

Master's Degree in Language Sciences

**Final Thesis** 

# The Expression of Indefiniteness in Italo-Ferrarese Bilectal Speakers

**Supervisor** Prof. Anna Cardinaletti

Assistant supervisors Prof. Giuliana Giusti Dr. Gianluca Lebani

**Graduand** Cristina Procentese Matriculation number 857274

**Academic Year** 2019 / 2020

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### Acknowledgements

I would like to express my deep gratitude to my thesis supervisor Anna Cardinaletti, who guided me with patience and precision throughout all phases of this research. I particularly appreciated her guidance at the very early stages of the project, by which I was inspired and thanks to which I was able to reach the present outcome. I would also like to thank Giuliana Giusti, who introduced me to the web-based tool *Qualtrics* and provided me valuable feedback on the research results. A special thank goes to Gianluca Lebani as well, whose contribution, assistance and kind support were fundamental during statistical analysis. I am grateful to all three of them for having given me the opportunity to contribute to the VariOpInTA (Variazione e Opzionalità in Italoromanzo) project, which was an enreaching experience form both a professional and personal point of view.

I am deeply grateful to my parents, who have never stopped believing in me and encouraging me to follow my passions.

A special thank goes to my best informants, Marco, Cosetta and Chiara, who taught me a lot about the Ferrarese dialect and supported me like a true family.

Finally, I thank those people who have been by my side throughout these long and challenging months: my beloved Stan, my best friend Lara, and my university colleague Elena, with whom I shared my passion for linguistics.

## Introduction

Bilingualism is generally understood as the ability to master two languages at a native-like level of competence. However, we are facing with an extremely broad concept that encompasses many different realities. A peculiar situation, which is referred to by the term "bilectalism" (Rowe and Grohmann, 2013; Leivada et al. 2017a,b), is found when speakers are competent in two highly similar languages that have a different sociolinguistic status. The extremely big amount of dialectal variation that is found in the Italian territory allows Italian linguists to give a fundamental contribution to the international research community working on this topic. In particular, the high degree of structural proximity between Italian and Italo-Romance dialects coexists with a finegrained variation that is extremely challenging to take into account for in formal models of grammar. Moreover, it is not easy to determine to what degree the two grammars assimilate and to what degree they diverge. Since the grammar of a language is extremely wide and heterogeneous in its components, the latter have to be addressed one by one. In the present work, we focus on the expression of indefiniteness in two varieties spoken in the province of Ferrara, located in Eastern Emila: the Ferrarese dialect and the local colloquial variety of Italian.

In previous literature, two main theories discussed the possible nature of the grammar available to bilectal Italo-Romance speakers.

First, the *double basis theory* (Egerland, 2010), explains the process of clitic pronouns' raising with restructuring verbs assuming the existence of two separated grammars. In fact, while Italian displays more options (that is, both proclitic and enclitic pronouns), the investigated dialects only allow one possibility. The different nature of these two grammars could be accounted for by the fact that a standardized language, contrary to dialects, encompasses a wider range of registers and styles.

Second, the *micro-comparative approach* (Benincà and Damonte, 2009) assumes that variation may regard either specific constructions of otherwise identical grammars, or exclusively the lexicon. On the one hand, the first option is most common in *macro-diglossic* areas. Here, dialectal koinés serve as lingua francas and prevent the loss of marked dialectal features. On the other hand, the second option is most common in *micro-diglossic* areas, where the function of dialectal koinés is replaced by neo-standard Italian. Therefore, dialectal grammars converge towards the grammar of Italian, and variation is restricted to the lexicon.

Despite these theories are extremely relevant, the heterogeneity of our sociolinguistic context and the extremely big amount of micro-variation are such that we are still far from having a clear idea of the nature of each bilectal grammar. Moreover, the internal complexity and heterogeneity of the different linguistic levels is such that we cannot address the grammar of a language globally, but rather focus on specific components one by one. While doing so, we may discover that while some components converge, others diverge on different degrees, or maybe converge towards unexpected directions. If it is the case, our background theory should become more complex than it seems.

Among the various components of grammar, we chose the expression of indefiniteness as the object of our inquiry. Recent works on this topic (cf. Cardinaletti and Giusti 2018, 2020; Molinari 2019; Cerruti and Regis 2020; Garzonio and Poletto 2020; Giusti, forthcoming) investigated two central issues, namely optionality and diatopic variation of determiner choice in Italo-Romance.

Cardinaletti and Giusti (2018), basing on some data collected in the  $AIS^{\perp}$ maps, list the different forms of indefinite determiners that are found in Italo-Romance varieties spoken in the last century. We provide here an overview of their geographical distribution and add some illustrative examples in Italian. First, the zero determiner (i.e bare nouns, henceforth ZERO) is most widespread in the Center and in the South, despite being present in some northern areas as well (cf (1)). Second, the definite article (henceforth ART) is the most widespread form across the peninsula, found in both northern and southern areas (cf (2)). Third, the indefinite operator (henceforth bare di) is mainly attested in North-Weastern varieties and often occurs with partitive objects under negation (see also Garzonio and Poletto, 2020). This form is ungrammatical in neo-standard Italian (cf (3)), in both negative and positive sentences. Fourth, the partitive determiner (henceforth di+ART) is typical of socalled Gallo-Italic dialects. It is attested from eastern Piedmont and Liguria down to the whole Emilia-Romagna region, where its use is particularly widespread (cf (4)). Finally, the determiner certo/a/i/e ('certain') is attested throughout the peninsula. However, in neo-standard Italian and in most dialects (with the possible exception of some southern varieties) it conveys a specialized meaning (i.e. 'with specific reference' or 'of a special type') (cf. (5))

- (1) Ho raccolto mele
- (2) Ho raccolto le mele
- (3) \*Ho raccolto di mele
- (4) Ho raccolto delle mele
- (5) #Ho raccolto certe mele

[I]have picked Ø/ART/di/di+ART/certain apples

Cardinaletti and Giusti (2020) further claim that the geographical distribution of indefinite determiners is accounted for by the Bartoli's *Law of Lateral Areas*, according to which the innovations spread from the centre towards the peripheries of a given area. Among the different available forms,

<sup>&</sup>lt;sup>1</sup> Linguistic and Ethnographic Atlas of Italy and Southern Switzerland.

the ZERO is the most ancient one, while the articled forms are an innovation of modern Romance languages. Thus, the use of the ZERO is maintained in the peripheries, while ART spreads from the centre in the North-South direction. Furthermore, bare di is a Gallo-Romance innovation derived by direct contact with French. Finally, di+ART spreads in the Weast-East direction.

After carrying a pilot study, Cardinaletti and Giusti (2020) also proved that diatopic variation in the choice of indefinite determiners in modern informal Italian is affected by the dialectal substratum. However, a different outcome is also possible, namely that the standard variety somehow affects the available options in the dialects. This is exactly what is found by Cerruti and Regis (2020). The authors show that the paradigm of indefinite determiners in peripheral varieties of Piedmontese matches the Italian one, unlike what happens in other areas of the region. This convergence between the two grammars in explained as an influence of Italian characterized in terms of *contact-induced stability*: if the two grammars share equivalent elements, their use is maintained over time, and change does not occur. This happens because those elements are generally cost saving in language processing and hence preferred by bilingual speakers. In a similar fashion, Molinari (2019) suggests that the low probability of acceptability of ZERO in Piacentino dialect could be due to an influence of Italian.

Following Giusti (2002, 2015), Cardinaletti and Gusti (2018) assume the existence of a unified syntactic structure for all indefinite determiners. These are taken to be simple DPs that host the indefinite operator di in the specifier, while the head D realizes Gender and Number concord features, as well as the direct vs partitive case distinction. On the one hand, if some element in the specifier position (i.e. the null operator or the indefinite operator di) requires a null head, a filter is applied that prohibits the realization of Concord. On the other hand, the lack of features in the specifier may be compensated by their realization on the head position. This process is called *Compensatory Concord*. Therefore, the existence of different variants is explained assuming different possible interactions between nano-parameters and micro-parameters (in Biberauer and Roberts's (2012) terms) within the structure of the DP. While the micro-parameter rules the realization of concord features on the head, the nano-parameter concerns the lexical realization of the indefinite determiner (i.e. as ZERO or *di*). The high degree of variability across the peninsula is explained by the fact that, as noted by Biberauer et al. (2014), microparameters and nano-parameters are unstable.

Garzonio and Poletto (2020) adopt a similar structure. However, they state that the indefinite operator (di or ZERO) must be located in the left periphery of the DP, in a rather low position encoding 'familiarity'. Moreover, they propose a syntactic structure that may account for negative partitive objects (NPOs,) which are analysed as an intermediate stage between true partitive structures (TPSs) and partitive determiners. Their structure is illustrated in (7)

(7)  $[_{NegP} pas ... [_{QP} [pas] [_{Q^{\circ}} AMOUNT] [_{KP} de [_{DP} vin]]]]$ 

(from Garzonio and Poletto, 2020 : 645(34))

At this point, we may ask what the language-internal factors are that may condition the different micro- and nano-parameter settings in each variety.

Garzonio and Poletto (2020) state that when there is internal variation regarding the presence or the absence of di (with or without inflectional markers), plural count nouns frequently correlate with its presence, contrary to singular mass nouns. We show in (6) the provided example in Ferrarese:

#### (6) Ferrara

a.	Ι	n	compra	mai	fruta,	il	mie	sureli [Ø(sing)]
	They	not	buy	never	fruit,	the	my	sisters
	'My si	sters	never buy	fruit'				
b.	T'ar	n co	mpri mai	di	pu	m		[di+ ART(plur)]
	You no	ot bu	iy neve	r di+AR	T.PL app	ples		
	'You n	ever	buy apple	s'				
					(Gai	rzonio	and P	oletto, 2020: 636)

Furthermore, Cardinaletti and Giusti (2018) individuate a series of traits that interact with indefinite determiners, conditioning the choice of one form over another, thus the degree of optionality. These are polarity, scope, clause type, aspect and noun class (i.e. mass vs plural count). In each context, which is defined by a certain combination of the above-mentioned traits together with the syntactic position, different semantic specializations are possible. Therefore, true optionality is not attested.

In **Table 1**<sup> $^{2}$ </sup> we show a protocol presenting the features associated to each indefinite determiners in Italian, as reported in Cardinaletti and Giusti (2020), Giusti (forthcoming). We add the syntactic position as well.

 $<sup>^2</sup>$  Since the determiner "certo/a/e/i" is not investigated in our research, it is excluded from both Table 1 and 2.

	ZERO	ART	DI+ART	DI
Object position	+	+	+	0
Subject position	-	# <sup>3</sup>	+	0
Polarity	+	+	+	0
Wide scope	+	+	+	0
Narrow scope	-	#	+	0
Generic sentences				
i. present	+	+	-	0
ii. past	?	?	?	0
Episodic sentences				
i. present	+	+	+	0
ii. past	+	+	+	0
Mass nouns	+	+	+	0
Plural count nouns	+	+	+	0
Core indefiniteness	+	+	-	0
Specificy	-	-	+	0
Saliency	-	+	-	0
Small quantity	-	-	+	0

**Table 1:** semantic and sentential features interacting with indefinite determiners in Italian.

Moreover, when indefinite determiners introduce dislocated objects, the scope properties of each determiner condition the choice of the resumptive clitic in the main clause. In particular, the quantitative clitic *ne* is compatible only with those determiners that allow for the narrow scope reading when dislocated. The protocol in **Table 2** resumes the resumptive options available to each determiner in Italian. LI stands for the accusative clitic, while NE is the quantitative clitic.

**Table 2:** resumptive options of left dislocated objects introduced by indefinite determiners in Italian.

	ZERO	ART	DI+ART	DI
LI	-	+	+	-
NE	+	-	-	+

Given the above-mentioned findings, the current research was conducted to investigate the availability of indefinite determiners in Italo-Ferrarese bilectal speakers. More precisely, our goal is to answer the following research questions:

How many indefinite determiners are available in Ferrarese and in the colloquial variety of Italian spoken in Ferrara? What is their probability of acceptability in each language?

<sup>&</sup>lt;sup>3</sup> In subject position and when it takes narrow scope, ART is obligatorily definite.

- ➢ How do they behave with respect to some of the traits individuated by Cardinaletti and Giusti (2018), namely episodic sentences in the past vs habitual sentences in the present and mass vs plural count nouns<sup>4</sup>?
- What is the degree of optionality between the competing forms? Do they specialize for meaning?
- How do they behave in Clitic Left dislocation (CLLD)? Which are their resumptive options?
- Does the bilingual profile affect the acceptability judgements in the two languages? Which are the contact-induced dynamics that can explain this effect?
- Do the components of grammar that rule the expression of indefiniteness in the two languages converge? Do they diverge to some extent?
- What is the theory that may better account for the nature of the grammar available to Italo-Ferrarese bilectal speakers?

The research is carried out through an online-based questionnaire, which we created through the web-based tool *Qualtrics*. The questionnaire was divided in three sections: (i) a battery of socio-demographic questions; (ii) a battery of questions adapted from the Bilingual language profile (BLP) scale (Birdsong, Gertken, and Amengual 2012); (iii) a Forced-Choice (FC) task asking for acceptability judgments in Italian and Ferrarese. The stimuli included in the FC task were 192 experimental sentences and 96 filler sentences, for a total of 72 questions. All the experimental sentences included negation and had the indefinite determiner in object position. In fact, given the traits mentioned in **Table 1**, we judged this syntactic context as the best to test optionality<sup>5</sup>. Finally, test administration consisted in two moments, each dedicated to a single language and occurring in a different day, in order to reduce language interference.

Results show that:

- The paradigm of indefinite determiners in Italian and Ferrarese is characterized by three forms: zero, ART, and di+ART. While ZERO is more likely to be acceptable in Italian, the opposite holds for di+ART. No significant differences are attested for ART.
- In both languages, these forms seem to alternate freely in both episodic and habitual sentences, with both mass and plural count nouns. This latter finding fights against Garzonio and Poletto's (2020) claim shown in (6).
- The majority of our informants did not signal a specialization of meaning, proving the existence of true optionality. In the few cases when semantic

<sup>&</sup>lt;sup>4</sup> We selected only these two traits in order not to exceede with number of variables under investigation.

<sup>&</sup>lt;sup>5</sup> A detailed description of the stimuli will be presented in Chapter 4.

specialization is signaled, di+ART is related to an added notion of specificity and small quantity, most frequently in Italian and in episodic sentences with plural count nouns.

- ➤ In dislocated objects resumed by the quantitative clitic, we find three options that are shared by both languages: ZERO, di+ART, and bare di. In Italian, ZERO and bare di are the most likely to be acceptable, while the highest probability in Ferrarese is found for di+ART. In both languages, ART is resumed by the accusative clitic, whereas ZERO and bare di are obligatorily resumed by the quantitative clitic *ne*. In Ferrarese, di+ART can be either resumed by the accusative clitic, or by *ne*, but the latter option is the most frequent. The same holds for Italian, where the probability of accepting di+ART with the accusative clitic is extremely low. This proves that in both languages the preferred reading for the dislocated partitive determiner is the narrow scope one.
- The components of grammar ruling the expression of indefiniteness in Italian and in Ferrarese are highly similar, but not identical. The points of divergence consist in: (i) the frequency of use of ZERO vs di+ART in simple sentences and of ZERO/bare *di* vs di+ART in dislocated objects resumed by the quantitative clitic; (ii) the frequency in which a specialization of meaning for di+ART is attested.
- The BLP score of our informants is inversely proportional to the probability of acceptability of di+ART in both languages. On the one hand, this indicates substratum interference in subjects with dialectal dominance. On the other hand, it shows interference of Italian into the dialect in subjects with Italian dominance. Finally, the probability of accepting ZERO does not change according to language dominance in Ferrarese. This proves that the high frequency of use of ZERO in Italian does not interfere into the dialect.
- The theory that better accounts for the grammar of Italo-Ferrarese speakers is the *micro-comparative approach*. However, our data prove that, despite Ferrara is located in a micro-diglossic area, the convergence between these specific components of the two grammars favors the dialectal marked features over the Italian ones. Moreover, the attested process of convergence is only partial, as the two grammars display points of divergence as well.

The present work is divided into 4 chapters.

Chapter 1, "Bilectalism in Italy: an integrated approach", outlines the topic of Italian-dialect bilectalism on a broad perspective, which integrates sociolinguistic, contact-linguistics, and theoretical linguistics. After providing an overview of the Italian sociolinguistic context, we address the main dynamics of contact-induced change attested in our territory. Then, we clarify our terminology and the theoretical notion of grammar adopted throughout the research. Finally, we address the main theories that try to account for the nature of the Italo-Romance bilectal grammar. Chapter 2, "Current studies on partitivity, pseudo-partitivity and indefiniteness" introduces the relevant literature on indefiniteness, which is one of the possible shades of partitivity. In particular, we start contextualizing the object of our inquiry within the ongoing research on partitive elements in European and Romance languages. Then, we focus on Italo-Romance, addressing both areal and formal issues in a comparative perspective with Italian and French.

Chapter 3, "The Ferrarese dialect", provides a geographical, social, historical overview of the just mentioned Gallo-Italic variety. Furthermore, it outlines some relevant characteristics of the dialect, such as the means to express indefiniteness. Moreover, some phonological phenomena are clarified in order to account for the allomorphs of some determiners and clitics that are found in our questionnaire. Finally, we address the main properties of CLLD.

Chapter 4, "The research", is dedicated to the description of our research, outlining the method (participants, materials, procedure, statistical analysis, ethical issues) and presenting our results. These are discussed in the final section of the chapter, which defines our proposal and addresses the limits of our work.

## Chapter 1 Bilectalism in Italy: an integrated approach

This introductory chapter outlines the topic of Italian-dialect bilectalism in a broad perspective, which is adopted throughout our research. First, we provide an overview of the Italian sociolinguistic situation. Secondly, we introduce some fundamental concepts from the field of contact linguistics, using them as a framework of reference to interpret contact-induced dynamics of language change within our multilingual territory. In doing so, we also consider external, socio-historical, functional and cognitive factors that may influence these dynamics, with a particular focus on morphology. Finally, after clarifying the notions of bilingualism, bilectalism and grammar adopted in our research, we explore some theories that may account for the nature of grammars available to Italo-Romance bilectal speakers. One of these theories may account for interlinguistic and intra-linguistic variability of the semantic and morphosyntactic traits of our interest.

#### 1.1 The Italian sociolinguistic situation: an overview

The Italian territory is characterized by an extremely wide range of language diversity. In fact, the official language coexists with minority languages and several other unofficial languages called "dialects", whose degree of daily use highly varies across the regions. This multilingual scenario is rooted in the Roman times, since spoken Latin evolved differently in each area of the empire. After the Roman decline, this diversification spread even more both because of superstratum and substratum interferences. Later on in the 16<sup>th</sup> century, Petrarch, Boccaccio and Dante were recognized by cultural elites as models for a pan-Italian literary language. Consequently, Florentine became the medium for literary works all over the peninsula. Despite that, a true linguistic unification did not occur, as Florentine kept staying a literary language coexisting with many spoken dialects. Finally, the political and linguistic unification of Italy realized relatively late, namely at the end of the 19th century. This is why Italy's linguistic diversity survived even in current times. We do not outline the history of the Italian language further, since it is not directly relevant for our research. For additional details see Grassi, Sobrero, and Telmon (2003: 3-33).

#### 1.1.1 The varieties of Italian: axes of variation

The amount of linguistic variation in the Italian territory resulted from the spread of the national language, which came into contact with the local dialects. Many intermediate varieties rapidly appeared, making difficult to classify the different strata. In this scenario, the diatopic variation interacts with socio-linguistic variation.

Linguists describe the modern Italian language as an "architecture" consisting of different components (Berruto 1987; Dardano 1994). A model for this architecture is found in Berruto  $(2012 [1987]: 24)^6$ .



Figure 1: A schema outlying a three-dimensional typology of Italian varieties (Berruto, 2012 [1987])

As we can see in *Figure 1*, the model is constructed as follows. The "centre" of the schema gathers the potentially pan-Italian standardized features, whereas the "periphery" includes features that somehow divert from the norm. Then, it shows three intersecting axes of variation called *diastratria* (societal variation), *diaphasia* (domain and functional variation) and *diamesia* (variation according to the spoken or written medium). Berruto's architecture disregards of *diatopia* (namely geographical variation), as the latter is assumed a priori as a background factor constantly present within the Italian linguistic context<sup>7</sup>.

<sup>6</sup> Berruto (2012: 23) specifies that this schema is not meant to be precise, since it is not possible to summarize the complexity of the Italian repertoire in a necessarily bidimensional graphic representation. However, it is a good attempt to illustrate the given typology in a schematic and clear fashion. See Berruto (2012: 17-21) for an overview of previous proposals.

<sup>&</sup>lt;sup>7</sup> This terminology, namely the concepts of diatopic, diastratic, diaphasic and diamesic variation, spread within the scientific community thanks to E. Coseriu. They were introduced by the Norwegian linguist L. Flydal (cf. Albrecht 1986).

These axes of variation consist in continua of different varieties. On the diastratic *continuum*, the highest code is represented by the variety spoken by highly educated groups, while the lowest one consists in the variety spoken by rural and low educated communities, which is usually referred to by the term "popular Italian"<sup>8</sup>. Secondly, on the diaphasic *continuum*, we find the most formal varieties on the top and the most colloquial ones at the bottom, selected by the speakers according to the communicative context. Finally, the diamesic *continuum* goes from the most formal written styles to the most colloquial and unplanned spoken ones. Berruto specifies that a given variety may be placed at any point of each of these axes of variation simultaneously. This is why the best way to represent the given scenario is through intersecting continua.

In the schema (*Figure 1*), seven varieties are distinguished and placed on the variation axes. Varieties 1-4 represent the fundamental points of reference<sup>9</sup>. First, *literary standard Italian* (1)<sup>10</sup> is the Italian of the written literary tradition. In the Italian context, native speakers of this variety no longer exist, as it is learned through schooling and used exclusively by specific professional groups. Second, *neo-standard Italian* (2) is a variety including some innovations of the spoken language and is currently replacing the standard language in everyday spoken and written communication (this process is referred to by the term restandardisation (Berruto, 2012: 67))<sup>11</sup>. Then, *colloquial Italian* (3) is the spoken variety of informal everyday conversation. Lastly, *popular regional Italian* (4) is the variety spoken by the less educated social groups.

#### 1.1.2 The nature of the Italian continuum

The notion of *continuum* has been widely used in American creolistics (for instance in Decamp 1971, Bickerton 1973) to refer to a linguistic situation that has much in common with the Italian repertoire. The term usually indicates a group of varieties in which the extreme points (namely the ends of the *continuum*) are easy to define and rarely come into contact, while the intermediate ones influence each other and easily overlap. The use of the term *continuum* in sociolinguistics is related to the traditional notion of "dialectal *continuum*". This consists in a series of dialects such that the closer ones from

<sup>&</sup>lt;sup>8</sup> A first conceptual definition of this term was provided by De Mauro (1970) and Cortellazzo (1972). These two definitions laid the foundations for two different lines of interpretation. The former focused on the communicative and expressive strategies adopted by speakers and on a general tendency to speak in Italian at any cost, while the latter paid attention to the characteristics of the product, namely a variety of Italian highly deviating from the norm, stemming from the contact with the dialectal substratum.

<sup>&</sup>lt;sup>9</sup>Varieties 5-7 are left out in our discussion, since they are not relevant for our purposes.

<sup>&</sup>lt;sup>10</sup> Defining the concept of "standard language" is not that as easy as it seems. It is necessary to distinguish between a functional and a linguistic definition. The first one is based on social criteria and defines the function of the given variety within a community of speakers, whereas the second one is of purely sociolinguistic nature (see Berruto, 2012: 68-69). Nevertheless, independently on the formal definition that we decide to adopt, the fundamental property of the standard language is explicit codification.

<sup>&</sup>lt;sup>11</sup> As noted in (Cerruti 2011a: 18), restandardisation tendencies are not always innovations. In fact, most neo-standard features are already attested in ancient Italian.

a geographical point of view are reciprocally understandable, contrary to the most distant ones. The term was codified in order to underline the inadequacy of the classical structuralist notion of "system" (Weydt and Schlieben-Lange 1981), which was not able to account for the linguistic variation, nor for the lack of clear boundaries between the closer varieties.

This initial and linear definition of *continuum* implies the existence of a situation of diglossia (Ferguson 1959), namely when two distinct varieties have clear functional differentiation and are used in specifically distinct contexts. In this case, the *continuum* is oriented towards a prestigious or standard variety called "basilect", placed at the superior pole, and a low substandard variety called "arcolect" at the inferior pole. The intermediate varieties are called "mesolects" and each speaker can be easily placed within the continuum (Bickerton, 1973). Anyway, it has been noted that in some creole *continua*, the mesolects cover the majority of the linguistic uses, whereas the basilect has almost disappeared and the arcolect is rarely attested (Bicketon 1973, Reinecke and Tokimasa 1934). This situation resembles the Italian repertoire, where the variety corresponding to the arcolect (namely standard Italian) is restricted to limited uses and the variety corresponding to the basolect (the local dialect) is often endangered. This is a consequence of the expansion of the standard language into different domains and of its functional overlap with the dialects in informal communication spheres (Dal Negro and Vietti 2011: 72). A similar repertoire has been named dilalia (Berruto, 1989).

All this considered, Berruto (2012 [1987]: 33) defines the Italian repertoire as an oriented *continuum* with "points of gathering", were different traits gather together and create the main varieties. Nevertheless, these "points of gathering" must not be conceived as polarizations, since, as we already noted, there are not clear boundaries between the close varieties. In addition, the Italian continuum is multidimensional, since each dimension of variation can be considered as a separate linear *continua* intersecting with the others. In this sense, we can talk about a *continuum* of *continua*.

#### 1.1.3 The diatopic dimension

Within the Italian context, *diatopia* "is considered the primary dimension of variation" (Cerruti 2011a: 19). The diatopic *continuum* is *polarized*, *oriented*, *linear* and *horizontal*, with different gradations and intermediate points. (Berruto 2012: 57) The different diatopic varieties are referred to by the notion of "regional Italians". These are mainly the product of contact between Italian and the local dialects, namely "varieties resulting from the geographical differentiation of the standard language after its social diffusion" (Cerruti 2011a: 10)<sup>12</sup>. Consequently, their traits depend on the dialectal substratum of each area. According to these traits, we can distinguish four main groups: northern regional Italian, Tuscan Italian, central-southern regional Italians and Italians of the extreme south. The first three areas are separated by the so called *La Spezia-Rimini line* (see 1.1.4)

<sup>&</sup>lt;sup>12</sup> Despite that, they also display structural internal tendencies, which are independent of substratum interferences.

In the last twenty years, colloquial Italian is progressively loosing regional markedness, since part of the regional traits are being replaced by neo-standard tendencies. This is due to sociocultural factors, such as the increasing internal mobility, globalization, and the raising level of education. As a result, the new generations' primary language of socialization is a regional or macro-regional variety (namely northern, central, or southern) with few marked traits, or even with traits of different geographical origin. In this latter case, we talk about "italiano composito", which means "mixed Italian" (Berruto 2012: 59).

#### 1.1.4 Italo-Romance dialects: distribution, classification and variation

Italo-Romance dialects are not varieties of Italian. They are independent Romance vernaculars derived from spoken Latin, which is a unique situation in Europe. According to the UNESCO's Atlas of the World's Languages in Danger, several Italo-Romance dialects are classified as vulnerable or even endangered. Without a doubt, this is a direct consequence of the so called "Italianization of dialects", by which dialects are losing many lexical, grammatical, or prosodic peculiarities.

The main linguistic boundaries of dialectal areas are the *Rimini-La Spezia line* and the *Roma-Ancona line*. The former was first identified by Biondelli (1853), while the latter was defined by Rohlfs (1937) using geo-linguistic criteria. These lines correspond to boundle of isoglosses that overlap in the area of Ancona (see *Figure 2*).



Figure 2: The La Spezia-Rimini line (on top) and the Roma-Ancona line (from Rohlfs 1937, map 2).

Italo-Romance dialects can be classified according to different criteria. First, a general historico-typological classification can be achieved combining extralinguistic (geographical, historical), diachronic (the distance from Latin, the development of specific traits), and synchronic factors (structural differences). This is what Grassi, Sobrero and Telmon (2003) have suggested, taking into consideration the pros and cons of all previous attempts (see figure 3). In particular, they distinguish six macro-areas: Gallo-Italic<sup>13</sup>, Tuscan, central area ("area mediana"), southern area ("area meridionale"), extreme southern area ("area meridionale estrema"), and Sardinian. As we can see on the map, in the northern area we find other restricted sub-areas: Trentino dialects, Veneto dialects, Friulan and Slovene in the northeast; Provencal and Franco-Provencal in the north-west.



Figure 3: Historico-typological classification of Italo-Romance dialects (from Grassi, Sobrero, Telmon, 2003)

<sup>&</sup>lt;sup>13</sup> According to Tamburelli and Brasca (2018), who conducted a study applying dialectometry to atlas corpora, the Gallo-Italic has to be genealogically classified as a sub-group of the Gallo-Romance branch, but separate from the Italo-Romance group (see §3.2).

Another possibility is to consider the typology of the communities (urban vs rural), the preservation of local marked traits and the distance from neostandard Italian. According to these criteria, which are linked to and dependent on each other, we can distinguish three main dimensions: *rural dialect, urban dialect,* and *dialectal koiné*. This distinction was introduced by (Pellegrini 1975 [1960]) who defined a dialectal koiné in the Italo-Romance context as a dialect devoid of the most local traits. While lacking a high degree of geographical markedness, these varieties absorb features from the biggest regional urban centers. In other words, we find a process of convergence from rural to urban dialects, and from urban dialects to dialectal koinés. These latter varieties are in fact *lingua francas* within each region, emerged because of mobility and communicative needs.

Dialectal koinés are not found in all regions. In some cases, we still see a high degree of linguistic polycentrism and local dialects compete directly with regional Italian. In order to distinguish these two situations, Mioni and Trumper (1977) introduced the terms *macro-diglossia* and *micro-diglossia*. The first refers to those regions displaying a dialectal koiné, e.g., Veneto, Piedmont and others, while the second refers to its exact opposite, that is to those regions that, lacking a dialectal koiné, display major linguistic pluralism, e.g. Emilia Romagna. *Macro-diglossia* and *micro-diglossia* have consequences that may impact on the survival of local dialects. In fact, as Mioni and Trumper (1977) themselves noted, dialectal koinés allow the speakers to use a dialectal variety even outside the boundaries of the local dialect, while in the opposite case, varieties of Italian serve as *lingua francas*. It follows that regions where we find *macro-diglossia* are more likely to preserve local dialects.

Finally, it is worth noting that the current geographical and sociolinguistic situation of Northern Italy is such that not all dialectal variation can be explained by migration or by language contact. First, as noted by Poletto (2012: 55), "the distribution of a given feature (be it phonological, morphological or lexical) is scattered in a non-homogeneous way across dialects, i.e. it does not extend over a whole geographical area, but appears here and there in different spots, although the neighbouring dialects do not display it". Second, this drift, which is refferred to by the term "leopard spots variation", is often independent from the tendencies found in neo-standard Italian and is not related to recent contact with other foreign languages. Poletto (2012) explains this phenomenon by noticing that all Italo-Roamance dialects share a common lexicon, which is derived from Latin. The functional lexicon derived by grammaticalization maintains some of its original properties and imposes common restrictions on the output structures. Nevertheless, similar patterns of change derived by these long-standing common properties coexist with fine-grained dialectal variation. In fact, "given that some functional items are internally complex, and contain several pieces of information that can be spelled out in order to 'represent' the whole functional element, it can happen that different dialects select different features (hence a different lexicon) to spell out the whole functional item, and therefore they can vary as much as distant languages can" (ibid.: 65).

#### **1.2** The perspective of contact linguistics

Contact linguistics aims to study all the varied situations of contact between languages, the resulting phenomena, and the possible external factors that may influence them. These factors may be of linguistic, psychological, or sociocultural nature. Therefore, the methodology of this field of study is by definition interdisciplinary.

#### 1.2.1 Contact situations: the case of Italy

In order to determine the nature and the direction of contact-induced changes in a given linguistic territory, we first have to define the contact situation we are dealing with. According to Winford (2003: 11), "we can in general distinguish three broad kinds of contact situations: those involving language maintainance, those involving language shift, and those that lead to the creation of new contact languages".

First, *language maintenance* consists in the preservation of a single variety within a speech community from generation to generation. This implies that if some changes occur, they are of small degree and mostly owe to internal developments rather than to language contact. Situations of language maintenance may include cases of borrowing, of structural convergence,<sup>14</sup> and code-switching phenomena, which involve mixing of different varieties within the same stretch of speech.

Secondly, *language shift* consists in "the partial or total abandonment of a group's native language in favour of another" (Winford, 2003: 15). This situation involves immigrants or minority groups that shift to the dominant majority's language. In some cases, the varieties spoken by these groups display features that stem from L1 interference. In other cases, minority groups preserve their native language in some contexts, while acquiring the dominant language for other purposes. Language shift is also common in colonial areas, where indigenous languages often disappear under the pressure of the invader's language. In all these situations, the process of gradual or complete abandonment of a previously used language occurs gradually, giving rise to interlanguage phenomena.

Finally, *contact languages* display restructuring and/or an extreme mixture of elements from more than one language. This is the case of pidgins and creoles. The former are reduced languages with minimal vocabulary and grammar, typical of settings displaying trade contacts between groups speaking different languages. They are the result of linguistic compromises aiming to facilitate communication. On the contrary, the latter are provided by a fully developed grammar and vocabulary. In other words, they consists in regularized pidgins that have become the native language of a second generation of speakers. Another example of contact languages are bilingual

<sup>&</sup>lt;sup>14</sup> Structural convergence consists in the diffusion of structural features within a given territory. It often occurs in areas where different languages are spoken in close geographical proximity. The best-known example is perhaps the Balkan *Sprachbund*, which is however characterised by an interplay between maintenance and shift. As Winford himself notes, some situation cannot be easily classified within the above-mentioned tripartition.

mixed languages. These are typically hybrid languages, which arise in settings involving long-term contact between two distinct ethnic groups. An example is Surzhyk, an Ukranian-Russian mixed language spoken in central areas of Ukraine (for further examples see Winford (2003: 168)).

In the current Italian context, we can see a general tendency of language shift from local varieties to neo-standard Italian, due to mainly two factors: the reduction of local dialects' linguistic functions and their Italianization (Dal Negro and Vietti 2011: 72-73). However, this process is still underway and "local dialects not necessarily converge towards Italian but also towards dialect koinés" (ibid.: 78). This is why there is still a relevant structural distance between regional Italians and neo-standard Italian. Moreover, code-switching phenomena are very frequent, since several speakers are bilingual/multilingual, with both a local dialect and one or more varieties of Italian in their linguistic repertoire.

In the present work, we adopt the term "substratum influence" or "substratum interference" to refer to contact-induced features that are the result of dialect influence on Italian. This choice is theoretically grounded, since the term "substratum" is common among both creolists and historical linguists. By using it, we can recall the similarities between the Italian repertoire and some creole *continua*, as well as the historical process that led to the current Italian linguistic scenario.

#### 1.2.2 Geographical diffusion and leveling

As we already noted, in the Italian linguistic territory we are assisting to a gradual loss of localized marked features. This outcome is generally caused by two mechanisms: *geographical diffusion* and *leveling*. On the one hand, *geographical diffusion* is a language change process "by which features spread out from a populous and economically and culturally dominant center". On the other hand, *leveling* "is closely related to (indeed, results from) the social psychological mechanism of speech accommodation, by which interlocutors will tend to converge linguistically" (Kerswill 2003: 223). Of course, regional dialect leveling is the outcome of geographical diffusion, since the speakers tend to avoid local forms in favor of others of wider geographical diffusion. Anyway, leveling may also be the simple outcome of accommodation, which is why the two mechanisms have to be distinguished.

As noted in (ibid.: 224, 225), this distinction may be quite challenging for several reasons. First, we need to verify whether the diffusion is occurring gradually across geographical space (which is the case of geographical diffusion), or whether it is establishing simultaneously within a given area (which is the case of leveling). Second, we need to consider the social structure of the communities involved in the change. For instance, in so called "high-contact language communities" the imperfect learning by adults often leads to simplification strategies and rapid change. Furthermore, a high degree of mobility may lead to a respectively high degree of receptiveness to innovations in the community of speakers.

All this considered, *geographical diffusion* seems to be the main mechanism that is causing the loss of local marked features within the Italian linguistic repertoire. In fact, the features that usually spread more easily come from culturally and economically dominant centers. Nevertheless, while analyzing specific structural or morphological changes within a particular area, we may also find tendencies that do not correspond to the general pan-Italian ones.

#### 1.2.3 Stability divergence and convergence

Language stability, divergence and convergence are possible outcomes of language contact and multilingualism. Contrary to the last two outcomes, the first does not imply language change. Varieties that come to contact do not necessarily converge or diverge as a whole, but also converge or diverge in some features and/or registers. Moreover, while some features converge, others can diverge simultaneously toward different varieties or tendencies.

Mechanisms that support or discourage these outcomes are not limited to language contact, but rather consist in a complex interplay of intra-linguistic, extra-linguistic, and cognitive factors. Starting from this assumption, Kühl and Braunmüller (2014: 30) provide a classification of stability and divergence situations in contexts of contact. First of all, contact-induced stability is often determined by the recognition of structural correspondences between varieties in contact. These inter-systematically congruent features and structures may be cost-saving in language processing, thus preferred by multilingual speakers. Secondly, stability despite contact may be due to language planning and stigmatization of foreign influences, to the existence of a standardized roofing language or to the closeness of a given community, in which linguistic solidarity would determine a higher resistance to external influences. In all these contexts, the attitudes of the speakers are of extreme relevance and may be influenced by socio-economic, socio-cultural, sociopolitical, or sociopsychological factors. Then, contact-induced divergence requires a big cognitive effort by bilingual speakers, which must be accompanied by a strong motivation and a certain degree of language awareness. This motivation is often of socio-psychological nature, such as the will to mark societal independence or group affiliation. Again, language planning can have a role in this context, functioning as a factor impeding convergence. Finally, divergence despite contact is caused by an independent development of the languages involved under the pressure of factors besides contact. If the degree of contact between two communities is sufficient to expect convergence, divergence must be explained and clarified.

As for convergence, also called pattern *transfer* or *calque*, it is defined as "the rearrangement of inherited material because of diffusional interference" (Heath, 1984: 367). As Heath notes, the words, sentences or morphemes that undergo these rearrangements make the target or recipient language more similar to the source language. Under this definition, convergence is caused by substratum interference. Nevertheless, according to Howard Giles' Communication Accomodation Theory (CAT; Giles and Ogay, 2007), convergence may also be caused by a reciprocal accommodation to each other's speech, which is realized in order to increase the communicative efficiency or to evoke the social approval of the listener. On the contrary,

divergent accommodation may happen under the pressure of a feeling of social identity within a community. Regardless of the cause, we are referring to the phenomenon of convergence in contexts of contact by the term *cotact-induced convergence*.

In the Italian territory, regional Italians are the outcome of two simultaneous processes: on the one hand of contact-induced convergence from dialects to neo-standard Italian; on the other hand of *divergence despite contact* of regional and local varieties from the national language, a process defined as "dialectization of (varieties of) Italian" (Berruto 2005: 83). At first, learners created personal interlanguages characterized by idiosyncratic dialectal interferences. Then, some of these interferences have fossilized, becoming shared features that are now part of regional grammars (Cerruti 2011a: 12). Contact-induced convergence has also determined the formation of regional koinés, and this is currently the most common process throughout the peninsula. Instances of stability despite contact are also present. In fact, certain local communities consider the dialect or the regional variety as the expression of the local culture, thus resisting to external influences. Despite that, even in these cases, local communities are bilingual and have Italian varieties in their repertoire, too. Some older individuals with low education may be dialectal monolinguals, but in most cases, they also speak popular or regional Italian. This is why contact-induced convergence toward neo-standard Italian can be considered as a pan-Italian tendency, even if in different degrees according to the geographical area.

#### 1.2.4 Transfer of morphology and facilitating factors

Substratum or L1 influence is characterized by a more structural than lexical nature. Therefore, it usually involves sounds, syntactic patterns, or morphology. As far as morphology is concerned, contact-induced changes require a high intensity of contact. In fact, Winford (2003: Section 7.2.3) observes that "unlike lexical elements, L1 morphemes tend not to be transferred directly into learners' approximations of the target language as substitutions for equivalents in the latter", especially when dealing with bound morphology. However, "close typological similarity between L1 and L2 may facilitate substitution of certain L1 morphemes for their target language counterparts". Since colloquial Italian and Italo-Romance varieties are an extreme case of language similarity, this could be our case.

Following Cerruti (2011a,b), we briefly outline here some relevant internal factors that may facilitate the retention of substratum features. First, when typologically similar languages come to contact, principles of structural convergence act together with principles of naturalness (cf. Siemund 2008; Winford 2003: 94-95 and 226-231; Aikhenvald 2006: 32-34; Thomason 2001: 76). Here, the notion of naturalness refers to Natural morphology<sup>15</sup>, a theory

<sup>&</sup>lt;sup>15</sup> Some universal preferences in morphology are for instance biuniqueness (correspondence between meaning and form), binarity (preference of binary morphological relations), morphotactic transparency (clear boundaries between the formatives), morphosemantic

that states the existence of functional explanations for certain linguistic structures, such as restrictions on memory, processing, and memorization. Second, the diffusion of a certain trait could be favoured if it is consistent with innovative tendencies of the target language (cf. (Aikhenvald, 2006: 32)). Additionally, if the inventory of the target language contains morphological elements that lack of an exact equivalent in the recipient language, transfer may be favoured in order to fill structural gaps (cf. Heine and Kuteva 2005: 124-128; Winford, 2003: 96-97; Aikhenvald, 2006: 30-31).

#### **1.3 Bilectalism in Italo-Romance speakers**

The study of bilingualism includes different perspectives, changing according to our branch of reference. On the one hand, bilingualism in sociolinguistics is not a matter of individual linguistic competence, but rather of language use. In fact, this discipline is concerned with the definition of grammars that are shared by speakers of a given community. In a similar fashion, contact linguists focus mainly on linguistic communities, losing sight of a more cognitive perspective that looks at the bilingual individual as the ultimate locus of contact. On the other hand, researchers working in the framework of Generative Grammar (first proposed in Chomsky [1957] and then revised in subsequent works) are primarily concerned with providing formal models of human's universal linguistic competence. While constructing a formal model, bilingualism becomes extremely challenging to account for. In fact, bilingual or multilingual speakers have access to multiple grammars that often interact with each other, a fact that an ideal model should be able to incorporate. Moreover, the existence of different social statuses associated to different languages, as well as of different levels of language proximity, complicate the general picture. First, these factors produce terminological problems. Second, they cause a wide variability in the characteristics of bilingual profiles.

In the present section, we first specify the adopted term to define the specific bilingual profile of our interest, namely "bilectalism". Then, we insert a digression on the notion of grammar in linguistic research, arguing for a modular formalist view and clarifying our approach. Finally, we present some prevous theories on the nature of the grammar available to bilectal Italo-Romance speakers.

transparency (presence of a fully compositional meaning), and constructional iconicity (morphosemantically marked categories are expressed with longer forms). According to Dressler (1985: 337–348), since the most natural option on all universal parameters is not possible, naturalness on certain parameters has to be sacrificed. Moreover, grammatical productivity is a relevant principle in inflectional morphology, although it may contradict the universal parameters of preference (Dressler 2004). For a general overview of the main sub-theories of Natural morphology, see Dressler (2006).

#### 1.3.1 Bilingualism, Bidialectalism and bilectalism: terminological issues

In previous literature, a bilingual repertoire including a standard language and a dialect, namely including two languages with a high degree of structural proximity, has been referred to by different terms. Some scholars provided the term "bidialectalism" (e.g., Chambers and Trudgill 1998; Bright et al. 2018) around which there is however some controversy. In fact, Crystal (2008) defines bidialectalism as the ability to speak two or more dialects, while Di Pietro (1970) and Elifson (1977) used the term to refer to teaching practice to African-American lower class students, who speak both English and their native dialect. Another choice is taken by Rowe and Grohmann (2013), who adopt the term "bilectalism" to refer to the diglossic situation of Cyprus, where standard modern Greek coexist with a non-standard variety, namely Cypriot Greek.

In the present work, (even though the Italian linguistic context is not defined by the term "diglossia"; but rather by the concept of "dilalia" (see \$1.1.2)) we adopt the term "bilectalism" for the following reasons. On the one end, there is no consistent definition for "bidialectalism". On the other hand, the term "bilingualism" refers to the "native like control of two languages" (Bloomfield 1933: 56), a concept that is extremely wide and cannot capture a specific instance of that control. Moreover, the term "bilectalism", as pointed out in Leivada et al (2017b), is preferred to the term "bidialectalism" for purposes of precision: the higher variety is usually a standardized superposed language rather than a dialect, both in situation of diglossia and of dilalia. In order to describe the native control of the two varieties of our interest, we address the degree of bilectalism, the degree of interference, and possible language dominance<sup>16</sup>.

#### 1.3.2 The notion of grammar

The notion of grammar in linguistics stands for a set of rules that allow speakers to form grammatical sentences in a given language. In this respect, the notion of "grammaticality" has not to be understood in prescriptive terms, but rather in descriptive ones. Any utterance that is judged as acceptable by native speakers of a given language is considered as grammatical.

As we are all native speakers of at least one language, we are all endowed with a knowledge of how to construct grammatical sentences. In other terms, we are all provided with a representation of grammar in our brain. The nature of this representation, and in particular its modularity, has long been a subject of debate in linguistics research. On the one hand, functionalist approaches

<sup>&</sup>lt;sup>16</sup>Since Leopold's (1939-1949) famous longitudinal study of bilingual development, we know that adult bilinguals usually have a stronger and a weaker language. Without a doubt, the dominance of one or another language influences the speaker's competence and skills. In addition, language dominance is related to multiple factors, not only to linguistic competence, but also to language use, to sociolinguistic factors, to the prestige of one of one or another language, to the speakers' linguistic attitudes. In our context, we expect Italian to be the dominant language in the majority of cases.

tend to be usage-based (Barlow and Kemmer 2000, Bybee and Hopper 2001, Bybee 2006). Therefore, they hold that grammar is shaped uniquely by repeated use over time, namely by external factors, such as frequency of usage, cognitive constraints, contact-induced changes and so on. According to this view, parsing can be achieved by using prosodic and statistical cues, which are stored by the brain and integrated in a probabilistic model that allows us both to comprehend and to produce linguistic structures<sup>17</sup>. This approach is compatible with a non-modular model of grammar, which has been supported by several works in the field of cognitive linguistics (i.e Bybee 2006; Fillmore et al. 1988; Goldberg 1995, 2006; Langacker 1987). On the other hand, we find formalist approaches following the Chomskian framework, from the Generative Grammar (Chomsky, 1957) to the newest Minimalist approach (Chomsky, 2001, 2005). These approaches assume modularity of language, which means that grammar itself can be seen as modular. Therefore, they are based on Chomsky's assumption that language is to complex to be learned exclusively from environmental exposure (see his review to Skinner's Verbal Behaviour in Chomsky (1959)), and also too peculiar in its structure to be learnable by a whole general cognitive system. Such a model of grammar does not exclude the role of language use. In fact, the module of linguistic competence is composed by two distinct modules: the grammatical and the pragmatic one, which puts linguistic structures into use and is, indeed, not modular, as it communicates with other cognitive systems. In fact, Chomsky (1995) distinguishes between internalized language (I-language), which is the set of rules and principles as represented in the brain by an ideal speaker, and externalized language (E-language), which is the performance, the concrete language of use. Since functionalist approaches conceive I-language as a pure statistical and probabilistic model, they do not need to analyse language data through metalanguages (in Dryer's 1999 terms), namely through abstract hierarchical structures. According to their view, language is exclusively a social and cultural artefact, whose knowledge consists in a "large inventory of symbolic pairings of sound and meaning, and nothing else" (Hilpert, 2008: 285).

In the present work we support the formalist view, thus adopting a modular model of grammar. We briefly outline here the theoretical and experimental evidences collected in previous literature that lead us to adopt this approach.

First, one of the traditional arguments in favour of modularity of grammar comes from the field of neurolinguistics. In fact, lesions in aphasic adults do not compromise general cognitive abilities, which proves for the exsistence of neural circuits that are specialized for language. Of course, when it comes to developemental language disorders in children the situation appears to be more complicated. In fact, as noted in Caselli and Marotta (2014: 166), the manifestation of language disorders in children can come from different

<sup>&</sup>lt;sup>17</sup> One of the arguments in favour of this view is taken to be, for instance, the evidence of a correlation between word frequency and phonetic reduction, which has been attested in some corpus-based studies (see for instance Hilpert, 2008).

pathological pictures that range from autistic spectrum disorders to neurological disorders or specific language impairements (SLI). Even SLI, which are traditionally classified as sectorial disorders that do not compromise general cognitive abilities, display very often comorbidities with other developemental disorders. However, this is the case because the cognitive system of the child is not comparable to that of the adult. Knowledges are not yet incapsulated in specific domains and high-level cognitive abilities weight on the general cognitive system (see Caselli and Marotta, 2014: 164). Therefore, modularity of grammar has to be seen as the point of arrival, the target of development that is manifested in the adult.

Second, according to Chomsky (1957) the existence of hierarchical structures underlining sentences is proved by the fact that the distance between words is never fixed, but rather flexible and recursively expandable. With this respect, Tettamanti et al (2009), using event-related functional magnetic resonance (fMRI) in sixteen native speakers of Italian, found evidence for the activation of Broca's area subsequently to the acquisition of non-rigid syntax, as opposed to the lack of a parallel activation after acquisition of rigid syntax. This experiment proves that the neural activity underlying parsing of linguistic structures must be language-specific rather than domain-general.

Moreover, Ding an al (2016), after recording the neural activity of Mandarin Chinese listeners using magnetoencephalography (MEG), found that linguistic structures can be built relying exclusively on grammatical knowledge. In the first set of experiments, the stimuli consisted in speech material where the constituent structure was isolated from prosodic cues. Despite that, the frequency domain of the response showed three picks at the syllabic, phrasal and sentential rate, a timescale that clearly underlies the syntactic building process. The same result was achieved in the second set of experiments, during which the stimuli consisted in a constant transitional probability Markovian Sentence Set (MSS) together with a similar set with varying probability. In this case, the same neural response was observed for both sets, showing that sentence tracking is not affected by changes in transitional probabilities<sup>18</sup>.

The process of syntactic structure building was disengaged from acoustic content in Artoni et al (2020) too. In this recent experiment, researchers built a battery of sentences displaying NPs merging a definite article with a noun and homophonous VPs merging a clitic pronoun with a verb (for instance: (i) *la* (the) *porta* (door) as in *pulisce la porta con l'acqua* "s/he cleans the door with water" and (ii) *la* (her) *porta* (brings) as *in domani la porta a casa* "tomorrow s/he brings her home"). Using stereo-electroencephalography (SEEG) in epileptic patients, they measured different electrophysiological correlates of NPs and VPs. In particular, they found higher gamma-band activity<sup>19</sup> and

<sup>&</sup>lt;sup>18</sup> Chomsky (1956) already noted that Markovian chains are not able to capture syntactic dependencies.

<sup>&</sup>lt;sup>19</sup> The EEG frequency range is classified into different neural oscillatory patterns, among which we find gamma-band oscillations (>30 Hz). A high gamma activity (>100 Hz) is an index of cortical activity associated to cognitive functions. In this experiment, high gamma-activity was not limited to those areas traditionally associated with syntactic impairments (namely Broca's area and the posterior temporo-parietal cortex). This fact clearly shows how

higher surprisal levels for VPs with respect to NPs. These results may prove for the existence of different underlying syntactic computations. Of course, surprisal levels could relate to the expectedness of the occurrence of a particular syntactic category basing on what appeared before in the corpus. The same holds for the the high gamma-band activity localised in the temporal cortex, an area that is generally involved in semantic and syntactic reanalysis. However, a future experimental design that controls better for the surprisal effect could eventually confirm the hypothesis that the difference found for the electrophysiological correlates of NPs and VPs is related to the contrast between a simple Merge operation and the encoding of a more complex syntactic dependency.

Altogether, these findings prove for modularity of grammar and for the usefulness of adopting hierarchical structures. In addition, they show that the inexistence of non-recursing languages cannot be a mere historical or cultural coincidence, but must be grounded in the functional nature of the human brain. In addition, our view is that these assumptions do not exclude the possible role of external factors (i.e language use, language contact or general functional and cognitive constraints) in shaping linguistic forms. In fact, what functionalists refer to by "function" should be understood in terms of purposes of language use, which can interact with our grammatical knowledge of formal structures.

#### 1.3.3 Theories for bilectal grammars of Italo-Romance speakers

As we saw, having control of both a dialect and a standard languages implies the existence of a bilectal grammar encompassing two typologically similar languages. In this respect, we may ask how these grammars are represented in the brain and how a theoretical model of grammar could account for inter-linguistic and intra-linguistic variability.

First, we may suppose the existence of two competing and separated grammars. This option was proposed in Egerland 's *double basis theory* (2010) in order to explain a phenomenon of morphosyntactic variation in Italian, namely optionality of clitic pronouns' raising with restructuring verbs. A questionnaire was handled out in order to verify if this variability was due to the dialectal substratum influence. The results showed optionality only in Italian, while the dialects displayed a single option. Egerland's proposal assumes, as we said, the existence of two separated grammars: the Italian grammar, encompassing a greater variability, and the dialectal grammar. This greater variability is due to the use of the standard language in a wide range of communicative contexts, which entails the presence of different registers and stiles. In this sense, variability across the speakers could be accounted for by the different nature of linguistic input.

Second, according to the so called *micro-comparative approach* (Benincà and Damonte 2009)<sup>20</sup> variation may either regard specific construction

syntactic processing involves the activation of a much more complex network and confirms how language functions cannot be rigidly localised to a specific cortical area.

<sup>&</sup>lt;sup>20</sup> This approach underlies the project ASIt, *Atlante Sintattico d'Italia* ("Syntactic Atlas of Italy"), which aims to document syntactic variation across Italo-Romance dialects.

between otherwise identical grammars, or be limited to the choice of lexical items within a single grammatical system. This distinction may depend on sociolinguistic variation across the regions. On the one hand, in areas displaying macro-diglossia, local dialects should be more resistant to external pressures. Hence, grammars could stay separated, even though they are almost identical and differ for specific constructions. On the other hand, in areas displaying *micro-diglossia*, local dialects are rarely preserved. Therefore, their grammar tends to lose marked features and progressively assimilates to more prestigious varieties. While grammars tend to assimilate, local dialects may incorporate external elements that are lexically different, but serve the same function and have the same properties. As a result, variation regards no more the existence of different grammars, but exclusively the lexicon. An example may be found in Emilia-Romagna, which is a typical example of microdiglossic area. Here, we find different post-verbal negation forms, as shown in (1). Although lexically different, these forms serve the same function and are found in the same syntactic position across dialects. In Emilia-Romagna, a dialect spoken in the town of Zocca (studied by Colombini 2007) displays two of these negations, which alternate without any difference in meaning, as shown in (2). Interestingly, the same alternation is found in the Ferrarese dialect, as in (3). Zocca and Ferrara are centers under the influence of bigger cities, such as Modena and Bologna, respectively.

(1) a.n	va	brisa				Emilian: Bologna
NEG b. n va	goes meng	NEG ga				Emilian: Modena
c. n NEG 'It do	va goes bes not	mia NEG t go'				Emilian: Carpi (Modena)
(2) a. A cl.SBJ 'I do b. A cl.SBJ 'I do	n J NH not ea n JNEG not ea	magn EG eat.1SG at meat' magn bri eat1SG NE at meat'	menga NEG sa la GG the	la the chern meat	cherna meat a	Emilian: Zocca

(3) a. A n màgn brisa la càran<sup>21</sup> Emilian: Ferrara cl.SBJ NEG eat. 1SG NEG the meat

<sup>&</sup>lt;sup>21</sup>In the present work, when writing in Ferrarese we follow the accentuation rules presented in Baiolini and Giudetti (2005: XL), according to which the graphic accent must be added obligatory on  $\langle e \rangle$  and  $\langle o \rangle$  (where it marks the quality of the vowel), on verbal forms and apocopated words. We do not put the accent on particles, adverbs and articles. Despite these general rules, it is possible to make use of the graphic accent in other contexts, if it clarifies some ambiguities of pronunciation. In this work, we decided to mark the accent on trisillabic words with more than one vocalic nucleus.

b. A n magn mina la càran cl.SBJNEG eat.1sg NEG the meat 'I do not eat meat'

Nevertheless, it is worth noting that the explanation for variation may also depend on the formal analysis that we adopt for the specific grammatical element of our interest. An example may be seen looking at variation in the syntactic position of complement clitics in the dialect of Cairo Montenotte, located at the border between Piedmont and Liguria regions. As Parry (2005: 177-9) specifies, in this dialect there are apparently three possible collocations for complement clitics, as you can see in the following examples:

(4) a.	A r	n	sn	fò-me	in	fazin
	cl.SBJ.1SG c	l.dat.1	SG am	made-cl.D.	AT.1SG a	focaccia bread
	"I made a f	ocaccia	bread for	r myself"		
b.	Ι	an	rangiò-la	a		
	cl.sbj.3pl	have	fixed-cl.	OBJ.2SG.F		
	"I fixed it"					
c.	А	j-eu		dic		
	cl.SBJ.1SG	cl.DAT.	ЗSG.M-h	ave told		
	"I have told	l him"				

According to Benincà and Damonte (2009: 192), if we analyze clitics as pronouns occupying a specific syntactic position, we have to suppose the existence of three grammars with different rules for clitic movement. The first grammar would be the local one, while the second would be the grammar of the variety spoken throughout the region (namely, the *dialectal koiné*). Finally, the third grammar would be closer to Italian, as well as to other neighboring varieties, thus having a broader sociolinguistic area of reference. Alternatively, Benincà and Damonte (2009: 192) propose that complement clitics could be analysed as particles. In this latter case, the speakers would be endowed with a single grammar. The particle, despite displaying morphological agreement with verbal arguments, could be either null or phonetically realized in each position available. One or another position is activated when certain constructions are found (for instance implicit theme, left or right dislocation).

Let us however consider the findings in Cardinaletti (2015). The author argues that proclitic pronouns and post-participial pronouns in some North-Western Italian varieties have actually a different status. While the former are clitic pronouns, the latter are weak pronouns. Therefore, post-verbal pronouns are only apparent instances of enclisis. While commenting on the status of these pronouns in some Franco-Provençal Valdôtain dialects, Cardinaletti (2015: 184-185) puts forward some arguments that can account for the example shown in (4) too. First, proclitic pronouns usually do not bare stress, contrary to  $m\dot{e}$  and  $l\dot{a}$  in (4a,b). Second, post-participial pronouns have usually a more complex structure, as you can see comparing m and  $m\dot{e}$  in (4a). As noted by Cardinaletti (2015: 185), this contrast cannot be phonological, as post-verbal weak pronouns have a more complex structure even when their onset could be potentially syllabified as a coda on the preceding verb. Finally, weak post-verbal pronouns cannot enter clusters, contrary to proclitic pronouns. Altogether, this proposal entails that what appears being a case of syntactic optionality, is explained looking at the lexicon.

The discussion above on clitic pronouns clearly shows, as we said, how the formal analysis adopted for a specific element of grammar can affect the overall assumptions on variation.

In the present work, we see which of the above-mentioned theories may better account for optional insertion and/or semantic specialization of uncontroversial indefinites available to bilectal Italo-Ferrarese speakers. In this process, the formal analysis of uncontroversial indefinites is of fundamental importance.

#### 1.4 Summary

In this chapter, we provided an overview of the Italian sociolinguistic situation, defining the continuum of Italian varieties and the different axes of variation. Moreover, we classified the Italo-Romance dialects as independent varieties from Italian and identified the Emilia-Romagna region as a microdiglossic area. Furthermore, we introduced some concepts of contact linguistics, which helped us to define the contact situations and contactinduced dynamics of change within our territory. In particular, we note a tendency towards language shift from local varieties to standard Italian, together with convergence of local varieties towards dialectal koinés, at least in *macro-diglossic* areas. These phenomena are caused by *geographical diffusion*, which causes the progressive loss of local traits. This general tendency to contact-induced-convergence coexists with opposite dynamics of change, namely divergence despite contact of regional and local varieties of Italian from neo-standard Italian and stability despite contact of some local varieties. The former is caused by substratum interference, while the latter is due to the fact that some local communities consider the dialect or the regional variety as the expression of the local culture, thus resisting to external influences. Since substratum interference will be of our particular interest while analysing the answers to the Italian questionnaire, we also introduced some factors that may facilitate the transfer of morphology, such as language similarity and principles of naturaleness. Finally, we introduced the topic of Italian-dialect bilectalism. After clarifying the adopted terminology, defining our approach and specifying the adopted notion of grammar, we explored some theories that may account for the nature of the bilectal grammar available to Italo-Ferrarese speakers. While analyzing our results, we are asking which theory (or theories) may better explain the informants' answers to our questionnaire, which tests for optional insertion and semantic specialization of different forms of uncontroversial indefinites.

## **Chapter 2**

# Current studies on partitivity, pseudo-partitivity and indefiniteness

In this chapter, we define the object of our inquiry, namely uncontroversial indefinites, which are a subtype of partitive elements. First, we introduce the ongoing research on partitive elements in European languages on a broad perspective, focusing on Romance languages. Afterwards, we consider some areal and formal issues related to indefiniteness in Italo-Romance, which will be relevant for our research purposes. In doing so, we focus on Italian, French, Italo-Romance dialects, and some Gallo-Italic dialects, since they are the relevant varieties for our research.

#### 2.1 Partitive elements: definition and typological distribution

#### 2.1.1 Partitive elements: a definition

Partitive elements (PE) is a cover term designating partitive articles, partitive pronouns, and partitive case markers. These elements can express different degrees of partitivity, i.e., true partitivity, pseudo-partitivity, and indefiniteness. Some PE, especially partitive articles and partitive pronouns, can express more than one of these notions according to the context. This is why issues related to partitivity are particularly challenging and still under research.

Semantically, true partitivity can be defined as "the indication of a part-whole relationship between an (un)specified subpart of a definite substance or set", while pseudo-partitivity refers to "an (un)specified subpart of an indefinite substance" (Ihsane and Stark 2020: 607). In other words, partitivity denotes a measured amount of a specific entity (as in (1)), while pseudo-partitivity denotes a measured amount of a non-specific entity (as in (2)). Considering syntax, Stickney (2007) proposes that the partitive is a complex noun, namely a head-complement structure (cf. (3)), while the pseudopartitive consist in a single nominal projection (cf. (4)). In fact, while  $\langle box \rangle$  in the partitive construction is a NP, in the pseudopartitive construction is a Measure Phrase (MP), namely a functional phrase within the left periphery of the NP  $\langle chocolates \rangle$ . An example of pseudo-partitive in Italian is the construction *un po' di* 'a bit of', shown in (5).

(1) a box of those chocolates

(2) a box of chocolates

(Stickney, 2007: 406)



(5) Vorrei trovare un po' di fiori (Cardinaletti and Giusti, 2020: 681)I.would.like to.find a bit of flowers'I would like to find some flowers''

Finally, indefiniteness refers to an unspecified quantity devoid of any partwhole relationship. In the literature, many attempts have been made to characterize the semantic distinction between indefiniteness and its positive counterpart, i.e., definiteness. These attempts refer to different formal distinctions, such as uniqueness and non-uniqueness (e.g. Russell 1905; 1919), familiarity and novelty (e.g. Bolinger 1977; Heim 1982), specificity and nonspecificity (e.g. Partee 1970; Fodor and Sag 1982). However, since indefiniteness consists in a broad issue, including syntax, semantics, and pragmatics, providing a unifying definition in a few lines is extremely challenging. Among others, Brasovenau and Farkas (2016) distinguish between definite and indefinite nominals. The former refer to an individual already mentioned in the discourse, while the latter may introduce a new individual in the discourse or even not have reference at all. Furthermore, the authors distinguish three types of indefinites: uncontroversial or unmarked indefinites, whose interpretation is not subject to any constraint (cf. (6)); partitive indefinites (in the literature, also called quantificational or strong indefinites), whose interpretation is domain-constrained (cf. (7)); marked indefinites introduced by the complex determiner "a certain" (cf. (8)), which are constrained in the values they can pick.

- (6) Madrigals are polyphonic. / These are madrigals. (ibid.: 239)
- (7) Some children ran into the room. A child / Some of the children was/were dressed up.
   (ibid.: 258)
- (8) Every Englishman adores a certain woman the Queen / his mother. (ibid.: 262)

Following Cardinaletti and Giusti (2018), in this work we focus on "uncontroversial indefinites" in the dialect of Ferrara.

#### 2.1.2 PE across European languages

Crosslinguistically, partitivity is encoded by a wide variety of grammatical means.

On the one hand, Finnish, Balto-slavic languages, Ancient Greek, Basque, and Russian (see Breu 2020; Huumo 2020; Luraghi and Smit 2020) display case markers, such as partitive or genitive case. These generally encode true partitivity (but also pseudo-partitivity and indefiniteness), while nominative, accusative, or absolutive cases denote an entire set of a definite referent (Luraghi and Kittilä 2014: 20). For explanatory purposes only, we show an example in Finnish (cf. 9a,b). In this language, the partitive/accusative alternation is employed to encode other semantic features, namely differences in verbal aspect/actionality, polarity, and quantification (see Huumo 2020 for further details).

(9) a. Ost-i-n kahvi-a. (adapted from Huumo, 2020: 906-7) buy-PST-1SG coffee-PAR 'I bought coffee/some coffee.'
b. Ost-i-n kahvi-n. buy-PST-1SG coffee-ACC 'I bought that coffee' 'I bought that coffee' 'I bought a [cup of] coffee

On the other hand, in most Romance and Germanic languages true partitivity (and also pseudo-partitivity) is expressed through adpositional encoding (cf. (10)-(11), adapted from Ihsane and Stark, 2020: 607).
- (10) Spanish Jaime comió mucho del pan Jaime eat-PST.3SGa.lot of.the.MPL bread 'Jaime ate much of the bread.'
- (11) German Marie aß drei Scheiben vom Brot Marie eat-PST.3SG three slices of.the.MPL bread 'Marie ate three slices of the bread.'

In this context, partitive articles and partitive pronouns are particularly interesting, since they often express pseudo-partitivity or no partitivity at all, namely indefiniteness. In the present work, following Cardinaletti and Giusti (2018), we analyse partitive articles encoding indefiniteness as determiners. In addition, we refer to them by the label "partitive determiners" in order to distinguish them from other kind of indefinite determiners. Furthermore, following Cardinaletti and Giusti (1992; 2006), we consider quantitative clitics as DPs.

Interestingly, partitive determiners and partitive pronouns seem to be a highly marked feature in European languages, mainly found in some Romance languages (i.e., French, Franco-provençal, Occitan, Italian, some Gallo- and Italo-Romance varieties) and in languages that came to contact with them (i.e., Dutch and Alemanic varieties in Switzerland). Partitive determiners result from the combination of the Latin preposition *de* with the definite articles, which are an innovation of modern Romance languages and derive from the Latin demonstrative *ille* (see Carlier and Lamiroy 2014 for additional details about the grammaticalisation process)<sup>22</sup>. According to Giusti (2002; 2015) and

<sup>&</sup>lt;sup>22</sup> In Spanish, we find a form of the di+ART type, but it only encodes true partitivity, and never indefiniteness. This form only occurs in object position with transitive verbs, while with subject NPs, it is ungrammatical (ia,b). This proves that it never became a determiner, contrary to their French and Italian counterparts.

(i) a.	Comió	del	pastel	у	luego	se	encontró	mal
	Eat.PST.3SG	of-the	cake	and	afterwards	REFL	find.PST3SG	bad
	'He ate a piec	e of the	e cake a	and felt	sick afterward	ls.'		
b.	*De los jóvene	s	entrab	an y	salían			
	of the young	-people	went-i	n and	d went-out			
	'Young peopl	le went	in and	out'				
							(Carlier and L	amiroy 2014

Indefiniteness in Spanish is encoded by other means, such as with zero article or with a plural form of the singular indefinite determiner *(unos/unas)*, as you can see in (ii). Note that in subject position bare nominals are not allowed (iii). Zero article is found also in Portuguese, Catalan and Romanian with mass nouns, as shown in (iiiia-c).

16)

 (iii) \*(Unos) estudiantes han ocupado el edificio Unos students have occupied the building
 'Some students have occupied the building'

<sup>(</sup>ii) Yo he visto (unos) estudiantes en el edificio. (Giusti, forthcoming. : 3)
I have seen unos students in the building
'I have seen some students in the buildig'

Cardinaletti and Giusti (2018), definite articles constitute the overt realization of Number and Gender features.

Across Romance languages, we find different types of covert and overt indefinite determiners, as well as different allomorphs of the quantitative clitic *ne*. In the present work, we focus on Italian, French, Italo-Romance dialects, and some Gallo-Italic dialects, since they are the relevant varieties for our research. In fact, as we will see in Ch. 3, the Ferrarese dialect is traditionally classified as Gallo-Italic, a group that shares a Celtic substratum with French.

# 2.2 Relevant issues related to indefiniteness in Italo-Romance

Partitivity is the topic of a cross-linguistic three-year research project named PARTE (PARTitivity in European languages) financed by the Netherlands Organization for Scientific Research and co-financed by a number of universities, including Ca' Foscari University of Venice. This project is focused on both areal and formal questions related to partitivity. Areal questions lie in "the geographical distribution of partitive elements and the identification of potential instances of language contact", while formal questions consist in the formal description, explanation and discussion of different partitive constructions together with their semantic and morphosyntactic properties (Ihsane and Stark, 2020: 606). Since indefiniteness is a possible shade of partitivity, these issues are relevant for our research.

### 2.2.1 Areal issues

Language contact is considered to be one of the main factors affecting the geographical distribution of partitive determiners in Romance (Bossong 2016; Cerruti 2014) as well as of other partitive elements throughout Europe. In this context, the contact between dialects and a standard language (also called vertical contact) is extremely relevant, since contact usually occurs between naturally learnt varieties rather than explicitly learned ones. As for partitive determiners in the Italian peninsula, they are found in many Italo-Romance, Gallo-Romance and Gallo-Italic varieties, which came in direct contact with both Italian and French. This may raise the question whether Italian or French gave a greater contribution in the make-up of morphosyntactic and semantic properties of partitive determiners (and also, more generally, of indefinite determiners). Moreover, contact can occur between different dialectal varieties too, such as between different local dialects or between local dialects and dialectal koinés. In contact contexts, different dynamics can affect the structures of the languages involved, such as the ones considered in §1.2.2, §1.2.3 and

(iiii)	a. Bebi (you)drank	vinho wine	Portuguese
	b. Bebì (you)drank	vino wine	Spanish
	c.Vaig beure (you)drank	vi wine	Catalan

§1.2.4. We will outline here some areal issues discussed in recent studies focusing on indefinite determiners in Italo-Romance and Gallo-Italic. We will consider only those studies that are most relevant for our research purposes.

## 2.2.1.1 Indefinite determiners in Italo-Romance

Cardinaletti and Giusti (2018)<sup>23</sup>, observing the findings collected in the AIS<sup>24</sup> maps, provide an overview of the geographical distribution of the different determiners found in Italo-Romance varieties. According to this study, indefiniteness can be expressed:

- through a zero determiner (henceforth ZERO). This form is found in the North (north-eastern Piedmont, northern Lombardy, the whole of Veneto, and the whole of Istria), in the South of Italy (southern Campania, southern Apulia, southern Calabria, Sicily), and in Sardinia. It is absent elsewhere. The zero article is much more widespread in the Center and in the South rather than in the North.
- through a *definite article* (henceforth ART). Three attestations are found in the province of Trento (330 Mortaso, 331 Stenico, 323 Predazzo). Moreover, in southern Lombardy this form builds a compact area, reaching the borders of Veneto region (360 Albisano (Verona)). ART interrupts in a large *di*+ART area corresponding to Emilia-Romagna region, and then continues in the rest of central and southern Italy, until the zero determiner starts again, as indicated above. ART is found spotlike in Sicily and Sardinia, too.
- through the *indefinite operator di* (henceforth bare *di*), attested in some North-Western varieties (for example in Val d'Aosta and western Piedmont, from 122 Saint Marcel (Aosta) down to 182 Limone Piemonte (Cuneo)). Only three further attestations towards East are found: one in northern Lombardy (209 Isolaccia (Sondrio)), one in central Veneto (354 Romano (Vicenza), where zero is also given as a second option)), and one attestation in Sardinia (943 Macomer (Nuoro)). We add here two examples, in Piedmontese (cf. (12a)) and in the variety spoken in Giaverno, near Turin (cf. (12b)). Finally, bare *di* is possible in Tuscan varieties as well, provided that the noun is modified by a prenominal adjective (13).

(12) a. sei fyse d' aqua	(Piedmontese; Berruto 1974: 57)
if (there) was of water	
b. anda sarkà d viulatte	(AIS 637, 153 Giaveno (Turin))
to-go to-pick of violets	

<sup>&</sup>lt;sup>23</sup> This paper is part of a long series on the same topic (Cardinaletti and Giusti 2015, 2016, 2018, 2020).

<sup>&</sup>lt;sup>24</sup> Linguistic and Ethnographic Atlas of Italy and Southern Switzerland.

- (13) a. di bon vino of food wineb. di belle patate of beautiful.PLU.FEM potatoes
- through a *partitive determiner* (namely di+ART). This form is attested mainly in the so-called Gallo-Italic varieties, from eastern Piedmont and Liguria down to the whole Emilia-Romagna region. Two attestations are found in Northern Tuscany (520 Camaiore (Livorno), 532 Montespertoli (Firenze)) and one attestation in Sardinia (937 Nuoro, where the article is *sa*).
- through the determiner-like certo/a/i/e, although it is not reported at any point in AIS maps. This determiner is found in both standard Italian and most dialects. However, only in restricted areas of southern Italy it displays peculiar semantic properties, at least according to some studies (see § 2.2.2).

Some of Cardinaletti and Giusti's (2018) generalizations were confirmed by pilot studies conducted by students of the MA programme in Language Sciences at Ca' Foscari University of Venice during the academic year 2018-2019 (Giusti, forthcoming). The dialects investigated partially cover the Italian territory: Campomolino (TV), Furlan (2018); southern Friulian (Castions di Strada, Pocenia and Gonars, UD), Perinot (2018); Piacenza, Molinari (2019); Altamura (BA), Vicenti (2019); the Neapolitan area (Casalnuovo, Casoria, Soccavo, Bagnoli, Pozzuoli, Santa Lucia, San Ferdinando, Vasto Napoli, Somma Vesuviana, Frattamaggiore), Procentese (2019); Galati (RC), Maesano (2019); Lecce, Antonaci (2018). We resume in **Table 3** the typology that was found, including the dialect of Ancona as well, represented by Giusti's own judgements.<sup>25</sup>

<sup>&</sup>lt;sup>25</sup> We will return on further issues related to this study in §2.2.2.2

			ADT	1 7.		
	Core indefinites in	ZERO	AKI	bare di	d1+AR1	certo
	object position					
	5 1					
	<u> </u>		(.)		(	(.)
a.	Campomolino	+	(+)	-	(+)	(+)
	(TV)					
b.	Southern Friulian	+	+	-	(+/-)	(+)
	(UD)					
	Dia servero	1	1	$NIEC > 1^{26}$	1	(1)
c.	Placenza	+	+	NEG >+	+	(+)
d	Ancona	-	+	-	(+/-)	(+)
ч.	7 meona				(.,)	()
e.	Altamura (BA)	-	+	-	-	(+)
	. ,					
C	NT 1	$\langle 1 \rangle$	1			(1)
I.	Neaples area	(+)	+	-	-	(+)
σ	Galati (RC)	+	+	_	_	(+)
g.	Galati (ICC)		1	_		(')
h.	Lecce	+	(+)	-	-	(+)
						~ /
		1		1		1

**Table 3:** results from pilot studies on indefinite determiners in Italo-romance dialects (Giusti, forthcoming: 23)

Cardinaletti and Giusti (2020) claim that the distribution of indefinite determiners in Italo-Romance is most probably related to diatopic variation and language contact. First, they state that the geographical distribution of indefinite determiners is explained by Bartoli's Law of Lateral Areas, according to which the innovations spread from the centre towards the peripheries of a given area. In our case, the *zero article* is the most ancient form, already present in Latin, while the articled forms are an innovation of modern Romance languages. The zero determiner resists in the peripheries, namely in the extreme north and the extreme south, while ART has spread from the centre in the North-South direction. Then, bare di is identified as a Gallo-Romance innovation, present exclusively at the borders with France because of contact, while di+ART is located in an area spreading in the West-East direction. Moreover, after delivering an online questionnaire in informal Italian checking for all the possible forms of indefinite determiners in given contexts, the authors compared the results with those found in Cardinaletti and Giusti (2018). From this comparison, they showed that diatopic variation in modern informal Italian is related to the dialectal substratum.

Another relevant and recent research on this topic is found in Cerruti and Regis (2020), who examine the main paradigmatic differences between

 $<sup>^{26}</sup>$  [NEG> +] means that in the dialect of Piacenza bare *di* is possible under the scope of negation. Molinari's (2019) results further show that "the remaining forms (ZERO, ART and di+ART) are generally possible in all the investigated sentences, with low occurrence of ZERO, while ART and di+ART are often in competition with one another". See §2.2.2.3 for further details on scope properties.

indefinite determiners in different Piedmontese varieties (which are Gallo-Italic dialects), basing on materials collected in ALEPO, which stands for *Atlante linguistico ed etnografico del Piemonte Occidentale* 'Linguistic and Ethnographic Atlas of Western Piedmont'. In doing so, they discuss contact phenomena between different varieties of Piedmontese, standard Italian, and French. Moreover, they consider the superposition of both standard varieties and the regional koiné over the local dialects.

The paradigmatic differences are resumed here in order to understand the following discussion.

- Both Piedmontese koiné (as described in reference grammars) and spoken Turinese display bare *di* with both mass nouns and plural count nouns, confirming the data from AIS map. While in Piedmontese koiné, this form is always mandatory (a behaviour that patterns with French), in spoken Turinese it can be omitted with countable plurals, as shown in (15);
- (14) [a i suŋ Ø 'tɛre mak a'date a fe
  3PL.SBJ LOC be.PRS.3PL Ø area.F.PL only suitable.F.PL to grow.INF
  1 'ɛrba]
  ART.DEF.F.SG grass.F.SG
  'There are areas where only grass grows'

(ALEPO Q502, Moncalieri; unpublished materials)

- In the majority of most peripherial varieties of Piedmontese, we find articled forms of partitive determiners (di+ART) alternating with zero article, both with mass and plural count nouns. Among the others, this is the case of the variety spoken in Campiglia Cervo. Nevertheless, it is important to note that in some of those varieties spoken in the plains situated northwest and southwest of Turin (the administrative centre of the region) and in the hilly areas around it (cf. Telmon (2001): 70–72), we find free alternation between articled and unarticled forms (di+ART, bare *di* and *zero article*) of indefinite determiners. These varieties are called "rustic" or peri-Turinese varieties and include, among the others, the dialect spoken in Bibiana. We show some examples in (15)-(19):
- (15) [dal paŋ] di+ART.M.SG bread
  'some bread'
  (adapted form ALEPO Q5252, Campiglia Cervo; unpublished materials)
- (16) [la stra la fa di tur'nant]
  the road 3SG.SBJ make.PRS.3SG di+ART.M.PL hairpin turns
  'the road makes hairpin turns'
  (adapted from ALEPO Q3635, Campiglia Cervo; unpublished materials)

(17) [əl 'vake a j 'davu Ø 'roba d the.F.PL cow. F.PL 3PL.SBJ to.them give.PST.3PL Ø stuff.F.SG of pur'kət] pork
'The cows (hanging topic) they gave them pig meat' (adapted form ALEPO Q2329, Campiglia Cervo; unpublished materials)

- (18) [ənt el sakl a smens e i by'tavu d in the.M.SG sack the.F.PL seed and LOC put.PS3PL di+art 'sabjaən'sema] sand.F.SG together
  'In the sack (there was) the seed, and they added some sand' (adapted from ALEPO Q750, Bibiana; unpublished materials)
- (19) [vøj by'te nt l ar'mari dla 'rɔba. want.PRS.1SG put.INF in the closet di+ART.F.SG stuff.F.SG
  'I want to put some stuff in the closet' (adapted from ALEPO Q5031, Bibiana; unpublished materials)

We resume in **Table 4** the above-mentioned data, as indicated in table 2, 4 and 5 of Cerruti and Regis  $(2020)^{27}$ .

(Cerruit and Regis, 20	20.0, 11	, 12)			
		Mass	nouns	Countab	ole nouns
		М	F	М	F
Piedmontese koiné	SING	öd (2d)	dä (d')	un [yn], n', në [nə]	na
	PLU	eu ( u),	ue (u)	ëd ('d), dë (d')	
Spoken Turinese	SING	ë	d	un na	
	PLU			ëd	/ Ø
Peripherial varieties	SING	dal / Ø	dla / Ø	in	ina
(Campiglia Cervo)	PLU			di/Ø	dal/ Ø

**Table 4:** the paradigm of indefinite determiners in Piedmontese varieties (Cerruti and Regis, 2020: 6, 11, 12)

Given the above-mentioned data, Cerruti and Regis (2020) state that the coexistence of articled and unarticled forms in so called called "rustic" or peri-Turinese varieties can be explained by contact, first and foremost with Turinese. In particular, the given situation displays geographical diffusion from the highest dialectal variety (namely Turinese) to the lower ones. Since the spread of

<sup>&</sup>lt;sup>27</sup>We ell return on further issues related to this study in §2.2.2.1

features does not result in the replacement of the original traits of the local varieties, the process of geographical diffusion determines intra-speaker variability, i.e., style variation. Cases of shifting from non-Turinese to Turinese varieties are also found and usually occur in response to closeness, prestige, the degree of formality of the situation, or theorigin/provenance of the interlocutor (see e.g. Cerruti 2006: 230-237; Parry 1997: 237). It is worth noting that also this kind of shifting may cause the alternation between articled and unarticled forms. In (20), we see that according to the addressee, the speaker selects different traits: bare di with the shopkeeper (a trait typical of Turinese) and di+ART with his brother, a feature found in peripheral varieties.

(20)	a.	[a	i	t∫am	S	а	j	e
		1sg.sbj	to.him	ask.PRS.1SG	if	3sg.sbj	LOC	be.PRS.3SG
		dal	lat∫]					
		di+art	milk					
		'I'll ask	him if th	ere's some milk'	(ad	dressing	her br	other)
	b.	[j e		d lajt]?		-		
		loc be	e.prs.3sg	of milk				

Moreover, the paradigm of indefinite determiners in peripheral varieties of Piedmontese matches the Italian paradigm. This influence from Italian could be interpreted in terms of *contact-induced stability* (seen in § 1.2.3). In other words, "changes may not have taken place because of inter-sistematically equivalent elements, which are cost-saving in language processing and hence usually sought by bilingual speakers" (Cerruti and Regis, 2020: 14).

Areal issues are also found in Garzonio and Poletto (2020), who explore the distribution of partitive objects under negation in Northern Italian dialects, which are called Negated Partitive Objects (NPOs). They notice that among these dialects, there are some displaying bare *di* because of contact with French, while others display di+ART, the *zero determiner*, or even both, like Italian. In this respect, they claim that Ferrarese dialect displays di+ART with plural nouns and zero article with the singular mass nouns (21):

(21) Ferrara

a.	Ι	n	compra	mai	fruta,	il	mie	sureli [Ø( <i>sing</i> )]
	They	not	buy	never	fruit,	the	my	sisters
	'My si	sters	never buy	fruit'				
b.	T'aı	n cc	ompri mai	di	pu	m		[di+ ART(plur)]
	You no	ot bu	ıy neve	r di+AF	T.PL app	ples		
	'You n	lever	buy apple	s'				

(Garzonio and Poletto, 2020: 636)

Given these data, we expect the contact with Italian to be more consistent than with French, at least as far as the paradigm of indefinite determiners is concerned. Finally, Molinari (2019) states that the pattern of indefinite determiners in modern Piacentino (a Gallo-Italian dialect spoken in Piacenza, an Emilian city), is influenced by Italian as well. In particular, this dialect borrowed from Italian the zero article (cf. (22)), which alternates with bare di in negative sentences, with both mass singular and plural count nouns (cf. (23)). However, it is not accepted by all speakers (especially the older ones). This may be the case for Ferrarese dialect, too. Thus, we will verify this hypothesis in our research.

- (22) a. Ho catè viulëti.
  - [I] have picked violets
  - b. Ho catè paja.[I] have harvested hayc. \*Ho catè viulëta.
    - [I] have picked violet
- (23) a. Ho mia catè (ad) viulëti. [I] have not picked di violets

(adapted from Molinari, 2019: 32(20))

(from Molinari, 2019: 15(18))

- b. Ho mia catè (ad) paja.
  - [I] have not harvested di hay
- c. \*Ho mia catè (ad) viulëta. [I] have not picked di violet

# 2.2.2 Formal issues

As we already saw in §1.3, the objective of formal approaches is to construct formal models of the linguistic competence. For all PEs, non-standard varieties are very interesting also from this perspective, since they always show natural tendencies. On the contrary, standard varieties are often subject to explicit leveling and conscious codifications (cf. Matras 2004). The core questions within this perspective concern the syntax of these elements, their semantic functions, their behavior with regard to scope and operators.

## 2.2.2.1 Indefinite determiners in Italo-Romance: syntax

Cardinaletti and Giusti (2018), following Giusti (2002, 2015), propose a unified syntactic structure for all indefinite determiners. In particular, indefinite determiners are taken to be simple DPs that host the indefinite operator di in the specifier<sup>28</sup>, while the head D realizes Gender and Number concord features. Since the head D is a bare realisation of nominal concord features<sup>29</sup>, it lacks of any semantic feature but realizes the direct vs partitive case distinction. We show the proposed structure in (24).

<sup>&</sup>lt;sup>28</sup>This higher portion, which is historically derived from the preposition, is a case marker.

<sup>&</sup>lt;sup>29</sup> The idea of the head D as bare realization of phi-features is proposed in Ihsane (2013) as well.



Following Giusti (2008, 2009) the process that determines feature sharing on the Spec-Head of functional projections is called *Concord*<sup>30</sup>. The dynamics of *Concord* are generally explained referring to principles of Economy. Thus, if some elements in the specifier position require a null head, a filter is applied that prohibits its realisation<sup>31</sup>. On the contrary, features can be realized on the head in order to compensate for the lack of them on the specifier, a procedure that is called *Compensatory Concord*. However, the Spec and Head position could also be both null or both overt. In the first case, the realization is ZERO, while in the second case, we find the partitive article.

Cardinaletti and Giusti (2018) are also concerned with optionality between competing forms in Italian and Italo-Romance<sup>32</sup>. The coexistence of the variants mentioned in § 2.2.1.1 is accounted for by referring to Biberauer and Roberts (2012), who mention the interaction between nano-parameters and micro-parameters within the structure of the DP. Within the framework *Generative Grammar*, parameters are underspecified formal features being part of UG. In other words, they are subsets of some universal principles that must be specified by the exposure to a specific linguistic input. Biberauer and Roberts (2012) propose the following taxonomy of parameters, reported from Biberauer et. al (2014: 11):

(25) "For a given value  $v_i$  of a parametrically variant feature F:

a. Macroparameters: all functional heads of the relevant type share v<sub>i</sub>;

(24)

<sup>&</sup>lt;sup>30</sup> Other procedures of feature sharing are taken to be *Agreement* and *Projection*. The former involves a probe-goal relation triggering movement and case checking, while the latter builds the extended projection starting from a lexical item.
<sup>31</sup> This filter within the nominal expression is parallel to the double-filled COMP filter within the

<sup>&</sup>lt;sup>31</sup> This filter within the nominal expression is parallel to the double-filled COMP filter within the clause (generalized in Sportiche 1992).

<sup>&</sup>lt;sup>32</sup> Optionality only concerns plural and singular mass nouns, since singular count nouns display a single option, i.e., numeral uno/a which grammaticalized into an indefinite determiner.

b. Mesoparameters: all functional heads of a given naturally definable class, e.g. [+V], share  $v_i$ ;

c. Microparameters: a small subclass of functional heads (e.g. modal auxiliaries, pronouns) shows  $v_i$ ;

d. Nanoparameters: one or more individual lexical items is/are specified for  $v_{i}.^{\prime\prime}$ 

Given this taxonomy, within Cardinaletti and Giusti's (2018) proposal, , "the micro-parameter regards whether the head D must be realized or remain silent when combined with an indefinite determiner sitting in its specifier. The nanoparameter, instead, regards the lexical realization of the indefinite determiner as di or zero." (Cardinaletti and Giusti 2018:142). This means that when SpecDP is realized as di, the head can be either non-realized, resulting in bare di, or overtly realize nominal concord features, resulting in di+art. If SpecDP is realized as zero, when the head remains silent, we obtain the zero determiner, and when phi-features are realized, we obtain ART. Biberauer et al. (2014) state that in the hierarchy presented in (25), the microparameters are "somewhat unstable", while nanoparameters are "highly unstable". This predicts the great variability in the forms of the indefinite determiners found throughout the peninsula.

Let us now consider another proposal found in Garzonio and Poletto (2020). The researchers adopt the same syntactic analysis proposed by Cardinaletti and Giusti (2018) presented above. However, they state that the the morpheme higher than the article (namely di) must be located in the left periphery of the DP, in a rather low position that encodes 'familiarity', given that the interpretation is the one of an indefinite. We outline the structure in the following example:

(26)  $[_{KP}[_{K}^{\circ} de-][_{d}^{\circ}-l] \dots [_{NP}]]$  (from Garzonio and Poletto, 2020: 644(33))

Garzonio and Poletto (2020) add that when the presence or the absence of di is mandatory, the presence of the additional marker (namely ART) depends on the semantic properties of the definite article in each variety. Moreover, they state that when there is internal variation regarding the presence or the absence of di (with or without inflectional markers) the mass singular vs. countable plural distinction becomes relevant. In general, plural count nouns are frequently linked to the presence of bare di (if it is an available option) or di+art, whereas the opposite holds for mass nouns (see for instance (21) in Ferrarese). Finally, they propose a syntactic structure that may account for NPOs, which are analysed as an intermediate stage between true partitive structures (TPSs) and partitive articles (PAs), as they share properties with both. On the one hand, they are endowed with a partitive meaning, like TPSs. On the other hand, the "whole" they refer to is indefinite, as in PAs, and d-linked, as in TPSs. In common with

TPSs, NPOs also have a null quantified AMOUNT/NUMBER functional light noun licenced by its measure specifier, which in French (that also displays NPOs, as we will see in the next section) is the negative marker  $pas^{33}$ . This marker originates as a part of the nominal expression and then it is moved out of the QP to the Spec of NegP through the probe-goal mechanism.

(27)  $\left[ NegP \text{ pas } \dots \left[ QP \left[ pas \right] \left[ Q^{\circ} AMOUNT \right] \left[ KP \text{ de } \left[ DP \text{ vin} \right] \right] \right] \right]$ 

(from Garzonio and Poletto, 2020 : 645(34))

Finally, concerning the distribution of indefinite determiners according to language-internal factors, Cerruti and Regis (2020) state that in some Piedmontese varieties, the alternation of articled and unarticled forms seems to be related to the presence or the absence of inflectional markers on the related noun. For instance, in (28-31) we see that in the variety spoken in Campiglia Cervo, the partitive determiner is always present when the indefinite noun does not bear any overt inflectional markers of number (cf. (28) (29)). On the contrary, when overt markers are present, the zero determiner is preferred (cf. (30) (31)). This factor may be also considered while trying to provide a formal analysis of indefinite determiners. In fact, as suggested in previous literature (Stark 2007: 52; Squartini 2017: 2, 7–8) the presence of a partitive determiner, which overly marks gender and number, could offset the absence of inflectional markers on the indefinite noun.

(28) [dal paŋ] INDF.DET-ART.DEF.M.SG bread 'some bread' (ALEPO Q5252, Campiglia Cervo; unpublished materials)

(i)  $[_{BELONGP} [_{Spec BELONG} [_{DP} 'part']] [_{BELONG^{\circ}} P] [_{DP} 'whole']]$ 

(from Garzonio and Poletto, 2020: 643(31))

(ii)  $[_{BELONGP} [_{Spec BELONG} [_{QP} [assez] [_{Q^{\circ}} AMOUNT] [_{BELONG^{\circ}} de] [_{DP} 'whole']]]$ 

(from Garzonio and Poletto, 2020: 643(32))

<sup>&</sup>lt;sup>33</sup> For TPs, Garzonio and Poletto (2020) adopt the proposal of Sleeman and Kester (2020) according to which the relation 'part/whole' is expressed through a small clause, where the nominal expression representing the part is in the specifier and the nominal expression representing the whole is placed in the complement position. Finally, the preposition realizes the head, which has a semantic value corresponding to the feature [belong]. This semantic value was first proposed by Hulk and Tellier (2000).

In addition to the small clause idea, the authors assume the presence of a null quantified AMOUNT/NUMBER functional light noun, following several authors (see Gross 1967; Milner 1978). This null noun is embedded in the nominal expression and located in the Spec of the small clause, namely in the structural position corresponding to the part. In this position, the null AMOUNT/NUMBER can be modified by a lexical specifier, as 'assez', which means 'enough' in French.

(29) [la stra la fa di tur'nant] The road 3SG.SBJ make.PRS.3SG INDF.DET-ART.DEF.M.PL hairpin turns 'the road makes hairpin turns'

(ALEPO Q3635, Campiglia Cervo; unpublished materials)

(30) [əl' vake a j' davu Ø'roba of ART.DEF.F.PL cow. F.PL 3 PL. SBJ to.them give.PST.3PL Ø stuff.F.SG d pur'kət] pork

'the cows (hanging topic) they gave them pig meat'

(ALEPO Q2329, Campiglia Cervo; unpublished materials)

(31) [je Ø 'fjure] LOC be.PRS.3SGØ flower.F.PL 'there are (lit. 'there is') flowers'

(ALEPO Q1323, Campiglia Cervo; unpublished materials)

### 2.2.2.2 Semantic and sentential features interacting with indefiniteness

Cardinaletti and Giusti (2018) state that the choice of the different forms of indefinite determiners is not completely free. In other words, different forms interact with a series of semantic traits and sentential features, which are: the argument position (preverbal subject vs direct object), aspect, polarity, scope properties, clause type (generic vs episodic), noun classes (mass singular vs. plural count distinction), specialization of meaning (saliency, small quantity). We provide here a brief overview of these traits in Italian and French, relating them to the restrictions they impose on indefinite determiners. In doing so, we adopt what is called a "protocol methodology", as defined in Giusti (forthcoming). Here a protocol is meant to be a "shared procedure of data representation into something more reflected and structured", which goes "one step further in the appropriate design of the table charts, presenting the features of the elements under investigation in a reflected way" (ibid: 17). Questionnaires that aim to test the semantic properties of indefinite determiners in Italo-Romance dialects, as well as other sentential traits that interact with them, can be adapted to this protocol. The value [+] is attributed when a certain trait is present, whereas the value [-] is attributed if it is absent

# 2.2.2.2.1. Argument position

Romance bare plurals, with the exception of Brazilian Portuguese, do not occur freely in preverbal subject position, whether in their generic reading or in their existential reading, since they are property-denoting (cf. (Dobrovie-Sorin and Laca 2003)).

In Italian, the zero determiner in subject position in generally ruled out with kind-referring predicates (cf (32a)), unless it is coordinated (cf. (32b)). Moreover, it is possible in other restricted cases, such as with some eventive

individual-level predicates that are modified by an adjective or other adjuncts, e.g by a PP, as in (33) (cf (Longobardi, 2001)). On the contrary, in object position all verbs that do not select kind-referring nouns allow for the *zero determiner* in object position (Giusti, forthcoming). An example is provided by consumption verbs (cf. (34)), which contrary to attitude verbs do not select kind-referring NPs (cf. (35). As for ART, it can be kind-referring (36), indefinite (37) or definite (38).

(32)	<ul> <li>a. *Elefanti di colore bianco sono estinti.</li> <li>'White-colored elephants have become extin</li> <li>b. Elefanti e tigri di colore bianco sono estinti.</li> <li>'White-colored elephants and tigers have be</li> </ul>	(Longobardi, 2001:343) nct.' (Cohen, 2007:513) ecome extinct
(33)	a. Cani da guardia di grosse dimensioni sono p 'Watchdogs of large size are more efficient/ag	oiù efficient/ aggressivi. gressive.' (Longobardi, 2001:341)
(34)	<ul><li>a. Bevo (il) caffé.</li><li>'I drink coffee.'</li><li>b. Mangio (le) ciliegie.</li><li>'I eat cherries.'</li></ul>	(Giusti, forthcoming: 10)
(35)	<ul> <li>a. Detesto *(il) caffé.</li> <li>'I hate coffee.'</li> <li>b. Detesto *(le) ciliegie.</li> <li>'I hate cherries.'</li> </ul>	(ibid: 10)
(36)	<ul> <li>a. L'acqua abbonda in questa regione. the water abounds in this region 'Water abounds in this region.'</li> <li>b. Le zanzare sono molto diffuse in questa reg the mosquitos are very wide-spread in this r 'Mosquitos are wide-spread in this region.'</li> </ul>	(ibid.: 8-9) ione. egion.
(37)	<ul> <li>a. Mi sono versata l'acqua nel bicchiere. CL.1P.DAT be.1P.SG poured the water in t 'I poured water in my glass.'</li> <li>b. In questa stanza (non) ci sono le zanzare. in this room, (NEG) there are the mosquitos 'In this room, there are (no) mosquitoes.</li> </ul>	(ibid.:8-9) he glass
(38)	a. L'acqua che ho preso dal frigorifero era tro 'The water that I took from the fridge was to b.Le zanzare che mi hanno punto erano molto the mosquitoes that CL.1P.ACC bit me wer 'The mosquitoes that bit me were very anno	ppo fredda. (ibid.:8-9) oo cold.' o fastidiose. e very annoying oying.'

In Giusti (forthcoming: 18(51)), other Italian indefinite determiners are related to argument positions. We show in **Table 5** the results, presented through a protocol methodology<sup>34</sup>. As you can see, di+ART and *certo* can occur in both subject and object position. On the other hand, zero and ART can only occur in object position.

IOTUIC	201111112(31))							
		ZERO	ART	di	di+ART	certo	un	Due
a.	preverbal subject	-	-	0	+	+	+	+

+

+

0

+

+

**Table 5:** Indefinite determiners across grammatical functions in Italian (Giusti, forthcoming: 12(51))

French behaves in a singular way, since it is the only Romance language that does not allow bare plurals in subject (39a) or in object position (39b). In these contexts, the presence of a partitive determiner is obligatory (cf. (40)). Nevertheless, in some restricted contexts bare nominals are allowed, such as when coordinated (cf. (41)) and when they are in predicate position and express functions (cf. (42)).

- (39) a. \*Etudiants ont occupé l'édifice. (Delfitto & Schroten 1991 : 155(2)))'Students have occupied the building.'
  - b. \*J'ai vu étudiants dans l'édifice.
    - 'I have seen students in the building.'

<sup>&</sup>lt;sup>34</sup> The protocol includes also the indefinite determiners un(o)/una 'one' and *due* 'two', which are syncretic forms homophonous to numerals. However, we are not discussing them, since they are not relevant for our research. In fact, the indefinite determiner un(o)/una (which corresponds to the French un/une) is only compatible with singular count nouns in both French and Italian (as (ia,b) and (iia,b) show) and has no competing forms. Following Cardinaletti and Giusti (2018), we consider it the reanalysis of an indefinite quantifier into an indefinite determiner. The same holds for the indefinite determiner *due*, which is absent in French. In addition, it is only compatible with plural count nouns and bares the same meaning as *un po' di* 'a bit of' (cf. (iii)).

(i)	a. b.	Ho raccolto una violetta. (Cardinaletti and Giusti, 2018:136-137) [I]have picked a violet Ho raccolto (*un) fieno [I]have harvested (*a) hay
(ii)	a. b.	Je vois un chat. (adapted from Carlier 2007: 2) I see a cat Je mange*un / du riz. I eat *a / of.the.MSG rice 'I eat rice.'
(iii)	Ho [I]h 'I at	mangiato due spaghetti ave eaten two spaghetti te some spaghetti'

b.

direct object

- (40) a. Il me faut \*(de /') eau. 'I need (some) water.'
  - b. J'achète \*(du) pain.'I buy (some) bread.'
  - c. Je vois \*(des) étudiants dans le bâtiment.'I see (some) students in the building.'
- (41) a. Un chien noir et un chat gras se battaient fougueusement dans notre a dog black and a cat fat were fighting furiously in our jardin. garden

b. Chien et chat avaient tous les deux l'air très sale. dog and cat had both the appearance very dirty

(Heycock and Zamparelli, 2003:445)

(42) a. Jean et Marie sont professeurs.'John and Mary are professors.'

(Roodenburg, 2004 : 304-305)

b. Jean est professeur.'John is [a] professor.'

The contrast between kind-referring verbs and consumption verbs is visible also in French. In fact, objects selected by attitude verbs display ART (41a), while objects of consumption verbs are introduced by de+ART (41b).

- (43) a. C'est un singe, mais il n'aime pas les bananes.'It's a monkey, but it doesn't love bananas.'
  - b. Arrête de manger **des** gâteaux, tu vas avoir mal au ventre. 'Stop eating cakes, you're going to have stomachache.'

The Ferrarese dialect is expected to pattern similarly to Italian, since bare nominals in object position are possible. Nevertheless, the zero determiner may be less acceptable than ART and di+ART. In fact, as we saw in §2.2.1.1, the use of di+ART is particularly widespread in Emilia Romagna region, where many dialects are Gallo-Italic. Therefore, if di+ART could be used as core indefinite (see §2.2.2.2.6.), Ferrarese may share properties of both languages and allow both ZERO and di+ART as objects of consumption verbs. In our research, we are verifying this hypothesis.

Since, as we saw, in object position there are less restrictions concerning the realization of indefinite determiners, this grammatical function seems to be the most reliable to investigate variation and optionality. For this reason, we will not investigate the subject position in our questionnaire. Moreover, we will avoid predicates selecting kind-referring objects, as they impose a kind-referring interpretation of ART.

#### 2.2.2.2.2. Aspect

The aspect of the sentence correlates with the interpretation of objectreferring nominals, thus having an impact on the realization of indefinite determiners. On the one hand, a telic event includes a "terminal pont". On the other hand, an atelic event stresses the process and does not entail a result. Thus, telicity and atelicity correlate with different adverbials, namely "in an hour" and "for an hour" respectively.

In Italian, di+ART is compatible with telic aspect, since an event can have as a result the moving of a small quantity (in this case, of grass or blackberries). With non-telicity, this interpretation appears to be less acceptable, even though not completely ungrammatical (cf. (44). ART is possible with both aspects (45) and the *zero determiner* correlates with atelic events (46).

(44)tagliato dell' erba(in un' (??per un' ora) a. Ho ora) / [I]have mowed di+ARTgrass in an hour / for an hour b. Ho raccolto delle more (in un' ora) / (??per [I]have mowed *di*+ARTblackberries an hour / in for un' ora) an hour

(Cardinaletti and Giusti, 2018: 143 (14))

(45)erba (#in un' a. Ho tagliato l' ora) / (per un' ora) [I]have mowed the grass in an hour / for an hour tagliato le b. Ho more (#in un' ora)/ (per un'ora) [I]have mowed the blackberries in an hour / for an hour

(Cardinaletti and Giusti, 2018: 143 (13))

(46)	a.	Но	tagliato	erba	(*in	un'	ora) /	(per	un'	ora)
		[I]have	mowed	grass	in	an	hour /	for	an	hour
	b.	Но	tagliato	more	(	*in ur	n' ora)	/ (p	er ur	n' ora)
		[I]have	mowed	blackt	oerries	in an	hour	/ 1	for an	hour
					(Card	linalet	ti and Gi	usti, 2	018: 1	43(12))

In French, the plural definite article correlates with telic interpretation, while the partitive determiner, contrary to Italian, is compatible only with atelic aspect (47-48). In fact, "noun phrases introduced by des/du do not delimit individual referents, as can be shown by the impossibility of their furnishing [...] the delimitation required for telic interpretations" (Corblin et al. 2004: 19)

(47) a. Il a mangé des gâteaux pendant / \*en une heure. He has eaten des cakes for / in one hour 'He ate cakes for /in an hour.' b. Il a mangé plusieurs gâteaux en / \*pendant une heure. 'He ate several cakes in / \*for an hour.'

(Corblin et al.,2004: 19)

(48) Marie a mangé des fraises \*en une demi-heure Marie has eaten de-ART.pl strawberries \*in a half-hour /pendant un demie-heure / for a half-hour
'Marie ate strawberries for half an hour.

(adapted from Ihsane 2020: 227)

With this respect, the partitive article in Ferrarese could behave similarly to the French one. Despite we are not checking for the aspectual trait in our questionnaire, we can advance some hypothesis to test in future research, basing on personal communication.

As you can see in (49) ART and di+ART seem to be compatible with both telic and atelic aspect. Thus, the behaviour of the partitive determiner may share some properties with both Italian and French. As for the zero article, it is judged ungrammatical with telic aspect and unusual with atelic aspect (cf. (50)).

- (49) a. A jò tajà l' èrba int n' óra I have cut the grass in an hour
  b. A jò tajà dl' èrba int n' óra I have cut di+ART grass in an hour
  c. \*A jo tajà èrba int n' óra I have cut grass in an hour
- (50) a. A jà tajà l' èrba par un'óra I have cut the grass for an hour
  b. A jò tajà dl' èrba par n' óra I have cut di+ART grass for an hour
  c. ??A jò tajà èrba par n' óra I have cut grass for an hour

## 2.2.2.2.3. Polarity and scope

Polarity and scope are other relevant features that interact with indefinite determiners. In this sub-section, we outline them together, since they can be combined while examining scope with respect to negation.

In Italian, ZERO in object position only takes narrow scope with respect to negation (cf. (51)), while di+ART may be ambiguous in the plural between narrow and wide scope<sup>35</sup> (cf. (52)). With mass nouns, the wide scope

<sup>&</sup>lt;sup>35</sup> In formal semantics, scope is defined in relation to operators that denote quantity (except for numerals). An operator has a domain over which it can affect the interpretation of certain

interpretation of di+ART is ruled out (cf. (53)). As for ART, wide scope reading forces its definite interpretation (cf. (54)). We show in **Table 4** the protocol from Giusti (forthcoming: 18 (52)).

(51)	<ul> <li>a. Non ho invitato ragazzi alla festa ma solo ragazze ¬∃</li> <li>[I]did not invite boys at the party but only girls</li> <li>b. *Non ho invitato ragazzialla festa perchè erano</li> <li>[I]did not invite boys at the party because [they]were</li> </ul>
	antipatici *3¬ obnoxious
	(Cardinaletti and Giusti, 2018: 145(15))
(52)	Non ho bevuto del vino, (adapted from Giusti, forthcoming: 12) NEG have drunk di+ART wine
	a. ho bevuto solo acqua
	b. #perché era acido #3¬ because it-was acid #3¬
(53)	a. Non ho invitato i ragazzi alla festa ma solo (delle/le) [I]did not invite the boys at the party but only (di+art/the) ragazze
	b. #Non ho invitato i ragazzi alla festa perchè erano [I]did not invite the boys at the party because [they]were antipatici #3¬ obnoxious

(Cardinaletti and Giusti, 2018: 145(16))

expressions within that domain. If a certain expression is within the scope of an operator, we say that that expression has scope over it. Moreover, an expression  $\alpha$  has wide scope over an expression  $\beta$  if and only if  $\beta$  is in the scope of  $\alpha$ . On the contrary, an expression  $\alpha$  has narrow scope over an expression  $\beta$  if and only if  $\alpha$  is in the scope of  $\beta$ . Negation quantifies over events, so it has scope over them. In the sentence (51a) the indefinite nominal expression *ragazzi* is in the scope of negation, so we say that it has narrow scope with respect to negation. On the contrary, in (31b) negation is in the scope of *ragazzi* (in fact, we can rephrase the sentence in this way: 'There are some boys that I did not invite because I considered them obnoxious'). Therefore, in this case we say that the indefinite nominal expression has wide scope with respect to negation.

(54)	a. Non ho [I]did not	invitato invite	dei <i>di</i> +art	ragazzi boys	alla at-the	festa eparty	ma solo but only	(delle) (di+art)
	ragazze girls b. Non ho [I]did not antipatici	invitato invite	dei <i>di</i> +art	ragazzi boys	alla at-the	festa e party	perchè because	rano [they]were
	obnoxiou	S						-

(Cardinaletti and Giusti, 2018: 145(17))

**Table 6:** indefinite determiners in object position in Italian (adapted from Giusti (forthcoming: 18 (52)).

		ZERO	ART	di	di+art	certo	un	due
e.	narrow scope	+	+	0	+	?	+	?
f.	wide scope	-	#	0	+ (only plural	+	+	?
					count nouns)			

Contrary to what is found in standard Italian (cf (55)), in some dialectal varieties we find bare di (as we saw in 2.2.1.1). An example is Piacentino (Molinari, 2019), were bare di occurs only in negative sentences (cf. (56)) and it always takes narrow scope.

- (55) a. \*Ho raccolto violette [I]have picked violets
  - b. \*Ho raccolto di fieno [I]have picked di hay
  - c. \*Ho raccolto di violetta [I]have picked di violet
- (56) a. \*Ho catè ad viulëti.
  [I]have picked di violets
  b. \*Ho catè ad paja.
  - [I]have harvested di hay
  - c. \*Ho catè ad viulëta. [I] have picked di violet

- a'. \*Non ho raccolto di violette NEG have picked di violets
- b'. \*Non ho raccolto di fieno. NEG have picked di hay
- c'. \*Non ho raccolto di violetta. NEG have picked di violet
- a'. Ho mia catè ad viulëti. [I]have not picked di violets.
- b'. Ho mia catè ad paja. [I]havenot harvested di hay
- c'. \*Ho mia catè ad viulëta. [I]have not picked di violet

(from Molinari, 2019: 19(31))

French also displays a consistent presence of *bare di* (in French *de*) in negative contexts, as shown in (57)- $(58)^{36}$ . As pointed out by Ihsane (2005), in negative contexts the definite article can appear too. However, in this case the sentence has a definite reading, as in (59). Between the two forms, distribution shows that bare *de* is the unmarked one. Furthermore, as noted by Ihsane (2008), bare *de* in French always takes scope over negation. In fact, the sentences in (60) result ungrammatical, as the de-NPs are not in the scope of the negation. Ihsane (ibid: 82) describes deNPs as "property-denoting arguments which occur in the scope of a negation and which lack existence entailment". This is the reason why they take only narrow scope with respect to negation.

(57)	a.	Il a	du	papier.	a'.	Il n'	а	pas de papier
		the ha	as of.the. N	A.SG paper		he NEO	G ha	s not of paper
	b.	Il a	un pa	pier.	b'.	Il n'	а	pas de papier
		he ha	.s a/one pa	per		he NEO	G ha	s not of paper
	c.	Il a	des	papiers.	c'.	Il n'	а	pas de papiers
		he ha	s of the. Pl	L. papers		he NEO	G ha	s not of papers

(Ihsane 2005: 205)

- (58) a. Marie n' a pas vu de fantôme. Marie NEG has not seen DE ghost 'Marie hasn't seen a ghost'
  - b. \*Marie a vu de fantôme. Marie has seen DE ghost

(Ihsane, 2008 : 79)

<sup>&</sup>lt;sup>36</sup>It is no coincidence that bare *di* occurs under the scope of negation. As explained by Luraghi and Kittilä (2014: 27), "the function of negation is, naturally, to state that the event/state referred to did not occur. This makes the patient of negated clauses indefinite, because the reference is not to a specific entity, but rather to any entity that corresponds semantically to the direct object referent." The indefinite reading of DPs under the scope of negation is also explained by the fact that "negatives [...] are not used to introduce new referents to the discourse." (Miestamo 2014: 81). As for languages with articles, "negation is found to affect the use of articles and other determiners" (Miestamo 2014:63), as in (i), while in languages without articles, like Finnic, Slavic, Basque and Baltic the NP under the scope of negation is marked by partitive case.

(i)	a.	je	vois	un	chien		
		1SG.NOM	see.1SG	INDF.M	dog		
		'I see a dog	,				
	b.	je	ne	vois	pas	de	chien
		1SG.NOM	NEG	see.1SG	NEG	DET	dog
		'I do not see	e a dog.'				
	c.	il y a un	livre	sur la	table		
		EX INDF.M	1 book	on DEF.F	table		
		'There is a b	oook on t	he table.'			
	d.	il n'y a pas	de liv	re sur la	tab	ole	
		EX.NEG D	ET bo	ok on DEF	.F tab	ole	
		'There is no	book on	the table.			

(59)	a.	Il a	le	papier.	a'.	Il n'	а	pas	le	papier
		he has	the	paper		he not	has	NEG	the	paper
	b.	Il a	les	papiers.	b'.	Il n'	а	pas	les	papiers
		he has	the. PL	papers		he not	has	NEG	the. P	L papers
							(	Ihsane.	2005	: 205)

(60)	a.*Mari Mari	e e	a has	insisté insisted	pour for	que that	d' DE	étudia stude	ants nts	ne NEG	pu cai	isse n
	pas	entre	r									
	not	to en	ter									
	b.*Soit	de	voleu	r n'est	t pas	entré		dans	la	maisc	on,	ou
	eithe	r DI	Ethief	ne is	not	enter	ed	in	the	hause	Э	or
	on	a	oubli	é d'	éteind	re						
	one	has	forgo	tten to	.switc	h.off						
			e						(I	hsane,	200	08: 81)

Concerning de+ART, Ihsane (2008) pointed out that, while the singular form (which occurs with mass nouns) can only take narrow scope, the plural one has ambiguous scope properties when used referentially. Consider, for instance, the following examples (cf. (61)). Both sentences (61a) and (61b) are ambiguous. In fact, one may refer to the same friends and the same children, or alternatively to any friends and any children. In the latter case, we have a property-denoting interpretation (that is the preferred one), while in the former case the interpretation is speaker-referential and corresponds to the widest scope reading. With the singular partitive determiner, the speaker referential reading is ruled out (cf. (62)).

- (61) a. Chaque dimanche, des amis viennent nous visiter. Every Sunday of-the friends come visiting us
  b. Des enfants, viennent jouer ici tous les jours.
  - Of the children come playing here all days
- (62) \*De l' étoffe que j'avais achetée hier traînait par terre Of the material that I had bought yesterday lay about on the floor

(Bosveld-de Smet 1998:33(68))

This fact, which is attested in both French and Italian, could be explained by Bunt's (1985) homogeneity hypothesis: since mass nouns do not denote minimal entities, contrary to plural count nouns, they cannot be used referentially. In fact, "as reference means picking out some entity(ies), this is not possible in the absence of entity(ies)" (Ihsane, 2008: 139). It follows that, if the speaker-referential reading is necessary to have the widest scope, singular partitive determiners only allow narrow scope.

In our questionnaire, we are including only negative sentences, but we are not testing for the narrow vs wide scope distinction, in order not to make the questionnaire too long (see Chapter 5). However, we advance here some hypothesis to verify in future research, basing again on personal communications.

First, as you will see in the next Chapter, in Ferrarese dialect bare di is ungrammatical, in both negative and positive sentences (cf. (63)). Then, di+ART seems to have both narrow and wide scope with respect to negation (cf. (64)). However, if it is singular, wide scope is less acceptable<sup>37</sup> (cf. (65)). As for ART, it allows both wide and narrow scope, although the latter necessarily implies a definite reading (cf (66)). Finally, the zero article takes only narrow scope (cf. (67)). Thus, with respect to scope properties, the Ferrarese dialect seems to behave exactly like Italian and French.

(63) a. \*A màgn ad caplìt
CL.NOM.1.SG eat *di* cappelletti
b. \*A n màgn brisa ad caplìt

b. \*A n màgn brisa ad caplìt CL.NOM.1.SG NEG eat not *di* cappelletti

- (64) a. A n' ho brisa invidà di ragazìt ala fèsta ¬∃
   CL.NOM.1.SG not have NEG invited di+ART boys to-theparty ma sol ragazéti but only girls
  - b. A n' ho brisa invidà di ragazit ala fèsta ∃¬ CL.NOM.1.SG not have neg invited di+ART boys to-theparty parché i éra ghignós because they were obnoxious

# (65) A n' ho brisa buest dal vin CL.NOM.1.SG not have NEG drunk di+ART wine

a. ma sol l'acqua ¬∃
but only the water
b. ?parché l'era azid #∃¬
because it was acid

<sup>37</sup> The judjements that I collected from personal communications are contradictory. In fact, some of my informants judged (65b) as acceptable, while others considered it unusual, but still acceptable. The issue should be solved in future research.

- (66) a. A n' ho brisa invidà i ragazìt ala fèsta ma ¬∃ CL.NOM.1.SG not have NEG invited ART boys to-the partybut sol ragazéti only girls
  b. A n' ho brisa invidà i ragazìt ala fèsta ma #∃¬
  - CL.NOM.1.SG nothave NEG invited ART boys to-the partybut #parché i éra ghignós because they were obnoxious
- (67) a. A n' ho brisa invidà ragazìt ala fèsta ma CL.NOM.1.SG not have NEG invited boys to-theparty but sol ragazéti only girls
  b. \*A n' ho brisa invidà ragazìt a la fèsta \*∃¬
  CL.NOM.1.SG not have neg invited boys to-theparty
  - CL.NOM.1.SG not have neg invited boys to-theparty parché I éra ghignós because they were obnoxious

In both Italian and Ferrarese, in contexts like those presented in (61-62), at least according to my judgement and to some personal communications, the preferred reading for the plural partitive determiner is the speaker-referential one, contrary to French. However, the property denoting reading is acceptable (cf.  $(68-69))^{38}$ . As for singular partitive determiners, the speaker-referential reading is ruled out, exactly like in French (cf. (70a,b)).

- (68) a. Ogni domenica vengono a trovarci degli amici Every Sunday come to visit-us of-the children
  - b. Tutti i giorni vengono a giocare qui dei bambini all the days come to play here of-the children
- (69) a. Ogni dméngai vién a truàras di amìgh Every Sunday CL.NOM come to visit-us of-the children
  b. Tut i dì i vién a zugàr chì di putìn All the days CL.NOM come to play here of-the children
- (70) a. \*Della stoffa che ho comprato ieri era buttata per Of.the material that [I]havebought yesterday lay about on the terra floor

<sup>&</sup>lt;sup>38</sup> In the Italian and Ferrarese translations, I decided to put the subject of both sentences (namely "some boys" and "some children") in post-verbal position, since it is the unmarked position for subjects of unaccusative verbs in these varieties. If we keep the preverbal position, the property-denoting interpretation is hardly acceptable.

b. \*Dla stòfa ch' a jò cumprà jer, la j'éra butàda
 Of.the material that I have bought yesterday CL.NOM lay about par tèra.
 on the floor

Alltogheter, these data seem to confirm Bunt's (1985) homogeneity hypothesis. Nevertheless, they should be verified on a large scale in future research.

## 2.2.2.2.4. Clause type

Clause type is another parameter that interacts with indefinite determiners. In fact, habitual sentences, which are used to refer to general facts, are more easily compatible with a kind-referring, non-specific reading of the infefinite NP in object position. On the contrary, episodic sentnces, which refer to particular events, more easily allow for specific indefinites. However, according to Krifka et al (1995), there is no 1:1 correspondence between generic<sup>39</sup> sentences and kind-referring nominals. The latter can be the argument of episodic sentences too, while the former do not necessarily have nominals that refer to kind.

Cardinaletti and Giusti (2020) designed a questionnaire in informal Italian that was filled in by 92 informants. They showed that ART is used more frequently in habitual sentences in the present (such as "I don't drink wine") rather than in episodic past sentences (such as "Yesterday I didn't drink wine"). Furthermore, in episodic sentences in the past the zero article, di+ART and ART are in free competition. Finally, di+ART is never present in habitual sentences. We show in **Table 7** the correspondence between indefinite determiners and these traits, always adopting the protocol methodology. As you can see below, the protocol includes also aspect, which can be tested for episodic sentences only.

<sup>&</sup>lt;sup>39</sup> A major line of research in the semantic field (including Krifka (1995) among the others) considers the modal component of habitual sentences to be identical to the operator underlying generic sentences. In fact, both generic and habitual sentences make generalizations over individuals, situations or events.

		ZERO	ART	di	di+ART	certo	un	due
a.	Habitual/generic sentences							
	i.present	+	+	0	-	-	+	?
	ii.past	?	?	0	?	?	?	?
b.	Episodic sentences							
	i.present	+	+	0	+	+	+	+
	ii.past	+	+	0	+	?	+	?
c.	Episodic sentences							
	i.atelic	+	+	0	-	?	-	?
	ii.telic	-	#	0	+	?	+	?

**Table 7:** sentence types interacting with indefinite objecs in Italian (adapted from Giusti, forthcoming: 18(53))

Concerning French, the partitive determiner, contrary to its Italian counterpart, can be used to mark kind-referring nominals in habitual sentences, such as (71-72). On the contrary, in episodic sentences it can appear with an indefinite, non-specific reading (cf. (73b)). In this latter context, the kind-referring interpretation can be obtained exclusively by means of the definite article (cf. (73a)).

- (71) (In a shop) Ici on vend du tabac (Ihsane 2008: 130) Here one sells of the tabacco 'Tabacco on sale here'
- (72) Speaker A : Vous vendez des sigarettes ? You sell of.the cigarettes ? Do you sell cigarettes?'
  Speaker B : Non, ici on vend des livres et des journaux. No, here one sells of.the books and of.the newspapers 'No, we sell books and newspapers'

: 285)

In our research, we are verifying the behaviour of Ferrarese, which is expected to behave similarly to French.

### 2.2.2.2.5. Noun classes

Traditionally, nouns are subdivided into COUNTABLE and MASS nouns. Most countable nouns design discrete entities that can be counted, whereas mass nouns denote uncountable entities. In this work, only mass singular and plural count nouns are considered, since singular count nouns can occur with a single indefinite determiner (namely un(o)/una in Italian and and un/une in French) that has no competing forms, in both Italian and French.

First, both ART and the *zero determiner*, in neo-standard Italian as in many northern and southern dialects, occur with both singular mass nouns (74a) (75a) and plural count nouns (74b) (75b). However, ART bares an ambiguous definite/indefinite interpretation in contexts that allow for both. With singular count nouns, the zero determiner is always ungrammatical (cf (74c), whereas ART has only definite interpretation (cf. (75c).

(74)	a. Ho	raccolto	fieno (Cardinaletti and Giusti, 2018: 137 (3))
	[I]have	harvested	hey
	b. Ho	raccolto	violette
	[I]have	harvested	violets
	c. *Ho	raccolto	violetta
	[I]have	harvested	violet
(75)	a. Ho	raccolto	il fieno
	[I]have	harvested	the hey
	b. Ho	raccolto	le violette
	[I]have	harvested	the violets
	c. Ho	raccolto	la violetta
	[I]have	harvested	the violet

Then, di+ART is compatible with both mass and plural count nouns (76). However, contrary to the other determiners, it conveys indefinite meaning with an added notion of small quantity.

(76)	Но	raccolto	del	fieno	/	Но	raccolto	delle
	[I]have	picked	di+AR7	Thay	/	[I]have	picked	<i>di</i> +art
	violette							
	blackber	rries						

(Cardinaletti and Giusti, 2018: 139(7))

Finally, *certo/a/i/e* in neo-standard Italian must be preceded by an indefinite article with singular count nouns (77a), while with mass singular and plural count nouns it is in competition with di+ART (77b).

(77) a. \*(un) certo ragazzo (Cardinaletti and Giusti, 2018:139(8)) a certain boy
b. (\*della) certa roba, (\*dei) certi ragazzi di+art certain stuff, di+art certain boys

In Table 8 we show the protocol (from Giusti, forthcoming:17(50)).

**Table 8:** indefinite determiners in Italian with different noun types ((from Giusti, forthcoming:17(50)).

		ZERO	ART	di	di+ART	certo	un	due
a.	mass nouns	+	+	-	+	+	#	-
b.	plural count nouns	+	+	-	+	+	-	-
с.	singular count nouns	-	#	-	-	-	+	-

In French, *partitive determiners* are obligatory with mass singular and count plural nouns, as shown in (78). Consequently, the zero article is ungrammatical. As for the definite article, it holds the same properties as its Italian counterpart with regards to the count vs mass distinction (cf. (79)).

(78) Elle a mangé<sup>40</sup>\*(du) gâteau /\*(de la) tarte she has eaten de+ART.MSG cake / de+ART.FSG tarte /\*(des) biscuits
/ de+ART.PL biscuits
'She ate (some) cake/tart/biscuits.'

(adapted from Ihsane 2008: 126)

(79) a. J'ai cueilli les violets [I]have picked the violets

(E. Rice Burroughs, Tarzan of the Apes)

<sup>&</sup>lt;sup>40</sup> However, as noted in Molinari (2019) "consumption verbs like to eat or to drink allow for bare partitives even in those languages that in general disallow them (e.g. English (i) and Spanish (ii))".

Again Tarzan came down into the village and renewed his supply of arrows and ate <u>of</u> <u>the offering</u> of food which the blacks had made to appease his wrath.

<sup>(</sup>ii) ... Eva, representada en las Sagradas Escrituras como mujer-culpable por haber comido de la manzana prohibida.

<sup>...</sup> Eva, represented in the Sacred Writings as woman-guilty of having eaten of the apple forbidden (data drawn from the CREA corpus)

b.	Je	préfère	la	viande
	Ι	prefer	the	meat
c.	J'ai	lu	le	livre
	I have	e read	the	book

As we already noted, bare di is ungrammatical in neo-standard Italian. However, in Piacentino dialect it is found with both plural count and singular mass nouns (see (55)). Despite that, it is slightly preferred with the latter nouns.

In our questionnaire, we will include sentences with both mass and plural count nouns.

### 2.2.2.2.6. Semantic specialization

Cardinaletti and Giusti (2018) argue that, at least in the Italo-Romance varieties of the last century, true optionality among the different forms of indefinite determiners was not attested. First, while the *zero article* is the core form for uncontroversial indefinites, ART conveys an added meaning of saliency. This is the reason why in the AIS map 1037 '[if there was] water' bare nominals are the most represented form, contrary to the AIS map 1343 '[go to the cellar] to take wine', which shows a high occurrence of ART. Second, di+ART seems to convey an added meaning of small quantity, as the high occurrences in the AIS map 637 '[to look for] violets' suggests. Finally, *certo/a/e/i* is a genuine indefinite determiner exclusively in some restricted areas of Southern Italy, as shown in (80)-(81).

(80) s' era coricato mmiezo a ccerto fieno
 [he]REFL.PRON was lied within a certain hey
 'He lied in some hey'

(Neapolitan; Rohlfs 1968: 118)

(81) certi kundi (Avezzano; Giammarco 1979: 141) some stories

The survey designed by Cardinaletti and Giusti (2020) only partially confirmed this first hypothesis. In fact, a high rate of optionality between zero and ART was attested throughout the country, with a preference for zero expecially in Sicily and in the northeast. As for di+ART, the specialized meaning for small quantity is confirmed. This holds also for Emilia-Romagna, where the determiner was expected to be unmarked. Finally, *certo/a/i/e* is not interpreted as an unmarked determiner, not even in the southern areas of the peninsula. With this respect, the authors argue that "certo conveys a specialized meaning, such as 'of a special type' or 'with specific reference'" (Cardinaletti and Giusti: 2020: 683). This specialization is most common with plural count nouns (cfr. (82a)) but can be found with both mass and plural count nouns in emphatic contexts, such as in (82b).

- (82) a. Mangio solo certe patate / ?Bevo solo certo vino

   I.eat only certain potatoes / I.drink only certain wine
   'I only eat certain types of potatoes.' / 'I only drink certain types
   of wine.'
  - b. Ci hanno servito certe patate! /Ci hanno servito us they.have served certain potatoes / us they.have served certo vino! certain wine

'They served us such potatoes!' / 'They served us such wine!'

(Cardinaletti and Giusti, 2020: 683)

This latter finding is coherent with the data collected in Procentese (2019). After delivering a questionnaire to a sample of 21 informants speaking different varieties of Neapolitan, I showed that the informants judged the determiner *certo/a/i/e* as marked by a specific reading such as the ones mentioned above for Italian. Only one informant from Somma Vesuviana (age rage 18-30) did not exclude the item as unmarked with a mass noun. Based on some personal communications and spontaneous conversation I heard, I do not exclude the possibility that in some varieties of Neapolitan throughout the region Campania, it is possible to use *cierto/a/i* with an unmarked, non-specific indefinite meaning. Nevertheless, this hypothesis has to be verified in future research, and hopefully with a bigger sample. The loss of this feature in some speakers could be the consequence of interference with Italian or, alternatively, of the process that we have called "Italianization of dialects".

Cardinaletti and Giusti's (2018, 2020) proposal has to be verified in different Italo-Romance varieties through large-scale questionnaires. Thus, our challenge is to establish the specific outcomes of possible semantic specializations in each variety, as well as how they relate with other features interacting with indefiniteness. In **Table 9** we resume the protocol for colloquial Italian.

		ZERO	ART	di	di+ART	certo	un	Due
a.	core indefiniteness	+	+	0	-	-	+	+
b.	Saliency	-	+	0	-	-	+	?
с.	small quantity	-	-	0	+	-	-	?
d.	Specificity	-	-	0	+	+	+	?

**Table 9:** specialization of meaning of Italian indefinite determiners in object position (Giusti, forthcoming: 18(52)).

Concerning French, we already saw that de+ART can have a kind-referring meaning in habitual sentences (see (71-72) in 2.2.2.4.). Ihsane (2008: 126-127) argues that this latter reading is 'non-quantitative' and opposed a 'quantitative' reading, such as in (83). However, she later specifies that, as both ''quantitative'' and 'non-quantitative' readings are plural, they should always imply more than

one entity. The difference lays in the fact that when the reading is 'quantitative', "the quantity is somehow more salient and precise" (Ihsane, 2008: 158). Despite this discussion appears rather informal and does not address the issue in depth, we can use it to draw some conclusions. In particular, we propose that the partitive determiner in French can be either provided of a specialization of meaning parallel to its Italian counterpart, either be used as a core indefinite. However, the added notion of small quantity must be specified by some other contrastive elements (such as "mais pas beaocoup" in (83)). Otherwise, the determiner stays unmarked.

- (83) a. J'a acheté du sel mais pas beaucoup (Ihsane, 2008 : 130)
   I have bought of the salt but not much
   'I bought (some) salt but not much'
  - b. J'ai acheté des livres mais pas beaucoup I have bought of the books but not much 'I bought (a few) books but not much'

Finally, the form *certain/e/s/es* is not used to "impose an extra qualitative distinction on the individuals making up the referent of the DP they head." (Le Bruyn 2010: 83). In fact, it cannot denote objects whose parts are indistinguishable one from the other (84). Furthermore, unlike *certo/a/i/e*, the French form can co-occur with di+ART (85), which however is not a determiner in this case, but rather a preposition introducing a PP and encoding true partitivity.

- (84) ?? J'ai parcouru certains kilomètres. (Le Bruyn, 2010: 83)'I have travelled certain kilometers.'
- (85) a. certaines des femmes (ibid.:113) certain di+ART.PL women
  b. certe (\*delle) donne certain di+art women

## 2.2.2.3 Indefinite determiners and CLLD in Italian and French

Clitic Left Dislocation (henceforth CLLD) consists in the dislocation of a constituent to the left periphery of the sentence (in the CP domain). When this happens, the dislocated material is reintroduced in the sentence by a resumptive clitic. This clitic carries the same case as the dislocated constituent and behaves according to its syntactic properties. This construction is typical of Romance languages<sup>41</sup> and has been analyzed in different ways. In the Minimalist program, the derivation is generally captured assuming syntactic movement. However, different analysis can be found. Among the others, Cinque (1990: 56-97), argued

<sup>&</sup>lt;sup>41</sup> CLLD has also been attested in other languages, such as Greek (Anagnostopoulou 1997) and Lebanese Arabic (Aoun and Benmamoun 1998)

in favor of the non-Wh-Movement nature of CLLD in Italian, while De Cat (2007) proposed a merge-adjunction analysis of French CLLD.

Since in our questionnaire, we will also test for the different available forms of indefinites in left-dislocated sentences, we provide here an overview of the main properties of CLLD in Italian and French, also focusing on the available resumptive clitic pronouns.

### 2.2.2.3.1 Main properties of CLLD

Cinque (1990) lists the main features of CLLD in Italian. We will be briefly resume them here in comparison with the properties of the corresponding French construction.

First, both in Italian and French the left dislocated position can be occupied by any maximal phrase (see (86-87)) and, at least theoretically, there is no limit for the number of fronted constituents (see (88-89)). In both languages the "dislocated constituent" can also be fronted at the left of any subordinate clause type (cf. (90-91)).

(86)	[PP Al	mare], ci	siam	o già	stati	(Cinque,	1990: 57-58)
	to-the	seasidethe	re (we)have	already	been		
	[AP Bella	ı], non İ	loè mai	stata			
	Beau	tiful non	it-(she) eve	r was			
	[VP Mess	so da parte],	non lo è	mai stat	0		
	Got o	out of the w	ay not-it-(he	) ever wa	.S		
	[QP Tutti	], non li	ho vist	i ancora			
	all	not-them	-(I)have see	n yet			
	[ <sub>CP</sub> Che b	evi],	lo dicono 1	utti.			
	that (	you) drink	it says o	everybody			
			-				

(87) A lacampagne, Paul n'y reste jamais longtemps. In the country, Paul never stays there a long time Heureuse, elle ne l'a jamais été. happy, she has never been it Partir, c'est mourir un peu to leave, that is to die a bit Moi, personne ne veut m'aider. me, nobody wants to help me

(adapted from Delais-Roussarie et al. 2004:502)

(88) Di vestiti, a me, Gianni, in quel negozio, non mi ce ne
Clothes to me Gianni in that shop (he)not-to-me-there-of them ha mai comprati ever bought (Cinque, 1990: 58)

 (89) Celui-là<sub>i</sub>, des vers<sub>j</sub>, il<sub>i</sub> en<sub>j</sub> produisait cinq tous les matins that-one-there INDEF verses he of-them produced five all the mornings

(De Cat, 2007: 489)

(90) L'unica persona che a Gianni, non gli ha mai fatto un favore, ... the only person which to Gianni not-to-him has ever done a favour Da quando, al mercato, ci va lui, non mangiano più bene. since when to the market he goes there they don't eat well anymore

(Cinque, 1990: 58)

(91) Je pense pas que la bière<sub>i</sub>, ça<sub>i</sub> soit très bon pour le foie.I think not that the beer it be very good for the liver'I don't think beer is very good for the liver.

(De Cat, 2007:490)

Second, while in French the resumptive  $\text{clitic}^{42}$  is obligatory (cf.(92)), in Italian it is obligatory only in case of a left dislocated object (see (93)). In both languages, the resumptive clitic is absent when a clitic form that corresponds to a certain left dislocated constituent does not exist at all (cf. (94) (95)).

<sup>&</sup>lt;sup>42</sup> In both languages, it is possible, in some cases, to resume a sentence-initial constituent through a non-clitic element. This construction is called Hanging Topic (cf. (i-ii)).

<sup>(</sup>i) a. <u>Gianni</u>, tutti vorrebbero essere come lui. Gianni, everyone would-like to-be like him b. Maria, la sua casa l'ha arredata lei. it has furnished she Maria, the her house 'Maria, she furnished her own house' c. Mio nipote, la ragazza verrà a passare il the girlfriend will-come to spend My grandson, the capodanno con lui. Newyears'eve with him d. Mario, darò soldi a quell'imbecille non più (I)NEG will-give anymore money to that idiot Mario, 'I will never give anymore money to that idiot' (Friulla 2015: 21-22) (ii) disparu. (De Cat, 2017: 488) a. Claas, ses chaussettes ont disappeared Claas his socks have 'Claas' socks have disappeared' b. Kambi, je n'ai plus jamais entendu parler de lui. I NEG-have not ever heard to-talk of him Kambi 'I never heard anything about Kambi again' c. Le lait, j'adore ça. the milk I-adore that 'I'm mad on milk' d. Plastic Bertrand, j'ai tous les disques de ce farfelu Plastic Bertrand I-have all the records of this weirdo

	<ul> <li>b. Di questa faccenda, non (ne) voglio più parlare. of this matter not (of-it) (I) want to speak anymor</li> <li>c. Bella, pare che non (lo) sia mai stata. beautiful it seems that not (it) (she) ever was</li> <li>d. Influenzato dalla pittura fiamminga, non (lo) è sta influenced by Flemish painting not (it) ha was</li> <li>e. Gianni, *(lo) vedrò domani Gianni (him) (I) will see tomorrow</li> </ul>	e ito.
(93)	<ul> <li>a. Jean, je *(le) verrai demain Gianni I (him) will-see tomorrow</li> <li>Gianni, I will see him tomorrow'</li> <li>b. A la maison, je n' *(y) ais ancore été at home I not (there) have yet been 'At home, I have not been there yet'</li> </ul>	(translation of (77))
	c. De cette question, je n'*(en) veux plus of this matter I not (of-it) want anymore 'Of this matter, I do not want to talk anymore'	parler to speak
	<ul> <li>d. Belle, il semble qu'elle ne *(le) soit jamais été Beautiful it seems that she not (it) was ever been 'Beautiful, it seems that she never was'</li> </ul>	é
	e. Influencé par la peinture flamande, il ne l'a ja influenced by the painting Flemish he not (it) l 'Influenced by Flemish painting, he never was'	amais ètè nas never been
(94)	<ul><li>a. Da Gianni, non è stato salutato</li><li>by Gianni,[he]not has been greeted</li><li>b. Per Mario, non ho mai lavorato</li></ul>	(Cinque, 1990: 68)
(95)	For Mario, [1]not have never worked a. Par Jean, il n' a jamais été salué By Joh, he not has never been greeted b. Pour Mario, je n' aj jamais travaillé	(translation of (79))
	For Mario, I not have never worked	

(Cinque, 1990: 71)

(92) a. A casa, non (ci) sono stato ancora.

home not (there) have (I) been yet

Finally, both in Italian and French connectivity between the TP internal position and the "left-dislocated" clause (e.g. sensitivity to binding theory) is obligatory (cf. 96-97), and the relation between the two positions undergoes island constraints (cf. 98-99).

(96) A lei/\*se stessa, Maria dice che non ci pensiamo mai.(Cinque, 1990: 59) of her/herself Maria says that (we) not-there-think ever A \*?lei/se stessa, Maria non ci pensa. of her/herself Maria not-there-thinks

(97) À elle/\*soi même Marie dit que nous n'y pensons jamais Of her/herself A \*?elle/soi même Of her/herself
Of her/herself
Mary says that we not-there-think ever Marie n'y pense pas Mary ne-there-thinks NEG

(translation of (96))

- (98) \*[PP A Carlo], ti parlerò solo del[NPle persone [CP che to Carlo (I) will talk to you only about the people that gli piacciono]]. to-him appeal
  - \*[PP A casa], lo abbiamo incontrato [PP prima che ci andasse]. At home we met him before that he there went

(Cinque, 1990: 59)

- (99) \*[PP À Charles], je te parlerai seulement de [NPles personnes[CP qui To Carlo I to-you will talk only about the people that lui plaient to-him appeal
  - \*[PP À la maison] nous l'avons rencontré [PP avant qu'il y allait] At home we met him before that he there went

(translation of (98))

### 2.2.2.3.2 Direct case clitics and quantitative clitics

When the "left-dislocated" constituents are in argument position, we find direct case clitics realized in the main sentence. In Italian, only accusative clitics are realized, while French, being a non pro-drop language, also displays a full array of nominative case clitics. These are *je* (1.SG), *tu* (2.SG), *il* (3.M.SG), *elle* (F.SG), *nous* (1.PL), *vous* (2.PL), *ils* (3.M.PL), *elles* (3.F.PL). We show two examples in (93-94).

- (100) Gianni, i panini, li mangia molto in fretta John the sandwiches [he] CL-ACC eats very fast
- (101) Jean, les sandwiches, il les mange très vite John the sandwiches he.CL.NOM CL.ACC eats very fast

As already mentioned, the resumptive clitic has the same case as the dislocated constituent and, consequently, also Gender and Number features. In both languages, past participles (as in *passato prossimo* and *passé composé*) agrees with the Gender and Number features of the clitic pronoun (see (102-103)). This agreement shows that clitic movement has taken place. During the derivation, the clitic pronoun undergoes movement from its base position, passing through the specifier position of the past participle (AgrPstPrt), which triggers agreement (cf. Belletti 1999).

(102) a.	Gianni	ha mangiato	la carne	
	John	has eaten	the meat	
b.	Maria	ha mangiato	la carne	
	Mary	has eaten	the meat	
c.	Maria,	la carne	<u>l'</u>	ha mangiata
			♠	
	Mary	the meat.F.SG	CL.PRON.F.SG	has eaten.F.SG
	-			
(103) a.	Jean a	mangé la	viande	
	John ha	is eaten the	e meat	
b.	Marie	a mangé	la viande	
	Mary	has eaten	the meat	
с.	Marie,	la viande	1'	a mangée
			<b>↑</b>	
	Mary	the meat.F.SG	CL.PRON.F.SG	has eaten.F.SG

Finally, quantitative clitics, which signal the presence of partitive case, are Italian *ne* and French *en*. The Italian clitic *ne* agrees with the past participle (cf. (104)), differently from its French counterpart (cfr. (105))

(104) a. Di ragazzo/a,	ne ho	visto/a	uno/a
Of boy/girl	NE have	seen.M.SG/F.SG	one.M.SG/F.SG
b. Di ragazzi/e,	ne ho	visti/e	due
Of boys/girls	NE have	seen.M.PL/F.PL	two

(105) a. De garçon/fille,	j'en ai	vu	un/e
Of boy/girl	I EN have	seer	n one.M.PL/F.PL
b. De garçons/filles	s, j'en ai	vu d	eux
Of boys/girls	I NE have	seen	.M.PL/F.PL two

Concerning syntax, Cardinaletti and Giusti (1992, 2006) argue for the DP status of the quantitative clitic  $ne^{43}$ . According to this view, the clitic is a maximal projection, namely a DP in the complement of Q, which assigns partitive case. The authors show that in Italian CLLDed constructions, the clitic *ne* is obligatory realized (cf. (106a)). Moreover, its co-occurrence with universal quantifiers (such as *tutti* 'everyone') is ruled out, since this class of quantifiers cannot assign case (cf. (107a)). Finally, the quantitative clitic is incompatible with distributive quantifiers (such as *ciascuno* 'each one' or *entrambi* 'both') (cf. (108a,c)), as their specifier position is filled with a null operator triggering the distributive reading. All this holds for the French clitic *en*, too, as you can see in (106b), (107b) and (108b)<sup>44</sup>.

<sup>&</sup>lt;sup>43</sup> See Cardinaletti and Giusti (1992, 2006) for further details about alternative analyses and arguments against them.

<sup>&</sup>lt;sup>44</sup> In French, the quantifier 'both' can only be translated through periphrastic construction, namely *tous les deux*, literally 'all the two'. Thus, we leave it out in this discussion.
(106) a.	Di ragazzi francesi, *(ne) ho conosciut Ofboys French [I] NE have met	ti molti. (from ibid.: 42) many
b.	De garçons Italiens, j'*(en) ai vu bea Of boys Italian, I en have see m	aucoup (translation of (97a)) aany
(107) a.	Di ragazzi, ne ho visti molti / *tutti.	
	of boys, [I] ne have seen many / *all	
	Tve seen many boys.	paletti and Giusti 2017: 36)
	(adapted from Cardin	laicti and Olusti 2017. 50)
b.	De graçons, j'en ai vu plusieurs / *	tous.
	Of boys, [I] ne have seen many /	*all
	'I've seen many boys.'	
		(translation of  (10/a))
(108) a.	*Di ragazzi, ne ho visti/o	ognuno
(	Of boys NE have seen.M.PL/M.SG	each-one
b.	*De garçons, j'EN ai vu chacun	
	Of boys I EN have seen each-one	
c.	*Di ragazzi, ne ho visti	entrambi
	Of boys NE have seen.M.PL/M.SG	both

#### 2.2.2.3.3 CLLD and scope

CLLD interacts with indefinite determiners, determining some change in their scope properties. For instance, the partitive determiner in left dislocated sentences can only have wide scope (cf. (109)). On the contrary, bare di takes only narrow scope (cf (110)).

- (109) a. \*Dei ragazzi, non li ho invitati alla festa, ma solo (delle) ragazze \*¬**I** di+ART boys, [I] did not invite them at the party, but only (di+art) girls
  - b. Dei ragazzi, non li ho invitati alla festa perché erano antipatici. ∃ di+ART boys, [I] did not invite them at the party because they were obnoxious

(Molinari, 2019: 41(93))

(110) a. (Di) Ragazzi, non ne ho invitati alla festa, ma solo (delle) ragazze (Of) boys, [I] did not ne invite at the party, but only (di+art) girls. ¬**H** 

 b. \*? (Di) Ragazzi, non ne ho invitati alla festa perché erano antipatici. (Of) boys, [I] did not ne invite at the party because they were obnoxious
 \*I¬

(Molinari, 2019: 41(94))

Given that the quantitative clitic *ne* only takes narrow scope, DPs introduced by di+ART in dislocated sentences can be resumed in the main sentence exclusively by direct case clitics (as shown in (109)). On the contrary, if the

clitic *ne* appears, the "left-dislocated" complement has to be introduced by bare *di* or *zero article*.

As regards French, the dislocated constituents are interpreted only in their superficial position. Therefore, they take wide scope with respect to the sentential negation (cf. (111)). On the contrary, NPs introduced by bare *de* and resumed by *en* have narrow scope, as in Italian (cf. (112)).

(111) Toutes ces toiles<sub>i</sub>-là, elle ne les<sub>i</sub> a pas vendues. (De Cat, 2007: 498) all those canvases-there she NEG them has not sold 'She didn't sell any of (all) those pictures.'
#'She didn't sell some of those pictures.'

(112) De garçons, j'en ai pas vu.of boys, [I] en have not seen'I didn't see any boy'

(Molinari, 2019: 42)

#### 2.3 Summary

In this Chapter, we first defined the notions of partitivity, pseudo-partitivity, and indefiniteness. Second, we defined the expression of indefiniteness as the object of our inquiry and, in particular, uncontroversial indefinites. Third, we introduced the ongoing research on partitive elements across European languages, of which uncontroversial indefinites are a subtype. In doing so, we paid particular attention to Romance languages. Moreover, we introduced some relevant areal and formal issues discussed in recent studies, which are related to indefiniteness in Italian and Italo-Romance. On the one hand, the areal issues that we discussed concern (i) the geographical distribution of the different forms of indefinite determiners throughout the peninsula and the dynamics that underlie the spread of innovations; (ii) the dynamics of contact between Italian, dialectal koinés, and local dialects, which affect the paradigm of indefinite determiners in some varieties. On the other hand, the formal issues that we presented concern the syntax of indefinite determiners, their semantic properties and the sentential features they interact with. The latter have been analysed in both Italian and French, since both languages came into contact with Ferrarese and Gallo-Italic dialects, which are found all over Emilia-Romagna region. Finally, we showed the main properties of CLLDed constructions in Italian and French, since we will include some sentences of that type in our questionnaire. In fact, when a complement introduced by an indefinite determiner is "leftdislocated", the dislocation imposes restrictions on the available forms of indefinite determiners that are realized in that position. Since the "left dislocated" sentence is always resumed by a clitic pronoun in the main clause, we also presented the properties of direct case clitics and quantitative clitics in Italian and French

# Chapter 3 The Ferrarese dialect

This Chapter introduces the Ferrarese dialect, a variety spoken in the province of Ferrara. After contextualizing the dialect in its geographical and sociolinguistic context, we provide a brief overview on the origins of the present-day dialect, which is traditionally classified as a Gallo-Italic dialect. Finally, we present some relevant features which are essential for a better understanding of our research.

## 3.1 Geographical and sociolinguistic background

This section aims to contextualise the Ferrarese dialect within its geographical and sociolinguistic context, namely Emilia-Romagna region and the province of Ferrara.

#### 3.1.1 Emilia-Romagna region and dialect division

Emilia-Romagna region is placed in northeast Italy. The region is crossed by the *Rimini-La Spezia line* (see §1.1.4), which separates the northern Gallic dialects from the central and southern ones. Concerning indefinite determiners, the North-South isogloss favouring ART and the West-East isogloss favouring *di* overlap in this territory, as well as in part of Liguria and Tuscany. As a result, as we already saw in §2.2.1.1, the most common form throughout the region is generally di+ART. In other words, we can say that the geographical position of Emilia-Romagna is peculiar, since it is a sort of crossroad of different tendencies.



Figure 4: A map of Emilia-Romagna with its main geographical division in two distinct areas: Emilia and Romagna.

As you can see in *Figure 4*, Emilia-Romagna is formed by two main geographical entities which are part of a unique administrative area: Emilia, which corresponds roughly to the western part, from Bologna (the regional capital) going westwards and northwards, and Romagna, which can be identified as the area from Bologna (excluded) eastwards (see the map in *Figure 4*). As noted in Hajek (1997), this historical distinction reflects into the major linguistic division between Romagnol and Emilian dialects. The former is distinguished from the latter by:

a) the lack of rounded front vowels [y] and [ $\emptyset$ ] (e.g CULU(M) > Ro. ['ku:l] 'backside' vs CULU(M) > W. Em ['ky:l] or SCHOLA(M) > W. Em [sk' $\emptyset$ :la]), a feature that is however common to Bolognese and Ferrarese;

b) the presence, in some areas, of central offgliding diphthongs (e.g. SAL >  $*[sale] > [se^{a}l] / [s\epsilon^{a}l]$  'salt' vs SAL > Ferr. ['sal], PAUCU(M) > ['po^{a}k] 'little' vs PAUCU(M) > Ferr ['pok]);

c) the survival of metaphony as a productive process, whose elimination characterizes only central and eastern Emilia to the exclusion of Bologna and Ferrara<sup>45</sup>;

d) the regular gliding of [l] when followed by labials and velars (e.g. UULPE(M) > Ro. ['vojpa] 'fox', SULCU(M) > ['sojk] 'furrow' vs UULPE(M) > Ferr. ['volp], , SULCU(M) > Ferr. ['solk].

According to Hajek (1997: 271), the region can be further divided in three geolinguistic strata, distinguished by phonological phenomena. First, the northern stratum encompasses most of the province of Ferrara, as well as the northernmost areas of Modena, Reggio Emilia, Parma and Piacenza. Second, the central stratum follows the Via Emilia, a historic road that crosses the whole region, linking Piacenza in the northwest and Rimini in the southeast, covering much of Bologna and all Romagna. The dialects of this strata are characterised by the fronting and raising of \*[a] in opened syllables (e.g CLARU(M) > Bol.  $['t]\epsilon:r]$  'clear')<sup>46</sup>. Finally, the southern stratum is found in the middle and upper Apennines of Emilia, where the conservation of rounded front vowels [v] and  $[\emptyset]$  is most consistent. The northern and southern strata are the most opened to linguistic influence from neighbour varieties. For instance, the common use of the participial suffix in Ferrarese -[ɛst] is borrowed from dialects spoken in Veneto (see e.g. [vlɛst] 'wanted' alongside with the Emilian [vlu]). In a similar fashion, the dialects belonging to the southern strata show a strong influence from Tuscan dialects, while the Appennine zones of Piacenza and Parma show influence from Liguria, with which they border.

<sup>&</sup>lt;sup>45</sup> As noted by Baiolini and Guidetti (2005: 40), in Ferrarese the process of metaphony can be found in many contexts, such as with masculine plural nouns, with feminine singular and feminine plural nouns, verbs, and some place names. Since it is a productive process, it can easily be confused with the vocalic outcomes attributed to spontaneous alteration and assimilation.

<sup>&</sup>lt;sup>46</sup> Among the provincial capitals of the region, Ferrara and Ravenna are the only ones which are not located on the *via Emilia*.

From a sociolinguistic perspective, as we already mentioned in §1.3.2, Emilia-Romagna is a *micro-diglossic* area. This means that, as we already saw in § 1.1.4, a dialectal koiné is absent. Consequently, there is a big amount of interlinguistic variation within the region, and dialects spoken in different or even rather closed cities may not be mutually understandable. Moreover, as we already saw, in *micro-diglossic* areas local dialects are rarely preserved. Therefore, Italian is becoming the most common means of everyday communication. According to a survey made by ISTAT (the Italian national institute of statistics) in  $2015^{47}$ , in Emilia-Romagna 55,6% of people talk almost exclusively in Italian within the family context. The percentage raises to 63,2% with friends and 89,1% with strangers. Additionally, the use of the dialect decreases among the younger generations and with the increase of the education level. Even though official data for the province of Ferrara are not available, we can say that it follows the same path.

#### 3.1.2 The province of Ferrara

The city of Ferrara is one of the provincial capitals of Emilia-Romagna, located in the northeast. It counts around 130 000 habitants, and its province is located at the border with the Veneto region. As you can see from Figure 5, it is possible to distinguish eight dialectal varieties in the province of Ferrara, indicated by different colours. A part from the Comacchiese dialect, which has to be classified as an independent variety<sup>48</sup>, all the others are very closed to each other. In fact, variation concerns mainly phonetics and lexicon, while the grammar is generally uniform. Of course, each variety is subject to linguistic influence from the neighbouring varieties. Therefore, Argentano borrowed phonetic end lexical elements from Romagnolo, Centese from Bolognese, upper Bondenese from Mantovano, Mesolano from the neighbouring Veneto dialects, and so on. In *Figure 5*, the border lines delimiting the dialectal areas should not be interpreted as rigid. However, they delimit the areas where the dialects contrasts considerably with Ferrarese by phonetic and lexical forms. Moreover, it is important to know that being Ferrara the capital of the province, the Ferrarese dialect (orange area) rarely borrows lexicon from the neighbouring varieties shown in Figure 5. On the contrary, it has the tendency to expand to the detriment of the other varieties, becoming a sort of super-stratum. .

<sup>&</sup>lt;sup>47</sup> ISTAT (2015) – L'uso della lingua italiana, dei dialetti e delle lingue straniere (2017), In <<u>https://www.istat.it/it/files//2017/12/Report\_Uso-italiano\_dialetti\_altrelingue\_2015.pdf</u>>.

<sup>&</sup>lt;sup>48</sup> The area of Comacchio is indeed a language island. This may be due to the superposition of different strata throughout time, or to the heavy presence of the Byzantines in the past. This dialect is peculiar in particular for its phonetics and prosody, with a typical intonation characterized by ascendant tones (cf. Vandelli, 2001: 16).



Figure 5: The dialectal areas of the province of Ferrara (from Baiolini and Guidetti, 2005)

## **3.2 Origins, classification, and contacts**

Since the work of Biondelli (1853), the Ferrarese dialect was classified as a Gallo-Italic dialect, similarly to the other Emilian varieties<sup>49</sup>. Recently, Baiolini and Guidetti (2005: 215) suggested that the dialect derives directly from spoken Latin and should therefore be classified as a Latin-Italic dialect. This claim comes from a series of arguments of both historical and linguistic type. First, at the time of the Gallic invasion in this area, the territory of Ferrara was marshy and inhospitable. This is why the Celtic settlements were not enough to form a linguistic sub-stratum. Moreover, the Romanization of the province of Ferrara concluded many years after the rest of Emilia. With the arrival of the Romans, the native population was alphabetized and learnt Latin, the new unifying language brought by the colonists. Second, some research based on poetries and vernacular Ferrarese literature has shown that many sounds of Ferrarese correspond to the Latin ones in an exceptional way. The phonologic differences (for instance metaphony, syncope, the insertion of consonants, etc.) are simply distributional phenomena, which developed independently or by imitation of the neighboring varieties. Finally, the authors (ibid. 2005: 217) examine the quadrilaterals of Canepari (cf. Canepari, 2007). These are schemes that represent the position that vowels assumed through language evolution in Latin and other Italo-Romance dialects. Basing on them, Baiolini and Giudetti (2005: 217) show

<sup>&</sup>lt;sup>49</sup> Despite Ferrarese is an Emilian dialect, the southern portion of Ferrara is highly influenced by Romagnol.

that the quadrilateral of Ferrarese is the one that corresponds better to imperial Latin (see *Figure 6*), at least if compared with Romagnol *(see Figure 7)* and Bolognese (see *Figure 8)*<sup>50</sup>. In order to add further data, we show here also the quadilateral of Sammarinese *(see Figure 9)* (from Canepari, 2007: 274), which is a Romagnol dialect too.



Figure 6: The quadrilaterals of Canepari: the position of vocalic sounds in classical Latin (on the left) imperial Latin (on the right) and Ferrarese dialect (below) (from Baiolini and Guidetti, 2005: 218)



Figure 7: The quadriaterals of Canepari: the position of vocalic sounds in Romagnol (from Canepari, 2007: 273)

<sup>&</sup>lt;sup>50</sup>Baiolini and Guidetti (2005: 217) cite the quadrilateral of Comacchiese as well. We leave it out since, as we saw, the area of Comacchio is considered a linguistic island.



Figure 8: The quadrilaterals of Canepari: the position of vocalic sounds in Bolognese (from Canepari, 2007: 271)



Figure 9: The quadilaterals of Canepari: the position of vocalic sounds in Sammarinese (Canepari, 2007: 274)

As observed by Tamburelli and Brasca (2018: 446), "the genetic and genealogical classification is based on measurement of successive innovations. Each innovation sets a variety apart from its original parent language, and shared innovations among varieties provide evidence for the formation of a subfamily". Of course, these innovations have to be pervasive, the source of systematic change, rather than innovations spread as borrowings or as a consequence of imitation of the neighbouring varieties. Since regular and systematic change can be frequently observed at the phonetic and phonological level, "the innovations at the basis of classificatory linguistics are mostly phonetic/phonological and occasionally morpho-phonological" (Tamburelli and Brasca, 2018: 446). In our case, Baiolini and Guidetti (2005) took a phonetic trait of Ferrarese, namely the simplicity of its vocalic system and its similarity to imperial Latin, and considered it a sign for archaism, which is the opposite of innovation. Since this particular trait differentiates the Ferrarese dialect from other Gallo-Italic dialects, and most importantly from some neighbouring Romagnol varieties, the authors concluded that the Ferrarese dialect should be considered as unique and devoid of a pervasive Celtic substratum. As noted by Tamburelli and Brasca (2018: 446), this is not something new in the history of dialectology. In fact, many linguists in the past selected a specific linguistic trait, using it as a sign for innovation or archaism. For instance, Pei (1949) based his classification of Romance varieties basing exclusively on stressed vowels, while Politzer (1947) paid attention solely to the diachronic conservation of the plural -s. It goes without saying that the selection of different traits often resulted in

different classifications, a fact that clearly shows how this method can produce erroneous or subjective classifications.

In order to avoid a single trait to become too influential in the classificatory process, modern dialectologists adopted dialectometry, a method that applies computational and statistical analyses within dialectology. This method does not select linguistic traits a priori, buth rather identifies distinctive features, extracts patterns from quantitative data and conducts aggregate analysis. A work on this track is Tamburelli and Brasca (2018), where dialectometry is applied to atlas corpora through the measurement of Levenshtein distance. This research shows that the Gallo-Italic should be classified as a homogenous subgroup of the Gallo-Romance branch distinct from Italo-Romance, an issue that has been controversial for years.

All this considered, we believe that selecting one single trait is not enough to exclude the Ferrarese dialect from the Gallo-Italic group. An extensive research would be needed, not only including other Emilian varieties, but also adopting an experimental method that allows to take into account an aggregation of traits. However, a detailed comparative study of that type is beyond scope of this thesis.

Finally, the French influence on Ferrarese may be accounted for by different contacts that occurred throughout time, such as by contact with the first Gallic communities settled in the region, by contact with the Gallo-Italic neighboring varieties and, to some extent, by direct contact with French between the end of the XVIII and the beginning of the XIX century. In fact, the city of Ferrara was part of the French Republic from 1796 to the fall of Napoleon in 1814.

## **3.3** The expression of indefiniteness in Ferrarese

As in Italian and French, in Ferrarese there are several options to express indefiniteness. These options are summarized in (1). These are: ART in (1a); ZERO (which is however less acceptable) in (1b); di+ART in (1c); the pseudo-partitive construction *un poc ad* 'a bit of' in (1d), and the cardinal *du* 'two' in (1e), which conveys the meaning of 'some'. With negation, we find ART, di+ART and ZERO, as shown in (2). Bare *di* is ungrammatical, both in negative and positive sentences, as shown in (3).

According to Baiolini ang Guidetti (2005: 93), indefiniteness can also be expressed through the determiner *zerti*, which is compatible with plural count nouns (4). However, according to our hypothesis, which should be verified on a large scale, this element is not accepted unanimously and is ungrammatical as non-specific. In fact, it may be a borrowing from the Italian *certi*.

 (1) a. A màgn i caplìt CL.NOM.1.SG eat ART cappelletti
 b. ??A màgn caplìt CL.NOM.1.SG eat cappelletti

	c.	А	màgn	di			caplìt	
		CL.NOM.1.SG	eat	di+AI	RT.M.PI	L	cappelle	tti
	d.	А	màgn	un po	oc ad ca	apli	ìt	
		CL.NOM.1.SG	eat	a bit	t of ca	app	elletti	
	e.	А	màgn	du	caplìt			
		CL.NOM.1.SG	eat	two	cappe	llet	ti	
(2)	А	n	màgn	brisa	i/di/?	Ø		caplìt
(-)	CL.1	NOM.1.SG not	eat	neg	ART/d	i+A	art/ Ø	cappelletti
(2)					1)			
(3)	a.	*A	màgn	ad ca	iplit			
		CL.NOM.1.SG	eat	di ca	appelle	tti		
	b.	*A	n	màgn	brisa a	ad	caplìt	
		CL.NOM.1.SC	i NEG	eat	not	di	cappelle	tti
(4)	In	zèrti cà as		vé	d la	lùs		
. /	In	some houses	CL.SC	i+one	sees tl	he	light	

In AIS, Ferrarese is not attested, as well as the majority of the dialects spoken in the province. We find however the variety spoken in Baura, a little village of 1000 inhabitants located in the province of Ferrara. The map 1037 'if there was water' and the map 1343 "to take wine" both show di+ART which is, as we already saw, the most widespread form throughout the region (see (5-6))<sup>51</sup>.

(5) d1 akwa (AIS 1037 427 Baura, (FE))

(6) a trar dal vin (AIS 1343 427 Baura (FE))

In our questionnaire, we will test for the degree of acceptability of each indefinite determiner, as well as for some of their semantic properties. We will also include the form that we expect to be ungrammatical (namely bare di).

#### **3.4** Phonological aspects of Ferrarese

In this section, we present some phonological aspects of Ferrarese that may account for some allomorphs of the preposition d, the quantitative clitic, and some forms of the definite article, the partitive article, the nominative and the accusative clitics.

<sup>&</sup>lt;sup>51</sup> An interesting fact is that map 637 "some violets" shows the expression "a viol" (AIS 637 427 Baura (FE)). It is not clear to what corresponds the vowel <a>. We leave the question open.

#### 3.4.1 The phonosyntax of Ferrarese: insertion of "moving" vowels

One of the most peculiar phonological aspects of Ferrarese, alongside with the other Emilian dialects, is the reduction of atonic vowels in protonic and posttonic positions (cf. Passino, 2013). This process has an impact on the phonosyntax of the dialect. In fact, it causes instances of apheresis, syncope, or apocope (eg. It. (e)stirpare > Ferr. *stirpar*; It. b(e)lleza > Ferr. *bleza*; It. *fusc(i)nare* > Ferr. *sfusnar*; It. incident(e) > Ferr. *azident*; It. (a)doperar(e) > Ferr. *duprar* (cf. Baiolini and Guidetti, 2005: 12)), which often determine unusual clusters of consonants (e.g *al vdeva* 'he see.PST', *al pkava* 'he peck.PST', *al kmandava* 'he command. PST). In some cases, this process has determined the insertion of non-etymological vowels, creating some fixed schemas of syncope and epenthesis. The quality and the position of these vowels in the various Emilian dialects is subject to variation.

On the one hand, descriptive literature refers to these non-etymological vowels by the label "euphonic vowels" (Biocati, 1980: 24; Vandelli 2001: 60ff). According to this perspective, these vowels are inserted in the phonologic string in order to facilitate pronunciation, avoiding too complex clusters of consonants. However, data from all the Emilian dialects that display this insertion prove that these varieties are quite tolerant to complex clusters of consonants. In fact, the insertion of non-etymological vowels is in many cases ungrammatical and particularly frequent in non-native speakers, such as immigrants from the south or young Italian monolinguals (Ferretti 2007). Therefore, this hypothesis has to be rejected.

On the other hand, the traditional approach (Repetti 1995a,b; Loporcaro 1996, 1998) analyses these vowels as epenthetic. Thus, their insertion in Emilian dialects is explained looking at their syllabic structure: when not admitted clusters of consonants appear, epenthetic vowels are inserted in order to allow resyllabification. In this respect, epenthesis is defined as a phonological process that implies the insertion of non-etymological segments within the string. Therefore, the type of segment is determined by parameters specific of each language, or influenced by adjacent segments through diffusion of subsegmental material. Nevertheless, in some cases this is not true, since we may find vowels whose phonetic characteristics do not depend on diffusion from an adjacent consonant (e.g. Ferr. al ga:1 'the rooster', il galin 'the chicken'). Moreover, they may sometimes have an etymological origin (e.g. Ferr. gni:r 'to come', a veŋ 'I come' < Lat. VENIRE). Consequently, also this theory has some weak points.

Finally, an alternative that may solve these questions consists in analysing these vocalic segments as 'moving vowels' (Scheer 2004; Passino, 2013), which are part of the lexical representation despite their melody is not linked to a skeletal position. Thus, when the reduction on atonic vowels occurs, the existence of an empty nuclei is assumed or, in other words, an empty category. These empty categories are allowed only if they are found in final nuclei or if they are followed by a covert vocalic nucleus. If this is not the case, the empty nucleus is phonetically realized through the connection of the vocalic melody with the skeletal position. This is the general view of autosegmental frameworks, such as Government phonology (Kaye, Lowenstamm, and Vergnaud 1990; Kaye 1990; Charette 1990; Harris 1994 among the others) or the Strict CV theory

(Lowenstamm 1996; Ségéral and Scheer 2001, 2008; Scheer and Ziková 2010 among others). We show an example in (7a,b) (adapted from Passino, (2013: 65(10a,b))



#### 3.4.2 Allomorphs of the preposition d

In the Ferrarese dialect, we find two allomorphs for the preposition "of": ad and d. The first is usually found in front of words beginning with a consonant, while the second precedes words starting with a vowel (as you can see in (8-9).

- (8) Al libar ad Giàni The book of John
- (9) Al libar d Anna The book of Anna

According to Biolcati (1980), the underlying form is taken to be *ad*, which can lose the initial vowel by apheresis. According to this theory, the apheresis should be orthographically signaled by adding an apostrophe ('*d*). We assume that in the passage from Latin *de* to Ferrarese *ad*, the initial  $\langle a \rangle$  was a moving vowel, but nowadays it has lexicalized. In fact, as noted by Passino (2013), a lexicalization of these vowels after being inserted in the past is more plausible than their current insertion in a synchronic phonological process, of which native speakers are completely unaware. The presence of these vowels in the lexical entries of the Emilian dialects' dictionaries corroborates this hypothesis. Since in the present work we will consider the first /a/ as a moving vowel, even if lexicalized, we will not mark the preposition *d* with a preceding apostrophe.

#### 3.4.3 Allomorphs of the definite article

The definite article in Ferrarese surfaces as follows (cf. Baiolini and Giudetti, 2014: 92): *al* (m.sg before consonant); *l'* (m.sg before vowel and in proclitic position); *la* (f.sg before consonant); *l'* (f.sg before vowel); *i* (m.pl before consonant); *j'* (m.pl before vowel); *ill* (f.pl before consonant); *j'* or *gl'* (f.pl before vowel). The first vowel of the allomorph *al* is without a doubt a lexicalized moving vowel. We show some examples in (10):

(10)	a. Al putìn	/	a	gh'	è	1'	putìn
	The.m.sg boy	/	CL.SBJ.	there	is	the	boy

b.	L'	amìga /	la	L	balìna
	the.F.SG	friend /	tł	ne.F.SG	little-ball
c.	Ι	putìn -	j'/	/gl'	amìghi
	the.M.PL	boys -	th	e.M.PL	friends
d.	ill zréz		-	j'/gl'	usìnn
	the.f.pl c	cherries	-	the.F.	PL buttons

#### 3.4.4 Allomorphs of the partitive determiner

The partitive determiner in Ferrarese surfaces in different forms: dal (M.SG); dla (F.SG before consonant); dl' (M/F.SG before a vowel); di (M.PL); dill (F.PL before consonant), di gl'/digl' (F.PL before vowel). Basing on some personal communications, there might be diatopic variation concerning the realization of dgli' instead of di gl'. We add here some examples:

(11)	a.	A gh'ò bevù dal	vìn
		CL.SBJ.1.SG have drunk di+AI	RT.M.SG wine
		'I bought some wine'	
	b.	A gh'ò magnà dla	pàsta
		CL.SBJ.1.SG have eaten di+AI	RT.M.SG pasta
		'I bought some pasta'	
	c.	A gh'ò vìst di	òman par la stràda
		CL.SBJ.1.SG have seen di+AI	RT.M.PL men on the road
		'I saw some men on the road'	
	d.	A gh'ò vìst dill	dònn
		CL.SBJ.1.SG have seen di+ART.	F.PL women
		'I saw some women'	
	e.	Al gh'à dgl'	idèi
		CL.SBJ.3.SG has di+ART.F.PI	L ideas
		'I have some ideas'	

#### 3.4.5 Allomorphs of subject and object clitics

The Ferrarese dialect, similarly to French, displays what would seem a full array of subject clitics (see 3.3.3.2 for further details). We show the full paradigm in **Table 10**, alongside the tonic pronouns. In fact, in the Ferrarese dialect we can note a reduplication of the subject in some contexts, also attested in other northern Italian dialects. When this reduplication occurs, we have a series of free tonic pronouns that can be omitted (except for some contexts, such as when they are contrastive), and a series of clitic pronouns, which are obligatorily realized in all persons<sup>52</sup>. In (12) we add some examples.

<sup>&</sup>lt;sup>52</sup> In oral spontaneous conversation, I noticed a tendency to omit subject clitics in some speakers, even when they should be obligatory realized. This omission could be a consequence of interference with Italian, which is a pro-drop language

	Tonic pronouns	Clitic pronouns
lps	Mi	Α
2ps	Ti	at (+C) /t (+V)
3ps	Lu (M)	al (+C) /l (+V)
	Lie (F)	la (+C)/l (+V)
1pp	Nu /Nuàltar	Α
2pp	Vu/Uàltar	Α
3pp	Lòr (M)	i
	Lor (F)	ill

Table 10: paradigm of subject pronouns (tonic and clitics) in the Ferrarese dialect.

- (12) a. Mi a són andà al marcà Me CL.SBJ.1.SG am gone to-the market 'We went to the market'
  - b. Ti t' a vìst Giàni You CL.SBJ.2.SG have seen John 'You saw John'
  - c. Inquò at gh'à vìst la nòna Today CL.SBJ.2.SG have seen the grandmother 'Today I saw my grandmother'
  - d. Lu l' a cumprà al sciflìn He CL.SBJ.3.M.SG has bought the whistle 'He vought the whistle'
  - e. Lu al cantàva He CL.SBJ.3.M.SG sing.PST 'He was singing/used to sing'
  - f. Lié l' a cumprà al sciflìn She CL.SBJ.3.F.SG has bought the whistle 'She bought a whistle'
  - g. Liè la cantàva She CL.SBJ.3.F.SG sing.PST 'She was singing/used to sing'
  - h. Nu a scorén al frarés We CL.SBJ.1.PLU speak the Ferrarese 'We speak Ferrarese'
  - i. Vu/Vuàltar a canté insém You CL.SBJ.2.PLU sing.PST together 'We used to sing/were singing together'
  - j. Lor i và a cà. They CL.SBJ.2.M.PLU go at home 'They are going at home'
  - k. Lor ill và a cà They CL.SBJ.2.F.PLU go at home

In the paradigm of clitic pronouns, the 1.p.sg, the 1p.pl, and the 2p.pl display the vowel /a/, which is distinct from the vocalic segment /i/ of the third person plural. The 2p.pl and 3p.sg, display a consonantal segment, thus resulting in at and *al* respectively. This pattern (namely V for the 1p.sg, the 1p.pl and the 2p.pl, and VC for the 1p.sg and 2p.sg) is shared by many dialects spoken in Emilia-Romagna (see (Guadenzi 1889; Mandelli 1995; Zörner 1989; Cardinaletti and Repetti 2004)). Nevertheless, not all researchers agree with the claim that the vocalic clitics have the status of real clitic pronouns. On the one hand, Pisani (1979) interpreted the vocalic clitics as prosthetic vowels, which are also found in the paradigm of non-subject clitic pronouns in Rumanian and Catalan. On the other hand, Vanelli (1984) and Poletto (2000) claim that the preverbal vocalic material must be considered as a true clitic pronoun. Finally, Cardinaletti and Repetti (2004) analyse the vocalic segments as epenthetic vowels, which are distinct from consonantal clitics and from the 3p.pl clitic. In fact, this last clitic gives information about Number and, in some cases, Gender features. In the present work, we will integrate this last theory and autosegmental approaches, thus considering the allomorphs al and at as derived by the insertion of moving vowels, exactly like the preposition ad (also see Cardinaletti and Repetti 2008).

Observing the paradigm of object clitics in **Table 11**, we can see that moving vowels may appear. If needed by the phonologic context, they may be added, proclitic on the object clitic (see (13)), proclitic on the following verb (14) or even in both positions (15). In other cases when the object clitic is preceded by a vocalic segment, this usually corresponds to the subject clitic needed in the clause. In other words, the object clitic may be enclitic and joined with the subject clitic, creating a unique syllable (see (16). Finally, the 3p.m.pl object clitic can be realized as /j/ (namely as an approximant) when it creates a diphthong with the subsequent vowel. In (17) we add some further examples in which moving vowels are absent.

1ps	am, m
2ps	at, t
3ps (M)	al, l
3ps (F)	la, l
1pp	as, s
2pp	av, v
3рр (М)	i, j
3pp (F)	gli/ l'

Table 11: paradigm of object clitics in the Ferrarese dialect

## Moving vowel

(13)	a. Ti t' <b>a</b> m vdévi al marcà You CL.SBJ.2.SG CL.OBJ.1SG saw at-themarket
	<ul> <li>'You used to see me at the market'</li> <li>b. T' as' incuntràvi al marcà CL.SBJ.2.SG CL.OBJ.1PLU meet-PST at-the market 'You used to meet us at the market"</li> </ul>
(1 A)	Moving vowel proclitic on the verb
(14)	a. Ad solit, mi at avdeva al marca Usually I CL.SBJ.1.SG+CL.OBJ.2.SG saw to-the market 'I usually saw you at the market'
	b. Lu al t' <b>a</b> vdéva al marcà He CL.SBJ.3.M.SG CL.OBJ.2.SG see.PST at-themarket 'He used to see you at the market'
	c. Lor i t ' <b>a</b> vdéva al marcà They CL.SBJ.3.M.PL CL.OBJ.2.SG see.PST at-themarket 'They used to see you at the market'
	Moving vowel proclitic on the object clitic and on the verb
(15)	Ti t <b>as' a</b> vdévi You CL.SBJ.2.SG CL.OBJ.1.PLU see.PST 'You were seeing us'
(16)	Subject clitic+object clitica. Ad solit lorimvdévaa scòlaUsually theyCL.SBJ.3.M.PL+CL.OBJ.1.SGsawat school
	b. Uàltar <b>am</b> vdévi al marcà You CL.SBJ.2.PL+CL.OBJ.1.SG saw at-the market
	c. Nuàltar <b>al</b> ' incuntràvan al marcà We CL.SBJ.1.M.PL+CL.OBJ.3.SG met at-the market 'We used to meet him at the market'
	d. Al marcà, lor, <b>iv</b> saluàva sémpar At-the market they CL.SBJ.3.M.PL+CL.OBJ.2.SPLU greeted always 'At the market they always greeted you'
	e. Mi <b>al</b> avdéva al marcà Me CL.SUBJ.1.SG+ CL.OBJ.3.MSG saw at-the market 'I used to see him at the market'
(17)	a. Ad sòlit, a la incuntravàn a la fiéra Usually CL.SUBJ.1.SG CL.OBJ.3.F.SG met at the fair 'They usually met her at the fair'
	b. Al m' a vist al marcà CL.SUBJ.3.MSG CL.OBJ.1.SGhas seen at-the market 'He saw me at the market'

- c. Al i saluàva al marcà CL.SUBJ.3.M..SG CL.OBJ.3.M.SG greet at-the market 'He used to greet them at the market'
- d. Al gli saluàva al marcà, CL.SUBJ.3.M..SG CL.OBJ.3.F.SG greet at-the market

#### 3.4.6 Allomorphs of the quantitative clitic

In the Ferrarese dialect, we find different allomorphs for the quantitative clitic: n' and in (18). Without a doubt, the form n' is derived by reduction of the atonic vowel, while the outcome *in* results from the addition of a moving vowel. The allomorph *in* can be enclitic to negation, as you can see in (19).

(18)	a.	Ad caramè	l a	n'ho	magnà	i do		
		Of candies	CL.SBJ	NE have	eaten	two		
	b.	Ad solit ad	fùnz	а	in		cói	brisa
		Usually of	mushroo	omsCL.SB	J not	-ne	pick	not
	c.	Ier,	ad càran	an	n'h	0	brisa	magnà
		Yesterday,	of meat	CL.SBJ-N	EG ne	have	not	eaten
		-						

(19) Mi, a nin màgn do Me CL.SBJ NEG-NE eat due

## 3.5 Clitic Left Dislocation in Ferrarese

In this section, we outline some relevant properties of CLLD in Ferrarese. In doing so, we leave out the scope properties, since they will not be tested in our questionnaires (see Ch. 4).

Clitic Left Dislocation in Ferrarese shares some features with both French and Italian. We list here some relevant feature:

Any maximal category can be fronted to the left periphery (cf. (20)

(20) a.	Al màr,	agh'		sèn	Z	à	stà	
	At-the seas	ide CL.SBJ	.1.PLU-	there have	e a	lready	been	
b.	Bèla,	la	n'	jé mai	stàd	a		
	Beautiful	CL.SBJ.3.I	F.SG NI	EG is neve	er b	een		
c.	Mìs da pàrt	t, a	al	n'	je	é mai	stà	
	Got out of	the way	CL.SBJ.3	.M.SG NE	Gi	s never	been	
d.	Ch' at	bèv	i, i		al		dìs	tùti
	That CL.SB.	J.2.SG drin	k cl.si	3J.1.PLU	CL.C	вј.3.м.	PL say	v everyone
e.	Tùti,	a	n'	i	ho	ancòr	a	vìst
	Everyone,	CL.SBJ.1.S	SG NEG	CL.OBJ.3	.M.P	L have	yet	seen
			(tı	ranslation	of C	Cinque 1	990: 5	57-58(1a))

- Theoretically, there is no limit for the fronted phrases, as you can see in (21).
  - (21) Di vestì, a mi, Giàni, in cal negòzi lì, an mi ha mai Of clothes, to me, John, in that shop there, NEG to-me has never cumprà bought

(translation of Cinque 1990:58 (1c)).

The "dislocated" constituent can be found at the left of any subordinate clause (cf. (22) translated from Cinque 1990:58(1b))

- (22) Da quand al marcà agh và lu, i n' màgna Since at-the market there goes he,CL.SBJ.3.M.PLU NEG eat più ben no-more good
- The dislocated element should be obligatorily resumed by a clitic in the main clause, even when the "dislocated" constituent is a subject, an indirect object, or an adjunct (cf. (23a-e)). In this respect, Ferrarese patterns with French. The resumptive clitic is not required when the clitic counterpart of the dislocated material does not exist (cf. (23f,g)).

(23)	a.	Giàni,	а	1'		h	10	vìs	t		
		John,	CL.SBJ.1.SC	G CL.O	вј.3.м	I.SG ha	ve s	seen	1		
	b.	A Marì	a, a	gh	'o dà	ur	ı lìb	ar			
		To Mar	y, cl.sbj.1.s	G hav	ve giv	en a l	bool	K			
	c.	A cà,	а	gh'	són	za	6	anda	à		
		At home	eCL.SBJ.1.SC	3 there	have	alread	ly go	one			
	d.	Ad sta r	òba chi, ε	ì		nin	V	ój	bris	a scór	ar
		Of this i	issue here, c	L.SBJ.	1.sg-1	NEG-NI	E wa	int i	not	talk	
	e.	I ragazi	ìt, i		n'	j'è br	isa	ariv	à		
		The boy	vs cl.sbj.3.n	A.PLU	NEG a	are not	arr	ivec	1		
	f.	Par lù,	an		gh'o	mai	lau	rà			
		For hin	n CL.SBJ.1.Se	G-NEG	have	never	woi	rkea	1		
	g.	Da glié	e, a	son b	orìsa s	tà ba	asà				
	-	By her,	CL.SBJ.1.SC	Gam r	not l	been ki	isse	d			
		-									

> In CLLDed constructions, the resumptive element has to be a clitic

(translation of Molinari, 2019: 51(12))

pronoun only. Tonic pronouns are ungrammatical (cf (24))

(24) A Fràra, agh soŋ bèla stà In Ferrara, CL.SBJ.1.SG-there have already been \*A Fràra, a sóŋ bèla stà là In Ferrara, CL.SBJ.1.SG have already been there

(translated and adapted form Cinque, 1990: 59(1d)

- There is Connectivity between the dislocated constituent and the TPinternal position (namely sensitivity to Binding Theory) (cf. (25)). Although the Ferrarese dialect lacks anaphors, parallel to Piacentino, the restrictions are visible on the pronouns.
  - (25) a. A lié<sub>i</sub>, Maria<sub>i</sub> la dìs ca n' agh To her, Maria CL.SBJ.3.F.SG says that-CL.SBJ.1.PLU NE of-that pensiàm mai think never
    - b. \*A lié<sub>i</sub>, Maria<sub>i</sub> la n' agh pénsa brisa To her, Maria CL.SBJ.3.F.SG NEG of-that thinks not

(translation of Cinque, 1990: 59(1e))

- The position of the fronted element and that of the clitic inside the TP field undergoes island constraints (cf. (26)):
  - (26) a. \*A Carlo<sub>i</sub>, at ciacararò sol dil parsòn To Carlo CL.SBJ.1.SG-CL.DAT.2.SG will-talk only of-the people c' ag<sub>i</sub> piàs that CL.DAT.3.M.SG likes 'To Carlo, I will talk only about the people that he likes' c' b. \*A cài, al éŋ cuntrà prima At home CL.SBJ.1.PL-CL.OBJ.3.M.SG have met before that aghi andàs there went 'At home, we have met him before that he went there' c. \*A Giàni<sub>i</sub>, at cuntàr dal lìbar vój To John CL.SBJ.1.SG-CL.DAT.2.SG want to-tell of-the book ch' dà i gh<sub>i</sub>' à that CL.SBJ.3.PLU CL.DAT.2.SG have given (translation of Cinque, 1990: 59(1f)

#### 3.5.1 Accusative clitics

As we already saw in 3.3.2.5, the Ferrarese dialect displays a full paradigm of accusative clitics, parallel to Italian and French. The derivation of these clitics is taken to be the same as their Italian counterparts (see 2.2.2.3.2). However, clitic movement is not always visible through agreement of the past participle. In fact, parallel to what is found in the Piacentino dialect (cf. Molinari, 2019: 53-54), some forms of the past participle in Ferrarese lost their inflection. As in Piacentino, the plural form of the past participle is not inflected for Gender (27a-

c). However, while in Piacentino Gender agreement on the singular forms "is visible only on those verbs whose unmarked participial form (masculine singular) ends with a consonant" (Molinari, 2019: 53-54), in Ferrarese when the past participle ends with a vowel it may be either specified or unspecified (see (27d-f)). In this respect, there might be variability of acceptability across the speakers. Moreover, it is possible that the inflected form stemmed from interference with Italian:

- (27) a. Giani l' ha vìst, di ragazìt John CL.NOM have.3.SG see.PST.PRT.M.SG of-the boys
  / 'na ragazeta /dil ragazeti
  / a girl / of-the girls
  - b. Na ragazéta, Giàni al l' ha vìsta a girl John CL.NOM CL.ACC.3.F.SG have.3.sg seen.PST.PRT. F.SG
  - c. Di ragazit / dil ragazéti Giàni al j/li
     Of-the boys / of-the girls John CL.NOM CL.ACC.3.M/F.PLU
     ha vìst
     have.3.PLU seen.PST.PRT
  - d. Giani l 'ha 'ncuntrà di ragazìt /dil ragazéti John CL.NOM have.3.SG meet.PST.PART.M.SG of-theboys/ of-the girls /'na ragazéta / a girl
  - e. Na ragazéta, Giàni al l' ha 'ncuntrà(da) a girl John CL.NOM CL.ACC.3.F.SG have.3.SG meet.PST.PRT. F.SG
  - f. Di razazìt / dil ragazéti Giàni al gli ha of-the boys of-the girls John CL.NOM CL.ACC.3.M/F.PLUhave.3.SG 'ncuntrà meet.PST.PRT.M.SG

#### 3.5.2 Nominative clitics

As we have seen in 3.3.2.5, the Ferrarese dialect displays a semi-full paradigm of Nominative clitics. Concerning their syntactic derivation, Rizzi (1986) points out that the syntactic status of Nominative clitics in Northern Italian dialects is distinct from the status of subject clitics in true non pro-drop languages like French. He puts forward some arguments in favour of his claim. First, contrary to what happens in French, the paradigm of the Nominative clitics is actually partially null. Thus, the obligatory use of the clitic pronouns in French could be a strategy to compensate the lack of inflection on the verb. Second, the reduplication of quantified subjects is possible in Northern Italian dialects but ungrammatical in French. In fact, in the French sentence in (28a), the nominative clitic pronoun cannot be realized, since it should occupy a syntactic position which is already filled by the quantifier *personne* 'no one'. On the contrary, in the Ferrarese sentence in (28b), the position of the nominative clitic is different because it can co-occur with a quantifier. Finally, in coordinated sentences the

subject clitics of Northern Italian dialects are obligatory, contrary to what happens in French (cf. (29)).

- (28) a. Personne (\*il) n' a dit rien No-one (CL.NOM) NE has said nothing
  b. Nisun \*(al) n' a dit nient No-one (CL.NOM) NE has said nothing
- (29) a. Elle chante et dance She sings and dances
  - b. La cànta e \*(la) bàla She sings and (cl.nom) dances

Benincà and Poletto (2004) further propose that the appearance of the Nominative clitic in the clause proves that the subject has been dislocated in the Topic field. However, this contradicts what we saw in (28b) and cannot be the case for Ferrarese either. In fact, if we assume a different status for dialectal clitics, we have to assume their occurrence on the verbal morphology.

Finally, Cardinaletti and Repetti (2010) state that the obligatory presence of the subject clitic in dialects like Ferrarese can be explained assuming that cliticization is triggered by Agree, but cannot be realized in T. This is because clitics cannot be incorporated in heads endowed with an EPP feature. Thus, the subject clitic shall incorporate into a higher functional feature, where it can check its unvalued  $\varphi$ -features. The nominative clitics are obligatory also in interrogative sentences. In this latter case, the verb moves to a higher functional head in order to value its interrogative features (cf. (30)).

(30) At magnà? Have-you eaten? 'Did you eat?'

#### 3.5.3 Quantitative clitics

The syntactic status of the quantitative clitic n' in Ferrarese (as well as in other Italo-romance dialects) is taken to be the same as in Italian (see 2.2.2.3.2), as well as its derivation. Parallel to Italian, the quantitative clitic in Ferrarese is incompatible with universal quantifiers and distributive quantifiers. Moreover, it triggers agreement on the part participle, when the latter can be inflected (cf. (31)).<sup>53</sup>

(31)	a.	*Ad ragazìt, a	n'	ho vìs	t tuti
		Of boys CI	L.NOM NE-	have see	en all
	b.	*Ad ragazìt, a	n'ho	o vìst	ogni uŋ
		Of boys CL.	NOM NE ha	we seen	each one

 $<sup>^{53}</sup>$  We leave out the distributive quantifier 'both' since it can be expressed only through a periphrastic construction, namely *tut i do* "all the two'.

- c. Ad ragazìt/ Ad ragazéti anho vist paréci/ purasà Of boys / of girls nehave seen many / a lot
- d. Ad ragazìt/ Ad ragazeti, an ho incuntrà paréci / purasà Of boys/ of girls ne have met many / a lot
- e. Ad ragazìt, an ho vìst pochi Of boys NE have seen few
- f. Ad ragazéti an ho vist poche Of girls NE have seen few
- g. Ad ragazéta, an ho vìst una Of girl NE have seen one
- h. Ad ragazéta, an' ho 'ncuntràda una Of girl NE have met one

## 3.6 Summary

In this chapter, we first contextualized the Ferrarese dialect in its geographical and sociolinguistic context, namely the Emilia-Romagna region. We saw the dialectal division of the region first in two main groups, namely Emilian and Romagnol, then in three different geolinguistic strata. In doing so, we defined Ferrarese as an Emilian dialect belonging to the northern geolinguistic stratum, which is particularly open to linguistic influence from the neighbouring varieties (in the case of Ferrarese, especially from Veneto dialects). Second, we showed the different dialectal varieties spoken in the province of Ferrara, specifying their main similarities and differences, as well as their dynamics of contact. Then, we presented the origin of the dialect, which is for some reasons controversial. In fact, despite Ferrarese was traditionally classified as a Gallo-Italic dialect, Baiolini and Guidetti (2005) argue against this proposal, claiming the absence of a Gallic substratum, proven by some conservative features of the Ferrarese vocalic system. In this respect, we claimed that genealogical cassifications should be done adopting an experimental method that allows to take into account an aggregation of traits, rather than a single one. Therefore, further researches would be needed in order to disentangle this debate, which is however beyond the scope of our thesis. Finally, we presented some features of the dialect that are relevant for our research purposes. These are:

- Indefiniteness can be expressed through different means: ART, di+ART (which is expected to be the most common indefinite determiner), pseudo-partitive constructions like *un poc ad* 'a bit of', the cardinal *du* 'two' meaning 'some'. Bare *di* is ungrammatical and ZERO sounds less acceptable. We will verify this hypothesis in our research. Finally, the determiner like *zerti*, at least according to the available grammars, is also possible. However, we expect it to be less accepted and never grammatical as non-specific. In fact, it may be a borrowing from Italian.
- The preposition 'of', the quantitative clitic, and some forms of the definite article, the partitive article, the nominative and the accusative clitics display allomorphs, which are often derived by the insertion of

moving vowels. This phonological phenomenon may be determined by instances of syncope caused by reduction of atonic vowels.

CLLD in Ferrarese shares some features with both Italian and French. Contrary to Italian, Ferrarese presents a paradigm of nominative clitics that are obligatory realized. However, their syntactic status is different from the one of subject clitics in true non pro-drop languages. As regards accusative and quantitative clitics, their syntactic status is assumed to be the same as in Italian. Nevertheless, the syntactic movement of the accusative clitics is not always visible on the agreement of the past participle.

## Chapter 4 The research

In this chapter, we are presenting our research. First, we present our method, focusing on the following aspects: the participants, the materials, the stimuli, the procedure, the statistical analysis and some ethical issues. While focusing on the participants, we examine their sociolinguistic and their bilingual profile, as well as look for possible correlations between the two by using both descriptive and inferential statistics. Finally, we present our results. In particular, we first examine the distribution of the participants' judjments across the different contexts and groups of our interest. Then, we look for the best predictors among the chosen explicative variables (i.e. language of the questions, determiner type, BLP group, clitic, noun type and clause type) and try to predict the probability that they produce an effect on the acceptability judjements. Finally, we focus on specialization of meaning and optionality of determiner choice. In the final discussion, we explore our results in detail, relating them to the relavant literature and to our research questions. In doing so, we define our final proposal.

## 4.1 Method

#### 4.1.1 Participants

The participants were 75 overall, 43 of which completed both parts of the questionnaire, one in Italian and one in Ferrarese respectively (see §4.1.2 and §4.1.3). Since we decided to adopt a within-subjects study design (see §4.1.4), we analysed only the data collected from those participants that completed both parts.

In this section, we show the sociolinguistic and bilingual profile of our informants. The former was built through some socio-demographic questions, while the second was obtained through an adaptation of the *Bilingual Language Profile* (BLP) scale (Birdsong, Gertken, and Amengual 2012). This adaptation was necessary, since the BLP is designed primarily for standardized languages (see §4.1.2.2).

#### 4.1.1.1 Sociolinguistic profile

First, as we can see from the barplot in *Figure 10*, the participants were equally distributed between two genders (n=20 female and n=23 male).



Figure 10: gender distribution within the sample.

Second, the barplot in *Figure 11* shows the distribution across the levels of education (1/43 primary school, 4/43 secondary school, 22/43 high school, 2/43 bachelor, 10/43 master and 4/43Ph.D.).



Figure 11: distribution of education levels within the sample.

Then, the histogram in *Figure 12* shows the age distribution across the participants. As you can see, the age distribution is bimodal, with two picks corresponding to the 20s (11/43) and the 50s (10/43). The remaining 22 participants are distributed as follows: 30s = 5/43, 40s = 7/43, 60s = 7/43, and 70s = 3/43.



Figure 12: age distribution within the sample.

Finally, as far as areal variation is concerned, the area (or the areas) of current and past residence of almost all our participants fall within the dialectal areas outlined in *Figure 5* (§3.1.2). In particular, as you can see from **Table 12**, 90% of our participants have lived exclusively in the Ferrarese area. Since differences across dialectal areas within the province of Ferrara concern mainly the lexicon, we do not expect particular differences concerning the choice of indefinite determiners in those four participants that have lived in different areas (namely Bondenese, Gorese and Argentano areas). With this respect, only one informant could display slightly different choices, since his areas of origin include a small town that does not fall within the dialectal areas previously mentioned. This town is Ficarolo, a Ferrarese-speaking enclave in Veneto region, located at the border with Emilia-Romagna and coasting the Po River (see *Figure 13*). Nevertheless, since the judgements of a single subject are not enough to draw meaningful conclusions, we are not paying particular attention to this informant. Instead, we are examining the answers globally.

	Frequency	Percent
Bondenese area	1	2.326
Bondenese area and Ficarolo	1	2.326
Border between Ferrarese and Argentano area	1	2.326
Ferrarese area	39	90.698
Gorese area and Ferrarese area	1	2.326
Total	43	100.000

Table 12: current and past residency of the informants.



Figure 13: Location map of Ficarolo, showing the province of Ferrara (Google, n.d.).

#### 4.1.1.2 Bilingual profile

Let us now have a look at the bilingual profile of our informants. First, the density plot in *Figure 14* shows the BLP distribution across our participants. It is evident that the BLP score tends to be unbalanced towards Italian in the majority of our participants, as we expected. In addition, we observe that our sample misses participants with a high dialectal dominance.



Figure 14: density plot showing the BLP score distribution within the sample.

Given the above mentioned distribution, we divided our informants in four groups:

- Group 1 included subjects with a moderate dialectal dominance, namely with a BLP score ranging from -70 to -20 excluded (see §4.1.2.2 for further details about the scoring);
- Group 2 included subjects with no dominance, i.e. with a BLP score ranging from -20 to 20 excluded;
- Group 3 included informants with a moderate Italian dominance, namely with a BLP score ranging from 20 to 70 excluded;
- Group 4 included participants with a high Italian dominance, i.e. with a BLP score ranging from 70 to 150.

In *Figure 15*, we clearly see that the most numerous group is the one with a high Italian dominance.



Figure 15: BLP groups in the sample: [-70, -20) moderate dialectal dominance; [-20, 20) no dominance; [20, 70) moderate Italian dominance; [70, 150] high Italian dominance.

Moreover, for a better understanding of the scale that we are adopting we may ask which of the sociolinguistic variables of our interest (age, education and gender) has a correlation with the BLP score. In order to answer this question, we first have a look at the distribution of the BLP across age groups, education groups, and gender groups. Then, we see if we can find some correlation between these independent variables and the BLP score.

First, from *Figure 16* we see that the medians for the first two age groups ([20, 40) and [40, 60)) are almost identical, as well as the maximum value, the first and the third quartile. The only noticeable difference is that the second group displays slightly lower values that fall below the zero. As for the third group ([60, 80]), it displays the lowest values, which however differentiate them significantly only from the first group. The overall visual impression is that BLP score tends to decrease in old age. However, running a *Spearman's rank* 

*correlation test* (see *Figure 17*) we observe that the negative correlation between the BLP score (the dependent variable) and age (the independent variable) is neither particularly strong, nor statistically significant ( $\rho$ =-0.2, *p*=0.19). Thus, we did not find an effect of age on the BLP at the level of the population.



*Figure 16: boxplot showing the distribution of the BLP score across the age groups within the sample.* 



*Figure 17: scatterplot showing a negative correlation between the BLP score and age*  $(\rho=-0.2, p=0.19)$ 

Second, from *Figure 18* we notice that the BLP score tends to increase with the level of education too. The only exception to this trend may be seen comparing the "Bachelor's" with the "Master's" and "PhD" groups. This may be related to the fact that the three-level system of higher education (Bachelor's,

Master's and PhD) was introduced in most European countries with the so-called Bologna Process in 1999. Therefore, the "Bachelor's" group may include younger people, who generally tend to have an Italian-speaking profile (at least in our sample).



*Figure 18: boxplot showing the distribution of the BLP score across the levels of education within the sample.* 

Third, in *Figure 19* we see that the BLP score distribution is characterized by lower values for men than for women. Our hypothesis is that this may be due to a difference in terms of language attitudes towards the local variety. The source of this difference could be verified in future research.



Figure 19: boxplot showing the BLP distribution across the gender groups within the sample.

Finally, in order to test for the influence of education and gender on the BLP score we run a two-way ANOVA-test<sup>54</sup>, which yielded a significant mean effect for both education (F(4, 33)=4.8, p =0.004) and gender (F(1,33)=7.901, p=0.008)<sup>55</sup>. However, the interaction effect was not significant (F (4, 33) = 0.775, p=0.549). Post hoc analysis using the Holm post hoc criterion for significance indicated that the mean difference was significantly higher between the middle school and the PhD groups (p=0.012) and between the middle school and Bachelor's degree groups (p=0.022). As for gender, the same post hoc analysis yielded a significant mean difference between men and women (p=0.008).

In conclusion, the bilingual profile of the informants, tested through our adaptation of BLP scale, seems to be significantly correlated with gender and education<sup>56</sup>, displaying higher values for women and for higher levels of education. Moreover, it tends to decrease in old age, even though this trend might not be remarkably significant at the level of the population. Overall, this statistical evidence shows that the BLP score does not just provide information about language dominance, but is also correlated to several sociolinguistic and background variables that affect the linguistic profile. This is why, as we will see in §4.1.4., the sociolinguistic variables of our interest are not explicitly included in our analysis. On the contrary, they are interpreted considering their correlation with the BLP score.

#### 4.1.2 Materials

This section describes the questionnaire used to answer our research questions. Each sub-section describes a specific part of the survey in order of administration.

#### 4.1.2.1 Socio-demographic questions

This first battery of questions had the purpose to control for our sociolinguistic variables of interest. In *Figure 20* we show the questions in order of administration. As you can see, we assessed the degree of education, the occupation field and the area of current or past residence within the province of Ferrara.

<sup>&</sup>lt;sup>54</sup> This test was run using the JASP statistical software (v. 0.14.1.0; JASP Team, 2020).

<sup>&</sup>lt;sup>55</sup>A necessary condition to run the ANOVA is that after grouping the continuous dependent variable (which is the BLP score in our case) on the independent variables the number of observations must not be < 2. For this reason, we included the single informant having the lowest level of education (namely primary school, as you see back in *Figure 11*) in the subsequent group, thus considering only 5 levels of education (middle school, high school, bachelor's degree, master's degree and PhD). Moreover, we checked both for the normality assumption and for the homogeneity of variance prior to running the test.

<sup>&</sup>lt;sup>56</sup> Previous studies on the non-standard variety spoken in Cyprus (i.e. Cipriot Greek) have proved the role of gender and education in determining the rates of use of dialectal forms in spontaneous production (see for instance Tsiplakou et al, 2016). These results are coherent with ours.

## (1) Anno di nascita

'Year of birth'

## (2) Genere

- 'Gender'
  - o Uomo 'man'
  - Donna 'female'
  - o Altro 'other'

## (3) Titolo di studio

'Level of education'

- o Licenza elementare 'Elementary school'
- o Licenza media inferiore 'Middle school'
- o Licenza media superiore (o equivalente) 'High school (or equivalent)'
- o Laurea Triennale 'Bachelor's degree'
- Laurea Specialistica, Magistrale o di Vecchio ordinamento 'Master's degree'
- Diploma di Specializzazione o Dottorato di ricerca 'Postgraduate course or Ph.D'

## (4) Ambito occupazionale

'Occupation field'

- Agricoltura 'agriculture'
- o Artigianato 'craftsmanship'
- Arte (musica, teatro, pittura, letteratura) 'Art (music, theatre, painting, literature)'
- o Commencio 'trade'
- o Lavoro dipendente 'dependent employment'
- o Imprenditoria 'business'
- Insegnamento 'teaching'
- o Libera professione 'freelance'
- o Ricerca 'research'
- o Studio 'study'
- Altro (specificare) 'other (specify)'

(5) In che zona/e di Ferrara o della provincia di Ferrara vive o ha vissuto? 'In which area/s of Ferrara or of the province of Ferrara do you live/have you lived?'

Figure 20: battery of socio-demographic questions in order of administration.

On the one hand, questions (3) and (4) were inserted in the questionnaire in order to assess the level of education of the informants, as well as to have an idea of their societal stratum. On the other hand, question (5) was included in order to assess diatopic variation.

While reflecting on the results we judged question (4) less interesting for our research purposes and decided to leave it out from our statistical analysis. As noted by Ash (2013: 419), "Researchers interested in linguistic variation and change have been wrestling with the problems of defining and implementing the notion of social class as long as they have been studying the social embedding of language". Nevertheless, "there is as yet very little contact between sociolinguists and sociologists, nor has there been systematic study of social class itself within the field of sociolinguistics, and the use of the variable of social class is still quite mechanical and naive in the hands of many researchers". In our case, we did not conduct an in-depth study of the local linguistic marketplace and labour market. This would be necessary in order to set an index that relates certain occupations with a particular societal stratum, which hopefully (but not necessarily) would correspond to a certain bilingual profile. Despite this issue could be interesting to solve in future sociolinguistic research, we prioritized other aspects of the study.

#### 4.1.2.2 BLP: adaptation and scoring

As we already said, the bilingual profile of the informants was obtained through an adaptation of the *Bilingual Language Profile* (BLP) scale (Birdsong, Gertken, and Amengual 2012). This consists in an instrument for assessing language dominance through self-report. Taking into account four different aspects of the participant's language experience (namely language history, language use and exposure, linguistic competence, and linguistic attitudes), the BLP allows obtaining a continuous dominance score given by the average scores on all four measures of the two languages. While adapting the BLP scale, our reference was the Italian vs English version.

The BLP has already been used in bilectal environments without any adaptation. This is the case, for instance, of Grohmann and al. (2017), who assessed the BLP of both a group of Sardinian/Italian adult speakers and of a group of monolingual Italians. Nevertheless, the goal of our adaptation was trying to take into account our intuition that in a bilectal environment the point of balance should not be the zero. This is particularly true for micro-diglossic areas such as Emilia-Romagna, where we expect the bilingual profiles to be particularly unbalanced towards Italian.

Of course, this adaptation has some limits. In fact, we did not have enough time to validate an official version of the BLP scale for bilectal environments, a question that still has to be discussed and researched into. Moreover, some questions were eliminated for mere reasons of space (i.e. we were concerned about not making the questionnaire too long). Therefore, one might claim that a better alternative to our solution would have been using the official BLP scale and reducing the experimental items. All this considered, the results from our study should be taken with caution, as well as used as a starting point to plan a more precise and reliable scale in future. While the BLP includes 19 questions, we decided to select only 14 of them, which we considered being the most relevant ones for our research purposes. To these questions, we added one more, resulting in 15 questions overall. Let us now examine how we adapted every section one by one.

In the section dedicated to the language history of the participant we asked for: (i) the age of acquisition of both languages; (ii) the number of years spent in a country or city where the two languages are spoken; (iii) the number of years spent in a family or work environnement where the two languages are spoken. Then, we decided to leave out question 2 of the original BLP scale, asking at what age the participants started to feel comfortable with the language. We made this choice for mere reasons of space. Moreover, question 3, which asked in which language the participants had classes during schooling, was left out too. Since the education system of Italy is completely Italian-centered, we considered it irrelevant. Furthermore, we added a question asking how many years the participants spent in a company of friends where one or the other language was spoken. In fact, throughout the BLP three contexts are under inquiry: family, the work environment, and the company of friends.

In the section dedicated to language use, we asked for the frequency of use (in terms of percentage of time) of each language in different contexts (family, work, with friends, with one's self). In this section we left out question 11 of the original BLP scale, asking how often (in terms of time frequency) the participants used to count in both languages. This was done, again, for mere reasons of space.

In the section dedicated to language proficiency, a ranking self-assessment on production and comprehension verified the linguistic competence in both languages. With respect to the original version of the BLP, we decided to leave out questions 14b and 15b relative to writing and reading skills in Ferrarese, since, as we already noted, no one received education in this dialect. As writing and reading skills in Italian could not be evaluated independently while scoring the results, questions 14a and 15a (even though present in the questionnaire) were erased from the results.

Finally, the section reserved to language attitudes was not subjected to changes.

Since, as we said, we changed the number of questions, the scoring process was subject to changes too. According to the original version, the points obtained for each module have to be multiplied for a factor that allows all the sections to have the same weight in the final score. Of course, these factors had to be changed according to the number of points obtained in the new selections, with the aim of reaching the same maximum amount of points reachable in the original BLP scale (i.e. 218). After obtaining a score for both languages, the language dominance index is obtained subtracting one language total from another. We resume in **Table 13** the scoring process. As you can see, we subtracted the partial BLP score for Ferrarese to the partial BLP score for Italian and interpreted the final dominance indexes referring to the group division introduced in §4.1.1.2 (see *Figure 15*).
BLP	Bilingual profile Italian-Ferrarese
Language history	Language history
$1 = \max 20 \text{ pt.}$	$1 = \max 20 \text{ pt.}$
$2 = \max 20 \text{ pt.}$	$4 = \max 20 \text{ pt.}$
$3 = \max 20 \text{ pt.}$	$5 = \max 20 \text{ pt.}$
$4 = \max 20 \text{ pt.}$	$6 = \max 20 \text{ pt.}$
$5 = \max 20 \text{ pt.}$	# = question absent from the BLP, equal to
$6 = \max 20 \text{ pt.}$	5 and 6 with the context "friends". Max 20pt
Tot= 120 x 0.454 = 54,48pt	Tot= 100pt x 0,545 = 54,5pt
Language use	Language use
$7 = \max 10 \text{ pt.}$	$7 = \max 10 \text{ pt.}$
$8 = \max 10 \text{ pt.}$	$8 = \max 10 \text{ pt.}$
$9 = \max 10 \text{ pt.}$	$9 = \max 10 \text{ pt.}$
$10 = \max 10 \text{ pt.}$	$10 = \max 10 \text{ pt.}$
$11 = \max 10 \text{ pt.}$	
Tot= 50 x 1,09 = 54,5pt	Tot = 40 x1,362 = 54,48pt
Language proficiency	Language proficiency
$12 = \max 6 \text{ pt.}$	12= max 6 pt.
$13 = \max 6 \text{ pt.}$	13= max 6 pt.
$14 = \max 6 \text{ pt.}$	
15= max 6 pt.	
Tot = 24 x 2,27 = 54,48pt	Tot = 12x 4,54 = 54,48pt
Language attitude	Language attitude
$16 = \max 6 \text{ pt.}$	$16 = \max 6 \text{ pt.}$
$17 = \max 6 \text{ pt.}$	$17 = \max 6 \text{ pt.}$
$18 = \max 6 \text{ pt.}$	$18 = \max 6 \text{ pt.}$
$19 = \max 6 \text{ pt.}$	$19 = \max 6 \text{ pt.}$
Tot = 24 x 2,27 = 54,48pt	Tot 24 x 2,27 = 54,48pt

**Table 13:** scoring of our adaptation of the official BLP scale. The enumeration shows the correspondence between the questions inserted in our questionnaire and the official BLP scale.

**Total max score in each language:** 218

**Dominance index**  $\rightarrow$  partial BLP score Italian – partial BLP score Ferrarese = [-70,-20) moderate dialect dominance, [-20, 20) 0 dominance, [20, 70) moderate Italian dominance, [70,150] high Italian dominance.

## 4.1.2.3 Stimuli

The test was first created in Italian by Anna Cardinaletti, Giuliana Giusti and Gianluca Lebani and then translated by me in Ferrarese with the supervision of Anna Cardinaletti. It aims to test some of the semantic and syntactic properties of indefinite determiners in affirmative and CLLDed clauses. Some of the semantic traits listed in §2.2.2 and taken from Giusti (forthcoming), are not tested in order not to make the questionnaire too long. In fact, a too long questionnaire may cause loss of attention in the informants and lead them not to complete the answers.

The list of items was divided into three groups: target sentences, containing the structure that were relevant for the research, and two groups of fillers. These latter had a double aim. First, they prevented the informants from getting used to experimental items, thus creating automatic answering patterns or conscious response strategies. The first group of fillers was labelled as FILLPOS, as it consisted in a series of sentences including possessive adjectives in different syntactic positions. The second was labelled as FILLCL, since the sentences included accusative and quantitative clitics with restructuring verbs (e.g. modal verbs). In total, the full matrix contained: 192 target sentences, labelled as EXPERIMENTAL; 96 FILLER sentences. Each item was presented in both Italian and Ferrarese, thus obtaining the double amount of items (total = 384).

The sentences can be characterized along the following dimensions:

- The number labelling the competing sentences included in the same question. In total, the questions were 72.
- EXP (for experimental items) or FILL (for filler items). The filler sentences were also specified for the aspect they investigated (namely FILLPOS and FILLCL).
- Sentence type: base sentence (BASE), quantitative clitic (NE) and accusative clitic (LI) for the experimental items; prenominal position (PREN), zero adjective (ZERO) and postnominal position (PSTN) for FILLPOS; accusative singular (ACCSG), accusative plural (ACCSG) and partitive (PART) for FILLCL.
- Event type: habitual (HAB) or episodic sentences (EPIS) for the experimental items; modal (MOD) for filler items.
- Noun class: mass nouns (MASS) and plural count nouns (PL) for the experimental items; singular (SG) and plural (PL) for FILLPOS; human animate nouns (HUM) and inanimate nouns (INANIM) for FILLCL.
- Lexical entry: vino 'wine', carne 'meat', pesce 'fish', frutta 'fruits', funghi 'mushrooms', giornali 'papers', zucchine 'courgettes' and biciclette 'bicicles' for the experimental items; fratello 'brother', sorella 'sister' and cugina 'cusin(f)' for the experimental items; macchina 'car', cellulare 'mobile', ombrello 'umbrella', scarpe 'shoes', pantaloni 'trousers' and guanti 'gloves for FILLPOS'; posso '(I)can', voglio '(I)want', vado '(I)go' and devo '(I)must' for FILLCL;
- Type determiner: ZERO, ART, di, di+ART for the experimental items (these were indefinite determiners); ART and ZERO for FILPOSS. Since FILLCL did not include indefinite determiners, we can substitute them with the

position of the clitic pronoun: proclitic (PROCL), median (MEDANO), ZERO and enclitic (ENCL).

Each question included four possible answers. In the experimental sentences, each option displayed a different form for the indefinite determiner and multiple answers were allowed. However, an additional option labelled "other" was added to the Ferrarese version. Here, the informants could eventually signal further options or the unacceptability of all the options by adding text manually. If more than one option was considered acceptable, the informants were asked to say if there was any difference in meaning. If their answer was affirmative, they were asked to specify this difference by adding text. Finally, it is important to point out that only the answers were translated in Ferrarese, whereas the questions and the first introduction to the questionnaire were kept in Italian. On the one hand, the register of the first introduction was too high to be translated into a dialectal variety. On the other hand, the questions were kept in Italian to be coherent with the first introductive part.

For reasons of space, we will provide only one example for each category of items included in the test, in both Italian and Ferrarese:

- The first series of experimental items presented habitual base negative sentences in the present tense, which were grouped in eight multiple-choice questions. Among them, four displayed singular mass nouns and the other four plural count nouns (cf. (1a, b), example with a mass noun).
  - (1) a. Nella sua varietà di italiano si può dire (sono ammesse scelte multiple).

'In your variety of Italian, can you say (multiple choices are allowed)'

0	Sono astemio.	Non	bevo vino	
	(I)am teetotaller.	(I)not	drink wine	
0	Sono astemio.	Non	bevo il vino	
	(I)am teetotaller.	(I)not	drink ART wine	
0	Sono astemio.	Non	bevo di vino	
	(I)am teetotaller.	(I)not	drink di wine	
0	Sono astemio.	Non	bevo del vin	0
	(I)am teetotaller.	(I)not	drink di+ART with	ne

b. Nella sua varietà di ferrarese si può dire (sono ammesse scelte multiple)

'In your variety of Ferrarese, can you say (multiple choices are allowed)'

- A són astèmi. An bév brisa vìn I am teetotaller. I-not drink NEG wine
- A són astèmi. An bév brisa al vìn I am teetotaller. I-not drink NEG ART wine

0	A són astèmi.	An	bév	brisa	ad vìn
	I am teetotaller.	I-not	drink	NEG	di wine

- A són astèmi. An bév brisa dal vìn I am teetotaller. I-not drink NEG di+ART wine
- > 8 multiple choice questions displayed the same habitual sentences as the first series, but with CLLD and the quantitative clitic ne (cf. (2))

(2) a. Nella sua varietà di italiano si può dire (sono ammesse scelte multiple):
'In your variety of Italian, can you say (multiple choices are allowed)'

- Sono astemia. Vino non ne bevo (I)am teetotaller. Wine (I)not NE drink
- Sono astemia. ART vino non ne bevo (I)am teetotaller. The wine (I)not NE drink
- Sono astemia. *di* vino non ne bevo (I)am teetotaller. Of wine (I) not NE drink
- Sono astemia. del vino non ne bevo (I)am teetotaller. di+ART wine (I) not NE drink

b. Nella sua varietà di italiano si può dire (sono ammesse scelte multiple).

'In your variety of Italian, can you say (multiple choices are allowed)'

0	A són astèmi.	Vìn a	nin	bév	brisa
	I am teetotaller.	Wine CL.	NOM.1SG not+	NE drink	NEG
0	A són astèmi.	Al vìn	a	nin	bév brisa
	I am teetotaller.	ART wine	CL.NOM.1SG	not+NE	drink NEG
0	A són astèmi.	Ad vìn	a 1	nin b	év brisa
	I am teetotaller.	di wine	CL.NOM.1SG 1	not+NE d	rink NEG
0	A són astèmi.	Dal vìn	а	nin	bév brisa
	Tom to state 11 an	1: 1 1 1 1 1 1 1 1 1 1	a GL MONT 1G		duinte MEG

- I am teetotaller. di+ART wine CL.NOM.1SG not+NE drink NEG
- 8 multiple choice questions displayed the same habitual sentences as the first series, but with CLLD and the accusative clitic (cf. (3))
  - (3) a. Nella sua varietà di italiano si può dire (sono ammesse scelte multiple).
    'In your variety of Italian, can you say (multiple choices are allowed)'
    - Sono astemia. Vino non lo bevo (I)am teetotaller. Wine (I)not CL.ACC.3SG drink
    - Sono astemia. Il vino non lo bevo (I)am teetotaller. ART wine (I)not CL.ACC.3SG drink
    - Sono astemia. Di vino non lo bevo (I)am teetotaller. *di* wine (I)not CL.ACC.3SG drink

0	So (I)a	ono astemia. Del um teetotaller. <i>di</i> +AI	vino non RT wine (I)not	lo CL.ACC.3SG	bevo drink	
	1	<ul> <li>b. Nella sua varietà multiple).</li> <li>'In your variety of allowed)'</li> </ul>	di italiano si p Italian, can yo	uò dire (sono u say (multip	ammesse le choices	scelte are
	0	A són astèmi. I am teetotaller. brisa NEG	Vìn an Wine CL.NOM.	al 1SG+not CL	b ACC.3SG di	év rink
	0	A són astèmi. I am teetotaller. bév brisa drink NEG	Al vin an ART wine CL.	NOM.1SG+no	al t CL.ACC.3	SG
	0	A són astèmi. I am teetotaller. brisa NEG	Ad vìn an <i>di</i> wine CL.N	IOM.1SG+not	al CL.ACC.3	bév SG drink
	0	A són astèma. D I am teetotaller. di brisa	al vìn an HART wine CL	NOM.1SG+no	al ot CL.ACC.	bév 3sG drink

- NEG
- The second series of items presented episodic negative sentences in the past tense, which were grouped into eight multiple-choice questions. Among them, four displayed singular mass nouns and the other four plural count nouns (cf. (4) example with the same mass noun).

(4) a. Nella sua varietà di italiano si può dire (sono ammesse scelte multiple).
'In your variety of Italian, can you say (multiple choices are allowed)'

0	Ieri no	n ho	bevuto vii	no.
	Yesterday (I)r	ot hav	e drunk wi	ine
0	Ieri no	n ho	bevuto il	vino.
	Yesterday (I)r	ot hav	e drunk ART	wine
0	Ieri no	n ho	bevuto di v	ino.
	Yesterday (I)r	ot hav	e drunk <i>di</i> v	vine
0	Ieri no	n ho	bevuto del	vino.
	Yesterday (I)r	ot hav	e drunk di+A	ART wine

b. Nella sua varietà di ferrarese si può dire (sono ammesse scelte multiple)

'In your variety of Ferrarese, can you say (multiple choices are allowed)'

0	Iér,	an	ho	brisa	buèst vìn
	Yesterday	CL.NOM.1SG+not	have	NEG	drunk wine

- Iér, an ho brisa buèst al vìn Yesterday CL.NOM.1SG+not have NEG drunk ART wine
- o Iér, an ho brisa buèst ad vìn
- Yesterday CLNOM.1SG+not have NEG drunk di wine
- lér, an ho brisa buèst dal vìn Yesterday CL.NOM.1SG+not have NEG drunk di+ ART wine
- > 8 multiple choice questions displayed the same episodic sentences as the second series, but with CLLD and the quantitative clitic ne (cf. (5))
  - (5) a. Nella sua varietà di italiano si può dire (sono ammesse scelte multiple).

'In your variety of Italian, can you say (multiple choices are allowed)'

• Ieri, vino non ne ho bevuto. Yesterday wine not NE have drunk

• Ieri, il vino non ne ho bevuto. Yesterday ART wine not NE have drunk

- Ieri, di vino non ne ho bevuto. Yesterday *di* wine not NE have drunk
- Ieri, del vino non ne ho bevuto. Yesterday di+ART wine not NE have drunk

b. Nella sua varietà di ferrarese si può dire (sono ammesse scelte multiple)

'In your variety of Ferrarese, can you say (multiple choices are allowed)'

- Iér, vìn an n' ho brisa buèst Yesterdaywine CL.NOM.1SG+not ne have NEG drunk
- Iér, al vin an n' ho brisa buèst YesterdayART wine CL.NOM.1SG+not ne have NEG drunk
- $\circ$  Iér, ad vin an n' ho brisa buèst Yesterday *di* wine CL.NOM.1SG+not ne have NEG drunk
- Iér, dal vìn an n' ho brisa buèst Yesterday di+ART wine CL.NOM.1SG+not ne have NEG drunk
- ➢ 8 multiple choice questions displayed the same episodic sentences as the second series, but with CLLD and the accusative clitic (cf. 6))
  - (6) a. Nella sua varietà di italiano si può dire (sono ammesse scelte multiple).
    'In your variety of Italian, can you say (multiple choices are allowed)'
    o Ieri, vino non l' ho bevuto.
    - Ieri, vino non l' ho bevuto.
       Yesterday wine not CL.ACC.3M.SG have drunk

- Ieri, il vino non l' ho bevuto. Yesterday ART wine not CL.ACC.3M.SG have drunk
- Ieri di vino non l' ho bevuto. Yesterday *di* wine not CL.ACC.3M.SG have drunk
- $\circ$  Ieri, del vino non l' ho bevuto. Yesterday di+ART wine not CL.ACC.3M.SG have drunk

b. Nella sua varietà di ferrarese si può dire (sono ammesse scelte multiple)

'In your variety of Ferrarese, can you say (multiple choices are allowed)'

- Iér, vìn an l' ho brisa buèst
   Yesterdaywine CL.NOM.1SG+not CL.ACC.3M.SG have NEG drunk
- Iér, al vìn an l' ho brisa buèst Yesterday the wine CL.NOM.1SG+notCL.ACC.3M.SG have NEG drunk
- Iér, ad vìn an l' ho brisa buèst Yesterday *di* wine CL.NOM.1SG+not CL.ACC.3M.SG have NEG drunk
- lér, dal vìn an l' ho brisa Yesterday di+ART wine CL.NOM.1SG+not CL.ACC.3M.SG have NEG buèst drunk
- ➢ FILPOS were grouped in 12 multiple-choice questions. Among the answers, each of the four options displayed one of the features that we have mentioned above (PREN, ZERO PSTN). In particular, there were two PREN (one with ART and one with ZERO) one ZERO and one POSTN (both with ART) (cf. (7)).
  - (7) a. Nella sua varietà di italiano si può dire (sono ammesse scelte multiple).

'In your variety of Italian, can you say (multiple choices are allowed)'

- Questa è Giovanna. Conosci suo fratello? This is Giovanna. (you)know her.M.SG brother
- Questa è Giovanna. Conosci il suo fratello? This is Giovanna. (you)know the.M.SG her.M.SG brother
- Questa è Giovanna. Conosci il fratello? This is Giovanna. (you)know the.M.SG brother
- Questa è Giovanna. Conosci il fratello suo? This is Giovanna. (you)know the.M.SG brother her.M.SG

b. Nella sua varietà di ferrarese si può dire (sono ammesse scelte multiple)

'In your variety of Ferrarese, can you say (multiple choices are allowed)'

• Questa l' è la Giuàna. Gnós-at so brother This CL.NOM is the Giovanna. Know-CL.NOM.2SG her. fradèl?

- Questa l' è la Giuàna. Gnós-at al This CL.NOM is the Giovanna. Know-CL.NOM.2SG the.M.SG so fradèl? her.M.SG brother
- Questa l' è la Giuàna. Gnós-at al This CL.NOM is the Giovanna. Know-CL.NOM.2SG the.M.SG fradèl? brother
- Questa l' è la Guàna. Gnós-at This CL.NOM is the Giuàna. Know-CL.NOM.2SG al fradèl so? the.M.SG brother her.M.SG
- FILCL were grouped in 12 multiple choice questions, of which 4 had ACCSG clitics, 4 ACCPL clitics and 4 PART. Among the answers, each of the four options displayed one of the features that we have mentioned above (PROCL, MEDIANO, ENCL AND ZERO). (cf. (8)).
  - (8) a. Nella sua varietà di italiano si può dire (sono ammesse scelte multiple).
    'In your variety of Italian, can you say (multiple choices are allowed)'
    - Carlo, lo posso accompagnare al cinema Charles,(I) CL.ACC.3M.SG can take to-the cinema questa sera? this evening
    - Carlo, posso lo accompagnare al cinema Charles, (I)can CL.ACC.3M.SG take to-the cinema questa sera this evening
    - Carlo, posso accompagnarlo al cinema questa sera Charles, (I)can take-CL.ACC.3M.SG to-thecinema this evening
    - Carlo, posso accompagnare al cinema questa sera Charles, can take to-the cinema this evening

b. Nella sua varietà di ferrarese si può dire (sono ammesse scelte multiple)

'In your variety of Ferrarese, can you say (multiple choices are allowed)'

- Carlo, al pòs cumpàgnar al cinema sta Charles CL.NOM+CL.ACC.3M.SG can take to-thecinema this sira evening
- Carlo, a pòs al cumpagnàral cinema Charles CL.NOM can CL.ACC.3M.SG take to-thecinema sta sira this evening

- $\circ$  Carlo, pòs cumpagnàral al cinema sta а take+CL.ACC.3M.SG to-the cinema this Charles CL.NOM can sìra evening Carlo, pòs cumpagnàr al cinema sta sira 0 а
- Charles CL.NOM can take to-the cinema sta sira

## 4.1.3 Procedure

Through the web-based tool *Qualtrics* (Qualtrics 2020) we built an online interface for collecting linguistic judgments from our participants.

First, we created a brief written introduction to the questionnaire, explaining the structure and mentioning the research project to which the data would contribute. In doing so, we stressed that our aim was not to do an assessment of the participants' linguistic competence, but rather to understand some linguistic phenomena. Furthermore, the participants were informed about the possibility to choose more than one option, to signal other variants or even the unacceptability of all options. Finally, we communicated the approximate duration of the questionnaire. However, we did not clarify the specific phenomena of our interest (namely the expression of indefiniteness) in order not to bias the answers.

After the introduction, we inserted the socio-demographic questions, and the the questions adapted from the BLP scale. In order to proceed to the next section, the participants had to press a blue arrow on the down left corner of the screen. We show in *Figure 21-24* how the interface looked like.

	Prima di cominciare, vorremmo conoscerla meglio. Vorremmo informarci su		A quanti a	nni ce	omino	iò a p	arlare	le segu	ienti lii	ngue?							
	Anno di nascita		Italiano Ferrarese		1 2 0 0	3 4 0 0 0 0	5 0	578 000 000	9	10 11 O C O C	12 O O	13 1 O ( O (	4 15 0 0	16 O O	17 O O	18 1 O C O C	
	Genere		Quanti anr	i ha tr	ascor	so in u	n paes	se/città	il cui s	parlar	o e se	guenti	lingue	7		•	
	donna		Italiano	1	23	4 5	6	7 8 9		11 1	2 13	14	15 1	6 17	18	19	
m	uomo	1	Ferrarese	0 (	00	00	00		0	0 0	00	0	0 0	0	0	0	
Ų	Altro (specificare)		In una sett contesti?	mana	norm	ale, in	che pe	ercentua	ale (di t	empo)	fa uso	dell'it	aliano	nei se	guen	, ti	
			In famiglia		0% O	10% O	20%	30% O	40% O	50% O	60% O	70%	80%	90%	100	)%	
			Al Lavoro		0	0	0	0	0	0	0	0	0	0	0		
			Con ĝli Am	ICI	0	0	0	0	0	0	0	0	0	0	C	,	

Figure 21: Qualtrics interface with the first socio-demografic questions (see §4.1.2.1.).

Figure 22: Qualtrics interface with some BLP questions from the sections "language history" and "language use" (see §4.1.2.2.)



 Per me è importante usare il ferrarese a livello nativo

 9 mon d'accordo
 1
 2
 3
 4
 5
 6=sono d'accordo

 Per me è importante che gli altri pensino che io sia un madrelingua italiano

 9 mon d'accordo
 1
 2
 3
 4
 5
 6=sono d'accordo

 9 mon d'accordo
 1
 2
 3
 4
 5
 6=sono d'accordo

 9 mon d'accordo
 1
 2
 3
 4
 5
 6=sono d'accordo

 9 mon d'accordo
 1
 2
 3
 4
 5
 6=sono d'accordo

Figure 23: Qualtrics interface with some BLP questions from the section "language proficiency" (see §4.1.2.2.)

Figure 24: Qualtrics interface with some BLP questions from the section "language attitudes" (see §4.1.2.2.).

Then, we transferred the items of the questionnaire from the spreadsheet into *Qualtrics*. We randomized the questions and divided them in two distinct blocks, one dedicated to Italian and the other to Ferrarese. The order of the two blocks was randomized too. We show in *Figure 25* how the interface appeared.

A són vegetarián. La	càran a nin màon brisa.	
A són vegetariàn. Dia	a càran a nin màgn brisa.	
A són vegetariàn. Ad	càran a nin màgn brisa.	
A són vegetarián. Cár	ran a nin màgn brisa.	
Altro (specificare)		
Ha selezionato più di	una risposta. C'è una differenza tra queste?	
No		
Puỏ brevemente spiej	garci la differenza tra le sue scelte?	

Figure 25: Qualtrics interface with an example of acceptability judgment.

Each informant had to choose the sentence (or sentences) that they considered acceptable. If they chose more then one option, additional questions asking for possible specialization of meaning appeared. Finally, to proceed to the next question the informants had to press the blue arrow on the down left corner of the screen. After finishing the first block of questions (either in Italian, or in Ferrarese), the participants were shown the link to the second block, which included the randomized questions in the remaining language. Here we added a message asking either to save the link for a future moment, or to write their e-mail address and receive the link after sending the answers (which was done, again, by pressing the blue arrow on the down left corner of the screen). If the second option was chosen, the software erased the e-mail address immediately after sending the link. This passage guaranteed the safeguard of the participants' privacy.

The link was authomatically generated by the software and contained the subject-id associated to that individual participant. In *Figure 26* we show the interface containing the link and the final instructions. The latter suggested to fill in the the second part of the questionnaire (namely the second block of questions) after a few days, with the aim to reduce interference between the two languages.



Figure 26: Qualtrics interface including the final message and the link to the second part of the questionnaire.

Each part of the questionnaire (one in Italian, the other in Ferrarese) lasted around 30 minutes, with individual variations depending on the accuracy of the answers and the presence of additional remarks. The first part lasted around 10 minutes more, given the presence of the initial socio-demographic and BLP questions. The questionnaire was disseminated through several social network platforms. In particular, I shared the link of the questionnaire and added a brief message in order to target my audience. This method allowed me to reach as many informants as possible. However, I reserved a special treatment to a restricted group of people, to which I administered the questionnaire in person. This group consisted principally in older people that might not be practical with web surfing. In this case, the interviews took place in a quiet setting (usually the house of the informants) in a relaxed context, as if we were doing a normal conversation. I read the questions aloud, and the informants had to spell out the options that they considered acceptable, as well as to explain the possible differences in meaning. If needed, I showed them the script on a mobile device, so that they could read the sentences by themselves. Due to the COVID-19 emergency, I took all the precautions needed, wearing a mask and keeping an appropriate distance.

### 4.1.4 Statistical analysis

Our statistical analysis was conducted in  $R^{57}$  (v. 4.0.2; R Core Team, 2020) and was organized as follows.

First, we ran some descriptive statistics in order to have some insights into how our data (i.e. the judgments of our participants) were distributed. In particular, we examined the acceptance rate of the indefinite determiners in the different contexts of our interest (i.e. in the two languages, across BLP groups, levels of education and age groups, in simple and CLLDed sentences with accusative and quantitative clitics, according to clause type and noun type). These descriptive statistics can already give us information about possible interference between the two languages in our sample. However, they do not make any prediction about the linguistic behavior of the population.

Second, we ran a *mixed effect logistic regression*, an inferential statistical model used to predict the probability of one or more independent explicative variables (i.e. the language of the questions, the determiner type, the BLP score, clitic type, noun type and clause type) to have an effect on a binary dependent variable (i.e. our collected acceptability judgments in the form of 1=acceptable, 0= not acceptable). A mixed model is able to take into account the existent correlation between repeated measures and a single subject. In particular, this kind of model is composed by two main elements: the *fixed effects*, namely those factors that are constant among the participants (i.e. the explanatory variables of our interest), and the *random effects*, namely those factors that variate among the participants (i.e. the fact that a certain participant tends to give more negative or positive judgements, the time spent to answer etc.). In order to establish the best combination of random and fixed effects that is able to predict the participant's judgements, we ran a hierarchical regression. For the random effects, we proceeded with a Type I ANOVA, which compares the nested models through a

<sup>&</sup>lt;sup>57</sup> Thethe main packages used in our analysis were: sjPlot package for the graphs (v. 2.8.7; Lüdecke, 2021); lme4 package for the mixed regression model (v. 1.1-25; Bates et al., 2015); emmeans package to calculate the estimated marginal means (v. 1.5.3; Searle et al., 1980); vcd package for the mosaicplots (v.1.4-8; Meyer, Zeileis and Hornik, 2020).

likelihood ratio test. Then, before focusing on the fixed effects, we checked for the presence of collinearity<sup>58</sup> among our variables of interest. Since we had predictors with more than two degrees of freedom, we used the Generalized Variance Inflation Factor (GVIF) proposed by Fox and Monette (1992).<sup>59</sup> Afterwards, we modelled all the possible interactions that involved the variables "type of determiner" (DET) and "type of language" (QUESTION\_LANGUAGE). These interactions included the following variables: the BLP scaled and centered (scaled(BLP)), clitic type (CLITIC), noun type (NOUN) and clause type (EVENT). After defining our model, we proceeded with its validation by identifying and removing the outliers, by evaluating its goodness of fit. Finally, we analysed the relationship between the single predictors or combinations of predictors and the participant's judgements. This was done by looking at the estimated marginal means for the probability of acceptability of the different determiner types in the contexts defined by the explicative variables. Through pairwise comparison of the estimates, we detected possible significant differences.

To conclude, we focused on optionality of determiner choice and possible specialization of meaning. First, we looked at the proportion of participants that selected only one option or more than one option, as well as at the proportion of those that signalled or did not signal a semantic difference among the chosen determiners. Then, we ran a *Pearson's Chi-squared*  $(X^2)$  test, which is an inferential statistical test used to verify the probability of any observed difference between two categorical variables to have arisen by chance. This is done by comparing the expected value under the hypothesis of a random phenomenon with the observed value assumed by the variable of interest. In our case, the results of the above-mentioned test allowed us to identify the combinations of determiners that are the most likely not to have arisen by chance. This is done examining the *Pearson residuals*, which constist in "the difference between each cell's observed minus its expected frequency, divided by the square root of the expected frequency. If a Pearson residual is positive/negative, then the corresponding observed frequency is greater/less than its expected frequency. Second, the more the Pearson residual deviates from 0, the stronger that effect." (Gries, 2013:326). Finally, in order to test for possible specialization of meaning, we examined (when present) the individual open answers of our informants.

## 4.1.5 Ethical issues

A responsible conduct of research is fundamental in order to guarantee the integrity, respect of the authorities and safeguard of the participant's privacy. We briefly list here the precautions we took in order to conduct a responsible research.

<sup>&</sup>lt;sup>58</sup> We talk about collinearity (or multicollinearity) when there is a high correlation between two or more predictors. This would produce unstable regression coefficients and unreliable t-test statistics.

<sup>&</sup>lt;sup>59</sup> The practical interpretation rule of this measure of collinearity is that  $\text{GVIF}^{2(1/(2 \times \text{Df}))}$  must be less than two.

First, before starting the test, the participants were informed about data treatment, as well as about the anonymousness of the questionnaire. Moreover, each participant was given the possibility to refuse their participation or interrupt the compilation at any time.

As far as authorities are concerned, we guarantee that each passage of the research project was supervised and agreed on by the supervisor and assistant supervisors, which were mentioned in the work every time necessary.

# 4.2 Results

# 4.2.1. Judgments' distribution: the acceptance rates

Let us start by looking at some descriptive graphs showing the general distribution of our participants' judgments in both Italian and Ferrarese.

First, *Figure 27* shows that while in Italian the higher acceptance rate is attested for ZERO and ART, in Ferrarese dialect it is attested for ART and di+ART. In **Table 14** we show the acceptance rates of each determiner in the two languages.

Table 14: acceptance rates of each determiner in Italian and Ferrarese.

	Ø	art	di+art	di
Italian				
	0.42	0.45	0.17	0.12
Dialect				
	0.15	0.38	0.38	0.08



Figure 27: barplot showing the overall acceptance rates of indefinite determiners in Italian and Ferrarese.

Then, *Figure 28, 29 and 30* show the acceptance rates of indefinite determiners in different education levels, BLP groups and age groups. While commenting on these graphs, we pay particular attention to the acceptance rates of ZERO and di+ART. In fact, the former is expected to be an Italian feature, and the high acceptability of the latter a dialectal feature.

First, in *Figure 28* we notice a substratum interference into Italian for people with a low level of education, who display a significantly higher acceptability rate for di+ART than the Ph.D group (0.52 vs 0.17). Moreover, we notice the interference of Italian into the dialect in informants belonging to the Ph.D group, who show the highest acceptability rate for the zero article in Ferrarese (0.46). The same interference of Italian into the dialect does not regard di+ART. In fact, in Ferrarese we see a high acceptability for di+ART in the PhD group too (0.66 for the Ph.D group, 0.72 for the lowest level of education). In **Table 15** we report the acceptance rates of each determiner in all levels of education.

	Secondary School	High School	Bachelor	Master	Ph.D.
Italian					
Ø	0.58	0.48	0.52	0.45	0.50
art	0.74	0.47	0.64	0.52	0.54
di+art	0.57	0.16	0.14	0.17	0.18
di	0.10	0.12	0.11	0.18	0.17
Ferrarese					
Ø	0.31	0.13	0.16	0.21	0.46
art	0.66	0.45	0.53	0.51	0.55
di+art	0.73	0.48	0.54	0.40	0.66
di	0.11	0.11	0.28	0.15	0.05

**Table 15:** acceptance rates of indefinite determiners in Italian and Ferrarese across the levels of education.



*Figure 28: barplot showing the acceptance rate of indefinite determiners across levels of education.* 

Then, in Figure 29, we see that in Ferrarese the highest acceptance rate for di+ART is found in the groups with a balanced bilingualism (0.68) and with a moderate dialectal dominance (0.57). In Italian, the highest acceptance rate of the same determiner is found in the balanced group (0.38), with the lowest corresponding to the group with a high Italian dominance (0.12). Therefore, the distribution of our data shows interference of Italian into the dialect for the groups with the highest Italian dominance. On the contrary, substratum interference into Italian in the group with a moderate dialectal dominance is not detectable. Nevertheless, this apparent inconsistency with our expectations may be due to the fact that the group with dialectal dominance was considerably less numerous than the other groups (see Figure 15, §4.1.1.2). Thus, we expect to have a different outcome in the following mixed effect logistic regression analysis (§2.2.2), which will consider the BLP score as a continuous variable, scaled and centered on the mean value. However, interference between the two languages is detectable only analysing the acceptance rates for di+ART. In fact, no significant differences are found for the ZERO, in both Italian and Ferrarese. In **Table 16** we show the acceptance rates for each group.

	1			0 1
	[-70,-20)	[-20,20)	[20,70)	[70,150]
Italian				
Ø	0.60	0.56	0.44	0.50
art	0.63	0.53	0.56	0.50
di+art	0.22	0.39	0.23	0.12
di	0.05	0.16	0.18	0.13
Ferrarese				
Ø	0.20	0.28	0.19	0.19
art	0.64	0.51	0.63	0.42
di+art	0.57	0.68	0.47	0.48
di	0.11	0.16	0.07	0.12

Table 16: acceptance rates of indefinite determiners across the BLP groups.



*Figure 29: barplot showing the acceptance rate of indefinite determiners across the BLP groups.* 

Finally, in *Figure 30* we see that the zero, similarly to ART, seems to be slightly more accepted in old age, in both Italian and Ferrarese. No significant differences are found for di+ART in Italian, while in Ferrarese it appears to be slightly more accepted in the middle age group ([40,60)). In **Table 17** we show the acceptance rates for each group. Overall, these results show the absence of a significant effect of age in terms of interference between the two languages.

	[20,40)	[40,60)	[60,80]
Italian			
Ø	0.47	0.50	0.55
art	0.52	0.50	0.60
di+art	0.21	0.19	0.22
di	0.19	0.13	0.09
Ferrarese			
Ø	0.20	0.17	0.28
art	0.47	0.49	0.60
di+art	0.50	0.56	0.45
di	0.22	0.07	0.06

**Table 17:** acceptance rates of the indefinite determiners in Italian and Ferrarese across the age groups.



*Figure 30: barplot showing the acceptance rate of indefinite determiners across age groups.* 

Let us look now at the acceptance rate in the different contexts of our interest, namely in simple sentences, in CLLDed sentences with the accusative and the quantitative clitics, with different clause types (habitual vs episodic) and noun types (mass vs plural count).

In *Figure 31* we see that in simple sentences in Italian, the highest acceptance rate is found for the zero (0.75), followed by ART (0.6) and finally by di+ART, whose acceptability is considerably lower (0.25). On the contrary, in Ferarese ART and di+ART have almost the same acceptance rate (around 0.6), while the

zero is less accepted (0.25). The acceptability of bare di is almost null in both languages. Then, in CLLDed contexts with the accusative clitic (marked as LI), ART is the most accepted determiner in both languages. Nevertheless, the acceptance rate is higher in Italian (0.9) than in Ferrarese (0.65), where di+ART is accepted more frequently (0.1 in Italian vs 0.4 in Ferrarese). The acceptability of zero in this context is low in both Italian and Ferrarese (around 0.1). As for bare di, its acceptability is almost null in Italian and very low in Ferrarese (0.1). Finally, in CLLDed sentences with NE (marked as NE) the most accepted determiner in Italian is zero (0.6), contrary to Ferrarese, where di+ART bares the highest acceptance rate (0.6). In this same context, the acceptability of ART is slightly higher in Ferrarese (0.35) than in Italian (0.2), while the acceptance rate of bare di is higher in Italian (0.4) than in Ferrarese (0.2). In **Table 18** we show all the acceptance rates.

**Table 18:** acceptance rates of Italian and Ferrarese indefinite determiners in the different sentence types (BASE, LI and NE).

	BASE	LI	NE	
Italian				
Ø	0.74	0.13	0.61	
art	0.61	0.89	0.10	
di+art	0.26	0.11	0.24	
di	0.00	0.03	0.38	
Ferrarese				
Ø	0.29	0.13	0.19	
art	0.55	0.65	0.32	
di+art	0.58	0.38	0.57	
di	0.02	0.11	0.21	



*Figure 31: acceptance rate of indefinite determiners in Italian and Ferrarese in BASE, LI and NE sentences.* 

Finally, we can notice only little differences depending on clause type and noun type. In *Figure 32* we see that ART and zero are slightly more accepted in habitual than in episodic sentences in both languages. As for di+ART, in both Italian and Ferrarese it seems to be slightly more acceptable in episodic sentences. Then, in *Figure 33* we notice that di+ART in Ferrarese is slightly more accepted with mass nouns than with plural count nouns, while in Italian almost no difference is attested. In both languages, the zero is slightly more accepted with mass than with plural count nouns. Finally, ART displays the opposite tendency only in Ferrarese, while in Italian it is equally accepted with both. In any case, none of the observed differences depending on clause type and noun type seems to be significant in terms of magnitude. In **Table 19** and **Table 20** we show all the acceptance rates, for event type and noun type respectively.

**Table 17:** acceptance rates of indefinite determiners in Italian and Ferrarese habitual and episodic sentences.

	HABITUAL	EPISODIC
Italian		
Ø	0.48	0.52
art	0.51	0.55
di+art	0.23	0.18
di	0.15	0.13
Ferrarese		
Ø	0.17	0.23
art	0.50	0.52
di+art	0.53	0.50
di	0.12	0.11



Figure 32: acceptance rate of indefinite determiners in Italian and Ferrarese with habitual vs episodic event types.

	MASS NOUNS	PLURAL COUNT NOUNS
Italian		
Ø	0.52	0.47
art	0.53	0.53
di+art	0.22	0.19
di	0.13	0.14
Ferrarese		
Ø	0.23	0.18
art	0.48	0.54
di+art	0.56	0.47
di	0.10	0.13

**Table 20:** acceptance rates of indefinite determiners in Italian and Ferrarese with mass and plural count nouns.



Figure 33: acceptance rate of indefinite determiners in Italian and Ferrarese with different noun types (mass nouns vs plural count nouns).

#### 4.2.2. Probability of acceptability according to the best predictors

Let us now focus on the second part of our analysis, namely a logistic regression model. It allows us to esteem the probability of a negative or positive judgementjudgement<sup>60</sup> to occur depending on some explanatory variables, namely the best predictors among the independent variables of our interest.

As we can see from **Table 21**, the best regression model according to our hierarchical regression includes both the random intercept for the subjects and

 $<sup>^{60}</sup>$  The dichotomy positive (outcome 1) vs negative (outcome 0) corresponds to acceptable vs unacceptable.

the random intercept for the items<sup>61</sup>. Nevertheless, since we found that including the random intercept for the items causes a singular fit error (which means that there is not really a systematic effect coming from items), we do not need to specify a high-complicated model. Therefore, we are including only the random intercept for the subjects.

	npar <dbl></dbl>	AIC <dbl></dbl>	BIC <dbl></dbl>	logLik <dbl></dbl>	deviance <dbl></dbl>	Chisq <dbl></dbl>	Df <dbl></dbl>	Pr(>Chisq) <dbl></dbl>
Sbj intercept	2	20201.02	20216.45	-10098.51	20197.02	NA	NA	NA
Items intercept	2	21135.72	21151.14	-10565.86	21131.72	0.0000	0	NA
Random intercepts	3	20182.04	20205.17	-10088.02	20176.04	955.6816	1	7.721773e-210

 Table 21<sup>62</sup>.: results of the hierarchical regression for the random effects.

Let us now look at the fixed effects. In **Table 22** we see that all our predictors satisfy the collinearity condition. Moreover, the results in **Table 23** show that the best model includes the following interactions: DET-QUESTION\_LANGUAGE-CLITIC and DET-QUESTION\_LANGUAGE-scale(BLP). Given this result, the best model is defined as follows: judgement  $\sim$  DET \* QUESTION\_LANGUAGE \* scale(BLP) + DET \* QUESTION\_LANGUAGE \* CLITIC+ SUBJ\_INTERCEPT.

	GVIF	df	GVIF^(1/(2*df))
DET	1.002345	3	1.000390
QUESTION_LANGUAGE	1.000025	1	1.000012
scale(BLP)	1.000089	1	1.000044
CLITIC	1.002155	2	1.000538
NOUN	1.000088	1	1.000044
EVENT	1.000012	1	1.000006

Table 22: measures of collinearity of each variable included in our model.

<sup>&</sup>lt;sup>61</sup> In order not to reduce excessively our statistical power (which is already limited by the dimension of the sample and by the number of variables that are taken into consideration), we tested only the random intercept for the subjects and the random intercept for the items.

 $<sup>^{62}</sup>$  In **Table 19**, npar represents the number of parameters within the fitted model. AIC stands for *Akaike Information Criterion*, whereas BIC stands for *Bayesian Information Criterion*. They are both statistics that evaluate the goodness of fit of the model. Generally, one prefers models with low AIC and BIC values. Then, logLik is the divergence of the maximum likelihood function (namely, the sum of the log-p of the observed values). Deviance is another measure of goodness of fit: the smaller the deviance, the better the fit. Finally, we find the values resulting from the *chi-square test* (X<sup>2</sup>, degrees of freedom and the associated p-value).

	npar <dbl></dbl>	AIC <dbl></dbl>	LRT <dbl></dbl>	Pr(Chi) <dbl></dbl>
<none></none>	NA	14585.16	NA	NA
DET:QUESTION_LANGUAGE:scale(BLP)	3	14594.89	15.729153	1.288577e- 03
DET:QUESTION_LANGUAGE:CLITIC	6	15024.54	451.381381	2.475281e- 94
DET:QUESTION_LANGUAGE:NOUN	3	14584.90	5.738777	1.250345e- 01
DET:QUESTION_LANGUAGE:EVENT	3	14584.34	5.176377	1.593283e- 01

**Table 23:** results of the hierarchical regression for the fixed effects.

Let us proceed now with the validation of our model. In order to identify and remove possible outliers (which could influence the esteem of the parameters in our model), we decided to eliminate all the points whose standardized residuals<sup>63</sup> are more than 2.5 standard deviations distant from the zero (see Baayen, 2008: 257). Overall, we identified and removed 135 outliers through the *data filtered* function. Then, we calculated the parameter estimates for the fixed effects (shown in **Table 24**) and for the subjects (shown in *Figure 34*).

 $<sup>^{63}</sup>$  The residual is defined as the difference between the data response and the fitted response. Thus, they indicate a discrepancy between the prediction of the model and the observed response. The standardized residual is the residual divided by its standard deviation. According to Christensen (1997), if the residuals in a binary logistic regression have been standardized, their expected value of standardized residuals should stay within ±2. Outside of this range, they can be considered as outliers.

	Estimate	Std.	z-value
		error	
(Intercept)	0.33015	0.16098	2.051
DETDI	-7.34677	0.98289	-7.475
DETDI+ART	0.13570	0.11694	1.160
DETZERO	-1.31044	0.12385	-10.581
QUESTION_LANGUAGEItalian	0.23533	0.11730	2.006
scale(BLP)	-0.42182	0.14738	-2.862
CLITICLI	0.46647	0.11838	3.940
CLITICNE	-1.17634	0.12341	-9.532
DETDI:QUESTION_LANGUAGEItalian	-10.13622	3.60437	-2.812
DETDI+ART:QUESTION_LANGUAGEItalian	-1.88899	0.17394	-10.860
DETZERO:QUESTION_LANGUAGEItalian	2.00238	0.17500	11.442
DETDI:scale(BLP)	0.61076	0.09837	6.209
DETDI+ART:scale(BLP)	0.16334	0.07127	2.292
DETZERO:scale(BLP)	0.37779	0.07964	4.744
QUESTION LANGUAGEItalian:scale(BLP)	0.20212	0.08316	2.430
DETDI:CLITICLI	3.78154	0.99585	3.797
DETDI+ART:CLITICLI	-1.43472	0.16823	- 8.528
DETZERO:CLITICLI	-1.89947	0.19932	-9.530
DETDI:CLITICNE	6.61769	0.99186	6.672
DETDI+ART:CLITICNE	1.10812	0.16972	6.529
DETZERO:CLITICNE	0.50808	0.18621	2.729
QUESTION LANGUAGEItalian:CLITICLI	1.32256	0.19080	6.932
QUESTION LANGUAGEItalian:CLITICNE	-2.50734	0.22537	-11.126
DETDI:QUESTION LANGUAGEItalian:scale(BLP)	-0.25320	0.14447	-1.753
DETDI+ART:QUESTION LANGUAGEItalian:scale(	-0.43924	0.11554	-3.802
BLP)			
DETZERO:QUESTION_LANGUAGEItalian:scale(BL	-0.28570	0.11790	-2.423
P)			
DETDI:QUESTION_LANGUAGEItalian:CLITICLI	5.71845	3.64274	1.570
DETDI+ART:QUESTION_LANGUAGEItalian:CLITI	-1.78994	0.28282	-6.329
CLI			
DETZERO:QUESTION_LANGUAGEItalian:CLITICL	-3.79734	0.30139	-12.600
Ι			
DETDI:QUESTION_LANGUAGEItalian:CLITICNE	13.45592	3.60561	3.732
DETDI+ART:QUESTION_LANGUAGEItalian:CLITI	2.39884	0.28962	8.283
CNE			
DETZERO:QUESTION_LANGUAGEItalian:CLITICN	2.51831	0.29293	8.597
Е			

Table 24: parameter estimates of the fixed effects.



Figure 34: estimates of the regression coefficients associated with the subjects.

As for the goodness of fit, it is checked through some statistics, namely *Pseudo* $-R^2$  (Nakagawa et al. 2017) and C (Hosmer & Lemeshow, 2000). While R2m (*Marginal Pseudo-R*<sup>2</sup>) codifies the variance explained by the fixed effects, R2c (Conditional Pseudo- $R^2$ ) codifies the variance explained by the entire model, including the random effects as well. Of course, R2m is the most interesting value for our purposes. For those values, we report the outcomes obtained through both the theoretical and the delta method, as the former is valid for all link functions, whereas the latter is specific for logistic regressions. As for C, which is an index of concordance between the predicted probability and the observed response, we adopt the scale proposed by Hosmer & Lemeshow (2000: 162): if C = 0.5 the model has no predictive capacity; if  $0.7 \le C < 0.8$  the discrimination ability of the model is acceptable; if  $0.8 \le C < 0.9$  the discrimination ability is excellent; if  $C \ge 0.9$  the discrimination ability is outstanding. C is also known as the receiver operating characteristic (ROC) curve, which is a plot of the values of sensitivity against one minus specificity. A model with high discrimination ability must have high sensitivity and specificity simultaneously, leading to an ROC curve, which tends to the top left corner of the plot.

Observing the values for  $Pseudo-R^2$  in **Table 25**, we can state that there is a strong correlation between the data and the predictor values. Therefore, we can affirm that our model fits the data. In addition, since C = 0.8729, our model has a good predictive ability. This is confirmed by the ROC curve shown in *Figure 35*, which tends to the top left corner of the plot.

	R2m	R2c
theoretical	0.7763895	0.8209333
delta	0.7291172	0.7709488

**Table 25:** results of the *Pseudo-*  $R^2$  statistics, showing the goodness of fit of our model.



Figure 35: ROC curve showing a good discrimination ability of our model.

Let us finally look at our results, which we show in *Figure 36-37-38-39*. The first two graphs refer to the same data, but from different perspectives. On the one hand, Figure 36 allows us to examine: (1) the pairwise comparisons of the estimated marginal means for the probability of acceptability associated with each determiner (ART vs di+ART vs zero vs di) while holding the variables QUESTION LANGUAGE and CLITIC constant; (2) the pairwise comparisons of the estimated marginal means for the probability of acceptability in Italian vs Ferrarese while holding the variables DET and CLITIC constant. On the other hand, Figure 37 shows the pairwise comparisons of the estimated marginal means for the probability of acceptability in BASE vs LI vs NE sentences while holding the variables QUESTION LANGUAGE and DET constant. Finally, Figure 38 and Figure 39 are plots of the marginal effects<sup>64</sup> of the BLP score on the probability of accepting each determiner. Again, they show the same data from different perspectives. In fact, while Figure 38 plots the change in the probability of acceptability of each determiner under the effect of the BLP score while holding the variable QUESTION LANGUAGE constant, Figure 39 shows the same change in the two languages while holding DET constant. In both cases, the

<sup>&</sup>lt;sup>64</sup> Marginal effects quantify how a dependent variable changes in association with a change in a continuous independent variable, while holding other independent variables at specific values.

results are averaged over the levels of the variable CLITIC. Notice that in these graphs the variable BLP score is scaled and centered on the mean value, which is 62.8. Moreover, while reporting all the above-mentioned pairwise comparisons, p-values are adjusted with Tukey's multiple comparison test and codify the probability under the null hypothesis, namely that p1 = p2.

Let us now examine Figure 36.



Figure 36: plot of the estimated marginal means for the probability of acceptability of each determiner type in Italian vs Ferrarese BASE, LI and NE sentences.

In Ferrarese, ART and di+ART are significantly more acceptable than ZERO in all contexts (ART-zero in BASE p < .0001; di+ART-zero in BASE p < .0001; ART-zero in LI p < .0001; di+ART-zero in LI p < .0001; ART-zero in NE p < .0001; di+ART-zero in NE p < .0001; di+ART-zero in NE p < .0001). As you can see from the comparisons, the lower difference, although always significant, is found for ART-ZERO in NE sentences. Then, the probability of accepting ART is significantly higher than the probability of accepting di+ART in LI sentences (ART-di+ART p < .0001), while the opposite holds for NE sentences (ART-di+ART p < .0001). On the contrary, in BASE sentences they are almost equally accepted with no significant difference (ART-di+ART p = 0.6518). As for bare di, in BASE sentences it is significantly less acceptable than all the other determiners (ART-di p < .0001; di-di+ART p < .0001; di-di+ART in LI and NE sentences it is less acceptable than ART and di+ART with a high significant difference (ART-di in LI p < .0001; di-di+ART in LI p < .0001; di-di in NE p < .0001; di-di+ART in LI p < .0001; di-di p < .0001; d

acceptable than ZERO with no significant difference (di-zero in LI p=0.2678; di-zero in NE p=0.9598).

In Italian, the probability of accepting ART is higher than the probability of accepting di+ART in all contexts (ART-di+ART in BASE p<.0001; ART-di+ART in NE p<.0001). The acceptability of ZERO is also more likely than the acceptability of di+ART with the exception of LI sentences, where we do not find a significant difference (di+ART-zero in BASE p<.0001; di+ART-zero in LI p=0.9991; di+ART-zero in NE p<.0001). Moreover, the zero is more likely to be accepted than ART in BASE (ART-zero p<.0001) and NE sentences (ART-zero p<.0001), while the opposite holds for LI sentences (ART-zero z= 26.081 p<.0001). As for bare di, it is less likely to be accepted than all the other determiners in BASE and LI sentences (ART-di in BASE p<.0001; di-di+ART in BASE p= 0.0001; di-di+art in LI p<.0001; di-zero di BASE p<.0001; di-zero in LI p<.0001). On the other hand, in NE sentences it is significantly mre likely than ZERO (di-zero p<.0001).

Comparing the two languages, we note that the probability of accepting ART is slightly higher in Italian than in Ferrarese, with a low significant difference between the two languages (Ferr-Ita p = 0.04). As for LI sentences, we always find a higher probability in Italian, with a rather high significant difference between the two languages (Ferr-Ita  $p \le .0001$ ). As for NE sentences, ART is almost never accepted in Italian, whereas in Ferrarese we find a low probability of acceptability. The difference between the two languages is again rather high and significant (Ferr-Ita p < .0001). Second, examining the situation of di+ART we see a significant difference between the two languages in all contexts (Ferr-Ita  $p \le .0001$  in base sentences; Ferr-Ita  $p \le .0001$  in LI sentences; Ferr-Ita p < .0001 in NE sentences). In fact, its probability of acceptability is always higher in Ferrarese. Third, ZERO is significantly more acceptable in Italian than in Ferrarese in base (Ferr-Ita p < .0001) and CLLDed sentences with NE (Ferr-Ita p < .0001). In CLLDed sentences with LI, it is almost never accepted in both languages with no significant difference (Ferr-Ita p=0.2203). Finally, bare di is almost never accepted in base sentences of both languages. In the few cases when it is accepted, the probability is slightly higher in Ferrarese than in Italian (Ferr-Ita 0.0060). In LI sentences we find a very low probability of acceptability only in Ferrarese, with a significant difference between the two languages (p <.0001). In NE sentences it is accepted significantly more frequently in Italian than in Ferrarese (p < .0001).

Let us first focus on Figure 37.



Figure 37: plot of the estimated marginal means for the probability of acceptability of each determiner type in BASE vs LI vs NE sentences in Italian and Ferrarese

In Ferrarese ART is more frequently accepted in base and LI sentences than in NE sentences (BASE-NE p < 0001; LI-NE p < .0001). Between base and LI sentences, the highest probability is found in the latter, even though with a rather low significant difference (BASE-LI p=0.0002). As for di+ART, the lower probability of acceptability is found in LI sentences, with a significant and rather high difference with both base (LI-BASE  $p \le .0001$ ) and NE sentences (LI-NE p =<.0001). On the contrary, in base and NE contexts it is almost equally accepted with no significant difference (BASE-NE p=0.8281). Then, the probability of acceptability of ZERO is rather low in all contexts, even though significantly higher in base than in CLLDed sentences (BASE-LI  $p \le 0.0001$ ; BASE-NE p < .0001). Between LI and NE sentences, the highest probability of accepting the zero is found in the latter context (LI-NE  $p \le .0001$ ). Finally, bare di is never accepted in base sentences and rarely accepted in LI sentences (BASE-LI p =0.0001). Comparing the three contexts, the highest probability of acceptability (even though it is always rather low) is found in NE sentences (BASE-NE p <.0001; LI-NE *p* <.0001).

In Italian, the probability of acceptability of ART is very high in both base and LI sentences, even though slightly higher in the latter than in the former context (BASE-LI p=0.0002). On the contrary, in NE sentences we find an extremely low acceptability (BASE-NE p < .0001; LI-NE p < .0001). As for di+ART, the

probability of acceptability is rather low in all contexts, even though higher in base and NE sentences than in LI sentences (BASE-LI p<.0001; LI-NE p<.0001). No significant differences are found between base and NE sentences (BASE-NE p=0.4173). Then, the probability of acceptability of ZERO is high in both base and NE sentences, even though slightly higher in the former context (BASE - NE p<.0001). On the contrary, in LI sentences it is almost never accepted (BASE-LI p <.0001; LI-NE p<.0001). Finally, bare di is acceptable only in NE sentences (BASE-NE p<.0001; LI-NE p<.0001).

Finally, let us look at Figure 38 and 39.



Figure 38: marginal offects of the BLP score on the probability of acceptability of different determiner types while holding the variable QUESTION\_LANGUAGE constant. Results are averaged over the levels of the variable CLITIC.



Figure 39: marginal offects of the BLP score on the probability of acceptability in the different languages while holding the variable DET constant. Results are averaged over the levels of the variable CLITIC.

The green line in *Figure 38* shows that the probability of accepting di+ART in both languages gets lower as the BLP score decreases. This trend may be due to an effect of the dominant language. In fact, in *Figure 39* we can see that the probability of acceptability of di+ART is generally higher in Ferrarese than in Italian. This visual evidence is confirmed by looking at the pairwise comparison of the probabilities of acceptability of di+ART in the two languages, while holding the BLP score constant at the mean value (i.e. 62.8). As we notice from the following results, we find a strong significant difference (Ferr-Ita p < .0001). Moreover, comparing the slopes of the lines representing the probability change in the acceptability of di+ART as an effect of the BLP score (*Figure 38*), we find a low significant difference (p = 0.0631). This means that the effect of the BLP score is slightly stronger in Italian than in Ferrarese.

Then, the red line in *Figure 38* shows that the probability of acceptability of ART in both languages gets lower as the BLP score increases<sup>65</sup>. Apparently, this finding cannot be explained as an effect of the dominant language. In fact, in *Figure 39* we notice that the intervals of the probability of accepting ART in the two languages overlap at almost all levels of the BLP. Again, this visual

<sup>&</sup>lt;sup>65</sup> Graphically, this decreasing trend seems to be more pronounced in Ferrarese than in Italian. However, comparing the slopes of the two lines we do not find a significant difference (z= -2.430, p = 0.2265).

evidence is confirmed by looking at the pairwise comparison of the probabilities of accepting ART in the two languages, while holding the BLP score constant at the mean value. As the following results show, we do not find a great difference (p=0.0765).

As for ZERO (purple line in *Figure 38*), in Ferrarese we do not notice any significant effect depending on the BLP score. In Italian we notice a slightly decreasing trend, with lower probabilities of acceptability associated with higher BLP scores. Despite this latter result is the opposite of what we would expect, we believe that the type of language is the main source of variation. In fact, as we can see in *Figure 39*, the probability of acceptability of ZERO is remarkably higher in Italian than in Ferrarese. Again, this difference can be proved by comparing the probability of acceptability of ZERO in the two languages while holding the BLP constant at the mean value (Ferr-Ita p < .0001).

Finally, we do not notice any effect on the variable bare *di* depending on the BLP score.

#### 4.2.3. Optionality and semantic specialization

Let us now focus on optionality. As it is shown in *Figure 40-41*, a striking majority of our answers included only one acceptable option. Examining the two languages separately, we notice the same trend in both languages with no significant differences (see *Figure 42-43* and *Figure 44-45*). In **Table 26** we report the acceptance rates associated to the number of answers in each language.



Figure 40: Number of acceptable answers per item as attested in the complete sample (Italian+Ferrarese.)



Figure 41: Number of acceptable answers per item as attested in the complete sample (Italian+Ferrarese). The bar plot shows the counts for 1 answer vs more than 1 answer (>1).







Figure 43: Number of acceptable answers per item in Italian. The bar plot shows the counts for 1 answer vs more than 1 answer (>1).



Figure 44: Number of acceptable answers per item in Ferrarese.



Figure 45: Number of acceptable answers per item in Ferrarese. The bar plot shows the counts for 1 answer vs more than 1 answer (>1).

#	1	2	3	4	>1
Italian+ Ferrarese	0.71	0.18	0.09	0.06	0.28
Italian	0.70	0.19	0.09	0.03	0.29
Ferrarese	0.72	0.17	0.09	0.09	0.27

**Table 26:** acceptance rates associated to the number of answers (1, 2, 3, 4, >1).

However, among the participants that considered acceptable more the one determiner we include both those that did and those that did not specify any semantic differences between the chosen variants. The first case would signal specialization of meaning, whereas the second would indicate true optionality.

As you can see in **Table 27**, the majority of participants that accepted more than one option did not signal any difference in meaning. Furthermore, the frequency of meaningful comments attesting an actual semantic defference is extremely low. In fact, the majority of cases they were either absent, either unclear, either targeted to obvious grammatical differences among the sentences (for instance, the presence or absence of the article). In Ferrarese, some informants signalled a difference, but then provided a literal translation in Italian instead of a comment underlying a proper difference in meaning.

	1	>1 NO	>1 YES	>1 YES
			with absent or useless comment	with meaningful comment
Italian	0.70	0.21	0.06	0.02
Ferrarese	0.72	0.18	0.08	0.009

**Table 27:** acceptance rates associated to optionality (NO) vs specialization of meaning (YES).

Before looking at the comments, let us look at the attested alternations of determiners in the contests defined by the variables of our interest.

*Figure 46* shows the results of a first *Pearson's Chi-squared test* ( $X^2$ = 1697.5, df = 52, p < 0.0001) testing for the relation between the possible alternations of determiners and the variables QUESTION\_LANGUAGE and CLITIC.



Figure 46: cross-category distribution of all the possible combinations of indefinite determiners with respect to the variables QUESTION\_LANGUAGE (Italian vs Ferrarese) and CLITIC (BASE, LI, NE).

In this mosaicplot, the shadings represent the results of a *Pearson residual test*, for which blue shadings indicate a positive deviance from the expected value (i.e. the item is significantly more accepted than expected), and red shadings represent a parallel negative deviance. The darker the shading, the more significant the deviance. The plot also shows the data distribution: the bigger the area of each rectangle, the more are the data falling into it (cf. Levshina 2015). In particular, the width of each rectangle shows the percentage of the different determiner combinations in each language, whereas the height is proportional to the total number of determiner combinations for each clitic type in the two languages.

Looking at the plot, we note that in Ferrarese BASE sentences, the combinations of determiners that are significantly more acceptable than expected are (in order of frequency and strength of the deviance)  $\emptyset \mid art \mid di+art$  and  $art \mid di+art$ . On the other hand, the combinations that are less acceptable than expected are  $\emptyset \mid art$  and almost all combinations including di. For the latter, we notice an extremely low or even null frequency. Moreover, in few cases they display a null deviance, which indicates that their number of occurrences is determined by chance. In Italian BASE sentences, the combinations of determiners whose high acceptability reaches statistical significance are (in order of frequency)  $\emptyset \mid art \mid di+art$  and  $\emptyset \mid art$ . As for the combinations including bare di, the situation is parallel to the one observed in Ferrarese. Interestingly, the positive deviance for  $art \mid di+art$  in Ferrarese and  $\emptyset \mid art$  in Italian corresponds to a negative deviance and a lower frequency in the opposite language.

Let us observe now the situation in LI sentences. In Ferrarese, several combinations of determiners seem to be significantly more acceptable than expected. We list them here in order of frequency:  $art \mid di+art, \emptyset \mid art \mid di+art \mid$ di, art | di+art | di, di+art | di. In is worth noting that among these combinations we find also the determiner di. Moreover, in some cases the frequency of the combinations including di is not even extremely low. This may indicate that despite the probability of accepting di in LI sentences is almost null (see Figure 35), a certain number of the participants in our sample still accepts it, and this event is not likely to have arisen by chance. On the other hand, the combinations that are less acceptable than expected (with a medium-size negative deviance) are  $\emptyset \mid di \text{ and } \emptyset \mid di + art \mid di$ , with an extremely low frequency for the first and a null frequency for the second. In Italian LI sentences, there are only two more acceptable combinations than expected, with a medium-size positive deviance. These are (in order of frequency) art | di+art and  $\emptyset$  | art. On the contrary,  $\emptyset$  | art | di+art,  $\emptyset$  | art | di+art | di,  $\emptyset$  | di,  $\emptyset$  | di+art,  $\emptyset$  | di+art | di and di+art | diare significantly less accepted than expected. Moreover, these last combinations, with the exception of  $\emptyset \mid art \mid di+art$ , display a null amount of occurrences.

Let us finally examine CLLDed sentences with the quantitative clitic (NE). In Ferrarese the combinations that are significantly more accepted than expected are (in order of frequency)  $\emptyset \mid art \mid di+art \mid di, art \mid di+art \mid di, di+art \mid di and \emptyset$  $\mid di+art \mid di$ , whereas the opposite holds for  $\emptyset \mid art \mid di+art$  and  $\emptyset \mid art$ . For  $\emptyset \mid$  $di+art \mid di$  we find a medium-size positive deviance. As for Italian, the acceptability of  $\emptyset \mid di+art \mid di$  and  $\emptyset \mid di$  (in order of frequency) reaches statistical significance. The same holds for  $\emptyset \mid art \mid di$ , and  $di+art \mid di$ , even thow their frequency is considerably low. On the other hand, the combinations that are less accepted than expected are (in order of frequency)  $\emptyset \mid art \mid di+art$ ,  $\emptyset \mid art$  and  $art \mid di+art$ . Then, Figure 47 shows the results of a second Pearson's  $X^2$ -test ( $X^2$ = 353.8, df = 31, p < 0.0001) testing for the relation between the combinations of determiners and the variables QUESTION\_LANGUAGE and EVENT.



Figure 47: cross-category distribution of all the possible combinations of indefinite determiners with respect to the variables QUESTION\_LANGUAGE (Italian vs Ferrarese) and EVENT (habitual vs episodic).

First, looking at the dimension of the rectangles we notice that despite the higher frequency is found for  $\emptyset \mid art \mid di + art$  in both languages, the combination displays a null deviance. Second, in Ferrarese the combination  $art \mid di+art$  is more acceptable than expected in both habitual and episodic sentences. The same holds for  $\emptyset \mid art$  in Italian, again without significant differences depending on clause type. Moreover, as in the previous mosaic plot (Figure 45), the two languages behave in a specular way: a positive deviance for  $art \mid di+art$  in Ferrarese corresponds to a negative deviance and a lower frequency in Italian, whereas a positive deviance for  $\emptyset \mid art$  in Italian corresponds to a negative deviance and a lower frequency in Ferrarese. Therefore, we confirm that this pattern is exclusively due to an effect of the variable QUESTION LANGUAGE, independently on clause type. As for the combinations including bare di, in Ferrarese a null deviance in episodic sentences for  $\mathcal{O} \mid art \mid di + art \mid di$ ,  $di + art \mid$ di and  $art \mid di + art \mid di$  correspond to a positive deviance in habitual sentences. On the contrary, the combination  $art \mid di$  is more acceptable than expected only in episodic sentences, even though it displays an extremely low frequency. As for Italian, the combination including all determiners is more acceptable than expected with both habitual and episodic sentences, even though its frequency is
rather low. Finally, the combination  $\emptyset \mid di + art \mid di$  (whose frequency is always low) is significantly more accepted than expected in episodic sentences, but not in habitual sentences.

Finally, *Figure 48* shows the result of a third *Pearson's X<sup>2</sup>-test* ( $X^2 = 357.6$ , df = 31, p< 0.0001) testing for the relation between the combinations of determiners and the variables QUESTION\_LANGUAGE and NOUN.



Figure 48: cross-category distribution of all the possible combinations of indefinite determiners with respect to the variables QUESTION\_LANGUAGE (Italian vs Ferrarese) and NOUN (mass vs plural count).

As in the previous mosaicplot, despite the higher frequency is found for the combination  $\mathcal{O} \mid art \mid di+art$ , its acceptability is not greater than the expected value. Moreover, the combinations  $art \mid di+art$  in Ferrarese and  $\mathcal{O} \mid art$  in Italian are more acceptable than expected with both mass and plural count nouns, again in a specular way parallel to what we saw in *Figure 44* and 45. As for the combinations including *di*, in Ferrarese *art*  $\mid di$  and *art*  $\mid di+art \mid di$  (which display however a low frequency) are more acceptable than expected with plural count nouns. On the contrary, the combination that includes all determiners is more accepted than expected only with mass nouns. However, this does not hold for Italian, where the acceptability of the latter combination reaches significance with both noun types. Nevertheless, a difference in Italian is found for the combination  $\mathcal{O} \mid di+art \mid di$ , which is significantly more acceptable than expected only with mass nouns.

Let us now examine the few comments of our informants regarding possible specialization of meaning.

Overall, the useful comments are associated to eight informants in Italian and six informants in Ferrarese.

Let us first look at the comments in Italian<sup>66</sup>:

- Informant 24114 (BLP 3.813) interpreted ZERO and/or ART as "generic"<sup>67</sup> and di+ART as "specific", as referring to a small quantity of that particular item or to some particular kind of that item. This was done in the following contests: NE-EPIS-MASS-FRUIT, LI-EPIS-PLU-NEWSPAPERS, LI-HAB-PLU-NEWSPAPERS, NE-EPIS-PLU-NEWSPAPERS, BASE-EPIS-PLU-MUSHROOMS, BASE-HAB-PLU-MUSHROOMS, LI-EPIS-PLU-MUSHROOMS, LI-EPIS-MASS-FRUIT, NE-EPIS MASS-FISH, BASE-EPIS-MASS-FISH, NE-EPIS-PLU-MUSHROOMS, BASE-HAB-PLU-NEWSPAPERS, BASE-PLU-MUSHROOMS, BASE-HAB-PLU-NEWSPAPERS, BASE-PLU-MUSHROOMS, BASE-HAB-PLU-NEWSPAPERS, BASE-EPIS-PLU-BIKES.
- Informant 37746 (BLP 108) chose  $\emptyset \mid art$  in BASE-HAB-PLU-COURGETTES. The participant wrote that with ZERO "one means that they do not have courgettes in their assortment" whereas with ART "one means that cougettes are a product that is not sought by the clients". Thus, while ZERO is a core indefinite, ART may be salient, since 'courgettes' is interpreted as a possible choice among vegetables. In other words, the hyponym *courgettes* may be interpreted as salient because of the implicit presence of the hypernym *vegetables*. In fact, the sentence could be rephrased as "among the vegetables that I sell, I usually do not sell courgettes".
- Informant 38569 (BLP 47.8) chose *art* | *di*+*art* in BASE-EPIS-MASS-FISH. The informant wrote that ART "refers to the item in general", while di+ART refers to "something that I have already bought". Therefore, ART is interpreted as core indefinite, whereas di+ART is related to a notion of specificity, i.e. it refers to that specific indefinite quantity of fish that the interlocutor has already bought.
- Informant 42719 (BLP 70) chose:
  - (i) *art* | *di*+*art* in a BASE-HAB-MASS-FRUIT. The participant wrote that ART refers to "all the fruit", while di+ART to "some fruit", namely to a small quantity of fruit. A parallel interpretation is given to the same determiners in LI-HAB-MASS FISH, LI-EPIS-MASS-FISH, , LI-HAB-PLU-BIKES, LI-HAB-PLU-COURGETTES, LI-EPIS-MASS-MEAT, LI-EPIS-PLU-NEWSPAPERS, LI-EPIS-PLU-MUSHROOMS, LI-EPIS-MASS-FRUIT, LI-EPIS-PLU-COURGETTES, LI-EPIS-PLU-BIKES;

<sup>&</sup>lt;sup>66</sup> While defining the context, we use the following labels: BASE = unmarked order, LI= CLLDed sentence with accusative clitic; NE = CLLDed sentence with wuantitative clitic; EPIS = episodic; HAB = habitual; MASS = mass noun; PLU = plural count noun. Finally, we add the lexical item.

<sup>&</sup>lt;sup>67</sup> We report in brackets the exact words of our informants.

- (ii) art | di+art in BASE-EPIS-PLU-BIKES, writing that ART signals "all the bikes", whereas di+ART refers to "exactly those bikes", i.e. to a specific object;
- (iii)  $\emptyset \mid art \mid di+art$  in a BASE-EPIS-PLU-COURGETTES interpreting ZERO as referring to "the item in general", ART as referring to "those courgettes" and di+ART to "only a part of the courgettes". In this case, the ZERO has a core indefinite reading, ART is definite (i.e. it refers to a precise referent that was already mentioned in the discourse and whose knowledge is shared with the interlocutor) and di+ART is related to a small quantity;
- (iv)  $\emptyset \mid art \mid di+art$  in BASE-HAB-PLU-MUSHROOMS. The informant points out that the sentence with ZERO means that "I usually pick no mushrooms at all", ART implies that "I may pick something else" and di+ART refers to "some mushrooms". Thus, ZERO expresses core indefiniteness, di+ART is associated to a small quantity and the complement introduced by ART may be salient, since the sentence can be interpreted as 'among the vegetables that I usually pick, I do not pick mushrooms'. The same specialization for  $art \mid di+art$  is found in LI-HAB-PLU-MUSHROOMS, BASE-HAB-PLU-GIORNALI. In BASE-HAB-MASS-PESCE and BASE-HAB-PLU-COURGETTES, while in BASE-EPIS-MASS-FRUIT only the specialization for small quantity of di+ART is reported.
- (v)  $art \mid di+art$  in LI-EPIS-MASS-WINE, pointing out that ART indicates "all types of wine, wine in general", whereas di+ART refers to "a particular kind of wine", namely to a specific object. In BASE-EPIS-MASS-FISH the informant points out the same interpretation. However, since the informant considers acceptable  $\emptyset \mid art \mid di+art$  writing "all fish or a type of fish?" it is not clear to which determiner he associates which interpretation. Given the previous comment, we may suppose that, in this case, only di+ART is interpreted as specific.
- Informant 44250 (BLP 95) chose:
  - (i)  $\emptyset \mid art \mid di+art$  in BASE-EPIS-MASS-MEAT, BASE-EPIS-MASS-FISH , BASE-EPIS-MASS-FRUIT, BASE-EPIS-PLU-COURGETTES interpreting the first two items as "generic", and the latter as "specifying the particular kind of the object that is mentioned";
  - (ii)  $\emptyset \mid art$  in BASE-EPIS-PLU-NEWSPAPERS, writing that ZERO is "generic", and ART may refer to "those newspapers that I bought that day", thus to a definite object that should have been mentioned before in the discourse.
- Informant 56784 (BLP 141.4) chose  $\emptyset \mid art$  in BASE-EPIS-MASS-MEAT and BASE-EPIS-MASS-FRUIT interpreting di+ART as "less specific" and ART saying that "it may refer to a particular meat/fruit". Therefore, di+ART is interpreted as a unmarked indefinite, while ART is definite (i.e. referring to a specific piece of meat that was mentioned before in the discourse, or whose knowledge is shared with the

interlocutor, for instance, the steak that the speaker cooked the day before). The same interpretation associated to the same determiners is found in BASE-EPIS-MASS-MUSHROOMS, where the informant writes that with ART the object consists in "mushrooms that are known by the interlocutor too".

- Informant 57455 (BLP 117) selected  $\emptyset \mid art \mid di+art$  in BASE-EPIS-MASS-WINE. The informant specified that ZERO is "assertive", ART is "specific" and di+ART is "generic".
- Informant 64701 (BLP 19) selected  $\emptyset \mid art \mid di + art$  in BASE-EPIS-MASS-FISH and BASE-EPIS-PLU-COURGETTES. On the one hand, in the first context the informant wrote that with ZERO the sentence means that "maybe I should have done it or I should do it in future", with ART that "I cooked something else" and with di+ART that "maybe I should have done it (together with other things) but I did not". On the other hand, in the second context the informant pointed out that with ZERO the sentence means that "yesterday night I did something else", with ART that "I should have sold the courgettes, but I did not succeed" and with di+ART that "I sold something else, but just a few or no courgettes at all". Thus, in both sentences ZERO is parsed as a core indefinite, while ART may be salient (in fact, one can rephrase the sentences as 'among all the food that I cooked, I did not cook fish' and 'among the products/vegetables that I had in my assortment, I sold something, but I did not succeed with the courgettes'). Finally, di+ART is associated to a small quantity only in the second sentence.
- Informant 76199 (BLP 120.3) selected  $\emptyset \mid art$  in BASE-EPIS-MASS-FISH noting that ART refers to "a particular fish", whereas di+ART is "generic".

Finally, let us examine the comments in Ferrarese:

- Informant 24114 (BLP 3.8)
  - (i) signals a notion of small quantity associated to di+ART in BASE-EPIS-PLU-MUSHROOMS, BASE-HAB-PLU-BIKES and BASE-EPIS-PLU-BIKES. In the first two contexts the informant points out that ART and/or ZERO are "more generic", while in the last contest ART refers to "those bikes that I should have repaired", thus to a definite object.
  - (ii) chose  $\emptyset \mid art \mid di+art$  in BASE-EPIS-MASS-FISH and BASE-EPIS-PLU-COURGETTES and  $art \mid di+art$  in LI-EPIS-MASS-WINE and NE-EPIS-MASS-MEAT. In all these contest, ART and/or ZERO are interpreted as "more generic", while di+ART "implies that I cooked/sold/drank/ate something else".
  - (iii) chose  $\emptyset | di + art$  in NE-EPIS-MASS-WINE, writing that ZERO "sounds more generic".
- Informant 38569 (BLP 47.8) chose:
  - (i)  $art \mid di+art$  in BASE-HAB-PLU-COURGETTES and BASE-EPIS-MASS-FISH. In both sentences ART is interpreted as

"generic" and di+ART as specific, referring to "the courgettes that I own" or "the fish that I planned to cook for dinner".

- (ii) art | di+art | di in NE-EPIS-PLU-MUSHROOMS writing that ART and bare di are "more generic"; whereas di+ART is used "if I am talking about the mushrooms that I own", thus, again, with a specific object.
- Informant 42583 (BLP 45.5) selected:
  - (i)  $art \mid di+art$  in BASE-EPIS-PLU-BIKES. The informant pointed out that with ART the sentence means that "I was already asked if I repaired those specific bikes and how many of them", whereas with di+ART "the sentence leaves open the possibility that I repaired something else".
  - (ii)  $\emptyset \mid art \mid di + art$  in BASE-EPIS-PLU-NEWSPAPERS writing that with ZERO the complement is "generic", while with ART it implies that "I may have read something else (such as a novel, comics etc.)". Therefore, while ZERO is interpreted as core indefinite, ART introduces a salient object. As for di+ART, the informant wrote that the sentence might be used with a particular intonation expressing annoyance.
- Informant 42719 (BLP 70) chose:
  - (i)  $art \mid di+art$  in LI-EPIS-PLU-BIKES writing that the object introduced by ART refers to "those particular bikes", whereas if it is introduced by di+ART the speaker refers to "some bikes in general". Thus, while ART is definite, di+ART is interpreted as core indefinite.
  - (ii) Ø | art | di+art in BASE-HAB-MASS-FISH writing that ZERO "is general", ART "means that I usually eat raw fish" and di+ART that "I cook something else"
  - that "I cook something else".
  - (iii)  $\emptyset \mid art \mid di+art$  in BASE-EPIS-PLU-MUSHROOMS, writing what follows: "In the first sentence", namely with ZERO "the attention is focused on the mushrooms. In the second", namely the sentence with ART "on the activity of picking mushrooms. In the third" namely the sentence with di+ART "on what I picked". Thus, ZERO and ART are core indefinites, while di+ART conveys a notion of specificity, which makes the reader focus on exactly what was picked with its particular characteristics.
- Informant 44250 (BLP 95.9) selected  $\emptyset \mid art \mid di+art$  in BASE-HAB-MASS-VINO writing that di+ART implies that "I do not want to drink wine, but something else".
- Informant 54982 (BLP 6.63) chose  $art \mid di+art$  in BASE-EPIS-MASS-FISH writing that ART refers to "one whole fish" and di+ART "is generic". Here, ART is definite and di+ART is a core indefinite.
- Informant 57455 (BLP 117.9) selected *art* | *di*+*art* in NE-EPIS-MASS-MEAT, BASE-EPIS-PLU-MUSHROOMS, BASE-EPIS-PLU-COURGETTES, BASE-EPIS-MASS-WINE, BASE-EPIS-MASS-PESCE. In all the above-mentioned contests, the informant wrote that ART sounded "more specific" and di+ART "more generic".

• Informant 59051 (BLP 19.6) chose  $di+art \mid di$  in NE-HAB-PLU-BIKES noting that bare di "sounds more generic".

### 4.3 Discussion

### 4.3.1 Indefinite determiners in Italian and Ferrarese

As we expected, the results from the *mixed effect logistic regression* (see *Figure 36-37*, §4.2.2) together with results from the first *Pearson's X<sup>2</sup>-test* (see *Figure 46*, §4.2.3), showed that in Italian and Ferrarese base sentences, we find three acceptable determiners: ZERO, ART and di+ART. Moreover, our *mixed effect logistic regression* analysis showed that the probability of acceptability of the ZERO is higher in Italian than in Ferrarese, while the opposite pattern holds for di+ART (see *Figure 39*, §4.2.2). This difference is likable not to have arisen by chance. In fact, the results of the first  $X^2$ -test show that a positive deviance for art | di+art in Ferrarese and  $\emptyset | art$  in Italian corresponds to a negative deviance and a lower frequency in the opposite language.

Formally, the different realizations of indefinite determiners in Italian and Ferrarese can be explained adopting Giusti (2008, 2009) proposal, according to which the realization of different forms depends on different instantiations of *Compensatory Concord*. Like in Italian, in Ferrarese the realization of the determiner *di* in the specifier (or, if we adopt Garzonio and Poletto's (2020) proposal, in the left periphery of the DP) obligatory requires *Compensatory Concord* to be applied, resulting in di+ART. On the contrary, the null determiner in the specifier usually entails *Compensatory Concord*, but not obligatory, resulting in a low acceptability of ZERO. In our view, both grammars have at their disposal the same strategies. However, the choice between different micro-and nano-parameters (in Biberauer and Roberts, 2012) strictly depends on the frequency of use of each determiner in the two languages, and specifically on the linguistic input to which the informants are exposed.

Without doubts, the choice of the informants may also be influenced by the semantic features of the sentence. With this respect, our initial descriptive statistics (see *Figure 32*, §4.2.1) seemed to show that ART and ZERO are slightly more acceptable in habitual than episodic sentences, while the opposite holds exclusively for di+ART. However, our hierarchical regression (see **Table 23**) did not provide evidence in favor of a statistically significant effect of clause type on the acceptability judgments. In fact, the latter variable was considered a bad predictor and excluded from our statistical model. In addition, our second  $X^2$ -test (see *Figure 47*, §4.2.3) showed the lack of relevant differences dependent on the clause type too. In fact, the most frequent combinations with a positive residual<sup>68</sup> (i.e. significantly more likely not to have arisen by chance) were  $\emptyset \mid art$  in Italian and  $art \mid di+art$  in Ferrarese, regardless of the habitual vs episodic distinction.

<sup>&</sup>lt;sup>68</sup> We are excluding here the less frequent combinations with a positive residual, since they all contained the determiner di, which is not accepted in BASE sentences. We will take them into consideration later, while discussing CLLD (see §3.3.1.1.).

As for the noun type, we did not find significant differences depending on the mass vs plural count distinction. Looking at the descriptive graph in *Figure 33* (§4.2.1), we noticed that ZERO is slightly more accepted with mass nouns than with plural count nouns, while the opposite holds for di+ART. However, in our *mixed effect logistic regression* model this difference turned out not to be statistically significant (see again the results of the hierarchical regression in **Table 23**). This finding, which was confirmed by our third  $X^2$ -test as well (see *Figure 48*, §4.2.3), argues against Garzonio and Poletto's (2020) claim that di+ART in Ferrarese is compatible exclusively with plural count nouns and ZERO with singular mass nouns. Therefore, our results do not confirm the hypothesis that the realization of the indefinite operator *di* in the specifier correlates with plural count nouns, at least in this variety.

We do not exclude that the presence of inflectional markers on the related noun may correlate with the realization of concord features in D (as suggested by Cerruti and Regis, 2020). Despite this issue was not part of our research questions, we noticed that in our questionnaire we included two items provided with an inflectional marker in Ferrarese, namely *fruta* 'fruit' and *giurnai* 'newspapers'. Having a look at the answers, we further noticed that they are acceptable with ZERO as well. Therefore, if the presence of an inflectional marker conditions somehow the choice of the informant, this effect could be simply characterized as a conditioning factor that may have an influence on the chosen strategy, rather than a rule implying grammaticality or ungrammaticality. Of course, we should verify in future if the latter effect is statistically significant or not.

In (14) we show a syntactic tree resuming our hypothesis, which should however be verified in future research.



Overall, our analysis tells us that zero, ART and di+ART are in free competition in both habitual sentences in the present and episodic sentences in the past. Moreover, they are all acceptable with both mass and plural count nouns. Considering that optionality has been proved to be much more frequent

than specialization of meaning and taking into consideration the few comments at our disposal, we advance the following proposal<sup>69</sup>.

- > In Italian and Ferrarese, the ZERO is a core indefinite.
- In Italian and Frerrarese, ART has the same reading of ZERO. However, in episodic contexts in the past, it can be interpreted as definite, with both mass and plural count nouns
- > In Ferrarese di+ART is an unmarked, core indefinite, parallel to the French partitive determiner. In an extremely little amount of cases, when choosing between different options, specialization for specificity and/or small quantity<sup>70</sup> can work, more frequently in episodic sentences and with plural count nouns. This holds for the colloquial variety of Italian spoken in this area too, which we hold being influenced by substratum interference. In our view, the similarities between the French partitive determiner and its Ferrarese counterpart cannot be explained by recent contact, but rather by an effect of the ancient Celtic substratum shared by many dialects spoken in Northern-Italy. In particular, following the suggestions in Poletto  $(2012)^{/1}$ , we propose that the ancient properties of this functional element have maintained over time. Given the spread of the partitive determiner in Emilia-Romagna, which increased its frequency of use over ZERO, its specialization of meaning did not fully occur and it keeps being used in a wide range of semantic contexts. However, given that there is often optionality with other determiners (and especially with ART), and given the pressure of neo-standard Italian, specialization of meaning is a possibility when choosing between different variants.

In **Table 28**, we resume our proposal, adopting a protocol methodology (Giusti, forthcoming).

<sup>&</sup>lt;sup>69</sup>While presenting the comments in §4.2.3, we often associated saliency reading with ART. However, in the present proposal, we decided to leave out saliency, as we believe that an indepth analysis of the comments would be necessary in order to disentangle some semantic ambiguities. Since we did not have enough time and space to conduct this analysis and since more data would be needed in order to make reliable generalizations, investigations on this semantic feature are left open for future researches.

<sup>&</sup>lt;sup>70</sup> In Ferrarese there might an additional semantic trait that is associated with the partitive determiner and that is more frequently attested than specialization of meaning for small quantity. This semantic traits triggers the interpretation of the object as leaving out space for "something else". Since its exact nature is not clear, we leave the question open for future inquiries. <sup>71</sup> See \$1.1.4.

<sup>149</sup> 

	ZERO	ART	DI+ART
Core indefiniteness	+	+	+
Specificity	-	-	(+)
Small quantity	-	-	(+)
Direct object	+	+	+
Habitual sentences (present)	+	+	+
Episodic sentences (past)	+	+	+
Mass nouns	+	+	+
Plural count nouns	+	+	+

**Table 28:** semantic traits interacting with indefinite determiners in Ferrarese and in the local variety of Italian.

The existence of true optionality (i.e. the existence of functionally equivalent elements that freely alternate in the same syntactic and semantic context) is accounted for by Cardinaletti and Giusti (2018) assuming the unstability of micro- and nano-parameters, as suggested by Biberauer and Roberts (2012). An alternative may be assuming a non-parametric model of UG and relegate variation to the externalization component of language. This idea has been explored in recent works within the Minimalist framework (Berwick and Chomsky 2011, Leivada 2015). Of course, assuming a non-parametric model of UG implies the necessity to build a new acquisition algoritm. However, this issue would require an in-depth theoretical study that goes beyond the goals of our thesis.

Starting from our proposal and basing on the personal communications reported in §2.2.2.2, we can advance a hypothesis on other semantic features interacting with the expression of indefiniteness in Ferrarese, which however should be verified in future research:

- In subject position, we expect to find the same pattern found in both Italian and French, i.e. bare nominals are ungrammatical, ART is obligatorily definite, di+ART is possible.
- In §2.2.2.2.2, we saw that that in Ferrarese ART and di+ART seem to be compatible with both telic and atelic aspect (see (49-50). Thus, the partitive determiner may share some properties with both Italian and French. Our hypothesis is that while in French, the notion of specificity or small quantity associated with di+ART must be specified by some other contrastive element (such as "mais pas beaucoup" in (77), §2.2.2.2.4), in Ferrarese this is not necessary. In other words, despite the partitive determiner in this dialect is unmarked, the specialization of meaning in some specific contexts is possible even without the presence of additional markers. Hypothetically, this could happen under the influence of neostandard Italian, where the process of semantic specialization has fully completed.
- The scope properties of indefinite determiners in Ferrarese (see §2.2.2.2.3., (64-67)) should be the same as in Italian and French. First, ZERO only allows narrow scope. Second, ART allows both wide and narrow scope, but in the former case, it is obligatorily definite. Finally, di+ART is ambiguous

between wide and narrow scope. However, with mass singular nouns the wide scope reading might be either ungrammatical or less acceptable.

#### 4.3.1.1. Clitic Left Dislocation

The results from our *mixed effect logistic regression* (see *Figure 36-37*, §4.2.2.) confirmed that in Italian the dislocated ZERO and bare *di* are most frequently resumed by the quantitative clitic *ne*. (see §2.2.2.3.3.). However, we did not confirm that DPs introduced by di+ART can be resumed exclusively by direct case clitics. In fact, they can be resumed by NE in both Italian and Ferrarese, even though with a significantly higher frequency in the latter. Moreover, the probability of acceptability of this determiner with the accusative clitic in Italian is as low as the acceptability of ZERO in this same context, thus extremely low.

In our view, the partitive determiner in Ferrarese may have ambiguous scope properties even when dislocated. On the one hand, it shares the properties of ZERO and bare *di* and hence it is interpreted as non-specific. On the other hand, it follows the pattern of ART. Then, the low probability of accepting di+ART in Italian with the accusative resumptive clitic could be interpreted in terms of extremely low frequency of use rather than in terms of true ungrammaticality. In fact, the probability of accepting ART in this context is extremely high, even higher than in the dialect. Consequently, the speakers may easily choose the most common form and avoid the partitive determiner. Nevertheless, we cannot ignore that di+ART in Ferrarese is more likely to be acceptable in base and NE sentences rather than in LI sentences. Furthermore, in NE sentences it is significantly more likely to be acceptable than bare *di*, which proves that also in Ferrarese, the narrow scope reading is the preferred one. Even though the issue is quite intriguing and difficult to solve, we may argue that the variety of Italian spoken in this area is affected by substratum interference. Since in Ferrarese the narrow scope reading of the dislocated partitive determiner is preferred over the wide scope reading, and since ART is the most frequent form to be resumed with the accusative clitic, we obtain the observed outcome.

Another interesting property of Ferrarese is apparently that ART in sentences with NE is significantly more acceptable than the zero and bare *di*. However, while submitting the questionnaire in person, I noticed that NE sentences with ART were often misread. For instance, if the informants found a sentence like (15), they often misread it substituting NE with an accusative clitic. In these cases, I had to go back to the sentence and let the informant notice that the sentence had not been read correctly. Once noticed the mistake, the informants always decided to avoid ART in the left dislocated sentence. In our opinion, this mistake might be due to the fact that our informants are generally not accustomed to read the dialect. Therefore, they may not pay attention to subtle details and get the sentence wrongly. Alternatively, there may be a general preference of the articled forms over the unarticled forms, regardless of CLLD. According to this latter hypothesis, ART would be a simple overt noun marker that fills what would be a null syntactic position. Since we lack of sufficient data to solve this issue, we leave it open for future research.

(15) Ier sira ill biciclet an n' ho brisa giustà(di) Yesterday night the bikes CL.NOM.1SG-not NE have NEG repaired 'Yesterday night I did not repair the bikes"

In **Table 29-30** we resume the available options in both languages, adding some illustrative examples. The determiners are ordered by their probability of acceptability according to our results. Thus, the first option is the more likely to occur, while the last is the less likely. If the probability is extremely low (i.e. < 10%), we consider the option ungrammatical.

Table 29: resumptive options of dislocated DPs introduced by indefinite determiners in Italian.

		ITALIAN
LI	1)	ART Il vino non lo bevo The wine not CL.ACC.3SG.m. drink 'I don't drink wine'
NE	1)	Ø Vino non ne bevo wine not NE drink 'I don't drink wine'
	2)	DI Di vino non ne bevo of wine not NE drink 'I don't drink wine'
	3)	DI+ART Del vino non ne bevo di+ART wine not NE drink 'I don't drink wine'

	FERRARESE		
LI	1)	ART Al vin an al bev brisa the wine CL.NOM-1SG-not CL.ACC.3SG.m. drink NEG 'I don't drink wine'	
	2)	DI+ART Dal vin an al bev brisa di+ART wine CL.NOM-1SG-not CL.ACC.3SG.m. drink NEG 'I don't drink wine'	
NE	1)	DI+ART Dal vin a nin bev brisa di+ART wine CL.NOM-1SG not-NE drink NEG 'I don't drink wine'	
	2)	ART (??) Al vin an nin bev brisa the wine CL.NOM-1SG-not not-NE drink NEG 'I don't drink wine'	
	3)	Ø/DI (Ad) Vin a nin bev brisa (Of) wine CL.NOM-1SG not-NE drink NEG 'I don't drink wine'	

**Table 30:** resumptive options of dislocated DPs introduced by indefinite determiners in Ferrarese

Finally, the *Pearson's residual analysis* §4.2.3 (*Figure 46*) confirms the results of the *mixed effect logistic regression*. In addition, it allows to add some further considerations.

First, in Ferrarese LI sentences several combinations of determiners including bare *di* were significantly more acceptable than expected under the hypothesis of a random event. In our view, this could be explained by a certain degree of uncertainty while giving the acceptability judgments. In fact, as noted by Leivada et al (2017b: 1) "non-standardization blurs the boundaries of grammatical variants and increases grammatical fluidity"<sup>72</sup>. However, the data at our disposal are not enough to affirm this suggestion with certainty.

Second, an additional surprising finding may be that in Italian the combination  $\mathcal{O} \mid art$  turned out to be more acceptable than expected in LI sentences, which generally do not allow bare nominals in the dislocated clause. The frequency was however very low.

<sup>&</sup>lt;sup>72</sup> This assumption is confirmed in Leivada et al (2017a,b), who focus on the bilectal community of Cyprus. In the first study (Leicada et al, 2017a), metalinguistic skills of bilectal Cypriot teachers are compared to the performance a group of Greek monolinguals in a variety-judgment task. The results show a sharp discrepancy between the performances of the two groups across all the linguistic levels. In fact, monolinguals perform generally better than bilectal speakers. In the second study (Leivada et al., 2017b) a similar task is administered to three groups of monolinguals, bilinguals and bilectals, showing that the latter group has the less accurate performance.

#### 4.3.2 The effect of the BLP score

The results of our *mixed effect logistic regression* analysis (see *Figure 38-39*, §4.2.2) show that the probability of accepting di+ART is inversely proportional to the BLP score in both languages. This trend indicates that in Italian, there might be substratum interference in the subjects with a moderate dialectal dominance and low level of education. On the other hand, in Ferrarese the subjects with Italian dominance and a high level of education may tend to accept di+ART less frequently because of interference with the standard variety. Since the BLP has been shown to be correlated to gender too, women might display higher BLP scores and thus tend to accept di+ART less frequently than men in both languages.

As for ZERO, the probability of its acceptability in Ferrarese does not change significantly according to the BLP score. The absence of interference of Italian into the dialect may be a sign that the acceptability of ZERO in the latter is not primarily due to a transfer/calque from Italian, but rather to *contact-induced stability*, as noted for Piedmontese by Cerruti and Regis (2020). Since ZERO is an inter-systematically similar element between the two grammars, it is cost saving in language processing and its use is maintained over time. Nevertheless, the di+ART innovation may have spread to the detriment of the most ancient form, which consequently lost frequency of use in the dialect and in the local variety of Italian. Of course, this is just hypothesis that should be verified by an in-depth diachronic study investigating the development of the paradigm of indefinite determiners in ancient texts.

Finally, the probability of accepting ART seems to decrease proportionally to the increasing of the BLP score in both languages. Since we did not find significant differences between the probabilities of accepting ART in the two languages, this finding cannot be explained by language interference. We suppose that this outcome might depend on some other effect related to the linguistic profile, regardless of the properties of each language. Of course, this should be verified in future with a larger sample, and hopefully with a more balanced distribution of the BLP scores.

#### 4.3.3 The grammar of bilectal Italo-Ferrarese speakers

Given the findings analyzed in the previous sections, we can conclude that the domains of grammar ruling the expression of indefiniteness in Ferrarese and in the local variety of Italian share the same micro- parameter and nano-parameter settings, which result in the same paradigm of indefinite determiners (i.e. ZERO, ART, di+ART). Second, even though semantic specialization of di+ART (i.e. for specificity or small quantity) is more frequent in the local variety of Italian than in Ferrarese, it occurs extremely less frequently than optionality in both the former and the latter language. Third, as we can see back in **Table 29-30**, in both languages ZERO, di+ART and di can be resumed by the quantitative clitic. This fact distinguishes these varieties from neo-standard Italian, which allows only ZERO and di.

Of course, there are also some points of divergence between the two grammars, which consist in: (i) the widespread use of di+ART in Ferrarese, as opposed to the frequent use of ZERO in Italian; (ii) the preference of different determiner types in dislocated objects resumed by a quantitative clitic (di+ART in Ferrarese vs bare *di* and ZERO in Italian); (iii) the different frequency in which a specialization of meaning for di+ART is attested. This means that, despite the hight degree of language proximity, our participants are able to distinguish between the two grammars and keep the two systems separated.

Overall, we can conclude that the two grammars tend to converge with each other in some of their characteristics. For this reason, we believe that the *micro-comparative approach* (Benincà and Damonte 2009) is the theory that better explains our data. However, if it is true that the two grammars tend to assimilate, points of divergence are still found. This is a sign that the assimilation between the two systems has not fully completed. Moreover, convergence does not seem to favour neo-standard Italian properties, but rather those of the dialect. This outcome is unexpected, since, as we saw in §1.1.4., the dialects spoken in micro-diglossic areas easily lose their marked features under the pressure of Italian. We propose that in the province of Ferrara, this process did not fully occur, and especially not in all domains of grammar. Moreover, we do not exclude that some components of grammar could either drastically diverge, either converge toward the standard language.

#### 4.3.4 Methodological remarks: the limits of our research

During the administration of the questionnaire, some problems have occurred and hence have to be underlined as limits of our research.

First, despite our efforts to shorten the questionnaire, the majority of our participants considered it too long. In fact, the software registered many incomplete answers that we were not able to take into account. One possible explanation for this problem may be that we truly underestimated the length of the questionnaire. Alternatively, the explanation could rather be that the questions were perceived as "boring" and "monotonous". In particular, CLLDed sentences may have sounded like a repetition to the informants, as they conveyed exactly the same meaning as their unmarked counterpart. In addition, the structure of the fillers was also rather monotonous, and contributed to the general feeling of boredom. For future research, I suggest (if it is needed) to investigate CLLD in a separate questionnaire, or alternatively, to make fillers more variate, ranging across different linguistic levels (i.e. morphology, syntax, lexicon, idiomatic expressions etc.) so that they could keep the informants' attention high.

It is also worth noting that many participants only completed the first part of the questionnaire, either because they forgot about the second, or because they did not read carefully the instructions at the end of the questionnaire. Of course, these incomplete answers could not be taken into account for data analysis either. In our opinion, it is possible that, if the questionnaire is administered online, this procedure requires too much effort by the informants, which should independently remember about the task and independently encourage themselves to do it. Nevertheless, if the questionnaire was less monotonous in its structure, the motivation may increase, hence reducing the probability to receive incomplete answers. Finally, submitting the test in person has often proven to be more helpful, since it allowed doing elicitation. In our view, this technique (if done conscientiously, without biasing the informants' answers) may reduce the effort to mentally construct situations in which the stimulus could be used (Schütze, 2016: 111) and avoid superficiality by the informants.

Despite all these problems could easily be avoided in future research adopting a different design, others arise from the chosen method. In fact, it has been argued that eliciting acceptability judgements from speakers of non-standard varieties may face various challenges.

First, the informants might be influenced by prescriptive notions of correctness, namely by the awareness that some variants in their linguistic repertoire are deemed as "incorrect". This awareness may lead them to *shift* their speech to the standard or, in some cases, even to deny the existence of any substantial difference (Leivada et al, 2019: 7).<sup>73</sup> Second, the lack of standardization determines a greater degree of intra- and interspeaker variation (ibid.: 4), as well as the absence of clear boundaries between the different varieties of the dialectal continuum. Of course, these are all factors that may produce a general trouble in giving unambiguous judgements over variants (see Cheshire and Stein, 1997; Henry, 2005). Finally, introspective judgments are filtered through speakers' perceptions about one's own language and performance (Leivada et al, 2019: 5). This filtering often results in a distortion, which means that a speaker may judge a form unacceptable, and then use it freely in spontaneous speech (see Cornips and Poletto, 2005).

It is worth noting that each method has its advantages and disadvantages. For instance, collecting spontaneous speech corpora is extremely demanding in terms of time and allows testing only those conditions that are found in the corpus. Moreover, while researching into a small, non-standard variety, finding and collecting material is even more challenging. All this considered, an effective solution for future research might be triangulation, namely the combination of different methods that either compensate the drawbacks of each, or investigate different aspects of the same phenomenon.

<sup>&</sup>lt;sup>73</sup> The probability of a shift toward the standard could be assessed toward a background questionnaire that tests for the attitudes of the informants toward the spoken languages. This is what we did by employing the BLP scale.

# Conclusions

In the present work, we studied the expression of indefiniteness in Italo-Ferrarese speakers with the aim to shed some light on the nature of their bilectal grammar.

We showed that the Ferrarese dialect and the local variety of Italian present the same paradigm of indefinite determiners, composed by ZERO, ART and di+ART. However, while the probability of acceptability of di+ART is much higher in the dialect, the opposite holds for the ZERO. Significant differences depending on clause type (habitual sentences in the present vs episodic sentences in the past) and noun type (mass vs plural count nouns) are not found, as well as the consistent presence of specialization of meaning. If the latter occurs, it is in an extremely little minority of cases, proving the existence of true optionality. We argue that all determiners express core indefinitenss, but di+ART can occasionally specialize for an added notion of specificity or small quantity, occasionally in Italian and rarely in Ferrarese.

Our results further show that in dislocated objects resumed by the quantitative clitic, we find three options that are shared by both languages: ZERO, di+ART and bare di. However, ZERO and bare di are the most likely options in Italian, while in Ferrarese the highest probability is found for di+ART. In both languages, ZERO and bare di are resumed by the quantitative clitic ne. Moreover, di+ART in Ferrarese can be resumed either by ne or by the accusative clitic, while in Italian only the first option seems to be likely. Then, ART is most frequently resumed by the accusative clitic in both languages, with extremely high probabilities. Nevertheless, ART in Ferrarese is slightly accepted in ne sentences as well, contrary to what is found in Italian. We argue that the two languages have the same resumptive options in ne sentences, but they adopt different choices according to the frequency of use in each language. We also believe that in both languages, the preferred reading for the partitive determiner in dislocated objects is the narrow scope one.

The above-mentioned findings allowed us to assume that despite the grammars ruling the expression of indefiniteness in Italian and Ferrarese are highly similar, they are provided with a few points of divergence. Formally, this means that the two grammars have at their disposal the same micro- and nano-parameters, but they resort to one or another specific setting with different frequencies. As for the lack of specialization of meaning, we assumed that di+ART has maintained over time the semantic features of the Celtic substratum, which continue to be spelled-out and trigger the interpretation as core indefinite in both languages. However, the specialization of meaning that has realized in neo-standard Italian became an available option and hence is found occasionally in Italian, but extremely rarely in Ferrarese.

In order to understand the effect that language dominance could have on the grammar of each speaker, we further examined the effect of the BLP score on the judgments of our informants. We found out that it was positively correlated with the probability of acceptability of di+ART. Therefore, we argue that in participants with a moderate dialectal dominance, di+ART is more accepted in Italian as an effect of substratum interference. Nevertheless, no correlation was

found between the BLP score and the probability of accepting ZERO in Ferrarese. This means that the high frequency of use of ZERO in Italian does not interfere into the dialect.

We finally claimed that the theory that better accounts for our data is the *micro-comparative approach*. However, despite Ferrara is located in a micro-diglossic area, the convergence between the two grammars favors the dialectal marked features over the Italian ones. Moreover, the few points of divergence between the two grammars provide evidence that (1) our informants are capable of keeping the two grammatical system separated; (2) the process of convergence has not completed in this specific component of grammar.

We cannot exclude the possibility that the results we obtained are highly influenced by the chosen method. In fact, it is possible that examining spontaneous speech we would find a different usage, as acceptability judgements only give one perspective on language competence. The distortion that may occur under the speaker's perception, as well as the degree of uncertainty due to the lack of standardization and the possible bias coming from the notion of correctness, have to be assumed as possible sources of weakness of our method. Therefore, I suggest the use of triangulation in future research, which is a technique that may allow us to compensate the drawbacks of different methods. Since the analysis of spontaneous speech corpora is extremely demanding in terms of time, an alternative would be exploring other elicitation techniques that could eventually give us different insights on the issue.

A few questions are still open and should be solved in future research:

- (i) The need for an adaptation of the BLP scale when researching into bilectalism was a mere intuition of ours that needs to be investigated in future.
- (ii) The tentative account sketched in our work is not able to explain all the available options in dislocated sentences. Further research would be needed on the behaviour of indefinite determiners in these structures.
- (iii) Other traits interacting with the expression of indefiniteness, as well as the role of inflectional markers on the noun, should be further investigated in order to obtain a clearer understanding of the phenomenon.
- (iv) The effect of the BLP score on the acceptability of ART, which seemed to increase in subjects with dialectal dominance, cannot be explained by interference between the two languages. Therefore, an open questions consists in whether there might be other external factors related to the linguistic profile that are responsible for the observed outcome.
- (v) True optionality between competing forms could be explained either assuming the existence of a complex hierarchy of parameters of the type proposed by Biberauer and Roberts (2012), or assuming a non parametric model of UG, thus relegateing variation to the externalization component of language. An extensive theoretical study would be needed in order to solve this opened question, which is still subject to a vibrant debate in linguistics research.

Despite these open questions, we believe that our work was able to provide interesting insights into the issue of bilectalism in Italo-Romance, proving that the Italian sociolinguistic situation needs a model of grammar that accounts for different degrees of divergence and convergence in specific components. Furthermore, we proved that the pressure of neo-standard Italian in microdiglossic areas should not be taken for granted, as dialectal marked features could also be maintained. How exactly to account for bilectalism in formal models of grammar is an extremely challenging issue about which there is certainly still much to understand.

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