Lasnik (1977) consider markedness as part of a theory of Core Grammar<sup>4</sup>. In their view, systems that fall within Core Grammar are considered to constitute the 'unmarked' case.

In recent years, the notion of markedness in syntax has also been extended to syntactic operations. Roberts & Roussou (2003), for instance, consider *Move* as a marked syntactic operation, while *Merge* is considered as unmarked. More specifically, they propose a markedness hierarchy, which is given in (6).

(6)  $F^*_{Move/Merge} > F^*_{Move} > F^*_{Merge} > F$  (where '>' = 'more marked than') [Roberts & Roussou, 2003: 210]

The diacritic \* indicates that F, a syntactic object, is phonologically realized. Conversely, the lack of the diacritic \* simply says that F is not overtly spelled-out. This would correspond to the most unmarked option.  $F_{Merge}^*$ , on the other hand, is more marked than F since it implies the overt realization of a syntactic object spelled-out in its base position. Furthermore,  $F_{Move}^*$  indicates that F has moved from the position in which it was generated, being overtly spelled-out in the position in which it lands. The most marked solution is the one at the left hand-side of the hierarchy, which is represented by  $F_{Move/Merge}^*$ . In this case, F moves and attaches to another syntactic head. Both F and the hosting syntactic object are spelled-out, thus allowing the instantiation of two phonological matrices.

The hierarchy depicted in (6) is based on the assumptions put forward by Clark & Roberts (1993, 1994) and Roberts (2001), which state that markedness corresponds to a formal device deriving from the application of the simplicity metric in (7).

<sup>&</sup>lt;sup>4</sup> Core Grammar is the universal grammar's contribution to the grammar of a specific language and provides a limited set of possible grammars. It merely consists of a well-defined set of devices, amongst which general rules or rule schema (e.g. move  $\alpha$ ), conditions on the rules (e.g. recoverability condition for deletions) and filters (e.g. \**that* [NP e]) are included. See Chomsky & Lasnik (1977), and the references therein, for a thorough survey of this topic.

"A structural representation R for a substring of input text S is simpler than an alternative representation R' iff R contains fewer formal feature syncretisms than R'".

[Longobardi (2001: 294)]

The notion of feature syncretism in (7) refers to the presence of more than one formal feature encoded in a given structural position. According to the simplicity metric in (7), a syntactic head, say X, is simpler than the syntactic head Y, if the number of formal features contained in X is smaller than the number of features contained in Y. We will return to this point in chapter 5, where the simplicity metric above, together with the notion of movement as a marked syntactic operation, will be crucial in defining the constraints on morphological markedness applicable in the case of lexical verbs in CSIDs. Markedness, as a syntactic notion, has been used by Holmberg & Roberts (2010) in their investigation of the cross-linguistic variation affecting the word-order parameter. Holmberg & Roberts propose a markedness convention, which is given in (8).

(8) For a class of heads H, uEPP for  $H_{[F:-]} \neq v \rightarrow \{[+EPP]/v_{[+EPP]};\}$ {[-EPP] elsewhere} [Holmberg & Roberts (2010): 40]

What (8) says is that the unmarked value of the EPP-feature is [+EPP] or [-EPP], where all heads endowed with movement triggering properties are specified for [+EPP] or [-EPP], respectively<sup>5</sup> (cf. Holmberg & Roberts, 2010: 40). This is to say that if all syntactic heads able to trigger movement are uniform in expressing either a [+EPP] or [-EPP] feature, then an unmarked syntactic configuration is obtained. In the former case, namely when all

## (7)

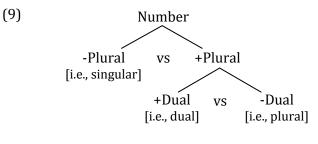
<sup>&</sup>lt;sup>5</sup> Dryer (1992) suggests that VO versus OV order is the basic determinant ordering among all head-complement pairs. Holmberg & Roberts (2010: 40) propose that this might follow from the fact that v is the category determining the word-order parameter in a particular language. This assumption might be justified by the fact that v is the phase head that determines argument structure, thus corresponding to the locus of the grammar in which the positioning and licensing of arguments is determined.

heads endowed with movement triggering properties are specified for [+EPP], a harmonic head-final syntactic configuration is attested. In the latter case, conversely, all heads endowed with movement triggering properties are specified for [-EPP], whose presence licenses a harmonic head-initial syntactic configuration. The presence of [+EPP] for some heads and [-EPP] for others would instead allow mixed configurations, which, according to Holmberg & Roberts (2010), are considered marked.

# 2.1.3 Morphological markedness

In morphology, markedness is divided between *formal* and *functional* markedness (cf. Dixon, 1994). This dichotomy has been the subject of some debate in  $\varphi$  theory in recent decades (cf. Silverstein, 1976; Harley, 1994; Bonet, 1995; Ritter, 1995; Noyer, 1998; Cowper, 2005; Nevins, 2007; Sauerland, 2008).

*Formal* markedness refers to those forms that are overtly marked by means of an inflectional marker conveying specific grammatical information. A typical example often discussed in the literature is the occurrence of *-s* as a marker of plurality for English regular nouns (cf. dog-**Ø** versus dog-**s**). The singular form *dog* is bare, thus not allowing the overt realization of a morpheme expressing singular. Zwicky (1978) defines the opposition between singular and plural as a matter of categorical binary distinction. In his treatment, plural, the marked category, bears a [+Plural] value, as opposed to the unmarked category found across languages, is thought to bear a [+Dual] value when present, as opposed to Plural, which bears a [-Dual] value.



[Zwicky (1978): 5]

The + values of the diagram in (9) are the marked ones, which stand in binary opposition to the – values, taken to be as unmarked.

*Functional* markedness, on the other hand, identifies the type(s) of categories that are distinguishable from others because of their use in a specific language. Focusing on personal pronouns in a number of languages, Silverstein (1976) observes that, for instance, 3 person is often attested in cases where a generic reference to other persons is intended. From this observation, he concludes that 3 person is functionally unmarked, since it can be selected as a default.

If we look at the agreement system of English lexical verbs in the present indicative, however, we observe that 3sg is marked with an -s (cf. I/you speak versus (s)he speaks). This means that formally a 3sg agreement marker in English is marked, while a 3p pronoun functionally is not. Furthermore, the overt realization of a  $\varphi$  marker in English is obtained only when the verb, in the present indicative, is valued for 3sg. All other forms in the paradigm, in fact, disallow the overt realization of agreement markers in English present indicative verbs are formally marked, whereas those expressing 1 and 2 person, both in the singular and in the plural, are not.

## 3. The morphological markedness of $\phi$ on perfective auxiliaries

### 3.1 The data

This part will focus on the formal markedness of  $\varphi$  attested on perfective active auxiliaries in a selected number of languages, including USIDs, Standard Italian, Spanish and Romanian.

It will be shown that USIDs do not all behave in the same way, as far as the formal markedness of  $\phi$  realized on present perfect and pluperfect auxiliaries is concerned.

### 3.2 The Romance scenario

Forchheimer (1953: 6) claims that languages tend to exhibit a mismatch in the morphological marking between 3 and 1/2 person agreement markers. From a cross-linguistic perspective, he observes that verbs tend to mark 1

and 2 person by means of a dedicated  $\varphi$  marker. The overt marking of 3 person on a verb, instead, seems to be infrequent. This behavior is attested in most Romance languages, French excluded, whereby 1 and 2 person, but not 3 person, agreement markers are overtly realized both on lexical and auxiliary verbs. These facts are illustrated by the present perfect constructions shown in (10)-(12).

(10) Standard Italian

a.	h <b>o</b>	mangiato/parlato	H.pr.1sg eaten/spoken
	hai	mangiato/parlato	H.pr.2sg eaten/spoken
	ha	mangiato/parlato	H.pr.3sg eaten/spoken
b.	abbia <b>mo</b>	mangiato/parlato	H.pr.1pl eaten/spoken
	av <b>ete</b>	mangiato/parlato	H.pr.2pl eaten/spoken
	ha <b>nno</b>	mangiato/parlato	H.pr.3pl eaten/spoken

### (11) Spanish

a.	h <b>e</b>	comido/llegado	H.pr.1sg eaten/arrived
	ha <b>s</b>	comido/llegado	H.pr.2sg eaten/arrived
	ha	comido/llegado	H.pr.3sg eaten/arrived
b.	h <b>emos</b>	comido/llegado	H.pr.1pl eaten/arrived
	hab <b>éis</b>	comido/llegado	H.pr.2pl eaten/arrived
	ha <b>n</b>	comido/llegado	H.pr.3pl eaten/arrived

### (12) Romanian

a.	am	vorbit/plecat	H.pr.1sg spoken/arrived
	ai	vorbit/plecat	H.pr.2sg spoken/arrived
	а	vorbit/plecat	H.pr.3sg spoken/arrived
b.	am	vorbit/plecat	H.pr.1pl spoken/arrived
	ați	vorbit/plecat	H.pr.2pl spoken/arrived
	a <b>u</b>	vorbit/plecat	H.pr.3pl spoken/arrived

Before considering the system of  $\varphi$  marking in (10)-(12), a clarification is required: Standard Italian, in contrast to Spanish and Romanian, opts for the selection of HAVE as a perfective auxiliary in the active voice only when it combines with a past participle of the accusative and unergative type. In the opposite situation, namely when the past participle is unaccusative, the auxiliary selected is BE. In this case, similarly to (10), BE is marked for its  $\varphi$  reference only when it expresses 1 and 2sg, and not, for instance, when it encodes 3sg: **sono**/ **sei**/ **è** arrivat(o/a) –BE.pr.1sg/ BE.pr.2sg/ BE.pr.3sg arrived-'I/you.sg/(s)he has arrived'.

All in all, five out of six forms in the paradigms in (10)-(12) are inflected for their  $\varphi$  information. In the traditional literature, it has been proposed that the richness of agreement encoded on a verb in declarative clauses depends on the application of verb movement, which, in Romance, corresponds to Vto-T (cf. Emonds, 1978; Pollock, 1989). Indeed, the Rich Agreement Hypothesis states that whenever V-to-T occurs, then richly inflected paradigms are obtained (cf. Roberts, 1985, 1993, 1999; Pollock, 1989; Belletti, 1990; Bobalijk, 1995; Thráinsson, 1996; Vikner, 1997; Bobalijk & Thráinsson, 1998; Biberauer & Roberts, 2010; Holmberg & Roberts, 2012). If we were following these assumptions, we would predict that the richness of  $\varphi$  expressed on the perfect auxiliaries in (10)-(12) would depend on the fact that these elements are merged in T°<sup>6</sup>.

The overt marking of 1 and 2 person on HAVE is also found in pluperfect auxiliaries in Standard Italian (cf. (13)). There, 3sg HAVE, similarly to (10), does not express its  $\varphi$  reference by means of a dedicated inflectional marker.

(13) Standard Italian

· · ·	<b>j</b>		
a.	avevo	mangiato/parlato	H.past.1sg eaten/spoken
	avevi	mangiato/parlato	H.past.2sg eaten/spoken
	aveva	mangiato/parlato	H.past.3sg eaten/spoken
b.	aveva <b>mo</b>	mangiato/parlato	H.past.1pl eaten/spoken
	aveva <b>te</b>	mangiato/parlato	H.past.2pl eaten/spoken
	aveva <b>no</b>	mangiato/parlato	H.past.3pl eaten/spoken

 $<sup>^6</sup>$  Schifano (in prep.) shows that the Rich Agreement Hypothesis is too strong since it does not predict the existence of richly inflected paradigms that do not feature Vto-T movement. In her work, she observes that Spanish verbs, although richly inflected, are not spelled-out in T°, but rather in a lower position. This is justified by the fact that Spanish verbs can be preceded by a range of adverbs which, according to Cinque (1999), are merged in a position lower than T°. For this reason, her conclusion is that richly inflected paradigms should not be directly associated with the overt movement of a verb to T°.

A different situation is attested for Spanish, which allows the selection of a syncretic exponent for 1 and 3sg HAVE when the auxiliary is in the pluperfect. In this type of construction, only 2 person is overtly marked in the singular paradigm (cf. (14)).<sup>7</sup>

(14)	Spa	nish
------	-----	------

a.	había	comido/llegado	H.past.1sg eaten/arrived
	había <b>s</b>	comido/llegado	H.past.2sg eaten/arrived
	había	comido/llegado	H.past.3sg eaten/arrived
b.	había <b>mos</b>	comido/llegado	H.past.1pl eaten/arrived
	había <b>is</b>	comido/llegado	H.past.2pl eaten/arrived
	había <b>n</b>	comido/llegado	H.past.3pl eaten/arrived

It is worth noting that the paradigms in (13) and (14), in contrast to those in (10)-(12), opt for the overt expression of a Tense marker encoding past information. In (10)-(12), in fact, no Tense marker is overtly expressed to specify the feature Present encoded on the auxiliaries. Furthermore, if we were to claim that the Rich Agreement Hypothesis was justified by the overt movement of the verb from V-to-T, then we would not understand why the auxiliaries in (14) allow less inflected forms compared to those in (11). Two solutions to this puzzle suggest themselves:

- i. In (14), the pluperfect auxiliaries do not move to T°, but rather to a lower position;
- ii. The presence of Past encoded on the pluperfect auxiliaries in (14) allows the overt marking of a smaller set of  $\varphi$  features.

The solution to this problem will be presented in §5 and §6.

<sup>&</sup>lt;sup>7</sup> In Romanian, a pluperfect construction is not expressed by means of a periphrasis, but rather by selecting a syncretic verbal form, which is thought to originate from the Latin plusperfect subjunctive: greșisem –mistake.pluperf.1sg- 'I had made a mistake' (Dindelegan, 2013: 226).

# 3.3 USIDs

USIDs seem not to be homogenous in the way they overtly encode  $\varphi$  information expressed on perfective auxiliaries. NIDs, similarly to Standard Italian, Spanish and Romanian, generally admit the overt marking of 1 and 2 person on both present perfect and pluperfect auxiliaries<sup>8</sup>. This situation is illustrated in the paradigms in (15) and (16), which show a present perfect and pluperfect construction respectively.

(15) San Benedetto del Tronto (Southern Marchigiano)

SO	'vi∫tə/dər'mi:tə/ve'nutə	B.pr.1sg seen/slept/come
∫i	'vi∫tə/dər'mi:tə/ve'nutə	B.pr.2sg seen/slept/come
а	'vi∫tə/dər'mi:tə/ve'nutə	H.pr.3 seen/slept/come
∫emə	'vi∫tə/dər'mi:tə/ve'nutə	B.pr.1pl seen/slept/come
∫etə	'vi∫tə/dər'mi:tə/ve'nutə	B.pr.2pl seen/slept/come
-		[Manzini & Savoia (2005), II: 682-683]

(16) San Benedetto del Tronto (Southern Marchigiano)

<b>S</b> JVƏ	'vi∫tə/dər'mi:tə	B.pr.1sg.H.past seen/slept
∫ivə	'vi∫tə/dər'mi:tə	B.pr.2sg.H.past seen/slept
a'vi	'vi∫tə/dər'mi:tə	H.past.3 seen/slept
∫ava <b>mə</b>	'vi∫tə/dər'mi:tə	B.pr.H.past.1pl seen/slept
∫avatə	'vi∫tə/dər'mi:tə	B.pr.H.past.2pl seen/slept
-	-	[Manzini & Savoia (2005), II: 683]

<sup>&</sup>lt;sup>8</sup> As D'Alessandro & Ledgeway (2010) point out, the pluperfect in Eastern Abruzzese is expressed by a Double Auxiliary Construction (DAC). DAC consists in the selection of two finite auxiliaries, whereby the first expresses the canonical BE-HAVE alternation according to  $\varphi$  feature specification of the sentential subject, as well as information for Present, and the second only expresses information for Past. This is true for the singular auxiliaries and 3 person HAVE. 1 and 2pl BE, on the other hand, indicate that the first auxiliary overtly expresses the consonant /s/, or similar, which corresponds to the root of BE. The second auxiliary, instead, is inflected for  $\varphi$  and expresses information for Past. This phenomenon is not limited to Eastern Abruzzese, but is also found in some Southern Marchigiano varieties.

On the other hand, CSIDs do not exhibit the same marking strategies of  $\varphi$  observed in (15) and (16). In these dialects, in fact, present perfect auxiliaries allow the overt marking of all  $\varphi$  features, except for 2sg (cf. (17)-(19)). This is to say that in the singular paradigm, only 1 and 3 person are overtly marked by means of a dedicated  $\varphi$  marker realized in word-final position. A 2sg present perfect auxiliary, on the other hand, is bare.

(17) Mola di Bari (Apulo-Barese)

a.	а <del>јј</del> /і	'fatt/par'tʉ:t	H.pr.1sg done/left
	а	'fatt/par't <del>u</del> :t	H.pr.2sg done/left
	(')a	<b>f</b> 'fatt/ <b>p</b> par't <del>u</del> :t	H.pr.3sg done/left
b.	a <b>m</b>	'fatt/par't <del>u</del> :t	H.pr.1pl done/left
	a'v <b>et</b>	'fatt/par't <del>u</del> :t	H.pr.2pl done/left
	an	'fatt/par'tʉ:t	H.pr.3pl done/left

### (18) Conversano (Apulo-Barese)

a.	SD	<b>f</b> 'fatt	B.pr.1sg done
	а	'fatt	H.pr.2sg done
	а	<b>f</b> 'fatt	H.pr.3sg done
b.	a <b>m</b>	'fatt	H.pr.1pl done
	av <b>et</b>	'fatt	H.pr.2pl done
	an	'fatt	H.pr.3pl done

#### (19) Airola (Central Campanian)

a.	a <b>ddʒə</b>	'vistə/'fattə	H.pr.1sg seen/done
	а	'vistə/'fattə	H.pr.2sg seen/done
	а	<b>v</b> 'vistə/ <b>f</b> 'fattə	H.pr.3sg seen/done
b.	a <b>mmu</b>	'vistə/'fattə	H.pr.1pl seen/done
	a <b>tə</b>	'vistə/'fattə	H.pr.2pl seen/done
	a <b>nnə</b>	'vistə/'fattə	H.pr.3pl seen/done

The overt marking of  $\varphi$  in the case of pluperfect auxiliaries slightly differs from that one observed for present perfect auxiliaries in (17)-(19). In the singular paradigm, in fact, only 2 person gets marked, whereas 1 and 3 person do not. This situation, as shown in (14), is also attested in Spanish,

where a 2sg pluperfect auxiliary is morpho-phonologically more marked than those conveying 1 and 3sg information. In CSIDs, the overt marking of 2sg does not take place via the overt encoding of an inflectional marker in word-final position, but rather through metaphony, which affects the stressed vowel of the auxiliary. It must be noted, however, that plural pluperfect auxiliaries always require the overt marking of  $\varphi$ . These facts are illustrated in (20)-(22)<sup>9</sup>.

(20) Mola di Bari (Apulo-Barese)

-	I		$\mathbf{H} = \{1, \dots, 1, \dots, 1, \dots, 1, 1, \dots, 1, 1\}$
a.	a'vev	man dzət/a pirt/və vx <sup>w</sup> t	H.past.1sg eaten/opened/drunk
	a'v <b>i</b> v	man'dʒət/a'pirt/ʋə'vɤʷt	H.past.2sg eaten/opened/drunk
	a'vev	man'dʒət/a'pirt/ʋə'vъʷt	H.past.3sg eaten/opened/drunk
b.	a'v <b>emm</b>	man'dʒət/a'pirt/ʋə'vъʷt	H.past.1pl eaten/opened/drunk
	a'v <b>ivər</b>	man'dʒət/a'pirt/ʋə'vɤʷt	H.past.2pl eaten/opened/drunk
	a'v <b>evən</b>	man'dʒət/a'pirt/ʋə'vɤʷt	H.past.3pl eaten/opened/drunk

(21) Conversano (Apulo-Barese)

a.	a've:v	man'dʒɜ:t/a'pi:rt/'fatt	H.past.1sg eaten/opened/done
	a'vi:v	man'dʒɜ:t/a'pi:rt/'fatt	H.past.2sg eaten/opened/done
	a've:v	man'dʒɜ:t/a'pi:rt/'fatt	H.past.3sg eaten/opened/done
b.	a'v <b>ɛmm</b>	man'dʒɜ:t/a'pi:rt/'fatt	H.past.1pl eaten/opened/done
	a'v <b>istəv</b>	man'dʒɜ:t/a'pi:rt/'fatt	H.past.2pl eaten/opened/done
	a'v <b>evən</b>	man'dʒɜ:t/a'pi:rt/'fatt	H.past.3pl eaten/opened/done

<sup>&</sup>lt;sup>9</sup> A large number of CSIDs display HAVE as a pluperfect auxiliary for the entire paradigm (cf. Manzini & Savoia, 2005; Cennamo, 2010). A group of CSIDs, instead, seems to choose BE instead of HAVE as the pluperfect auxiliary for all persons in the paradigm. In both cases, 2sg is always overtly marked by means of metaphony, whereas 1 and 3sg forms are not, thus displaying the selection of a syncretic exponent: Martina Franca (Apulo-Barese) ετə/ irə/ ετə la'vεtə -BE.past.1sg/ BE.past.2sg/ BE.past.3sg washed- 'I/you.sg/(s)he had washed' (cf. Manzini & Savoia (2005), II: 793).

(22) Airola (Central Campanian)

· ·	)	1 )	
a.	a'le:və	man'dʒɜ:t/a'pi:rt/'fatt	H.past.1sg eaten/opened/done
	a'l <b>i</b> :və	man'dʒɜ:t/a'pi:rt/'fatt	H.past.2sg eaten/opened/done
	a'le:və	man'dʒɜ:t/a'pi:rt/'fatt	H.past.3sg eaten/opened/done
b.	a'le:və <b>mə</b>	man'dʒɜ:t/a'pi:rt/'fatt	H.past.1pl eaten/opened/done
	a'levə <b>və</b>	man'dʒɜ:t/a'pi:rt/'fatt	H.past.2pl eaten/opened/done
	a'levə <b>nə</b>	man'dʒɜ:t/a'pi:rt/'fatt	H.past.3pl eaten/opened/done

The CSIDs documented in (17)-(22) strongly indicate that present and pluperfect auxiliaries do not display the same type of overt marking of  $\varphi$ : a present perfect auxiliary allows the overt marking of 1 and 3sg, but not 2sg. A pluperfect auxiliary, conversely, admits the overt marking of 2sg, with the exclusion of 1 and 3sg.

# 3.4 Summary

In this section, we have seen that USIDs and other Romance languages, such as Standard Italian, Spanish and Romanian, opt for different mechanisms of  $\phi$  marking on perfective auxiliaries. As far as present perfect auxiliaries are concerned, we have observed that:

- i. NSIDs, similarly to Standard Italian, Spanish and Romanian, always allow the overt marking of 1 and 2 person, both in the singular and plural. 3 person, at least in the singular paradigm, is never overtly marked;
- ii. CSIDs, differently from NSIDs, Standard Italian, Spanish and Romanian, always allow the overt marking of plural forms, as well as of 1 and 3sg, and never of 2sg.

Conversely, in the case of pluperfect constructions, we have observed that:

i. NSIDs, similarly to Standard Italian, always allow the overt marking of 1 and 2 person in the singular and plural. 3 person, at least in the singular paradigm, is never overtly marked;

ii. CSIDs, similarly to Spanish, always allow the overt marking of all  $\phi$  values, except 1 and 3sg.

A summary of these facts is given in the table in (23). The symbol + indicates the contexts in which the overt marking of  $\phi$  is operative. -, on the other hand, signals that no marking for a given  $\phi$  value is obtained.

)							
	Perfective auxiliaries						
	Preser	Present perfect aux.			Pluperfect aux.		
φ values	1sg	2sg	3sg	1sg	2sg	3sg	
Languages							
Standard Italian	+	+	-	+	+	-	
Spanish	+	+	-	-	+	-	
Romanian	+	+	-				
NSIDs	+	+	-	+	+	-	
CSIDs	+	-	+	-	+	-	

The table in (23) shows that CSIDs differ from all other languages in never allowing the overt realization of 2sg on a present perfect auxiliary. Furthermore, this group of dialects obligatorily induces the overt marking of 3 person by means of RF when the auxiliary occurs in a present perfect construction. The overt marking of 3sg on a present perfect auxiliary is only attested in CSIDs, and not found elsewhere.

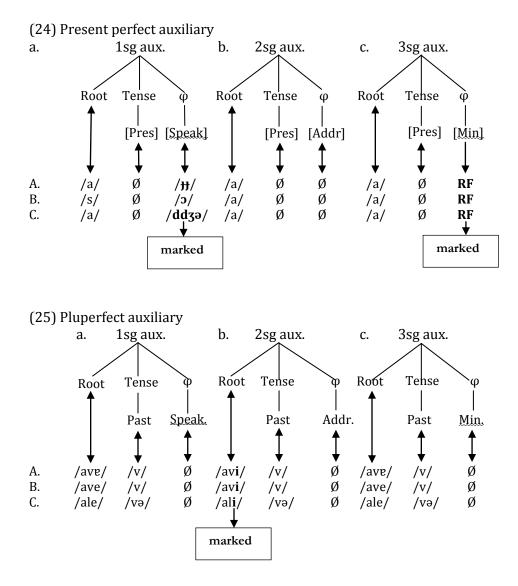
It is interesting to note, however, that no language in (23) lacks the overt marking of 1sg on a present perfect auxiliary. This is to say that present perfect auxiliaries in the languages listed in (23) obligatorily admit the overt marking of 1sg by means of a dedicated  $\varphi$  marker.

As far as pluperfect auxiliaries are concerned, (23) shows that CSIDs, similarly to Spanish, allow the overt marking of all  $\phi$  values, except 1 and 3sg.

# 3.5 Summary of the morphological markedness of $\boldsymbol{\phi}$ on perfective auxiliaries in CSIDs

With reference to the dialects of Mola di Bari, Conversano and Airola presented in (17)-(22), a generalization can be proposed: the overt marking of  $\varphi$  on perfective auxiliaries in these dialects is strictly connected to the information expressed by Tense. The diagrams in (24) and (25) summarize these facts, by showing that the overt marking of 1 and 3sg only occurs with an auxiliary specified for Present, whereas the overt marking of 2sg, conversely, occurs when the auxiliary expresses information for Past. We will make use of [Speaker] and [Minimal] to refer to the morphosyntactic features expressing 1 and 3sg, respectively. Conversely, [Addressee] corresponds to the feature expressing 2sg (cf. Harley & Ritter, 2002). Moreover, the morphosyntactic features Present and Past will henceforth be referred to as [Present] and [Past], respectively.

In the diagrams below, A, B and C correspond to the overt realization of the singular present perfect and pluperfect auxiliaries of the dialects of Mola di Bari, Conversano and Airola, respectively.



At first glance, it seems that the marking strategies of  $\varphi$  observed in (24) and (25) are complementary. In both cases, in fact, the overt marking of  $\varphi$  seems to be strictly dependent on the value expressed by Tense: if Tense is [Present], then the default morphosyntactic nodes branching below [Participant], e.g. [Speaker] and [Minimal], are overtly marked. On the other

hand, if Tense expresses [Past], the feature which gets overtly marked is [Addressee], which, according to the geometry of morphosyntactic features by Harley & Ritter (2002), corresponds to the marked one branching below [Participant]. Given these facts, we will assume that the morphological markedness of  $\varphi$  in the auxiliaries in (24) and (25) derives from a post-syntactic mechanism that states that the information expressed by Tense, namely its grade of markedness, is able to determine the type of morphosyntactic feature to be overtly expressed on a perfective auxiliary.

# 4. The acquisition of pronouns, agreement markers and Tense

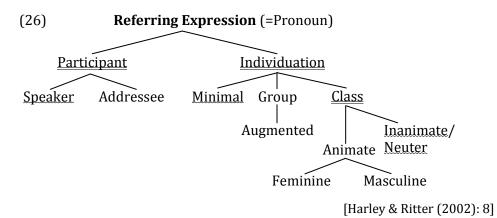
In this section, we will focus on the acquisition of pronouns, agreement markers and Tense. This survey will be crucial for our analysis of morphological markedness of  $\varphi$  features encoded on perfective auxiliaries in CSIDs, which will be put forward in §5.

In what follows, we propose that the grade of markedness inherited by a pronoun, agreement marker and Tense is determined by purely acquisitional facts: features that are learnt earlier are considered as defaults, or unmarked, whereas those acquired later are thought to be marked (cf. Jakobson, 1971; Rice & Avery, 1995; Brown, 1997; Harley & Ritter, 2002; a.o.).

# 4.1 The acquisition hierarchy

# 4.1.1 The acquisition and markedness of pronouns

According to Jakobson (1971), the process of acquisition determines the set of features that need to be overtly marked in a given language. Building on this proposal, many researchers have focused on the acquisitional path of a given type of feature, trying to capture whether markedness can be understood as a phenomenon that depends on acquisitional facts, and, more specifically, to understand whether acquisitional phenomena are able to determine how markedness should be defined cross-linguistically. Within works in generative phonology, Rice & Avery (1995), for instance, refer to the so-called model of "Global uniformity", which states that children tend to acquire the basic set of sounds in roughly the same order. Once the basic sound inventory has been stored in a child's brain, other sounds are acquired in different orders, giving rise to "Local variability". Harley & Ritter (2002), drawing on the models of acquisition by Rice & Avery (1995) and Brown (1997), also propose that Universal Grammar provides a minimal initial structure of morphosyntactic features. According to them, features learnt early in the acquisitional process are considered defaults, whereas those acquired late are considered marked. Harley & Ritter (2002) organize morphosyntactic features within a geometry, which is reproduced in (26).



In (26), the organizing nodes [Participant], [Individuation] and [Class] are features that allow the branching of other morphosyntactic features within their domains. As the geometry above shows, three of those dependents branching below [Participant], [Individuation] and [Class] are curly underlined. These nodes, namely [Speaker], [Minimal] and [Inanimate/Neuter] correspond to defaults. Default nodes are those learnt before others. For this reason, with reference to the Participant domain, [Speaker], in being a default, is learnt before [Addressee].

A caveat is required at this point. Harley & Ritter claim that a default node must be represented in a feature geometry. A different proposal is put forward by Rice & Avery (1995) and Brown (1997), who claim that defaults

are not represented in underlying representations if they do not enter into contrast with another feature<sup>10</sup>.

The sequence of the acquisition of pronouns as put forward by Harley & Ritter (2002) has been also referred to by other researchers and scholars in recent years (cf. Forchheimer, 1953; Benveniste & Meek, 1971; Aikhenvald & Dixon, 1998; Baerman *et al*, 2005; a.o.). Since 3sg is generally acquired before 1sg and 1sg is acquired before 2sg, they propose the following person hierarchy (3 > 1 > 2)<sup>11</sup>. According to this acquisitional hierarchy, 1 person is learnt after 3 person. This means that, making use of the privative feature system à *la* Harley & Ritter, [Minimal] is generally learnt before [Speaker]. As for [Addressee], this is categorically learnt after the two defaults have been acquired. As Harley & Ritter (2002:28) claim "A Speaker default at the Participant node is consistent with the early acquisition of 1<sup>st</sup>

<sup>&</sup>lt;sup>11</sup> Other hierarchies defining markedness effects have been found to exist in different languages. One of these is the nominal hierarchy proposed by Dixon (1994), which is based on that put forward by Silverstein (1976). According to these studies, 1, 2 and 3sg pronouns and nouns can be arranged on a scale. Those appearing at its left-edge, i.e. 1 and 2 person pronouns, are considered to prototypically confer agentive properties, whereas those appearing at its right, i.e. 3 person pronouns, are thought to embed inherent information for patient. In a group of ergative languages, 1 and 2 person pronouns are marked if they function as objects, while 3 person pronouns are marked if functioning as subjects. This situation is the one found in Dyirbal:

1	

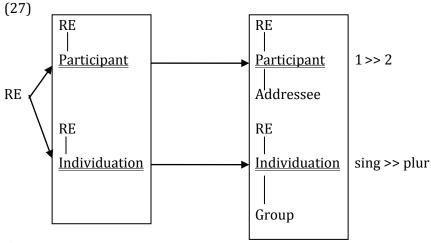
Agent	-Ø	-ŋgu	-ŋgu	-ŋgu
Object	-na	Ø	Ø	Ø
	Pronouns 1	Pronouns 3	Proper	Common
	& 2		names	names

[Dixon (1994): 85]

In this language, the **-na** and **-ŋgu** markers are realized on nominals that do not cover the prototypical information they inherit.

<sup>&</sup>lt;sup>10</sup> With reference to phonological features, Avery & Rice (1989) claim that coronal is the unmarked place of articulation. Their proposal is supported by the fact that all languages have coronal consonants whereas labials and dorsals are marked because they are not found in all languages. For this reason, they claim that coronal is the underspecified node under place, which may be absent from underlying representations, whereas labial and dorsals, which are marked, must be present in the underlying representation. These facts have already been briefly introduced in §2.1.1.

person; likewise, a Minimal default at the Individuation node allows us to predict that singular should also emerge early on". This is exemplified in (27).



 $\rightarrow$  where RE is Referring Expression

[Adapted from Harley & Ritter (2002): 28]

The structure in (27) shows that [<u>Participant</u>] and [<u>Individuation</u>] are the dependents of Referring Expression. The acquisition of [Addressee] and [Group] operates after the acquisition of the defaults of [<u>Participant</u>] and [<u>Individuation</u>]. [Addressee] and [Group], in fact, are equally embedded in the geometry and bear the same degree of markedness.

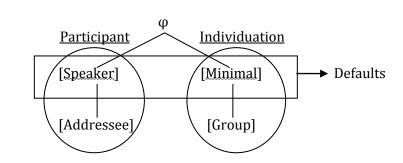
# 4.1.2 The acquisition and markedness of $\boldsymbol{\phi}$ agreement markers

Many studies on the acquisition of agreement markers have revealed that [Minimal] is generally learnt before [Speaker]. As for [Addressee], this is consistently acquired after [Speaker], as the cross-linguistic observation presented in (28) illustrates.

(28)		
Language	Reference	Order of acquisition
Basque	Austin 2012	<b>3</b> < 1 < 2
Catalan	Grinstead 2000	<b>1</b> , <b>3</b> < 2
Croatian	Katičić 2003	<b>3</b> < 1 < 2
Estonian	Lipp 1977	<b>3</b> < 1 < 2
Finnish	Laalo 2003	<b>3</b> < 1 < 2
German	Clahsen 1988, Poeppel	<b>1</b> , <b>3</b> < 2
	& Wexler 1993	
Greek	Christophidou &	<b>3</b> < 1 < 2
	Stephany 2003	
Hebrew	Armon-Lotem 2006	<b>1</b> , <b>3</b> < 2
Italian	Clark 1985	<b>3</b> < 1 < 2
Lithuanian	Wójcik 2003	<b>1</b> , <b>3</b> < 2
Northern East Cree	Terry 2009	<b>3</b> < 1 < 2
	Grinstead 2000, Félix-	<b>1</b> , <b>3</b> < 2
Spanish	Brasdefer 2006, Austin	
	2012	
	Aguirre 2003	<b>3</b> < 1 < 2
Turkish	Özden Ekmekci 1982	<b>1</b> , <b>3</b> < 2

[Ackema & Neeleman (2012): 7]

Given (28), the acquisition hierarchy observed for pronouns and discussed above (cf. Forchheimer, 1953; Benveniste & Meek, 1971; Aikhenvald & Dixon, 1998; Harley & Ritter, 2002; Baerman *et al*, 2005; a.o.) can also be understood to apply to agreement markers. For this reason, we assume that [Minimal] and [Speaker] correspond to default agreement markers, the former being the default for [Individuation] and the latter being the default for [Participant].



Having presented the notion of default and marked agreement markers, let us focus now on the acquisition and markedness of Tense. More specifically, the next section will consider Tense as a morphosyntactic feature that can express a default or marked value on a par with pronouns and agreement markers.

## 4.1.3 The acquisition and markedness of Tense

In the traditional literature, the morphosyntactic feature [Present], as opposed to [Past], is generally assumed to be a default (cf. Greenberg, 1966; De Hoop *et al.*, 2004; Nevins, 2007; Aalberse, 2009; a.o.). This feature, in fact, is generally assumed to be acquired before [Past].

Furthermore, the reason why [Present] is considered a default, as opposed to [Past], derives from the observation that finite verbs generally receive a default tense interpretation, i.e. [Present], in those languages in which no tense marker is overtly encoded. This is the case for English, where, for instance, verbs in the present tense lack the overt realization of a Tense marker expressing [Present]. On the other hand, the overt marking of [Past], at least in regular verbs, is expressed by means of -ed: walk- $\emptyset$  versus walk-**ed**.

According to Comrie (1985), [Present] is expressed when the moment of speech coincides with the event time. [Past], instead, is encoded when the event time precedes the moment of speech. Following the markedness convention put forward by Holmberg & Roberts (2010) and discussed in §2.1.2, which assumes that the uniformity of values expressed on features gives rise to unmarked, i.e. default, syntactic configurations, we consider the

(29)

morphosyntactic feature [Present] as a default. This is due to the fact that when present tense is expressed, both the event time and the moment of speech share the same reference. On the other hand, [Past] can be considered as marked since it signals that the event time and the moment of speech do not converge.

# 5. The composition of Infl°

Building on our proposal put forward in chapter 2, we propose that syntactic auxiliaries are merged in Infl<sup>o</sup>, which, based on Ritter & Wiltschko (2010), is a syntactic head composed of three deictic categories, including Tense and  $\varphi$ . We will observe that the value expressed by Tense, as briefly mentioned above (cf. Comrie 1985), depends on the anchoring mechanism between the event situation and the utterance situation.

## 5.1 The substantive content of Infl°

Ritter & Wiltschko (2010) show that a group of Amerindian languages spoken on the west coast of North America behaves differently from Indo-European languages in not allowing the selection of a morphological marker expressing Tense. In some languages belonging to this group, however, an overt marker expressing Tense is attested, although it is not obligatory. One example is provided by Halkomelem, a Central Coast Salish language that has an overt marker expressing past tense, the interpretation of which is that the event is not ongoing. The absence of that morphological marker does not mean that the event described takes place at the utterance time, i.e., the lack of a Tense marker does not imply that the event and utterance situations coincide.

(30	))		
a.	í <b>-lh</b>	qw'eyílex	tú-tl'ò
	aux. <b>past</b>	dance	he
	'he was d	ancing'	
b.	í	qw'eyílex	tú-tl'ò
	aux	dance	he
	'he is/wa	s dancing'	

[Ritter & Wiltschko (2010): 1-2]

The auxiliary i in the examples in (30a) and (30b) is a locative auxiliary, the morphological shape of which changes according to spatial factors. In other words, if the location of the reported event coincides with that of the utterance, then auxiliary i is selected. If the location of the reported event does not coincide with that of the utterance situation, a distal auxiliary is selected, with the form li:

(31)
a. í qw'eyílex tú-tl'ò aux.prox dance he 'he is/was dancing [here]'
b. lí qw'eyílex tú-tl'ò aux.dist dance he 'he is/was dancing [there]'

[Ritter & Wiltschko (2010): 8-9]

A similar situation is observed in Blackfoot, an Algonquian language (cf. (32)), where the morphological marking of person signals whether at least one participant of the reported event coincides with at least one of those involved in the utterance situation. The lack of overt realization of a person marker indicates that none of the utterance participants coincides with the set of participants present in the event situation.

(32)

- a. Kitsinóóhpoaawa kit-ino-o-**hp**-oaawa 2.see.1:2**.local**.2pl 'I saw you.pl'
- b. Ana póókaawa inoyííwa ani imitááyi an-(wa) pookaa-wa ino-yii-Ø-wa an-(y)i imitaa-ya dem.prox child.prox see.dir.3.prox. dem.obv. dog-obv. 'The child saw the dog'

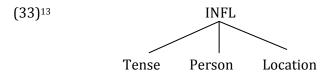
[Ritter & Wiltschko (2010): 9-10]

Ritter & Wiltschko (2010), building on Ritter & Wiltschko (2009), claim that there is a universal category where Tense is marked in Indo-European languages and that this category corresponds to INFL<sup>12</sup>. In languages like Halkomelem and Blackfoot, no overt realization of a morpheme specifying tense information is found. In these languages, other deictic elements conveying information for Location and Person are present. If Tense, as proposed by Chomsky (1995), were the category provided by Universal Grammar where tense functions are displayed, languages like Halkomelem and Blackfoot would be understood as lacking this universal category altogether (cf. Wiltschko, 2002; Ritter & Wiltschko, 2004; Shaer, 2003; Bittner, 2005). All in all, the data provided in this section suggest that a category other than Tense, namely INFL, corresponds to the universal category where information for Tense, Location and Person are encoded.

<sup>&</sup>lt;sup>12</sup> The same proposal was put forward by Chomsky (1981), who claimed that tense features, along with subject-verb agreement, constitute the content of an abstract category called INFL. Differently from Chomsky (1981), Pollock (1989), in his seminal paper, provides a different analysis related to the content of INFL. Firstly, he provides a different label to this category, which he calls Tense. Moreover, he proposes that the content of Tense should be split, thus postulating the presence of two different syntactic categories, one called Tense and the other called Agr. The Agr category, the content of which is supposed to host  $\varphi$  features, has been criticized by Chomsky (1995) since its contribution only consists in mediating an Agree relation between this category and, say, the subject. Furthermore, other scholars have cited empirical evidence for postulating that Agr, merging lower than Tense, might correspond to Aspect (cf. Zagona, 1993; Stowell, 1996).

Building on some studies on the syntax-semantics interface (cf. Enç, 1987; Zagona, 1990, 1995; Demirdache & Uribe-Etxebarria, 1997, 2000), which define Tense as a category that serves to relate event to utterance time, Ritter & Wiltschko (2009) identify INFL as the category whose function is that of anchoring the event with the utterance situation.

In their view, the morphological marking of Tense displayed by a large number of Indo-European languages corresponds to one of the choices offered by Universal Grammar. Thus, Indo-European languages make use of the overt marking of tense morphemes encoded on INFL in order to anchor the event time to the utterance time. Some other languages might make use of other types of elements, which, according to Ritter & Wiltschko, correspond to Person and Location:



Differently from a language like English, Halkomelem uses Location to express whether the location of the reported event is the same as the location of the utterance. In Blackfoot, a person marker is selected to express whether the set of participants in the event situation is the same or a subset of those present in the utterance situation.

## 5.1.1 Event and utterance situations: the anchoring of [ucoin]

Ritter & Wiltschko (2010) argue that the anchoring mechanism linking the event to the utterance situation is obtained by means of a feature intrinsically associated to INFL, which they call [ucoin(cidence)]. This feature is unvalued and must be checked according to the information provided by the event situation. The structure they propose is the one in

<sup>&</sup>lt;sup>13</sup> Gruber (2013) proposes a similar analysis with reference to 1 and 2 person pronouns. Her account claims that Person, Location and Time are non-atomic entities. She argues that Person is a category dependent on Time and Location (Gruber, 2003: 2).

(34), where the utterance situation is encoded in the specifier of INFL and the event situation is expressed in the specifier of VP.

(34)

UG IP [Utt-sit INFL [ucoin] VP [Ev-sit V]]

[Ritter & Wiltschko (2010): 12]

[*u*coin] must be valued during the derivation of indicative clauses. The morphological marking of this feature serves as a way of expressing its value. When the event situation coincides with the utterance situation, [*u*coin] bears a + value. If the two times do not coincide, then the value encoded on that feature is -.

In a language like English, for instance, [ucoin] is valued as + only if the event situation coincides in time with the utterance situation. This is to say, [ucoin] in English is + only if the event situation is present. If the event situation is past, and thus does not coincide with the utterance situation, [ucoin] bears a – value.

In Halkomelem, on the other hand, [*u*coin] gets a + value when the location of the event is the same as that of the utterance situation, meaning that [+coin] in this language indicates that the event location is where the sentence is uttered. If the location of the event and that of the utterance situation are not the same, [*u*coin] gets a – value.

Finally, the + value of [*u*coin] in Blackfoot indicates that the event participants are the same as or a subset of those of the utterance situation, thus coinciding with either 1 and/or 2 person, or both. If the event participant is 3 person, for instance, [*u*coin] is valued as -. In every language, the feature [*u*coin] must be associated with one of the three categories within INFL. In English, [*u*coin] is expressed in Tense, whereas in Halkomelem and Blackfoot this feature is encoded in Location and Person, respectively.

(35)

a. IP [Utt-sit INFL [+coin] VP [Ev-sit V {present}]]

English

b. IP [Utt-sit INFL [-coin] VP [Ev-sit V {past}]]

(36)

a. IP [Utt-sit INFL [+coin] VP [Ev-sit V {proximate}]] Halkomelem

b. IP [Utt-sit INFL [-coin] VP [Ev-sit V {distal}]]

(37)

a. IP [Utt-sit INFL [+coin] VP [Ev-sit V {local}]]

b. IP [Utt-sit INFL [-coin] VP [Ev-sit V {other}]]

[Ritter & Wiltschko (2010): 12]

Blackfoot

At this point, we might wonder whether languages can opt for the morphological marking of more than one grammatical category within INFL. Moreover, it might be useful to investigate whether, for instance, the value expressed by [ucoin] encoded on a given category influences the type of marking of other categories. An example was provided above in (30), where the occurrence of a morphological marker expressing information for [Past] can combine with the auxiliary *i*, which expresses information for proximity, thus morphologically marking [+coin] for Location. Furthermore, if we observe how the + and – values of [ucoin] are morphologically marked in the languages in (38)-(40), we see that [ucoin], when valued for a + value, is not always more morphologically marked than when expressing a value. Blackfoot shows that the presence of [+coin] for the category Person is signaled by means of a morphological marker, the presence of which is excluded when this category is [-coin] (cf. (38)). In Halkomelem, conversely, a more marked auxiliary, namely *lí*, is realized when [*u*coin] is valued for – with regard to Location. In the reverse case, namely when [ucoin] bears a + value, a less marked auxiliary, namely *i*, is selected (cf. (39)).

(38) Blackfoot

a.	IP [Utt-sit INFL [+coin] VP [Ev-sit V {local}]]	↔ hp
b.	IP [Utt-sit INFL [-coin] VP [Ev-sit V {other}]]	$\leftrightarrow \emptyset$

(39) Halkomelem

a. IP [Utt-sit INFL [+coin] VP [Ev-sit V {proximate}]]	⇔í
--	----

b. IP [Utt-sit INFL [-coin] VP [Ev-sit V {other}]]  $\leftrightarrow \mathbf{li}$ 

From (38) and (39), it seems that there is no general rule which states that the type of value present on [*u*coin] categorically activates a specific marking strategy. Indeed, [-coin] in Halkomelem is morphologically more marked than [+coin]. The opposite applies in Blackfoot. Similarly to Halkomelem, English also allows the morphological marking of Tense when this bears a [-coin] valuation. In the presence of present tense, on the other hand, no overt marker is selected to express this information:

(40) English	
--------------	--

-	, ,	
a.	IP [Utt-sit INFL [+coin] VP [Ev-sit V {prese	ent}]] $\leftrightarrow \emptyset$
b.	IP [Utt-sit INFL [-coin] VP [Ev-sit V {past}]	$ ] \leftrightarrow -ed$

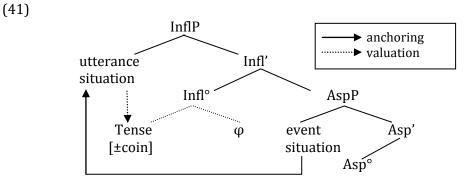
In addition, English allows the overt realization of a person marker, namely 3sg -s, when [ucoin] is valued as + for the category Tense. When [ucoin] bears a – value, no person marker is selected, thus suggesting that the value expressed on [ucoin] determines the type of person feature to be morphologically marked in indicative clauses.

# 5.2 Perfective auxiliaries in CSIDs: the anchoring of [ucoin] in Tense

Here, we argue that perfective active auxiliaries in CSIDs, similarly to English and other Indo-European languages, encode a [*u*coin] feature in the category Tense.

In the case of periphrastic constructions composed of perfective auxiliaries followed by past participles, we claim that  $Asp^{\circ}$  corresponds to the syntactic head where participles are merged. The specifier of  $Asp^{\circ}$  is thought to encode the event situation. It is assumed that  $Infl^{\circ}$ , merging right above  $Asp^{\circ}$ , hosts the auxiliary and the utterance situation is encoded in its specifier. If the event situation in Spec, AspP and the utterance situation in Spec, InflP coincide, namely if the event has direct consequences on the utterance situation, [*u*coin] encoded in Tense bears a + value. On the other hand, if the event situation, in Spec, AspP does not have direct consequences on the utterance situation, [*u*coin] in Tense is valued as -. The anchoring between the event and the utterance situations in perfective auxiliaries in CSIDs is illustrated in (41).

### The post-syntactic operation of *Default Marking* 123



Based on the markedness convention proposed by Holmberg & Roberts (2010), we consider + expressed on [ucoin] as a default value. This relies on the fact that the event and utterance situation in this case share the same value, the uniformity of which licenses a default configuration. On the other hand, if the event and utterance situation do not share the same value, namely when [ucoin] is valued as -, then a marked configuration is obtained.

### 6. The post-syntactic operation of *Default Marking*

In this section, we propose that the overt marking of  $\varphi$  realized on perfective auxiliaries in a group of CSIDs derives from the application of a post-syntactic mechanism, which we call *Default Marking*. The definition of *Default Marking* is given in (42):

### (42) Default Marking

The morphological marking of a  $\phi$  feature can only take place if all features bear the same markedness on the functional head that hosts them.

According to the *Default Marking* mechanism in (42),  $\varphi$  features encoded on perfective auxiliaries get overtly spelled out only if their grade of markedness is the same as that expressed by [*u*coin], which we assume is encoded in Tense in CSIDs. More explicitly, we predict that if [*u*coin] is valued as +, which in our account corresponds to a default, then only default  $\varphi$  features, i.e. [Speaker] and [Minimal], get overtly marked at PF.

Conversely, if [*u*coin] is valued as –, which in our model corresponds to a marked value, then only marked  $\varphi$  features, i.e. [Addressee], get overtly marked. In our account,  $\varphi$  features are encoded in the deictic category embedded within Infl° that corresponds to Person according to Ritter & Wiltschko (2010).

The uniformity of markedness expressed by [ucoin] and  $\phi$  gives rise to a default configuration (based on Holmberg & Roberts, 2010) that is responsible for licensing the post-syntactic application of *Default Marking*. We assume that this takes place in the morphological component.

In §6.1, we examine the mechanism of *Default Marking* with reference to present perfect auxiliaries. §6.2, on the other hand, will consider the application of *Default Marking* with pluperfect auxiliaries.

# 6.1 Default Marking and present perfect auxiliaries

In this part, we consider the post-syntactic operation of *Default Marking* operating in the case of present perfect auxiliaries in a subset of CSIDs. We will focus on the application of *Default Marking* in the singular paradigm (cf. §6.1.1) before turning to the plural paradigm (cf. §6.1.2).

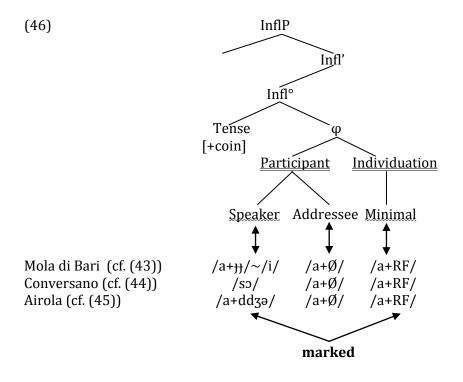
# 6.1.1 The singular paradigm

We reproduce in (43)-(45) the singular paradigm of the present perfect auxiliaries first given in (17)-(19).

(43) Mola ( a <b>ɟɟ/i</b> a (')a	di Bari (Apulo-Barese) 'fatt/par'tʉ:t 'fatt/par'tʉ:t <b>f</b> fatt/ <b>p</b> par'tʉ:t	H.pr.1sg done/left H.pr.2sg done/left H.pr.3sg done/left
	ersano (Apulo-Barese)	r - 0 ,
รว	<b>f</b> fatt	B.pr.1sg done
а	'fatt	H.pr.2sg done
а	<b>f</b> 'fatt	H.pr.3sg done

(45) Airola (0	Central Campanian)	
a <b>ddʒə</b>	'vistə/'fattə	H.pr.1sg seen/done
а	'vistə/'fattə	H.pr.2sg seen/done
а	<b>v</b> 'vistə/ <b>f</b> 'fattə	H.pr.3sg seen/done

All the present perfect auxiliaries in (43)-(45) are endowed with [+coin], because the time of the event and utterance situations coincide. In the morphological component, [+coin] selects the set of  $\varphi$  features to be overtly spelled out. Since the value + specified on [*u*coin] corresponds to a default value, then the  $\varphi$  features that will get overtly marked at PF correspond to those that also bear a default interpretation. The application of *Default Marking* (cf. (42)) to the paradigms in (43)-(45) is given in (46).



In (46), we observe that  $\varphi$  is overtly encoded only if the auxiliary is valued for [Speaker] and [Minimal]. In the case of [Speaker], an exponent is always

overtly realized, whereas in the case of [Minimal], RF is applicable. It must be noted, however, that the overt marking of [Speaker] is obtained either by means of selection of BE, as in (44), or HAVE, as in (43) and (45). The dialect of Mola di Bari shows that 1sg HAVE can be overtly expressed by the forms /a<sub>H</sub>/ and /i/. In the former case, [Individuation] and [Speaker] are overtly expressed by means of dedicated exponents, whereas in the latter case, crucially, a fusional form is selected.

The overt marking of [Speaker] and [Minimal] is attributed to the fact that these two features share the same type of markedness with [+coin] expressed on Tense: Tense and  $\varphi$  are uniform in their grade of markedness, meaning that *Default Marking* operates post-syntactically (cf. (42)).

As far as [Addressee] in concerned, however, no  $\varphi$  marker is overtly expressed on the auxiliary. In fact, 2sg HAVE in (46) is bare, and no morpho-phonological marker expressing [Addressee] is realized in word-final position. This might be due to the fact that [Addressee] is a marked morphosyntactic feature (cf. Harley & Ritter (2002)), which does not share the same grade of markedness with the feature [+coin]. The mismatch of markedness between [Addressee] and [+coin] gives rise to a marked configuration, which, in our account, blocks the post-syntactic application of the *Default Marking* operation.

# 6.1.2 The plural paradigm

Similarly to the singular paradigm, in the dialects of Mola di Bari, Conversano and Airola in (17)-(19), on a par with many other CSIDs, postsyntactic *Default Marking* (cf. (42)) also applies in the presence of plural present perfect auxiliaries. Before considering whether this assumption might be on the right track or not, let us observe the plural paradigms of present perfect auxiliaries of the dialects of Mola di Bari, Conversano and Airola, which are reproduced in (47)-(49), respectively.

(47) Mola di Bari (Apulo-Barese)

a <b>m</b>	'fatt/par'tʉ:t	H.pr.1pl done/left
a'v <b>et</b>	'fatt/par'tʉ:t	H.pr.2pl done/left
an	'fatt/par'tʉ:t	H.pr.3pl done/left

(48) Convers	sano (Apulo-Ba	rese)
a <b>m</b>	'fatt	H.pr.1pl done
av <b>et</b>	'fatt	H.pr.2pl done
an	'fatt	H.pr.3pl done

(49) Airola (Central Campanian)		
a <b>mmu</b>	'vistə/'fattə	H.pr.1pl seen/done
a <b>tə</b>	'vistə/'fattə	H.pr.2pl seen/done
a <b>nnə</b>	'vistə/'fattə	H.pr.3pl seen/done

All present perfect auxiliaries in (47)-(49) correspond to HAVE. These forms, unlike the singular paradigms in (43)-(45), allow the overt realization of an agreement marker realized in word-final position.

If we focus on the inflectional suffix of the plural auxiliaries above, however, it is clear that 1 and 3pl forms cluster together in allowing a nasal consonant. In contrast, the inflectional suffix that expresses 2pl selects a voiceless plosive. As argued previously (cf. §2.1.1), nasal segments are considered to be more marked than plosives (cf. Jakobson, 1932; Avery & Rice, 1989; Jakobson & Pomorska, 1990; Hume, 2011; a.o.). Moreover, /m/ and /n/ are phonologically more marked than /t/ in encoding the feature [+sonorant], which is absent in /t/ (Selkirk, 1984). Since /m/ and /n/ are specified for [+nasal] and [+sonorant], as opposed to /t/, which does not bear this type of specification, we are forced to argue that 2pl present perfect auxiliaries are less morpho-phonologically marked than those expressing 1 and 3pl.

This analysis makes the following prediction: the presence of [Addressee] in a plural auxiliary inevitably allows the selection of the voiceless plosive /t/, whose place of articulation corresponds to Coronal, thus to a default phonological feature for Place (cf. Avery & Rice, 1989). Nasal consonants, in being more marked than /t/, are selected by 1 and 3pl HAVE.

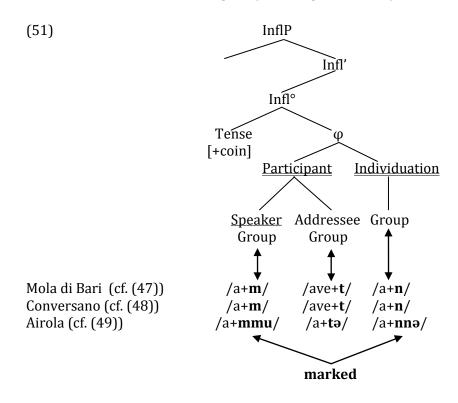
Plural auxiliaries, according to the morphosyntactic feature geometric à *la* Harley & Ritter, must activate the node [Group], which is considered a marked node within [Individuation]. As far as 3pl auxiliaries are concerned, however, these are specified for [Group] only since the [Participant] feature encoded on these elements remains underspecified. In the case of a 1 and

2pl auxiliary, conversely, both [Group] and [Speaker]/[Addressee] are expressed, as (50) indicates.

$( \Box \cap )$	
1500	

U.	505		
	a.	3pl HAVE	[ <u>Participant</u> :; <u>Individuation</u> : Group]
	b.	1pl HAVE	[Participant: Speaker; Individuation: Group]
	C.	2pl HAVE	[ <u>Participant</u> : Addressee; <u>Individuation</u> : Group]

From (50), it clearly emerges that only 2pl auxiliaries bear the highest number of marked morphosyntactic features. In this case, both [Participant] and [Individuation] are specified for [Addressee] and [Group]; according to the analysis presented above, both of these correspond to marked values. As for the other forms, 1pl HAVE is more marked than 3pl HAVE in expressing [Speaker]. 3pl HAVE, on the other hand, is the least marked since [Participant] is fully underspecified. Given these facts, we propose that a nasal consonant is selected as an agreement marker by those plural auxiliaries that are either underspecified for [Participant], or that bear a default specification for this feature. In the presence of a fully specified value for [Participant], i.e. [Addressee], a non-nasal voiceless segment is selected, namely /t/, which in our account corresponds to a non-marked inflectional marker. These facts are summarized in (51).



In the same fashion as in the singular paradigm, 1pl HAVE is morphophonologically more marked than the auxiliary expressing 3pl information. In fact, the nasal feature expressed on 1pl HAVE is specified as [+labial], while 3pl HAVE selects an alveolar nasal consonant, which, according to the geometry in (5), is considered to be underspecified for place of articulation (cf. Avery & Rice, 1989).

The empirical facts presented above are intended to demonstrate that *Default Marking* (cf. (42)) also operates post-syntactically with plural present perfect auxiliaries. This is due to the fact that 1 and 3pl present perfect HAVE are endowed with default interpretation for [Participant], which, in sharing the same grade of markedness with [+coin], licenses the post-syntactic application of the *Default Marking* operation.

## 6.2 Default Marking and pluperfect auxiliaries

This part looks at the application of the *Default Marking* operation with pluperfect auxiliaries in a subset of CSIDs. §6.2.1 focuses on the application of *Default Marking* in the singular paradigm, whereas §6.2.2 considers the application of *Default Marking* in the plural paradigm.

## 6.2.1 The singular paradigm

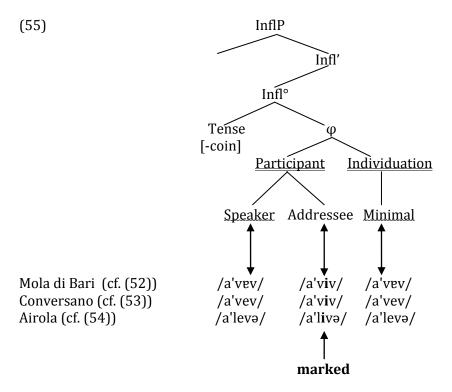
Here we examine the overt marking of  $\varphi$  realized on pluperfect auxiliaries in a large group of CSIDs. More specifically, we focus on those forms that were presented in the paradigms in (20)-(22), and are reproduced in the singular paradigm in (52)-(54).

(52) Mola di Bari (Apulo-Barese)

(02) 1000 01	Buil (lipulo Buiese)	
a'vev	man'dʒət/a'pirt/ʋə'vɤʷt	H.past.1sg eaten/opened/drunk
a'viv	man'dʒət/a'pirt/ʋə'vɤʷt	H.past.2sg eaten/opened/drunk
a'vev	man'dʒət/a'pirt/ʋə'vɤʷt	H.past.3sg eaten/opened/drunk
(53) Convers	ano (Apulo-Barese)	
a'vev	man'dʒɜ:t/a'pi:rt/'fatt	H.past.1sg eaten/opened/done
a'viv	man'dʒɜ:t/a'pi:rt/'fatt	H.past.2sg eaten/opened/done
a'vev	man'dʒɜ:t/a'pi:rt/'fatt	H.past.3sg eaten/opened/done
aver	man agorç a pin çriate	inpustions catchy openedy aone
(54) Airola ((	Central Campanian)	
a'levə	man'dʒɜ:t/a'pi:rt/'fatt	H.past.1sg eaten/opened/done
a'l <b>i</b> və	man'dʒɜ:t/a'pi:rt/'fatt	H.past.2sg eaten/opened/done
a'levə	man'dʒɜ:t/a'pi:rt/'fatt	H.past.3sg eaten/opened/done
	5 / 1 /	

In the paradigms in (52)-(54), only a 2sg pluperfect auxiliary, which encodes [Addressee], is morpho-phonologically marked by means of metaphony. 1 and 3sg pluperfect auxiliaries, on the other hand, are syncretic and no metaphony is attested there. The auxiliaries in (52)-(54) are endowed with a [-coin] feature. The presence of [-coin] is supported by

the fact that the event situation, encoded in Spec,AspP, and the utterance situation, in Spec,InflP, do not coincide in time. In the case of a 2sg pluperfect auxiliary, a default configuration is obtained: both [-coin] and [Addressee] share the same grade of markedness, which, in the morphological component, allows *Default Marking* (cf. (42)) to apply. Conversely, the presence of [Speaker] and [Minimal] on a pluperfect auxiliary would trigger a marked configuration, which does not allow the application of *Default Marking*. These facts are shown in the diagram in (55).



The overt marking of [Addressee] is uniquely obtained by means of metaphony on the stressed vowel of the auxiliary. This is attested in all the dialects documented in (52)-(54), as well as in other varieties belonging to the same group of dialects (see Manzini & Savoia, 2005, II).

At this point, we should investigate whether the presence of metaphony in the case of a 2sg pluperfect auxiliary is due to the application of *Default Marking* in morphology or, crucially, if it is fed by phonological processes of a different nature.

According to Maiden (1991) and Calabrese (1998), (2009), metaphony is a process whereby a stressed vowel is raised when the following syllable contains a high vowel. In CSIDs, the phenomenon of metaphony is not restricted to pluperfect auxiliaries valued for 2sg, but is also found on 2sg lexical verbs in the present indicative. 2sg HAVE in the pluperfect, as well as 2sg lexical verbs, were historically endowed with the vowel /i/ in wordfinal position. This vowel, although deleted in diachrony, is still held to cause metaphony in today's dialects. Crucially, in the lexical verbs of the dialects of Mola di Bari, Conversano and Airola, metaphony is not always attested in the presence of present indicative lexical verbs specified for 2sg. In these varieties, in fact, the 2sg lexical verbs that do allow metaphony are those that display a stressed vowel endowed with a mid-high/low feature. In the presence of a low vowel in stressed position, namely /a/, metaphony is not obtained: Mola di Bari: 'mandy/ 'mandy/ 'mandy -eat.pr.1sg/ eat.pr.2sg/ eat.pr.3sg- 'I/you/(s)he eat(s)' versus 'dorm/ 'durm/ 'dorm sleep.pr.1sg/ sleep.pr.2sg/ sleep.pr.3sg- 'I/you/(s)he sleep(s)'. The dialect of Mola di Bari in (52) shows that metaphony on a 2sg pluperfect auxiliary is attested even though the underlying form of the auxiliary is endowed with a low vowel in stressed position. This observation leads us to the conclusion that the application of metaphony in 2sg pluperfect auxiliaries in the dialect of Mola di Bari, as well as in many other CSIDs, does not depend on the presence of a high vowel in word-final position, but rather on the application of a markedness constraint stating that [Addressee] encoded on this auxiliary must be marked. The problem of metaphony realized on lexical verbs in CSIDs, as well as in NSIDs, will be addressed in chapter 5. In the next subsection, we will see how the post-syntactic mechanism of *Default Marking* operates in the plural paradigm.

#### 6.2.2 The plural paradigm

Similarly to the singular paradigms in (52)-(54), the – value expressed on [*u*coin] determines the overt marking of  $\varphi$  on pluperfect auxiliaries. The

plural paradigm of pluperfect auxiliaries, presented earlier (20)-(22), is given in (56)-(58).

(56) Mola di E a'v <b>emm</b> a'vivər a'v <b>e</b> vən	Bari (Apulo-Barese) man'dʒət/a'pirt/บə'vรʷt man'dʒət/a'pirt/บə'vรʷt man'dʒət/a'pirt/บə'vรʷt	H.past.1pl eaten/opened/drunk H.past.2pl eaten/opened/drunk H.past.3pl eaten/opened/drunk
(57) Conversa a'v <b>ɛmm</b> a'vistə <b>v</b> a'vɛvən	ano (Apulo-Barese) man'dʒ3:t/a'pi:rt/'fatt man'dʒ3:t/a'pi:rt/'fatt man'dʒ3:t/a'pi:rt/'fatt	H.past.1pl eaten/opened/done H.past.2pl eaten/opened/done H.past.3pl eaten/opened/done
(58) Airola (C a'levə <b>mə</b> a'levə <b>və</b> a'levə <b>və</b>	entral Campanian) man'dʒɜ:t/a'pi:rt/'fatt man'dʒɜ:t/a'pi:rt/'fatt man'dʒɜ:t/a'pi:rt/'fatt	H.past.1pl eaten/opened/done H.past.2pl eaten/opened/done H.past.3pl eaten/opened/done

As observed in the previous subsection, the morpho-phonological marking of [Addressee] in the singular paradigm is signaled by means of metaphony affecting the stressed vowel of the auxiliary. The 2pl forms of HAVE in (56) and (57) also feature metaphony. In this case, the stressed vowels of the pluperfect auxiliaries correspond to /i/, and are thus in opposition to those occurring in 1 and 3pl HAVE, which select /e/ or / $\epsilon$ /. This operation, crucially, is not attested in the dialect of Airola in (58), where metaphony is not found on the stressed vowel of 2pl HAVE.

It is worth noting that the paradigms in (56)-(58), differently from their singular counterparts, allow the overt realization of an inflectional marker in word-final position. The same situation has been observed for the plural paradigm of present perfect auxiliaries in §6.1.2. In (56)-(58), this  $\varphi$  marker corresponds to a nasal consonant in 1 and 3pl HAVE. In 2pl HAVE, a different consonant is selected. In the dialect in (56), the alveolar trill /r/ is chosen. In (57) and (58), the consonant /v/ is found to mark 2pl. In §6.1.2, we observed that /t/ is the consonant selected as the inflectional marker for 2pl HAVE in the present perfect. We propose that the consonant /t/ is less

marked than the consonants /v/ and /r/. In fact, the former is specified for the feature [-voice], whereas the latter express the feature [+voice]. The fact that /v/ and /r/ are more marked than /t/ is also supported by the universal Sonority Hierarchy in (59).

(59)14

Voiceless stop	e.g.	/p, t, k/
Voiced stop		/b, d, g/
Voiceless fricative		/f, s, x/
Voiced fricative		/v, z, ~/
Nasal stops		/n, m/
Liquids		/l, r/
	[Ada	apted from Gnanadesikan, 1995: 13]

Voiceless stops, which are at the top of the hierarchy, are considered as the most unmarked consonants in terms of sonority, whereas liquids, which are located at the bottom of the hierarchy, are thought to be highly marked. Given the hierarchy in (59), the consonants /v/ and /r/ must be considered as more marked than /t/, which, together with /p/ and /k/, is the most unmarked consonant for sonority.

Given these facts, we propose that the consonants /v/ and /r/, which are the inflectional markers found on 2pl pluperfect HAVE in (56)-(58), are more marked than /t/, which is the consonant selected by 2pl present perfect HAVE in the dialects of Mola di Bari, Conversano and Airola. 1 and 3pl pluperfect HAVE in (56)-(58), instead, are consistent in selecting a nasal consonant both in the present perfect and in the pluperfect. These facts are summarized in (60).

<sup>14</sup> For further references on the Sonority Hierarchy, see Sievers (1881), Jespersen (1904), De Saussure (1916), Zwicky (1972), Hankamer & Aissen (1974), Hooper

(1976), Steriade (1982), and Selkirk (1984), a.o.

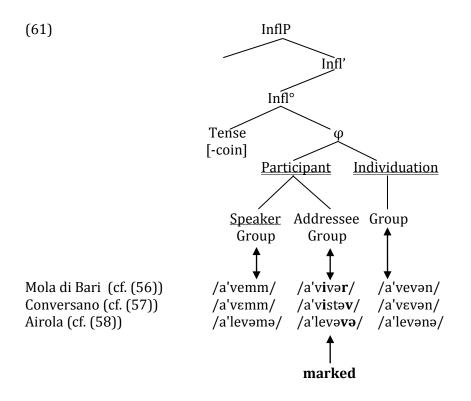
#### **Present perfect HAVE Pluperfect HAVE** 1pl /m/ /m..... ..... 2pl $/v/ \sim /r/$ /t/ 3pl /n/ ..... ..... /n/ ▶= do not mark! where:..... $\blacktriangleright$ = mark!

(60)

## The post-syntactic operation of *Default Marking* 135

Given (60), we argue that the presence of [Addressee] in the plural paradigm of a pluperfect auxiliary must be marked by selecting either /v/ or /r/, which, according to what proposed before, are more marked than /t/. We propose that the selection of a marked consonant by 2pl pluperfect HAVE derives from the application of the *Default Marking* operation (cf. (42)). Indeed, [Addressee], in being a marked feature, shares the same grade of markedness with [-coin]. The uniformity of markedness between [Addressee] and [-coin] gives rise to a default syntactic configuration, which allows *Default Marking* to apply in the morphological component (cf. (42)). This operation does not take place when [Speaker], or underspecification for [Participant], is encoded on a pluperfect auxiliary. These facts are explained in the diagram in (61).





The operation of *Default Marking* illustrated in (61) differs from that in (51) in that it allows the morphological markedness of [Addressee] both in the root and in the agreement marker. This situation is attested only for the Apulian dialects in (56) and (57), and is not applicable in the Campanian dialect of Airola in (58), which overtly expresses the morphological markedness of [Addressee] in the agreement suffix only.

## 6.3 Preliminary conclusion

In the previous sections, we have claimed that perfective auxiliaries in CSIDs are merged in Infl<sup>o</sup>, which, according to Ritter & Wiltschko (2009), is a syntactic head composed of a series of deictic categories, including Tense and Person. We have assumed that Person corresponds to a  $\phi$  agreement category.

Following Ritter & Wiltschko (2010), we have treated Infl<sup>o</sup> in perfective auxiliaries in CSIDs as a syntactic head endowed with a [ucoin] feature. It has been argued that this feature is encoded in the category Tense. The function of [ucoin] is that of anchoring the utterance time encoded in Spec,InflP with the event time specified in Spec,AspP. This feature must be valued and its valuation depends on the relation between the event and the utterance time. When the event time coincides with the utterance time, namely in the present tense, then [ucoin] is valued as +, which in our analysis corresponds to a default value. On the other hand, if the event and utterance time do not coincide, namely in the past tense, then [ucoin] is valued as -, which in our model corresponds to a marked value.

With regard to the  $\varphi$  category, we have advocated the presence of default and marked  $\varphi$  features. Default  $\varphi$  features are those acquired early through the acquisitional process, and merely correspond to [Speaker] and [Minimal]. On the other hand, [Addressee] and [Group], which are learnt after the default features, have been considered as marked (cf. Harley & Ritter, 2002).

Based on the markedness convention put forward by Holmberg & Roberts (2010), we have argued that the uniformity of markedness between  $\varphi$  and [*u*coin] feeds the application of the post-syntactic operation called *Default Marking*. *Default Marking* simply states that  $\varphi$  features encoded on perfective auxiliaries get overtly marked only if their grade of markedness is the same as that expressed by [*u*coin] (cf. (42)). In more specific terms, *Default Marking* predicts that:

- i. [Speaker] and [Minimal], which are default  $\varphi$  features, get overtly marked at PF only if [*u*coin] is valued as +, which, in our account, corresponds to a default value;
- ii. [Addressee], which is a marked  $\varphi$  feature, gets overtly marked at PF only if [*u*coin] is valued as -, which, in our account, corresponds to a marked value.

These facts are summarized in (62).

(62)			
		[+coin]	[-coin]
Singular	[Speaker]	+	-
	[Addressee]	-	+
	[Minimal]	+	-
Plural	[Speaker], [Group]	+	-
	[Addressee], [Group]	-	+
	[Group]	+	-

In the next section, it will be shown that *Default Marking* operates postsyntactically not only in CSIDs, but also in other Italo-Romance dialects and Romance languages.

## 7. Cross-linguistic evidence

This section will show that *Default Marking* (cf. (42)) is also found outside CSIDs, specifically in certain Italo-Romance dialects and Romance languages<sup>15</sup>. In §7.1, we will consider the application of *Default Marking* in present tense modals, as well as present perfect auxiliaries. §7.2, on the other hand, will consider the application of *Default Marking* in modals expressing past information, as well as pluperfect auxiliaries.

<sup>&</sup>lt;sup>15</sup> *Default Marking* seems to be also attested in English, which allows the overt marking of [Minimal] only in the presence of lexical verbs and auxiliary HAVE in the present indicative: I/you speak/have versus (s)he speaks/has. The overt encoding of [Minimal] by means of a dedicated  $\varphi$  marker is obtained only when the verb is in the present indicative and not, for instance, when it expresses [Past]. Roberts (to appear) claims that the presence of *–s* as a 3sg agreement marker must be taken as a result of the presence of an underspecified tense and  $\varphi$  feature on the verb. It is crucial to observe, however, that English does not opt for the overt marking of [Speaker]. This is to say that English, differently from CSIDs, opts for the overt marking of a subset of default morphosyntactic features, namely [Minimal], when the verb is in the present indicative.

## 7.1 Default Marking outside CSIDs

## 7.1.1 Present Tense

The post-syntactic operation of *Default Marking* (cf. (42)) appears to be attested in a group of NIDs spoken in the northern Marche. In these dialects, *Default Marking* is not operative in present perfect auxiliaries, but is found in present tense modals. This is illustrated by the singular paradigm in (63), where [Speaker] and [Minimal] get overtly marked when encoded on modals expressing information for present.

(63) Fano (Northern Marchigiano)

pɔ <b>ss</b> 'fa	can.pr.1sg do
pɔ 'fa	can.pr.2sg do
pɔl 'fa	can.pr.3sg do

(63) shows that an inflectional marker is realized in word-final position only if it encodes [Speaker] and [Minimal]. It is worth noting, however, that no subject clitics are instantiated in (63). In general, NIDs display subject clitics in preverbal position in declarative clauses (cf. Brandi, 1981; Brandi & Cordin, 1981, 1989; Benincà, 1983, Rizzi, 1986; Poletto, 1993, 2000; Manzini & Savoia, 2005, a.o.), but these are not attested in this group of Northern Marchigiano dialects. Instead, verbal paradigms are richly inflected, as shown by the singular paradigm in (64).

(64) Fano (Northern Marchigiano)

'parl	speak.pr.1sg
'parl <b>i</b>	speak.pr.2sg
'parla	speak.pr.3sg

The difference between the verbal forms in (63) and those in (64) is that in (63) only [Speaker] and [Minimal] get spelled-out through the selection of a dedicated  $\varphi$  marker. In (64), on the other hand, only [Addressee] is overtly marked through the selection of /i/ as an inflectional  $\varphi$  marker realized in word-final position. The 1sg verbal form is bare, thus not allowing the overt

marking of [Speaker]. Furthermore, the 3sg form only allows the overt expression of the theme vowel /a/.

The evidence given above clearly shows that the dialect of Fano, a NID spoken in the northern Marche, allows the application of *Default Marking* with modal verbs expressing present information. In other words, similarly to what was observed in the previous section, the feature [+coin] encoded on modals allows the overt marking of the features [Speaker] and [Minimal]. This is due to the fact that [+coin] and the features [Speaker] and [Minimal] are defaults, thus sharing the same grade of markedness. In our account, the uniformity of markedness between [*u*coin] and  $\varphi$  is what is required for the application of *Default Marking* (cf. (42)).

On the other side of the Apennines, roughly at the same latitude, the phenomenon of *Default Marking* is attested both with modal verbs in the present indicative and with present perfect auxiliaries. The paradigms in (65a) and (65b), from the dialect of Siena, illustrate these facts.

(65) Siena (Central Tuscan)

a.	pɔ <b>ssɔ</b> 'fa pɔ 'fa pɔ <b>f</b> 'fa	can.pr.1sg do can.pr.2sg do can.pr.3sg do
b.	o f'fatto a 'fatto a <b>f</b> 'fatto	H.pr.1sg done H.pr.2sg done H.pr.3sg done

In (65a), similarly to the dialect of Fano in (63), [Speaker] and [Minimal] get overtly marked. Similarly to what was observed for CSIDs, 3sg *can* licenses RF, the occurrence of which is banned with 2sg *can*. The presence of RF in (65a) can be justified from the presence of a mora at PF, whose content corresponds to [Minimal].

The marking strategy observed in (65a) is also at play in the case of present perfect auxiliaries in (65b), where the exponent /ɔ/ is selected when the present perfect auxiliary expresses [Speaker]. 3sg HAVE, on the other hand, licenses RF. RF triggered by 3sg HAVE, in the same fashion as RF triggered by 3sg *can*, derives from the presence of an empty mora, whose content is [Minimal].

Similarly to the dialect of Fano in (64), the application of *Default Marking* is excluded in the presence of lexical verbs in the present indicative, as the singular paradigm in (66) illustrates.

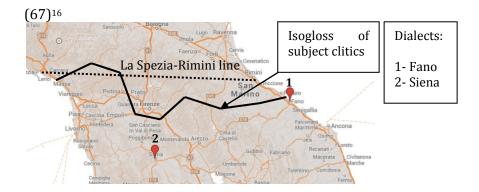
(66) Siena (Central Tuscan)

'фarl <b>o</b>	speak.pr.1sg
'фarl <b>i</b>	speak.pr.2sg
'фarla	speak.pr.3sg

In (66), differently from (63) and (65), /i/ is spelled-out in the case of a lexical verb endowed with [Addressee].

Similarly to the dialect of Fano, the dialect of Siena allows the overt marking of [Speaker] and [Minimal] in the presence of modals and perfective auxiliaries only if [ucoin] is valued as +. In this situation, both  $\varphi$  and [ucoin] share the same type of markedness, which allows the application of *Default Marking* post-syntactically (cf. (42)).

The empirical facts shown in this subsection demonstrate that *Default Marking* also occurs outside CSIDs, namely in a group of dialects spoken in the northern Marche and central Tuscany. In Northern Marchigiano, *Default Marking* is attested only with modals in the present indicative, whereas in the dialect of Siena it is found both with modals in the present tense and with present perfect auxiliaries. It should be noted that the dialects of Fano and Siena are spoken in the transitional geolinguistic area between CIDs and NIDs. The geographic location of these two dialects is given in (67).



The map in (67) indicates that the post-syntactic operation of *Default Marking* is attested in those dialects spoken in a transitional corridor between NIDs and CIDs.

## 7.1.2 Past Tense

Let us turn to the modal *can* in the dialect of Fano. This verb, when expressing past tense, only allows the overt marking of [Addressee], and never of [Speaker] and [Minimal]. The overt marking of [Addressee] operates through the insertion of /i/ in word-final position. The singular paradigm in (68) illustrates these facts.

(68) Fano (Northern Marchigiano)

po'de:va	can.past.1sg do
po'de:vi	can.past.2sg do
po'de:va	can.past.3sg do

<sup>&</sup>lt;sup>16</sup> The La Spezia-Rimini isogloss corresponds to the border between NIDs and CIDs. In recent years, it has been proposed that the isogloss delimiting NIDs from CIDs is located further south, coinciding with the Massa-Senigallia line. The isogloss of subject clitics is drawn based on Torcolacci (2006) for Northern Marchigiano, and on Manzini & Savoia (2005) for the Tyrrhenian side.

In (68), 1 and 3sg *can* are syncretic. This is to say that these forms do not allow the overt marking of [Speaker] and [Minimal]. The overt marking of [Addressee], but not [Speaker] and [Minimal], has been observed to be operative in Spanish (cf.§3.1) in the case of a pluperfect auxiliary. (69) shows the paradigmatic instantiation of Spanish pluperfect auxiliaries in the singular paradigm.

(69) Spanish	
había	H.past.1sg
había <b>s</b>	H.past.2sg
había	H.past.3sg

In (68) and (69), the overt marking of [Addressee] is obtained when past information is specified either on the modal, as in (68), or on a perfective auxiliary, as in (69).

The overt marking of [Addressee] in these cases can be attributed to the operation of *Default Marking* applying in the morphological component (cf. (42)). In (68) and (69), [*u*coin] is valued as – and [Addressee] is specified on the auxiliary. [-coin] and [Addressee] are uniformly marked. For this reason, a default syntactic configuration is obtained and the overt marking of [Addressee], resulting from the *Default Marking* operation, can freely apply.

It must be noted, however, that Spanish does not allow the application of *Default Marking* on the occurrence of HAVE in the present perfect. This is to say that if [*ucoin*] is specified for + on a perfective auxiliary, *Default Marking* does not apply: he/ has/ ha comido –H.pr.1sg/ H.pr.2sg/ H.pr.3sg eaten-'I/you/(s)he has eaten'.

The opposite situation is attested for the dialect of Siena. In this dialect, in fact, the post-syntactic operation of *Default Marking* takes place only if a perfective auxiliary, as well as a modal, is specified for present information and not, crucially, when these verbs express [Past]: po' $\theta$ e:vo / po' $\theta$ e:vi / po' $\theta$ e:va –can.past.1sg/ can.past.2sg/ can.past.3sg- 'I/you/(s)he could'. This is to say that *Default Marking* in the dialect of Siena, differently from Spanish, applies only if [ucoin] is valued as +.

#### 8. Summary and conclusions

In this chapter, we have focused on the morpho-phonological markedness of  $\phi$  encoded on present perfect and pluperfect auxiliaries in a group of CSIDs.

In the geolinguistic area stretching from central Campania and Apulia up to the border with ESIDs, present perfect and pluperfect auxiliaries exhibit different marking strategies with regard to  $\varphi$  features. Present perfect auxiliaries, for instance, feature the overt marking of [Speaker] and [Minimal] only, and not of [Addressee]. The overt marking of [Speaker] is obtained by inserting an exponent at the word-boundary of the auxiliary, whereas the overt marking of [Minimal] is expressed by means of RF.

On the other hand, we have observed that pluperfect auxiliaries opt for the reverse marking strategy, whereby only [Addressee], and not [Speaker] and [Minimal], is overtly marked. The overt marking of [Addressee] is signaled by means of metaphony on the stressed vowel of the auxiliary.

Following Harley & Ritter (2002), we have considered [Speaker] and [Minimal] as default morphosyntactic features. [Addressee], conversely, has been treated as a marked feature. Following Ritter & Wiltschko (2010), we have treated perfective auxiliaries as syntactic objects directly merged in Infl°. Infl° corresponds to a syntactic head composed of a set of deictic categories, including Tense and Person. In our account, Person corresponds to an agreement category which hosts  $\varphi$  features. Furthermore, based on Ritter & Wiltschko (2010), we have argued for the presence of the feature [*u*coin] on Tense, whose function is to express the anchoring between the event time encoded in Spec,VP and the utterance time in Spec,InflP. If the event and the utterance time coincide in their reference, then [*u*coin] is valued as +. In our model, the value + specified on [*u*coin] corresponds to a default. On the other hand, if the utterance and the event time do not coincide, as in the case of past tense, then [*u*coin] bears a marked value, which, in our analysis, corresponds to -.

Based on the markedness convention proposed by Holmberg & Roberts (2010), we have claimed that the value expressed by [*u*coin] determines the set of  $\varphi$  features to be overtly spelled-out at PF. More specifically, we have claimed that if [*u*coin] and  $\varphi$  share the same grade of markedness, then an unmarked, i.e. default, configuration is obtained. In this case, the *Default Marking* operation applies post-syntactically. The definition of *Default Marking* given in (42) is reproduced in (70).

#### (70) Default Marking

The morphological marking of a  $\phi$  feature can only take place if all features bear the same markedness on the functional head that hosts them.

With reference to present perfect auxiliaries, we have claimed that [Speaker] and [Minimal] get overtly marked at PF since their grade of markedness is uniform with [+coin]. On the other hand, the overt marking of [Addressee] has been attributed to the uniformity of markedness with [-coin].

In the last part of this chapter, we have observed that the post-syntactic operation of *Default Marking* is also attested outside the domain of CSIDs. More specifically, we have observed that Northern Marchigiano and Central Tuscan allow the application of *Default Marking* not only with perfective auxiliaries, but also with modals. In addition, we have seen that lexical verbs categorically exclude the application of this post-syntactic operation.

The fact that *Default Marking* is observed with perfective auxiliaries and modals, and excluded in the case of lexical verbs in a number of NIDs and CIDs, poses interesting questions with regard to its domains of application. These investigations will be tackled in the next chapter.

## Domains of application of Default Marking

## **1. Introduction**

The purpose of this chapter is twofold. Firstly, it will be claimed that the post-syntactic operation of *Default Marking* (see chapter 4) typical of CSIDs is not limited to those periphrastic constructions composed of perfective auxiliaries followed by a past participle, but also occurs with other periphrases, both in the verbal and in the nominal domain. Secondly, it will be shown that the application of *Default Marking* in CSIDs is also attested in the case of lexical verbs in the present indicative.

Our discussion will start by looking at verbal periphrastic constructions composed of a modal followed by an infinitival. We will argue that modals, following and updating Ross (1969)<sup>1</sup>, are directly merged in Infl<sup>o</sup>. For this reason, modals will be considered on a par with perfective auxiliaries in being functional heads directly merged in the position in which they get spelled-out. We will observe that modals and perfective auxiliaries are also similar in the way they overtly mark  $\varphi$  information: in both cases through the post-syntactic operation of *Default Marking*.

We will then draw a parallelism between the overt marking of  $\varphi$  occurring between modals and perfective auxiliaries, on the one hand, and lexical verbs, on the other. We will observe that the post-syntactic operation of *Default Marking* is also found in the case of lexical verbs in CSIDs. Differently from perfective auxiliaries and modals, lexical verbs in CSIDs only allow the overt marking of marked morphosyntactic  $\varphi$  features. This is due to the fact that lexical verbs in these dialects undergo V-to-T movement, typical of Romance languages, which, following Roberts & Roussou (2003), is a marked syntactic operation (see chapter 4).

<sup>&</sup>lt;sup>1</sup> According to Ross (1969), modals, more specifically those with an epistemic reading, are raising predicates. Root modals, on the other hand, are not the same. The same account is given in Jackendoff (1972). The reason why epistemic modals are viewed as raising predicates is that they take scope over subjects, while root modals do not.

In the final part of the chapter, nominal periphrases composed of a Delement followed by a noun will be examined. We will observe that the overt marking of  $\varphi$  applying on definite D-elements mirrors that observed for perfective auxiliaries and modals. This depends on the application of *Default Marking* in the presence of D-elements as well.

This chapter is organized as follows: in the first part (cf. §2), it will be proposed that auxiliaries and modals in CSIDs share a number of syntactic properties, which are reflected in the way  $\varphi$  features are overtly spelled-out on these items. The second part (cf. §3) will focus on the mechanism of  $\varphi$  marking on lexical verbs. §4 will treat the overt marking of  $\varphi$  encoded on definite D-elements in CSIDs. Last, §5 summarizes and concludes the chapter.

## 2. Modals in CSIDs

## 2.1 The syntax

There is general agreement in the literature that modals in many languages are auxiliary-like elements (cf. Ross (1969)). This idea relies on the assumption that these elements, similarly to perfective auxiliaries, have undergone processes of grammaticalization (cf. Heine, 1993; Bybee, Pagliuca & Perkins, 1994; Kuteva, 2001, a.o.).

For English, Roberts & Roussou (2003) posit that modals can be analyzed as syntactic elements that behave more like auxiliaries than lexical verbs. More precisely, they argue that modals in today's English are a clear case of grammaticalization of fully verbal elements, which, at an earlier stage of the language, underwent a categorical change and became auxiliaries. Their claim is based on a number of diagnostics that show that modals are syntactically distinct from main verbs. (1) a. Modals lack non-finite forms:

\*To can swim is useful

- b. Modals cannot be iterated: \*He shall must do it
- c. Modals lack complements of all types (except bare infinitives): \*I shall you a penny
- d. Modals are in complementary distribution with *do*-support and always precede *not*:

\*I don't can speak Chinese / \*Do you can speak Chinese? / \*I not can speak Chinese / I cannot speak Chinese

- e. Modals always move to C in inversion contexts:
  \*How many languages (do) you can speak? / How many languages can you speak?
- f. Modals, unlike main verbs, can license VP-fronting: Win the election, I thought she would (\*win)—.
- g. Modals, unlike main verbs, can phonologically contract:
  We can fish ambiguous ('we are able to fish' or 'we put fish in cans') versus We c'n (/kən/) fish. unambiguous (only 'we are able to fish').

[Roberts & Roussou (2003): 36-37]

Given these diagnostics, it is obvious that modals in Modern English should be considered as distinct from lexical verbs. In fact, lexical verbs generally display non-finite forms<sup>2</sup>, allow iteration, can select an internal argument, are compatible with *do*-support and must follow negation. Moreover, they cannot raise to C, cannot license VP-fronting and are not able to contract morpho-phonologically.

<sup>&</sup>lt;sup>2</sup> The properties shown in (1) are valid for English, but not for all languages. The languages of an area known as the *Balkan Sprachbund*, for instance, do not respond uniformly to these diagnostics. Indeed, as is well known in the literature, infinitival forms of lexical verbs are not attested in these languages. Note the contrast between Greek and English: Prep**ei** na piò ena potiri nero -must/have to.sg that drink.perf.1sg a glass of water- versus I must/have to drink a glass of water. Although the Greek lexical verb *pi*ò, unlike English *drink*, never admits an infinitival form, it is endowed with full argumental structure. For more details on this type of structure, see Joseph (1983) and the references therein.

CSIDs seem to share a number of properties with English, as far as the syntax of modals is concerned. Indeed, in these dialects, modals seem to lack non-finite forms (cf. (2a)). Moreover, they cannot select any type of complement, except bare infinitives (cf. (2b)), and can phonologically contract (cf. (2c))<sup>3</sup>. These tests are illustrated in (2).

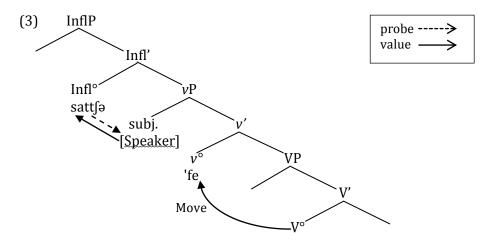
(2) Mola di Bari (Apulo-Barese)							
a. Modals	lack non fi	nite-foi	rms <sup>4</sup> :				
*pə'tə	par'lə	je	f'fa:tʃəl	l			
can.in	f. speak.inf.	B.3sg	easy				
b. Modals	lack comp	lement	s of all t	ypes (e	excep	t bare infi	initives):
i. *a <del>jj</del>	u		'fatt				
must	t.pr.1sg the	e.masc.s	sg story	/			
ii. a <del>jj</del>	а	'fe	u		'fatt		
must	must.pr.1sg to do.inf. the.masc.sg story						
c. Modals, unlike main verbs, can phonologically contract:							
s(ə)	'fe kɛssa	'k	aus? /	('tu) f*	'('e)	kessa	'kaus?
can.2sg	do this.fe	m.sg tł	ning	you do	o.2sg	this.fem.	sg thing

The evidence put forward in (2) suggests that modals in the CSID of Mola di Bari share the same morphosyntactic properties as the English modals in (1). However, it must be noted that the properties in (1d.)-(1f.) are not all found in CSIDs, since modals in these varieties are not in complementary distribution with a *do*-like element, which does not exist in Romance (but see Benincà & Poletto (1998) for a different opinion, with reference to NIDs), and the VP-fronting of the infinitival is not possible.

<sup>&</sup>lt;sup>3</sup> In CSIDs, as well as in English, modals cannot be iterated. This situation is also attested in other languages, such as Standard Italian. The fact that modals cannot be iterated might result from the fact that two finite verbs in CSIDs, as well as in other languages, cannot be adjacent to one another: Mola di Bari [Apulo-Barese] \*pottʃə sattʃə par'lə akkəsseit -can.pr.1sg can.pr.1sg. speak.inf. like this-; Standard Italian: \*posso so parlare così -can.pr.1sg can.pr.1sg. speak.inf. like this-.

<sup>&</sup>lt;sup>4</sup> It seems that not all USIDs display the absence of infinitival forms for modals. In NSIDs, in fact, modals have infinitival forms which, differently from CSIDs, can be iterated: Arielli [Eastern Abruzzese] li 'vujə **sa'pɛ** 'fa -them.masc.pl. want.pr.1sg can.inf. do.inf.; **pu'tɛ sa'pɛ** par'la je mbur'tandə -can.inf. can.inf. speak.inf. is important (p.c. Roberta D'Alessandro).

Given these facts, we postulate that modals in CSIDs are auxiliary-like elements. Our idea, which relies on Roberts & Roussou (2003), is that these syntactic objects are directly merged in the functional head where information for Tense is encoded. Similarly to perfective auxiliaries, we posit that this syntactic position is Infl<sup>o5</sup>:



As shown in the monoclausal structure in (3), we assume that the infinitival undergoes V-to- $\nu$  movement. The modal, on the other hand, is merged in Infl<sup>o</sup> and agrees with the subject in Spec, $\nu$ P. All things being equal, we can think of (3) as the syntactic structure that also instantiates English modal structures<sup>6</sup>. Finite verbs in CSIDs, as in the rest of Romance, are instead

<sup>&</sup>lt;sup>5</sup> According to Cinque (1999), modals come in different types, with different semantics, and they are therefore functional elements merged in different syntactic positions in the clause-spine. In our analysis, we will not concentrate on the exact merging site of these elements, but rather consider them as syntactic objects directly merged in Infl<sup>o</sup>, which corresponds to the position where information for Tense and Agree are displayed (see Ritter & Wiltschko, 2010).

<sup>&</sup>lt;sup>6</sup> Modals in Old English are thought to allow a biclausal structure. In particular, they possessed an argument structure and could take any type of structure complement other than a VP. Moreover, they were endowed with non-finite forms (cf. Denison, 1985; Roberts 1993; Warner, 1993; Roberts & Roussou, 2003). The restructuring of these verbs (cf. Rizzi, 1982), which led from biclausal to monoclausal structures, took place as soon as these properties were lost. The same conclusions have been

merged in V° and move, cyclically through  $v^\circ$ , to T° (on Infl°) (cf. Jackendoff, 1972; Emonds, 1976).

## 2.2 The morphological marking of $\phi$

In this part, we will consider the morphological marking of  $\varphi$  expressed on modals in CSIDs. In §2.2.1, the system of  $\varphi$  marking attested on modals in the present indicative will be analyzed. Then, §2.2.1 will investigate the  $\varphi$ -feature to morphology mapping that operates in modals in the indicative mood in the past tense.

## 2.2.1 Present tense

The system of  $\varphi$  marking attested for modals in the present indicative in CSIDs is illustrated in (4) and (5). In the singular paradigm,  $\varphi$  information is overtly expressed only if the modal encodes 1 and 3 person and not if it expresses 2 person. The overt marking of 1 and 3 person, and not of 2 person, has also been observed in present perfect auxiliai in a subset of CSIDs (see chapter 4).

drawn for modals of Romance languages. These elements, which were originally endowed with lexical meaning, are also thought to have lost their lexical properties in their diachronic development. Because of this process of desemanticization, they have undergone a process of grammaticalization (cf. Fleischman, 1982; Pinkster, 1987; Heine, 1993; Hopper & Traugott, 1993; Roberts, 1993; Bybee, Pagliuca & Perkins, 1994; Kuteva, 2001; Roberts & Roussou, 2003; a.o.), which is claimed to have led to the syntactic structure in (3).

(4) Mola di Bari (Apulo-Barese)

a.

Dynamic modal <sup>7</sup>	
sa <b>tt∫</b> 'fə	can.pr.1sg do.inf.
s(ə) 'fə	can.pr.2sg do.inf.
sə <b>p</b> 'fə	can.pr.3sg do.inf.
sapəm 'fə	can.pr.1pl do.inf.
sapət 'fə	can.pr.2pl do.inf.
sapən 'fə	can.pr.3pl do.inf.

b. Epistemic/deontic modal

(5) Airola (Central Campanian)<sup>8</sup>

a. Dynamic/epistemic modal

can/may.1sg speak.inf.
can/may.2sg speak.inf.
can/may.3sg speak.inf.
can/may.1pl speak.inf.
can/may.2pl speak.inf.
can/may.3pl speak.inf.

<sup>&</sup>lt;sup>7</sup> "Modality itself can be subdivided into dynamic, deontic (together also called 'root' modality) and epistemic modality, whereby the first two are agent-oriented and the last is speaker-oriented (expressing the role the speaker wants the proposition to play in the discourse)" (cf. Fischer 2004: 20).

<sup>&</sup>lt;sup>8</sup> It is crucial to observe, however, that the 2sg form of the modal in (5a) allows metaphony. In this case, we might think that the presence of 2sg is signalled only by means of metaphony and not, for instance, by inserting an agreement marker at word-final position.

b. Epistemic/deontic modal

a <b>dd3</b> a man'd3a	have to/must.1sg eat.inf.
a man'dʒa	have to/must.2sg eat.inf.
a <b>dd</b> a man'dʒa	have to/must.3sg eat.inf.
amm a man'dʒa	have to/must.1pl eat.inf.
at a man'dʒa	have to/must.2pl eat.inf.
ann a man'dʒa	have to/must.3pl eat.inf.

As for the segment /p/ of /səp/ in (4a), we might at first think that it corresponds to the last consonant of the root *sap*, which consistently appears in the plural paradigm. If this were true, then our primary concern would be to consider why this segment is absent when 1 and 2sg is encoded on the modal. In fact, the modal expressing 1sg in (4a) allows the overt marking of an affricate attached to /sa/, namely /ttʃ/, whereas the modal bearing 2sg interpretation only allows the overt realization of /s(ə)/, and no other segment is overtly expressed.

Merlo (1929), Rohlfs (1966) and Tekavčić (1980), a.o., claim that the affricates /ttʃ/ and /ddʒ/ in the case of /sattʃ/ and /addʒ/ in (4a) and (5a), respectively, must be taken to derive from the application of a phonological rule active in diachrony, which says that bilabial and labiodentals consonants followed by a glide turn into a postalveolar affricate (cf. Lat. SAPIO > /sattʃ(ə)/; Lat. HABEO > \*ayo)<sup>9</sup>. The 2 and 3sg forms of present indicative *can* in Latin were also endowed with /p/ followed by *i* (cf. Lat. SAPIS 'you can', SAPIT '(s)he can'). In both cases, the plosive /p/ does not turn into a postalveolar fricative. In fact, /p/ is retained in SAPIT, but is deleted in SAPIS and is not replaced by any other phonological segment (cf. Mola di Bari: SAPIS > s(ə); SAPIT > səp).

In chapter 3, we claimed that /v/ occurring on 3sg HAVE that precedes a past participle starting with a vowel is the overt realization of a morpheme expressing 3sg (cf. Mola di Bari [Apulo-Barese] av a'pirt 'HAVE.pr.3sg open.pp'). Given this observation, we can propose that /p/ in (4a) also corresponds to a  $\varphi$  marker. The same proposal can be advanced for the consonant /v/ occurring in word-final position of the modal expressing 3sg

<sup>&</sup>lt;sup>9</sup> Rohlfs (1966) posits that /p/ turns into a postalveolar affricate only in SIDs, and not in other Italian dialects. /p/ turning into a postalveolar affricate operates not only with verbs, but also with nouns: Lecce < Lypiae (cf. Rohlfs, 1966: 400).

in (4b), which, according to our proposal, corresponds to the marker for 3sg.

Turning to the dialect of Airola in (5a), we see that RF is triggered when the modal is specified for 3sg. The occurrence of RF must be assumed to result from the presence of a mora at PF, which is devoid of melodic content. As proposed in chapter 3, this mora corresponds to a morpheme that expresses 3sg. Finally, (5b) shows that the epistemic/deontic modal does not allow RF but selects a consonant, namely  $/d/^{10}$ .

To sum up, the empirical evidence given in (4) and (5) indicates that modals expressing present information admit the overt marking of only 1 and 3sg, and never of 2sg. The overt marking of 1 and 3sg operates by means of overtly encoding a  $\phi$  marker in word-final position.

In the previous chapters, we have argued that 1 and 3sg correspond to the features [Speaker] and [Minimal], respectively. On the other hand, 2sg corresponds to the feature [Addressee] (cf. Harley & Ritter (2002)). This is to say that modals in (4) and (5) allow the overt marking only of [Speaker] and [Minimal] and not of [Addressee].

As for the plural paradigm, it must be noted that the segment /t/ occurs when 2pl is encoded on the modals, both in (4) and (5). This segment, according to our analysis presented in chapter 3, has been considered to be a less marked consonant compared to the nasals /m/ and /n/, which are thought to be marked and selected when a modal is valued for 1 and 3pl.

### 2.2.3 Past tense

In the same fashion as perfective auxiliaries, modals in the past tense in CSIDs also display a particular mechanism of  $\phi$  marking, whereby, in the singular paradigm, 2sg is overtly expressed by means of metaphony

<sup>&</sup>lt;sup>10</sup> It is worth noting that the epistemic/deontic modals in (4b) and (5b) are syncretic with the active auxiliary HAVE. Moreover, these forms can also coincide with those of future auxiliaries (cf. Fleischman, 1982; Pinkster, 1987; Hopper & Traugott, 1993; Roberts, 1993). Future auxiliaries originate from periphrastic constructions composed of an infinitive followed by HAVE, where HAVE, in the course of the centuries, has been reanalyzed as a future marker. This process of grammaticalization has been thought to consist of three important stages, the development of which is covered in breadth and depth in Roberts & Roussou (2003).

targeting the stressed vowel. Modals endowed with 1 and 3sg, on the other hand, are syncretic and do not seem to be affected by any kind of  $\phi$ -marking mechanism.

- (6) Mola di Bari (Apulo-Barese)
- a. Dynamic/epistemic modal

pə'ta:v 'fə	can.past.1sg do.inf.
pə't <b>i</b> :v 'fə	can.past.2sg do.inf.
pə'ta:v 'fə	can.past.3sg do.inf.
pə'temm 'fə	can.past.1pl do.inf.
pə'ti:vər 'fə	can.past.2pl do.inf.
pə'te:vən 'fə	can.past.3pl do.inf.

# b. Epistemic/deontic modal

a'va:v a man'dʒə	have to/must.past.1sg eat.inf.
a'v <b>i</b> :v a man'dʒə	have to/must.past.2sg eat.inf.
a'vɑ:v a man'dʒə	have to/must.past.3sg eat.inf.
a'vemm a man'dʒə	have to/must.past.1pl eat.inf.
a'vi:vər a man'dʒə	have to/must.past.2pl eat.inf.
a'vevən a man'dʒə	have to/must.past.3pl eat.inf.

# (7) Airola (Central Campanian)

a. Dynamic/epistemic modal

pu'te:və par'la	can.past.1sg speak.inf.
pu't <b>i</b> :və par'la	can.past.2sg speak.inf.
pu'te:və par'la	can.past.3sg speak.inf.
pu'te:vəmə par'la	can.past.1pl speak.inf.
pu'te:vəvə par'la	can.past.2pl speak.inf.
pu'te:vənə par'la	can.past.3pl speak.inf.

## b. Epistemic/deontic modal

a'le:və man'dʒa	have to/must.past.1sg eat.inf.
a'l <b>i</b> :və man'dʒa	have to/must.past.2sg eat.inf.
a'le:və man'dʒa	have to/must.past.3sg eat.inf.
a'le:vəmə man'dʒa	have to/must.past.1pl eat.inf.
a'le:vəvə man'dʒa	have to/must.past.2pl eat.inf.
a'le:vənə man'dʒa	have to/must.past.3pl eat.inf.

As far as the plural paradigms in (6) and (7) are concerned, (6) indicates that metaphony is found only with a verb expressing 2pl. In the other two cases, namely when the modal expresses 1 and 3pl, no metaphony is found. Moreover, the 2pl form of the modal allows the overt realization of the alveolar trill /r/ in word-final position. This segment, as suggested in the previous chapter, is a marked consonant as opposed to /t/, which is instead selected as a  $\varphi$  markers for present indicative modals expressing 2pl. A similar situation is attested for the plural paradigm in (7). In (7), the fricative /v/ is selected as a  $\varphi$  marker realized in word-final position only if the verb expresses 2pl. /v/, similarly to /r/, is more marked than /t/, which is the consonant selected by 2pl modals in the present indicative in (5). Furthermore, in both (6) and (7), /m/ and /n/ are the  $\varphi$  endings selected in order to encode 1 and 3pl on the modals. These consonants are the  $\varphi$  markers selected also by 1 and 3pl modals in (4) and (5).

#### 2.3 Modals and Default Marking

In this subsection, we propose that the morphological marking of  $\varphi$  observed in (4)-(7) derives from the application of the post-syntactic operation *Default Marking*.

*Default Marking,* as extensively discussed in the previous chapter, consists in an operation of the morphological component, the definition of which is repeated in (8).

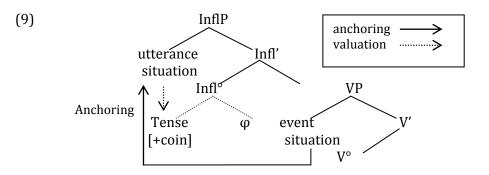
#### (8) Default Marking

The morphological marking of a  $\phi$  feature can only take place if all features bear the same markedness on the functional head that hosts them.

In §2.3.1, we present the application of *Default Marking* with modals expressing present information. §2.3.2, on the other hand, shows how *Default Marking* operates with modals that convey information for past.

#### 2.3.1 Present Tense

Building on Ritter & Wiltschko (2010), we consider Infl<sup>o</sup> as a syntactic head composed of a number of deictic categories, including Tense and  $\varphi$ . Based on our assumption put forward in the previous chapter, we assume that the category Tense is endowed with the feature [*u*coin] (cf. Ritter & Wiltschko, 2010). The function of [*u*coin] is that of anchoring the event with the utterance time. When a verb expresses information for present, the event and the utterance situations coincide in time. In this case, [*u*coin] is valued as +, which, according to our account, corresponds to a default value. It must be noted that the event situation is expressed in Spec,VP, whereas the utterance situation is expressed in Spec,InflP (cf. Ritter & Wiltschko, 2010):

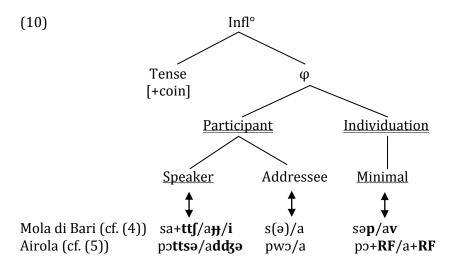


The agreement, or  $\varphi$ , category is also assumed to host default or marked values. Following Harley & Ritter (2002), we consider [Speaker] and [Minimal] to be defaults. [Addressee], on the other hand, corresponds to a marked feature.

In chapter 4, we have postulated that the uniformity of markedness between [*u*coin] and  $\varphi$  gives rise to a default configuration, which, according to our account, favors the application of *Default Marking* (see definition in (8)). Given *Default Marking*,  $\varphi$  features get overtly marked at PF only if they share the same type of markedness as [*u*coin].

In the case of a modal in the present tense, we propose that the overt marking of [Speaker] and [Minimal] on these elements applies only if [*u*coin] expresses a + value. In fact, [Speaker] and [Minimal] share the same

degree of markedness as [+coin] and therefore they get overtly marked at PF by means of a  $\phi$ -marker in word-final position.

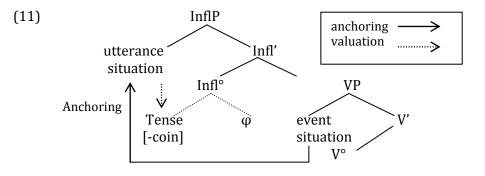


In (10), the only feature that does not get overtly marked in word-final position is [Addressee]. This is because [Addressee], being a marked  $\varphi$  feature, does not share the same grade of markedness as [+coin]. In this case, *Default Marking* cannot apply and [Addressee] does not get overtly marked by means of a dedicated  $\varphi$ -marker.

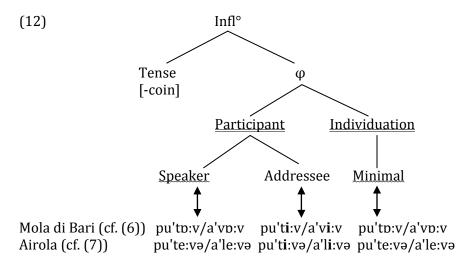
### 2.3.2 Past Tense

Here, we consider the application of *Default Marking* with modals expressing past tense.

According to the discussion presented in the previous chapter, we have considered [ucoin] to be a feature encoded in the category Tense, the valuation of which depends on the anchoring between the event and the utterance time. When a verb expressing past, [ucoin] is valued as – since the event and the utterance situations do not coincide in their time reference. This mechanism is outlined in (11).



If the modal is valued for [Addressee], then an unmarked, i.e. default configuration is obtained. In this case, in fact, both [*u*coin] and  $\varphi$  express marked values, which, according to our proposal, allow *Default Marking* to apply post-syntactically (cf. (8)). This is to say that when [-coin] and [Addressee] realized on a modal share the same markedness value, [Addressee] is allowed to be overtly marked. The marking of [Addressee] applies by means of metaphony of the stressed vowel, as shown in (12).



*Default Marking* in the case of [Speaker] and [Minimal] does not apply because these two features are defaults, thus displaying a different degree of markedness than [-coin]. In this case, no morphological marking of  $\phi$  is

realized and the modals endowed with these two features are spelled-out by selecting a syncretic exponent.

## 2.4 Summary

In the previous subsections, we have observed that *Default Marking* (cf. (8)) is a post-syntactic operation found not only with perfective auxiliaries but also with modals. With these verbs too, the overt marking of [Speaker] and [Minimal] is dependent on the markedness of [ucoin]. If [ucoin] has a + value, which is a default, then [Speaker] and [Minimal], which are also defaults, get overtly marked at PF. Conversely, if [ucoin] possesses a – value, which is marked, then only [Addressee], which is also a marked feature, is overtly marked at PF.

At the beginning of this chapter we considered modals to be auxiliary-like elements that license periphrastic constructions. As a result, we now need to investigate whether *Default Marking* also applies in the case of non-periphrastic constructions. This survey will be presented in the next section.

# 3. Lexical versus modal

## 3.1 Data

Lexical verbs in CSIDs never license periphrastic constructions. Moreover, they exclude the overt marking of [Speaker] and [Minimal], but not of [Addressee], in the present indicative. The marking of [Addressee] is obtained by means of metaphony, which targets the stressed vowel of the verb. These facts are illustrated in (13) and (14). It must be noted that the overt marking of [Addressee] applies only in (13a) and (14a) and not in (13b) and (14b)<sup>11</sup>.

<sup>&</sup>lt;sup>11</sup> The lexical verbs in (13) and (14) are all composed of more than one syllable. In most Campanian and Apulian dialects, monosyllabic lexical verbs display a specific type of morphological marking of  $\varphi$ , which is opposed to the one found with bi/polysyllabic forms: Mola di Bari [Apulo-Barese] 'v**ɔŋg**/ 've/ 've 'cə:n -go.pr.1sg/ go.pr.2sg/ go.pr.3sg. slowly- '1/you/(s)he go(es) slowly'; Airola [Central Campanian] 'va:**k**/ 'va(**j**)ə/ 'va k a 'ma:kinə -go.pr.1sg/ go.pr.2sg/ go.pr.3sg with

## (13) Mola di Bari (Apulo-Barese)

a.	'dorm	sleep.pr.1sg
	'd <b>u</b> rm	sleep.pr.2sg
	'dorm	sleep.pr.3sg
	dər'mə:m	sleep.pr.1pl
	dər'mə:t	sleep.pr.2pl
	'dormən	sleep.pr.3pl
b.	'mandz	eat.pr.1sg

0	1 0
'mandy	eat.pr.2sg
'mandy	eat.pr.3sg
man'ʤə:m	eat.pr.1pl
man'ʤə:t	eat.pr.2pl
'mandʒən	eat.pr.3pl

## (14) Airola (Central Campanian)

a.	'rɔrmə	sleep.pr.1sg
	'r <b>uə</b> rmə	sleep.pr.2sg
	'rɔrmə	sleep.pr.3sg
	rur'mimmə	sleep.pr.1pl
	rur'mi:tə	sleep.pr.2pl
	'ruərmənə	sleep.pr.3pl

the car- 'I/you/(s)he go(es) by car'. It seems that in the case of monosyllabic lexical verbs, [Speaker], on a par with modals and auxiliary HAVE, must be overtly marked. Differently from these forms and similarly to bi-/polysyllabic lexical verbs, [Addressee] can be overtly realized. This is attested in many Campanian dialects, as the dialect of Airola shows, and is not found in Apulian dialects. Moreover, 3sg monosyllabic verbs do not allow the overt marking of [Minimal] in either Campanian or Apulian dialects. These observations suggest that in monosyllabic lexical verbs, only [Speaker] and [Addressee] can be overtly marked. The overt marking of [Speaker], according to the data available, seems to be obligatory, whereas the overt marking of [Addressee] is language specific.

'mandʒə	eat.pr.1sg
'mandʒə	eat.pr.2sg
'mandʒə	eat.pr.3sg
man'dzammə	eat.pr.1pl
man'dza:tə	eat.pr.2pl
'mandʒənə	eat.pr.3pl
	'mandʒə 'mandʒə man'dʒammə man'dʒa:tə

The non-overt marking of [Speaker] and [Minimal] in (13a) and (14a) results in the selection of a syncretic exponent. A syncretic verbal form is also chosen for those formatives expressing 1, 2 and 3sg in (13b) and (14b). There, in fact, [Addressee] does not get overtly marked.

The presence versus absence of metaphony affecting the 2sg verbs in (13) and (14) might be attributed to the type of phonological feature expressed on the stressed vowel of these verbs in their underlying representation. If the stressed vowel is endowed with a [mid-high] or [mid-low] feature, then metaphony is obtained. In (13a), for instance, metaphony affects /o/, which is a mid-high vowel. In this case, /o/ raises to /u/, which is a high vowel. In (14a), the mid-low vowel /ɔ/ turns into the diphthong /uə/. Conversely, when the stressed vowel is endowed with a [low] feature, namely /a/ (cf. (13b) & (14b)), metaphony is not attested<sup>12</sup>. The table in (15) summarizes these facts.

	Lexical verb	
	Stressed Vow:	Stressed Vow:
	[low]	[mid-(high/low)]
[Speaker]	-	-
[Addressee]	-	+
[Minimal]	-	-

ſ	1	5	٦
ι	т	J	J

<sup>&</sup>lt;sup>12</sup> Calabrese (2009) claims that high vowels, i.e. /i/ and /u/, as well as mid-high vowels, i.e. /e/ and /o/, are endowed with an [ATR] feature. The feature [ $\pm$ ATR], in his account, makes a distinction between mid-high and mid-low vowels. The difference between /o/ and /ɔ/, for instance, would be that /o/ is endowed with a [back], [round] and [+ATR] feature, whereas /ɔ/, conversely, only expresses [back] and [round], and is specified for [-ATR].

As Maiden (1991) and Calabrese (1995) point out, metaphony in Italian dialects generally targets mid-vowels, namely *o* and *e*. In many dialects, high-mid vowels are raised to high, while low-mid vowels can be raised to mid-high, or be diphthongized. A stressed low vowel can be affected by metaphony in Italian dialects in some rare cases (cf. Calabrese, 1985, 1998; Maiden, 1991), for instance in a number of Abruzzese dialects and Romagnolo. Whereas in Romagnolo stressed low vowels tend to raise to mid-low or mid-high vowels (cf. Maiden 1991: 131), in some Abruzzese dialects all vowels become high under metaphony: /a,  $\varepsilon$ , e/ > /i/ and /o, ɔ/ > /u/ (cf. Maiden 1991: 167).

Based on these facts, we might argue that the lack of overt marking of [Speaker] and [Minimal] on a lexical verb expressing information for present in (13) and (14) is the result of the non-application of the post-syntactic operation *Default Marking*, the definition of which is given in (8). In fact, a lexical verb in the present indicative is endowed with a [+coin] feature, which, according to our account, would allow the overt marking of [Speaker] and [Minimal], but not of [Addressee]. The presence of [+coin], instead, allows the overt marking of [Addressee] only if the stressed vowel of the verb is endowed with a specific phonological feature.

Given the morphological marking strategies of  $\varphi$  observed in (13) and (14), we postulate that the value expressed by [*u*coin] in the case of lexical verbs is not crucial in determining the set of morphosyntactic  $\varphi$  features to be overtly spelled out at PF. Instead, we posit that the value of [ucoin] expressed on Tense is able to determine the morphological marking of  $\phi$ only in the case of auxiliary-like verbs, which license periphrastic constructions. Following Roberts & Roussou (2003), we take periphrases to correspond to unmarked syntactic configurations. On the other hand, lexical verbs, which in CSIDs and other Romance languages are thought to undergo V-to-T, or V-to-Infl, movement (cf. Jackendoff, 1972; Emonds, 1978; Pollock, 1989; Belletti, 1990; Vikner, 1994, 1995, 1997; Cinque, 1999; Bentzen, 2007, 2009; Biberauer & Roberts, 2010; Holmberg & Roberts, 2010; Roberts, 2010; a.o.), will be assumed to license marked syntactic configurations (cf. Clark & Roberts, 1993, 1994; Roberts, 2001; Roberts & Roussou, 2003; Holmberg & Roberts, 2010). In our analysis, marked syntactic configurations only allow the overt marking of marked morphosyntactic  $\varphi$  features at PF by means of *Default Marking*.

### 3.2 Analysis

We propose that the morpho-phonological marking of [Addressee] in (13a) and (14a) is the result of *Default Marking* (see (8)) applying postsyntactically. The application of *Default Marking* with lexical verbs can be accounted for the fact that lexical verbs spelled-out in Infl<sup>o</sup> correspond to marked syntactic heads that allow the overt marking only of marked morphosyntactic  $\varphi$  features. This is to say that if a syntactic head is complex, thus marked, then only marked morphosyntactic  $\varphi$  features can be overtly spelled-out at PF. The presence of [+coin] on Tense with lexical verbs would then exclude the overt marking of default morphosyntactic  $\varphi$ features. This is due to the fact that the non-markedness of [+coin] is overridden by the markedness of V-to-T, or V-to-Infl, movement.

Let us consider now why lexical verbs correspond to complex syntactic heads. In line with Clark & Roberts (1993), (1994), Roberts (2001) and Holmberg & Roberts (2010), we claim that verb movement "is always associated with relatively complex representations" (cf. Roberts & Roussou, 2003: 210). The notion of complex representation is based on the simplicity metric put forward by Longobardi (2001), which is given in (16).

## (16)

A structural representation R for a substring of input text S is simpler than an alternative representation R' iff R contains fewer formal feature syncretism than R'.

[Longobardi (2001: 294)]

Feature syncretism simply refers to the presence of more than one formal feature realized in a syntactic position. Given the simplicity metric in (16), it is straightforward to assert that if the number of formal features encoded on a syntactic head Y is greater than that found in Y', then Y is more complex, or marked, than Y'.

In the presence of verb movement, for instance, the verb X incorporates into a higher head Y and these get spelled-out together. At Spell-Out, one exponent expressing both the features of X and of Y is selected (cf. (17a)). In the absence of verb movement, on the other hand, the verb X does not incorporate into Y and Y gets spelled-out separately from X. In this case, a periphrastic construction is obtained (cf. (17b)):

(17) a. [YP [[X]+[Y]] [XP [t <del>X</del> ]]]	where [[X]+[Y]]	= α
b. [YP [Y] [XP [X]]]	where [Y]	= β

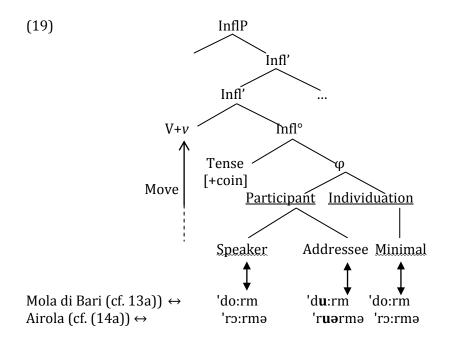
Given (17), we consider the syntactic head spelling out  $\alpha$  as being more complex than the one spelling out  $\beta$ . In fact,  $\alpha$  corresponds to the overt realization of the features of X and Y, whereas  $\beta$  is the lexical item expressing the feature(s) of Y only.

Based on these facts, we posit that the exponents of  $Infl^{\circ}$  in the paradigm in (13) and (14) are more complex than those of (4) and (5), the former being lexical verbs and the latter being modals. At Spell-Out, in fact, the lexical verbs in (13) and (14) encode both the V+v complex, as well as those features that make up Infl<sup>o</sup>. The modals in (4) and (5), on the other hand, only encode Infl<sup>o</sup>, thus being 'poorer' than lexical verbs in the number of formal features they bear.

(18) a. [InflP [[V+v	']+[Infl°]] [vP t <del>[V][v]</del> ]]	where
[[V+v]+[Inf	°]] ↔ 'd <b>u</b> :rm/ 'ma:ndʒ	(cf. (13a)/(14b))
b. [InflP [Infl°	] [ <i>v</i> P [V][ <i>v</i> ]]]	where
[Infl°]	⇔ sa <b>tt∫</b> / pɔ <b>ttsə</b>	(cf. (4a)/(4b))

The presence of metaphony in the case of ['du:rm]/['ruərmə] (13a) and (14a) can be therefore explained by the fact that the V+v complex moves to Infl°, thus leading to a complex Infl head. The presence of a complex Infl head would be the trigger for the overt marking of [Addressee], which in our account corresponds to a marked morphosyntactic  $\varphi$  feature. As mentioned above, the presence of [+coin] in Tense would not favor the overt marking of default  $\varphi$  features with a complex Infl head. Indeed, V-to-T, or V-to-Infl, is a marked syntactic operation which, in our account, overrides the non-markedness of [+coin].

In the case of perfective auxiliaries and modals, the uniformity of markedness between [*u*coin] and  $\varphi$  encoded in Infl<sup>o</sup> has been claimed to license the application of *Default Marking* (see (8)). In the case of lexical verbs, conversely, *Default Marking* is obtained due to the presence of a complex, i.e. marked, Infl head combining with a marked morphosyntactic  $\varphi$  feature:



All things being equal, we would expect *Default Marking* to also be attested in (13b) and (14b). More specifically, given the uniformity of markedness between complex Infl<sup>o</sup> and [Addressee], we would expect metaphony to also be found in (13b) and (14b). There, in fact, the lexical verb is also valued for a marked morphosyntactic  $\varphi$  feature. Nonetheless, as demonstrated above, metaphony is not attested.

In order to solve this puzzle, we propose to go a step further and claim that metaphony can apply only if the stressed vowel of the lexical verb bears a marked phonological feature in the underlying representation. Following Jakobson (1968), we postulate that the low vowel [a], which is stressed in the verbal forms in (13b) and (14b), is found in all languages and must therefore be considered as a default. The stressed vowels in (13a) and (14a), which bear a mid-high and mid-low feature, respectively, must be considered as more marked than [a] since they are not found in all languages (see Arabic, for instance).

At this point, we speculate that the presence of a complex Infl head in CSIDs allows the overt marking of marked morphosyntactic  $\phi$  features by means

of metaphony only if the vowel in question is endowed with a marked phonological feature<sup>13</sup>. These facts are illustrated by the implicational hierarchy in (20).

(20)14

Infl [marked] >\*  $\phi$  [marked] >\* Vowel [marked]

(20) says that if Infl° is marked, i.e. complex, then only marked morphosyntactic  $\phi$  features, i.e. [Addressee], can get overtly marked. At PF, the overt marking of [Addressee] is sensitive to the quality of the stressed vowel. Indeed, [Addressee] can be marked only if the stressed vowel of the lexical item selected is endowed with a marked vowel in its underlying representation.

It is worth noting, however, that the implicational hierarchy in (20) is relevant only to CSIDs. In a subset of NSIDs, for instance, [Addressee] always gets overtly marked by means of metaphony when encoded on a lexical verb. Hence, the marking of [Addressee] with lexical verbs in NSIDs is not sensitive to the type of phonological feature expressed on the stressed vowel. The paradigm in (21) illustrates these facts.

<sup>&</sup>lt;sup>13</sup> It should be noted that in the case of a mid-front vowel, such as [e], metaphony is found only when the lexical verb is endowed with specification for [Addressee]: Mola di Bari (Apulo-Barese) 'send/ 'sind/ 'send -feel.sg.1sg/ feel.sg.2sg/ feel.sg.3sg- 'I/you/(s)he feel(s)'; Airola (Central Campanian) 'sɛ:ntə/ 'sje:ntə/ 'sɛ:ntə -feel.sg.1sg/ feel.sg.2sg/ feel.sg.3sg- 'I/you/(s)he feels'. The 2sg verb of the dialect of Airola gets diphthongized. In the traditional literature, diphthongization is also treated as a type of metaphonic alternation in the same way as vowel heightening (cf. Calabrese 1985, 1998; Maiden, 1991).

 $<sup>^{14}</sup>$  The diacritic \* indicates that information for markedness is passed from a module to another.

(21) Arielli (Eastern Abruzzese) 'maŋŋə eat.pr.1sg 'miŋŋə eat.pr.2sg 'maŋŋə eat.pr.3sg maŋ'ŋe:mə eat.pr.1pl

map'pe:tə

'mannə

[D'Alessandro & Roberts (2010): 67]

In (22), we outline the implicational hierarchy of  $\varphi$ -marking with lexical verbs in the Abruzzese dialect in (21).

eat.pr.2pl

eat.pr.3pl

(22)

Infl [marked] >\*  $\phi$  [marked] >\* Vowel

According to (22), all vowels can undergo metaphony when a lexical verb is endowed with the morphosyntactic feature [Addressee]. NSIDs, in fact, allow the overt marking of [Addressee] independently of the phonological feature expressed on the stressed vowel. In these dialects, the nonuniformity of markedness between the phonological feature expressed on the stressed vowel of the verb and the  $\varphi$  feature carried by the verb does not block the overt marking of [Addressee] by means of metaphony.

## 3.3 Interim summary

So far, we have observed that lexical verbs in the present indicative categorically disallow the overt marking of [Speaker] and [Minimal]. The only feature in the singular paradigm which gets overtly marked is [Addressee]. This overt marking of [Addressee], it is argued, is triggered by the presence of a marked syntactic configuration (cf. Clark & Roberts, 1993, 1994; Roberts, 2001; Roberts & Roussou, 2003; Holmberg & Roberts, 2010), which inevitably allows the overt marking of [Addressee], but not of the defaults [Speaker] and [Minimal].

It has been claimed that the overt marking of [Addressee] in this situation is determined by the application of the post-syntactic operation *Default* 

Marking (see (8)): Infl<sup>°</sup>, being complex, i.e. a marked syntactic head, allows the overt marking only of marked morphosyntactic  $\varphi$  features. We have observed that with lexical verbs, the application of *Default Marking* in NSIDs differs from that observed in CSIDs: in NSIDs the overt marking of [Addressee] freely applies by means of metaphony, whereas in CSIDs it applies only if the phonological feature expressed on the stressed vowel of the verb bears a marked value.

These facts are presented in order to show that [+coin] in the case of lexical verbs in the present indicative does not license the overt marking of default morphosyntactic  $\phi$  features. This is due to the fact that V-to-T, or V-to-Infl, movement leads to a marked syntactic configuration, which outranks the non-markedness of [+coin]. As a result, only marked morphosyntactic  $\phi$  features, i.e. [Addressee], get overtly marked.

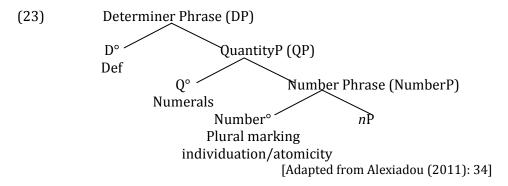
The question which arises now is whether the application of *Default Marking*, triggered by the value of [*u*coin], is confined only to periphrastic constructions realized in the verbal domain, or if it is also found in the case of D-elements followed by nouns. This will be addressed in the next section.

## 4. Determiners in CSIDs

In this part, we will focus on the syntax of determiners in CSIDs, as well as on the morphological marking of  $\varphi$  attested on these elements. More specifically, we will see that a subset of D-elements, namely definite determiners and demonstratives, are able to license RF only if they express neuter and/or feminine plural. We will claim that occurrence of RF in both cases derives from the application of *Default Marking* (cf. (8)).

### 4.1 The syntax of DP

Since the studies proposed by Szabolsci (1983), (1984), Abney (1987) and Horrocks & Stavrou (1987), there has been a general consensus in the literature regarding the syntactic status of the D(eterminer) category. The principal idea is that D° corresponds to a functional head taking a noun phrase (NP) as its complement. For this reason, the structure of the NP parallels that of the sentence, inasmuch as D°, in the same way as Infl°, is the functional head displaying agreement properties<sup>15</sup>. It was later proposed that the nominal phrase does not only consist of an NP and a DP, but also of other syntactic heads sandwiched between these two projections. These correspond to Number<sup>o</sup> and Q(uantity)<sup>o</sup> (cf. Abney, 1987; Grimshaw, 1991; Ritter, 1991; Bouchard, 1998; van Riemsdijk, 1998; Borer, 2005; Heycock & Zamparelli, 2005; Chierchia, 2008; Dobrovie-Sorin, 2009; Alexiadou, 2011; a.o.), as shown by the syntactic tree in (23).



The structure in (23) indicates the presence of another projection, namely nP, which is located directly below NumberP. Following Marantz (2000), (2006) and Arad (2005), a.o., we consider n as a categorizing head, a nominalizer in this case, merging with a root not associated with a categorical feature.

Jespersen (1909) suggests that nouns can be of two different types, according to whether they allow a countable or uncountable reading. In the former case, the projection of a NumberP and a QP is necessary since countable nouns (CNs) can refer to the sum of individuals and thus qualify as atomic/individual (cf. Borer, 2005; Chierchia, 2008). They can therefore allow plural morphology and combine with a numeral. On the other hand, uncountable nouns, which are commonly defined as mass nouns (MNs), are not atomic, disallow plural morphology and are incompatible with

<sup>&</sup>lt;sup>15</sup> Higginbotham (1985) proposes that a simple noun such as *book*, which denotes each of the various individuals possessing the property of being a book, has an open space in it. This position, according to his analysis, is identified with the specifier of an NP and corresponds to the place where the thematic grid of a simple noun is satisfied.

(24)

numerals (cf. Quine 1960, Krifka 1989, a.o.), unless they encode typeshifting interpretation<sup>16</sup>. Another difference between CNs and MNs that needs to be accounted for is that CNs can be preceded both by a definite and indefinite determiner, while MNs can be preceded only by definite determiner, not an indefinite one (cf. Gillon, 1992; Alexiadou, 2011; a.o.). The table in (24) summarizes these facts by drawing parallels between the syntactic properties of CNs and MNs if no type-shifting interpretation is found on the latter.

		CNs	MNs
Plural marking		book- <b>s</b>	*wine- <b>s</b>
Numeral		three book-s	*three wine-s
Determiner	Definite	the book(s)	the wine
	Indefinite	<b>a</b> book	* <b>a</b> wine

(24) shows that D° is a syntactic head that always gets realized with CNs

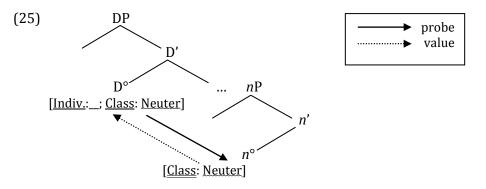
and MNs. In the case of MNs, D° can only express a definite reading. It is worth noting that D-elements do not only include determiners, but also demonstratives, which generally stand in complementary distribution with definite determiners<sup>17</sup>. Because of this, a DP such as *this/that wine* is fully grammatical.

<sup>&</sup>lt;sup>16</sup> The division of labor between CNs and MNs, in allowing or disallowing the plural morphology, respectively, does not seem to be rigidly defined. In fact, in English, as well as in other languages, plural morphology is permitted on a MN. Moreover, MNs in English can combine with a numeral: we have drunk **two** wine-**s**. In this case, type-shifting takes place (Partee, 1987; Chierchia, 1998; a.o.). Furthermore, as Grimshaw (1990) shows, plural morphology and numerals are banned with argument structure nominals: \*one folding of the chair; \*two foldings of the chair. For this reason, MNs and argument structure can both be assumed to entirely lack the merging of a NumberP and OP above *n*P.

<sup>&</sup>lt;sup>17</sup> It is important to note that some languages always allow the realization of a definite article combined with a demonstrative. This situation is attested for Greek, where the demonstrative *afto* (this) must precede a definite determiner in DPs of the type *this book*: afto to vivlio –this.neut.sg. the.neut.sg. book-.

#### 4.2 Agree within the DP

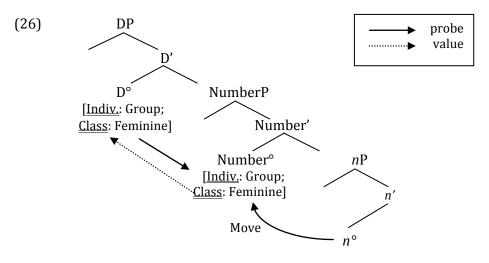
In contrast to Infl<sup>°</sup>, which, as extensively discussed in the previous chapter, generally encodes information for Person and Number in Romance<sup>18</sup>, the functional head D<sup>°</sup> only expresses Number and Gender. Based on the operation of *Agree* put forward by Chomsky (2000), (2001) and (2004), the definition of which was given in chapter 3, we postulate that D<sup>°</sup> is a syntactic head endowed with unvalued Number and Gender features. These features get valued against the corresponding interpretable features specified in the noun. In order for the *Agree* operation to take place, the noun must be in the c-command domain of D<sup>°19</sup>. Let us suppose that the noun is uncountable. This means that it is in  $n^{\circ}$ , without moving to Number<sup>°</sup>. In this case, the noun can be thought of as being interpretable for Gender, or [<u>Class</u>], only. The Gender feature specification of the noun in  $n^{\circ}$  is copied by D<sup>°</sup>, by means of *Agree*. The featural make-up of D<sup>°</sup> also contains the feature [<u>Individuation</u>]. This feature cannot be valued by  $n^{\circ}$  and thus remains underspecified. These facts are exemplified in (25).



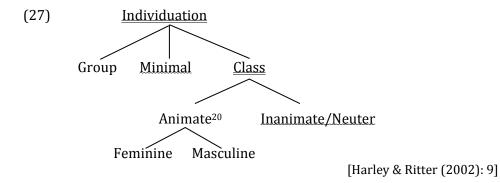
<sup>&</sup>lt;sup>18</sup> In the southern Marchigiano dialect of Ripatransone, a NSID, gender is also expressed on the verbal inflection (Mancini, 1993; Rossi, 2008; Ferrari, 2010; D'Alessandro, 2011; D'Alessandro, 2012; a.o.): i rid**u** -I.masc.sg. laugh.1.masc.sg.versus ìa rid**e** -I.fem.sg. laugh.1fem.sg.- (cf. Rossi, 2008: 31). The overt encoding of gender on lexical verbs seems to be limited to this dialect and is not found elsewhere in Romance.

<sup>&</sup>lt;sup>19</sup> For the condition on *Agree* between a probe (Pr) and a goal (G), see chapter 3, §2.2.

In the case of a CN, conversely, the noun moves to Number<sup>o</sup>, thus being interpretable for number information. In this case, D<sup>o</sup>, after entering an *Agree* relation with the noun, does not remain underspecified, but gets valued either for [Minimal] or [Group]. (26) shows how *Agree* between a plural feminine noun and D<sup>o</sup> is obtained.



In the same fashion as verbal agreement markers, we assume that the morphosyntactic features expressed on D° are organized within the geometric representation of features proposed by Harley & Ritter (2002). In this geometry, [Individuation] has three daughter nodes, namely [Minimal], [Group] and [Class]. [Class], which expresses Gender properties, has three daughter nodes, including [Neuter/Inanimate], [Masculine] and [Feminine]. Moreover, it should be noted that [Class], unlike [Participant], is not the sister node of [Individuation], but is dominated by it, as the geometry in (27) illustrates.



Harley & Ritter postulate that in a feature geometry a more dependent feature implies the presence of another one that dominates it. This means that [<u>Class</u>] in the geometry in (27) implies the presence of [<u>Individuation</u>]. The dependency of Gender on Number has been claimed to appear cross-linguistically. Indeed, Greenberg's (1963: 95) Universal 36 argues that "[i]f a language has the category of gender, it always has the category of number".

If this were true, then we would expect all nouns expressing Gender to also be specified for Number. This assumption is incompatible with the structure proposed in (23). There, Number<sup>o</sup> corresponds to a syntactic head conveying plurality/singularity, merging right above *n*P.  $n^{\circ}$ , on the other hand, expresses information for Gender only. Based on these facts, we propose that the geometry in (27) applies to D-elements and not to nouns spelled-out in Number<sup>o</sup> or  $n^{\circ}$ .

In the same fashion as [<u>Participant</u>] and [<u>Individuation</u>], this geometry predicts that [<u>Class</u>] also has one dependent endowed with a default

<sup>&</sup>lt;sup>20</sup> [Animate], in our account, simply corresponds to a morphosyntactic feature and does not make any reference to its semantic contribution. Indeed, SIDs, on a par with Italian and many other languages, show that an inanimate noun can be endowed with [Masculine] or [Feminine] specification. This simply means that in these languages there is no full correspondence between semantic and morphosyntatic gender encoded on a noun. In short, the mapping of masculine or feminine on an inanimate noun is purely arbitrary and language specific. See the contrast between Italian and German (i. Italian: la luna -the.fem.sg. moon.fem.versus ii. German: der Mond -the.masc.sg. moon.masc.-), where *moon* is feminine in Italian and masculine in German.

reading. This node corresponds to [Inanimate/Neuter]. [Masculine] and [Feminine], on the other hand, are marked. The classification of [Inanimate/Neuter] as a default is dependent on acquisitional facts: this feature is learnt before [Masculine] and [Feminine], and must therefore be considered as default/unmarked.

If we were in the presence of two D-elements, one specified for feminine plural and the other for neuter singular, the former would be understood as being more marked than the latter. This is because a feminine plural D-element is endowed with two marked features, whereas a neuter singular D-element encodes two default features, as (28) demonstrates.

(28)

a.	Neuter singular D	[Class: Neuter; Individuation: Minimal]
u.	neuter singular D	<u>Couss</u> . Meater, <u>mannadation</u> . Mannad

b. Feminine plural D [Class: Feminine; Individuation: Group]

A similar proposal has been made in chapter 4 and in section §2.2, with reference to default and marked features expressed on perfective auxiliaries and modals. It was proposed that a 3sg agreement marker is less marked than one expressing 2pl. This is argued on the basis that 3sg agreement markers only express the feature [Minimal], which is a default, whereas 2pl agreement markers encode both [Addressee] and [Group], which are marked morphosyntactic features. These facts are illustrated in (29).

(29)

à.	3sg aux./modal	[Participant:; Individuation: Minimal]
b.	2pl aux./modal	[Participant: Addressee; Individuation: Group]

In this subsection, we have shown that D°, similarly to Infl°, is a functional element that can be specified for default or marked  $\phi$  values.

## **4.3 Neuter D in USIDs**

Unlike in most Romance languages, where determiners can only be inflected for masculine and feminine, a three-way gender system of determiners is found in a subset of USIDs (cf. Rohlfs, 1966, 1968; Leonard, 1978; Andalò, 1991; Maiden, 1991, 1997; Penny, 1994; Ledgeway, 2009; a.o.), whereby definite D-elements can express neuter in addition to masculine and feminine<sup>21</sup>. This phenomenon is in fact not limited to a subset of USIDs, but is also attested in a large number of CIDs. Specifically, the dialects that allow a three-way gender system of determiners are those spoken in the geolinguistic area stretching from the Ancona-Rome corridor up to central Campania, northern Lucania and central Apulia.

In these dialects, a neuter determiner is selected by nouns that possess a semantic interpretation for mass (Rohlfs, 1968: 109)<sup>22</sup>. In the case of a CN, conversely, no neuter determiner can be found and either a masculine or a feminine determiner is attested.

<sup>&</sup>lt;sup>21</sup> Loporcaro & Paciaroni (2011) claim that a subset of USIDs, as well as some CIDs, display a four-way gender distinction. In these dialects, a group of nouns, which were neuter in Latin and belonged to the  $2^{nd}$  declension, do not combine with a neuter determiner, but rather with a determiner expressing masculine or feminine. A masculine singular determiner is selected when the noun is in the singular, whereas a feminine plural determiner is chosen when the noun is in the plural: **lu** vrattsə -the.masc.sg. arm- versus **rə** bbrattsə -the.fem.pl arms- [Loporcaro & Paciaroni, (2011) : 412]. The noun *vrattsə/bbrattsə* stems from Latin neuter *brāchium/brāchiǎ*. In the former case, namely when the noun is in the singular, the determiner *lu* is selected, which is masculine. In the latter case, namely when the noun is in the plural, the determiner *rə* is chosen, which is feminine in gender. This determiner, in contrast to the masculine singular determiner, licenses RF. According to Loporcaro & Paciaroni (2011), this type of alternation, which is typical of a subset of USIDs and CIDs, corresponds to a way of expressing a four-way gender distinction.

<sup>&</sup>lt;sup>22</sup> As Kučerova & Moro (2011) point out, many northern Spanish dialects spoken in Asturias and Cantabria show the same three-way gender system of determiners found in CIDs and USIDs. For the sake of clarity, we will not discuss the gender system of northern Spanish dialects here, but will focus specifically on that found in CIDs and USIDs.

(30) Macerata (Central Marchigiano)	
<b>lu</b> táulu/fjore	'the.masc.sg. table/flower'
<b>la</b> kasa	'the.fem.sg. house'
lo tjetje	'the.neut. chickpea'
	[Paciaroni (2012): 8]

In the Central Marchigiano dialect in (30) determiners can take three different morphological shapes: in the case of *táulu/fjore*, a CN, a masculine singular determiner is selected, as well as in the case of *kasa*, which is countable and selects a feminine singular determiner. On the other hand, *tfetfe*, a MN, chooses a neuter determiner<sup>23</sup>. As mentioned above, a three-way gender system of determiners is also found in a large number of USIDs: San Felice Circeo [Romanesco]: ju canə -the.masc.sg. dog- versus lu lattə - the.neut. milk- (Rohlfs 1968: 109); Pontelandolfo [Northern Campanian]: rə 'ka:nə -the.masc.dog- versus lə 'lattə -the.neut milk-.

The alternation in gender affecting the determiners in (30) can be further observed for demonstratives, which, following the discussion presented above, are also considered as D-elements:

(31) Celano (Western Abruzzese)

<b>kwístə</b> líbbrə	'this.masc.sg. book'
<b>kwesta</b> kásə	'this.fem.sg. house'
<b>kwεstə</b> pépə	'this.neut. pepper'

[Kučerová & Moro (2011): 4]

Rohlfs (1968) observes that in a vast number of dialects spoken in central Campania and central Apulia, however, neuter determiners are not morphologically different from masculine singular determiners. More precisely, in the geolinguistic area stretching from central Campania and

<sup>&</sup>lt;sup>23</sup> Rohlfs (1968) posits that neuter determiners in CIDs and USIDs are not selected only with mass nominals whose etymon was neuter in Latin (cf. *vinum* (wine), *sale* (salt), *lac* (milk)). Conversely, they are also found in constructions where the nominal was masculine in Latin and possessed semantic interpretation for mass (cf. *panis* (bread), *caseus* (cheese), *sanguis* (blood)). Merlo (1917) claims that the Romance neuter determiner does not derive from the Latin neuter gender, but it is an innovation.

central Apulia, up to the Naples-Matera-Bari corridor, neuter determiners are homophonous with those expressing masculine singular information. They differ, however, in that the former trigger RF while the latter do not. This situation is shown in (32)-(34).

(32) Mola di Bari (Apulo-Barese)

u l'latt	'the.neut. milk'
u 'litt	'the.masc.sg. bed'
a 'port	'the.fem.sg. door'

## (33) Airola (Central Campanian)

<b>u l'l</b> attə	'the.neut. milk'
u 'liəttə	'the.masc.sg. bed'
a ma'e:strə	'the.fem.sg. teacher'

(34) Cerignola (Apulo Daunian-Apennines)

'the.neut. pepper'			
'the.masc.sg. brother'			
'the.fem.sg. sister'			

In this group of dialects, demonstratives expressing neuter and masculine singular properties, on a par with definite determiners, are syncretic. These facts are given in (35)-(37).

(35) Mola di Bari (Apulo-Barese)

kuss l'latt	'this.neut. milk'
kuss 'litt	'this.masc.sg. bed'
kessa 'port	'this.fem.sg. door'

### (36) Airola (Central Campanian)

sto l'lattə	-	'this.neut. milk'
sto 'liəttə		'this.masc.sg. bed'
sta ma'e:strə		'this.fem.sg. teacher'

(37) Cerignola (Apulo Daunian-Apennines)			
stu p'pɔ:p	'this.neut. pepper'		
stu 'frɔt	'this.masc.sg. brother'		
sta 'sɔ:r	'this.fem.sg. sister'		

The neuter demonstratives in (35)-(37), similarly to definite neuter determiners in (32)-(34), are able to trigger RF. In the next subsection, we will investigate the interplay between the type of root selected by a D-element and the triggering of RF by these elements.

# 4.3.1 RF and neuter D

# 4.3.1.1 Diachronic versus typological observations

As Rohlfs (1968:110) suggests, the reorganization of morpho-phonological material on Latin neuter demonstratives has been crucial in determining the rise of RF triggered by definite neuter determiners in a group of modern USIDs. Specifically, Rohlfs proposes that in the period of transition from Vulgar Latin to southern Italo-Romance, some phonological changes that affected the last segments of the Latin neuter determiner *illūd* created the right context for RF. According this theory, *illūd* had a long *u*, the presence of which determined the rise of RF at a certain historical stage. *Illŭm*, on the other hand, which corresponds to the Latin etymon of the masculine determiner, featured a short *u*, which did not result in RF. All in all, Rohlfs' proposal is that the different length of *u* found in *illūd* and *illŭm* determined whether or not the phonological context was right for the application of RF<sup>24</sup>.

This explanation, however, cannot account for certain facts. Firstly, it does not address the question why dialects of the type in (30) and (31) do not display RF after a neuter determiner (cf. Macerata [Central Marchigiano] lu

<sup>&</sup>lt;sup>24</sup> A similar approach is proposed by Lüdtke (1965), who also assumes that RF triggered by a neuter determiner is determined by the morpho-phonological makeup of the Latin determiner *illud*. Among other diachronic explanations, it is worth mentioning that proposed by Merlo (1906), which states that the neuter determiner able to trigger RF derives from the form *\*illoc*, which, unlike *illum*, is argued to trigger RF.

táulu/ la kasa/ lo tʃetʃe –the.masc.sg. table/ the.fem.sg. house/ the.neut. chickpea-; Celano [Western Abruzzese] kwístə líbbrə/ kwɛsta kásə/ kwɛstə pépə -this.masc.sg. book/ this.fem.sg. house/ this.neut. pepper-).

A possible solution would be to assume that RF triggered by a neuter Delement is found only in those dialects where this element is syncretic with the element expressing masculine singular information. Crucially, the northern Barese dialect of Bitonto (cf. (38)) shows that this is not the case, since a neuter determiner is morphologically distinct from the determiner with masculine singular interpretation and, despite the lack of syncretism, it can trigger RF. This situation is not only attested for this dialect but also for other dialects in the same area (cf. (39)).

(38) Bitonto (Apulo-Barese)

<b>rə p'p</b> jon	'the.neut. bread'
u 'pre:vət	'the.masc.sg. priest'
la 'pɔrt	'the.fem.sg. door'

(39) Ruvo di Puglia (Apulo-Barese)

rə p'pən	'the.neut. bread'
u 'prjɛ:vət	'the.masc.sg. priest'
la 'pwort	'the.fem.sg. door'

Despite these observations, we still need to clarify whether a MN obligatorily combines with a neuter determiner or if it can also be preceded by a definite determiner specified for masculine or feminine. The data in (40) and (41) seem to confirm that the latter is true: in fact, the data show that MNs in USIDs can be specified for all gender values, although there is a general tendency for MNs to be inherently specified for neuter<sup>25</sup>.

<sup>&</sup>lt;sup>25</sup> From a statistical survey carried out by the author, it emerged that there is a general tendency to select a neuter determiner when the MN following it refers to a concrete mass entity, such as *bread*, *pepper*, etc., whereas a non-concrete or abstract mass entity, such as *fire*, *wind*, etc. is more likely to have a masculine (or feminine) determiner. This generalization appears not to be rigid, since a noun like *fire* in some Apulian dialects can be specified for neuter or masculine information: Giovinazzo [Apulo-Barese] u 'fu:k –the.masc.sg. fire- versus Conversano [Apulo-Barese] u ffuk -the.masc.sg. fire-

(40) Mola	di Bari	(Apulo-Ba	rese
(10)11010		(	

<b>u p'p</b> ə:n	'the.neut. bread'
u 'vi:ənd	'the.masc. wind'
a 'lə:n	'the.fem. wool'

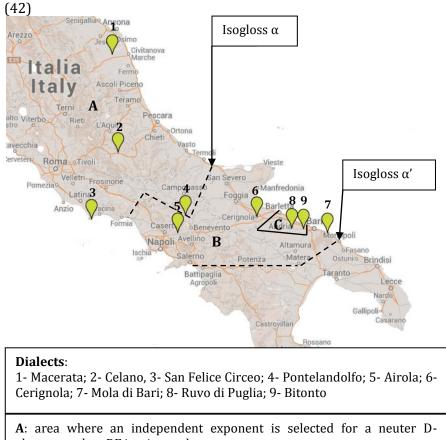
(41) Bitonto (Apulo-Barese)

<b>rə p'p</b> jɔ:n	'the.neut. bread'
u 'vi:nd	'the.masc. wind'
la 'lɔ:n	'the.fem. wool'

In (40) and (41), RF can be triggered only by a neuter determiner that precedes a MN. If the determiner preceding a MN is masculine or feminine, then RF is not found.

The map in (42) illustrates the geolinguistic extension of RF triggered by a neuter definite determiner and demonstrative<sup>26</sup>. The isoglosses  $\alpha$  and  $\alpha'$  refer to the northern and southern borders of RF triggered by a neuter definite determiner and demonstrative, respectively. North of the isogloss  $\alpha$ , an independent lexical entry for a neuter definite determiner and demonstrative is found and no RF is attested. South of the isogloss  $\alpha'$ , on the other hand, no neuter exponents are found.

 $<sup>^{26}</sup>$  The isoglosses drawn in (42) are approximate. They are based on the data presented in this section, as well as on those collected by the author for the purposes of this dissertation (see chapter 1).



element and no RF is triggered; **B**: area where a syncretism is at play between a neuter and a masculine singular D-element and RF is triggered only by the one expressing neuter

information; C: area where an independent exponent is selected for a neuter D and RF

**C**: area where an independent exponent is selected for a neuter D and RF is triggered by this element.

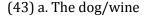
Because the diachronic explanations examined in this section seem to be unable to capture the distribution of RF triggered by a neuter D-elements, we propose an alternative explanation, according to which RF triggered by a neuter D-element is determined by purely morphosyntactic properties. This analysis will be presented in the next sections.

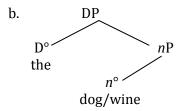
#### 4.4 Nominal periphrases and Default Marking

In this section, we propose that the post-syntactic operation of *Default Marking* presented in (8), as well as in the previous chapter, is also operative with periphrases realized in the nominal domain and composed of a definite D-element followed by a noun. We postulate that D°, similarly to Infl°, also encodes a [*u*coin] feature (cf. Ritter & Wiltschko, 2009), the valuation of which determines the application of *Default Marking* in morphology. In §4.4.1, the operation of *Default Marking* with neuter determiners is analyzed. §4.4.2, on the other hand, looks at *Default Marking* with feminine plural definite determiners.

## 4.4.1 D° and the feature Definiteness

Before looking at the application of *Default Marking* on D°, let us consider the structure of a DP as in (43).





Based on Marantz (2000), (2006) and Arad (2005), a.o., we treat the noun in  $n^{\circ}$  as a syntactic head that combines with a root endowed with no wordclass features. The merging of  $n^{\circ}$  with a root is crucial in allowing its conceptualization as a noun, namely as an Entity. Since the entity named by the noun is syntactically an nP (cf. Marantz, 1997; Lecarme, 2004; Wollin, 2011; a.o.), we predict that the nP is endowed with an Entity Reference feature, which is encoded in its specifier (see Ritter & Wiltschko 2009 for the encoding of an event and utterance feature in the Spec,VP and Spec,INFL, respectively). We consider this feature to be specific in its interpretation. In fact, the CN *dog* in (43) refers to all those types of entities that are specified for the property of being a dog. Because of this property, we propose that the Entity Reference feature inherently expresses a specific value.

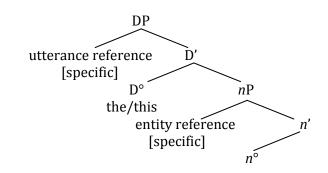
As for D° in (43b), we simply postulate the presence of an Utterance Reference feature encoded in its specifier. This feature can express either a specific or generic value. A specific value for the Utterance Reference feature is conveyed when the reference to the entity in *n*P is definite in the utterance situation (cf. the dog/wine). On the other hand, a generic value is expressed when the reference to the noun in Spec,*n*P is indefinite in the utterance situation (cf. a dog)<sup>27</sup>.

Demonstratives, which are definite in nature, are also thought to be merged in D°. Their specifier, which also hosts an Utterance Reference feature, also expresses a specific value on a par with definite determiners.

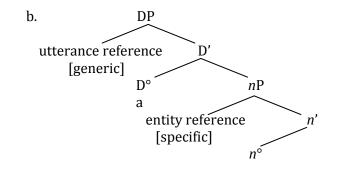
The syntactic structures of two different DPs, one composed of a definite determiner and the other composed of an indefinite determiner, are given in (44) and (45), respectively. (44) illustrates the type of features encoded in the specifier of nP and DP with a definite determiner and demonstrative. (45), on the other hand, shows the type of features expressed in the specifier of nP and DP when an indefinite determiner occurs in D°.

<sup>&</sup>lt;sup>27</sup> Nordlinger & Sadler (2004), a.o, show that in a group of languages, including Somali and some Salishan languages, determiners overtly express temporal information. As Lecarme (2008) suggests, these temporal markers supply existential, temporal or spatial reference to nouns. Parker (1999) shows that in Chamicuro, an endangered Amerindian language belonging to the Arawakan family, a tense marker can appear in the noun phrase, with no tense distinction on the verb, leaving this item unmarked: i-nis-kána **na** čamàlo (see.3.pl the bat – 'They see the bat') versus y-alíyo **ka** ké:ni (fall.3 the.past rain – 'It rained') (cf. Parker, 1999: 552).

 $(44)^{28}$  the/this dog



(45) a. a dog

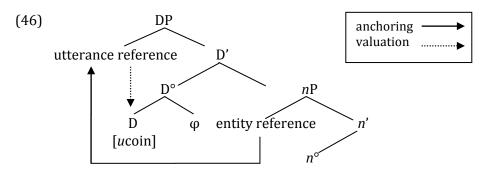


The structures in (44) and (45) resemble that proposed by Ritter & Wiltschko (2010) for the sentence, whereby Spec,InflP is taken to be the syntactic locus where the utterance situation is encoded, and Spec,VP expresses the event situation.

Because of this similarity, we treat D°, similarly Infl°, to be inherently endowed with a [*u*coin] feature. Furthermore, we assume that D° corresponds to a syntactic head composed of two categories, one expressing Definiteness and the other encoding agreement, or  $\varphi$ , properties. In our account, the [*u*coin] feature is expressed in the Definiteness category, which

<sup>&</sup>lt;sup>28</sup> As argued in §4.1, a CN such as *dog* raises from  $n^{\circ}$  to Number<sup> $\circ$ </sup>. We have left aside the Number projection in (44) and (45) in order to clarify that the Entity Reference is expressed in the specifier of  $n^{\circ}$  and the Utterance Reference in the specifier of D<sup> $\circ$ </sup>.

we refer to as D. The [ucoin] feature must be valued and the valuation depends on the anchoring between the Entity and the Utterance Reference. These facts are represented in (46).



If the entity and the utterance features coincide in their values, then [ucoin] is valued as +. On the other hand, if the entity and the utterance features express different interpretation, then [ucoin] is valued as –.

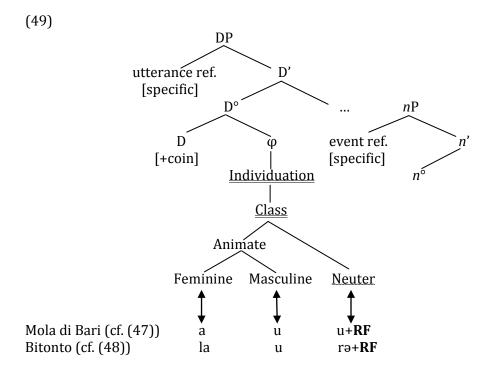
In the former case, based on Holmberg & Roberts (2010), we have an unmarked, i.e. default, configuration, while in the latter case, conversely, we have a marked syntactic configuration.

# 4.4.2 Neuter D and Default Marking

(47) and (48) again show the morpho-phonological realization of determiners preceding MNs in the CSIDs analyzed in §4.3.1.

(47) Mola di Bari (Apulo-Barese)		
<b>u p'p</b> ə:n	'the.neut. bread'	
u 'vi:ənd	'the.masc.sg wind'	
a 'lə:n	'the.fem.sg wool'	
(48) Bitonto (Apulo-Barese) <b>rə p'p</b> jɔ:n u 'vi:nd la 'lɔ:n	'the.neut. bread' 'the.masc.sg wind' 'the.fem.sg wool'	

In these examples, RF is triggered only by a neuter determiner and not by those determiners expressing masculine and feminine singular. Similarly to the case of 3sg HAVE and modals, we claim that RF triggered by neuter determiners in a group of CSIDs corresponds to a mora that overtly expresses the feature [Neuter] encoded on a morpheme. The overt marking of [Neuter] is due to the application of *Default Marking*, which predicts that when [*u*coin] is valued for +, thus for a default, then only default morphosyntactic  $\varphi$  features can be overtly expressed at PF (see (8)). [Neuter] is the default feature branching below [Class] and can therefore be overtly marked. These facts are shown in (49).



The representation in (49) indicates that the feminine and masculine determiners differ in their morphophonological make-ups. In (47), the

masculine determiner is syncretic with that expressing neuter<sup>29</sup>, whereas in (48) it selects an independent exponent. In no dialect documented by the author for the purposes of this dissertation do we find syncretism between a masculine and a feminine singular definite determiner.

In the following subsection, we investigate the process of *Default Marking* in the case of plural feminine determiners.

# 4.4.3 Plural feminine D and Default Marking

In a large group of CSIDs, which includes dialects spoken in Campania, northern Lucania and northern Apulia, feminine definite plural determiners are more morphologically marked than masculine. Generally, definite feminine and masculine plural determiners in these dialects share the same root, although definite feminine plural determiners trigger RF, while masculine plural determiners do not. This situation is exemplified by the minimal pairs in (50)-(52).

(50) Airola (Central Campanian)

- a. i/e 'fra:tə the.masc.pl. brothers
- b. **e s's**ɔrə the.fem.pl. sisters

(51) Cerignola (Apulo Daunian-Apennines)

- a. i 'fro:t the.masc.pl. brothers
- b. **i s's**ɔ:r the.fem.pl. sisters

(52) Bitonto (Apulo-Barese)

- a. i/rə 'frɔ:t the.masc.pl. brothers
- b. **rə s's**ɔ:r the.fem.pl. sisters

<sup>&</sup>lt;sup>29</sup> According to the Subset Principle (cf. Sauerland, 1996), a phonological exponent is inserted on a morpheme only if it matches all or a subset of features specified in the terminal node. The reason why a syncretic exponent is selected by a neuter and masculine singular determiner in (47) might depend on the fact that /u/ in (46) is the exponent for [<u>Class</u>]. The dialect of Mola di Bari in (46), unlike the dialect of Bitonto in (47), is not endowed with an exponent expressing masculine singular.

The presence of RF triggered by a feminine plural definite D-element is described in details in Rohlfs (1968):

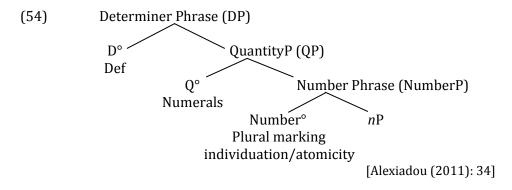
(53)			
a.	e ffigliə	the.fem.pl. daughters	Neapolitan
		'the daughters'	(Central Campanian)
b.	li bbini	the.fem.pl. vains	Morigerati
		'the vains'	(South. Campanian)
с.	rə ppalt	the.fem.pl. pockets	Canosa di Puglia
		'the pockets'	(Apulo-Barese)
d.	<b>rə gg</b> ammə	the.fem.pl. legs	Ripacandita
		'the legs'	(Northern Lucania)

[Adapted from Rohlfs (1968): 107, 108]

Rohlfs observes that RF is also found also after a definite feminine plural demonstrative and attested in many Campanian dialects (cf. Neapolitan [Central Campanian]: chellə **pp**ərzonə -those fem.pl. people.fem.pl- 'those people')<sup>30</sup>.

At this point, it is crucial to determine why feminine plural definite determiners and demonstratives in most CSIDs induce RF, while masculine plural determiners and demonstratives categorically exclude this mechanism. Before proceeding with this investigation, let us return back to the syntactic structure in (23), which is repeated in (54) for convenience.

<sup>&</sup>lt;sup>30</sup> Meyer-Lübke (1890-1902, vol. 2) claims that the presence of RF after a feminine plural determiner must be attributed to the fact that the ancient form of the determiner was *illas*, the *-s* of which got assimilated in the diachronic path from Latin to southern Italo-Romance, thus leading to the realization of RF.



In (54), NumberP, merged above *n*P, encodes information for singularity versus plurality. This phrase, as extensively argued above, is present only with CNs, since this type of nominal, unlike MNs, inherently expresses individuation/atomicity. In most Romance languages, as well as in English, a CN specified for plural necessitates the overt expression of a morpheme specialized for this feature. The overt encoding of a morpheme expressing singular information on a CN is instead absent in these languages. As an example, consider the contrast between the words *book* and *books* in English. Only in the latter case is an agreement marker found, namely *-s*, which expresses plural information. In the former case, conversely, no  $\varphi$  morpheme is overtly realized and the noun conveys information for singular.

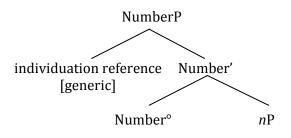
A nominal specified for plural can opt to combine with a Q or D-element, or to stand alone. The presence or absence of one of these two functional elements preceding the nominal in NumberP is relevant to whether the plural noun receives a specific or generic semantic interpretation. From a typological observation looking at Italian dialects, it has been observed that the presence versus absence of a definite determiner preceding a plural subject in postverbal position is crucial in determining the type of agreement displayed on the verb. This is illustrated in the examples in (55) and (56), which indicate that in a group of Sardinian dialects (as well as in some Calabrian dialects), referential agreement is found in the presence of definite correlates, whereas partial agreement is found when a subject in postverbal position is bare, thus not preceded by either a Q or D-element.

(55	5) Làconi (Campidanese-Sardinian)		
a.	iŋ kud'dei 'drommi <b>p</b> pip'piuzu	there.expl. children	sleep.pr.3sg
b.	iŋ kud'dei 'drommi <b>nti is</b> pip'piuzu	there.expl. children	sleep.pr.3pl the
		[Manzini & S	Savoia (2005), I: 341]
(56	) Siniscola (Logudorese-Nuorese)		
a.	bi 'drommi <b>ti</b> pit'tsinnɔzɔ	there.expl. children	sleep.pr.3sg
b.	'drommi <b>ni zɔs</b> pit'tsinnɔzɔ	sleep.pr.3pl the children [Manzini & Savoia (2005), I: 341]	

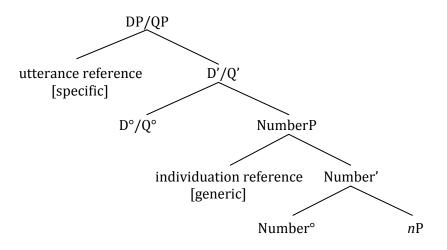
Manzini & Savoia (2005) suggest that partial agreement is always found with an indefinite correlate, which are generic in their interpretation. In (55a) and (56a), the generic, thus indefinite, specification of the plural nominals is expressed by the bare nominal. For this reason, we can postulate that a NumberP is endowed with an Individuation Reference feature, which inherently expresses a generic reading (cf. (57a)). It is the presence of a definite QP and/or DP, merging with it, that can provide the plural noun with a definite interpretation (cf. (57b)).

(57)

a. Indefinite interpretation



b. Definite interpretation

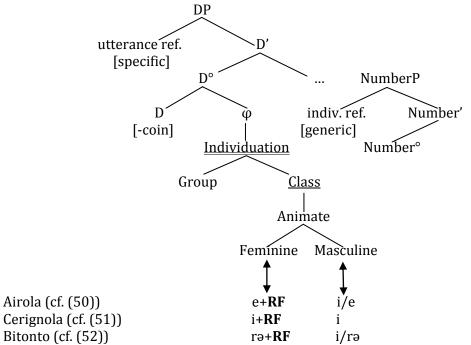


We postulate that the structure in (57a) occurs with the indefinite postverbal subjects in (55a) and (56a). Conversely, we assume that the configuration in (57b) is found with the definite postverbal subjects in (55b) and (56b).

Given these facts, we are now ready to consider why a definite feminine determiner is more morphologically marked than one endowed with masculine information by means of licensing RF. Similarly to what we have observed for neuter determiners, we claim that the triggering of RF by feminine plural D-elements derives from the application of *Default Marking* post-syntactically (see (8)). We postulate that when a plural feminine noun is raised to NumberP, the Utterance Reference feature in Spec, DP anchors with the Individuation Reference feature, which is expressed in Spec,NumberP. These two features do not express the same value and thus [*u*coin] in D gets valued as -. -, as mentioned previously, is a marked value. The occurrence of [-coin] allows the overt marking of marked morphosyntactic features realized in the  $\varphi$  category. This is due to the application of *Default Marking* in the morphological component, which states that a  $\varphi$  feature can be overtly marked only if its degree of markedness is uniform with that expressed by other features encoded on the same syntactic head (cf. (8)). In our account, [Feminine] corresponds to a marked feature, as opposed to [Masculine], both branching below

[Animate]. For this reason, [Feminine], which shares the same grade of markedness as [-coin], has to get overtly marked. On the other hand, [Masculine], which is less marked than [Feminine], does not undergo this process. These facts are exemplified by means of the structure in (58).





Our assumption that [Feminine] is more marked than [Masculine] is supported by the fact that definite masculine plural determiners are generally selected when combining with nominals not specified for gender. A definite feminine plural determiner, on the other hand, is selected only when combining with a noun endowed with feminine information (cf. Cerignola i ma'estr -the.masc.pl. teachers.masc./fem.- versus i **m**ma'estr - the.fem.pl. teachers.fem.pl-).

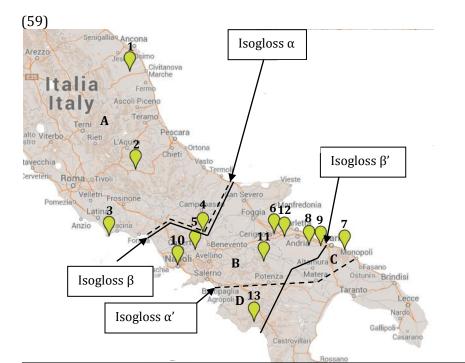
In (50) and (52), the root of a feminine plural determiner can be syncretic with a determiner expressing masculine plural. Younger speakers of the dialects in (50) and (52) seem to opt for the selection of a syncretic

exponent with a masculine and feminine plural definite determiner. The selection of an independent exponent for each determiner appears to be restricted to the older generations. This observation seems to suggest that the dialects of Airola and Bitonto are transitioning from a grammar in which both masculine and feminine plural definite determiners are distinctly marked by means of selection of independent exponents, towards one that requires the selection of a syncretic root for both items.

## 4.5 The geography of Default Marking in D

This last section shows the geolinguistic distribution of the *Default Marking* operation in the nominal domain. This is illustrated in the map in (59)<sup>31</sup>.

<sup>&</sup>lt;sup>31</sup> The isoglosses  $\alpha$  and  $\alpha'$  in (59) correspond to the same isoglosses marked on the map in (42). The isoglosses  $\beta$  and  $\beta'$ , which respectively indicate the northern and southern limits of the application of RF triggered by a definite feminine plural determiner, are approximate and roughly indicate the geolinguistic extension of this phenomenon. The drawing of these two isoglosses is based on the data presented in this chapter.



#### Dialects:

1- Macerata; 2- Celano; 3- San Felice Circeo; 4- Pontelandolfo; 5- Airola; 6-Cerignola; 7- Mola di Bari; 8- Ruvo di Puglia; 9- Bitonto; 10- Naples; 11-Ripacandita; 12- Canosa di Puglia; 13- Morigerati.

A: area where *Default Marking* does not apply with D;

**B**: area where *Default Marking* applies with neuter and feminine D;

C: area where *Default Marking* applies only with neuter D;

**D**: area where Default Marking applies only with feminine D.

The map above shows that the area in which *Default Marking* occurs with neuter D-elements does not coincide exactly with the area in which *Default Marking* occurs with feminine plural D-elements. While dialects spoken in the geolinguistic area B allow RF triggered by both neuter and feminine plural D-elements, dialects of the area C and D allow the application of *Default Marking* only with neuter definite determiners and demonstratives

or only with feminine plural definite determiners and demonstratives, respectively. On the other hand, the overt marking of neuter and feminine is not attested at all in the geolinguistic area in A.

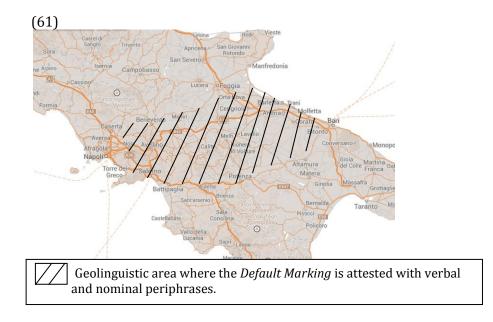
Although the isoglosses in (59) do not overlap, it seems plausible to propose that the application of *Default Marking* with neuter and feminine plural determiners and demonstratives is operative in roughly the same group of dialects.

## **5.** Conclusions

In this chapter, we have seen that the application of the post-syntactic Default Marking operation is not limited to periphrases composed of perfective auxiliaries followed by a past participle, but is also found with other periphrastic constructions, including modals followed by an infinitival and definite determiners and demonstratives preceding a noun. We have postulated that the application of *Default Marking* must depend on a markedness convention, which says that morphosyntactic  $\varphi$  features get overtly marked only if they express the same grade of markedness as [ucoin] (see definition of *Default Marking* in (8)). [ucoin] (cf. Ritter & Wiltschko, 2010) is a syntactic feature encoded both on Infl<sup>o</sup> and D<sup>o</sup>, whose function is to anchor the Event situation, expressed on Spec,VP, or Entity Reference, expressed on Spec, *n*P, with the utterance situation encoded in Spec,InflP and Spec,DP. In CSIDs, the value expressed on [ucoin] is responsible for the selection of morphosyntactic features that are overtly expressed on perfective auxiliaries and D-elements as well as on modals. When [ucoin] is valued as +, which is a default, then only default morphosyntactic features get overtly expressed. On the other hand, when [ucoin] is -, then only marked morphosyntactic features get overtly expressed. These facts are summarized in the table in (60). + and - indicate where the overt marking of morphosyntactic  $\varphi$  features is applicable in morphology.

	Default Mai	rking	
		[+coin]	[-coin]
Perfective aux.	[Speaker], [Minimal]	+	-
	[Addressee]	-	+
Modals	[Speaker], [Minimal]	+	-
	[Addressee]	-	+
Definite D	[Neuter]	+	-
	[Feminine]	-	+

The set of data presented in this chapter, in combination with those studied in the previous chapter, show that the post-syntactic operations of *Default Marking* found on verbal and nominal periphrases are found in broadly the same group of dialects. This is shown in the map in (61).



It should be noted, however, that this post-syntactic operation, with both verbal and nominal periphrases, applies in only a subset of CSIDs. We will not try to capture the reason why *Default Marking* is attested only in the

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central and southern USID area, and not in other dialects of this geolinguistic domain, but instead consider this as a topic for future investigation.

## **Chapter 6**

### **Conclusions and questions for future research**

This dissertation has explored the morpho-phonological markedness of  $\varphi$  realized on perfective auxiliaries, lexical verbs and definite D-elements in USIDs. In this chapter, we will both provide a summary of the core findings outlined in this work (cf. §1) and present some research questions of use for future investigations (cf. §2).

#### 6.1 Summary of the core findings of this dissertation

In the first part of this dissertation, we considered the phonological process of RF in a particular group of USIDs. USIDs are dialects spoken in the central-southern part of the Italian peninsula. According to our classification presented in chapter 1, USIDs can be split into two macroareas. Northern Southern Italian dialects (NSIDs) are USIDs spoken in the geolinguistic area that borders CIDs, while Central Southern Italian dialects (CSIDs) are USIDs spoken not far from ESIDs. The novel aim of this dissertation was to investigate the typology and nature of RF triggered by present perfect BE/HAVE auxiliaries in USIDs. This investigation, which seems to have been largely overlooked by linguists and dialectologists previously, has shown that RF triggered by present perfect auxiliaries cannot be understood as a purely phonological phenomenon (cf. Korzen, 1980; Chierchia, 1986; Basbøll, 1989; Sluyters, 1990; Agostiniani, 1992; Loporcaro, 1997b; a.o.). On the contrary, we argued that RF triggered by present perfect BE/HAVE auxiliaries in USIDs does not exclusively result from the application of the phonological process of regressive consonantal assimilation, or RCA, applying at word-boundaries (cf. Schuchardt, 1874; Hall, 1964; Loporcaro, 1997b; Repetti, 2001; Waltereit, 2004; Passino, 2012; a.o.). This assumption is supported by the fact that some southern Italian present perfect auxiliaries do not trigger RF despite having had a consonant in word-final position.

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(1) Conversano (Apulo-Barese)

SD	<b>f</b> fatt	B.pr.1sg done
а	'fatt	H.pr.2sg done
а	<b>f'f</b> att	H.pr.3sg done

In (1), 1sg BE, as well as 2 and 3sg HAVE, are the relics of Latin forms SUM/\*SON, \*HA(BE)S and \*HA(BE)T, respectively. All these forms ended in a consonant, which, according to Schuchardt (1874), Hall (1964), Loporcaro (1997b), Repetti (2001), Waltereit (2004) and Passino (2012), a.o., would have triggered the application of RCA. However, as (1) shows, RF is not attested after 2sg HAVE. For this reason, we abandoned the idea that RF triggered by present perfect auxiliaries in USIDs is the result of the outcome of the RCA rule applying at external sandhi sites. Instead, we argued that RF after present perfect auxiliaries in USIDs consists in the overt expression of a null morpheme that expresses a dedicated morphosyntactic  $\varphi$  feature (based on Torcolacci, 2014). This analysis was presented in chapter 3. In the case of 1sg BE, the null morpheme triggering RF expresses the feature [Speaker], whereas the null morpheme triggering RF on 3sg HAVE expresses the feature [Minimal]. [Speaker] and [Minimal] are morphosyntactic features that correspond to 1 and 3sg (cf. Harley & Ritter, 2002).

In chapter 4, we aimed to solve the puzzle connected to the absence of RF after 2sg HAVE. We observed that the non-overt expression of [Addressee], i.e. 2sg information, on 2sg present perfect HAVE is found in most CSIDs. These dialects generally select HAVE for the entire paradigm both in the present perfect and in the pluperfect. These facts are illustrated in the singular paradigms in (2) and (3), from the Apulian dialect of Mola di Bari, spoken around the area of Bari.

(2)

a <del>jj</del> /i	'fatt/par'tʉ:t	H.pr.1sg done/left
а	'fatt/par'tʉ:t	H.pr.2sg done/left
(')a	<b>f'f</b> att/ <b>pp</b> ar't <del>u</del> :t	H.pr.3sg done/left

tu:t 'H.past.1sg done/left'
tu:t 'H.past.2sg done/left'
t <del>u</del> :t 'H.past.3sg done/left'

In the pluperfect construction in (3) 2sg HAVE clearly features metaphony. We considered metaphony as a way of overtly expressing [Addressee] on a pluperfect auxiliary. (2) and (3) show that the overt marking of  $\varphi$  features in present perfect and pluperfect auxiliaries is in complementary distribution. In (2), only [Speaker] and [Minimal] are overtly marked, whereas in (3) only [Addressee] is overtly expressed.

Given these facts, we proposed that the overt marking of [Speaker] and [Minimal] on a present perfect auxiliary, as well as the overt marking of [Addressee] on a pluperfect auxiliary, is dependent on the application of a markedness principle called *Default Marking*, which states that  $\varphi$  feature are overtly marked at PF only if they bear the same degree of markedness as all the other morphosyntactic features encoded on the same functional head. In our framework, *Default Marking* applies in the morphological component of the grammar. (4) provides the definition of this markedness principle.

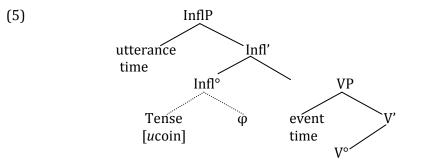
#### (4) Default Marking

The morphological marking of a  $\phi$  feature can only take place if all features bear the same markedness on the functional head that hosts them.

We proposed that perfective auxiliaries in USIDs are functional heads merged in Infl<sup>o</sup>. Based on Ritter & Wiltschko (2010), we argued that Infl<sup>o</sup> in perfective auxiliaries in USIDs is a functional head endowed with two deictic categories: Tense and Person (or  $\varphi$ ). Furthermore, building on Ritter & Wiltschko, we assumed [*u*coin] to be a feature encoded in the category Tense, whose function is that of anchoring the event time, in Spec,VP, with the utterance time, in Spec,InflP. These facts are illustrated in (5).

(3)

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The valuation of [*u*coin] expresses the interpretation of Tense. If the event time and the utterance time coincide, then [*u*coin] is valued as + and information for Present is conveyed. Conversely, if the event and the utterance time do not converge, then [*u*coin] is valued as -, and information for Past is expressed. Based on Holmberg & Roberts (2010), we assumed that uniformity of feature values triggers default configurations. According to Holmberg & Roberts, in fact, an unmarked, i.e. default, syntactic configuration is attested when all features of the same type encoded on different syntactic heads express the same value. For this reason, we considered [+coin] as a default. Indeed, in this case, in fact, the event and the utterance time converge. If [+coin] combines with [Speaker] and [Minimal], which are default morphosyntactic  $\varphi$  features, then another default configuration is obtained. For this reason, [Speaker] and [Minimal] are overtly marked at PF by means of the application of *Default Marking* in morphology.

In the reverse case, namely when the event and the utterance time do not converge, [*u*coin] expresses a marked value, i.e. -. In this case, only [Addressee] gets overtly expressed given the post-syntactic application of the *Default Marking* operation. The overt marking of [Addressee] is dependent on the uniformity of markedness between [-coin] and [Addressee].

In chapter 5, we established that the overt marking of [Neuter] on a singular definite determiner and demonstrative, as well as the overt marking of [Feminine] on a feminine plural definite determiner and demonstrative, is also dependent on the application of the *Default Marking* rule in (4).

(6) Airola (Central Campanian)

u l'lattə	'the.neut. milk'
e s'sorə	'the.fem.pl. sisters'

We took definite D-elements to be syntactic objects merged in the functional head D°. Similarly to Infl°, we assumed that D° hosts a [*u*coin] feature in the Definiteness, or D, category. If [*u*coin] on D expresses a + value, then [Neuter], which is a default, gets overtly marked. In the reverse case, namely in the presence of [-coin], [Feminine], which is marked, gets overtly expressed.

The morpho-phonological markedness of  $\varphi$  realized on perfective auxiliaries and definite D-elements in CSIDs demonstrated that the uniformity of markedness expressed by a number of features encoded on a given functional head triggers the application of *Default Marking*. In chapter 5, we observed that lexical verbs in the present indicative in USIDs do not allow the overt marking of [Speaker] and [Minimal], but only of [Addressee]. This is due to the fact that lexical verbs in the present indicative in USIDs are spelled-out in Infl°, through V-to-T (or V-to-Infl) movement. In this case, Infl° corresponds to a complex syntactic head (cf. Roberts & Roussou, 2003), which allows the overt marking of only marked morphosyntactic features.

#### 6.2 Questions for future research

In this dissertation, we argued that RF triggered by present perfect auxiliaries in USIDs is morphosyntactic in nature. As observed in chapter 1, RF is not found solely in USIDs. Indeed, the presence of RF is also attested for other dialects, such as CIDs, ESIDs, Sardinian and Corsican. In all these dialects, RF is found after a subset of prepositions, such as *a* and *per*, a.o.: Rutigliano (Apulo-Barese) [a **k'k** $\Rightarrow$ s] -to home-; [p $\Rightarrow$  **m'm** $\epsilon$ ] -for me-. At this point, we might wonder whether RF after the prepositions *a* and *per* can be taken to derive from the application of the RCA rule (preposition *a* derives from Latin AD), or, conversely, if it is the result of the overt marking of a null morpheme expressing a dedicated morphosyntactic feature.

In the previous chapters, we illustrated that CSIDs opt for two different strategies with regard to the overt marking of  $\phi$  with present perfect and

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pluperfect auxiliaries. More concretely, we showed that the overt marking of  $\phi$  on present perfect and pluperfect auxiliaries in CSIDs is in complementary distribution and dependent on the value expressed by Tense. These facts leads us to pose the following research questions:

- i. Does the information expressed by Tense influence the overt marking of  $\varphi$  on perfective auxiliaries only in CSIDs?
- ii. Is this phenomenon found elsewhere or is it limited to CSIDs?

We claimed that the overt marking of  $\varphi$  on perfective auxiliaries is dependent on a post-syntactic operation called *Default Marking*. A proper understanding of *when* and *how* the operation of *Default Marking* became productive in CSIDs requires an investigation of the diachronic evolution of the system of perfective auxiliation in CSIDs. This study would shed light on the factors that have led to the emergence of *Default Marking* in these dialects.

A further valuable study would examine whether the definition of *Default Marking* in (4) is limited to the overt marking of  $\varphi$  or, conversely, if it can be extended to other features. More specifically, such an investigation should consider whether other morphosyntactic features can be overtly marked at PF only if they bear the same markedness as other features expressed on the same syntactic head.

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Het doel van deze dissertatie is tweeledig: ten eerste onderzoeken we de aard van *Raddoppiamento Fonosintattico*, getriggerd door de hulpwerkwoorden in de voltooid tegenwoordige tijd in de bovenste groep van Zuid-Italiaanse dialecten (in het vervolg USIDs). Ten tweede is dit een studie naar het fenomeen van de persoonsbepaalde hulpwerkwoordselectie in USIDs.

In het eerste hoofdstuk stellen we dat USIDs in twee macrotaalgroepen verdeeld kunnen worden: Noordelijke Zuid-Italiaanse dialecten (in het vervolg NSIDs) en Centrale Zuid-Italiaanse dialecten (in het vervolg CSIDs). NSIDs worden gesproken in het geolinguïstische gebied dat grenst aan de Centrale Italiaanse dialecten (in het vervolg CIDs), terwijl CSIDs niet ver van de Extreem-Zuidelijke Italiaanse dialecten (in het vervolg ESIDs) gesproken worden. In NSIDs lijkt de keuze van het hulpwerkwoord voor voltooid tegenwoordige tijd bepaald te worden door het persoonskenmerk dat gecodeerd is in het subject van de zin: ZIJN wordt over het algemeen geselecteerd in het geval van een subject van de 1<sup>e</sup> en 2<sup>e</sup> persoon, terwijl HEBBEN geselecteerd wordt bij een subject van de 3<sup>e</sup> persoon (zie Cocchi, 1995; Ledgeway, 2000; Manzini & Savoia, 2005; D'Alessandro & Roberts, 2010; Legendre, 2010; Loporcaro, 2010; o.a.). Het patroon van hulpwerkwoordsselectie in deze dialecten verschilt van dat van het Standaard Italiaans, CIDs en Noord-Italiaanse dialecten (in het vervolg NIDs), waar ZIJN gewoonlijk geselecteerd wordt door onacccusatieve predicaten en HEBBEN door onergatieve en accusatieve predicaten (zie Perlmutter, 1978; Burzio, 1986; Hubert & Rindler-Schjerve, 1987; Chierchia, 1989; Legendre, 1989; Van Valin, 1990; Loporcaro, 1998; Sorace, 2000; o.a.); CSIDs, aan de andere kant, vertonen een ander patroon in de hulpwerkwoordsselectie in de voltooid tegenwoordige tijd. In deze dialecten wordt HEBBEN gewoonlijk geselecteerd voor alle personen in het paradigma. Sommige dialecten in de overgangszone tussen NSIDs en CSIDs, evenals dialecten in het gebied rondom Bari, worden gekenmerkt door de selectie van ZIJN met of de 1ste persoon enkelvoud of de 2e persoon

enkelvoud, of beiden. Dit is te zien in het paradigma van het enkelvoud in (1) en (2), waar (1) een NSID is en (2) een CSID. De notatie Z verwijst naar ZIJN, terwijl de glosse H naar HEBBEN verwijst.

(1) Amand	ola (Zuid-Marchigiano)	Z.tt.1ev. geroepen/gesproken
so	<b>cc</b> a'mato/ <b>pp</b> ar'lato	Z.tt.2ev. geroepen/gesproken
si	<b>cc</b> a'mato/ <b>pp</b> ar'lato	H.tt.3ev. geroepen/gesproken
a	ca'mato/par'lato	[Manzini & Savoia (2005), II: 684]
(2) Conver	sano (Apulo-Barese)	

j conversano (ripulo barese)		
SD	<b>f'f</b> att	Z.tt.1ev. gedaan
а	'fatt	H.tt.2ev. gedaan
а	<b>f'f</b> att	H.tt.3ev. gedaan

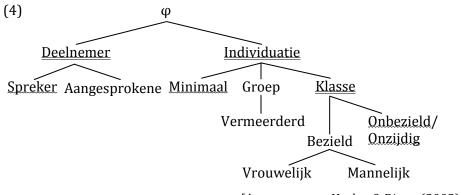
De  $1^{e}$  en de  $2^{e}$  persoon enkelvoud ZIJN in (1), evenals de  $1^{e}$  persoon enkelvoud ZIJN en de 3<sup>e</sup> persoon enkelvoud HEBBEN in (2), worden gevolgd door een voltooid deelwoord dat een dubbele medeklinker in woordinitiële positie heeft. Dubbele medeklinkers in externe sandhi-posities in Centraal Zuidelijk Italo-Romaans zijn instanties van Raddoppiamento en Fonosintattico (in het vervolg RF). In de traditionele literatuur wordt RF beschouwd als een fonologisch fenomeen dat van regelmatige of onregelmatige aard kan zijn. Regelmatige RF wordt gevonden in CIDs na (een subset van) oxytone woorden. Onregelmatige RF wordt daarentegen gevonden na (een subset van) woorden die een medeklinker in finale positie in het Latijn hadden. Onregelmatige RF wordt aangetroffen in CIDs en in alle zuidelijke Italiaanse dialecten (zie Schuchardt, 1874; Hall, 1964; Loporcaro, 1997b; Repetti, 2001; Waltereit, 2004; Passino, 2012; o.a.). RF na hulpwerkwoorden van de voltooid tegenwoordige tijd in USIDs wordt als onregelmatig beschouwd, zoals wordt getoond in (3):

(3) CVCVC # # CVCVCV HABET xxxxxx RF

In (3) eindigt HABET, het Latijnse etymon van de derde persoon enkelvoud HEBBEN, in een medeklinker die geassimileerd is met de eerste medeklinker van het volgende woord gedurende de overgangsperiode van het Latijn tot Zuidelijk Italo-Romaans.

In hoofdstuk 3 wordt gesteld dat de RF die getriggerd wordt door de hulpwerkwoorden van de voltooid tegenwoordige tijd niet gezien kan worden als een puur fonologisch fenomeen. We stellen daarentegen voor dat de door de perfectieve hulpwerkwoorden ZIJN/HEBBEN getriggerde RF afgeleid is van de overte markering van een speciaal morfosyntactisch  $\varphi$ -kenmerk dat gecodeerd is in deze elementen.

In navolging van Harley & Ritter (2002) stellen we voor dat perfectieve hulpwerkwoorden in USIDs voorzien zijn van een set morfosyntactische  $\varphi$ -kenmerken die zijn weergegeven in het schema in (4).



[Aangepast van Harley & Ritter (2002): 8]

Het kenmerk [Deelnemer], dat overeenkomt met Persoon, bevat twee subkenmerken: [Spreker] en [Aangesprokene]. [Spreker] verwijst naar de 1<sup>e</sup> persoon enkelvoud, terwijl [Aangesprokene] naar de 2<sup>e</sup> persoon enkelvoud verwijst. [Individuatie] komt op zijn beurt overeen met getal. Dit kenmerk is de moeder van [Minimaal] en [Groep], die verwijzen naar enkelvoud respectievelijk meervoud. Volgens Harley & Ritter (2002) zijn [Minimaal] defaultwaardes. [Spreker] en in tegenstelling tot [Aangesprokene] en [Groep], die gemarkeerd zijn. Deze claim is afgeleid van de cross-linguïstische observatie dat de pronomina van de 1<sup>e</sup> en 3<sup>e</sup> persoon enkelvoud eerder verworven worden dan de pronomina die de tweede

persoon of meervoud uitdrukken. Hetzelfde verwervingspatroon is geconstateerd voor congruentiemarkeerders (zie Ackema & Neeleman (2012) voor een samenvatting hiervan).

Op de basis van het schema in (4), stellen we dat de RF die veroorzaakt wordt door de 1<sup>e</sup> en 2<sup>e</sup> persoon in de voltooid tegenwoordige tijd van ZIJN in USIDs afgeleid is van de overte markering van het kenmerk [Deelnemer] dat gecodeerd is in deze elementen. Meer specifiek stellen we dat de 1<sup>e</sup> en 2<sup>e</sup> persoon enkelvoud van de voltooid tegenwoordige tijd van ZIIN in USIDs inherent een kenmerk [Deelnemer] codeert. De aanwezigheid van dit kenmerk staat de codering van een morfeem dat ook [Deelnemer] uitdrukt toe in het morfologische component. Dit morfeem, dat overeenkomt met een mora op PF, is niet gebonden aan een onafhankelijk segment. Daarom vindt de regressieve spreiding van de eerste medeklinker van het voltooid deelwoord plaats om de lege mora op te vullen (zie Torcolacci (2014)). RF die veroorzaakt wordt door de 3<sup>e</sup> persoon enkelvoud van HEBBEN in (2) is een gevolgd van de overte markering van het morfeem [Minimaal] dat gecodeerd is in dit hulpwerkwoord. Op dezelfde manier als [Deelnemer] in het geval van de 1<sup>e</sup> en 2<sup>e</sup> persoon enkelvoud ZIJN in (1), komt [Minimaal] overeen met een lege mora bij PF, wat de regressieve spreiding van de volgende medeklinker in de lineaire volgorde veroorzaakt.

In hoofdstuk 4 worden de strategieën besproken voor het markeren van  $\varphi$ kenmerken die aangetroffen worden in de voltooid tegenwoordige en de voltooid verleden tijd in CSIDs. Waar de hulpwerkwoorden van de voltooid tegenwoordige tijd in CSIDs de overte markering van [Spreker] en [Minimaal] toestaan, met uitzondering van [Aangesprokene], staan de hulpwerkwoorden van de voltooid verleden tijd de overte markering van alleen [Aangesprokene] toe, en niet van [Spreker] en [Minimaal]. Dit wordt weergegeven in de voorbeelden (5) en (6), die uit het Apulo-Barese dialect van Conversano komen, gesproken in het gebied van de CSIDs.

(5)

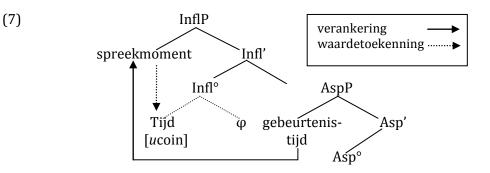
SD	<b>f'f</b> att	Z.tt.1.ev gedaan
а	'fatt	H.tt.2.ev gedaan
а	<b>f'f</b> att	H.tt.3.ev gedaan

ev gegeten/geopend
ev gegeten/geopend
ev gegeten/geopend

De overte markering van [Aangesprokene] in (6) werkt door middel van metafonie. In de traditionele literatuur wordt metafonie beschouwd als een fonologisch proces dat bestaat uit de verhoging van een beklemtoonde vocaal die getriggerd wordt door de aanwezigheid van een hoge vocaal in post-tonische positie (zie Maiden, 1991; Calabrese, 1998, 2009; o.a.). We beargumenteren dat metafonie met de tweede persoon enkelvoud van het hulpwerkwoord voor de voltooid verleden tijd HEBBEN in (6) een manier is om overt [Aangesprokene] uit te drukken. De paradigma's in (5) en (6) tonen aan dat de overte markering van  $\varphi$ -kenmerken in hulpwerkwoorden voor de voltooid tegenwoordige en de voltooid verleden tijd in complementaire distributie is. In (5) worden [Spreker] en [Minimaal] openlijk gemarkeerd, waar in (6) alleen [Aangesprokene] gemarkeerd is. Vanwege deze verschillen stellen we voor dat de overte markering van  $\omega$ kenmerken op perfectieve hulpwerkwoorden in CSIDs afhangt van de waarde die overgebracht wordt door Tijd. Als Tijd [Tegenwoordig] is, dan worden alleen [Spreker] en [Minimaal] overt gemarkeerd. In het omgekeerde geval, namelijk wanneer Tijd [Verleden] is, wordt alleen [Aangesprokene] overt gerealiseerd.

In ons model zijn perfectieve hulpwerkwoorden syntactische hoofden die in Infl° gemerged worden. Volgens Ritter & Wiltschko (2010) is Infl° een syntactisch hoofd dat drie deiktische categorieën bevat, namelijk Tijd, Persoon en Locatie. We stellen dat de overte markering van Tijd in de perfectieve hulpwerkwoorden een gevolg is van een verankeringsmechanisme tussen de gebeurtenis en het spreekmoment (zie Ritter & Wiltschko (2010)). Bovendien postuleren we op basis van Ritter & Wiltschko (2010) de aanwezigheid van een [ucoin(cidentie)] kenmerk op Tijd. De waardetoekennig van dit kenmerk hangt af van het verankeringsmechanisme tussen de gebeurtenis en het spreekmoment. Dit wordt afgebeeld in (7):

(6)



Als de gebeurtenis en het spreekmoment samenvallen, heeft het kenmerk [*u*coin] een positieve waarde, die we als default beschouwen. Omgekeerd, als de gebeurtenis en het spreekmoment niet overeenkomen, heeft [*u*coin] een negatieve waarde, die we als gemarkeerd beschouwen.

In navolging van Holmberg & Roberts (2010) stellen we dat uniformiteit van kenmerkwaardes leiden tot ongemarkeerde, dus default, configuraties. Daarom stellen we voor dat als [+coin] op Tijd gecombineerd wordt met een default  $\varphi$ -kenmerk, een defaultconfiguratie wordt verkregen. Evenzo wordt, als een [-coin] op Tijd gecombineerd wordt met een niet-default  $\varphi$ kenmerk, een andere defaultconfiguratie verkregen. Daarom stellen we voor dat  $\varphi$ -kenmerken die uitgedrukt worden op perfectieve hulpwerkwoorden in CSIDs alleen overt gemarkeerd kunnen worden als hun gradatie van gemarkeerdheid uniform is met die van het [*u*coin] kenmerk op Tijd. Van dit mechanisme, dat we *Default Marking* (*Defaultmarkering*) noemen, wordt gedacht dat het optreedt in de morfologische component van de grammatica. De definitie van *Defaultmarkering* is gegeven is (8):

#### (8) Defaultmarkering

De morfologische markering van een  $\varphi$ -kenmerk kan alleen plaatsvinden als alle kenmerken dezelfde gemarkeerdheid hebben op het functionele hoofd dat hen bevat.

(8) suggereert dat *Defaultmarkering* niet alleen gevonden wordt bij perfectieve hulpwerkwoorden. Dit post-syntactische mechanisme wordt inderdaad aangetroffen bij andere perifrasen in CSIDs, waaronder modale

hulpwerkwoorden die door infinitieven gevolgd worden en bepaalde lidwoorden en demonstratieven (D-elementen) gevolgd door NPs. Dit wordt besproken in hoofdstuk 5. Wat betreft de *Defaultmarkering* met bepaalde D-elementen, merken we op in (9) dat RF plaatsvindt na een bepaald lidwoord dat onzijdig en vrouwelijk meervoud uitdrukt.

(9) Airola (Centraal Campano)

a.	<b>u l'l</b> attə	'de.onz. melk'

b. **e s'**sɔrə 'de.vr.mv. zussen'

In het schema van (4) is [Onzijdig] de default voor [Klasse]. [Vrouwelijk] wordt daarentegen als gemarkeerd beschouwd. We postuleren dat bepaalde lidwoorden en demonstratieven gemerged worden in D° en dat D° opgebouwd is door een aantal categorieën, waaronder D (definietheid) en  $\varphi$ . Op een vergelijkbare manier als bij Tijd in (7), stellen we voor dat D een [ucoin] kenmerk bevat. De waarde van [ucoin] wordt bepaald door het verankeringsmechanisme tussen de spreekreferentie in Spec,DP en de entiteitsreferentie in Spec, nP (in het geval van ontelbare zelfstandige naamwoorden), of tussen de spreekreferentie in Spec,DP en de individuatiereferentie in Spec,NumberP (in het geval van telbare zelfstandige naamwoorden). In (9a) is zowel de spreekreferentie als de entiteitsreferentie specifiek en daarom krijgt [ucoin] een positieve waarde. aanwezigheid van [+coin] op D is de trigger voor de De defaultmarkeringsoperatie, die de overte markering van [Onziidig] fiatteert. In (9b) daarentegen, delen de spreekreferentie en de individuatiereferentie niet dezelfde waarde, waardoor [ucoin] negatief gespecificeerd is. [-coin] triggert de overte markering van [Vrouwelijk] in de morfologie door middel van Defaultmarkering.

## **Curriculum Vitae**

Giuseppe Torcolacci was born in Fossombrone (Italy) on 10<sup>th</sup> December 1981. He obtained his Master degree in foreign languages and literatures at the University of Urbino, where he specialized in German and English. He majored in Linguistics with a thesis on the morpho-syntax of subject clitics in a subset of Italian dialects spoken in the northern Marche. In 2009, he obtained a 3-month grant from the Freie Universität in Berlin, where he was a guest researcher. From 2010-2014, he carried out his doctoral studies at the University of Leiden, during which time this dissertation was written. In 2013, he spent a 3-month visiting period at the University of Cambridge, in the United Kingdom.