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## **UCD Working Papers in Italian Studies: an introduction**

Those working in Italian Studies know very well the clichés that surround their subject, both in popular perception (a musical language, pizza, works of art turned into icons of globalized consumerism) and to some extent also in academia (which in modern society is not so different from a facet of popular culture). This is not really a problem, although it may sometimes become tiresome, or, more seriously, drive curriculum choices. But this received view also has the less obvious effect of obscuring how diverse and multi-faceted the field of Italian studies really is. In literature, art, cinema, music, but also in philosophy, design, law, architecture, an immense wealth of cultural expressions is associated, down the centuries, with what we call ‘Italy’. In addition, and to anticipate the content of this volume, historical vicissitudes have preserved on Italian soil a dialectal diversity that is unparalleled in the modern Romance-speaking world, and indeed in Europe. And yet, the pressures of popular stereotyping and the practical constraints of teaching inevitably conspire to give a reductive impression of all this cultural and linguistic (and, actually, also geographic and biological) diversity.

The tradition of Italian scholarship at University College Dublin has always been keenly aware of this diversity. Since its inception in the 1970’s, what used to be the Italian Department and is now the section of Italian in the School of Languages, Cultures and Linguistics has consistently offered a range of teaching and research topics as broad as practically possible. This was perhaps natural for an academic unit which traditionally teaches large number of students, having gradually become the largest centre in the state in this respect. An important reflection of this central role is the UCD Foundation for Italian Studies, which since it was originally established in 1980 has been promoting the discipline with a rich catalogue of publications and a constant flow of sponsored events (most notably the Dante series of lectures which ran annually from 1973 to 2010).

The UCD Foundation for Italian Studies is now giving a new impulse to this tradition with the launch of an online series of working papers. Each issue will make freely available on the Foundation’s site a collection of unpublished articles in non-peer-reviewed form. The goal, as in similar ventures, is to aid the circulation of ideas and the dissemination of preliminary research results without the delay caused by the reviewing and the publishing process. An online platform is particularly useful in this case, since it removes the geographical barrier between researchers in Ireland and in mainland UK (even though, evidently, the papers uploaded are freely available to a potentially global readership). In this respect the UCD Working Papers in Italian Studies thus aim at bolstering the close connection already existing between the research communities in Ireland and the UK, a connection that owes much to the work of the Society for Italian Studies.

### *This volume*

Our first volume consists of a collection of papers on the linguistics of the Italian dialects, an eccentric choice which not only emphasizes the diversity of the field, but also opens up another dimension of relevance. For the papers presented here represent current research in theoretical grammar, and as such are relevant above all for the whole community of researchers interested in theoretical linguistics, not just those working on Italian and Romance languages. Importantly, linguists can find here analyses based on first-hand data, an extremely valuable empirical contribution which can be discussed from different perspectives, or indeed in different analytic frameworks.

The collection is made up of six papers: two on syntax, one on phonology, one on morphology, and one on semantics. If the subdisciplines are well balanced (even though these

labels only describe the privileged analytic viewpoint of the contributions, without pigeonholing them), the empirical domain spans the whole spectrum of dialects spoken in Italy but is not a balanced sample — nor could it be, with only six contributions. Rhaetoromance enjoys a lot of attention, with one paper dealing with Ladin, one with Friulian, and one that discusses Rhaetoromance within a comparison that also includes Italian, Venetian, English, and French; Abruzzese is discussed by two of the contributions (which focus on two different varieties, Aquilano and a variety of the Chietino group); and the Sicilian variety of Pantelleria provides the topic of the last contribution.

In her discussion of Ladin inflection, Cappellaro studies in detail the systematic lack of inflectional ending *-es* on modifiers and articles that agree with a feminine plural noun. She reaches the conclusion that this apparent irregular development is a symptom of a system-internal tendency to biuniquely match inflectional class endings and feature combinations: the feminine plural exponent is suppressed just in those varieties where the same exponent would otherwise be compatible with a masculine plural content. Effectively, the “irregular” lack of a feminine plural ending on noun modifiers eliminates what would otherwise be a syncretism between masculine and feminine plural. This solution represents an advance over current accounts, in that it explains why this type of suspended exponence concerns specifically the feminine, or rather, gender.

Casalicchio and Masutti deal instead with a syntactic question posed by the microvariation of the 3 sg. subject clitic *al* in Friulian; while there are good reasons for analyzing it as the merged realization of two separate clitics *a-* and *-l* in the western varieties, the evidence points to a monomorphemic interpretation for the central ones. Crucially this interpretation is supported by the interaction of *al* with other clitic elements — negation and direct/indirect objects — observed both at the syntactic and at the phonological level. A deeper investigation in the morphosyntactic behaviour of a clitic therefore leads to a stronger hypothesis about syntactic microvariation between neighbouring dialect areas.

Franco and Lorusso, working on the Pantiscu dialect of Pantelleria, also develop a syntactic analysis, but the relevant interface in this case is with semantics. Their point of departure is a puzzling phenomenon: in this dialect, a subject clitic, which double up the pronominal features of the subject, expresses a progressive reading of the verb. They offer a structural reinterpretation of Loporcaro’s recent analysis, based on two hypotheses: that the clitic forms with the lexical verb a sort of idiom, so that what expresses the progressive is the whole complex, neither the clitic nor the verb alone; and that it expresses pronominal features, despite lexicalizing an aspectual head, because the progressive value of the Aspect head is a target of syntactic agreement (carries a phi-probe) which agrees with the subject features. Again, a small localized phenomenon is analyzed in a way that has much broader and deeper implications.

Larrivée and Poletto’s contribution differs from those considered so far, as it includes Rhaeto-Romance and Venetian alongside Italian, English, and French, in a systematic comparison of sentential particles (a subclass of discourse markers) which highlights the variability of syntactic placement for elements that have an invariant (more or less) pragmatic content. Thanks to the evidence gathered from languages that are not national standards, they can uncover a general pattern in which discourse markers not specifically restricted to encoding types of speech act gradually turn into sentential particles with rigid distribution and obligatorily associated with the corresponding speech act. The process is more aptly termed syntacticisation than grammaticalization, because it does not involve phonological reduction or semantic impoverishment, but just the fixation of syntactic position and biunique correlation with pragmatic value. Their approach showcases the importance of not limiting oneself to traditional standard languages for gleaning a full picture of the logic of linguistic variability.

With Passino and Pescarini's contribution we move to phonology. They examine the vowel system of a dialect in eastern Abruzzo, and their detailed description (in itself a significant contribution) brings to light a puzzling pattern in the diachronic development that led from Proto-Romance \*a to [ə] (in open tonic position), from \*o to [u] (in open position), from \*e to [a], and from \*i to [ɔ]. These rather surprising developments become more natural if, as the authors suggest, the modern vowels arose from earlier diphthongs, which were the immediate (and much more plausible) developments of the corresponding Proto-Romance segments. In addition, a series of apparently capricious irregularities receive a plausible explanation under the hypothesis that the phonetic outcomes deriving from metaphony and from the alternation between open- and closed syllable were morphologized to express paradigmatic alternations in gender. A remarkable component of this explanation is that word-final metaphony triggers \*i and \*u could effectively block, rather than trigger, the breaking of stem-internal \*i and \*u. To what extent this type of anti-metaphony can be a valid explanation tool elsewhere is one of the many insightful questions raised in this contribution.

The contribution by Ursini also studies an Abruzzese dialect, this time Aquilano, but it explores yet another dimension. It is centred on the semantics of so-called "chorophorics", that is, spatial pronouns related to spatial prepositions (possibly complex) but incompatible with the separate expression of a ground argument: *perrete ajju divano* 'behind the sofa' takes *ju divano* as an argument just like the Italian *dietro al divano*, but *arrete* 'behind [it/there]' cannot be followed by it (cf. German *dahinten*). In fact, the in-depth analysis of such elements results in a detailed study of the morphology, syntax, and semantics of spatial prepositions, conducted with a rigorous formal methodology couched in the vocabulary of Discourse Representation Theory. The analysis derives the distributional and semantic properties of chorophorics by modelling them as anaphoric elements which require a suitable antecedent interpreted as a presupposed ground. Here too, but from a different perspective, we see how the analysis of non-standardized linguistic varieties can lead to insights not otherwise available from better-studied ones, which can and should inform linguistic research at large.

There is no need to dwell any further on the relevance of this type of investigation, especially when it is supported by first-hand data from an empirical domain that is quickly disappearing. Italianists and linguists need no convincing that research on dialects is indispensable for the scientific inquiry into natural language and for the scholarly investigation into the cultures that it expresses. Other readers may be pleasantly surprised at the wealth and depth of information that can be gleaned by the rigorous analysis of linguistic systems all too often misconceived as substandard varieties of Italian (the dominant view, reinforced by the label 'Italian dialects'). It is my hope that this collection, deliberately devoted to a lesser-studied aspect of Italian studies, may usher in a varied and stimulating flow of research contributions on many aspects of Italian language(s) and culture(s). My thanks go to the authors, who made this volume possible by kindly sharing the results of their current projects; to the Head of Italian Studies at UCD and director of the UCD Foundation of Italian Studies, Dr Ursula Fanning, for leading and promoting this initiative; and to the head of the UCD School of Languages, Culture and Linguistics, Professor Bettina Migge, for welcoming it and hosting it as part of the Italian section of the School's website. It seems an appropriate home for a research platform devoted to Italian Studies — a particularly fascinating aspect of the study of language, culture, and linguistics.

Paolo Acquaviva

## Why is Ladin lazy agreement a feminine gender issue?

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### 1. Introduction

This study is concerned with a non-canonical agreement phenomenon found in Dolomitic Ladin, (north-eastern Italy, cf. Map I) whereby **number is not overtly marked on all elements of a noun phrase if the head noun is feminine plural**, as illustrated in (1) with data from the dialect spoken in Cortina d’Ampezzo (Veneto).<sup>1</sup>



Map I. Ladin-speaking area in northern Italy (from Grassi, Sobrero and Telmon 2003:82)

(1) Ampezzan: ‘the new boy(s)/girl(s)’

a.	<i>el</i>	<i>noo</i>	<i>toso</i>
	the.M.SG	new.M.SG	boy.M.SG
b.	<i>i</i>	<i>noe</i>	<i>tose</i>
	the.M.PL	new.M.PL	boy.M.PL
c.	<i>ra</i>	<i>noa</i>	<i>tosa</i>
	the.F.SG	new.F.SG	girl.F.SG
d.	<i>ra (*res)</i>	<i>noa (*noes)</i>	<i>toses</i>
	the.F.SG	new.F.SG	girl.F.PL

As (1d) shows, definite articles and pronominal adjectives agree in gender but not in number if the noun is F.PL. This does not happen in systems with ‘canonical agreement’ (Corbett 2000: 9) such as Italian (see (2)). As is well known, in a system with canonical agreement the controller noun is present, has overt expression of features, is consistent in the agreement it takes, and its part of speech is not relevant. Targets have bound expression of agreement, obligatory marking, repeating the marking on the noun, and the marking is regular,

<sup>1</sup> Data are from the *ALD I – Atlante linguistico del ladino dolomitico e dialetti limitrofi* by Hans Goebel and associates, available online at <<http://ald.sbg.ac.at/ald/ald-i/index.php>>.

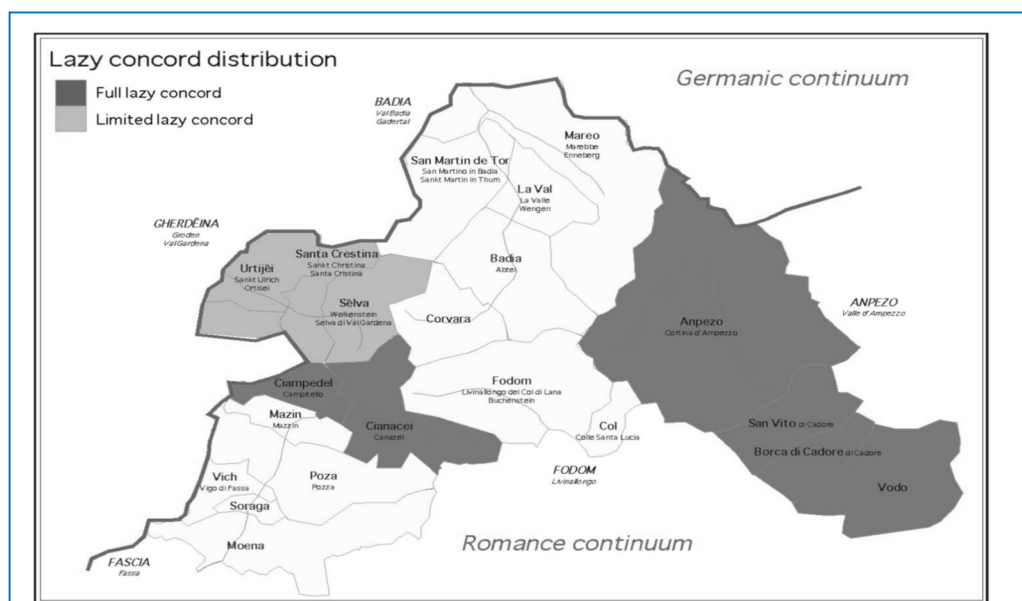
phonologically identical, productive; the target has a single controller and its part of speech is not relevant (cf. Corbett 2000:9f.).

(2) Italian: ‘the new boy(s)/girl(s)’

a.	<i>il</i>	<i>nuovo</i>	<i>ragazzo</i>
	the.M.SG	new.M.SG	boy.M.SG
b.	<i>i</i>	<i>nuovi</i>	<i>ragazzi</i>
	the.M.PL	new.M.PL	boy.M.PL
c.	<i>la</i>	<i>nuova</i>	<i>ragazza</i>
	the.F.SG	new.F.SG	girl.F.SG
d.	<i>le (*la)</i>	<i>nuove (*nuova)</i>	<i>ragazze</i>
	the.F.PL	new.F.PL	girl.F.PL

The phenomenon was first observed by Elwert (1943), later discussed and labelled ‘*Ladin lazy agreement*’ by Haiman & Benincà (1992), and studied in depth within the generative framework by Rasom (2008).

Not all Dolomitic Ladin varieties have lazy agreement. The exact distribution of the phenomenon is recorded in Rasom 2008 and is illustrated in Map III (from Rasom 2008). As summarized in (3), lazy agreement is found in Fassan *cazet* (darker grey), Gherdener (lighter grey)<sup>2</sup>, Ampezzan and Oltrechiusa (darker grey, to the east<sup>3</sup>) but not in Badiot, Fodom and southern Fassan varieties (in white) which have full agreement like Italian.



Map I. *Lazy agreement* distribution (Rasom 2008)

<sup>2</sup> The ‘limited agreement’ of Gherdener is discussed §2.

<sup>3</sup> Notice that Oltrechiusa varieties (San Vito di Cadore, Borca di Cadore and Vodo di Cadore) are not included in the ALD (cf. Map III). Their ‘ladinità’ has been object of much debate (see Pellegrini 1979 and Zamboni 1984 for a discussion). However, as far as noun phrase agreement is concerned they behave like Ampezzan and have been included in Rasom’s (2008) study.



(3)	Feature value combination	Fassan <i>cazet</i> , Gherdener, Ampezzan, Oltrechiusa	Badiot, Fodom, S. Fassan (like Italian)
	M.SG	full agreement	full agreement
	F.SG	full agreement	full agreement
	M.PL	full agreement	full agreement
	F.PL	<b>lazy agreement</b>	full agreement

Lazy agreement is always obligatory prenominal, thus always affects definite articles – the F.PL form of the definite article is still present in the system but only in lexicalised expressions such as *res tres* (three o'clock) – and prenominal adjectives. Modifying adjectives however can also be postnominal, in which case the noun can optionally show number agreement, as in the example (4). A full account of the phenomenon is given in §2.

(4)	<i>ra</i> the.F.SG	<i>tosa/toses</i> girl.F.SG/F.PL	<i>noes</i> new.F.PL
-----	-----------------------	-------------------------------------	-------------------------

Rasom observes that a necessary (but not sufficient) condition for lazy agreement is the presence of a sigmatic ending ‘at least on the last constituent’ of the phrase.

- (5) “[...] lazy concord morphology occurs only in phrasal contexts where there is a sigmatic ending at least on the last constituent” (Rasom 2008:99).

However, what remains unexplained is why lazy agreement is a feminine gender issue. It is possible to find M.PL ‘last constituents’ of a phrase with a ‘sigmatic ending’ in varieties with lazy agreement. Take, for example, the Ampezzan phrases ‘the new/green irons’ in (6).

- (6) Ampezzan: ‘the new/green irons’

a.	<i>i</i> the.M.PL	<i>noe</i> new.M.PL	<i>feres</i> iron.M.PL
b.	<i>i</i> the.M.PL	<i>feres</i> iron.M.PL	<i>verdes</i> green.M.PL

So why is a phrase such as \**el.M.SG noo.M.SG feres.M.PL* ‘the new irons’ or \**el.M.SG fer.M.SG/feres.M.PL verdes.M.PL* ‘the green irons’ ungrammatical?

Gender asymmetries at the level of the noun phrase are not *per se* problematic and are not even rare in Romance. In northern Italy, for example, we find peculiar morphological developments in F.PL nouns, such as the *-n* suffix in Val Mesolcina and Val Bregaglia (Tuttle 1982) and the syncretic type ‘*la.F.SG/PL capra.F.SG/PL*’ ‘the goat(s)’ in northern Tuscany (Rohlf 1968: 28f.), as illustrated in (7) below.

- (7) a. Val Mesolcina (Tuttle 1982: 77)

	SG	PL
F	la gamba	la gamban

- b. Val Bregaglia (Tuttle 1982: 77)

	SG	PL
F	la gamba	lan gamba

c. Gagnola (Rohlf 1968: 28)

	SG	PL
F	la capra	la capra

These asymmetric developments (which are all separate and non-contact-induced) are linked to a characteristic development from Latin shared by Italo-Romance varieties at large, i.e. the asymmetrical morphological development of masculine and feminine plurals from Latin nominative and accusative case-forms. In particular, the fact that feminine nouns continue plural forms in *-Vs*, a segment that would be later susceptible to deletion, while masculine plurals continue the nominative case-form *-i*.

This asymmetry is also visible in Ladin definite articles and determiners. Masculine plural forms are vocalic and continue the nominative-case (*i* < Latin ILL-I), while feminine nouns continue the plural forms in *-Vs* (*las, les, res* > Latin ILL-AS). But again, this asymmetry cannot explain *per se* why lazy agreement affects feminine (but not masculine) plural noun phrases, since there are numerous Ladin varieties with articles of the type *i/las* which have never developed lazy agreement.

I propose that lazy agreement is, at the syntagmatic level, a response to gender overtization (cf. Cappellaro 2016), i.e. the diachronic emergence of a biunique alignment between inflectional ending and gender value, which is in turn triggered by phonological change (word-final *-s* deletion in this case).

Deletion of word-final *-s* (a well-known phenomenon in Romance — cf. Poplack 1980, Guy 1981, the more recent work by MacKenzie (2014) and Lipski (2017) and references therein) has in fact an important role in my hypothesis, and data from Rasom (2008) and Stark & Pomino (2009) corroborate this intuition.

For example, findings on language acquisition from Rasom indicate a link between lazy agreement and deletion of word-final *-s* (see (8)).

- (8) “The work has revealed that children pass an acquisitional period where the lazy morphology is in *-e*, and not *-a*. This new morpheme corresponds to a feminine plural ending lacking the sigmatic element. [...] In the acquisitional period, the passage to lazy morphology in *-a* takes place relatively late, in the age between 5 and 7 years” (2008: 179).

That is to say that children in Ciampidel (Fassan Cazet) start by producing phrases of the type *re noes toses*<sup>4</sup> with mere *-s* deletion in the definite article *res* F.PL, and only at a later stage of acquisition (between age 5 and 7) is *ra* F.SG produced.

Stark & Pomino (2009) highlight the link between non-canonical agreement and *-s* deletion in ‘popular Portuguese’ and Occitan, and propose a comparison with Ladin lazy agreement. However, the problem of gender asymmetry in Ladin is not considered at all by the two authors who, in fact, extend the label ‘lazy’ to Portuguese and Occitan (2009:117) where there is no gender asymmetry and M.PL and F.PL behave in the same way (see examples in (9)).<sup>5</sup>

<sup>4</sup> Data from Ampezzan. Rasom’s examples are from her native variety of Ciampidel (Fassan Cazet).

<sup>5</sup> That is to say that *lazy agreement* in their study corresponds to non-canonical agreement in the plural, and not, as in Ladin, in feminine plurals.

(9) ‘Popular’ Portuguese (Stark&Pomino (2009:118), quoted from Scherre 2001)

a. <i>o</i>	<i>novo</i>	<i>aluno</i>	a <sup>i</sup> . <i>o</i>	<i>aluno</i>	<i>novo</i>
the.M.SG	new.M.SG	pupil.M.SG	the.M.SG	pupil.M.SG	new.M.SG
b. <i>a</i>	<i>nova</i>	<i>aluna</i>	b <sup>i</sup> . <i>a</i>	<i>aluna</i>	<i>nova</i>
the.F.SG	new.F.SG	pupil.F.SG	the.F.SG	pupil.F.SG	new.F.SG
c. <i>os</i>	<i>novos</i>	<i>aluno</i>	c <sup>i</sup> . <i>os</i>	<i>aluno</i>	<i>novo</i>
the.M.PL	new.M.PL	pupil.M.SG	the.M.PL	pupil.M.SG	new.M.SG
d. <i>as</i>	<i>novas</i>	<i>aluna</i>	d <sup>i</sup> . <i>as</i>	<i>aluna</i>	<i>nova</i>
the.F.PL	new.F.PL	pupil.F.SG	the.F.PL	pupil.F.SG	new.F.SG

To my knowledge, the basic question of why Ladin lazy agreement is a feminine gender issue has remained unexplained.

I will address this basic question by analysing data on the nominal morphology of six Ladin varieties listed in (10), three of them displaying lazy agreement and the other three having full agreement. The data have been obtained from *ALD*, and the table in (10) provides both *ALD* point numbers/names and the equivalent names in Rasom (2008).

(10)	ALD POINT	RASOM (2008) EQUIVALENT	TYPE OF AGREEMENT
	Ampezzan (92)	Ampezzan	lazy
	Ciampidel (98)	Fassan Cazet	lazy
	Bula (86)	Gherdener	lazy (partial)
	Moncion (99)	S. Fassan	full
	Reba (96)	Fodom	full
	La Pli (81)	Badiot	full

Data will show that there is a diachronic tendency to establish a biunique relation between inflection and feature value combination in varieties with full agreement, which, I claim, was triggered by sound change (deletion of word-final -s) and I propose that lazy agreement be analysed as a syntagmatic response to the same tendency.

This study is structured as follows: in §2 findings on lazy agreement from previous studies are discussed; in §3 (and §4) data from six varieties (three with lazy agreement and three with full agreement) are presented and analysed, before the conclusions in §5.

## 2. Rasom 2008

A caveat is in order. This section is not meant to give an exhaustive summary of Sabrina Rasom’s complex theory and original findings, and will make reference to a small proportion of her data (and their analysis) only in a condensed form. For a full presentation of the theoretical issues see Rasom 2008.

The phenomenon of Ladin lazy agreement is illustrated with data in (11) and (12) from Fassan Cazet and Gherdener. As the examples show, in the context of lazy agreement the (F.PL) head noun marks plurality obligatorily when it is in final position but optionally when it is not in final position (except in Gherdener, where lazy agreement is partial and the construction in (12c) is ungrammatical). Moreover, prenominal modifiers consistently fail to mark plurality, but postnominal modifiers always always mark plurality (cf. Rasom 2008: 24).

(11) FASSAN *CAZET*<sup>6</sup> ‘the small houses’

a.	<i>la</i>	<i>picola</i>	<i>cèses</i>
	the.F.SG	small.F.SG	house.F.PL
b.	<i>la</i>	<i>cèses</i>	<i>pìcoles</i>
	the.F.SG	house.F.PL	small.F.PL
c.	<i>la</i>	<i>cèsa</i>	<i>pìcoles</i>
	the.F.SG	house.F.SG	small.F.PL

## (12) GHERDENER ‘the small houses’

a.	<i>la</i>	<i>pitla</i>	<i>ceses</i>
	the.F.SG	small.F.SG	house.F.PL
b.	<i>la</i>	<i>ceses</i>	<i>pitles</i>
	the.F.SG	house.F.PL	small.F.PL
c.	<i>la</i>	<i>ceses (*cesa)</i>	<i>pitles</i>
	the.F.SG	house.F.PL	small.F.PL

The varieties with canonical agreement for all feature values, namely Badiot (Val Badia), Fodom (Livinallongo, Colle Santa Lucia) and southern Fassan (Mazzin, Pozza, Vigo di Fassa, Soraga and Moena), behave like Italian. Among them, some varieties have preserved a sigmatic plural on all the constituents of the feminine plural phrase (Badiot in (13) for example). Others (Fodom and southern Fassan in (14-15) for example) have lost the sigmatic feature on the feminine plural nominals (cf. Rasom 2008: 97f.).

## (13) BADIOT ‘the small houses’

a.	<i>les</i>	<i>pitles</i>	<i>ciases</i>
	the.F.PL	small.F.PL	house.F.PL
b.	<i>les</i>	<i>ciases</i>	<i>pitles</i>
	the.F.PL	house.F.PL	small.F.PL

## (14) FODOM

a.	<i>le</i>	<i>picole</i>	<i>cese</i>
	the.F.PL	small.F.PL	house.F.PL
b.	<i>le</i>	<i>cese</i>	<i>picole</i>
	the.F.PL	house.F.PL	small.F.PL

## (15) S. FASSAN

a.	<i>le</i>	<i>picole</i>	<i>ciase</i>
	the.F.PL	small.F.PL	house.F.PL
b.	<i>le</i>	<i>ciase</i>	<i>picole</i>
	the.F.PL	house.F.PL	small.F.PL

Rasom proposes the so-called *Lazy Concord Hypothesis* (2008:39), which is as follows.

‘I) in Ladin the morphology of lazy concord on the noun disambiguates the potentially ambiguous interpretation of postnominal adjectives, present in the Romance languages’.

<sup>6</sup> See also AMPEZZAN: a. *ra piccola ciases*; b. *ra ciases pìcoles*; c. *ra ciasa pìcoles*. And OLTRECHIUSA: a. *la piccola ciases*; b. *la ciases pìcoles*; c. *la ciasa pìcoles*.

II) lazy concord on adjectives instead exclusively depends on their syntactic position'.<sup>7</sup>

The first statement is particularly interesting.<sup>8</sup> The claim is that lazy vs full agreement on the controller noun followed by a postnominal adjective represents a minimal pair at the semantic level. Consider the different interpretation in (16a) and (16b) according to the parameter absolute/relative meaning (one of the parameters adopted by Cinque (2005)).

(16) FASSAN *CAZET*

- a. I volea demò rampeèr su per la **crepa** autes e ertes de l'India  
'they wanted to climb only those mountains of India which were tall and steep'  
[‘relative’ meaning, Cinque 2005]
- b. I volea demò rampeèr su per la **crepes** autes e ertes de l'India  
'the mountains of India are all tall and steep and they wanted to climb them all'  
[‘absolute’ meaning, Cinque 2005]

In (16a, lazy agreement on noun) the meaning is ‘they wanted to climb only those mountains of India which were tall and steep’ while in (16b), full agreement on noun) the meaning is ‘the mountains of India are all tall and steep and they wanted to climb them all’ (Rasom 2008:29).

In Italian, on the other hand, as well as in all Romance varieties with full or canonical agreement, the same phrase (noun + postnominal adjective<sup>9</sup>) would be ambiguous.

(17) Volevano scalare solo le montagne alte e ripide dell'India.

‘they wanted to climb only those mountains of India which were tall and steep’

OR

‘the mountains of India are all tall and steep and they wanted to climb them all’  
[both ‘absolute’ and ‘relative’ meaning]

<sup>7</sup> Rasom adds that this second statement ‘corresponds exactly to the “*Ladin lazy agreement rule*” as it is presented by Haiman & Benincà 1992. These authors propose that the phenomenon of lazy concord has syntactic reasons, whereby modifiers on the noun, that is to say articles, determiners and prenominal adjectives, always undergo lazy concord’ (2008:39).

<sup>8</sup> This is a finding which has particularly theory-internal importance since it supports Cinque’s (2005) theory of a dual source of adjectives: ‘whereas in prenominal position the adjective receives only one interpretation, which corresponds to an individual level, non-restrictive and absolute reading, in postnominal position it can have two interpretations: the same as the adjective in prenominal position, or another interpretation, corresponding to a stage level, restrictive and relative reading’ Rasom (2008:27). For further discussion see Rasom (2008:26f.).

<sup>9</sup> In the context of noun + prenominal adjective, on the other hand, both Italian and Fassin *Cazet* would have only one possible (absolute) meaning, as in the examples below.

- a. ITALIAN: Volevano scalare solo le alte e ripide montagne dell'India [absolute/\*relative meaning]
- b. FASSAN *CAZET*: I volea demò rampeèr la **auta e erta crepes** de l'India [absolute/\*relative meaning].

If Rasom's analysis is correct, and there is no reason to doubt its correctness, the gender asymmetry between feminine and masculine nouns in Ladin varieties with lazy agreement is even more puzzling if left unexplained. Why should this overt semantic difference be sensitive to a noun's gender?

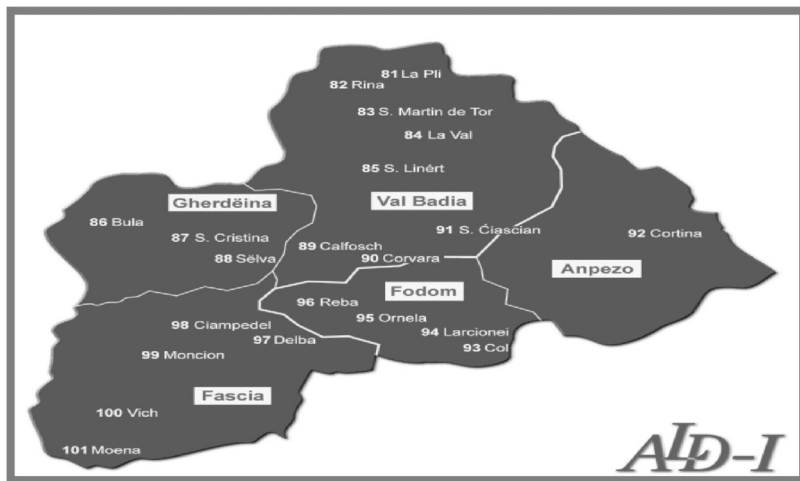
### 3. Data presentation and discussion

As mentioned in the introduction, I propose that the basic question of why lazy agreement affects feminine but not masculine NPs can be understood by analysing the full nominal morphology of six Ladin varieties, which were listed in (10) and are copied below in (18), three of them displaying lazy agreement and the other three having full agreement. All data in this section are from the *ALD-I*.

(18)

ALD POINT	RASOM (2008) EQUIVALENT	TYPE OF AGREEMENT
Ampezzan (92)	Ampezzan	lazy
Ciampidel (98)	Fassan Cazet	lazy
Bula (86)	Gherdener	lazy (partial)
Moncion (99)	S. Fassan	full
Reba (96)	Fodom	full
La Pli (81)	Badiot	full

#### 3.1 Ladin varieties with full agreement



Map III. ALD-I map

All three varieties with full agreement, that is Monciòn (99), Reba (96) and La Pli (81) which can be easily identified in Map III, have full, non-syncretic paradigms for the definite article. La Pli, as opposed to Monciòn and Reba, has preserved sigmatic plural in the feminine article (see *les* F.PL in La Pli vs *le* F.PL in Monciòn and Reba).<sup>10</sup>

<sup>10</sup> Observe how La Pli, which shows a higher degree of word final -s preservation, is also the furthest geographically from Venetan varieties (dialects spoken in the Veneto region) to the south. Contact with more

## (19) Definite articles

## a. Monción

	SG	PL
M	(a)l	i
F	la	le

## b. Reba

	SG	PL
M	(e)l	i
F	la	le

## c. La Pli

	SG	PL
M	le	i
F	la	les

The inflectional morphology of adjectives is exemplified by Class 1 adjectives ‘ripe’ and ‘poor’ in (20) and (21) which continue the Latin type *BONUS*, and Class 2 adjective ‘green’ in (22) which continues the Latin type *VIRIDIS* which was (and still is in Ladin) syncretic for gender.

## (20) Adjectives (Class 1): ‘ripe’

## a. Monción

	SG	PL
M	<i>mađúr</i>	<i>mađúres</i>
F	<i>mađúra</i>	<i>mađúre</i>

## b. Reba

	SG	PL
M	<i>mađúr</i>	<i>mađúr</i>
F	<i>mađúra</i>	<i>mađúre</i>

## c. La Pli

	SG	PL
M	<i>mađü</i>	<i>mađüs</i>
F	<i>mađüda</i>	<i>mađüdes</i>

## (21) Adjectives (Class 1): ‘poor’

## a. Monción

	SG	PL
M	<i>purét</i>	<i>purétχ</i>
F	<i>purétâ</i>	<i>puréte</i>

## b. Reba

	SG	PL
M	<i>puóro</i>	<i>puóri</i>
F	<i>puóra</i>	<i>puóre</i>

## c. La Pli

	SG	PL
M	<i>püre</i>	<i>püri</i>
F	<i>püra</i>	<i>püres</i>

## (22) Adjectives (Class 2): ‘green’

## a. Monción

	SG	PL
M	<i>vert</i>	<i>vertχ</i>
F		

## b. Reba

	SG	PL
M	<i>vart</i>	<i>vartχ</i>
F		

## c. La Pli

	SG	PL
M	<i>vert</i>	<i>vertχ</i>
F		

Now let us consider a sample of nouns, colour-coded for gender (blue=feminine), in (23). The data show that the sigmatic element marking plurality on nouns is either lost (Reba) or biuniquely associated with one gender value, either masculine (Monción) or feminine (La Pli).

We can observe, for example, that in Monción the sigmatic plural on nouns has not disappeared but that affixes *-es/-s* are almost entirely associated with values M.PL (with only two exceptions: *la nogáa/le nogáes* ‘walnut tree(s)’ and *la sor/le sores* ‘sister(s)’). Feminine plural nouns, with the two exceptions just mentioned, end in vocalic plural *-e*. One further interesting point is that invariant nouns are exclusively associated with feminine gender which results in the asymmetric behaviour of masculine vs feminine oxytonic nouns ending in *-n*, such as *l žomelín/i žomelíns* (M) and *la man/le man* (F).

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prestigious Venetan varieties, which lost word-final *-s* very early, could certainly be a factor in the loss of word-final *-s* in these southern Ladin varieties.

In Reba, we can observe an almost complete loss of sigmatic plural, with the exception of *l žemeliŋ/i žemelíns* (M) and *l pére/i péreš* (M). Inflectional affix -e on plural forms is invariably associated with feminine gender. The loss of word-final -s often results in invariance for number, particularly in masculine nouns.

In La Pli, it is significant how affix -es is biuniquely associated with feminine gender. Affix -s is associated overwhelmingly with masculine gender, but there are exceptions such as *la maŋ/les maŋs* (F).

## (23) Nouns

ALD ENTRY		MONCION 99 S. FASSAN	REBA 96 FODOM	LA PLI 81 BADIOT
23-24	amica 'friend'	<i>l amikâ/le amike</i>		<i>la kompáña/ les kompáñes</i>
25-26	amico 'friend'	<i>l amik/i amíš</i>	<i>l amiko/i amíci</i>	<i>le kompáñ/ i kompáñs</i>
104	campo 'field'	<i>l tɣamp/i tɣámpes</i>	<i>l tɣamp/i tɣamp</i>	<i>le tɣamp/i tɣamp</i>
169-170	cognata 'sister-in-law'	<i>la kuñádâ/le kuñáde</i>	<i>la kuñáda/le kuñáde</i>	<i>la küñáda/ les küñádes</i>
171-172	cognato 'brother-in-law'	<i>l kuñá/i kuñé</i>	<i>l kuñé/i kuñéi</i>	<i>le küñé/i küñés</i>
197	cosa 'thing'	<i>la róba/le róbe</i>	<i>la róba/le róbe</i>	<i>la kósa/les kóses</i>
284	ferro 'iron'	<i>l fer/i fères</i>	<i>l fiern/i fierñ</i>	<i>le fer /i fers</i>
295	figlio 'son'	<i>l fi/i fies</i>	<i>l fi/i fioi</i>	<i>le fi/i fis</i>
294	figlia 'daughter'	<i>la fiâ/le fie</i>	<i>la fia/le fie</i>	<i>la fia/les fies</i>
304	foglia 'leaf'	<i>la fóâ/le fôe</i>	<i>la fóia/le fóie</i>	<i>la féia/les féies</i>
305	foglio 'sheet'	<i>al šfói/i šfôes</i>	<i>l šfói/i šfói</i>	<i>la pláta/les plátes</i>
316	fratello 'brother'	<i>l fra/i frádes</i>	<i>l frađél/i frađiéi</i>	<i>le fre/i frédeš</i>
330	fungo 'mushroom'	<i>l foŋk/i fónġes</i>	<i>l foŋk/i fontɣ</i>	<i>le fuŋgún/i fuŋgúnġs</i>
338	gemello 'twin'	<i>l žomelín/i žomelíns</i>	<i>l žemeliŋ/i žemelíns</i>	<i>l žomeliŋ/i žomelínġs</i>
390	ladro 'thief'	<i>l ládro/i ládri</i>	<i>l láđro/i láđri</i>	<i>le lére/i léri</i>
425	madre 'mother'	<i>la máre/le máre</i>	<i>la mére/le mére</i>	<i>la óma/les ómes</i>
434	mano 'hand'	<i>la man/le man</i>	<i>la maŋ/le maŋ</i>	<i>la maŋ/les maŋs</i>
439	maschio 'male'	<i>máštxo/máštxi</i>	<i>el máščo/i mášči</i>	<i>le mandl/i mándli</i>
450	mela 'apple'	<i>l pom/i pómes</i>	<i>l pom/i pom</i>	<i>le pom/i poms</i>
457	mese 'month'	<i>l méis/i meiš</i>	<i>l meis/meiš</i>	<i>le meŋs/i meŋš</i>
458	messa 'mass'	<i>la mésâ/le mése</i>	<i>la mása/le máse</i>	<i>la mésa/les méses</i>
511	il noce	<i>la nogáâ/le nogáes</i>	<i>la nožéra/le nožére</i>	<i>le leŋ da nuš/</i>



	‘walnut tree’			<i>i leŋs da nuš</i>
512	la noce ‘walnut’	<i>la nouš/le nouš</i>	<i>la nouš/le nouš</i>	<i>la nuš/les nuš</i>
516	notte ‘night’	<i>la not/le not</i>	<i>la not/le not</i>	<i>la net/les nets</i>
539	orso ‘bear’	<i>n ors/i orš</i>	<i>na lors/le lors</i>	<i>la laürs/les laürs</i>
528	oca ‘goose’	<i>l ókã/le óke</i>	<i>la óka/le óke</i>	<i>l áltɣa/les áltɣes</i>
540	ortica ‘nettle’	<i>l ortiã/le ortíe</i>	<i>la ortia/le ortíe</i>	<i>la skóta/les skótes</i>
547	padre ‘father’	<i>l páre/i páreš</i>	<i>l pére/i péreš</i>	<i>le pere/i peri</i>
576	pera ‘pear’	<i>l peir/i péires</i>	<i>l péier/i péier</i>	<i>le pier/i piers</i>
578	pero ‘pear tree’	<i>l piré/i pirées</i>	<i>l perér/i perér</i>	<i>le leŋ da píers/ i leŋs da píers</i>
594	pidocchio ‘louse’	<i>l póie/i póies</i>	<i>l piégle/i piégli</i>	<i>le piedl/i piédli</i>
624	porta ‘door’	<i>l uš/i úžes</i>	<i>la pórtã/le pórtie</i>	<i>la pórtã/les pórties</i>
656	ragno ‘spider’	<i>l arén/i aréñes</i>	<i>l arañ/i arañ</i>	<i>l arañ/i arañs</i>
659	rana ‘frog’	<i>la ránã/le ráne</i>	<i>la rána/le ráne</i>	<i>l arósk/i aróstɣ</i>
663	re ‘king’	<i>l re/i rées</i>	<i>l re/i reš</i>	<i>le re/i reš</i>
753	sorella ‘sister’	<i>la sor/le sóres</i>	<i>la soréla/le soréle</i>	<i>la so/les sorús</i>

These three varieties all show variable degrees of word-final -s deletion, as is also confirmed by the loss word-final -s from 2.SG indicative < VENIS ‘you come’ in (24).

(24) Present indicative, 2.SG, ‘you come’

849	(tu) vieni ‘you come’	<i>(tu) tu véñe</i>	<i>(ti) te véñe</i>	<i>(tö) véñe</i>
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Overall, the data suggest that in these varieties a marked tendency to biuniqueness between affix and feature values (cumulated) has developed diachronically. Crucially, the phenomenon of -s deletion is pressed into the (new) service of marking overt distinction between M.PL and F.PL.

### 3.2 Varieties with lazy agreement

Ampezzan (92), Ciampidel (98), and Bula (86) all show lazy agreement. The paradigm of the definite article is given in (25) below.

## (25) Definite articles

## a. Ampezzan

	SG	PL
M	(e)l	i
F	ra	ra (res)

## b. Ciampidel

	SG	PL
M	(e)l	i
F	la	la (les)

## c. Bula

	SG	PL
M	le	i
F	la	la (les)

The adjective is again exemplified by Class 1 ‘ripe’ and ‘poor’ in (26-27) and Class 2 ‘green’ in (28).

## (26) Adjectives (Class 1): ‘ripe’

## a. Ampezzan

	SG	PL
M	<i>madúro</i>	<i>madúre</i>
F	<i>madúra</i>	<i>madúres</i>

## b. Ciampidel

	SG	PL
M	<i>madúr</i>	<i>madúres</i>
F	<i>madúra</i>	

## c. Bula

	SG	PL
M	<i>madúř</i>	<i>madúřəs</i>
F	<i>madúřa</i>	

## (27) Adjectives (Class 1): ‘poor’

## a. Ampezzan

	SG	PL
M	<i>poeréto</i>	<i>poeréte</i>
F	<i>poeréta</i>	<i>poerétes</i>

## b. Ciampidel

	SG	PL
M	<i>pére</i>	<i>péres</i>
F	<i>pérə</i>	

## c. Bula

	SG	PL
M	<i>púəřə</i>	<i>púəřəš</i>
F	<i>púəřa</i>	<i>púəřəs</i>

## (28) Adjectives (Class 2): ‘green’

## a. Ampezzan

	SG	PL
M	<i>véřde</i>	<i>véřdes</i>
F		

## b. Ciampidel

	SG	PL
M	<i>vert</i>	<i>vertš</i>
F		

## c. Bula

	SG	PL
M	<i>věřt</i>	<i>věřtć</i>
F		

As regards nouns, as the data in (29) show, affix *-es*, which has been preserved in the definite article F.PL, is not associated biuniquely with the value F(PL) or M(PL). See, for example, Ampezzan *el páre/i páres* ‘father(s)’ (M) and *ra máre/ra máres* ‘mother(s)’ (F) and *el fer/i fěres* ‘iron(s)’ (M) and *ra róba/ra robes* ‘thing(s)’ (F).

In Ciampidel and Bula, where some adjectives show gender syncretism in the plural (cf. *madúres* M/F.PL and *madúřəs* M/F.PL in (26)), the association of plural affix *-es* with both genders is even more manifest than in Ampezzan. Consider, for example Ciampidel *el tšamp/i tšámpes* ‘field(s)’ (M) and *la róba/la robes* ‘thing(s)’ (F) and Bula *l ćamp/i ćámpəs* ‘field(s)’ (M) and *la řoba/la řobəs* ‘thing(s)’ (F).

## (29) Nouns

ALD ENTRY	AMPEZZAN 92	CIAMPIDEL 98 FASSAN CAZET	BULA 86 GHERDENER
23-4 amica ‘friend’	<i>r amíga/r amíges</i>	<i>l amíka/l amíkes</i>	<i>la kumpánia/ la kumpániəs</i>
25-6 amico ‘friend’	<i>l amígo/i amíge</i>	<i>l amík/i amíš</i>	<i>l kumpáni/ i kumpániəs</i>
67-8 bello ‘beautiful’	<i>bel/biei</i>	<i>bel/bíe</i>	<i>bel/biei</i>

		<i>béla/béles</i>	<i>bélâ/béles</i>	<i>béla/bélàs</i>
104	campo 'field'	<i>el cámpo/i cámpes</i>	<i>el tšamp/i tšámpes</i>	<i>l écamp/i écampàs</i>
169	cognata 'sister-in-law'	<i>ra koñáda/ ra koñádes</i>	<i>la kuñédâ/la kuñédes</i>	<i>la kuniēda/la kuniēdàs</i>
171	cognato 'brother-in-law'	<i>el koñá/i koñáde</i>	<i>el kuñá/i kuñé</i>	<i>l kuniá/i kuniēi</i>
197	cosa 'thing'	<i>ra róba/ra róbes</i>	<i>la róbâ/la róbes</i>	<i>la rôba/la rôbàs</i>
284	ferro 'iron'	<i>el fer/i fères</i>	<i>el fer/i fères</i>	<i>l fiēr/i fiēràs</i>
294	figlio 'son'	<i>ra fia/ra fies</i>	<i>la fiâ/la fies</i>	<i>la fia/la fiáns</i>
295	figlia 'daughter'	<i>el fiol/i fioi</i>	<i>el fi/i fies</i>	<i>l fi/i fions</i>
304	foglia 'leaf'	<i>ra fôia/ra fôies</i>	<i>la fôâ/la fôes</i>	<i>la pléca/la plécàs</i>
305	foglio 'sheet'	<i>el šfoi/i šfôe</i>	<i>el šfô/i šfôes</i>	<i>la pláta/la plátàs</i>
316	fratello 'brother'	<i>el fardél/i fardiēi</i>	<i>l fra/i frédes</i>	<i>l fřa/i fřédáš</i>
330	fungo 'mushroom'	<i>ra fônža/ra fônžes</i>	<i>el fonk/i fónges</i>	<i>l fonk/i fončé</i>
338	gemello 'twin'	<i>el zomeliŋ/i zomelís</i>	<i>el žomelín/i žomelíns</i>	<i>l žumblinŋ/i žumblíns</i>
390	ladro 'thief'	<i>el ládro/i ládre</i>	<i>el lére/i léreš</i>	<i>le lérâ/i léràs</i>
425	madre 'mother'	<i>ra máre/ra máres</i>	<i>la mére/la méres</i>	<i>la lóma/la lómàs</i>
434	mano 'hand'	<i>ra man/ra mas</i>	<i>la man/la mans</i>	<i>la máŋ/la maŋs</i>
439	maschio 'male'	<i>máščo/mášće</i>	<i>el máštšo/i máštši</i>	<i>l mandl/i mándli</i>
450	mela 'apple'	<i>el pómo/i póme</i>	<i>el pom de élber/ i pómes de élber</i>	<i>l mēil/i mēilàs</i>
457	mese 'month'	<i>el mes/i meš</i>	<i>el méis/i méiš</i>	<i>le mēŋs/i mēŋš</i>
458	messa 'mass'	<i>ra mésa / ra méses</i>	<i>la mésâ/la méses</i>	<i>la mēsa/la mēsàs</i>
511	il noce 'walnut tree'	<i>ra nogéra / ra nogéres</i>	<i>la nožáâ/la nožáes</i>	<i>l lēŋ da kúca / i lēŋs da kúcàs</i>
512	la noce 'walnut'	<i>ra kúca/ra kúces</i>	<i>la nouš/la nóužes</i>	<i>la kúca/la kúcàs</i>
516	notte 'night'	<i>ra nóte/ra nótes</i>	<i>la net/la nets</i>	<i>la núæt/la núætàs</i>
528	orso 'bear'	<i>un órso/i órse</i>	<i>l ors/i orš</i>	<i>la lórâs/la lóràs</i>
539	oca 'goose'	<i>r óka/ra ókes</i>	<i>l áutšâ/l áutšes</i>	<i>l áuca/l áucàs</i>
540	ortica 'nettle'	<i>r ortía/r orties</i>	<i>l ortiâ/la orties</i>	<i>la uřtía/la uřtíàs</i>
547	padre 'father'	<i>el páre/i páres</i>	<i>el pére/i péreš</i>	<i>l pérâ/ i péráš</i>
576	pera 'pear'	<i>el péro/i pére</i>	<i>el peir/i péires</i>	<i>l pēir /i pēiràs</i>
578	pero 'pear tree'	<i>el brašón dei pére / i brašói dei pére</i>		<i>l lēŋ da pēiràs / i lēŋs da pēiràs</i>

594	pidocchio 'louse'	<i>el peḏóo/i peḏóe</i>	<i>el póie/i póies</i>	<i>l podl/i pódli</i>
624	porta 'door'	<i>ra pórtā/ra pórtēs</i>	<i>l uš/i úžes</i>	<i>la póřta/la póřtās</i>
656	ragno 'spider'	<i>el talarán / i talaránes</i> <sup>11</sup>	<i>l aréñ/i aréñes</i>	<i>l ařáni/i ařáni</i>
659	rana 'frog'	<i>ra rána/ra ránes</i>	<i>la rénā/la rénes</i>	<i>l křot/i křoć</i>
663	re 'king'	<i>el re/i res</i>	<i>el re/i rées</i>	<i>l řě/i řěiaš</i>
753	sorella 'sister'	<i>ra soréla/ra soréles</i>	<i>la sor/la sóres</i>	<i>la soř/la suřáns</i>

It is also worth observing that these varieties, as opposed to the three with full agreement considered in § 3.1, show a lower degree of loss of word-final -s, as confirmed by the retention of -s in the second person of present indicative verbs in (30).

(30) Present indicative, 2.SG, 'you come'

849	(tu) vieni 'you come'	<i>(tu) tu viénes</i>	<i>te véñes</i>	<i>tu veniaš</i>
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#### 4. The hypothesis reiterated

Given the diachronic tendency in varieties with full agreement which show signs of having undergone word-final -s deletion to establish a biunique relation between inflection and feature value combination, I propose that lazy agreement be analysed as a syntagmatic response to the same tendency. It is a strategy to cope with the opacifying effect of language change, and specifically the effect of a sound change on the organization of the morphology (a hypercorrect response to ambiguity regarding the gender-value of inflectional endings).

Diachronic tendencies towards the realisation of a biunique relation between inflection and feature values with scope over entire morphological systems are found, *mutatis mutandis*, in other Romance varieties (with vocalic plural and cumulative exponence). For example, in the emergence in diachrony of a totally predictable relation between gender and inflection in the noun system of Bocchigliere (Calabria, Italy) where plurals ending in -i (/i/) are assigned masculine gender regardless of the gender (feminine or masculine) of the corresponding singular and regardless of the sex (male or female) of the referent. The same applies to those ending in -e (/e/) which are assigned feminine gender without exception. See data in (31) and (32) from Scafoglio (1928) as analysed in Cappellaro (2016).

(31)	a.	<i>u cìciaru</i>	<i>i cìciari</i>	'chickpea'
		the.M.SG chickpea.M.SG	the.M.PL chickpea.M.PL	
	b.	<i>u prièvite nùovu</i>	<i>i prièviti nùovi</i>	'new priest'
		the.M.SG priest.M.SG new.M.SG	the.M.PL priest.M.PL new.M.PL	
	c.	<i>u tiempu</i>	<i>e tiempure</i>	'time'
		the.M.SG time.M.SG	the.F.PL time.F.PL	
	d.	<i>u dièbitu</i>	<i>e dièbite</i>	'debt'
		the.M.SG debt.M.SG	the.F.PL debt.F.PL	

<sup>11</sup> The noun *talaràn* has in fact more than one plural form, that is *talarànes*, *talaràns*, *talaràne*. See Cappellaro (forthcoming) for a discussion of overabundance (Thornton 2011) in Ampezzan nouns.

e.	<i>u bicchieri</i>	<i>i bicchieri</i>	‘glass’
	the.M.SG glass.M.SG	the.M.PL glass.M.PL	
f.	<i>a pupa nova</i>	<i>e pupe nove</i>	‘new doll’
	the.F.SG doll.F.SG new.F.SG	the.F.PL doll.F.PL new.F.PL	
g.	<i>a cruce nova</i>	<i>i cruci nuovi</i>	‘new cross’
	the.F.SG cross.F.SG new.F.SG	the.M.PL cross.M.PL new.M.PL	
h.	<i>a vutta</i>	<i>i vutti</i>	‘barrel’
	the.F.SG barrel.F.SG	the.M.PL barrel.M.PL	
i.	<i>a campà</i>	<i>e campure</i>	‘caterpillar’
	the.F.SG caterpillar.F.SG	the.F.PL caterpillar.F.PL	

- (32) *S' 'u 'mprustu fosse bùonu, si 'imprestèrranu i muglieri*  
 If the.M.SG lending.M.SG was good.M.SG REFL lend.COND the.M.PL wife.M.PL  
 ‘If the loan were so good, people would lend their wives’ (Scafoglio 1928:35)

Consider also the emergence in diachrony of invariance for number in feminine (but not masculine) nouns continuing Latin III declension in the dialect of Macerata (33) and Pigna (34).

- (33) Macerata (Marche, Italy) (Paciaroni 2012)

SG	PL	GLOSS	Italian type (for comparison)
<i>(la) kasa</i>	<i>(le) kase</i>	‘(the) house/-s’	casa/case (F)
<i>(lu) táulu</i>	<i>(li) táuli</i>	‘(the) table/-s’	tavolo/tavoli (M)
<i>(lu) muru</i>	<i>(le) mure</i>	‘(the) wall/-s’	muro/mura (M.SG/F.PL)
<i>(la) nòtte</i>	<i>(le) nòtte</i>	‘(the) night/-s’	notte/notti (F)
<i>(lu) ffore</i>	<i>(li) ffuri</i>	‘(the) flower/-s’	fiore/fiori (M)

- (34) Pigna (Liguria, Italy) Manzini and Savoia (2005, III:574)

SG	PL	GLOSS	Italian type (for comparison)
<i>l v̥ra</i>	<i>e 'v̥re</i>	‘wing’	ala/ali (F)
<i>l omu</i>	<i>i 'omi</i>	‘man’	uomo/uomini (M)
<i>u 'bracu</i>	<i>i 'braci</i>	‘arm’	braccio/braccia (M)
<i>a 'nuize</i>	<i>e 'nuize</i>	‘walnut’	noce/noci (F)
<i>u 'kɔ:ŋ</i>	<i>i 'kɔ:i</i>	‘dog’	cane/cani (M)

Going back to Ampezzan, Ciampidel, and Bula, my hypothesis is that *lazy agreement* makes manifest a tendency to avoid non-biuniqueness between affix (-es) and one feature value combination (either F.PL or M.PL) in the face of sound change, particularly at the level of the definite article which is easily analysed as *l-a* and *l-es*.

## 5. Conclusions

In this paper I have drawn attention to the issue of gender asymmetry in Ladin *lazy agreement*, which is not found in other Romance varieties with sigmatic plural showing non-canonical agreement and tendency to -s deletion in word-final position.

I have offered data on nominal morphology in a corpus of Dolomitic Ladin varieties and shown that those without lazy agreement have developed (in diachrony) a system with a biunique relation between inflection and feature value combination.

I have proposed that lazy agreement be analysed as a syntagmatic response to the same diachronic tendency to biuniqueness, as a strategy to avoid the opacifying effect of language change, and specifically the effect of a sound change on the organization of the morphology. Lazy agreement is thus one of the possible responses of an agreement system to ambiguity regarding the gender-value of inflectional endings brought about by sound change.

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## La microvariazione del clitico soggetto *al* in friulano. Un confronto tra le varietà occidentali e centrali

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### 1. Introduzione<sup>1</sup>

Il friulano possiede un sistema completo di pronomi proclitici soggetto:

1. sg.	2. sg.	3. sg.m.	3. sg.f.	espletivo	1. pl.	2. pl.	3. pl.m.	3. pl. f.
o	tu	al/el	e	al	o	o	a/e	a/e

**Tabella 1:** Il sistema dei pronomi proclitici soggetto in friulano centrale (cfr. Marchetti 1985, Vanelli 1998, ASIt, Benincà 1994)

All'interno di questo sistema, il clitico di terza persona singolare *al* risalta per un comportamento *sui generis*: da un lato, la sua sintassi è soggetta a un alto grado di microvariazione, come risulta evidente se si confrontano gli studi che trattano di questo clitico in diverse varietà friulane (si vedano tra gli altri: Benincà 1994, Vanelli 1998a, Manzini & Savoia 2005, 2009, Gaglia 2012, Calabrese & Pescarini 2014, Casalicchio & Masutti 2015, Gaglia & Schwarze 2015). Dall'altro lato, in numerose varietà friulane i clitici di terza persona formati da '*a* + (semi)consonante' (*al* e in alcune varietà anche i clitici plurali *ai* e *as*) si distinguono dai restanti clitici soggetto per il loro comportamento quando co-occorrono con un altro clitico.

In questo contributo ci concentriamo sul pronome proclitico di terza persona maschile singolare *al* in friulano centrale,<sup>2</sup> con dei riferimenti puntuali ad altre varietà friulane e italiano-settentrionali, in particolare al clitico di terza persona '*a* + *l/ø/i/s*' in friulano occidentale, esemplificato dalla varietà di Campone (PN) analizzata in Casalicchio & Masutti (2015). La questione che affrontiamo in questo lavoro è come si possa analizzare il comportamento idiosincratico del clitico *al* in friulano centrale quando co-occorre con una

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<sup>2</sup> In questo lavoro ci concentreremo sul pronome proclitico e non sul corrispondente enclitico *-(i)al*, perché le restrizioni tipiche del pronome proclitico non compaiono nella versione enclitica. Tuttavia, le conclusioni a cui giungiamo per il proclitico sono trasferibili anche allo stesso pronome quando è enclitico. Ricordiamo che in friulano centrale il pronome enclitico può assumere, a seconda della varietà, la forma *-ial* o *-iel*:

- (i) Cui puartiel 'l pan? [Cividale, ASIt 2, 119]  
chi porta-*al* il pane
- (ii) Cui puartial el pan? [Qualso, ASIt 2, 119]  
chi porta-*al* il pane





- (3) a. *A plouf* (Campone, Casalicchio & Masutti 2015: 108)  
       *a piove*  
       b. *Al plu:f* (Nimis, ASIt, 2, 1)  
       *al piove*  
       c. *Al semee che Pieri al rivarà doman* (Nimis, ASIt, 4, 5)  
       *al sembra che Piero al arriverà domani*

In sintesi, la forma *al* del friulano centrale è usato come clítico di terza persona singolare sia in contesti referenziali (in riferimento ad un soggetto maschile), sia in contesti non referenziali. In questo gruppo di varietà, quindi, la forma *a* non occorre mai senza l'elemento *l* in contesti singolari.<sup>6</sup>

## 2.1 Distribuzione di *al*

Una descrizione cartografica dettagliata della distribuzione di *al* in friulano centrale ci consente di osservare, in primo luogo, che questo clítico non rientra tra i clítici "alti" – ovvero tra i clítici definiti "di CP" – della classificazione proposta in Poletto (2000): *al*, infatti, occorre sempre in una posizione più bassa rispetto agli elementi collocati in CP, come i topic e i focus (4)a, il complementatore *che* (4)b, il verbo salito a C° nelle interrogative totali (4)c, e i pronomi *wh* in interrogative parziali, che a loro volta sono più alti del verbo salito a C° (4)d-e:<sup>7</sup>

- (4) a. *A Giorgio, al ha daat il pan* (Cisterna/Coseano)  
       *A Giorgio, al ha dato il pane*  
       b. *Duc e pensavin cal ploves* (Moimacco, ASIt 3,14)  
       *tutti e pensavano che=al piovesse*  
       c. *Vegnial ancje Antonio?* (Qualso, ASIt, 2, 79)  
       *vien=al anche Antonio*  
       d. *Cui lu haial robat?* (Qualso, ASIt, 2, 120)  
       *chi lo ha=al rubato*  
       e. *Parcè no mangjial el meloç?* (Qualso, ASIt, 4, 36)  
       *perché non mangi=al la mela*

Se da un lato *al* è sempre più basso degli elementi del CP, dall'altro lato esso si trova alla sinistra del verbo finito in frase dichiarativa principale (si veda, ad esempio, (4)a). Questo ci porta a collocare *al* all'interno della parte alta di TP e ad associarlo ai clítici "bassi" (come quelli di persona) individuati in Poletto (2000), o al clítico vocalico *a* delle varietà piacentine (Cardinaletti & Repetti 2010a, b).<sup>8</sup>

Per il friulano occidentale, Casalicchio & Masutti (2015) hanno proposto che il clítico *al* sia composto da due clítici separati (*a+l*), in quanto la negazione appare tra di essi (cfr. (5)a); i clítici oggetto diretto e indiretto, invece, si trovano alla destra dell'intero nesso *a+l*, (5)b:

<sup>6</sup> Fanno eccezioni alcune varietà isolate.

<sup>7</sup> Si noti che negli esempi in (4) l'intero nesso enclítico *al* è compatibile sia con la negazione che con clítici oggetto, diversamente da quanto accade quando *al* è proclítico.

<sup>8</sup> Il clítico *al* del friulano centrale si distingue però dal clítico soggetto piacentino studiato da Cardinaletti & Repetti per il fatto che quest'ultimo è usato non con la terza persona, ma con la prima persona singolare e con la prima e seconda persona plurale.

- (5) a. *A no l mi clame* (Campone, Casalicchio & Masutti 2015: 121)  
       *a non l mi chiama*  
       b. *Il pan, a l mi lu compra lui* (Campone, Casalicchio & Masutti 2015: 118)  
       *il pane, a l me lo compra lui*

Questi dati dimostrano che il clítico *a* in friulano occidentale è il più alto nella "gerarchia dei clitici"; il clítico *l*, invece, si situa chiaramente in una posizione più bassa, tra la negazione e i clitici oggetto. In friulano centrale, invece, questo tipo di distribuzione non è empiricamente dimostrabile, essendo l'elemento *a* di *al* di fatto incompatibile con il clítico di negazione, così come l'intero clítico *al* non co-occorre con altri clitici (si veda anche Vanelli 1998a). Questa questione è cruciale per la nostra analisi e merita di essere trattata nel dettaglio.

Per quanto riguarda il comportamento di *al* in presenza del clítico di negazione *no*, si osserva che la vocale *a* non viene mai realizzata, mentre la *l* permane alla destra della negazione (tranne in alcune varietà in cui cade anch'essa). È qui rilevante il confronto con il friulano occidentale, in cui, come accennato sopra, il nesso *a+l* si scinde in presenza di un clítico di negazione, cfr. (6)a-b con (5)a:<sup>9</sup>

- (6) a. *Nol compre mai nuie* (Nimis, ASIt, 2, 65)  
       *non=l compra mai niente*  
       b. *lúy nq l kôr máy* (Ronchis, AIS p. 357, VIII, 1605)  
       *lui non l corre mai*

Per quanto concerne la cooccorrenza del clítico soggetto con altri clitici, emerge che, in friulano centrale, *al* non co-occorre generalmente con i clitici oggetto diretto (7)a, dativi (7)b o riflessivi (7)c.<sup>10</sup> Ancora una volta, è interessante confrontare questo dato con il friulano occidentale, in cui la vocale *a* del clítico *al* è sempre compatibile con altri clitici, mentre la *l* è generalmente incompatibile solo con il clítico oggetto di terza persona *la/lu* (7)d:

- (7) a. *Lu lei e lu torne a lei di continuo* (Remanzacco ASIt, 2, 95)  
       *lo legge e lo torna a leggere di continuo*  
       b. *Mi ha rivade una letara* (Remanzacco, ASIt, 1, 32)  
       *mi ha arrivata una lettera*  
       c. *Gianni si a sintuut mal* (Cividale, ASIt 1, 7)  
       *Gianni si ha sentito male*  
       d. *Lui a(\*l) lu conos vs. A\*(l) ti vomp* (Campone, Casalicchio & Masutti 2015: 120)  
       *lui a(\*l) lo conosce a\*(l) ti vede*

Riassumendo, il confronto con altre varietà friulane ci consente di notare che, in friulano centrale, il clítico *al* non appare mai scisso in due clitici separati, diversamente da quanto

<sup>9</sup> La *a* non viene realizzata nemmeno quando il soggetto è un quantificatore negativo, perché in questi casi appare sempre il *no* (cosiddetta "concordanza negativa"):

- (i) *Nissun no l'è rivaat in timp* (Cividale, ASIt 1, 33)  
       *nessuno non CL.=è arrivato in tempo*

<sup>10</sup> Gaglia (2012) riporta dei dati per cui, nella varietà centrale di Mortegliano (UD), l'occorrenza del clítico soggetto assieme ad un altro clítico oggetto o riflessivo si può considerare sfavorita, ma non agrammaticale: la co-occorrenza è accettata quasi nel 40% delle risposte fornite dagli informatori (è addirittura preferita nel 16,7% e giudicata allo stesso livello della variante senza clítico nel 10% dei casi).

avviene regolarmente in molte varietà del friulano occidentale. Infatti, in friulano centrale, il clítico soggetto di terza persona può comparire nelle seguenti forme:

- come *al* (clítico inseparabile) in assenza di altri elementi clíticos (esempi (3) e (4));
- come *l* quando co-occorre con il clítico di negazione (esempi (6)a-b e);
- fonologicamente nullo ( $\emptyset$ ) quando è presente un pronome clítico oggetto diretto, indiretto, o un clítico riflessivo (esempi (7)a-c).

Nel prossimo paragrafo discuteremo questo quadro nel dettaglio, al fine di proporre un'analisi della natura e delle proprietà sintattiche del clítico *al* in friulano centrale, questione che rimane tuttora aperta in letteratura. Sulla base del confronto con il friulano carnico e dell'analisi di dati finora rimasti in secondo piano, proporremo che in friulano centrale il clítico *al* forma un clítico unico e che la sua riduzione a *l* è dovuta a un regolare processo fonologico. L'assenza totale del clítico con altri pronomi clíticos è invece attribuita, nella nostra analisi, a motivi sintattici.

### 3. Analisi

In questa sezione proporremo un'analisi che permetta di spiegare perché il clítico *al* del friulano centrale è realizzato come *l*, quando è presente la negazione, e fonologicamente nullo, quando è presente un altro clítico di persona. Discuteremo due ipotesi, che differiscono fondamentalmente nel trattare *al* come un unico clítico o come un nesso di due clíticos, e mostreremo che l'analisi di *al* come clítico unico è superiore empiricamente. A tal fine risulta fondamentale il confronto con le altre varietà friulane: più precisamente, nel confronto con il friulano occidentale, terremo in conto non solo le somiglianze, ma anche e soprattutto le differenze tra le due varietà; allargheremo inoltre il confronto al friulano carnico (rappresentato dalla varietà di Forni di Sopra<sup>11</sup>), che ci consentirà di rafforzare l'ipotesi che *al* formi sempre un unico clítico.

#### 3.1. L'ipotesi di *al* come nesso di clíticos ('a+l')

La proposta di analizzare *al* come nesso di due clíticos si appoggia sui dati del friulano occidentale, che sono stati discussi in vari lavori (si vedano Manzini & Savoia 2009, Calabrese & Pescarini 2014, Casalicchio & Masutti 2015, e la letteratura ivi citata). In friulano occidentale vi sono tre prove a sostegno dell'indipendenza dei clíticos *a+l*:

- (i) il clítico *a* appare da solo quando si ha un soggetto espletivo ((3)a, qui ripetuto);
- (ii) i due clíticos vengono separati dal clítico di negazione, quando presente (esempio (5)a qui ripetuto);
- (iii) il clítico *a* è portatore di un tratto indipendente, di [3. persona], mentre i tratti di numero e genere sono realizzati dal clítico più basso *l/Ø/i/s* (quando il soggetto è referenziale (8)); di conseguenza, *a* appare ogni qual volta si abbia un soggetto di terza persona.

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<sup>11</sup> La varietà parlata a Forni di Sopra appartiene al friulano carnico sud-occidentale, e presenta alcuni tratti in comune con il friulano occidentale (Frau 1984). Come risulterà tuttavia evidente dai dati discussi, per quanto riguarda il fenomeno qui considerato il friulano di Forni di Sopra si distingue nettamente dal friulano occidentale.

- (3) a. *A plouf?* (Campone, Casalicchio & Masutti 2015: 108)  
*a piove*
- (5) a. *A no l mi clame* (*Ibid.*: 121)  
*a non l mi chiama*
- (8) a. *A l / A ø favela*  
*a l a ø parla*  
 b. *A i / A s fevelan* (*Ibid.*: 106)  
*a i a s parlano*

In base ai test sulla posizione del clítico *a*, Casalicchio & Masutti (2015) propongono che esso si trovi nella proiezione più alta della gerarchia dei clitici e che sia la realizzazione fonetica ('spell-out') della testa Subj° (per la proiezione SubjP vd. Cardinaletti 2004, Rizzi & Shlonsky 2007). Poiché la *a* occorre con tutti i tipi di soggetto di 3. persona, essa viene analizzata come realizzazione del tratto [+3. persona]. Si può dunque ritenere che la *a* del friulano occidentale si comporti (in frase dichiarativa) come le "subject field vowels" delle varietà piacentine e venete studiate rispettivamente da Cardinaletti & Repetti (2004) e da Chinellato (2005). Questi clitici vocalici occuperebbero una proiezione alta del TP, che questi autori denominano ZP.

Estendendo al friulano centrale un'analisi simile a quanto proposto per Campone in Casalicchio & Masutti (2015) si otterrebbe la struttura in (9), con la *a* in una posizione a cavallo tra il CP e il TP, sopra al clítico di negazione:<sup>12</sup>

- (9) [CP [SubjP Mario [Subj' *a* [NegP no [SCL *l* [ clitici oggetto [... ]]]]]] (Friulano centrale)

Per spiegare la presenza della sola *l* quando c'è una negazione (6), si potrebbe ipotizzare che la realizzazione fonetica del clítico *a* sia bloccata dalla presenza della negazione. Il clítico sarebbe dunque presente, ma realizzato da una testa nulla. Si tratta di un fenomeno attestato, per esempio, anche in padovano con il clítico *ghe*: Benincà (2007), rifacendosi a osservazioni di Kayne (2005b – vedi anche Kayne 2015) osserva che il clítico *ghe*, che accompagna obbligatoriamente il clítico *ne* (10), non viene realizzato se c'è un altro clítico dativo-locativo referenziale (11):<sup>13</sup>

- (10) *\*(ghe) ne compro dò*  
*\*(ghe) ne compro due*
- (11) *me (\*ghe) ne compro dò* (esempi adattati da Benincà 2007: 198)  
*me (\*ghe) ne compro due*

Un fenomeno simile è riferito da Pescarini (2013) per la varietà pesarese di Granarola di Gradara: il clítico soggetto di 3. persona maschile singolare (*e*)*l*, che di solito è obbligatorio, non compare quando c'è la negazione:

- (12) *(\*el) an compra mai gnent* (Granarola di Gradara, Pescarini 2013: 48)

<sup>12</sup> La proiezione che in Casalicchio & Masutti (2015) è chiamata genericamente 'SCL' (ossia di clítico soggetto) può essere identificata con la proiezione del clítico di Persona di Poletto (2000) e con la proiezione YP di Cardinaletti & Repetti (2004 e succ., vd. *supra*).

<sup>13</sup> Quando è presente un nesso partitivo, anche il clítico *ghe* che accompagna le forme di avere viene solitamente cancellato (cfr. Benincà 2007: 199).

(\**el*) non compra mai niente

La mancata realizzazione di *a* in friulano centrale si potrebbe quindi ricondurre a dei meccanismi più generali che bloccano la presenza di determinati nessi di clitici, causando la cancellazione di uno di essi.

Come osservato nella parte descrittiva, esiste un secondo fenomeno che interessa i clitici soggetto del friulano centrale, ossia la mancata realizzazione dell'intero nesso *al* quando è presente un altro clitico di persona (7)a-c. Mentre l'analisi proposta in (9) può dar ragione del comportamento sintattico di *a* in presenza del clitico di negazione, l'incompatibilità di *a* con altri clitici di persona rappresenta un punto critico nell'analisi di *al* come *a+l*. Infatti, mantenendo quest'analisi, bisognerebbe spiegare per quale ragione la presenza di un clitico di persona blocchi la realizzazione non di uno, ma di ben due altri clitici nel friulano centrale. Dunque, mentre nelle varietà occidentali come quella di Campone è solo il secondo clitico del nesso, ossia *l*, a non essere realizzato quando c'è un'incompatibilità con il clitico oggetto *lu/la*, nelle varietà centrali sarebbe l'intero nesso *a+l* a cadere, rendendo insufficiente la ragione fonologica. Si osservi il contrasto in (7)b vs. (7)d, qui ripetuti:

- (7) b. Mi ha rivade una letara (Remanzacco, ASIt, 1, 32)  
mi ha arrivata una lettera  
d. Lui *a*(\**l*) lu conos vs. *A*\*(*l*) ti vomp  
lui *a* (\**l*) lo conosce *a* \*(*l*) ti vede  
(Campone, Casalicchio & Masutti 2015: 120)

### 3.2 L'ipotesi di *al* come un clitico unico

La seconda ipotesi analizza *al* come un clitico unico. Essa prevede che gli effetti della negazione esemplificati in (6) non siano da attribuire al fatto che quest'ultima blocca astrattamente la realizzazione fonologica di un clitico; piuttosto, la presenza della vocale /o/ del clitico di negazione *no* provoca l'aferesi di una parte del clitico che la segue, ossia della vocale *a* di *al*.

Seguendo questa ipotesi, l'intero clitico *al* va collocato in una proiezione più bassa della negazione, mentre la testa Subj° non è fonologicamente realizzata, (come accade anche in italiano):

- (13) [CP [SubjP Mario [Subj' [NegP no [SCL *al* [ clitici oggetto [... ]]]]]]] (Friulano centrale)

Se (9) è suffragata da dati comparativi del friulano occidentale, (13) trova una controparte nel friulano carnico:

- (14) N *a l* du'arm (Manzini & Savoia 2005: 134)  
non *a l* dorme

A Forni di Sopra la presenza della negazione non provoca la separazione di *al* come in friulano occidentale. La vocale *a* alla destra della negazione potrebbe essere interpretata come (i) la parte vocalica del clitico *al*,<sup>14</sup> oppure (ii) la parte vocalica della negazione stessa, che a Forni di Sopra è *na*.<sup>15</sup>

<sup>14</sup> Si noti che in friulano carnico *a* e *l* formano comunque due clitici separati, poiché il clitico *a* appare da solo come espletivo:

(i) *A* 'maea (Forni di Sopra, Manzini & Savoia 2005: 106)

In effetti, se confrontiamo più nel dettaglio il comportamento di *al/a+l* in friulano occidentale e in quello centrale, notiamo che questo paragone appare inficiato da alcune differenze sostanziali tra i due gruppi di varietà. Per il friulano occidentale, l'analisi di *a+l* come nesso di due clitici indipendenti si regge sulle tre osservazioni esemplificate al § 3.2. In friulano centrale, invece, tutte e tre queste condizioni sono assenti:

- (i) il clitico espletivo in queste varietà è *al* e non *a* (3)b;
- (ii) non c'è nessun esempio concreto in cui *al* appaia separato dalla negazione o da altri elementi clitici (6)a;
- (iii) i clitici di terza persona al femminile singolare non presentano la *a* (che nelle varietà occidentali realizza imprescindibilmente il tratto di terza persona);<sup>16</sup> inoltre, in molte varietà centrali, la *a* non realizza nemmeno la terza persona plurale: questo tratto viene principalmente realizzato dalla vocale *e*, mentre l'uso di *a* è limitato a varietà isolate (vd. tabella 1).<sup>17</sup>

(3) b. *Al plu:f* (Nimis, ASIt, 2, 1)  
*al piove*

(6) a. *Nol compre mai nuie* (Nimis, ASIt, 2, 65)  
*non=l compra mai niente*

Per questi motivi, non c'è nessuna evidenza che la vocale *a* sia realizzata in una posizione diversa dalla *l*, né che i due elementi formino dei clitici indipendenti (il primo responsabile dell'assegnazione dei tratti di persona, il secondo di quelli di numero). Proponiamo dunque che la forma *no l* della negazione vada interpretata come *no'l*, con aferesi della *a*.

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*a piove*

<sup>15</sup> Nella varietà di Forni di Sopra, la forma piena del clitico di negazione è *na*. Si confrontino i due esempi:

- (i) N i duarmi (Manzini & Savoia 2005: III, 292)  
non i dormo
- (ii) Na tu duarms (*ibid.*)  
non tu dormi

La forma *na*, attestata alla seconda persona singolare, sembra suggerire un'evoluzione diacronica in cui la *a* del clitico soggetto *al*, più bassa del clitico di negazione, sia stata rianalizzata come parte della negazione. Il clitico di negazione *na* a Forni di Sopra sarebbe quindi il risultato di una grammaticalizzazione della forma '*no/n'* + *al*'. Non è dunque da escludersi che oggi anche l'esempio (14) sia analizzato come (iii):

- (iii) Na 'l duarm  
n+a l dorme

con la *a* rianalizzata come parte del clitico di negazione. Se quest'ipotesi fosse vera, non smentirebbe comunque la nostra analisi; al contrario, un tale processo di rianalisi diacronica mostrerebbe chiaramente come la *a* del clitico soggetto occupasse una posizione originariamente più bassa della negazione. E' inoltre da notare che, negli esempi (i) e (ii), anche i pronomi soggetto *i* e *tu* occorrono in una posizione più bassa del clitico di negazione; posizione che avrebbe potuto verosimilmente ospitare anche il pronome soggetto di terza persona *al* prima del processo di rianalisi.

<sup>16</sup> Fa eccezione, tra le varietà inserite nell'ASIt, solo la varietà di Palazzolo dello Stella (UD).

<sup>17</sup> Dato che questa *a* del plurale, nelle varietà in cui è usata, realizza anche il tratto [+plurale], e nel caso della 3. persona plurale femminile anche il tratto [+femminile], crediamo che essa non sia paragonabile alla *a* di Campone, dove questi tratti sono realizzati dal clitico basso *i* e *s*, rispettivamente al maschile e femminile plurale (vd. Casalicchio & Masutti 2015).

Oltre al diverso comportamento rispetto al friulano occidentale, c'è un'altra prova che va nella direzione della seconda ipotesi: in alcune varietà centrali la *a* di *al* non compare nemmeno se è preceduta dal complementatore:<sup>18</sup>

- (15) a. Ma kǫmę vū tu krōdi kę-l mwārdi (Ronchis, AIS VI, 1109, p. 357)  
           ma come vuoi tu credere che=(a)l morda  
       b. O crodevin che/ fos tard (Moimacco, ASIt 3, 13)  
           o credevamo che =(a)l fosse tardi  
       c. O crut che'l vidi telefonat Gianni (Moimacco, ASIt 3, 16)  
           o credo che=(a)l abbia telefonato Gianni

L'occorrenza della sola *l* quando il clítico è preceduto dal complementatore è difficilmente spiegabile pensando a un'incompatibilità come quella che si riscontra in diverse varietà italo-romanze per i nessi di clitici (vd. *supra*). Se quindi vogliamo dare una spiegazione unica dell'occorrenza della sola *l* con la negazione e con il complementatore, dobbiamo trovare un'ipotesi alternativa. A nostro parere, l'assenza della *a* può essere spiegata con ragioni fonologiche; tale assenza può essere analizzata come risultato di un processo più ampio, che prevede la caduta della *a* del clítico quando è preceduta da un elemento funzionale del CP terminante in vocale, sia esso il complementatore (15) o la negazione (6). Si tratterebbe dunque di un fenomeno limitato al friulano centrale, che alterna, nel caso della sequenza '*che* + *al*', con l'apocope – un fenomeno attestato anche nelle restanti varietà friulane.

Un'ulteriore prova per una spiegazione di questo tipo, che fa dipendere la mancata realizzazione della *a* da ragioni fonologiche, e non puramente sintattiche, proviene dai casi in cui il pronome soggetto *al* (o la sua variante *-ial*, si veda nota 2) è enclítico: in questo caso l'intero nesso (*-i*)*al* appare anche in presenza della negazione. Se la mancata realizzazione della *a* fosse dovuta a una qualche "incompatibilità" sintattica, ci aspetteremmo che la *a* cada anche quando il pronome è enclítico. Invece, diversamente dalla predizione dell'ipotesi 1, ciò non avviene, e l'intero pronome (*-i*)*al* è realizzato:

- (16) a. Cui no vuelial vigni:? (Nimis, ASIt 4, 38)  
           chi non vuole-*ial* venire?  
       b. Parcè no mangjial el meloç? (Qualso, ASIt 4, 36)  
           perché non mang-*ial* la mela

Per quanto riguarda invece l'incompatibilità di *al* con altri clitici, questo tipo di restrizione tra clitici soggetto e i clitici oggetto (o un loro sottogruppo) è attestata in diverse varietà italiane settentrionali; si vedano Cardinaletti & Repetti (2010a) per l'incompatibilità tra clitici soggetto e elementi interrogativi ("*wh*") clitici, Pescarini (2013) per il dialetto pesarese di Granarola di Gradara e Casalicchio & Masutti (2015) per Campone.<sup>19</sup> Visto che *al* in friulano centrale generalmente non occorre con nessun altro clítico di persona (con alcune marginalità, vd. Gaglia 2012), riteniamo che questa incompatibilità non dipenda dal fatto che i clitici soggetto e gli altri clitici competono per la stessa posizione. In questo caso, infatti, anche i clitici oggetto diretto e indiretto dovrebbero essere incompatibili tra di loro, ma questo non avviene:

<sup>18</sup> Per l'interpretazione del dato in (15)b-c bisogna tenere conto che a Moimacco il clítico soggetto, che solitamente è *al*, può apparire con l'allomorfo *el* in alcuni contesti. Non abbiamo evidenza di ciò invece nella varietà di Ronchis.

<sup>19</sup> Diversamente da quanto avviene in friulano centrale, però, a Granarola e Campone l'incompatibilità tra i clitici soggetto e oggetto è limitata ai casi in cui co-occorrono i due formativi *\*ll* (per es. *\*el la*), vd. Pescarini (2013: 52), Casalicchio & Masutti (2015: 120 n. 31).



- (17) (\**Al*) me lu ha podut portà in mattinada (Moimacco, ASIIt 1, 79)  
 (\**al*) me lo ha potuto portare in mattinata

Ci sembra più plausibile proporre dunque che il clítico soggetto *al* sia generato in una posizione più bassa e debba transitare per le varie proiezioni dedicate ai clíticos di persona. Se queste sono già occupate, *al* non può essere realizzato fonologicamente, e i tratti di persona sono realizzati semplicemente dal verbo. Questa proposta è in linea con quanto proposto, tra gli altri, da Poletto (2000), che discute prove a sostegno del fatto che i clíticos possano muoversi all'interno del campo dei clíticos da una posizione più bassa a una più alta; anche Roberts (2010) propone che i clíticos soggetto siano generati nello Specificatore del vP e poi cliticizzino a una testa T (pur ipotizzando un tipo diverso di movimento).

Infine, ci sono altre due osservazioni che ci fanno propendere per l'analisi di *al* come clítico unico. Innanzitutto, il clítico *al* sembrava formare un clítico unico anche nel friulano rinascimentale, con la differenza che in quel periodo *al* era più alto della negazione (Vanelli 1998b: 73 s.). Gli esiti attuali in friulano centrale possono quindi essere ricondotti a un'inversione tra la negazione e il clítico post-rinascimentale *al*; un fatto comune in molte varietà dell'Italia settentrionale (Vanelli 1998a, Poletto 2000 *et al.*) e che in friulano è avvenuto anche con il clítico di 2. persona singolare *tu*.

Il secondo tipo di evidenza per la nostra analisi viene da un'osservazione di Chinellato (2005), che riporta come alcuni pazienti afasici del vicentino (in cui esiste una *a* vocalica separata dal clítico soggetto) producano la *a* ma non il clítico soggetto; in friulano centrale, invece, Fabbro (2001) aveva mostrato come i pazienti afasici eliminassero l'intero clítico *al*:

- (18) a. El frut bev (afasici friulani; Fabbro 2001: 207)  
 il bambino beve  
 b. El frut *al* bev (target)  
 il bambino *al* beve
- (19) a. Ti a bevi (afasici vicentini; Chinellato 2005: 32)  
 tu *a* bevi  
 b. Ti a te bevi (target)  
 tu *a te* bevi

In conclusione, ci sembra che l'ipotesi di *al* analizzato come un clítico unico sia superiore alla luce dei dati, sia considerando quelli provenienti dal friulano centrale sia operando un confronto interlinguistico con altre varietà friulane e dell'Italia settentrionale.

#### 4. Conclusioni

In questo studio si sono analizzate le proprietà sintattiche del clítico soggetto di 3sing. *al* in friulano centrale. Confrontandone i dati con quelli di varietà carniche e occidentali, è emerso che *al* è soggetto a forte microvariazione: mentre in friulano occidentale *al* si comporta come un nesso di due clíticos portatori di tratti indipendenti, in friulano centrale esso va analizzato come un clítico unico, collocato in una proiezione più bassa del clítico di negazione. La nostra proposta poggia, in particolare, sul comportamento sintattico che *al* assume in presenza di altri elementi clíticos.

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## On the syntax of Pantiscu aspectual subject clitics

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**Abstract:** In this paper we will address the unusual behaviour of subject clitics (sbj.cl) in Pantiscu, which express a progressive aspect (Prog) value; to account for their puzzling shape, we will proposed that sbj.cl can be associated to aspectual features, following Manzini & Savoia (2002). To explain the non-compositional behaviour of the Pantiscu Prog periphrasis, we will resort to a phrasal spell-out mechanism, assuming that the sbj.cl plus the lexical verb are spelt-out (as a whole) as ProgP. Finally to account for the fact that an aspect particle can agree with the external argument in phi-features we will assume, along the lines of Kalin & van Urk (2015), that an imperfective projection (here Prog) can act as a phi-probe. Alternatively, we can assume that aspectual Prog features are attracted by the TP yielding agreement (Manzini & Savoia 2002).

**Keywords:** *subject clitics, aspect, imperfective, progressive, phrasal-spell-out.*

## 1. Introduction

In recent work Loporcaro (2012, cf. Loporcaro *et al.* 2010, cf. also Benincà 1992, Tropea 1975 for the original observation) has described a very unusual pattern in the semantic value expressed by subject clitics (sbj.cl) in *Pantiscu*,<sup>1</sup> namely a progressive aspect (Prog) value. In previous literature concerning the features expressed by sbj.cl in other Italo-Romance varieties (cf. e.g. Cardinaletti & Repetti 2008: 549, Rizzi 1993 [2000]: 86, Manzini & Savoia 2005, I: 69–196, among many others), they have been considered as encoding the inflectional categories of person, number and gender. Mood/Aspect/Tense *shifts* related to the presence/absence of sbj.cl were previously unknown in the literature on Romance languages and elsewhere.<sup>2</sup> Consider the *Pantiscu* examples in (1), taken from Loporcaro (2012: 755) and Loporcaro *et al.* (2010: 101).

- (1) a. 'Id:z-I 'part-onu  
3-PL leave.PRS-3PL  
'they leave' or 'they are leaving'  
*(Unmarked for aspect values)*
- b. 'Id:z-I 'sta-n:u par't-en:u  
3-PL stay-PRS.3PL leave-GER  
'they are leaving'  
*(Progressive aspect)*
- c. 'Id:z-I d:z-I 'part-onu  
3-PL 3-PL leave.PRS-3PL  
'they are leaving'  
*(Progressive aspect)*

<sup>1</sup> Pantiscu is a Sicilian dialect spoken on the island of Pantelleria, which is located between the coast of Sicily and the coast of Tunisia.

<sup>2</sup> Potentially, a similar behaviour can be assumed for a pronominal preverbal item (the so called ‘Tense Ezafe’) of the Bahdini dialect of Kurmanji Kurdish (Iranian), which Haig (2011) connects to the expression of tense/aspect. In general, however, Franco *et al.* (2015) have shown that this item can combine with a full set of different aspectual forms of the verb, excluding a specialized contribution of its own to the aspectual interpretation of the VP.

- (Habitual aspect)*

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instance in the classic work of Brandi and Cordin (1981).<sup>4</sup> Nevertheless, as already pointed out, the presence of *sbj.cl* in Pantiscu is constrained from a semantic viewpoint and necessarily expresses the feature Prog.

Actually, clitics seem to play a role in lexicalizing aspectual information in Romance. In Spanish, reflexive clitics are markers of telicity<sup>5</sup> (Tenny 1987, Sanz & Laka 2002, among others), with proper  $\phi$  features agreeing with the subject. The presence of reflexive clitics establishes a relation between the agent and the event: while the reflexive clitic *se* is compatible with a telic interpretation (7) its absence implies a preferential atelic reading (6), as shown by the ‘frame’ adverbial modification test (Dowty 1986).

(6) *Pedro (\*se) leyó un libro durante tres horas*  
 ‘Pedro read a book for three hours’

(7) *Pedro \*(se) leyó un libro en tres horas*  
 ‘Pedro read a book in three hours’

Both Pantiscu (subject) and Spanish (reflexive) clitics entail a marked aspectual reading (progressive and telic, respectively) and both show overt  $\phi$  features, suggesting that aspectual projections could carry a  $\phi$ -probe, as assumed in Kalin & Van Urk (2015). In this paper, we argue that Pantiscu subject clitics enter the derivation as the head of ProgP, as part of a stored lexical structure. This structure is liable to a process of spell-out which gives a non-compositional Prog interpretation. The pronounced form of the clitic is shaped by Agree between the clitic in Prog and the pre-moved subject in Spec,TP. An alternative account along the lines of Manzini & Savoia (2002) is also sketched.

## 2. The syntactic characterization of Italo-Romance subject clitics

The literature on Italo-Romance *sbj.cl* has addressed almost exclusively Northern Italian dialects (NID), because Pantiscu represents, up to now, the sole known Southern Italian variety in which the presence of *sbj.cl* is attested.<sup>6</sup> *Sbj.cl* are considered as items realizing the Inflectional head (independently from the verbal morphology) so that the Inflection can license a null subject, taken to be invariably *pro* (see, e.g., Brandi & Cordin 1981, Kayne 1983, Rizzi 1986, Sportiche 1999, Poletto 2000, among many others). Rizzi (1993 [2000]) comparing NID and French - that is assumed to standardly host the clitic in a Spec, Infl position - elegantly accounts for a ‘cartographic model’ of Infl, arguing that an inflectional position, higher than the inflected verb, in declarative sentences must be assumed for NID *sbj.cl* to explain for their inversion in interrogatives.

Cardinaletti & Repetti (2008) depart from this line of research in assuming that obligatory NID *sbj.cl* are to be interpreted, as in French, as the true subjects of the clause, moved in Spec, TP from the thematic position. This seems not to be the case of Pantiscu in which *sbj.cl* surface only when Prog has to be signalled. Namely, it is likely that Pantiscu

<sup>4</sup> Note that crucially for such a characterization, Pantiscu allows null subject unlike, for instance, French (e.g. *'c2.vi* vs. *il pleut*, both ‘it rains’).

<sup>5</sup> Similar constructions are found in some northern Italian varieties (as suggested by an anonymous reviewer for Romagna varieties). We report here Spanish data due to their robustness.

<sup>6</sup> Maybe, it would be more correct to say that subject proclitic are unknown in Southern Italian varieties, due to the facts that for instance (second person) subject enclitics are attested in Sicilian (cf. Cruschina & Rinollo 2013). Furthermore impersonal subject clitic pronouns are found in upper Southern Italian varieties (D’Alessandro & Alexiadou 2006).

sbj.cl enrich the Infl layer but not that they correspond to subject positions.

An interesting proposal concerning the status of NID sbj.cl has been put forth in Manzini & Savoia (2002) (henceforth: M&S). Within their model, sbj.cl is able to *lexicalize* an aspectual feature.<sup>7</sup> They assume theta assignment as shaped in association of an aspectual feature on the verb with D(efiniteness) features, allowing the item bearing D features (the sbj.cl) to be interpreted as an argument. Following Borer (1994), they label *Originator* the aspectual feature associated to the thematic role of the agent, and in turn to the sbj.cl. A potential problem is that a Prog value — when encoded *via* a nominal device — is normally associated, from a cross-linguistic viewpoint to patient-like thematic roles, which are assumed to correspond to the aspectual feature of *Measurer* (cf. Borer 1994, Arad 1998, Ramchand 2008). Consider Finnish in (8) (Krifka 1992, Kiparsky 1998).

- (8) a. Lapsi söi ***kalan*** kun Maija tuli silään.  
 child ate fish.ACC when Maija came in  
 ‘The child ate a/the fish when Maija came in’  
 b. Lapsi söi ***kalaa*** kun Maija tuli silään.  
 child ate fish.PART when Maija came in  
 ‘The child was eating a/the fish when Maija came in’

In (8b), the partitive case is used as a Prog encoding device and is associated with the internal argument (cf. Aikhenvald 2008 for cross-linguistic data). The use of partitive as a Prog is linked to the fact that Prog involves a (partitive) *measuring* operation in the domain of events (cf. Bonomi 1997). It seems that Prog constructions can be derived either by the eventive modification of the predicate (*measurer*) or the overt morphology of the subjects (*originator*). The typological literature (Bybee et al. 1994), in fact, notes that Prog is found in many languages in locative/unaccusative structures, in which the subject is centrally located (Hale 1986; Mateu & Amadas, 2001) within the timeframe denoted by the event expressed by the *vP* (Laka 2006). So, the overt morphology of the originator can have a central role in determining a Prog reading, crosslinguistically. M&S proposal is crucial to the interpretation of the Pantiscu facts, in that they have shown - in formal terms - that the heads hosting clitics are devoted to *lexicalize* the aspectual features of the verb, which are linked to the central location of the subjects within the event expressed by V. In what follows we will try to give an explanation of the Pantiscu data mainly basing ourselves on recent work of Harwood (2014) and on a phrasal spell-out machinery (cf. Starke 2009, 2011, Neeleman and Szendroi 2007, Caha 2009, among others).

### 3. The ‘Progressive phase’, phrasal spell-out and agreement

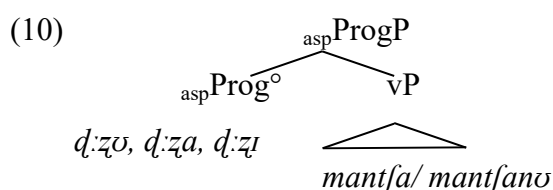
Once assumed that sbj.cl can be associated to aspectual features, broadly in the spirit of M&S (2002), we can try to delineate the derivational path they enter. Assuming the existence of a dedicated projection encoding Prog (cf. Harwood 2014), we may consider the subject clitic to be the X° head of a functional XP that is merged in a position higher than the position accessed by the lexical verb along the classic analyses of Brandi and Cordin (1981), Rizzi (1993 [2000]), De Crousaz and Shlonsky (2003), among others. Such analysis is also

<sup>7</sup> M&S (2002) argued for the existence of a D functional projection, which immediately dominates the inflectional node and is morphologically realized by the sbj.cl. Lexical subjects are realized in Spec, D and a head-Spec relation is assumed to explain agreement in phi-features of the clitic with the lexical subject. Parametrically, the element realizing D can be a sbj.cl, as in NID, a full DP as in English, or the finite verb, as in standard Italian and Southern Italian varieties.

favoured by the data in (9). We collected data from three *Pantiscu* native speakers (age range 66-84). In (9) the Prog sbj.cl co-occur with (non dislocatable) quantificational subjects.<sup>8</sup>

- (9) a. 'n:ʊd:zʊ      **d:zʊ**      'mantʃa /      'vɛ:ne  
 nobody      3sg      eat.prs.3sg /      come.prs.3sg  
 'Nobody is eating / coming'
- b. kwar'cʊnʊ      **d:zʊ**      mantʃa /      'vɛ:ne  
 someone      3sg      eat.prs.3sg /      come.prs.3sg  
 'Someone is eating / coming'

The X° subject clitics of *Pantiscu* bears an uninterpretable inflectional feature [*uT*] valued for Prog aspect [*uT*: Prog] and in order to check this feature, the sbj.cl lands/merge in Prog°. Once in Prog°, the sbj.cl is able to check its feature and is spelt out in this position. A rough representation is the one sketched in (10).



At this point, there are at least two questions to be tentatively answered or indeed simply posed: (i) Why are *Pantiscu* subject clitics associated *only* to Prog and *not* to other aspectual values? (ii) Why — despite encoding a Prog value — do they display agreement with the subject in phi-features?

To answer the first question we may assume, following Harwood (2014) that Prog aspect is *unique* amongst aspectual forms: it is part of the clause-internal Phase (unlike Perfect and all the higher functional devices hosted within the CP/TP phase). The marking of the role of the *originator* is, in fact, instantiated within the vP phase. We should now consider that aspectual particles are commonly able to lexicalize a given aspectual head and can work compositionally (cf. Aboh 1996, 2004; Cinque 1999). Consider the examples in (11) from *Gungbe*.

- (11) a. Sèna **tò** kiklo móto lo  
 S. PROG wash car the  
 'Sèna is washing the car.'
- b. Sèna **ná** **tò** dudu lesi lo  
 S. FUT PROG eat rice the  
 'Sèna will be eating the rice.'
- c. Àsíba **ná** **nɔ** **tò** kpikpon vi lé go  
 A. FUT HAB PROG take care of the children  
 'A. will frequently be taking care of the children.'

*Gungbe* (Aboh 1996, Cinque 1999: 64-65)

<sup>8</sup> Following Cardinaletti & Starke (1999), Corver & Delfitto (1999), Panagiotidis (2002) (cf. Arregi & Nevins 2012 on Basque), *Pantiscu* sbj.cl enter the derivation where referential and pronominal DP are standardly merged, as specifiers of vP. The clitics then move to an intermediate specifier (XP) to finally attach itself to the closest c-commanding head within the Inflectional layer, which in the specific case of the *Pantiscu* clitics would be Prog°. In any case, following this view, the syntactic subject, either a strong pronoun or a full DP, must be analyzed as a left-dislocated DP, contra the data in (9).



In (11a) the particle *tò* marks Prog aspect, in (11b) *tò* interacts with the future particle *ná* and in (11c) *tò* works compositionally both with the future particle and the habitual morpheme *nɔ*. Such compositionality is banned in Pantiscu, and this fact possibly weakens the (reasonable) idea that they host the head of Prog, as shown in the representation in (10). Consider the examples in (12) where the *sbj.cl* does not show up with tenses other than *plain* present and imperfect and cannot interact with habitual items (cf. Loporcaro 2012: 758ff for the full set of constraints on Pantiscu pronominal Prog).

- (12) a. *'id:z-ʊ (\*d:zʊ)* *'vin:-ɪ*  
 3-MSG PROG come.PST-3SG  
 'he came'
- b. *a stʊ pa 'ɪ:se ʊ 'tempʊ fa ʃkɪfɪ:ʊ pɪ 'k:ɪ*  
 in this village the weather is disgusting because  
*(\*d:zʊ) ' cɔ:v-ɪ 'sempe*  
 prog rains always  
 'In this village the weather is disgusting because it always rains'

Hence, as already noticed in Loporcaro (2012: 767) who proposes an *externalist* explanation of Pantiscu's data based on grammaticalization theory:

"Prog meaning in the Pantiscu periphrasis does not result compositionally from the meanings of its parts [...] since the verbal form in itself does not convey this aspectual meaning (the imperfect tense does signal imperfective aspect, though not specifically Prog, whereas the present is aspectually unmarked, [...]) and neither of course is it conveyed by the pronominal clitic itself."

A solution to the 'compositionality' issue may be to assume that the Pantiscu Prog periphrasis possibly behaves (*sensu lato*) like idioms (of the *kick the bucket* type), which are usually defined as (series of constituents) for which the interpretation is not a compositional function of the formatives of which they are composed.<sup>9</sup> Jackendoff (1997, 2002) assumes that idioms are conceived as constructional, namely as complex lexical items whose meaning is not syntactically determined, and has to be retrieved at the syntactic structure – conceptual structure interface component (contra this proposal see the compositional account of Marantz 1996, cf. also Mateu and Espinal 2007: 35-36). Specifically, Jackendoff argues that not only individual lexical items but also chunks of syntactic structure (e.g. idioms) can be listed in the lexicon of a given language, as shown in (13) (cf. also Harwood 2014).

- (13)
- ```

      VP      > die
     /  \
  kick /   \ DP
      /     \
    the /     \ NP
        /       \
       the       bucket
  
```

<sup>9</sup> Note that the same proposal may in principle be formulated for standard Italo-Romance 'stare + gerund' (stay + gerund) or 'andare + gerund' (go + gerund) aspectual periphrases (cf. Squartini 1998; cf. Bertinetto & Delfitto 1996, Bertinetto 1997). Progressives are, in fact, typologically found with idioms which bring out the isomorphism between progressive and spatial location (Bybee et al. 1994). Such extension is beyond the scope of the present work.

Nanosyntax (cf. Stark 2009, 2011, Caha 2009) expresses the multi-word and multi-terminal aspect of idioms directly – by simply storing the entire constituent (e.g. [VP = *kick the bucket*]) in a lexical entry via the Phrasal spell-out device.<sup>10</sup> Quite Interestingly, Svenonius (2005; cf. Harwood 2014) has noticed that there seems to be a rigid partition between the vP and TP domains with regards to idioms, namely verbs seem to regularly form idioms with their arguments and other material contained within vP, but they are unlikely to form idioms with material generated outside of it. Nevertheless, quite puzzlingly, there are many idioms which are reliant upon Prog aspect, as in (14), adapted from Harwood (2014). Prog seems to be unique in this regard.

- (14) a. XP<sub>subj</sub> be dying to VP = XP is keen to do something.  
 b. Bob is dying to meet you = Bob is keen to meet you.  
 c. Bob has died to meet you ≠ Bob has been keen to meet you.

The chunk in (14a) corresponds to the idiomatic interpretation ‘X is keen to do something’, as illustrated in example (14b). Without the presence of Prog aspect the idiomatic reading is lost as in (14c), where the interpretation, if any, must be literal. With a phrasal spell-out tool, we can simply store the entire <sub>ASP</sub>Prog constituent (e.g. [<sub>ASP</sub>Prog = *XP<sub>subj</sub> be dying to VP*]) in a lexical entry. Now, if non-compositional periphrases of the Pantiscu pronominal progressive type are *kind of* idioms, on the basis on phrasal spell-out machinery it is licit to assume that they enter the lexicon as full chunks of structures in a *constructionist* fashion (cf. Jackendoff 1997, Hale & Keyser 2002, Starke 2009, among others). Hence, following this perspective, the Pantiscu Prog periphrasis, is stored as in (15).

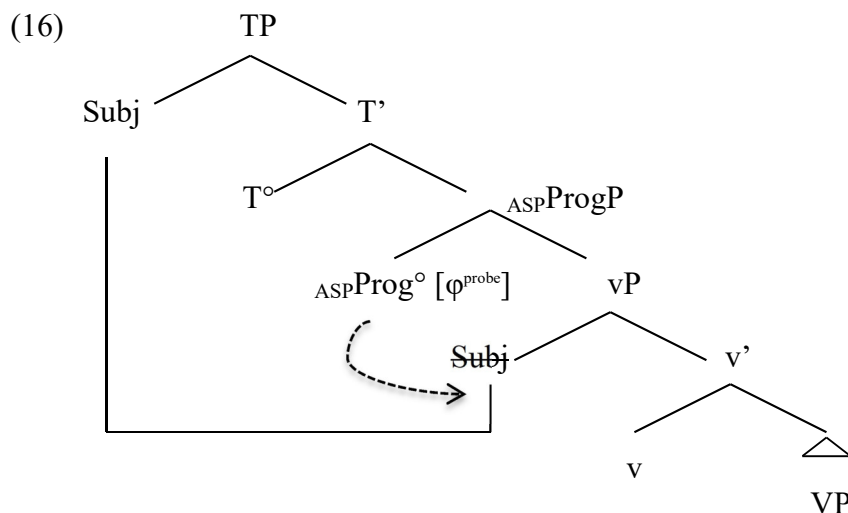
- (15) [<sub>asp</sub>ProgP [vP [VP]]] > spells out as *Sbj.cl + lexical verb*

The availability of a Phrasal spell-out mechanism is enhanced by the assumption that Prog aspect is part of the clause-internal phase, as shown in Harwood (2014, cf. also Bošković 2014), once we assume broadly along the lines of Phase theory (Chomsky 2001, Kratzer & Selkirk 2000) that spell-out is restricted to a given phase domain. Within such a phase domain, other syntactic operations, like the *event identification* of the originator (Kratzer 1996) apply. Event Identification is defined by Kratzer (1996) as a recursive mechanism involving the external argument and the VP. It relates the external argument introduced by *v* or by other aspectual heads to the VP via an identification of the event variable of the embedded predication. Roughly, Event Identification allows to add further aspectual information to the event described by the verb.

Coming to the second question, namely how it is possible for an aspectual item to agree in phi-features with the subject, we may assume — following recent work by Kalin and Van Urk (to appear) on Senaya (Neo-Aramaic) — that Prog is special in that a phi-probe can be introduced by an imperfective (*vs.* perfective) Asp projection. In Pantiscu, Prog is likely to carry a phi-probe (16): since Prog is a structurally closer c-commander of the subject than T, the subject is targeted by the phi-probe on Prog instead of the phi-probe on T: the agreeing subj.cl. When T merges and probes, it does not find a matching goal, since the subject has already agreed with Prog.<sup>11</sup>

<sup>10</sup> We follow Nediger (2015, cf. Williams 2007) in assuming that a Distributed Morphology approach to idioms, forcing the spell out of terminal nodes only, is at odds with “*our intuitions about the distributivity of meaning*” inherent to idiomatic expression.

<sup>11</sup> Following Kalin & Van Urk (2015) we propose that the subject moves around the phi-probe on T, to spec-TP, before T probes. Furthermore, following Kalin & Van Urk (2015) and Preminger (2011) we assume here that a failure of agreement does not give rise to ungrammaticality (i.e. a probe attempts to agree, but the derivation



An alternative analysis could involve the role of the subject as the *originator*, aspectually (Manzini & Roussou 1997, M&S 2002). M&S (2002) assumes that thematic, hence aspectual, features are weak, and do not therefore need to be satisfied as soon as they are introduced within the derivation. The subject DPs, in fact, are merged to satisfy strong features such as D(efiniteness). So, following Manzini & Roussou 1997, the originator (Or) is not a strong property, and then *id:z-I* is merged directly into [Spec, TP] to satisfy the strong D-feature of T (17).

- (17) [TP '*id:z-I* T [ASPProg-OrP AspProg Or [VP '*part-onu*]]]  
 'they leave' or 'they are leaving' (unmarked for aspect values)

(17) simply includes a covert process of feature movement, whereby Or is attracted to the checking domain of TP: every DP is associated with a [-interpretable] Asp feature that needs to be checked. It is in order to check this feature that a [+interpretable] Asp moves to the checking domain of TP. By this mechanism of feature movement, the Or role is conveyed to the lexical DP subject in (18).

- (18) [TP '*id:z-I* [Or- T] [ASPProg-Or AspProg <sub>Or</sub> [VP '*part-onu*]]]

When we have an overt element such as the subject clitic in Pantiscu, the Asp feature is checked overtly by the subject clitic (19).

- (19) [TP '*id:z-I* [ASPProg-Or *d:z-I* Or [VP '*part-onu*]]]

As M&S (2002) suggest, the subject clitic of Northern Italian dialects is an inflection, associated with a categorial D-feature that attract an Asp role. If the Asp feature is weak it does not of course require overt satisfaction. At the same time, we can assume that like all D-features it attracts Asp. This will mean that Asp itself can then take along the [-interpretable] phi-features of T yielding the desired agreement effect the subject DP and the subject clitic as a result (20).

- (20) [TP '*id:z-I* [*d:z-I*] [ASPProg-Or *d:z-I* <sub>Or</sub> [VP '*part-onu*]]]

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does not crash if agreement is unachievable. Further notes that Agree is not banned within lexicalized expressions (cf. e.g. *he kicks the bucket/he kicked the bucket*).

#### 4. Conclusion

In this brief paper we have addressed the very unusual behaviour of *sbj.cl* in Pantiscu; to tentatively account for their puzzling shape, we have proposed that *sbj.cl* can be associated to aspectual features (M&S,2002). To explain the non-compositional behaviour of the Pantiscu Prog periphrasis, we have resorted to a phrasal spell-out tool, assuming that the *sbj.cl* plus the lexical verb are spelt out (as a whole) as ProgP. Finally to account for the fact that an aspect particle can agree with the external argument in phi-features we have assumed, following Kalin & van Urk (2015), that an imperfective projection (here Prog) can act as a phi-probe. Alternatively we may assume that aspectual Prog features are attracted by the TP yielding agreement (M&S 2002).

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## Mapping the Syntacticisation of Discourse: The case of Sentential Particles

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**Abstract:** This article revisits the issue of how independent items become Sentential Particles (SP). Sentential Particles are a subclass of Discourse Markers (DM) that relate to typical properties of speech acts (veridicality, source of information, commitment, expectedness, information status). DM from French, English and Italo and Rhaeto-Romance are compared and contrasted in order to assess their differential behaviour and identify the steps along the path of SP syntacticization. The criteria identified to define these steps comprise relation of markers to literal interpretation, sensitivity to speech act types and main clause environments, positional variability, complementary distribution and obligatoriness. It is proposed that an opaque interpretation, complementary distributions with other sentential markers and obligatoriness constitute the successive steps towards full syntacticisation. More generally, this work shows that syntacticisation involves syntax and pragmatics proceeding in a parallel fashion in the progressive fixation in position and pragmatic contribution of the SP.

### 1. Introduction

Discourse Markers have been the object of considerable interest in the last decades (i.a. Schiffrin 1988, Jucker et Ziv 1988, Fraser 1999, Blakemore 2002, Dostie 2004, Fisher 2006, Degand et al 2013). Discourse Markers is the umbrella term for the (uses of) items that communicate the relation between the speakers, or between the speakers and the clause; different morpho-syntactic categories are concerned such as Sentential Particles (*She indeed completed the programme*), sentential adverbials (*He has won, hopefully*), interjections (*Wow, you're on time!*), and discourse management elements (*Uh huh*), to the exclusion of connectives that have to do with relations between clauses. They raise a number of conceptual issues, regarding their interpretation, their syntactic status, and the general processes of their evolution. This can be illustrated by reference to Sentential Particles (SP), a subset of Discourse Markers that take the morphosyntactic form of particles, that can entertain a close syntactic dependence to a clause, and whose interpretation is often described as ineffable. In the following, the SPs intuitively comment on the relation between the speech act and the hearer.

- (1) Sit down then.
- (2) Asseyez-vous donc!  
Sit        2SP DM  
Please sit down.
- (3) Sentete do \*(mo)! (Rhaeto-Romance; Poletto and Zanuttini, (51a))  
sit    down SP  
“Sit down!”

The exact nature of their interpretation and of their syntactic role is unclear. There is an ongoing debate about how SP arise diachronically, whether the process is one of grammaticalization or of pragmaticalisation (Traugott 1995, Hansen and Rossari 2005), and whether these two processes are related (Dostie 2004, Badiou-Montferran and Buchi 2012). Under a grammaticalization interpretation, a lexical item like English *then* ‘at that time’ that has acquired a grammatical consequence reading equivalent to ‘therefore’ has further



developed the ‘invitation’ value in (1). What elements or meaning are lost from the ‘time’/‘consequence’ to the ‘invitation’ reading, and whether these are related to specific syntactic positions (initial in temporal (*And*) *Then sit down* and final in invitation *Sit down then*) are questions that are still to be resolved for this SP and SPs in general. A related question is whether the process must involve a progressive phonological erosion of the lexical material of the element undergoing the process. No evidence of erosion was found for the Rhaeto-Romance SP *mo*, which is phonologically identical to the adverb *mo* meaning ‘now’ of the Southern Italian dialects. Whether it is comparable to grammaticalization or not, the process should also allow for SPs to become full syntactic markers as with compulsory *mo* in (3) as compared to optional *donc*.

The purpose of this paper is to propose a novel perspective on the diachronic process of evolution of SPs. While case studies are provided in the literature, they are up against issues of documentation: SPs are found in interactional language, which is represented in a particular subset of written historical material, which do not necessarily present a reliable picture of actual usage. These documentation issues may reduce the ability to assess the diachronic interpretation of items and the range of their syntactic behaviour. That is why we are using a comparative methodology contrasting SPs in some contemporary language varieties. It rests on the standard uniformitarian principle (Labov 1994: 21): the same pathways and driving forces structure synchronic and diachronic variation. Our proposal is that SP develop from a process of syntacticization (Haegeman and Hill 2013) by which the interpretation and syntax of markers becomes increasingly fixated (Abraham 1991) to reflect typical interpretative and formal properties of speech acts. This process does not involve loss of lexical value *per se* as in grammaticalization, but rather the alignment to abstract typical speech act properties and the associated syntactic projections. Therefore, one objective is to identify (some of) these typical speech act properties. Another is to develop diagnostics of increasing degrees of syntacticisation. The diagnostics that we test are the following ones: a) the opacity of the interpretation with respect to other interpretations of the item, b) the degree of positional variability, c) the sensitivity to main and subordinate clause type, d) the complementary distribution with other sentential markers such as negation, and the e) degree of obligatoriness. These criteria once measured against the data will in turn help identify the critical steps of the evolution process.

The paper is organised as follows. In the first section, we consider the typical properties of speech acts by contrasting the interpretation of some interrogatives, imperatives, exclamatives and declaratives. A number of case studies follows that establish how markers that relate to these fare in interpretative and formal terms. The conclusion summarises findings and spells-out the significance of a syntacticization process of SPs for the understanding of language change.

## 2. A pragmatic framework for Sentential Particles

Discourse markers in general, and Sentential Particles in particular, are typically ineffable. When asked, speakers find it difficult to provide a definition to markers such as *look*, *indeed*, or *obviously* as used in the following.

- (4) Look, she’s the person in charge.
- (5) She’s indeed the person in charge.
- (6) She’s obviously the person in charge.

There is therefore a need to consider the typical notions that items intuitively belonging to the class of Sentential Particles recurrently communicate. Such notions are considered in this section, that proceeds to illustrate them by reference to cross-linguistically stable variation in the instantiations of the three speech act types of assertion, exclamation and interrogatives. The reason for this illustration choice is that the notions necessary to define sentence types appear to be those communicated by Sentential Particles (Heim et Wiltschko 2017, Wiltschko *et al.* 2016, Zeevat 2000). While we have relied on a wide range of different theories, approaches and studies, only some central references will be cited here, and no exhaustive review of the field will be attempted, as this is clearly beyond the scope of this work (see Gosselin 2010 for such an attempt).

Of the five notions that seem necessary to contrast and compare Sentential Particles and sentence types, one is veridicality. Veridicality is the property by which the proposition expressed by a sentence is actualised or not (Giannakidou 2015). A positive assertive in the episodic perfective past or a positive exclamative are typically actualised and therefore veridical, whereas negative assertives or interrogatives are typically not.

- (7) I was there yesterday.
- (8) You're there!
- (9) If Paula calls, I'm not here.
- (10) Hello, are you there?

Typical linguistic reflexes of (non-)veridicality comprise the Romance and Slavic subjunctive, and polarity items.

Whether it be actualised or not, the proposition has a source. The source of a proposition is the entity that relays it (on this, see the work by Oswald Ducrot and followers, Goffman's notion of Footing, and the Appraisal framework developed by White, e.g. White 2015). The entity in question is generally the speaker of the speech act. This is the case of the examples cited so far in this section. This is so obvious as to bear the question of whether it need be mentioned at all. The reason why it does is the existence of other configurations. One subtype is for the speaker to present information as being the result of an inferential process as in (6) above and the illustrations below, relating to evidentiality (Aikhenvald 2004):

- (11) Evidently, he's at home(. A green Prius is parked in front of the house).
- (12) He must be at home(. The lights are on).

The information can also be presented as coming from another speaker, as in citational sequences (13):

- (13) You say "I'm here for you", but I wonder if you really are.
- (14) Whether he's here? Let me check.

or through indirect speech reformulations:

- (15) You're apparently there for me, but are you really?
- (16) Paul asks me to tell you that he's not here.

Sentential information can have collective sources, as with proverbs, clichés and various institutional utterances the creation of which cannot be attributed to a single individual.

- (17) Time heals all things.

- (18) It's just one of those things.  
(19) I have packed these bags myself. (On an airport form)  
(20) I believe in one God, the Father almighty, creator of heaven and earth. (Christian creed)

Reportative basque *omen* (Korta and Zubeldia 2014) and Japanese quotative *-tte* (Hirose and Nawatab 2016) illustrate sources other than the speaker, and the grammatical system of e.g. Turkish and Inuktitut morphologically mark inferred propositions.

One reason why the source of information matters is that it can impact on the commitment with respect to the information (i.a. Gunlogson 2008). Commitment is the stance of the speaker with respect to the proposition that she is uttering, and whether she believes it to be the case, is neutral with respect to it, or distances herself from it. The default case for positive assertive and most exclamationatives is for the speaker to be committed to the sentential information when she is the source of it (Nölke 2017). Thus, Moore's paradox below leads to incoherence because the same speaker both commits to the veridical assertion that she is the source of and then distances herself from it (Krifka 2017).

- (21) ?? Paul is here, but I don't believe it.

Such a configuration is however perfectly acceptable when the source of the first proposition is a speaker other than the one expressing doubt:

- (22) You claim that Paul is not here, but I don't believe it.  
(23) Apparently, Paul is not here, but I don't believe it.

No commitment is generally expressed in ordinary information-seeking interrogatives,

- (24) Does it rain a lot in Normandy?

although commitment from the speaker is found in biased questions.

- (25) Doesn't it snow a lot in the Dolomites?

The commitment of the speaker to the underlying proposition of the inverse polarity allows the interlocutor to object with "That's not true", as with simple assertives, and unlike with ordinary interrogatives.

- (26) - Doesn't it snow a lot in the Dolomites?  
- That's not true!  
(27) - Does it rain a lot in Normandy?  
- ? That's not true!

This suggests that commitment is central for the understanding of biased questions (e.g. Farkas and Bruce 2010; see also Hansen 2017). That is, the presupposed polarity of answers thus asymmetrically depends on commitment.

The commitment and source of information are about the relationship between a proposition and its speaker. The information status of a proposition concerns its accessibility to the hearer. Accessibility defines the given, discourse-old status of (part of) a proposition. It can be achieved explicitly by (part of) a proposition having been used in so many words in the antecedent context, with echo questions such as *Paul asked you to tell me what?* And

*Whether he's here?* Another way to achieve discourse-old status is through accommodating constructions and inferential relations, as with biased questions (for criteria and illustrations, see Larrivé 2012 and references therein). Discourse-new status is that of a (part of a) proposition that is not accessible to the hearer at that point in discourse. Informational status is encoded by various marked negative and interrogative configurations in languages of the world (e.g. Blaxter and Willis 2017 and references therein for negatives).

One more notional category is regularly communicated by some clause types and Sentential Particles is expectedness. This is illustrated by propositional high degree (as in exclamatives), aspectual suddenness (as in miratives, DeLancey 2001), and emphasis (evoked by a host of Discourse Markers in e.g. German). The reason not to have these depend from a simple notion of degree is provided by Merin and Nikolaeva (2008) who have demonstrated that whereas from unexpectedness one can derive degree effects for exclamatives (*This is good!*, implying *very good* rather than *just about good*), degree cannot derive unexpectedness, and high degree does not characterize all exclamatives (as in *Paul is gone!*). Because such factors combine with both discourse-new and discourse-old propositions, it cannot be a subcategory of discourse status.

From that perspective, the principal purpose of Sentential Particles is to assess a proposition in relation to reality (veridicality), its speaker (source of information, commitment, expectedness) and its hearer (information status). Sentential Particles spell out typical properties of the structural and interpretative constitution of speech acts. The proposed properties are a response to the methodological issue of the intuitive ineffability of Sentential particles. The proposal would be invalidated if it were found that in some languages, some of the dimensions were never expressed by particles patently relating to the speech act, or if other dimensions were systematically relevant.

One important question that arises is the way in which these notions relate to the syntactic organisation of the sentence. Since Rizzi (1997) Split CP hypothesis, there has been an increasing movement to integrate to the left periphery of sentential structure recurrent notional properties of clauses. Embedding notions of veridicality, source of information, commitment, information status and expectedness in the syntactic structure is justified by the general issue of establishing the syntactic role and positional restrictions of overt items that communicate them, and of covertly licensing the interpretation of propositions with no overt reflexes. As with syntactic organisation, asymmetries are observed between notional properties, such that commitment is dependent on source of information, for instance, as are the asymmetrical structural relations between items.

A recent proposal to integrate the typical properties of speech acts is put forward by Wiltschko et al. (2016). They suggest that speech acts could be represented in a dedicated projection above the Force projection. It would be broken down into an Addressee projection and a projection encoding the Speaker's attitude (see Giorgi 2010 for a specific proposal of a SpeakerP dominating the whole sentence structure). It may be that the projection relating to the Speaker's attitude could host the representation of notions relating to the speaker such as source, commitment and expectedness. There have been proposals to characterise the discursive status of clauses in a higher Addressee node (Zanuttini 2008, Pescarini 2009), or via the lower projections of Topic and Focus (Martins 2016, Larrivé 2018). Veridicality has been handled via a lower projection (Haegeman and Breitbarth 2014; see also Duffield 2016). Obviously, it is a matter of considerable debate how and where these notions should be integrated into the syntactic structure, the point is that it is not only desirable but also feasible to integrate the typical notions of speech act into syntactic organisation. To do so might help explain why Sentential Particles tend to occur at the periphery of a clause, and why they are particularly sensitive to the type of the speech act that they relate to, since they represent the very properties that define speech act types. Assertives, interrogatives and exclamative can be

compared and contrasted with respect to veridicality, commitment and expectedness. The following sections proceed to case studies in order to assess the level of syntactic integration of Sentential Particles.

### 3. Case study 1 – French and English consequence DM

Several languages have Sentential Particles (Haegeman and Hill 2013). The question might be raised as to whether there are candidates to SP status in well-described languages such as English and French. Starting with French, let us consider the list of the 20 most frequent discourse markers provided by Charet (2004: 14-16), that is, in order of frequency, *mais, donc, alors, bon, là, bien, parce que, quoi, ben, puis, enfin, aussi, voilà, après, quand même, en fait, par exemple, c'est-à-dire, puisque, surtout*. Most are connectives that do not principally profile the expected contributions. Such a contribution is however found with consequential connective *donc* ‘then’ in some of its uses. In about 10% of attested uses (35 out of the first 300 occurrences in vernacular French ESLO2 corpus), *donc* is found without the antecedent clause that would support the explicit consequence reading. This is the case in total and partial interrogatives,

- (28) a. Êtes- vous donc musicien?  
Be-PR-2P 2P-NOM DM musician?  
Are you a musician then?
- b. comment s'appelle-t- il donc ? (ESLO2)<sup>1</sup>  
How REFL-call-PR-3S 3S-NOM DM  
What's his name again?

imperatives,

- (29) ben passe donc à la maison quoi euh (ESLO2)  
Well come-PR-2S DM at home like er  
Do drop by at home sometime like

and partial and total exclamatives.

- (30) a. Elle est donc jolie !  
3SF-NOM be-PR-3S DM pretty
- b. Comment donc qu' elle est jolie !  
How DM that 3SF-NOM be-PR-3S pretty  
You bet that she's pretty!

In these contexts, unlike in assertives, a DM reading is found. There is nuance of insistence in total interrogative, and in total exclamative, and of insistent invitation in the total imperative, that suggest a discourse-old value. This discourse-old information value is found in the partial interrogative (28b) – that calls for an answer that has been provided before, as *again* would suggest in *How is it again?* – and the partial exclamative (30b) – that evokes agreement to a previously asserted proposition.

In both contexts, the DM is a main-clause phenomenon (MCP)<sup>2</sup>

<sup>1</sup> A SP with the same value is reported in Del Gobbo *et alii* (2015) for Bellunese, a Northern Italian variety. Bellunese *po* has exactly the same property of adjoining to a *wh*-item.

- (31) a. A-t-il déclaré qu' il était (?? donc) musicien ?  
 Have-PR-3SNOM declare-PRT that 3S-NOM be-PA-3S DM mucisian  
 Has he said that he is a musician?
- b. Comment soupçonnes-tu qu' il s'appelle ( ?\* donc) ?  
 How suspect-PR-3S 2SG that 3S-NOM REF3S-called-PR-3S DM  
 What do you think his name is?
- (32) a. Dites- lui qu' il passe (?\* donc) à la maison.  
 Tell-PR-2P 3P-DAT that 3S drop-SUBJ-PR-3G DM at the home  
 Tell him to drop by sometime.
- b. Comment qu' elle est ( ?\* donc) jolie !  
 How SP that 3S-FEM-NOM be-PR-3S DM pretty  
 You bet that she's pretty!

It displays some positional variation. It can be adjoined to the *wh*:

- (33) a. Comment donc qu'il s'appelle ?  
 What's his name again?
- b. Comment donc qu' elle est jolie !  
 How DM that 3SFem be-PR-3S pretty  
 You bet that she's pretty!

although it is generally in a medial position in the verbal complex, below the inflected verb, but before Neg2 and complements.

- (34) L' auriez- vous donc fait ?  
 3S-ACC have-COND-2P 2P-NOM DM done-PRT  
 Would you have done it then?
- (35) Fais-le donc pas. (Quebec French)  
 Do-IMP-2PS- SS-ACC DM not.  
 Don't do it then.

It is however not found in peripheral position, where *donc* only has its connective reading.

- (36) (\* Donc) Passe (donc) à la maison (\* donc) (under DM reading)  
 (DM) come-PR-2S (DM) at home (DM)  
 Do drop by at home sometime

The restricted position of *donc* might be taken as an indication that an autonomous Sentential Particle use is emerging as part of the grammatical system of French. However, if there were such an autonomous SP use, it should enter into competition with other SPs with opposite value. This should exclude joint use with another SP expressing a comparable discourse-old value. Looking at such SPs like *bien* with the confirmation reading of *indeed*, no such exclusion with DM *donc* can be observed, as shown by joint uses in the standard French and Quebec French examples below.

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<sup>2</sup> Some authors have put into question the fact that SPs are a MCP; for instance, Coniglio (2011) shows that German sentential particles are found in non-MCP contexts. More work is needed on MCP and non-MCP DMs and SPs.

- (37) Voulez- vous donc bien cesser de m' importuner ?!  
 Want-PR-2P 2P-NOM MD indeed stop to 1S-ACC bother  
 Will you stop bothering me?
- (38) Veux- tu don(c) ben pas m' achaler !  
 Want-PR-2S 2S-NOM MD indeed not 1S-ACC bother  
 Will you stop bothering me?

These illustrations suggest that because it cooccurs with SP *b(i)en* 'indeed', *donc* is not a fully syntacticised SP.

The interpretative contribution of *donc* in those seems to differ from the ordinary expression of consequence in its connective uses. A proposed characterisation of the difference is made by Vlemings (2003). He criticises the hypothesis by Hansen (1997) that *donc* in all its uses expresses only mutual manifestedness as being rather vague. He claims that *donc* is a consequence marker, but that in its DM use, due to the absence of an antecedent clause, an antecedent is inferred from the speech situation.

*donc* establishes an inferential link between the propositional content of the utterance it is part of ... and the extralinguistic situation evoking a kind of general deontic rule that the hearer should obviously obey. (Vlemings 2003: 1110)

Comparing the imperative *Tais-toi* 'Shut up' with and without *donc*, he proposes that;

Both 'Tais-toi' and 'Tais-toi donc' can be used in the same situation, such as the theater context ... on a purely intuitive basis, the main difference between the utterance with *donc* and the one without DM would be that in the latter case, the directive merely expresses the fact that the speaker wants the hearer to be quiet, whereas in the former, *donc* connects the propositional content of its host utterance ('to shut up') with a<sup>3</sup> 'deontic' rule ('you should shut up'), inferred from the context ('given the present situation')<sup>4</sup> by the speaker .... (Vlemings 2003: 1104)

Therefore, the DM reading is in close relation to the literal interpretation of the connective. It suggests that the speech act that it applies to results from an implicit antecedent, that is inferred from the context (Vlemings 2003: 1097; see also Badiou-Montferran and Rossari 2017). This yields discourse-old inferences. There is some sensitivity to speech act types (infelicity in assertives) and main clause (MCP), its position is relatively fixed, but no complementary distribution or obligatoriness is found.

A similar situation is found with English consequence connective *then* (Aijmer 2015, Haselow 2011). Like *donc*, *then* is comparatively rare with the target DM reading typically arising in imperatives. 237 of the first 300 occurrences in the Spoken material of the British National Corpus (available on the Brigham Young University website) have a temporal and a

<sup>3</sup> A similar value is expressed by the quantificational expression *un po'* 'a bit' in colloquial standard Italian in cases like (i):

(i) Ma sta un po' zitto!  
 But stay a bit quiet!  
 'Do be quiet!'

<sup>4</sup> "Inferred from the context" makes Vlemings' approach very similar to the notion of "mutual manifestness" that the author criticises Hansen for.

consequence reading, that can be respectively paraphrased by *at the moment* and *as a consequence*. 28 occurrences relate to the DM use of *then* in interrogatives. In the following, a question arises following a discussion of the earnings of the speaker as a young man.

- (39) – How much was you're a-- father earning at this time?  
– Oh about seven and six a shift.  
– So I mean.  
– That was top price.  
– Before you started work were the family fairly poorly off then?

These present an expression of consequence. It is not internal to the speech-turn itself, but is inferred from the preceding context. This contributes to relate the question to the antecedent discourse, and mitigate its out-of-the-blue character, which is odd otherwise:

- (40) – How much was your a father earning at this time?  
– Oh about seven and six a shift. That was top price.  
– ? Was the family fairly poorly off?

While use in exclamation seems implausible,

- (41) She's so pretty (\* then)!

imperatives are attested (10 occurrences).

- (42) – I don't want peas.  
– Don't you?  
– Well, eat up (pause) eat up the broccoli then.

The imperative with DM *then* is uttered for the benefit of the hearer<sup>5</sup>, as it does in fixed phrase *Go on then*, but this is not always the case.

- (43) a. – Come and stand on my feet like we do. (pause) Come on. Come and stand on my feet (pause) and we walk round.  
– Oh, why?  
– (laugh) Come on then.  
– (crying)  
– Well let's show Tracy. Let's show Tracy. Stand on my feet. Come on then.  
b. Where you gone? Come on you can roll over, here are, come on you can roll over (pause) you gon na sit up? Sit up then, you sit up? Go on then sit up.

Other contexts include use with simple assertives (5 occurrences),

- (44) I'm gonna have to start flogging some of the stuff off to get some money back then.

and in conjunction with discourse markers (*Well then* (5), *Okay then* (5), *Allright then* (7), *yes then* (1), *tara then* (1), *bye then* (1)).

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<sup>5</sup> SPs which encode point of view of the speaker or the hearer are reported for Rhaeto-Romance by Poletto and Zanuttini (2003)., see section 5 below.



With each speech act type, the DM seems to be a MCP.<sup>6</sup> But this is difficult to assess due to the position of *then*. Unlike *donc*, DM *then* is clause final; the clause-initial position seems unavailable as it is occupied by the ordinary consequence connective (or temporal marker). Sentence-internal uses are found with *whs*.

- (45) a. If Paul isn't, who then is a musician?  
b. Who is a musician then?

Thus, in *Tell him to come and see us then*, it is not clear whether *then* relates to the main or to the non-finite subordinate.

No mutual exclusion with *indeed* are noted,

- (46) a. If Paul isn't, who then is indeed a musician?  
b. Who is indeed a musician then?  
c. ? Play it indeed then.  
d. Indeed, don't worry about it then.

to suggest that like *donc*, *then* is not a fully syntacticised SP. Unlike *donc* however, *indeed* in clause internal position is difficult to use with *then*, as suggested by the slight oddity of (c) (although note that DPs such as e.g. *A close call indeed then* is attested)

DM *then* closely relates to its literal consequence reading, and evokes that the speech act is an effect of the antecedent exchange. It is sensitive to speech act (with no use in exclamatives), to main clause (as a MCP), clause-final position, although as with *donc*, there is no complementary distribution or obligatoriness.

The conclusion that follows is that despite similarities, neither *donc* nor *then* are actually Sentential Particles. Their interpretation as DM is transparently connected to the consequence reading, and the antecedent is inferred rather than explicitly provided. We therefore are still dealing with expressions of consequence, rather than the default spell-out of a Discourse-status projection. The same conclusion can be reached on the basis of formal behaviour. Restrictions are observed, but they vary between the two markers (no use in assertive and exclamatives respectively; clause-medial versus clause final positions, adjunction to a *wh*), and there is no complementary distribution or obligatoriness that would suggest relation to a fixed projection.

The following section presents three more case studies. They further test the criteria of interpretation, sensitivity to speech act type, restriction to main clauses, position, competition with other SP candidates and obligatory presence. The objective remains to establish steps along the syntacticisation process of SP.

#### 4. Case Study 2: Venetian *ciò*

In this section, we look at one DM in the Venetian variety of Italo-Romance. A number of markers in that variety have been described (*i.a.* Munaro and Poletto 2002, 2008).

- (47) Dove valo,                      ti?  
Where go-PR-3S                      DM

<sup>6</sup> Some MCP embeddings are allowed with bridge verbs (Haegeman 2006 and references therein), as in *I think that you shouldn't worry about it then*.

Where on earth is he going?

- (48) Quando eli rivadi, po?  
When have-PR-3S arrived, DM  
When have they arrived then?

- (49) Quando rivaràli, mo?  
When arrive-FUT-3P DM  
When will they finally arrive?

Some are of pronominal in origins (*ti* being homophonous with the second person singular tonic pronoun), some other adverbial (like *po* and *mo*), and yet some other are verbal. This is the case of *ciò*. Although its etymological origin is already completely opaque to the speakers, it derives from the second person singular imperative of the verb 'take', and the behaviour of the DM use has not been considered (but see Penello and Chinellato 2008 for a study on Paduan *ciò*, which has a more limited distribution). The interpretation of *ciò* is that of the pressing invitation found in *come on* as in the following that enjoins a passive spectator to help the speaker with the activity they are engaged in.

- (50) Ciò, dame na man!  
DM, give-2S-1S-DAT a hand!  
Come on, give me hand!

The particle occurs with all types except for declaratives.

- (51) a. (Ciò) ti te movi (, ciò)?  
(DM) 2S-NOM 2S-ACC move (DM)?  
(Listen,) would you move (, ?? come on)?  
b. (Ciò) sentete (ciò)!  
(DM) sit.down (DM)  
(Come on,) Sit down (come on)!  
c. (Ciò) vien qua (ciò)!  
(DM) come-2S here (DM)  
(Come on,) Come here (, come on). d. (Ciò) Che beo che el ze, (cio)!  
(DM) How nice that that is, (DOM)

It is sensitive to the main versus embedded status of the clause, as it only occurs in root contexts:

- (52) a. Ciò, ti ghe ga dito de vegner?  
(DM) 2S-ACC have-1S already told-PRT to come  
Listen, did you already tell him to come?  
Look, have you already told him to come?  
b. I me ga domandá (\* ciò)<sup>7</sup>  
3P-NOM 1S-ACC already ask-PR-3P (DM)

<sup>7</sup> In (52b) the DM cannot be interpreted in the main clause, since it is a declarative, nor with the embedded clauses, since this DM obeys the MCP restriction. If the main clause is turned into an interrogative, the sentence is possible in the interpretation of the DM referring to the main clause.

They asked me DM  
 se (\* ciò) ti ghe ga dito de vegner  
 if (DM) 2S-NOM 3-ACC have- already told-PRT to come  
 I'm wondering whether you have already told him to come.

It is restricted to initial and final position, as attested by the following cases:

- (53) a. Ciò, dame na man!  
 DM, give-2S-1S-DAT a hand!  
 Come on, give me hand!  
 b. Dame na man, ciò!  
 Give me a hand, come on!  
 c. \*Dame ciò na man!  
 Give me (\* come on) a hand!

Munaro and Poletto (2002, 2008) treat sentence final DMs by assuming that the DM is nevertheless in the left periphery of the clause and becomes sentence final because it can attract the whole clause to its specifier. In this case, the attraction of the clausal complement of the DM would be optional, since the DM can very well occur at the beginning of the clause.

The DM is not in complementary distribution with any other similar marker, be it adverbs, or vocatives which are the most plausible alternant of the DM, since it seems to have a vocative flavor:

- (54) (Ciò,) Toni, cossa ti ghe ga dito (ciò)?  
 (Come on,) Toni, you, what you him have told (Come on)?  
 Come on, Toni, what did you tell him?

The only restriction is that as shown above, the DM in sentential initial position is found before the vocative.

We note finally that the DM is not obligatory in any of the contexts above. There is simply a tendency to use it in contexts in which the speaker is trying to draw the attention of the addressee, but there is no need to utter the DM in any of the contexts mentioned in order for the clause to be grammatical, as indicated by the brackets in all examples.

We conclude that *ciò* represents an early stage in the process of syntacticisation. While its reading is not tied to one typical property of speech acts, formal restrictions are observed in its main-clause use, the incompatibility with assertive, and its position with respect to vocative elements. Before moving on to Rhaeto-Romance that has fully integrated some of these particles into the grammatical system, we examine a case from French that seems to represent an intermediate stage in the syntacticisation of SP.

#### 4. Case Study 3: Back to French

The previous case studies explored markers that concern properties of speech acts in a tangential way. By contrast, one such property is directly communicated by one DM in French. Unlike *bien* on its own which can be ambiguous between different readings, the slightly archaic phrase *bel et bien* 'well and good' is unambiguously communicating a biased commitment that contrary to expectations, a proposition is the case.

- (55) (Une habitante de Condat-sur-Vienne, près de Limoges, a découvert qu'elle était déclarée morte)  
 alors qu' *elle* est bel et bien vivante. (Google)  
 while that 3SF be-PR-3S DM alive  
 (An inhabitant of Condat-sur-Vienne, near Limoges, discovered that she had been declared dead) when she is indeed alive

The marker is moderately sensitive to speech acts. While being found mostly in assertives as above, it seems possible in total and partial questions.

- (56) Leur rupture est-elle bel et bien définitive ? (On dirait en tout cas !) (Google)  
 Their breaking-up be-PR-3S 3SF DM final?  
 Is their breaking-up indeed for good?
- (57) Et qui c'est qui est bel et bien vivant ? (Google)  
 And who 3S be-PR-3S who be-PR-3S DM alive  
 And who is it who is indeed alive?

Felicitous use seems possible, although rare, in imperatives,

- (58) Et faites bel et bien ce bilan  
 (avant de poursuivre votre Plan d'AutoFormation.) (Google)  
 And make-PR-2S DM that assessment  
 And do the assessment training (before carrying on with your self-training plan).

but not in exclamatives.

- (59) a. ?? Elle est bel et bien jolie !  
 3SF-NOM be-PR-3S DM pretty  
 b. Comme elle est (\* bel et bien) jolie !  
 How 3SF-NOM be-PR-3S DM pretty  
 She's indeed pretty!

As evidenced by the initial illustration in (55) and by those below, *bel et bien* is acceptable in subordinate clauses, beyond bridge verbs.

- (60) a. Les onze chefs (...) assurent qu' il est bel et bien vivant.  
 The eleven chiefs declare-PR-3P that 3PS-NOM be-PR-3S DM alive  
 The eleven chiefs declare that he is indeed alive  
 b. Si elle est bel et bien intégrée au projet de loi ...,  
 If 3FS-NOM is DM integrated to the project of law  
 If it is indeed built in the law project ...

Restrictions bear upon its position however, being exclusively sentence medial, like DM *donc*

- (61) (\*Bel et bien) Il est (bel et bien) parti (\*? bel et bien).  
 (DM) 3S-NOM be-PR-3S (DM) go-PRT (DM)  
 He is indeed gone.

In this medial position, it enters into competition with negation,

- (62) ? Il ne travaille bel et bien pas.  
 3S-NOM NEG1 work-PR-3S DM NEG2  
 He indeed doesn't work.

and the infelicity increases with *bien*, which has a wide network of readings (Dostie 2004) that include those associated with *bel et bien* :

- (63) ?? Il ne travaille bien pas.  
 3S-NOM NEG1 work-PR-3S DM NEG2

Similar competition is observed with *peut-être* 'maybe'

- (64) a. \* Il travaille bel et bien peut-être.  
 3S-NOM work-PR-3S DM maybe  
 He indeed maybe does work.  
 b. Il travaille peut-être bel et bien.  
 3S-NOM work-PR-3S maybe DM  
 He indeed maybe does work.

No element of obligatoriness is noted however.

Thus, the phrase *bel et bien* apparently represents an intermediate stage of syntacticisation. While its sensitivity to speech act types and MCP is less constrained than with *ciò*, its interpretation and positions are more fixed, and elements of competition with other sentential markers are observed. We move on to cases of optimal SP development from a variety of Rhaeto-Romance.

## 5. Case study 4: Rhaeto-Romance

We have seen so far that comparing DMs from different languages help identify different degrees of syntactic integration, and identify characteristic steps in the process.

Varieties of Rhaeto-Romance display particles that communicate well-defined pragmatic properties. On an intuitive approach, Sentential Particle *pa* draws attention to a proposition, in the way that *ciò* does (Del Gobbo, Munaro and Poletto 2014).

- (65) Al ploi pa.  
 3S-NOMIt rain-PT-3S SP  
 'Look it's raining'

From the work done on these particles, it emerges clearly that they are not sensitive to speech act type, since they are not the sort of typing particle that Cheng (2001) postulates for languages like Chinese. To continue on *pa*, it is found in interrogatives, imperatives, and exclamatives.

- (66) a. Vast pa a Venezia?  
 Go-2S SP to Venice?  
 Are you going to Venice?  
 b. Ulà a- i pa ody Giani, l'ultimo ja:d?  
 where have-PR-3SG 3P-NOM-CL SP see-PRT John, the last time  
 Where did they see John last time?

- c. Faa-l *pa.* (S. Leonardo di Badia)  
Do 3S-ACC SP  
'Do it!'
- d. Al è (*pa*) gny inier!  
SCL is (SP) come yesterday  
He came yesterday!
- e. Ci bel c al è (*pa*) da jii a spazir soe par munt!  
how nice that SCL is (SP) of to-go t o walk on around mountains  
How nice it is to go walking in the mountains!

*Pa* is sensitive to the main versus embedded status of the clause. It can occur both in main (as above), and in embedded declaratives selected by bridge verbs, which notably display MCP (notice that this Rhaeto-Romance variety is still V2):

- (67) Al m a dit  
3S-NOM-CL 1S-ACC have-PR-3S say-PRT  
c al n ee *pa* nia bel.  
that 3S-NOM-CL NEG1 was SP NEG2 nice  
He told me that it wasn't nice.

but not in embedded interrogatives.

- (68) \*A i m a domané s al n fus *pa* bel.  
SCL SCL me asked if 3S-NOM-CL NEG was SP nice  
He asked me whether it was nice.

In the V2 Rhaeto-Romance varieties we observe a set of DM that have a fixed medial syntactic position, which is immediately after the inflected verb but before the past participle (69) and cannot be interrupted by either modal (70), (71), temporal (72) or aspectual adverbs (73):

- (69) a. Al è (*pa*) gny inier.  
SCL is *pa* come yesterday  
'He came yesterday.'
- b. \*Al è gny *pa* inier
- c. \*Al è gny inier *pa*
- (70) a. Al a *d sigy* mangé.  
SCL have of sure eaten  
'He ate for sure.'
- b. Al a *pa d sigy* mangé.  
SCL have *pa* of sure eaten
- c. \*Al a *d sigy pa* mangé.  
SCL has of sure *pa* eaten
- (71) a. Al a *magari* bel mangé.  
SCL has perhaps already eaten  
'Perhaps he has already eaten.'
- b. Al a *pa magari* bel mangé.  
SCL has *pa* perhaps already eaten
- c. \*Al a *magari pa* bel mangé
- d. \*Al a *magari bel pa* mangé

- (72) a. Al vagn *duman*.  
SCL comes tomorrow  
'He is coming tomorrow.'
- b. Al vagn *pa duman*.  
SCL comes pa tomorrow
- c. \*Al vagn *duman pa*  
SCL comes tomorrow pa
- (73) a. I n a *pa nia ciamò* mangé ncoe.  
SCL neg have pa neg yet eaten today  
'I haven't yet eaten today.'
- b. \*I n a *ciamò pa nia* mangé ncoe  
SCL neg have yet pa neg eaten today

Thus, the position of the particle must be rather high since it occurs in front of modal adverbs like *magari* 'perhaps' and temporal adverbs like *duman* 'tomorrow'. It is clear that the particle *pa* has a fixed position immediately after the inflected verb, which has raised up to the C-domain, due to the V2 configuration.

The Sentential Particles are obligatory in one type of clauses, namely *wh* interrogatives, where it is necessary to convey the meaning of a standard question:

- (74) a. Ulà vas-t pa?  
where go-SCL pa  
Where are you going?
- b. %Ulà vas-t?  
where go-SCL
- c. \*Ulà pa tu vas?  
where pa SCL go

(74a) represent a standard question, while (74b) can only be interpreted as a special question in the sense of Obenauer (2006), i.e. (74b) can only be interpreted as a rhetorical question or a surprise/disapproval question. (74c) shows that the particle has indeed a fixed position also in interrogatives. The same happens in imperative clauses, where at least one particle is obligatory:

- (75) a. Faal *pa*!  
do-it pa  
Do it!
- b. Faal *ma*!
- c. Faal *poe*!
- d. Faal *mo*!
- e. \*Faal!

This means that particles have grammaticalized in these varieties. The fact that it is not possible to utter an imperative clause without the presence of a particle shows that they are fully integrated into the grammar of the language. However, they do not mark sentence type but express pragmatic values, i.e. for *pa*, the confirmation against contrary expectations. The analysis that we adopt of their pragmatic value is that of Poletto and Zanuttini's (2003) who identify two dimensions. The first value is point of view, and separates *mo* and *pa*, which are uttered in favor of the speaker, and *ma* and *poe*, which are uttered in favor of the addressee. So, *Faal mo!* is an invitation to do something for the sake of the speaker, and *Faal ma!* for

that of the hearer. Note that a similar grammatical distinction is found in the “versions” of the verb in Kartvelian languages, where an action can be marked as being performed for oneself (subjective version) or for another (objective), also found in Turkic, Munda, and Burushaski language families (Anderson and Gurevich 2005). The following are illustrations from Kartvelian language Svan (Tuite 1998).

- (76)
- a. Neutral version  
dina qæn-s æ-b-em  
girl:NOM bull-DAT NtV-tie-SM  
‘the girl ties up the bull’  
(no specific orientation)
  - b. Subjective version  
dina qæn-s i-b-em  
girl:NOM bull-DAT SbV-tie-SM  
‘the girl ties up her own bull, ties it for herself’  
(orientation toward subject)
  - c. Objective version  
dina mu-s qæn-s x-o-b-em  
girl:NOM father-DAT bull-DAT O3-ObV-tie-SM  
‘the girl ties up her father’s bull, ties it up for him’ (orientation toward indirect object)

The distinction between *ma* and *poe* has to do with the expectations of the speaker, since *poe* negates an implicature, while *ma* does not. The distinction between *mo* and *pa* is in terms of Focus: when *pa* is uttered in addition to point of view, the whole sentence is focused.

The complementary distribution of particles is clear in imperative clauses, where it is only possible to have one particle of the same type per clause:

- (77)
- a. Faal *pa* *poe*!
  - b. \*Faal *poe* *pa*!
  - c. ?(?)Faal *pa* *ma*!
  - d. \*Faal *ma* *pa*!

While *pa* and *poe* are compatible, *pa* and *ma* are not. One might wonder whether this is a purely syntactic effect, i.e. it might be the case that the incompatibility depends on the fact that there is just one position for several particles, and that they are in complementary distribution because they occupy the same position. However, the fact that the two particles are incompatible might also be derived by their opposite semantic/pragmatic value.

Notice however, that the incompatibility does not hold of particles only but also of other adverbial elements, like negation. Contrary to positive imperatives (see (42e)), negative imperatives in Rhaeto-Romance need not express the particle, but display a special type of negative marker *no*, which is not found in declaratives, where the form of the post-verbal negative marker is *nia*, which is homophonous with the n-word meaning ‘nothing’ (see Poletto and Zanuttini 2004). The negative marker *no* can occur both pre- and post-verbally, when it occurs in preverbal position, the other preverbal negative marker *ne* disappears:

- (78)
- a. *Ne* le fà *no*!  
neg it do neg (2nd sg)  
“Don’t do it!”
  - b. *No* le fà!



neg it do (2nd sg)  
 “Don't do it!”

The negative marker is compatible with some particles but not others. Note that this cannot simply be a purely syntactic effect, since this happens when the negative marker is pre-verbal as well as when it is postverbal, as shown by the fact that (79c) and (80c) are both ungrammatical:

- (79) a. Ne le fà *ma no*!  
           neg it do ma neg (2nd sg)  
           “Don't do it!”  
       b. Ne le fà *pa no*!  
       c. \*Ne le fà *mo no/no mo*!
- (80) a. *No ma* le fà!  
           neg ma it do (2nd sg)  
           “Don't do it!”  
       b. *No pa* le fà!  
           neg pa it do (2nd sg)  
           “Don't do it!”  
       c. \**No mo/Mo no* le fà!

We can conclude that in Rhaeto-Romance, particles have completely syntacticized, i.e. they represent the last stage of evolution of Sentential Particles. They are compulsory items that enter in competition with other grammatical markers, display positional restrictions and a pragmatic value that cannot be derived from a literal interpretation that is entirely opaque. The stages of syntacticisation of SP and their criteria are summarized below.

## 6. An implicational hierarchy

The case studies above have presented us with pragmatically-charged sentential markers. The consideration of their interpretative and formal characteristics has helped defined criteria to identify different steps in the evolution of Sentential Particles. They are summarised in the table below.

|                                       | Interpretation                 | Position                                                | Sensitivity to speech act types |   |     |     | MCP | Complementary distribution with other elements | Obligatoriness |
|---------------------------------------|--------------------------------|---------------------------------------------------------|---------------------------------|---|-----|-----|-----|------------------------------------------------|----------------|
|                                       |                                |                                                         | Ass                             | Q | Imp | Exc |     |                                                |                |
| French <i>donc</i>                    | Relating to connective reading | Medial, except with partial interrogatives              | +                               | + | +   | +   | +   | -                                              | -              |
| English <i>then</i>                   | Relating to connective reading | Final, except with partial interrogatives               | +                               | + | +   | -   | +   | -                                              | -              |
| Venetian <i>ciò</i>                   | Opaque                         | Initial/final                                           | -                               | + | +   | +   | +   | -                                              | -              |
| French <i>bel et bien</i>             | Opaque                         | Peripheral                                              | +                               | + | +/- | -   | -   | +/-                                            | -              |
| Rhaeto-Romance<br><i>Ma/mo pa/poe</i> | Opaque                         | Medial after the inflected verb but before all adverbs. | +                               | + | +   | +   | +   | +                                              | +              |

From the table above, we can derive some interesting considerations. First of all, there is essentially no distinction between DMs and SPs in terms of sensitivity to speech act types

and main clause phenomena. With the notable exception of *bel et bien*, all these elements have a tendency to be found in main clauses (or in those embedded clauses which are known to have main clause behavior). None of these elements is similar to so-called sentence typing particles, since they can occur in different clause types and also this property is stable across DMs and SPs. Furthermore, it is possible to derive at least four steps in the development of SPs.

- The first stage is represented by French *donc* and English *then*. These DMs have an interpretation that is not limited to the abstract properties of speech acts like commitment or information status, their position is variable, they are not in complementary distribution with other elements and they are not obligatory.
- The second stage is represented by Venetian *ciò*: although the SP is not obligatory, we see that it starts to alternate with other elements. At this point, this could just be a semantic effect of incompatibility, but it shows that the meaning of the SP is becoming tied to speech act properties.
- The third stage is represented by French *bel et bien*, which is more advanced than *ciò* in terms of position, but is not yet obligatory.
- The fourth and last stage is represented by Rhaeto-Romance, where the SPs are the obligatory expression of syntactic projections and as such, their semantic/pragmatic value is fixed and their syntactic position is also fixed, since they can only occur immediately after the inflected verb but before all adverbs.

Thus, from the markers studied, Venetian *ciò* would represent the initial stage, French *bel et bien* an intermediate step and Rhaeto-Romance particles the final actualisation of the syntacticisation process. While our survey cannot have the pretense of being exhaustive, it is suggestive that the obligatory presence, which means that the SP has become the morphological exponent of a given grammatical value, goes together with its “intolerance” with respect to elements that either express or probably imply the opposite value with respect to the one expressed by the DM.

As anticipated in the introduction, the variation found from DMs to SPs cannot be characterized in terms of grammaticalization, since the typical correlates like semantic loss and phonological reduction are not present. Rather, the data analysed here suggest that evolution of pragmatic markers is not a story of loss, but a story of increasing fixation, which proceeds in parallel in the pragmatic as well as in the syntactic component. This is a rather interesting result, since it attests that language variation/change is not triggered by one component – such as phonological reduction as has so often been proposed, that then impacts onto other components –, but the process of fixation needs to evolve in a parallel way in different modules of grammar.

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## The vowel system of San Valentino in Abruzzo Citeriore<sup>1</sup>

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**Abstract:** This work focuses on the vowel system of the Italo-Romance dialect spoken in the village of San Valentino in Abruzzo Citeriore. Based on novel fieldwork data, the article describes the vowel system of Sanvalentinense from a phonetic and phonological point of view and accounts for a number of puzzling evolutions in the light of a reconstruction of previous stages of the dialect.

**Keywords:** Italian dialects, vowel differentiation, mobile diphthongs, metaphony

### 1. Introduction

This contribution describes and analyses the vowel-system of the Italo-Romance dialect of San Valentino in Abruzzo Citeriore (henceforth San Valentino) in order to provide an account of some puzzling phonological features and attempt a reconstruction of a previous stage of the dialect. The article is organised as follows: in this section we introduce the dialect under investigation by overviewing the surrounding dialectal area (1.1) and presenting the vowel system we are going to investigate in detail (sections 1.2 and 1.3 illustrate the outcomes of Latin vowels in the stressed and unstressed positions, calling attention to the data that are of particular interest). In section 2 we provide a detailed description and analysis of the data at hand. Section 3 summarizes our proposals and provides some final remarks.

#### 1.1 *The dialectal area of San Valentino*

The dialect of San Valentino in Abruzzo Citeriore is spoken in a village with a population of approximately 2000 inhabitants, located in the Abruzzi.

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<sup>1</sup> Although the chapter is the result of close collaboration between the authors, Diego Pescarini and Diana Passino carried the main responsibility for data collection and analysis, respectively. We wish to thank our informant, Silvio Pascetta, and, for comments and discussion, audiences in Viterbo, Rome, and Padua.

For previous studies on Sanvalentinense, see Benincà & Pescarini 2014; Pescarini & Pascetta 2014; Pescarini, & Passino 2015; Passino & Pescarini, *to appear*.

Our data come from fieldwork conducted with one informant. Since our interest is mainly phonological, we have not conducted phonetic analysis of the data collected. The phonetic transcription is therefore based on our perception.



Figure 1 – Detail of the *Carta dei dialetti d'Italia* (Pellegrini 1977)

The town lies on top of a hill overlooking the Pescara river valley, 40 km from the Adriatic Sea. The Sanvalentinense dialect belongs to the Upper-Southern group, more specifically it is an Eastern Abruzzese dialect of the Chietino group (Giammarco 1979: 88).

The dialectal area where Sanvalentinense is spoken is characterized by several phonological features. We focus here on vocalic differentiation by position (Wartburg 1950:142, Weinrich 1958 1969:176, Rohlf 1966 § 8-10, 31-32, 36-39 62-63, 80-81 Carosella 2005) and mobile diphthongs. Vocalic differentiation by position refers to a situation whereby tonic open syllables evolve displaying a richer inventory of vowels than closed syllables: the former undergo tonic lengthening or breaking under sentence stress, while the latter display a smaller inventory of vowels that do not undergo lengthening, often lax vowels or light diphthongs. The differentiation by position characterizes a subgroup of the Upper-Southern dialects shown in Figure 1 that includes Southern Abruzzi, non-salentine Apulia, Northern and Central Lucania, and Northern Calabria through Molise (Rohlf 1966:30, Savoia 1989, and Marotta & Savoia 1994 for Southern Abruzzi; Ziccardi 1919 for Molise; Zingarelli 1899, Merlo 1912, De Gregorio 1939, Rohlf 1966:30, Stehl 1980, Loporcaro 1988, Carosella 2005 among others for Apulia; Marotta & Savoia 1994 and Carpitelli & Savoia 2008 for Lucania; Marotta & Savoia 1994 for Northern Calabria).

In the vocalic differentiation of Sanvalentinense and nearby dialects, open syllables of proparoxytonic words pattern with closed syllables in displaying short/lax vowels, as shown in (1):

(1) Open vs. closed position in San Valentino

| <i>open syllable</i> |                       | <i>closed syllable</i> |
|----------------------|-----------------------|------------------------|
| <i>Paroxytones</i>   | <i>Proparoxytones</i> |                        |
| peṭə < PĒDEM         | ˈmɛtəɾə < MĒTERE      | ˈpɛttə < PĒCTU(M)      |
| nouvə < NŌVU(M)      | ˈrɔtələ < RŌTULU(M)   | ˈkəllə < CŌLLU(M)      |

Another phonological feature common to the dialects of the area is the alternation driven by sentence/phrase stress and simple word stress, which yields mobile diphthongs. Certain vowels break under sentence stress. This results in diphthongs surfacing in the sentence/phrase final position and in isolation, whereas simple vowels appear in sentence-internal position under ordinary word stress.

The examples in (2)-(3) illustrate this situation with data from Abruzzese and Apulian dialects featuring an alternation between (a) diphthongs in syllables bearing sentence/phrase stress (") and (b) simple vowels in syllables bearing only word stress ('):

- (2) a. Nu "fuilə < FĪLUM (Palmoli, Rohlfs 1966:30)  
       'a thread'  
       b. Nu 'fīlə "nairə  
       'a black thread'
- (3) a. A "foikə < FĪCUM (Vico del Gargano, Rohlfs 1966:30)  
       'a fig'  
       b. 'fīka "sekk  
       'dried fig'

In Sanvalentinense, the vowel/diphthong alternation concerns the outcomes of Proto-Romance \*ε, \*ɔ, \*u. As shown in (4), the simple vowels [e, o] and the central rounded vowel [ə] occur in phrase internal positions, while the diphthongs [ei/ou/əu] occur in the sentence/phrase final position:

- (4)
- |      | <i>Phrase internal position</i>                                      | <i>Phrase final position</i>                                                           |
|------|----------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| *ε > | Lu 'petə sa<br>The foot his<br>'his foot'                            | sə faɪfə mələ a lu "peitə<br>to.himself= he.made ill to the foot<br>'he hurt his foot' |
| *ɔ > | 'korə ma!<br>Hearth my<br>'my darling'                               | allu "kourə<br>to.the hearth<br>'to the hearth'                                        |
| *u > | 'nəʃfi nutʃjillə<br>walnuts and hazelnuts<br>'walnuts and hazelnuts' | e ccu bbonə li "nəuʃə<br>are more good the nuts<br>'nuts are tastier'                  |

As previously mentioned, the diphthongised allophones appear in sentence final position and thus also when the word is uttered in isolation. Given the peculiar alternation between diphthongs and simple vowels recorded in this dialect in sentence medial and in sentence final position, we will henceforth mark sentence stress when words appear in isolation.

## 1.2. Vowel inventory in the stressed position

Having outlined some outstanding phonological features of the dialectal area, we can now introduce the vowel system of Sanvalentinense (in (5) and Table 1)<sup>2</sup> and call attention to the phonological features worthy of investigation. As can be observed in the following table, the present-day system features a double series of allophones in complementary distribution in

<sup>2</sup> In the Italo-Romance dialectological tradition, it is customary to discuss vowel systems both in metaphonic and non-metaphonic positions, i.e., to set the reflexes of the Proto-Romance vowel inventory given final /i/ (or final /i, u/ according to the dialect described) apart from the outcomes given final /a, e, o, u/ (or /a, e, o/ according to the dialect described). This is because the phonological process of metaphony induces vowel-raising on tonic vowels by influence of final unstressed high vowels. In this section we introduce the default system in non-metaphonic environment postponing the illustration of the tonic system in metaphonic position to 3.3.1



the open and closed positions. Since vowels in open positions undergo tonic lengthening, only long nuclei (allophonic heavy diphthongs or long vowels) may appear in stressed open syllables of paroxytones, with lax vowels occurring elsewhere (with the remarkable exception of [ei] < \*i occurring in the closed position). The reflexes of \*ε, \*ɔ in open positions display diphthongs alternating with simple tense vowels (cf. the mobile diphthongs described above) and lax vowels in closed positions. The dialect also displays some phonologically puzzling data: a stressed schwa in open positions alternating with a full [a] in closed positions as outcomes of \*a; the back vowels [ɔ], and [a] respectively evolved from Proto-Romance \*i, and \*e. This [ɔ] < \*i vowel is of an intermediate quality, being different from both [o] and [ɔ], also present in the language, and alternates with the diphthong [ei] in closed position. On top of that, a considerable number of allophones, namely five, are on record as outcomes of \*u.

(5) Evolution of tonic vowels in the dialect of San Valentino:

| Latin           | Ī  | Ī  | Ē    | Ē  | Ā/Ā  | Ō  | Ō      | Ū | Ū |
|-----------------|----|----|------|----|------|----|--------|---|---|
|                 |    | ∨  |      |    |      | ∨  |        |   |   |
| Proto-Romance   | *ī | *ē | *ε   | *a | *ɔ   | *o | *u     |   |   |
|                 |    |    |      |    |      |    |        |   |   |
| Open position   | ɔ̄ | a  | e/ei | ə  | o/ou | u  | u/ə/əu |   |   |
| Closed position | ei | a  | ε    | a  | ɔ    | ɔ  | ɔ/wu   |   |   |

Table 1. Illustration of the tonic vowel system of Sanvalentinense

| P.Rom | Open syllables |        |          | Closed syllables<br>(and open syllables of proparoxytones) |          |          |
|-------|----------------|--------|----------|------------------------------------------------------------|----------|----------|
| *a    | "trə:və        | TRABEM | ‘beam’   | "passə                                                     | PASSUM   | ‘step’   |
| *ε    | "pei:tə        | PĒDEM  | ‘foot’   | "pəttə                                                     | PĒCTOREM | ‘breast’ |
| *e    | "ma:sə         | MĒNSEM | ‘month’  | "pəʃfə                                                     | PĪSCem   | ‘fish’   |
| *i    | "fɔ:lə         | FĪLUM  | ‘thread’ | "lejbbrə                                                   | LĪBRUM   | ‘book’   |
| *ɔ    | "vouwə         | BŌVEM  | ‘ox’     | "kəllə                                                     | CŌLLEM   | ‘hill’   |
| *o    | "fju:rə        | FLŌREM | ‘flower’ | "tənnə                                                     | ROTŪNDUM | ‘round’  |
| *u    | "mu:rə         | MŪRUM  | ‘wall’   | "fɔʃtə                                                     | FŪSTUM   | ‘trunk’  |
|       | "ləu:mə        | LŪMEN  | ‘light’  | "fɔwɔtʃə                                                   | CIŪCUM   | ‘donkey’ |

### 1.3. Vowel inventory in unstressed positions

Unstressed vowels, on the other hand, exhibit a mapping that is rather common across Upper Southern dialects: in the pre-tonic position, reflexes of front vowels (\*i/e/ε) appear as [ə], reflexes of back vowels (\*u/o/ɔ) converge to [u], and \*a remains unchanged. In the post-tonic position, all vowels reduce to [ə]. However, in particular configurations – most notably noun phrases, but not exclusively – some final vowels, namely [a, i, u], may resist reduction and surface as full vowels (Bafle 1997, Ledgeway 2009 for Neapolitan). For Sanvalentinense this situation is illustrated in (6) with data from Pescarini & Pascetta (2014):

- (6) a. kəss einə nu bellu parlə` ‘This is something good to say/hear’  
 b. m'aripwɔrti təu ? ‘Are you bringing me back home ?’  
 c. na bbella kəsə ‘A nice house’

In Table 2. we show the mapping from the Proto-Romance heptavocalic system in all of the aforementioned contexts: open, closed, and unstressed positions:

Table 2.

| <i>Proto-Romance</i>     | *i   | *e  | *ε       | *a  | *ɔ        | *o  | *u            |
|--------------------------|------|-----|----------|-----|-----------|-----|---------------|
| <i>Open Position</i>     | [o]  | [a] | [ei]/[e] | [ə] | [ou̯]/[o] | [u] | [u]/[əu̯]/[ə] |
| <i>Closed Position</i>   | [ei] | [a] | [ε]      | [a] | [ɔ]       | [ɔ] | [wɔ]/[ɔ]      |
| <i>Pretonic Position</i> | [ə]  | [ə] | [ə]      | [a] | [u]       | [u] | [u]           |
| <i>Word-final</i>        | [ə]  | [ə] | [ə]      | [ə] | [ə]       | [ə] | [ə]           |

Pre-tonic reduction is a synchronically active phenomenon, as shown in (7), where the evaluative suffixes -attə/-allə trigger an alternation due to stress shift. Notice that [ɔ] and [a], which are reflexes of Proto-Romance \*i and \*e, synchronically reduce to schwa, as opposed to other back vowels, which reduce to [u]. We discuss this further in section 2.

- (7) a. "palə → pə'l-attə  
 hair hair-DIM  
 b. "vɔnə → və'n-allə  
 wine wine-DIM  
 c. "kəsə → ka's-attə  
 house house-DIM  
 d. "voɯwə → vu.'v-attə  
 ox ox-DIM  
 e. "tənnə → tun'n-attə  
 tuna tuna-DIM

Once the vowel system of San Valentino has been illustrated, we provide a phonological representation of the inventory and an account of the puzzling phonological features outlined above.

## 2. The Sanvalentinense vowel system

### 2.1 *The reflexes of \*a*

The evolution of Proto-Romance \*a in tonic position displays two allophones according to position: a schwa-like [ə] allophone in the open position, and [a] in the closed position. In addition, [a] is also found in the pre-tonic position and, sporadically, in word-final position (as previously shown in section 1.2). This alternation is puzzling, as one might expect the melodically weaker schwa-like allophone to occur in the weaker prosodic positions (closed, pretonic) and the melodically stronger allophone [a] to surface in the stronger prosodic positions (open, tonic). To account for the presence of [ə] in the open tonic position, we propose that, like the outcomes of \*i, \*ε and \*u, and consistently with the typology of the dialectal area (detailed in section 1.1), also the outcome of \*a in the open position had a diphthongised allophone under sentence stress. This broken allophone, a reconstructed heavy centering diphthong [ɛə]/[əə], was eventually monophthongised.

Similar diphthongs arising from \*a in open position under sentence stress are attested in several Upper-Southern dialects like the Lucanian dialect of Gorgoglione (Savoia 2015:335-336), exemplified in (8)<sup>3</sup>:

- (8) a. "nɛəsə < NASUM 'nose' (Gorgoglione, Lucanian)  
b. "lattə < LACTEM 'milk'

In Gorgoglione, \*a breaks in the open position under sentence stress (8a), while simple [a] occurs in the open sentence-internal position and in the closed position (8b), as is customary in these dialects. In the neighbouring dialect spoken in Cirigliano, located 6.3 km from Gorgoglione, on the other hand, a weak schwa allophone appears in the open position, while [a] surfaces in the closed position, as illustrated in (9):

- (9) a. "nə:sə < NASUM 'nose' (Cirigliano, Lucanian)  
b. "lattə < LACTEM 'milk'

We can safely hypothesise that dialects such as Gorgoglione, where a diphthong surfaces in the open position, represent a previous diachronic stage with respect to the dialect of Cirigliano, where monophthongation to schwa has targeted a previously centering [ɛə]-type diphthong. In view of the above data, we extend this reconstruction to Sanvalentinense and propose that the allophone [ə] originated through monophthongation of a centering diphthong [ɛə], which in turn originated from the breaking of \*a in open position under phrasal stress.

### 2.2 *The reflexes of mid-front vowels*

The outcomes of the Proto-Romance \*ε are [e] in the open position, alternating with [ei] under phrasal stress and [ɛ] in the closed position, whereas \*e resulted in a low-back vowel [ɑ]. To account for the presence of the low-back allophone [ɑ], we appeal to a previous stage of the language, when an underlying /e/, broke and surfaced as an [ai]/[ai] diphthong, both in the open and – exceptionally – closed positions. This diphthong eventually underwent monophthongisation resulting in [ɑ]. Consistently with our proposal, [ai] and [ai] diphthongs,

<sup>3</sup> /a/ breaks in the open position also in other dialects of the area such as Agnone (Ziccardi 1910).

as well as [a] (all resulting from \*e) have been documented throughout the Eastern Abruzzi-Apulian area (Teramo, Opi, Gessopalena, Tuffillo, Andria, Altamura, Ruvo di Puglia, Palo del Colle, Gravina di Puglia, Molfetta among many others cf. Rohlfs 1966:85, Loporcaro 1988, Savoia 1989, 2015, Passino 2016). More importantly, our informant recognises these diphthongs as an archaic feature of Sanvalentinense, as spoken by previous generations. Again, the emergence of a double series of allophones follows the general pattern described for the dialects of the area, i.e. tense vowels alternating with heavy diphthongs in the open position and lax vowels in the closed position.

### 2.3 *The reflexes of mid-back vowels*

The outcomes of \*ɔ in open position are [o]/[ou] respectively under word and sentence stress and [ɔ] in the closed position. As is customary in this dialectal area the alternation of tense/lax and diphthongized allophones is regulated by position and phrase stress.

The outcome of Proto-Romance \*o displays the allophone [u] in the open position and [ɔ] in the closed. We propose that the surfacing of [u] in the open position results from the monophthongation of an [au]-type diphthong, with which [o] was alternating in a previous stage of the language. The monophthongation that we propose must have taken place before that of [oi] and [ai] that are recognised as archaic, since our informant has no recollection of this diphthong in the language. However, diphthongation of \*o in open position is common across the dialectal area (Rohlfs 1966:99). [au] < \*o is documented in the neighbouring dialect spoken in Casalinocontrada (De Lollis 1890-1892), in Opi, Pescasseroli, Alberobello, Andria among others while [eu] < \*o has been reported in Popoli (Savoia 1989), Agnone (Rohlfs 1966:99) among others, providing support for our reconstruction. The reconstruction of a diphthongised allophone is consistent with the phonological features described in the dialectal area of investigation.

### 2.4 *The reflexes of high vowels*

This section deals with high vowels, which display a number of unexpected outcomes. In order to provide an explanation and propose a coherent representation of high vowels in the system, it is worth introducing Sanvalentinense metaphony and its bearing on morphology, described in the next section.

#### 2.4.1 *Metaphony in San Valentino*

Another factor bearing on vowel differentiation in the evolution from Latin to the Italo-Romance dialects is metaphony, an assimilatory process according to which word-final unstressed high vowels, which eventually became centralised or disappeared in some dialects, influenced stressed word-internal vowels, causing raising or diphthongisation (Lausberg 1976:228, Loporcaro 2011:127). As opposed to the general situation, in restricted areas of the Italian peninsula, including the area of San Valentino, metaphony was only triggered by \*-i (which eventually reduced to schwa in absolute word-final position), and targeted also /a/. The metaphonic alternations of Sanvalentinense are outlined in Table 3.

Table 3. Vowel differentiation and metaphony in Sanvalentinense

| <i>Proto-Romance</i>                        | *i   | *e   | *ɛ       | *a   | *ɔ       | *o      | *u           |
|---------------------------------------------|------|------|----------|------|----------|---------|--------------|
| <i>Open Position<br/>(non metaphonic)</i>   | [ɔ]  | [a]  | [e]/[ei] | [ə]  | [o]/[ou] | [u]     | [u],[ə]/[əu] |
| <i>Open Position<br/>(metaphonic)</i>       | [i]  | [i]  | [i]      | [i]  | [ə]/ ə̣  | [ə]/ ə̣ | [ə]/ ə̣      |
| <i>Closed Position<br/>(non metaphonic)</i> | [e]  | [a]  | [ɛ]      | [a]  | [ɔ]      | [ɔ]     | [wɔ]/[ɔ]     |
| <i>Closed Position<br/>(metaphonic)</i>     | [jɪ] | [jɪ] | [jɪ]     | [jɪ] | [wɔ]     | [wɔ]    | [wɔ]         |

Table 4 illustrates the metaphonic alternations as occurring in actual words. In the case where alternations hold between sentence-final and sentence-internal position, we indicate the latter allophones in brackets, since they do not occur in words spoken in isolation.

Table 4. Metaphonic alternations in Sanvalentinense

| <i>Open position</i> |                    |          | <i>Closed position</i> |           |          |
|----------------------|--------------------|----------|------------------------|-----------|----------|
| Sg.                  | Pl.                |          | Sg.                    | Pl.       |          |
| 'trə:və              | 'tri:və            | 'beam'   | 'passə                 | 'pjissə   | 'step'   |
| "pejtə<br>('petə)    | 'pi:tə             | 'foot'   | 'pettə                 | 'pjittə   | 'breast' |
| 'ma:sə               | 'mi:sə             | 'month'  | 'pɔʃfə                 | 'pjɪʃfə   | 'fish'   |
| 'fɔ:lə               | 'fi:lə             | 'thread' | "leɪbbərə              | 'ljɪbbərə | 'book'   |
| "vouwə<br>('vo:wə)   | "vəwə<br>('vəwə)   | 'ox'     | 'kollə                 | 'kwolle   | 'hill'   |
| 'fju:rə              | "fjəwə<br>('fjərə) | 'flower' | 'tənnə                 | 'twənnə   | 'round'  |
| 'mu:rə               | "məwə<br>('mərə)   | 'wall'   | 'fɔʃtə                 | 'fwɔʃtə   | 'trunk'  |

Whether metaphony can still be analysed as a synchronic process at all is a much debated question. Despite the fact that final -i (*i.e.* the metaphonic trigger) has undergone reduction to schwa in Sanvalentinense, it is our contention that a floating -i as a plural exponent can be

posited in the dialect, where metaphony expresses gender/number distinctions. The argument in favour of the presence a floating *-i* is supported by the fact that, as discussed in section 1.3, in the dialect of San Valentino, word-final [i] may surface in phrase-internal positions, as shown in (10) with data from Pescarini & Pascetta (2014)<sup>4</sup>:

- (10) a. 'ajə kum'bri:tə 'tʃerti 'bbəni 'ljibbrə  
 I.have bought some good books  
 'I bought some good books'  
 b. 'ajə kum'bri:tə 'bbəni 'ljibbrə  
 I.have bought good books  
 'I bought good books'  
 c. 'ajə kum'bri:tə 'ljibbri bbəunə.  
 I.have bought books good  
 'I bought good books'

By observing Table 3, we find that metaphonic outcomes – like their non-metaphonic counterparts – have different allophones distributed according to position: the allophones [i] and [əu] [ə] in the open position and the light diphthongs [ji] and [wɔ] in the closed. Most noteworthy, different outcomes of Proto-Romance high vowels are documented in metaphonic and non metaphonic position, although high vowels do not usually display metaphonic alternations, since by definition a high vowel cannot be subject to raising. We address all these questions in the next section.

#### 2.4.2 The reflexes of high-front vowels

We have previously shown that the outcomes of \*i in the open position is the back vowel [ɔ]. This vowel, however, does not phonologically pattern with the other back vowels. Back vowels in Sanvalentinense uniformly reduce to [u] when occurring in the pretonic position (after a stress shift), mid-back vowels raise to high back light diphthongs under metaphony, and surface as lax back allophones in the closed position. Conversely, [ɔ] reduces by centralising to *schwa* (as is customary for front vowels), yields a high front vowel in metaphonic position, and displays a front allophone in the closed position, i.e. [ei]<sup>5</sup>.

To account for the gap between phonology and phonetics, we propose again that \*i diphthongised to [oi] in the open position under sentence stress and then further monophthongised to [ɔ], a mid-back allophone phonetically different from the outcomes of \*o and \*ɔ. Breaking of the outcome of \*i is very common in the dialectal area of San Valentino, where diphthongs of different colours are attested (Rohlf 1966: 54). The outcome [oi] in the open position has been documented by Rohlf (1966: 54) and Savoia (1989, 2015) in neighbouring dialects like Popoli, located 21 km from San Valentino along the valley of the Pescara river, as well as in other Upper Southern dialects of the Adriatic area such as Andria, and Bitonto (Rohlf 1966: 54). Above all, the allophone [oi] is recognised as an archaism by our Sanvalentinense informant and can thus be said to be documented in a previous stage of the language we are investigating and support our analysis. In addition,

<sup>4</sup> In (10a) the final *-i* does not induce metaphonic raising of the quantifier stem-internal vowel. This is not necessarily a problem for our general analysis of metaphony. However, the discussion of this topic far exceeds the scope of this paper and will be addressed in future work.

<sup>5</sup> This outcome is exceptional since diphthongs are usually restricted to open positions, although some exceptions to this generalisation are also found in other dialects of the area. However, it is important to note that it is a front allophone.

Rohlf's (1966: 54-55) also documents a number of front-rounded [ø] as outcomes of \*i, proposing, as we do, a previous stage where \*i diphthongised to [oi].

The [ø] allophone extended to the sentence-internal position, as we have suggested in previous cases. The expected allophone in the closed position, given the underlying /i/, should be [ji], a light high-front diphthong. Lowering of [ji] to [je] is compatible with the regression described by Maiden (1991: 201) and Barbato (2008: 285), wherein a metaphonic alternation is analogically extended to cases where it is not etymologically justified in order to signal the number opposition. Under regression, outcomes of high vowels lower in the singular forms, in order to replicate the singular/low vs. plural/high pattern present in the paradigm.

It is more difficult to explain why /e/ surfaces as the heavy diphthong [ej], usually found in the open position, instead of surfacing as [je], in a dialect that almost everywhere else seems to distribute long vowels/heavy diphthongs in the open position and short vowels/light diphthongs in the closed position. In the nearby dialect of Casalincontrada, however, heavy diphthongs are documented also in the closed position (De Lollis 1890-1892). Heavy diphthongs as non metaphonic \*i outcomes are also documented in Apulia in Minervino Murge among others (Stehl 1986). Be that as it may, the diachronic events just described result in different outcomes of high front vowels in metaphonic and non-metaphonic position, as illustrated in (11):

- |      |          |   |          |       |   |          |             |
|------|----------|---|----------|-------|---|----------|-------------|
| (11) | FĪLU(M)  | > | 'f̥o:lə  | FĪLI  | > | 'fi:lə   | 'thread/-s' |
|      | LĪBRU(M) | > | 'leḷbbrə | LĪBRI | > | 'ljibbrə | 'book/-s'   |

This situation is rare in Romance, since high vowels cannot be targeted by raising processes. To account for the phenomenon, one could wonder about the situation in the past: Why is it that underlying -i unexpectedly underwent a different diachronic path in metaphonic and non-metaphonic position so as to yield vowels of different phonetic quality? Why did diphthongisation of /i/ not take place in the metaphonic position under sentence stress yielding also [oi] and then the monophthong [ø]? We know that, historically, diphthongisation in the open position took place after metaphony and that in many dialects, such as Popoli (situated 20 km from San Valentino), breaking affected metaphonic high vowels as well as non metaphonic vowels, as shown in (12):

- |      |                   |                 |                                   |
|------|-------------------|-----------------|-----------------------------------|
| (12) | a. Non-metaphonic | b. Metaphonic   | (Popoli; Savoia 1989, 2015:83-84) |
|      | [roḷdə] < RIDO    | [poidə] < PEDES |                                   |

Conversely, in Sanvalentino, the diphthongisation to [oi] has only occurred in the non-metaphonic position, yielding a situation in which two different phonetic outputs are present as reflexes of the same vowel \*i. This unusual state of affairs, we argue, depends on the influence of a final /i/ to the stressed internal \*i in a previous stage of the language. We propose that at that stage a bond was created on the vocalic tier between identical melodies, which prevented the stem-internal /i/ from breaking.

While in canonical metaphony the final /i/ induces the raising of stem-internal, stressed non-high vowels through a harmonic process, in the process we have described here the final /i/ prevents the stem-internal /i/ from breaking. Both processes yields an alternation in metaphonic and non-metaphonic positions. The phenomenon we have described took place diachronically. The stressed /i/ diphthongisation is no longer active, and moreover the diphthong has monophthongised. Likewise, the dialect of San Valentino displays different outcomes of the high-back vowel \*u in metaphonic and non metaphonic position. We discuss this issue in the next section.

### 2.4.3 High back vowels in open diphthongising position

The attested reflexes of Sanvalentinense \*u are more than the three expected allophones regulated by position and stress. Table 3 shows [ø]/[u] in the open position, [wø]/[ɔ] in the closed position and [əu], the broken allophone, under sentence stress. Because the data are rather complex we start by discussing the outcomes in the open diphthongising position, the one that characterizes words uttered in isolation or hit by sentence stress. In this position the broken allophone [əu] is on record, which corresponds to word internal [ø]. [u], on the other hand, does not break under sentence stress. It thus shows no alternation with a diphthong and is usually found in the masculine singular of words that etymologically ended in *-u*. [ø], on the other hand, is found in feminine nouns. The former are shown in (13a) and the latter in (13b), where the alternation between word and sentence stress is attested<sup>6</sup>:

- (13) a. "mu:rə < MŪRU(M) 'wall  
           "mu:tə < MŪTU(M) 'dumb'  
           "fu:sə < FŪSU(M) 'spindle'  
           "ʃku:rə < OBSCŪRU(M) 'dark'
- b. 'fə:nə/ "fəunə < FŪNE(M) 'rope'  
       'lə:nə/ "ləunə < LŪNA(M) 'moon'

To account for these different evolutions of ū we propose the following scenario: the reflex of \*u surfaced as [u] in sentence-internal position, while the broken allophone [əu] surfaced under sentence stress (and thus in isolation). [wø] was the allophone of the closed position. From a phonetic point of view, these are in fact the expected allophones according to the typology of the language, where vowel differentiation and breaking under sentence stress take place.

However, in a number of words, namely the nouns of the 2<sup>nd</sup> and 4<sup>th</sup> inflectional classes, the presence of unstressed word-final [u] < ū prevented stressed word-internal [u] from breaking to [əu] under sentence stress. In our view, diphthongisation was blocked by the influence of a similar vowel. As we have seen in the case of final /i/ in the previous section, interaction between identical melodies prevented breaking. Since the nouns of the 2<sup>nd</sup> and 4<sup>th</sup> inflectional classes ending in [u] < ū were masculine nouns, we propose that the blocking of the breaking process created a situation whereby, under sentence stress (and therefore also when the words were uttered in isolation), a tonic unbroken [u] was reanalysed as a masculine singular exponent and [əu] as a feminine exponent. Evidence for the reanalysis of the simple/broken vowel as respectively masculine/feminine gender exponents is discussed next. First of all, stressed [u] resisting diphthongisation under sentence stress was analogically extended to masculine nouns that etymologically did not end with \*u, e.g. fju:mə < FLŪMEN \* fju:mə. In addition, among the nouns belonging to declensions not ending in [u], some have developed a double gender corresponding to slightly different meanings, as shown in (14), where a neuter noun of the Latin 3<sup>rd</sup> declension yielded two outcomes with different gender. Accordingly, under sentence stress, it appears respectively with the allophone resisting to breaking in the masculine and with the broken allophone in the feminine:

<sup>6</sup> For ease of exposition words with word-stress and sentence stress are indicated in isolation. However, the forms with simple word stress may never occur in isolation, where they bear sentence stress.



- (14)                      masculine                      feminine  
 a. LUMEN >        "lu:mə 'light'        "ləumə 'lamp'

Such cases provide further evidence for our suggestion according to which stressed internal [u] was reanalysed as a masculine exponent and analogically extended to other masculine nouns that etymologically did not end with \*u. They also back up the proposal that the regular outcome under sentence stress in the singular, namely [əu], also became a feminine gender exponent opposed to [u], the masculine gender in the diphthongising position.

As illustrated in Table 5, the outcome of \*u in the plural under sentence stress is also [əu]. This situation results in paradigmatic oppositions yielding a *morphomic* pattern of allomorphy (Maiden 2005, 2009) for adjectives under sentence stress. In fact, feminine singular and plural (invariable), as well as masculine plural converge to the same output form, whereas the masculine singular stands out, since final \*u blocked breaking in the diphthongising context, as shown in Table 5:

Table 5. L pattern of allomorphy in the diphthongising context (sentence final, isolation)

|   | SG      | PL      |        |
|---|---------|---------|--------|
| M | "ʃku:rə | "ʃkəʊrə | 'dark' |
| F | "ʃkəʊrə | "ʃkəʊrə |        |

This situation, we argue, has dictated further changes involving the outcomes of Ū, as discussed next.

#### 2.4.4 High back vowels in open non diphthongising position

We have proposed that \*u generally evolved as [u] in open position, alternating with [əu] under sentence/phrase stress. In open word-internal position under simple word-stress, however, words that did not end with -u, display the presence of a central rounded vowel [ə] instead of the expected [u]. This puzzling outcome deserves an explanation. We have proposed above that the reanalysis of [u] as a masculine singular exponent created paradigmatic oppositions in the diphthongising context, the one under sentence-stress and of words uttered in isolation. We suggest now that the situation found in the diphthongising context drove further changes in order to replicate the same paradigmatic opposition also in the open position of non-diphthongising contexts. More specifically, we argue, the allophone [ə], a back rounded centralised vowel was backformed from the diphthong [əu] by fusion of the phonetic characteristics of the vowels in the diphthong. This happened in order to maintain the pattern that distinguishes the masculine singular from the other forms of the paradigm shown in Table 4. Accordingly, after backformation a correspondence obtains between words uttered in isolation (with sentence stress) and words in sentence-internal position (with simple words stress). In Table 5 the pattern found in the diphthongizing context is repeated and compared to the pattern obtained via backformation of [ə] < [əu], shown in Table 6.

Table 5. Paradigmatic opposition existing in the diphthongising context (phrase final, isolation)

|   | SG                   | PL                   |        |
|---|----------------------|----------------------|--------|
| M | "sku:rə              | "skə <sub>u</sub> rə | 'dark' |
| F | "skə <sub>u</sub> rə | "skə <sub>u</sub> rə |        |

Table 6. Analogical extension via backformation in non-diphthongising context (phrase-internal)

|   | SG                   | PL                   |        |
|---|----------------------|----------------------|--------|
| M | "sku:rə              | "skə <sub>o</sub> rə | 'dark' |
| F | "skə <sub>o</sub> rə | "skə <sub>o</sub> rə |        |

A number of words still exist in which [u] instead of [ə] in the sentence-internal position alternates with [ə<sub>u</sub>] under sentence stress (cf. ccu/ccə<sub>u</sub> < PLŪS<sup>7</sup>), hinting at the existence of this previous diachronic stage.

#### 2.4.5 High back vowels in closed position

In the previous sections we have proposed that the five reflexes of \*u arose as an effect of a number of analogical processes. The first concerned the extension of stressed [u] in diphthongising position to all masculines. The second the backformation of [ə] from [ə<sub>u</sub>] in order to maintain a paradigmatic correspondence, which arisen in the diphthongising open position, also in the non-diphthongising open position. We argue that to explain the presence of both [ɔ] and [wɔ] in the closed position as outcomes of \*u we appeal again to paradigmatic pressure and analogy.

If we observe the attested distribution of allophones illustrated in Table 7, we observe again a pattern of allomorphy akin to what has been shown for the open position:

Table 7. Analogical lowering in closed position

|   | SG       | PL       |         |
|---|----------|----------|---------|
| m | 'fɔtɬə   | 'fɔwɔtɬə | 'dunce' |
| f | 'fɔwɔtɬə | 'fɔwɔtɬə |         |

In this case, we explain the origin of the allophone [ɔ] from analogical lowering of the high back vowel, with the aim of creating a seemingly metaphonic alternation. The phenomenon has been dubbed regression and is reported in Maiden (1991: 201), for dialects where metaphony has been morphologised. Vowel lowering extends the same pattern to the closed position context, like it has been extended to the open non diphthongising position by means of the backformation of [ə] (see above). After lowering, the outcome of \*u in the closed non-metaphonic position coincides with the outcomes of the other back vowels.

<sup>7</sup> Paolo Acquaviva (p.c.) pointed out that elements such as aspectual adverbs never participated in gender alternations.

### 3. Final remarks

In this contribution we have tried to explain some puzzling evolutions by reconstructing the diachronic scenario by means of data from geolinguistic variation. We have argued that, in a previous stage, Sanvalentinense conformed with how vocalic differentiation worked in the dialects of the area: all vowels diphthongised in open position under sentence stress. In (15) we illustrate our proposal for the tonic system in non-metaphonic position in this previous stage of the language indicating in bold the outcomes that are attested in the present-day dialect or that speakers can recollect:

(15) The tonic vowel-system of San Valentino (reconstruction):

|                 | I    | Ī         | Ē    | Ĕ        | Ā/Ā  | Ō    | Ȯ         | Ū | Ȫ |
|-----------------|------|-----------|------|----------|------|------|-----------|---|---|
| Proto-Romance   |      | ∨         |      |          |      |      | ∨         |   |   |
|                 | *i   | *e        | *ε   | *a       | *ɔ   | *o   | *u        |   |   |
| Open position   | i/oī | e/ai      | e/eī | a/εa     | o/oū | o/au | u/əū      |   |   |
| Closed position | ei   | <b>ai</b> | ε    | <b>a</b> | ɔ    | ɔ    | <b>wɔ</b> |   |   |

Subsequently, due to a number of diachronic changes, some purely phonological, others driven by paradigmatic pressure, the system reached the present stage. We illustrate the changes affecting the hypothetic reconstructed system in (16), where vowels deleted by monophthongation of diphthongs are in brackets, while > indicates analogical changes.

(16) Evolution of the present tonic vowel-system of San Valentino (reconstruction):

|                 | I        | Ī        | Ē    | Ĕ        | Ā/Ā  | Ō        | Ȯ             | Ū | Ȫ |
|-----------------|----------|----------|------|----------|------|----------|---------------|---|---|
| Proto-Romance   |          | ∨        |      |          |      |          | ∨             |   |   |
|                 | *i       | *e       | *ε   | *a       | *ɔ   | *o       | *u            |   |   |
| Open position   | (i)/o(i) | (e)/a(i) | e/eī | (a)/(ε)a | o/oū | (o)/(a)u | u > ɐ /əū     |   |   |
| Closed position | iī > ei  | <b>a</b> | ε    | <b>a</b> | ɔ    | ɔ        | <b>wɔ</b> > ɔ |   |   |

We have also illustrated an effect of word-final vowels on word-internal stressed vowels that recalls metaphony. However, while metaphony induces assimilatory changes in word-internal vowels that result in raising or breaking, we have pointed out cases in which word-final vowel influence word-internal vowels so that they *resist* to unconditioned changes such as vowel breaking.

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## Chorophorics in the Aquilan dialect

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**Abstract:** This article outlines the properties of chorophorics (“spatial pronouns”) in the Italian dialect Aquilan. It is shown that chorophorics (e.g. *pe’nfronte* ‘to in front (of the place)’) display similar morphological properties to spatial prepositions (e.g. *nfronte alla macchina* ‘in front of the car’). However, they differ in their syntactic distribution, and their semantic interpretation in intra- and inter-clausal structures. An outline of the data is offered, and a sketch of chorophorics’ lexical and anaphoric potentials are defined via a minimal fragment of Discourse Representation Theory. The article concludes with some general considerations on the nature of chorophorics.

### 1. Introduction<sup>1</sup>

*Aquilan* is a central Italian dialect spoken in L’Aquila, Northwest Abruzzo, and its surrounding valley (Vignuzzi, 1997; Loporcaro and Paciaroni 2016). Some of its lexical, phonological, and morpho-syntactic properties are well-studied. One example is morphological alternation in lexical items, due to the influence of other Abruzzese dialects (e.g. *ju piete* vs. *ju pee* ‘the foot’, respectively: Lolli 1982; Marra et al. 2000; Cavalieri 2001). A phonological example includes a dearth of diphthongs (e.g. *bbonu* ‘good’, cf. Italian *buono*: Avolio, 1992, 1993, 2009a). A lexical example includes the distinction between copulas respectively denoting stable and temporary relations over time: *esse* and *sta*’ (Giammarco 1973; Manzini and Savoia 2005). However, other domains of the grammar and the lexicon of Aquilan seem understudied.

One such domain includes *spatial prepositions* and *chorophorics*, two categories that belong to the set of *spatial categories*. Spatial categories are usually defined as categories that can contribute spatial information to sentences (Hagège 2010: Ch.1; Libert 2013; and references therein). Spatial prepositions are usually defined as (syntactic) heads that describe the location of one entity, or *figure*, with respect to a landmark object or *ground* (Talmy 2000: Ch.1). Prepositions in Italian dialects are generally understudied (cf. Maiden and Parry 1997: Ch.1; Ledgeway 2016; Garzonio and Rossi 2016 on Sicilian). Italian prepositions, instead, have received relatively more attention over the years (e.g. Rizzi 1988; Serianni 1988; Taylor 1988; Folli 2008; Tortora 2008; Luraghi 2009). A more homogeneous picture emerges when one focuses on chorophorics, defined as vocabulary items that can act as “spatial” pronouns (Hagège 2010, 2013). Studies on chorophorics are still rare; hence, their properties in Italian, Aquilan and other Italo-Romance dialects are virtually unexplored.

The properties of spatial prepositions and chorophorics in Aquilan, together with their categorial, lexical and distributional relations can be preliminarily illustrated via (1)–(3):

<sup>1</sup> The list of abbreviations used in this paper is as follows: A=sense cluster associated to *a*; DE=sense cluster associated to *de*; DEF= definite marker; E=copula, extended aspect; ML=male gender; INF=infinitival marker; MED=deixis, medial marker; N=sense cluster associated to *n-*; PE=sense cluster associated to *pe*; S=copula, stable aspect; SELF=reflexive clitic; SING= singular number.

- (1) Luigi sta 'n-fronte a-jju divano  
 Luigi is.E N-front A-the sofa  
 'Luigi is behind the sofa'
- (2) Luigi s'assetta de-fronte (#a-jju divano)  
 Luigi SELF.sits DE-front (A-the sofa)  
 'Luigi sits down behind (the sofa)'
- (3) Paolo va pe'n-fronte a-jju divano. Luigi va pe-rrete/#arrete a-jju divano  
 Paolo goes pe-N-front A-the sofa. Luigi goes PE-back/\*A-back A-the sofa  
 'Paolo goes in front of the sofa. Luigi goes behind (of the sofa)'

The sentence in (1) includes the preposition *'nfronte a* 'in front of', which takes the *Noun Phrase* (NP) *ju divano* 'the sofa' as its complement and forms a *Prepositional Phrase* (PP), *'nfronte ajju divano*. The article *ju* 'the.ML.SING' conflates with the head of this preposition, *a*, to form the *preposizione articolata ajju via raddoppiamento sintattico*, or "syntactic doubling" in English (cf. Napoli and Blevins 1987; Rizzi 1988: 498 for Italian). The copula *sta* describes the relation between Luigi and the sofa as being temporary (Avolio 2009a). It takes this PP and the NP referring to the figure as its arguments, thereby acting as a copula that can have a "locative predication" function (Stassen 2013).

The sentence in (2) includes the chorophoric *defronte*, which refers to the posterior axis of a given sofa in context. Chorophorics cannot take a ground NP as their complement, unlike prepositions. If this happens, a sentence becomes uninterpretable, as we show via the "#" symbol. This is because chorophoric and ground NP end up introducing two ground referents, when only one is accessible in context. Consider now (3). In the first sentence, the PP *'nfronte ajju divano* introduces a frontal location that Paolo occupies with respect to a given sofa. The second sentence establishes that Luigi occupies a posterior location with respect to this sofa. However, the presence of the obligatory chorophoric *derrete* 'behind' prevents the overt repetition of the ground NP.

Overall, these initial data seem to suggest that chorophorics and PPs stand in a complementary distribution at an intra-sentential level but can establish anaphoric relations at an inter-sentential level. These data also suggest that the apparently different morphological structures of prepositions and chorophorics involve the same categories: spatial nouns and prepositions. Thus, *'nfronte*, *defronte* and the related *pe'nfronte* seem to act as members of a more abstract categorial paradigm: prefixes *'n-*, *pe-*, and *de-* seem to determine which preposition/chorophoric must occur in a sentence. Nevertheless, these converging grammatical, lexical, and discourse-bound properties seem still poorly understood.

The first goal of this article is therefore descriptive in nature. We aim to offer a thorough presentation of these patterns and show how properties of these two categories are tightly intertwined. The second goal is instead theoretical. We aim to offer an account of the different properties of chorophorics and connect these properties to their grammatical and discourse distribution. Thus, we aim to offer an analysis that allows us to show how these categories form the grammar and the lexicon of "space" of the Aquilan dialect (cf. Levinson 2003; Levinson and Meira 2006). We also aim to offer a contribution to the broader typological debate on adpositions, chorophorics, and their structural relations (cf. Haspelmath 2003; Hagège 2010, 2013; Dryer 2013; Libert 2013). To reach these goals we present the relevant data in section 2. We then offer a theoretical account based on Lexical Syntax (Hale and Keyser 2002) and Discourse Representation Theory (Kamp et al. 2011) in section 3. Section 4 concludes.

## 2. Methodology and Data

### 2.1 Background information, material, and methods

Aquilan is a central Italian dialect from *cicolano-reatino-aquilano* sub-branch (Lopez 1988; Avolio 2009a, b). Aquilan has a semi-standard spelling system, used in literary texts (e.g. poetry, theatrical plays) and in modern social media communication (e.g. satire: Lolli 1975, 1982; AA.VV. 2017, <https://www.facebook.com/ngulochestrina>). Language-specific forms of spelling include the use of “j” for /j/ (e.g. *jemo* ‘we go’), apocope and syntactic doubling (e.g. ‘*nnanzi* lit. ‘a-head’) (Marra et al. 2000; Cavalieri 2001). Diastratic variation involves older generations (>60 years) including near-monolingual speakers, unlike younger generations (<40 years). Diatopic variation involves South-Eastern varieties having influences from Southern Abbruzzese dialects (e.g. frequent apocope: Avolio 2009b). Code-switching is common regardless of register and social context: dialect carries a form of covert prestige. Hence, Aquilan and Italian co-exist in a condition of *diglossia*, (cf. Chambers and Trudgill 1998: ch. 4; Berruto 2012).

Because of these factors, we collected data by using the following methodology. A group of near mono-lingual NORM speakers (N=13; cf. Chambers and Trudgill 1998: 28–30) over 60 years of age were interviewed during a period of fieldwork. The goal was to reduce the influence of Italian to a minimum, since no participant was genuinely monolingual. Participants were asked to offer dialect “lessons” to the field researcher, who explicitly asked to be educated in the use and understanding of these expressions. The researcher started the interview by using Italian, but slowly switched to Aquilan as the interview unfolded. The use of a naturalistic context and the acknowledgement of the informants’ expertise on dialect greatly facilitated a cooperative attitude from the participants (Chelliah, Shobhana and Willem 2010: ch.5; Margetts and Margetts 2012).

Since the goal was to test how spatial prepositions and chorophorics are used in context, we adapted parts of the “Topological Picture Research Series” task method for use in the interviews. Speakers of a target language are asked to name and describe spatial relations as they are presented with pictures from a closed set (Bowerman and Pederson 1992; cf. Levinson and Wilkins 2006: Ch.1). The elicited expressions were then compared across speakers. In this way, a researcher can establish which preposition can better describe a given relation (e.g. *in* vs. *on* for ‘inclusion’ in English). One minor obstacle was that this series mostly focuses on geometrical relations. For projective relations, fully described in the next section, we adopted an extension of the task. We thus used toy characters and props to “act out” these other spatial relations (cf. Levinson 2003: Ch.1). We applied the same method to test chorophorics, since the use of props allowed us to always make clear which were the grounds that could be implicitly be referred to, in context. Interviews were usually conducted in rooms furnished with a table. Hence, the researcher could easily move the props and change their spatial configuration as required. The elicited sentences were then transcribed, analysed, and organized into sub-categories, as discussed in the next section.

### 2.2. The Data

Aquilan Prepositions can be distinguished between *simple* and *complex* prepositions, like their Italian counterparts (Rizzi 1988; Serianni 1988). Complex prepositions can be further distinguished between *projective* and *place* prepositions, due to a semantic alternation



reflected in their morphosyntactic structure (Cresswell 1978; Jackendoff 1983, 1990; Wunderlich 1991; Zwarts and Winter 2000; a.o.). The structural relations between prepositions and chorophorics follow subtle patterns that can be best understood once we present each category.

Simple prepositions form a sub-set of mono-morphemic, monosyllabic lexical items. These prepositions are highly polysemous: they can cover or *colexify* several related senses.<sup>2</sup> They introduce the complement ground NP in *Basic Locative Constructions* (BLCs), defined as the predominant type of declarative sentences or answers in a language that can describe a spatial relation (Levinson 2003; Levinson and Meira 2003; Levinson and Wilkins 2006: ch.1). Simple prepositions must occur with a ground NP, lest a sentence be ungrammatical, and can alternate between a *directional* and a *locative* sense type. Directional senses involve a relation between figure and ground as changing over time; locative, as remaining stable. Thus, Aquilan seems a “verb-framed” language like Italian (cf. Talmy 2000: Ch.3; Folli 2008).

Complex prepositions involve the combination of simple prepositions and *spatial nouns*, defined as nouns that refer to parts, sections, and axes of objects (Levinson 1994; Svenonius 2006).<sup>3</sup> Most spatial nouns can also be attested as distinct lexical items (e.g. *la fronte dejju quatrano* ‘the boy’s front’ vs. *nfronte* ‘in front’). However, only prefixed spatial nouns can occur in complex prepositions: “bare” spatial nouns are disallowed. Projective prepositions include *n-*, *pe-* and *a-* as prepositions re-interpreted as prefixes (e.g. *n-fronte*, *a-rrete*). Place prepositions include *preposizioni articolate* *ajju* and *alla* (e.g. *ajju lato* ‘at the side’, *alla sinistra* ‘at the left’). Note that *ajju* includes *ju* and *alla* includes *la*, respectively male and female gender (singular) forms of the definite article. Spatial nouns follow gender assignment rules for nouns in this dialect, although no semantic distinction is related to these patterns.

Projective prepositions include *a* and *de* (e.g. *assenistra de*) as their head. Place prepositions include only *de* (e.g. *ajju lato de* ‘at the side of’). Both categories include prefixed arguments (e.g. *nfronte*), or a silent prefix (e.g. *lungo* in *lungo a* ‘along’). Consider (4)–(10), with the *proviso* that we only use examples involving locative prepositions and static verbs. In (4)–(5) we illustrate the distribution of simple prepositions, in (6)–(8) the distribution of complex projective prepositions, and in (9)–(10) that of complex place prepositions. In (11) we offer the list of simple prepositions, and in (12)–(13) non-exhaustive lists of complex prepositions:<sup>4</sup>

- (4) Luigi    sta    a-jju tavolo  
       Luigi    is.E   A-the table  
       ‘Luigi is at the table’

- (5) \*Luigi sta    a(jju tavolo)  
       Luigi    is.E   A(-the table)  
       ‘Luigi is at (the table)’

<sup>2</sup> Polysemy holds when one lexical item has several related senses, hence it offers a semasiological perspective. Colexification holds when several related senses are associated to one item, and thus captures an onomasiological perspective (François 2008, 2015). In this article, we only focus on the polysemy of simple prepositions as heads, and as affixes in chorophorics.

<sup>3</sup> Most authors use the labels “body part”, “place”, and “relational” nouns for this macro-category (cf. Levinson and Wilkins 2006: ch.1). We use Chappell and Peyraube (2008)’s label to discuss the data in a streamlined manner.

<sup>4</sup> Ungrammatical sentences were tested by having a toy character called “Luigi” next to a toy table and asking if these sentences could be used in such a context.

(6) \*Luigi sta rete a-jju tavolo  
 Luigi is.E back A-the table  
 ‘Luigi is behind the table’

(7) Luigi sta a-rrete a-jju tavolo  
 Luigi is.E A-back A-the table  
 ‘Luigi is behind the table’

(8) Luigi sta a-rrete (a-jju tavolo)  
 Luigi is.E A-back (A-the table)  
 ‘Luigi is behind (of the table)’

(9) Luigi s’assetta a-lla destra de-jju tavolo  
 Luigi SELF.sits A-the right DE-the table  
 ‘Luigi sits down to the right of the table’

(10) Luigi se mette a-jju fianco (de-jju tavolo)  
 Luigi SELF puts A-the flank (DE-the table)  
 ‘Luigi places himself to the side of the table’

(11) **Simple prepositions**= $\{a$  ‘at, in, to,...’,  $de$  ‘of, from’,  $da$  ‘at, from, to’,  $pe$  ‘through, around’}

(12) **Complex projective prepositions**= $\{a-rrete/n-fronte$   $a$  ‘behind/in front of’,  $a-ddestra/a-ssenistra$   $de$  ‘to the right/left of’,  $sopre/sottu$   $a$  ‘above/below’,  $pe-ttraverso$   $a$  ‘through, across’,  $lungo$   $a$  ‘along’,...}

(13) **Complex Place Prepositions**= $\{a-jju$   $fronte$   $de$  ‘at the front of’,  $a-jju$   $fonno$  ‘at the bottom/back of’,  $a-lla$   $senistra/destra$   $de$  ‘at the left/right of’,  $a-jju$   $centro$  ‘at-the centre of’,...}

Complex prepositions can be distinguished from simple prepositions also because they can undergo ground NP *ellipsis*, as (7)–(10) show (cf. Merchant 2001: Ch.2, 2004; Svenonius 2006). This optional form of ellipsis is licensed in deictic or *referential* contexts, and in discourse or *anaphoric* contexts. Referential contexts are defined when a sentence is used in isolation: the identity of its referents must be inferred from the extra-linguistic context (Von Stechow 1994; Diessel 1999: Ch.1). In anaphoric contexts, previous sentences act as the discourse background against which a novel sentence is interpreted. These contexts license anaphoric relations as relations between two phrases possibly belonging to the same category (e.g. PPs) or carrying the same semantic features (e.g. spatial senses). The phrases in the context sentences act as *antecedents* of the phrases in the novel sentence (cf. Kamp et al. 2011: Ch.4; Kibrik 2013). The pronounced part of an elided phrase is known as *the remnant*, which in these cases corresponds to the complex prefixed preposition: ground NP and head are elided. Anaphoric relations also establish identity relations between the referents that the involved phrases denote.

The list in (11) presents the 4 attested simple prepositions of Aquilan, with their most frequent senses. The lists in (12)–(13) are non-exhaustive, even though they considerably expand over previous lists (e.g. Cavalieri 2001). Most complex prepositions feature *a* as their main head. Prepositions distributing as suffixes include *a* (e.g. *a-rrete a*), *pe* (e.g. *pe-*

*attraverso a*) and *'n* (e.g. *'n-fronte a*). This latter prefix seems a remnant of the preposition *in* (cf. its Italian and Latin cognates: Rizzi 1988; Vincent 1999), also attested in verbs (e.g. *'n-colla* lit. ‘to in-shoulder’, i.e. to shoulder a weight). As a distinct head, it seems to have disappeared from the synchronic lexicon of Aquilan. *De* and *pe-* also appear in chorophorics, as we discuss in the next paragraphs.

These lists define the range of prepositions in Aquilan and show the relevance of simple prepositions and spatial nouns for an analysis of complex prepositions and chorophorics. According to Hagège (2010: 108–130, 2013), chorophorics are an understudied category due to their heterogeneous grammatical status. These works observe that chorophorics act as a sub-category that can refer to discourse-specific locations or “places”. This interpretation can be licensed in either anaphoric or referential contexts. It is known that chorophorics appear in languages such as Mandarin and Hebrew (Botwinik 2008; Hagège 2010), but their distribution across languages is still vastly understudied. Hence, these works treat chorophorics as a liminal category occupying the categorial space between prepositions and nouns (Libert 2013: Ch.2).

Three key properties of Aquilan chorophorics can thus shed light on the general properties of this category. First, as shown in the introduction, chorophorics and PPs with complex prepositions as heads stand in complementary distribution. Second, only chorophorics distribute with static verbs other than the copula *sta*. Third, *de-* and *pe-* act as prefixes forming two distinct chorophoric classes. *De-* is used when BLCs cover locative senses; *pe-*, when BLCs cover directional senses. If (14) shows that *'nfronte* can be the remnant occurring with *sta*, then (15) shows that *de-fronte* is obligatory with *s'assetta* ‘sits’. Instead, (16) shows that *pe'nfronte* is obligatory with *va* ‘goes’; (17), that *de-fronte* cannot combine with this dynamic verb, for the most part:

- (14) Luigi sta 'n-fronte (a-jju divano)  
       Luigi is.E N-behind (A-the sofa)  
       ‘Luigi is in front (of the sofa)’
- (15) Luigi s'assetta de-fronte (#a-jju divano)  
       Luigi SELF.sits DE-front (A-the sofa)  
       ‘Luigi sits down in front (of the sofa)’
- (16) Luigi va pe'n-fronte (#a-jju divano)  
       Luigi sits PE.N-front (A-the sofa)  
       ‘Luigi sits down outside (of the sofa)’
- (17) ??Luigi va de'n-fronte  
       Luigi goes DE.N-front  
       ‘Luigi goes outside (of the sofa)’

Note that due to the subtle nature of the distinctions at stake, participants’ intuitions were less clear-cut. The symbol “??” thus represents that (17) is nearly unacceptable, although participants did not firmly rule this type of example out. However, the distribution of “simple” chorophorics with NPs was always judged uninterpretable, when sense-matching verbs were used. Complex spatial nouns *qua* remnants (e.g. *'nfronte* in (14)) can be labelled as “derived” chorophorics: they derive referential properties in ellipsis contexts.

Anaphoric examples offer a more complex picture. When a context sentence introduces a ground NP, the subsequent sentence can include a chorophoric. Hence, PP and chorophoric establish an anaphoric relation, with the PP as the chorophoric’s antecedent. The cline of

acceptability in these contexts seems also related to the verb's type at stake. The copula *sta* seems to accept derived chorophorics, but simple chorophorics can also occur with this verb (cf. *deffronte*, *'nffronte* in (18)). Other lexical static verbs seem to trigger a clear preference for *de-* chorophorics (cf. *da-rrete* in (19)). Directional verbs seem to select the *pe-* type chorophorics, as *perrete* in (20) shows. We round up the discussion with non-exhaustive lists of chorophorics in (21):

(18) Paolo sta a-rrete a-jju divano. Luigi sta de-fronte/'n-fronte (a-jju divano)  
 Paolo is.E A-back A-the sofa. Luigi is.E DE-front/N-front (A-the sofa)  
 'Paolo is behind the sofa. Luigi is in front (of the sofa)'

(19) Paolo s'assetta 'nffronte a-jju tavolo. Luigi s'assetta de-rrete/??a-rrete  
 Paolo SELF.sits N-front A-the table. Luigi SELF.sits DE-back/A-back  
 'Paolo sits down in front of the car. Luigi sits down behind (the car)'

(20) Paolo va 'n-fronte a-lla machina. Luigi va pe-rrete/#a-rrete  
 Paolo goes N-front A-the car. Luigi goes PE-back/a-back  
 'Paolo goes in front of the car. Luigi goes behind (the car)'

(21) a. **Simple Chorophorics, *pe-* series**:= {*pe-rrete*, *pe-nffronte*, *pe-ssopre*, *pe-ssottu*,...}  
 b. **Simple Chorophorics, *de-* series**:= {*de-rrete*, *de-fronte*, *de-sopre*, *de-sottu*,...}  
 c. **Derived Chorophorics**:= {*a-rrete*, *'n-fronte*, *Ø-sopre*, *Ø-sottu*,...}

The lists in (21a–c) show that that simple and derived chorophorics can be conceived as items belonging in a paradigm-like distribution. For instance, the spatial noun *ffronte* can combine with prefix *pe-* to form the directional simple chorophoric *perrete*, with *de-* to form the locative chorophoric *derrete*, or with *'a-* to form the derived chorophoric *arrete*. Derived chorophorics can thus emerge in the opportune syntactic and discourse-bound contexts. Note, then, that chorophorics seem to always refer to specific, discourse-given places, not unlike place complex prepositions. Overall, chorophorics display a category-specific array of morpho-syntactic and semantic properties, which seem “inherited” from spatial nouns and prepositions, *qua* their formative categories.

Let us take stock. We have reached the first goal by showing that Aquilan prepositions can include simple and complex prepositions. The latter category involves the combination of spatial nouns and simple prepositions as prefixes, as in the case of chorophorics. Thus, complex prepositions and chorophorics seem to form a paradigm-like macro-category of vocabulary items that can refer to “places” and/or directions defined with respect to a ground. Simple chorophorics (e.g. *perrete*) must refer to a ground implicitly, blocking the presence of a ground NP. Chorophorics derived via ellipsis of ground NP involve the optional presence of this NP, instead. In sentential contexts, PPs and chorophorics can distribute as complements of VPs; in discourse contexts, they can establish inter-sentential anaphoric relations. The second goal, offering a formal account of these data, is the target of the next section.

### 3. The Account

#### 3.1. The Proposal: The *P*-within-*P* hypothesis and spatial categories

In this section we offer a compact presentation of *Lexical Syntax* (Hale and Keyser 2002). A concise discussion of previous proposals on the structure of adpositions will help us justifying this choice of framework for our account.

Research on prepositions started with early generative and cognitive linguistics proposals (e.g. Jackendoff 1972, 1983, 1990; van Riemsdijk 1978; Langacker 1987). Successive proposals across distinct frameworks converged onto a bipartite structure for adpositions (generative syntax: van Riemsdijk 1990; Wunderlich 1991; Koopman 2000; LFG: Vincent 1999; HPSG: Tseng 2000; functional typology: Croft 2001: ch.4, 2003; Hagège 2010). For instance, Jackendoff (1983, 1990) proposes that English compound prepositions such as *from under the bed* involve a Path head as the projection of *from*, and a Place head projecting from *under*. Other prepositions such as *into* also support this analysis, due to their conflation of a Place head (i.e. *in*), and a Path head (i.e. *to*).

Recent proposals on Italian prepositions have suggested that the classical analysis can be extended to include aspectual phenomena (cf. Folli 2008; Tortora 2008). The recent Garzonio and Rossi (2016) has suggested that prepositions in Sicilian can receive a ‘Cartography’ account. Building on the proposal illustrated in Cinque and Rizzi (2010), they suggest that a preposition such as *in fronti a* ‘in front of’ projects three distinct heads, one per constituting morpheme. Thus, *a* projects a Kase head, *fronti* an Axpert head, and *in* a Place head. A silent Path head can determine whether prepositions carry a locative or directional sense. Furthermore, this work speculates that a similar analysis can be extended to other Italo-Romance dialects.

Our account of the morpho-syntactic properties of Aquilan spatial categories follows a different perspective: the “P-within-P” hypothesis proposed within *Lexical Syntax* (Hale and Keyser 2002: ch.4; Mateu 2002; \_\_\_\_). We conceive our use of this account as a theory-neutral alternative to previous proposals, for other frameworks have offered equivalent analyses (e.g. Tseng 2000; Hagège 2010: 108–109; Jackendoff 2005). To present this hypothesis and show its empirical import, we first present the key assumptions of *Lexical Syntax*.

First, according to *Lexical Syntax* language-specific categories can project at least one of four language-general head types. Depending on the valence of a lexical or functional item in a syntactic context, the corresponding head will instantiate a 0-place, 1-place, or 2-place head type. A 0-place head is projected from an item that can occur as a “bare” argument (i.e. distributionally equivalent to a phrase). A 1-place head is projected from an affix (prefix or suffix) that takes another item as its argument. A 2-place head type is projected from a “relational” head, i.e. a head taking two phrases as its arguments. Although the framework proposes two types of 2-place heads, we can ignore this distinction without losing precision in our analysis (cf. Hale and Keyser 2002: 13–14). Heads can thus combine or *merge* with 0, 1 or 2 distinct phrasal arguments, forming a corresponding phrase.

Second, prepositions involve a 2-place head that takes a ground NP as its complement and possibly another spatial phrase as its internal argument (a *specifier*, in generative terms). The three elements form a PP or “spatial phrase” (SP), in the case of spatial prepositions. Consider (22) as an example:

(22) [SP[SP in front ] of [NP the sofa ]]

The phrase *in front of the sofa* involves of projecting a 2-place head. Its arguments are the ground NP *the sofa* and the complex preposition *in front*. As (22) shows, the “P-within-P” label stems from analysing complex prepositions as arguments of simple prepositions as heads. This example also shows that the internal structure of complex prepositions remains unanalysed, as *in front* is treated as a single (lexical) item.

Our third, novel assumption is that complex/internal prepositions can be analysed via this hypothesis. Simple prepositions are mono-morphemic items either acting as heads or as prefixes in complex prepositions. In their “simple” distribution, they correspond to 2-place head types; in their prefix distribution, to 1-place head types. As prefixes, they usually undergo conflation with spatial nouns (cf. Talmy 2000 Ch.3; Hale and Keyser 2002: ch.1). Furthermore, internal prepositions specify which location is involved in a given relation (e.g. *‘nfronte*).

For chorophorics, we only need two minimal extensions. First, derived chorophorics earn this status when ellipsis can occur in a sentential context. Ellipsis targets the ground NP and the governing head, thereby leaving the internal “spatial phrase” as the remnant (cf. Merchant 2001: Ch.3). Second, simple chorophorics involve the merge of *pe-* and *de-* as prefixes with spatial nouns. The resulting spatial phrases block the merge of a ground NP, for they carry features that signal the presupposition of a ground NP in context. Consequently, the presence of ground NPs with chorophorics renders sentences uninterpretable or incoherent, when discourses are involved (cf. also Kehler 2011; Ward and Birner 2012). We represent this sub-category via superscripts: “SP” (i.e. SP prime) is the label for simple chorophorics and a simple notational tool to represent their status as pronominal (i.e. presupposition-carrying) items. We show these structures in (23)–(27):

(23) [SP<sub>[SP Ø]</sub>] a [NP -jju tavolo]]

(24) a. [SP ‘n [NP -fronte ]]  
b. [SP a [NP -jju fianco ]]

(25) a. [SP<sub>[SP ‘n [NP -fronte ]]</sub>] a [NP -jju divano ]]  
b. [SP<sub>[SP a [NP -jju fianco ]]</sub>] de [NP -jju divano ]]

(26) a. [SP da [NP -rrete ]]  
b. [SP’ pe [NP -rrete ]]  
c. [SP n [NP -arrete ]]

(27) a. [SP<sub>[SP ‘n [NP -fronte ]]</sub>] (a<sub>SP</sub> [NP -lla machina ]]  
b. [SP<sub>[SP a [NP -jju fianco ]]</sub>] (de [NP -lla machina ]])  
c. \*[SP<sub>[SP’ pe [NP -rrete ]]</sub>] a [NP -lla machina ]]

As (23) shows, simple prepositions involve a silent internal preposition, a fact that seems connected to their rich polysemy. Without this preposition specifying the location at stake, these prepositions seem to have broader, ‘general’ senses. Instead, (24) shows that complex prepositions involve prefixation and conflation of a 1-place preposition and a spatial noun. Place complex prepositions minimally differ in including the definite article and *a* as the fixed prefix, with the two elements undergoing conflation.<sup>5</sup> Thus, (25) shows that they also differ from projective prepositions in always having *de* as the 2-place head, apparently covering a part-of relation (cf. Stassen 2009: Ch.4). Projective prepositions may also include a silent prefix (cf. *sopre/sottu*), a fact that falls within the assumptions of the P-within-P hypothesis.

<sup>5</sup> Note that we treat definite articles as part of NPs, thereby simplifying the underlying structure of head SPs. This simplification does not reduce the explanatory power of our account. See however Elbourne (2013) for a recent discussion on definite NPs.

The structures in (26) show that chorophorics share the same morphological structure of internal prepositions. Since their different distribution is based on their semantic contribution to sentences, this analysis aptly captures the emergence of these restricted paradigms. The structures in (27) show that by having ellipsis to target head preposition and ground NP, the internal SP becomes a remnant. The category of the remnant preserves the category of the whole phrase, thereby preserving its categorial status as an SP.<sup>6</sup> Note that by assuming that chorophorics correspond to SP' (type) phrases, we can capture their inability to merge with ground NPs within other heads. As (27c) shows, the simple preposition *a*, among others, only takes SP specifiers.

We can now offer an account of the sentential data. For standard BLCs, we assume that verbs act as heads of verbal phrases (i.e. VPs), which represent the minimal structures underlying BLCs. PPs/SPs act as the complements of verbs. Thus, the structures in (28) illustrate the possible BLCs emerging from our examples. The structures in (29), instead, illustrate the types of ellipsis structures that result from the data:

- (28) a. [VP[NP Luigi] sta [SP[SP Ø] a [NP -ju tavolo ]]]  
       b. [VP[NP Luigi] sta [SP[SP 'n [SN -fronte ]]] a [NP -jju divano ]]]  
 (29) a. [VP[NP Luigi] va [SP[ a [SP -rrete ] (a [NP -jju divano ]]]]  
       b. [VP[NP Luigi] va [SP pe [NP -rrete ]]]

As (28a) shows, a simple preposition can head a PP (i.e. *ajju tavolo* 'at the table') which becomes the complement of a static verb (i.e. the copula *sta*). A similar reasoning applies for projective and place complex prepositions, as '*nfronte ajju divano* in (28b) shows. Ellipsis patterns show that ground NP ellipsis is optional when a derived chorophoric is involved (cf. (29a)), or obligatory when a chorophoric is merged (cf. (29b)). Whether the remnant is thus of type SP or the sub-type SP', a BLC includes a reduced form of this category as its complement. We can thus account the syntactic distribution of complex prepositions and chorophorics.

We can now offer an analysis of discourse structures. We borrow some key assumptions from syntactic frameworks also covering discourse structures (e.g. Ginzburg and Sag 2000; Jäger 2005; Sag et al. 2012). We treat distinct sentences as structured sequences of clauses. In Lexical Syntax, this entails that a silent sentential connective acting as a 2-place head merges with two clauses/sentences as its arguments, here represented as VPs. Thus, anaphoric relations between chorophorics and PPs/SPs as antecedents hold when these categories share the same underlying category. We capture this relation via the use of category equations, in (30):

- (30) a. [CP[VP Paolo sta [SP(2) arrete ajju divano ]] Ø [VP Luigi sta [SP(Y) defronte ]]],  
       with  $SP(2)=SP(Y)$   
       b. [CP[VP Paolo sta [SP(3) arrete ajju divano ]] Ø [VP Luigi sta [SP(Z) 'nfronte (ajju divano) ]]],  
       with  $SP(3)=SP(Z)$

As this analysis shows, a chorophoric requires an antecedent that also belongs to the SP type. Since *arrete ajju divano* qualifies as such an antecedent, the two phrases enter in an anaphoric relation, represented via the identity relations  $SP(Y)=SP(2)$ ,  $SP(3)=SP(Z)$ . By establishing anaphoric relations between their constituents, these sentences form a cohesive

<sup>6</sup>We gloss over the complex debate on whether ellipsis is better accounted for via syntactic or pragmatic treatments (Merchant 2001; vs. Stainton 2006), as this discussion would lead us too far afield.

and coherent mini-discourse, a fact that is also consistent with previous accounts (e.g. Ward and Birner 2012). This is another welcome result of adopting Lexical Syntax as our account.

Overall, we now have a formal account showing that prepositions and chorophorics act as distinct members of a general set of spatial categories. Complex prepositions and chorophorics, however, inherit their properties from spatial nouns and simple prepositions. This account is consistent with the “P-within-P” hypothesis, but also with frameworks that assume hierarchical relations between categories (e.g. Sign-Based Construction Grammar: Sag et al. 2012). The next section, then, builds on these results to offer an account of the semantic patterns.

### 3.2. *Semantics*

The discussion of the data has highlighted that chorophorics minimally differ from spatial prepositions in carrying an anaphoric component. Prepositions introduce a ground referent; chorophorics seem to *presuppose* the existence of this discourse-given referent (cf. Libert 2016). Thus, chorophoric carry a discourse-bound interpretation.

Discourse-bound phenomena have been intensely studied within “dynamic semantics” approaches (Nouwen et al. 2016). Frameworks such as the Generative Lexicon (Pustejovsky 1995) and Type-Logical Composition (Asher 2011) have instead addressed polysemy and the effect of context-sensitivity on the representation of senses for lexical entries. Syntheses of these different strands of research have been offered, e.g. the integration of (Segmented) DRT with the Generative Lexicon (Asher and Pustejovsky 2013).

Even if theoretical proposals abound, the framework we adopt to account for the data is *Discourse Representation Theory* (DRT), in the formulation offered in Kamp et al. (2011). Our choice falls on DRT for three reasons. First, DRT represents the dynamic semantics theory that has perhaps the highest degree of flexibility, since it can recast other formal approaches within its own formalism (cf. Brasoveanu 2006: Ch.1–2). Second, DRT can be used to offer context-sensitive representations for vocabulary items and their senses (e.g. Asher 2011; Asher and Pustejovsky 2013). Third, DRT offers an incremental model of interpretation that is easily implementable with different syntactic approaches (Kamp et al. 2011: ch.2), including Minimalism (cf. Haselbach 2017). Thus, DRT seems the ideal framework to account for our data. Three central assumptions play a role.

First, DRT assumes that sentences and discourse are interpreted in an on-line manner. Previous sentences thus offer the context against which novel sentences are interpreted and checked for their consistency. This process ranges from morphemes as the smallest units in words and phrases, to sentences and discourses (Haselbach 2017: Ch.4). Second, in DRT vocabulary items are represented as contributing lexical content and possibly anaphoric relations. Lexical content comes in the form of *conditions*, 1-place or 2-place predicates (i.e. relations) that individuate referents and their relations. For instance, the indefinite NP *a delegate* introduces a condition *woman(x)* and a referent *x*. Thus, anaphoric relations are represented as relations between referents and contexts.

Although DRT is well-known for its “box” notation, in linear notation this information is represented as  $[\{x\}: delegate(x)]$ . This type of structure is known as a *Discourse Representation Structure* or DRS. Square brackets represent pairings of referents and conditions associated to a morpho-syntactic string. Set (i.e. curly) brackets represent its referents, and the colon the relation between the two elements. Thus, the NP *a delegate* introduces a new referent individuated as a female, singular individual. DRSs represent the active referents in discourse available for anaphoric relations, one can label their



corresponding set as the *universe of discourse*  $U$  (e.g.  $\{x\}$  in the DRS for this NP). The rest of a DRS is the *condition set*, the set of conditions individuating and relating referents.

More complex DRSs can be built via precise algorithms, which define how the sets of referents and conditions are *merged* in a principled manner. There is an intimate relation between the syntactic operation of merge mentioned in the previous section and the operation that builds more complex DRSs. Here, we do not spell out the formal details. Instead, we maintain the pre-theoretical intuition that vocabulary items are merged to form phrases, sentences and discourses, and then their meanings/senses are merged to form their corresponding senses. To illustrate this point, consider (31a) (from Kamp et al. 2011: 130, (4)):

(31) a. A delegate arrived. She registered.

b.  $\{[x,y]:\text{delegate}(x),\text{arrive}(x),\text{woman}(x),\text{registered}(y),\text{woman}(y),y=x\}$

If *a delegate* introduces a new referent that is identified as a woman, then the pronoun *she* introduces a novel referent  $y$  and the condition(s) *woman(y)* as part of its lexical content. The corresponding DRS also includes the open identity (anaphoric) relation  $y=?$ . This condition is interpreted as establishing that the referent that *she* introduces must be identified with a previous referent in context. This is the referent that *a delegate* introduces, as the resolved identity (i.e. anaphoric) relation  $y=x$  shows. Thus, the referent individuated as a woman delegate arriving at some implicit conference is also the one registering. Commas can be treated as equivalent to predicate conjunction (i.e. *delegate(x),arrive(x)* is equivalent to *delegate(x) ∧ arrive(x)*). Different DRT formats take different perspective to how conditions are combined, but for our purposes this equivalence is precise enough.

We can now turn to the analysis of our data. First, we assume that lexical entries for vocabulary items can be represented as DRSs including the type for their conditions, as in Asher and Pustejovsky (2013). For complex/internal prepositions and chorophorics, we follow the treatment outlined in “Vector Space semantics” (Zwarts and Winter 2000; Matushasnky and Zwarts 2018). Here we offer a compact overview that sets types aside: the reader is deferred to these works for further details. First, spatial nouns (e.g. *fronte*) are assumed to refer to specific parts of objects. Prepositions distributing as affixes (e.g. ‘*n-*’, ‘*a-*’) establish that the resulting complex prepositions denote the locations that these objects occupy. These locations are modelled as sets of vectors that start at the centre of an object and reach the object’s part. Thus, a complex preposition (e.g. ‘*nfronte a*’) introduces a vector set/location  $v$  as a referent, and a condition individuating a ‘front’ location (i.e. *front(v)*). Simple prepositions as heads, then, denote relations between locations/vectors. Chorophorics differ from prepositions in introducing a presupposition: they refer to grounds previously introduced in context.

Given this isomorphism between morpho-syntax and meaning, we propose chorophorics’ senses in (32). We use “iconic” letters to represent location/vector referents (e.g.  $g$  for “ground”,  $l$  for “location”); “[ $\cdot$ .]’ is the interpretation function:

(32) a.  $[[a\text{-SN}]] := [\{l\}:\text{condition}(l)]; [[n\text{-SN}]] := [\{l\}:\text{condition}(l)];$

b.  $[[pe\text{-SN}]] := [\{l,g,R\}:\text{condition}(l), +\text{dir}(R), \underline{R(l,g),\text{ground}(g),g=?}];$

c.  $[[de\text{-SN}]] := [\{l,g,R\}:\text{condition}(l), -\text{dir}(R), \underline{R(l,g),\text{ground}(g),g=?}];$

The senses of complex prepositions including *a-* and other prefixes introduce locations and the spatial conditions individuating them, viz. (32a). The senses of chorophorics including a *pe*-prefix introduce relations between a specific location and a presupposed ground, viz. (32b). The condition *ground(g)* represents the thematic role assigned to a given argument (cf.

Krifka 1998). The condition  $\underline{g=?}$  Represents the presupposed anaphoric relation. Its presuppositional status is represented by underlining the condition, as per standard DRT notation (van der Sandt 1992; Geurts 1999; Kamp et al. 2011: Ch.4). Crucially, presupposed conditions must be added to the context before the sentence or phrase containing the presupposition can be merged. If this operation is successful, then the chorophoric's lexical contribution is successively merged with a sentence's DRS. Thus, the condition that a given location is the ground (i.e.  $\text{ground}(g)$ ), must find a suitable referent (i.e. the  $\underline{g=?}$ , condition) and must be related to a specific condition (i.e.  $R(l,g)$ ) must be merged first). The conditions describing the lexical content of a chorophoric (i.e.  $\text{condition}(v)$ ,  $\pm\text{dir}(R)$ ) are merged once these presuppositions are accommodated.

The *de-* chorophorics, in (32c), minimally differ by including a  $-\text{dir}$  condition holding for this relation; the *pe-* chorophorics include a  $+\text{dir}$  condition. Simplifying matters somewhat, the  $+\text{dir}$  condition individuates a relation involving directed motion of the figure; the  $-\text{dir}$  condition, a lack thereof (cf. Zwarts and Winter 2000; Kracht 2002). These conditions are defined over relations between referents (here,  $R$ ), which can in turn act as “structured” referents (cf. Brasoveanu 2006: ch.2; Kamp et al. 2011: ch.3). Thus, chorophorics have the same distribution of SPs/PPs, but their semantic contribution also includes presupposed material, aside lexical content.

This point can be appreciated once we offer the DRSs corresponding to SPs. We offer examples based on (23)–(27) in (33)–(37), using simplified morpho-syntactic structures:

(33)  $[[_{\text{SP}} \text{ajju tavolo}]] := [\{l, g, R\} : \text{at}(v), \pm\text{dir}(R), R(l, g), \text{ground}(g), \text{table}(g)];$

(34) a.  $[[_{\text{SP}} \text{'nfronte}]] := [\{l\} : \text{front}(l)];$   
 b.  $[[_{\text{SP}} \text{ajju fianco}]] := [\{l\} : \text{side}(l)];$

(35) a.  $[[_{\text{SP}} \text{'nfronte ajju divano}]] := [\{l, g, R\} : \text{front}(l), \pm\text{dir}(R), R(l, g), \text{ground}(g), \text{sofa}(g)];$   
 b.  $[[_{\text{SP}} \text{ajju fianco dejjju divano}]] := [\{l, g, R\} : \text{side}(l), \pm\text{dir}(R), R(l, g), \text{ground}(g), \text{sofa}(g)];$

(36) a.  $[_{\text{SP}} \text{de-}[_{\text{NP}} \text{-rrete}]] := [[ \text{de-rrete}]] := [\{l, g, R\} : \text{back}(l), -\text{dir}(R), \underline{R(l, g)}, \underline{\text{ground}(g)}, \underline{g=?}];$   
 b.  $[_{\text{SP}} \text{pe-}[_{\text{NP}} \text{rrete}]] := [[ \text{pe-rrete}]] := [\{l, g, R\} : \text{back}(l), +\text{dir}(R), \underline{R(l, g)}, \underline{\text{ground}(g)}, \underline{g=?}];$   
 c.  $[[_{\text{SP}} \text{a-}[_{\text{NP}} \text{-rrete}]]] := [[ \text{a-rrete}]] := [\{l\} : \text{back}(l)];$   
 d.  $*[[_{\text{SP}} \text{perrete alla machina}]] :=$   
 $[\{l, g, R\} : \text{back}(v), +\text{dir}(R), R(l, g), \text{ground}(g), \text{car}(n), \text{ground}(n), \text{car}(n), g \neq n];$

(37) a.  $[[_{\text{SP}} \text{'nfronte (alla machina)}]] :=$   
 $[\{l, g, R, C\} : \text{front}(l), \pm\text{dir}(R), R(l, g), (\text{ground}(g), \text{car}(g), (C(g), C(R)))];$   
 b.  $[[_{\text{SP}} \text{ajju fianco (della machina)}]] :=$   
 $[\{l, g, R, C\} : \text{side}(l), \pm\text{dir}(R), R(l, n), (\text{ground}(g), \text{sofa}(g), (C(g), C(R)))];$

As (33) shows, the PP/SP *ajju tavolo* ‘at the table’ denotes a relation between a ‘general’ set of locations  $l$ , and another location identified as a unique table and ground in context (cf. Kamp et al. 2011’s treatment of definite descriptions). For this and other prepositions, we represent their polysemy with respect to the directional/locative alternation via an underspecified DRS. In compressed format,  $\pm\text{dir}(R)$  stands for a condition that can have either a directional or non-directional (i.e. locative) sense. Thus, a DRS embedding this condition type can be conceived as the union of two possibly acceptable DRSs (cf. Egg 2010; Asher and Pustejovsky 2013). The DRSs associated to the complex prepositions ‘*nfronte* ‘in front’ and *ajju fianco* ‘the side’ are in (34). These DRSs can be merged with those of *a* and corresponding ground NPs in (35) and form the DRSs associated to the PPs ‘*nfronte ajju*

*divano* and *ajju fianco dejju divano*. Both describe spatial relations holding between a sofa and either a front projection or a generic side, respectively.

The DRSs for chorophorics in (36) underline the sense differences among these morphologically similar categories. Thus, *perrete* in (36b) is associated to a DRS that minimally differs from the *arrete* one (cf. (36c)) in introducing a presupposition about the ground. The same reasoning holds for *derrete* in (36a), which however denotes a locative relation between figure and ground. The ungrammaticality/uninterpretability of chorophorics merging with prepositions is shown in (36d). Since *perrete* introduces a presupposition that the ground is retrieved from the context, the ground NP *la macchina* ‘the car’ can only introduce a new referent. A phrase such as *perrete alla macchina* would thus refer to two distinct grounds (i.e. the  $g \neq n$  condition) when only one car is under discussion. In other words, a sentence that combines incompatible senses would render a discourse incoherent.

Ellipsis targets head preposition and ground NP as elements that can be retrieved from the context, as we show in (37). A context  $C$  is defined as the set of referents and conditions available to a sentence/phrase’s DRS from previous sentences in discourse (i.e.  $C = \{U_n, Cn_n\}$ , cf. Kamp et al. 2011: 134–145). Thus, the ground referent  $n$  must belong to the set of previously introduced referents, a fact captured via the condition  $C(g)$ . The relation that connects this referent to the novel location in discourse (e.g. ‘*nfronte*’ in (37a)) can also be retrieved from the extra-linguistic context (cf. van der Sandt 1992). For the sake of clarity, we represent the conditions corresponding to the elided material in square brackets (i.e.  $C(g)$ ,  $C(R)$ ).

Before we continue, we must offer a clarification. Discourse-givenness and presupposition resolution are intertwined but distinct phenomena, tightly connected to information structure (cf. Schwarzschild 1999; von Stechow 2000; Beaver 2001; Beaver and Clark 2008). Presuppositions ultimately operate at a propositional level: they establish how sentential meanings can be merged together. Discourse-givenness establishes, among other patterns, which constituents do not contribute novel information and can therefore be elided. We believe that our data offer evidence on the two phenomena operating in a cyclical manner in chorophorics and prepositions. Chorophorics include presuppositions that are resolved at a sentential level. Presupposition resolution subsequently licenses the elision of discourse-given SPs. It also triggers the necessary omission of ground NPs when chorophorics are involved. Once it is established that two sentences introduce the same ground referent but distinct locations (and figures) defined with respect to it, the second ground NP and head are elided.

We can show how this treatment captures the sentential data to confirm its empirical import. Note that the presence of a chorophoric with a sense not matching a verb’s sense renders the sentence uninterpretable, rather than triggering a presupposition failure. Verb and preposition simply denote contradictory conditions on the type of sense associated to a location. Consider thus the DRSs in (38)–(40):

(38) a.  $[[_{VP} \text{Luigi sta ajju tavolo}]] :=$

$[\{u, l, g, R\} : \text{Luigi}(u), -\text{dir}(R), \text{at}(l), R(l, g), \text{ground}(g), \text{table}(g)];$

b.  $[[_{VP} \text{Luigi sta ‘n-fronte ajju divano}]] :=$

$[\{u, f, g, R\} : \text{Luigi}(u), -\text{dir}(u, R), \text{front}(f), R(f, g), \text{ground}(g), \text{sofa}(g)];$

(39) a.  $[[_{VP} \text{Luigi va arrete (ajju divano)}]] :=$

$$[\{u,b,g,R,C\}:\text{Luigi}(u),+\text{dir}(R),\text{go}(u,R),\text{back}(b),R(b,g),\text{ground}(g),\text{sofa}(g),C(g),C(R)]\rightarrow$$

$$[\{u,b,g,R,C\}:\text{Luigi}(u),+\text{dir}(R),\text{go}(u,R),\text{back}(b),\text{ground}(g),\text{sofa}(g),C(g),C(R)]$$

b.  $[[_{VP} \text{Luigi va perrete} ]]:=$

$$[\{u,b,g,R,C\}:\text{Luigi}(u),+\text{dir}(R),\text{go}(u,R),\text{back}(b),\underline{R(b,g),\text{ground}(g),g=?},C(g)]\rightarrow$$

$$[\{u,b,g,n,R,C\}:\text{Luigi}(u),+\text{dir}(R),\text{go}(u,R),\text{back}(b),R(b,g),\text{gr}(g),\text{sofa}(g),\text{gr}(n),\text{sofa}(n),g=n,C(g)];$$

(40)  $[_{CP}[_{VP} \text{Paolo sta arrete ajju divano} ]]\emptyset [_{VP} \text{Luigi sta defronte} ]]:=$

$$[\{p,i,b,f,g,u,R\}:$$

$$\text{Pa}(p),-\text{dir}(p,R),\text{back}(b),R(b,g),\text{gr}(g),s(g),\text{Lu}(i),\text{dir}(i,R),\text{front}(f),\underline{R(l',g),\text{gr}(u),\text{sofa}(u),u=?}]\rightarrow$$

$$[\{p,i,b,f,g,u,R\}:$$

$$\text{Pa}(p),\text{dir}(p,R),\text{back}(b),R(b,g),\text{gr}(g),\text{sf}(g),\text{Lu}(i),\text{dir}(i,R),\text{front}(f),\text{R}(l',g),\text{gr}(g),\text{sofa}(g),u=g)]$$

As the DRSs in (38) show, a sentence including simple preposition *a* and its corresponding PP denotes a relation between figure and ground. Due to the polysemous nature of *a*, this relation can include any location defined with respect to the ground, represented via the condition *at(l)*. To simplify matters, we reduce the semantics of *sta* to its ‘locative’ sense, leaving aside its other contributions related to its status as a copula. Once this copula merges with the underspecified condition  $\pm\text{dir}(R)$  that *a* in (38a) and ‘*nfronte*’ in (38b) carry, only the  $-\text{dir}(R)$  is maintained in the sentential DRS. Only matching conditions can be merged in sentential DRSs.

The DRSs in (39), instead, shows that sentences involving the optional ellipsis of ground NP and the formation of a remnant SP involve a different interpretation procedure. For derived chorophorics, i.e. complex prepositions as remnants, the underlying relation holding between ground and specific location is part of a DRS. However, if the ground’s identity can be retrieved in context (i.e. its identity is “given”), then the NP and head can be left unpronounced, as we mark via round brackets in the resulting DRS. This is in line with standard treatments of ellipsis as a coherence phenomenon (cf. Schwarzschild 1999; Merchant 2001). The symbol “ $\rightarrow$ ” is used to show that both ellipsis and presupposition resolution subsequently license the successful merge of their embedding DRSs with the rest of the sentence DRSs.

The DRS in (40) illustrates how these patterns emerge at the discourse level. The chorophoric *defronte* first finds a suitable antecedent in the previous sentence for its presupposed ground. When this anaphoric relation is successfully resolved, it matches with the verb *sta* in its locative sense. A DRS for the mini-discourse is obtained, defining all the locations and figures with respect to a given ground. For mere reasons of space, we have the universe set and the condition set of this DRS on different lines.

Overall, the account can aptly capture the differences between chorophorics, complex prepositions and their status as derived chorophorics/remnants. Chorophorics have a richer anaphoric potential and more specific lexical content than prepositions. This potential also determines ellipsis/blocking patterns, thereby justifying their label as spatial pronouns. Before we conclude, we would like to offer a concise summary of our four key results.

First, our account offers an account of Aquilan prepositions and chorophorics that presents novel fieldwork data and a concise analysis of their properties. Aquilan prepositions can act as heads or prefixes and can combine with spatial nouns to form chorophorics as a distinct

category. Chorophorics thus display the lexical content of preposition (i.e. they denote spatial relations), combined with that of nouns (i.e. their anaphoric potential). This analysis is consistent with previous analyses of chorophorics (e.g. Hagège 2010: ch.6; Libert 2013: ch.5). At the same time, it makes precise how these properties emerge from those of their constituting categories: spatial prepositions and nouns.

Second, our account explicitly represents how the morphological structure of chorophorics is related to lexical or “static” content, and anaphoric or “dynamic” relations. Thus, spatial nouns prefixed via *a-* form complex prepositions that lack the anaphoric potential of their *pe-* and *de-* counterparts. This account can also capture principles of argument selection, i.e. how chorophorics must merge with verbs of matching sense. This fact suggests that there may be formal relation underpinning anaphora and agreement patterns, as also observed in the minimalist literature (cf. Diercks et al. 2016; Haselbach 2017: Ch.4). Our account is consistent with these observations; a fuller proposal must wait for the future, however.

Third, this account extends basic assumptions found in Vector Space Semantics (e.g. vectors and locations as spatial referents) to discourse contexts. We leave open, however, the possibility to integrate this treatment with previous other works on spatial prepositions (e.g. Nam 1995; Kracht 2002). The treatment also shows that the P-within-P hypothesis (Hale and Keyser 2002) lends itself to an analysis of chorophorics that can cover inter-sentential phenomena related to chorophorics (Hagège 2013). The literature on these topics is immense, so we must consider our account as merely a starting point for future work. Nevertheless, the account can be thought as a natural extension of several strands of research on spatial categories and their lexical and anaphoric content.

A fourth result pertains to the debate on the relevance of dialectal data for typological research. As our discussion shows, the Aquilan data on chorophorics shed light on a still understudied category (cf. Hagège 2013). By analysing the Aquilan data, we also offer further evidence that the micro-variation data of dialects can inform typological research (cf. Siemund 2009). Dialects may offer crucial evidence on the properties of typologically rare categories, thus improving our understanding of these categories. Since we have reached our two initial goals, we can turn to the conclusions.

#### 4. Conclusions

The goal of this article has been to offer an overview of spatial prepositions and chorophorics (i.e. spatial pronouns) in the Italian dialect of Aquilan. The article has shown that Aquilan chorophorics include lexical content and anaphoric relations that link them to prepositions and verbs. A formal account combining Lexical Syntax and Discourse Representation has reached the second goal: offering a formalization of the data. The article thus sheds light on chorophorics, a still understudied category within the domain of spatial categories. Given the restricted nature of the data, this analysis can be conceived as an overall preliminary step towards a more rigorous study of this category, and its relation to adpositions and other spatial categories. We leave such endeavours, however, for future research.

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