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Partitivity in Italian

A protocol approach to a multifaceted phenomenon

This paper claims that “partitive” is a cover term for at least four types of syntactic constructions and provides diagnostics to distinguish among (i) partitive structures instantiated by a quantifier selecting two arguments: an indefinite nominal expression and a “partitive PP” (cf. Cardinaletti & Giusti 2017) (ii) quantitative structures instantiated by a quantifier just selecting the indefinite nominal expression; (iii) the so-called “partitive article” (*di*+*art* in Italian), which is an indefinite determiner for mass and plural count nouns; (iv) the partitive clitic *ne*, which only resumes a bare indefinite nominal expression. The paper presents the diagnostics in the “protocol” fashion, a theory-neutral methodology to present and organize data, encompassing the incommunicability across different approaches. The diagnostics highlight properties that distinguish the four categories from one another and set them in comparison with other categories, such as genitive and oblique PPs; accusative, genitive and oblique clitics and null subject pronouns; circumstantial partitive PPs; bare nouns and pseudo-partitives. This is done in a one-language perspective, focussing on Italian with a close eye on what has been claimed for French, the only other language to display the four phenomena.

1 Introduction

1.1 The controversial notion of partitivity

The term “partitive” is often used as a cover-term to refer to what I claim here to be four different phenomena.¹ I concentrate on Italian, but the argument is predicted to hold more generally in languages displaying forms and constructions such as the four nominal expressions in square brackets in the following examples:

¹ Preliminary versions of this paper have been presented in an invited seminar at the Amsterdam Center for Language and Communication on May 25, 2018, and at the PARTE Workshop in Venice. I thank the audiences and an anonymous reviewer for comments and constructive criticism. I also thank Laura Brugè, Anna Cardinaletti, Petra Sleeman and Klaus von Heusinger for precious comments on previous drafts. Needless to say, all remaining mistakes are my own fault.

- (1) a. [Alcune delle ragazze] sono arrivate.
'Some of the girls arrived.'
- b. [Alcune ragazze] sono arrivate.
'Some girls arrived.'
- c. [Delle ragazze] sono arrivate.
 of-the girls are arrived
'Girls arrived.'
- d. [Ne] sono arrivate (alcune).
 CL.PART are arrived some
'Some arrived.'

In (1a), the subject is the prototypical example of a “partitive construction” with a quantifier *alcune* (‘some’) picking an indefinite quantity of indefinite individuals out of a definite set of individuals of the same kind (‘girls’). The (genitive) preposition *di* (‘of’) merges with a definite article *le* (art.F.PL) obtaining *delle*, to express the definite set out of which the partition is operated.² In (1b), the subject is a quantified nominal expression without a partitive complement. The interpretation is of an indefinite quantity of girls, with no partition of a definite set. In (1c), the subject is apparently introduced by the same *di*+art form introducing the definite set in (1a), but its interpretation is neither of partition nor of definiteness. Instead, it is indefinite as in (1b) but, unlike (1b), it is not quantified. Finally, in (1d), we observe the possibility to substitute the indefinite subject with the clitic *ne*. The quantifier *alcune* (‘some’) is optional here. This suggests that *ne* is extracted from the internal argument position (direct object or postverbal subject of unaccusative verb, as in this case) even when the quantifier is not present.³

² I will call the *di*-constituent “partitive PP”, as it is usually called in current literature for languages that express the superset with a prepositional phrase. Nothing in the label P prevents us from assuming that *di* is a case-marker and is therefore semantically and functionally equivalent to partitive case, which is also realized as genitive or ablative across languages, as observed in Giusti & Sleeman (2021, this volume), Seržant (2021, this volume), von Heusinger & Kornfilt (2021, this volume), and Huumo (2021, this volume). In this perspective, it is not surprising to consider the whole partitive PP as “definite”, assuming that the preposition *di* is a case marker in the highest head of the nominal expression.

³ I am not claiming that the four constructions exhaust the notion of “partitivity” in a cross-linguistic perspective or even in Italian. The four cases in (1) are just the most prominent in Italian and therefore the most urgent to be discussed in a language-internal perspective. I only briefly touch upon partitives and pseudo-partitives arising with semi-lexical quantity nouns (‘a glass of wine, a liter of wine’), which are treated for comparative purposes in section 2.1, protocol (16), and section 3.1 protocol (66). I disregard other constructions like ‘that treasure of a woman’ or ‘wine of good quality’ which, in my opinion, are not to be unified with partitives, *pace* Corver

A unified analysis of the four types of nominal expressions in (1) is legitimated by the features that are apparently common to some of the constructions and could, by transitivity, be extended to all. The fact that *ne* can, in other contexts, resume a genitive possessor or a genitive argument of a verb (as will be discussed later) may suggest that the *ne* in (1d) is a prepositional clitic that resumes a partitive PP, such as the one we find in (1a). The fact that *di+art* introduces partitive PPs and indefinite expressions may suggest that the partitive determiner in (1c) is in the complement of a hidden quantifier thereby unifying (1c) with (1a). The hidden quantifier hypothesis could further unify (1c) with (1a-b)). Finally, the indefinite interpretation of the nominal expressions in (1b) and (1c) may suggest the assumption of a hidden quantifier even for bare indefinite nominals, which are resumed by *ne* in (1d). These possibilities are summarized in (2):

- (2) a. genitive morphology on the partitive PP (1a) and on the clitic *ne* (1d),
- b. formal identity (*di+art*) of the inflected preposition in the partitive construction in (1a) and the partitive determiner in (1c),
- c. occurrence of the same class of existential quantifiers in (1a), (1b), and (1d),
- d. indefinite interpretation of the nominal expressions in (1a-c) and of the clitic in (1d).

There are, however, crucial differences among the four constructions in (1) and notable parallels that each of them has with non-partitive constructions, which must be accounted for.

1.2 Aims and structure of the paper

The aim of this paper is to pin down in a systematic way differences and similarities across the structures in (1) and propose diagnostics to distinguish them from one another and put them in comparison with other constructions. This will be done using a descriptive methodology informed by the advances of formal linguistics, which I call Protocol Linguistics for reasons that will be made clear below.

(1998) and much work following him. I also disregard possessive partitives or double genitives such as “a friend of Mary’s” which are one of the main points in Barker’s (1998) paper but are not present in Italian and would therefore take us afar from the focus of this paper.

The paper is structured as follows. The rest of this section introduces the protocol methodology. Section 2 overviews previous literature proposing unification of two or more of the structures in (1) and presents diagnostics to evaluate alternative analyses. Section 3 provides an overview of the diagnostics in basic and dislocated positions. Section 3.1 presents the selectional restrictions on partitives, indefinites and pseudo-partitives also distinguishing between selected and circumstantial partitives. Section 3.2 discusses the categorial status of partitives and indefinites making use of the different distribution and forms of resumptive clitics in dislocated positions. Section 4 draws the conclusions.

Before starting the discussion, a terminological caveat is in order. I use the term **nominal expression** (abbreviated as **NomExpr**), to abstract away from the NP/DP diatribe. I call complex structures such as *alcune delle ragazze* ('some of the girls') in (1a) **partitive constructions** and less complex structures with a NomExpr preceded by a quantifier such as *alcune ragazze* ('some girls') in (1b) **quantitative constructions**. *Delle ragazze* in (1c) is an **indefinite NomExpr**, introduced by the **partitive determiner**⁴ *delle* (also labelled as *di+art*), to be distinguished from the preposition bundled with a definite article in the **partitive PP** belonging to the partitive construction in (1a). The clitic *ne* in (1d) is labelled **partitive ne**⁵ to be distinguished from **genitive ne** in the complement of nouns (whether functional or lexical) and **oblique ne** in the complement of verbs.⁶ An indefinite NomExpr with no overt determiner is called **bare NomExpr**.

⁴ I use the term "partitive determiner" or "*di+art*" as equivalent to "partitive article", which is also very common in the literature. This is to remain agnostic as to the category of this element, which is analyzed in Cardinaletti & Giusti (2015, 2016, 2020) as an indefinite determiner (*di*) in SpecDP combining with concord morphology in D (the article). In this perspective neither portion of *di+art* is a true article. However, nothing hinges on this here.

⁵ In much literature, among which Cardinaletti & Giusti (2006, 2017) partitive *ne* is called quantitative *ne* because it is claimed to resume the indefinite expression in the quantitative construction. The term partitive here is used for the sake of homogeneity with the other papers of the volume but it is also useful to distinguish *ne* which resumes a bare NomExpr, that can appear in a quantitative construction but can also appear independently of insertion of a quantifier.

⁶ I am claiming here that no genuine partitive clitic exists in the narrow sense of a clitic resuming the *di*-PP in a partitive construction. The term partitive *ne* is therefore used to refer to the case assigned to the indefinite nominal in a quantitative construction and to the clitic that resumes it. The correlation of partitive case with indefiniteness, is discussed at length by Carlier (2021, this volume), Huomo (2021, this volume) Etxeberria (2021, this volume) and by Giusti and Sleeman (2021, this volume).

1.3 The protocol methodology

Achievements in linguistics are often ignored by applied fields such as language teaching, language therapy, and language policies. It is also true that researchers of different theoretical persuasions find it difficult to share their results and build on reciprocal advances. The generalized incommunicability is due to the highly abstract theoretical assumptions and specialized terminological tools, which are not shared by different theoretical frameworks and specializations. This is particularly unfortunate in the view that different subfields (syntax, semantics, morphology, phonology, discourse, etc.) and approaches (historical, typological, functional, generative, optimality, etc.) raise different research questions, whose answers would altogether bring about a better understanding of language as a human capacity. We therefore need a sound methodology, free of those theoretical biases that hinder the collaboration among linguists, to overcome this stalemate situation and build on current theoretical advances.

Such a methodology should allow us to formulate research questions, design questionnaires and experiments, and present the results in a format accessible to linguists of different persuasions as well as non-linguists, avoiding unnecessary technicalities but crucially without renouncing depth of insight. What can such a methodology consist of? It cannot be another theory, in addition to the ones already available; nor can it be an a-theoretical or anti-theoretical approach. It needs to individuate good practices, which are currently in use and organize research in a “protocol” fashion. In science, a protocol is an established procedure, which applies in the same way with the same tools in different but comparable situations. It is therefore set to ensure comparability in the collection, organization, and presentation of data avoiding disturbances.

What is a good protocol for linguistic data collection and presentation? General linguistics is used to systematizing linguistic features in tables that display a $[\pm]$ value for the crossing point of two different indicators. Table charts showing the interaction of two dimensions of indicators are a simple and shared methodology.

The protocol methodology applied in the last years to different empirical environments (cf. Giusti 2011, Giusti & Zegrean 2015, Di Caro & Giusti 2015, Giusti 2021) wants to go one step further and set a methodology to design appropriate table-charts for given research questions. In the streamline of the search for parameters or implicational universals of language, the features of the protocol can be organized in clusters of properties that contribute to characterize a given construction and distinguish it from the other.

After having established the relevant clusters of features for the relevant phenomena in the studied language(s), we are ready to produce a simple table-chart

intersecting the features with the studied constructions in one or more languages. To give a provisional example of a protocol, let us organize the observations that justify the unification of the four constructions under the umbrella-term “Partitivity in Italian”. In protocol (3), the horizontal axis lists the constructions in (1) above, the vertical axis lists the interpretive properties of the constructions and the observed formal identity with “genitive” morphology. The [+] value stands for mandatory presence of the feature; the [-] value stands for mandatory absence; the [+/-] value stands for presence or absence according to different contexts; [0] indicates that the intersection is irrelevant, as is the case in (3c) for the interpretation of the article in quantitative constructions and with partitive clitics, given that there is no article in these cases:

(3)

Partitivity in Italian	Partitive construction (1a)	Quantitative construction (1b)	NomExpr with a partitive determiner (1c)	Partitive clitic (1d)
a. quantified interpretation	+	+	-	+/-
b. part-whole interpretation	+	-	-	-
c. definite interpretation of the article	+	0	-	0
d. genitive-like morphology	+	-	+	+

Protocol (3) states that the partitive construction (1a) has a quantified part-whole interpretation, marked with [+] in (3a-b), it contains a definite NomExpr in the partitive *di*-PP which has apparent genitive morphology, as indicated by [+] in (3c-d). The quantitative construction (1b) is quantified but does not have the part-whole interpretation, as indicated by [+] in (3a) and [-] in (3b). Since in Italian the NomExpr in the quantitative construction never displays the preposition *di*, it receives a [-] as regards genitive morphology in (3d). The indefinite NomExpr introduced by a partitive determiner (1c) is not quantified and does not have a part-whole interpretation, nor does it have definite interpretation; thus, it is marked with [-] in (3a-c). The determiner formed with *di* can be considered as displaying genitive morphology. This is marked with [+] in (3d). Partitive *ne* (1d) may resume the indefinite argument of the quantifier and is marked with [+/-] in (3a), but cannot resume the partitive PP (as will be argued in section 2.2), nor can it have definite interpretation. This is marked with [-] in (3b). Its genitive form is uncontroversial and is marked with [+] in (3d).

Unification of the four constructions would imply arguing that the differences in values in (3) are only apparent. This may come to mind if we consider French,

where the indefinite complement of the quantifier *beaucoup* ('much / many') is introduced by the preposition *de* (4a-b) thereby supporting unification of genitive morphology in the four cases. Milner's (1978) seminal work on these constructions unifies the quantitative constructions in (4b-b') proposing a covert counterpart of *de* in (4b'). It also unifies nominal expressions with partitive determiners (4c) and quantitative constructions proposing a covert quantifier selecting the partitive determiner. Finally, partitive *en* in (4d) can pronominalize the nominal part of a quantitative construction or an indefinite NomExpr if the quantifier is not expressed:

- (4) a. J'ai vu beaucoup/plusieurs des filles.
'I've seen many of the girls.'
- b. J' ai vu beaucoup de filles.
I have seen much of girls'
- b' J' ai vu plusieurs filles.
have seen many girls.
'I saw many girls'
- c. J' ai vu des filles.
I have seen of-the girls
'I saw girls.'
- d. J' en ai vu (beaucoup/plusieurs).
I CL.PART have seen many
'I saw many of them.'

Further arguments for unification would be the possibility for an indefinite NomExpr with a partitive determiner and partitive *en* to refer to a previously introduced referent, thereby having the same referential property as the partitive PP (which is mandatorily definite). The dislocated NomExpr in (5a) can be interpreted as either referential (*deux des livres de Zola* 'two of Zola's books') or non-referential (equivalent to *deux livres de Zola* 'two books by Zola'), as shown by the translation. The second sentence in (5b) can either mean that they killed five of the ten lions seized on Tuesday (referential interpretation), or that they killed five more lions (non-referential interpretation):

- (5) a. Des livres de Zola, j'en ai lu deux.
of-the books by Zola, I CL.PART have read two.
'I read two (of the) books by Zola'

- b. Ils ont attrapé dix lions mardi;
they have caught ten lions [on] Tuesday;
mercredi, ils en ont tué cinq.
[on] Wednesday they CL.PART have killed five
‘They caught ten lions on Tuesday; on Wednesday they killed five more
lions/ five of them.’

Protocol (6) summarizes the similarities that may suggest unification in French making use of covert categories and extends them to Italian by assuming more covert categories. The value [(c)overt] means that the item can be overt or covert:

(6)	Partitivity in Italian and French	Partitive construction	Quantitative construction	NomExpr with partitive determiner	Partitive clitic
a.	Quantifier	+	+	+	+
	Italian	overt	overt	covert	(c)overt
	French	overt	overt	covert	(c)overt
b.	Preposition	+	+	+	+
	Italian	overt	covert	overt	overt
	French	overt	(c)overt	overt	overt
c.	Genitive morphology	+	+	+	+
	Italian	overt	covert	overt	overt
	French	overt	(c)overt	overt	overt
d.	Definite interpretation	+	–	–/+	–/+

In (6a), a covert quantifier is assumed in the NomExpr with the partitive determiner; this is consequently extended to the partitive clitic, which is now analyzed as occurring with an overt or covert quantifier. In (6b), the unification of *de* as a preposition in partitive and quantitative constructions (overtly with *beaucoup* in (4b), covertly with *plusieurs* in (4b') and in indefinite nominal expressions also unifies partitive determiners with partitive clitics and prepositional clitics. In (6c), the genitive morphology realized by *di/de* and *ne/en* is unified in the four constructions, assuming *di/de* to be covert in quantitative constructions in Italian, and overt or covert in French according to the quantifier. Even the interpretive properties in (6d) would be at least partially unified: the possibility reported in (5) of referential interpretation for the dislocated NomExpr with partitive determiners resumed by *ne* softens two out of three [-] values in (3c) to variable values [-/+] in (6d). In the rest of the paper, I will argue against the unification envisaged in protocol (6).

The literature on these phenomena is copious and the proposals so diverse that it is impossible to do justice to them here. As far as I know, no piece of work has ever attempted a full unification of the four structures, as represented in (6). Researchers working on different languages and theoretical frameworks usually only focus on part of the empirical environments represented in (1). This is mainly due to the fact that while partitive PPs and quantitative constructions with quantifiers are present in many languages, partitive clitics and partitive determiners are quite restricted.⁷ The point here is that while most authors emphasize the similarities and aim to accommodate the differences in a unified frame,⁸ this work aims to show that these phenomena are radically different from one another in the synchrony⁹ and treats them in comparison with other properties of the language.

⁷ As observed by Giusti and Sleeman (2021, this volume), partitive determiners are limited to French, Italian and non-standard Gallo-Romance varieties (cf. Gerards & Stark 2021 on Franco-Provençal). I am unaware of other languages that have a genitive preposition combined with a definite article introducing indefinite nominal expressions. The Dutch *van die* construction is no exception to this, if Le Bruyn (2007) is correct in proposing that *van* ('of') is a preposition and *die* is not an article ('the') but a demonstrative ('those').

Across Indo-European languages, partitive clitics are present in French, Italian and Catalan (a subset of Romance) but also in Slavic (cf. Toman 1986 for Czech) while partitive weak pronouns are present in Germanic (Strobel & Glaser 2021 and the many papers on *Duch er*, among which Berends et al. 2021, this volume). Genitive morphology or case alternations related to indefiniteness is found in Finno-Ugric (cf. Huumo, 2021, this volume), Turkic (cf. von Heusinger & Kornfilt, 2021, this volume) and Basque (cf. Etxeberria, 2021, this volume). I am unaware whether all these languages distinguish between quantitative and partitive constructions. The picture is further complicated by the observation that there are different types of partitive constructions (cf. Giusti & Sleeman, 2021, this volume and Falco & Zamparelli 2019 for a general overview, Seržant 2021, this volume for a diachronic typology, and section 3.1.1 of this paper for Italian). It is therefore very difficult to decide what categories and constructions are relevant to crosslinguistic comparison.

⁸ This is the spirit of more recent literature. For example, Zamparelli (2000), Dobrovie-Sorin & Beyssade (2004), Ihsane (2008), and Dobrovie-Sorin (2021) derive different interpretations proposing different levels of structural complexity but maintain that the most complex nominal expression is equivalent to referential DPs. These authors assume that ambiguous items such as quantifiers, the functional element *di* and the article it combines with are merged lower than D and can be moved upwards to intermediate heads reaching the level of D at most. Unification of partitive and quantitative constructions and the partitive clitic in Ibero-Romance is proposed by Martí i Girbau (1999, 2010) who claims that a quantifier selects a single complement which can be definite (partitive) or indefinite (quantitative); and both can be resumed by the clitic *en/ne*. Indefinite *des/du* is unified with quantitative and partitive by Bosveld de Smet (1998, 2004) for French. The list cannot be exhaustive.

⁹ It is important to distinguish the diachronic analysis, which derives the partitive determiner from a proper partitive construction, from the newly formed partitive determiner with proper characteristics even in neighboring languages; cf. Carlier (2021, this volume), Carlier (2007),

It will do so by providing protocols to diagnose differences and similarities that each of the four constructions has with other constructions of the language. The comparative dimension here is not across languages but across categories and constructions. The diagnostics provided here can be the ground for the design of data collection in future research to validate the data presented here, detect variability across speakers and across varieties. Gallo-Romance varieties in this respect are the most relevant, since they are the only ones that productively display the four phenomena.

2 Three environments of possible unification

Chierchia (1997) and Zamparelli (2008) propose a unified analysis of partitive, quantitative and indefinite nominal expressions introduced by *dei* along the following rationale: (i) The partitive construction is made of a quantifier in D, a null NP filled by a covert [PART] feature and a partitive PP. (ii) The quantitative construction is simpler and only has the quantifier in D and an overt NP. (iii) The indefinite NomExpr with *dei* is derived by moving the low D into P and then the complex head P+D from the downstairs partitive PP to N, adjoining it to [PART], and then moving the whole [[PART]+*delle*] to the higher D. The status of the clitic *ne* is taken to resume the upper NP in (1a-b). For this reason, *ne* cannot be extracted from (7c), where the content of the upper NP has been moved to D. The three structures in (7) are my own simplification. (7a) corresponds to (1a); (7b) to (1b) and (7c) to (1c):

- (7) a. $[_{DP} [_D \text{alcune}] [_{NP} [_N \text{PART}] [_{PP} [_P \text{delle}] [_{DP} [_D \text{le}] [_{NP} [_N \text{ragazze}]]]]]]]$
 b. $[_{DP} [_D \text{alcune}] [_{NP} [_N \text{ragazze}]]]$
 c. $[_{DP} [_D \text{PART+delle}] [_{NP} [_N \text{PART+delle}]] [_{PP} [_P \text{delle}] [_{DP} [_D \text{le}] [_{NP} [_N \text{ragazze}]]]]]]]$

Three separate hypotheses are needed in the unification in (7); each of them has (at least) an alternative in a framework in which indefinite nominal expressions are of category DP (Cardinaletti & Giusti 2015, 2016), while quantified constructions are of category QP, as in Cardinaletti & Giusti (2006, 2017):

Carlier & Lamiroy (2014) for French, Stark (2002), Luraghi & Albonico (2021, this volume), for Old Italian.

- (8) a. [_{QP} [_Q alcune [_{DP} pro]] [_{PP} de- [_{DP} le [_{NP} ragazze]]]] (1a)
 b. [_{DP} alcune [_{DP} 0 [_{NP} ragazze]]] (1b)
 c. [_{DP} de- [_D le] [_{NP} ragazze]] (1c)

The unifying assumptions are formulated in (9i-iii.a) and the alternatives in (9i-iii.b):

- (9) Three independent hypotheses
- i.a. The partitive PP is unified with the indefinite NP complement of D.
 - i.b. Alternatively, the partitive PP and the indefinite DP are different arguments of Q.
 - ii.a. *Ne* is ambiguous between the partitive and the quantitative interpretation.
 - ii.b. Alternatively, *ne* resumes the indefinite NomExpr in a quantitative construction.
 - iii.a. The partitive determiner is derived from the PP by movement.
 - iii.b. Alternatively, the partitive determiner is an independent indefinite determiner.

In principle, each hypothesis in (9) could coexist with any other except its direct alternative. Therefore, the exclusion of one alternative, *per se*, gives no clue as to which hypothesis should be favoured in the other pairs.

The hypothesis that functional projections can split in separate hierarchical projections (Rizzi 1997 for the clause, Giusti 1996 for its early application to the nominal structure) is the base of Zamparelli's (2000) and Ihsane's (2008) proposals to analyze different types of indefinites as having a common structural core and being different as to the presence or absence of the highest projections. A common feature of the two approaches is that they split the DP in three projections, each realizing a different discourse feature / triggering a different interpretation: referential > quantitative > predicative. Determiners that are ambiguous across two or all three interpretations, such as existential quantifiers, singular *un* ('a/one') and partitive determiners are taken to start from the lowest possible position and move stepwise to higher ones. This has a consequence on the analysis of the clitic *ne*, which is analyzed as being structurally less rich than accusative clitics, thereby deriving its non-referential interpretation. I consider these as unified analyses.

On the opposite side, Cardinaletti & Giusti (1992, 2006, 2017) distinguish across quantifiers of different classes, one of which selects an indefinite NomExpr (the only one to be resumed by *ne*) and an optional partitive PP (with a definite NomExpr). Furthermore, Cardinaletti & Giusti (2015, 2016, 2020) claim that indefinite nominal expressions are DPs that can have overt or non-overt determiners according to the

case they are assigned. A bare NomExpr is assigned partitive case, can only occur in internal argument position, and is resumed by *ne*. An indefinite NomExpr introduced by a partive determiner can be in any position and receive case accordingly: when dislocated from object position, it is resumed by an accusative clitic; when in subject position it is resumed by a null subject pronoun. For this reason, it cannot be assumed to receive partitive case (since arguments can only bear one case).

The rest of section 2 pins down some empirical facts to evaluate the alternatives spelled out in (9) and organize them in three protocols: (i) different partitive complements, (ii) different categories of *ne*; (iii) different categories of *di*+art. For reasons of space, I only refer to seminal works and do not mention the large debate stemming from them.

2.1 The two complements of Q

As early as Jackendoff (1968), generative approaches attempt a unification of partitive expressions occurring with quantity nouns (qNs) and quantifiers (Qs), like those in (10), making use of deletion-transformations. According to this line of reasoning, (10c) is derived from (10b) by deleting *of*. Lack of article in (10c) is related to the possibility in English to express indefiniteness with a null determiner, as is also possible in the partitive complement of the quantity noun in (10a):

- (10) a. a / the group of (the) men
 b. three of *(the) men
 c. (the) three (*the) men

Jackendoff (1968) must postulate a restriction to a single definite determiner either preceding or following the quantifier to account for the ungrammaticality of **the three of the men*. This is an unmotivated difference with qNs, which freely admit a determiner before and after them, as in *the group of the men*, cf. section 3.1.2 below.

Against the unified proposal, Selkirk (1977) for English, Milner (1978) for French, Belletti (1979) and Rizzi (1979) for Italian claim that the partitive PP in (10b) is different from the NomExpr occurring with a quantifier in the quantitative construction (10c).

Belletti observes that *five books* simply refers to five individuals, while *five of the books* also implies the existence of more than five individuals. This is the core of the partitive construction (Barker 1998) and should hold crosslinguistically. Note that this is not the case of the PP complement of qNs such as *group*. Belletti also observes that in Italian, it is impossible to extract a possessor PP from a par-

titive construction (11a), while this is possible from a quantitative construction (11b). Furthermore, Italian allows extraction from a definite NomExpr (11c). Thus, in (11b) extraction is not blocked by the definiteness of the partitive PP but by its prepositional nature.¹⁰ This is a good argument against the assumption of a covert preposition *di* in quantitative constructions:

- (11) a. *Di chi hai letto molti [_{PP} dei libri [_{PP} di chi]]
 of whom have-you read many of-the books
 b. Di chi hai letto molti [_{NomExpr} libri [_{PP} di chi]]
 of whom have-you read many books
 ‘Whose books did you read?’
 c. Di chi hai letto tutti [_{NomExpr} i libri [_{PP} di chi]]
 of whom have-you read all the books
 ‘By whom did you read all books?’

Rizzi (1979) observes that a singular quantifier such as *un(o)* in (12a) agrees in number with its nominal complement while the partitive PP is plural (12b):

- (12) a. un libro / *un libri
 one book / one books
 b. uno dei libri / *uno del libro
 one of-the books / *one of-the book’

Rizzi also observes that the elided form *un* (‘a/one’), as well as other singular quantifiers such as *ogni* (‘each’) and *qualche* (‘some’) can only occur in a quantitative construction (13a) and not with a partitive PP (13b). The presence of the PP is only allowed with a strong (pronominal) form of the quantifier (13c), suggesting the presence of a null category (a bare NomExpr in our terms) between the quantifier and the PP:

- (13) a. un / ogni / qualche libro
 a / each / some book
 b. *un / *ogni / *qualche dei libri
 c. uno / ognuno / qualcuno dei libri
 one / each / some of-the books

¹⁰ If we take prepositions to be case markers, we could say that in Italian it is impossible to extract from oblique NomExpr. In this perspective, postverbal nominative, accusative, and partitive are direct cases from which it is possible to extract.

The data in (11)-(13) favour hypothesis (9i.b) over (9i.a), as stated in (14):

- (14) The partitive PP and the bare NomExpr occurring with Q cannot be reduced to a single category.

Note that qNs always have a PP complement in Italian. This PP is different from both the partitive PP occurring with Q in partitive constructions and the NomExpr occurring with Q in quantitative constructions. In fact, the PP complement of qNs can be definite or indefinite (15a). Extraction from qNs (15b) show that if the PP embeds an indefinite DP, it has the properties of the indefinite NomExpr in the complement of Q, which does not imply the part-whole relation and allows extraction (cf. (11b) above); if it embeds a definite DP, it has the properties of the partitive PP, which conveys the part-whole interpretation and disallows extraction (cf. (11a) above):

- (15) a. un gruppo di ragazze / delle ragazze della mia classe
 ‘a group of girls / of the girls of my class’
 b. Di quale classe conosci un gruppo di ragazze/*delle ragazze
 [di quale classe]?
 ‘Of which class do you know a group of girls/*of the girls?’

Also note that unlike Q in (11), which agrees for gender with the NonExpr independently of the presence or absence of a preposition, qN has a morphological gender of its own (*gruppo* in (15) is masculine even if it refers to a plurality of girls).

The protocol in (16) summarizes the features to distinguish the partitive PP and the bare NomExpr in the quantitative construction. It also shows that the PP complement of a qN is different from both and needs to be treated separately:

(16)

‘Partitive’ complements of Q and qNs	Partitive PP in partitive constructions	Indefinite NomExpr in quantitative constructions	PP complement of qN
a. The NomExpr can be definite	+	–	+
b. The NomExpr can be indefinite	–	+	+
c. The construction implies a larger set	+	–	+/–
d. <i>Wh</i> -extraction of a possessor PP	–	+	+/–
e. Number agreement between Q/qN and the NomExpr	–	+	–
f. Gender agreement between the Q/qN and the NomExpr	+	+	–

2.2 The category of *ne*

Let us now evaluate the competing hypotheses (9ii.a-b) regarding the possible unification of the clitic pronoun (French *en*, Italian *ne*) with the partitive PP or the indefinite NomExpr complement of a Q. In this perspective, a comparison with genitive *ne* is relevant.

Milner (1978:51) notes that partitive *en* cannot be extracted out of a definite NomExpr, while genitive *en* can. The same holds for Italian. In the second sentence of the pair in (17a), *ne* resumes the indefinite complement of the quantifier; the ungrammaticality of the second sentence in (17b) suggests that *ne* cannot resume an NP when D is filled by a definite article. This also holds when a cardinal is present, suggesting a dual nature of the cardinal (as a quantifier and as an adjective, cf. Cardinaletti & Giusti 2006, 2017):

- (17) a. Ho letto due libri. → Ne ho letti due [ne].
 'I read two books' → CL.PART I-have read.M.PL two
 b. Ho letto i due libri. → *Ne ho letti i due [ne].
 'I read the two books' → CL.PART I-have read.M.PL the two

The sentences in (18) show that genitive *ne*, unlike partitive *ne*, can be extracted out of a definite or indefinite NomExpr:

- (18) a. Conosco (le) tre versioni di questo capitolo.
 I-know (the) three versions of this chapter
 b. Ne conosco (le) tre versioni [ne].
 CL.GEN I-know (the) three versions

Establishing that partitive *ne* is different from genitive *ne* slightly favours (9ii.b) over (9ii.a) under the consideration that both genitives and partitives are prepositional.

Boivin (1999, 2005) provides one piece of evidence, for French, against the assumption that partitive *en* is the partitive PP, even if in some cases it is translated as “of them” in English. The same type of evidence holds in Italian. In (19), adapted from Boivin (2005), there is no definite set of books to which *ne* could refer; therefore, *ne* could only refer to the indefinite NomExpr in the complement of the quantifier:

- (19) Maria ha comprato tre libri alla Coop
 Maria has bought three books at-the Coop
 e Piero ne ha comprati due da B&N.
 and Piero CL.PART has bought.M.PL two at B&N's

Sentence (19), however, is only evidence for the possibility of *ne* to refer to an indefinite entity previously introduced but is still compatible with (9ii.a), which proposes that *ne* has ambiguous quantitative or partitive status.

Cardinaletti & Giusti (1992) observe that quantitative *ne* in Italian behaves like a direct object clitic and is different from prepositional clitics in that it triggers past participle agreement, while prepositional clitics do not, cf. (20a) with (20b-c):¹¹

- (20) a. Ne ho letti/*o due [ne] (di libri).
 CL.PART I-have bought.M.PL two (of books.M.PL)
 ‘Books, I read two.’
 b. Ne ho parlato/*parlati [ne] ieri (di libri).
 CL.PART I-have spoken.(*M.PL) yesterday (of books.M.PL)
 ‘I talked about books, yesterday.’
 c. Ne ho letto/*i due versioni [ne] (di questi libri).
 CL.PART I-have read.(*M.PL) two versions (of-these books.M.PL)
 ‘Of these books, I read two versions.’

Cardinaletti & Giusti unify partitive *ne* with direct object clitics (which trigger past participle agreement and are nominal expressions) and genitive and oblique *ne* with prepositional clitics (which do not trigger agreement and are of category PP).

Both partitive *ne* and accusative clitics can extract out of a quantifier. The crucial difference is that universal quantifiers select a definite NomExpr to which they transfer the accusative case assigned by the verb in (21a). Existential quantifiers absorb accusative and assign partitive case to the indefinite NomExpr in (21b):

- (21) a. Ho letto tutti i libri. → Li ho letti tutti [ti]
 ‘I read all the books’ → CL.ACC.M.PL I-have read.M.PL all.M.PL
 b. Ho letto molti libri. → Ne ho letti molti [ne].
 ‘I read many books’ → CL.PART I-have read.M.PL many.M.PL

The same holds for postverbal subjects of unaccusative verbs, with the crucial difference that partitive *ne* is parallel to *pro*, since Italian is a null subject language. The null subject *pro* has referential interpretation and can be the complement of a

¹¹ Agreeing past participles have the following endings: -o (M.SG), -a (F.SG), -i (M.PL), -e (F.PL) and are glossed consequently. Non-agreeing past participles have the ending -o which is not to be considered as masculine singular but as lack of gender agreement. For this reason, I will not gloss it at all.

universal quantifier in (22), while the indefinite pronoun selected by *molte* in (23) must be realized as partitive *ne*:¹²

- (22) a. Sono arrivati tutti i libri.
are arrived.M.PL all the books.M.PL
'All books arrived.'
- b. Sono arrivati tutti [pro].
are arrived.M.PL all.M.PL
'All arrived.'
- (23) a. Sono arrivati molti libri.
are arrived.M.PL many.M.PL books.M.PL
'Many books arrived.'
- b. Ne sono arrivati molti [ne].
CL.PART are arrived.M.PL many.M.PL
'Many arrived.'

Note that extraction of a direct object or subject pronoun, whether overt (*li/ne*) or covert (*pro*), triggers past participle agreement in (21)-(23). The facts are reversed with indirect objects (24) and oblique complements of the verb (25):

- (24) a. Ho parlato a Maria.
I-have talked to Maria
'I talked to Maria.'
- b. Le ho parlato/*a [le].
CL.DAT.F.SG I-have spoken/F.SG
'I talked to her.'

¹² In (22)-(23), the [-animate] noun "books" excludes the possibility of a [+human] arbitrary *pro* interpretation (cf. Rizzi 1986), which according to Cardinaletti & Giusti (1992, 2006, 2017) allows for a null bare NomExpr in the complement of Q in any grammatical function:

- (i) a. Ho visto molti [pro].
I-have seen many.M.PL
'I saw many [people].'
- b. *Ho letto molti.M.PL [pro].
I-have read many
- (ii) Sono arrivati molti [pro]
are arrived.M.PL many.M.PL
'Many [people] arrived.'

- (25) a. Ho parlato di Maria
 I-have talked of Maria
 'I talked about Maria.'
 b. Ne ho parlato/*a [ne].
 CL.GEN I-have spoken/F.SG
 'I talked about her.'

Partitive *ne* (26b) can resume an indefinite NomExpr (bare or introduced by the partitive determiner) with narrow scope reading, such as (*delle*) *lettere* in (26a):¹³

- (26) a. Non ho scritto (delle) lettere.
 NEG I-have written (of-the) letters.F.PL
 'I didn't write (some) letters.'
 b. Non ne ho scritte [ne].
 NEG CL.PART I-have written.F.PL
 'I didn't write any.'

Note that the indefinite NomExpr with the partitive determiner in (26a) may have wide scope ('there are some letters that I did not write'). But *ne* in (26b) can only have narrow scope.

Finally, Belletti notes that partitive *ne* must cooccur with the partitive PP in relative clauses (27a-b), while genitive *ne* cannot cooccur with the oblique PP selected by the verb (27c):

- (27) a. Questi libri, di cui ne ho letti molti [ne] [di cui],
 these books.M.PL of which CL.PART I-have read.M.PL many.M.PL
 sono in programma.
 are in syllabus
 b. *Questi libri, di cui ho letto molti [di cui], sono in programma.
 these books.M.PL of which I-have read many.M.PL are in syllabus
 'These books, of which I read many, are on the syllabus.'
 c. Questi libri, di cui (*ne) ho parlato, sono
 these books.M.PL of which CL.GEN I-have talked are
 in programma.
 in syllabus
 'These books, which I talked about, are on the syllabus.'

¹³ Note that unlike French, in Italian indefinite nominal expressions in the scope of negation are not introduced by the bare preposition *di*, cf. French *Je n'ai pas écrit de lettres* (lit.: I NEG have NEG written of letters, 'I wrote no letters'). There is therefore no reason to hypothesize that the clitic that resumes the bare indefinite is of category PP.

The data in (20)-(27) favor hypothesis (9ii.b) over (9ii.a). As regards the category of partitive *ne*, we can formulate the empirical generalization in (28):

- (28) Partitive *ne* is like a direct object clitic, a null subject pronoun, and a bare NomExpr, and unlike a prepositional clitic, such as genitive *ne* or oblique *ne*.

The features to diagnose the three different types of *ne* in Italian are given in protocol (29):

(29)	Partitive vs prepositional <i>ne</i>	Partitive <i>ne</i>	Genitive <i>ne</i>	Oblique <i>ne</i>
a.	Can extract out of a definite NomExpr	–	+	0
b.	Triggers past participle agreement	+	–	–
c.	Covaries with accusative clitics	+	–	–
d.	Covaries with null subjects	+	–	–
e.	Can cooccur with a <i>di</i> -PP	+	–	–

In (29a) we contrast (17b) with (18b), which are both extraction out of a NomExpr. Extraction of the genitive selected by a verb is irrelevant to the point. In (29b) we contrast partitive *ne* (20a) that requires past participle agreement with genitive and oblique *ne* (20b-c), which excludes it, on a par with other prepositional clitics (24/25b). (29c) puts together the past participle agreement of partitive *ne* (21b) with accusative clitics (21a). (29d) draws parallels between partitive *ne* in post-verbal subject positions (23b) and null subject pronouns in the complement of a universal quantifier (22b). (29e) contrasts the co-occurrence of partitive *ne* with a partitive PP introducing a relative clause (27a-b) with other prepositional clitics (and their counterpart PP introducing a relative clause (27c).

The diagnostics in (29) support the hypothesis that partitive *ne* is of the same category as direct object clitics and null subjects. Following Cardinaletti & Giusti (2006, 2017), I take it to be an indefinite NomExpr assigned partitive case by the quantifier that embeds it or by an external operator in the clause (Belletti 1988, Dobrovie-Sorin & Beyssade 2004). Note that discrimination among the “partitive” constructions analyzed here allows unification of partitive *ne* with accusative clitics and subject *pros* and of genitive *ne* with oblique clitics. Such a unification would not be possible in an analysis that unifies partitive *ne* with genitive *ne* in the name of a generalization of genitive PPs and partitive PPs.

2.3 The category of the partitive determiner

The partitive determiner in (1c) is homophonous with the preposition *di* ‘of’ merged with a definite article. It contributes a quantity interpretation and occurs with mass nouns and plural count nouns. It is therefore tempting to unify it with the partitive PP that occurs with quantifiers and claim that the quantifier may be null, as proposed by Milner (1978) for French, and represented in (30) for Italian, where the first translation corresponds to the sentence without the quantifier and the second to the sentence with the quantifier:

- (30) a. Ho mangiato (molta) della carne.
 I-have eaten (much) of-the meat
 ‘I ate meat.’ / ‘I ate a lot of the meat.’
 b. Ho letto (molti) dei libri.
 I-have read (many) of-the books
 ‘I read books.’ / ‘I read many of the books.’

The unification hypothesis under the category PP is at first sight supported by the observation that the definite article in (30) may be replaced by a demonstrative. However, as Kupferman (1979) notes for French and we observe here for Italian, this only holds for the object of verbs that have a “fragmentative” interpretation, such as *mangiare* (‘eat’) in (31a). With other verbs, the bare partitive formed with a demonstrative (without an overt quantifier) can only have the “sort-of” interpretation, as in (31b):¹⁴

- (31) a. Ho mangiato (molta) di questa carne.
 I-have eaten (much) of this meat
 ‘I ate some of this meat.’ / ‘I ate a lot of this meat.’
 b. Ho letto #(molti) di questi libri.
 I-have read (many) of these books
 ‘I read I read books of this sort.’ / ‘I read many of these books.’

This observation led Kupferman (1979) and much work after him (cf. Ihsane 2008 for an overview) to propose that fragmentative verbs have a PP complement.

¹⁴ Also cf. the discussion of (78) below. This type of partitives that may occur with demonstratives and other determiners are also called “faded partitives” by de Hoop (2003) and bare partitive by Le Bruyn (2007). See the terminological section of Giusti & Sleeman (2021, this volume) and the internal references therein.

Thus, the prepositional form of the bare partitive with a demonstrative is not to be unified with the partitive determiner. In this hypothesis, the partitive determiner introduces an indefinite NomExpr and not a quantified one.

Furthermore, while the partitive determiner conveys indefinite interpretation, as shown by the glosses of (30)-(31), the partitives formed with a demonstrative may have genuine partitive interpretation, which is detectable in the plural object of fragmentative verbs. Thus, while (32a) simply means 'I ate an indefinite number of biscuits', (32b) can either mean that I ate parts of these biscuits leaving the biscuits partially uneaten or that I have eaten biscuits of this sort; but it cannot mean that I ate an indefinite number of these biscuits:

- (32) a. Ho mangiato dei biscotti.
I-have eaten of-the biscuits
'I ate (some) biscuits.'
- b. Ho mangiato di questi biscotti.
I-have eaten of these biscuits
'I ate parts of these biscuits.' / 'I ate biscuits of this sort.'

Therefore, only for the fragmentative interpretation of (32b) would it be legitimate to hypothesize the presence of a covert classifier noun [part], which induces the partitive interpretation. *Vice versa*, the lack of partitivity in the indefinite interpretation of (32a) and in the sort-of interpretation of (32b) suggests the absence of such a covert element.

Another crucial semantic difference between partitive determiners and partitive PPs is the interpretation of the article. The article is not interpreted as definite in (33a), where *di+art* has ambiguous scope properties like the indefinite article in (33b). The opposite case is provided by the quantifier in (33c), which induces wide scope, regardless of the presence or absence of the partitive PP. Note that a bare *NomExpr* cannot have scope over negation (33d):

- (33) a. Non ho mangiato dei biscotti. $\neg E / E\neg$
 NEG I-have eaten of-the biscuits
 'I didn't eat any biscuits / I didn't eat some biscuits.'
 b. Non ho mangiato un biscotto. $\neg E / E\neg$
 NEG I-have eaten a biscuit
 'I didn't eat any biscuit / I didn't eat a [certain] biscuit.'
 c. Non ho mangiato alcuni (dei) biscotti. $*\neg E / E\neg$
 NEG I-have eaten some (of-the) biscuits
 'There are some biscuits I did not eat.'

- d. Non ho mangiato biscotti. -E / *E-
 NEG I-have eaten biscuits
 'I did not eat biscuits.'

In the attempt to rescue Chierchia's (1997) analysis that derives (33a) from (33c), Zamparelli (2008) suggests that the definite article in the partitive determiner in (33c) does not refer to a definite individual (as it does in (33a) but to the kind. This is in principle plausible given that in all Romance languages, generic interpretation is expressed by the definite article. Zamparelli's proposal is however contradicted by two facts, brought about by Cardinaletti & Giusti (2016). The first is the possibility of a partitive determiner with measure nouns, as in (34a), but not in true partitive constructions, as in (34b). Note that measure nouns generally require a specification of quantity, which can be provided by an indefinite article or a cardinal (34c); they also allow the "small quantity" interpretation provided by the partitive determiner in (34a) or the quantifier *alcuni* in (34b). What is totally unallowed is a true partitive construction in (34b):

- (34) a. Ho comprato ?(dei) chili di quei biscotti.¹⁵
 I-have bought (of-the) kilos of those biscuits
 'I bought (some) kilos of those biscuits.'
- b. Ho comprato alcuni (*dei) chili di quei biscotti.
 I-have bought some (of-the) kilos of those biscuits
 'I bought some kilos of those biscuits.'
- c. Ho comprato un chilo / tre chili di quei biscotti.
 'I bought a kilo / three kilos of those biscuits.'

The almost mandatory presence of *dei* with measure nouns is unexpected if the definite article refers to the kind, given that it is implausible to suppose that measures are kinds. This is confirmed by the fact that measure nouns in the plural are ungrammatical as subject of predicates such as *be widespread* that ensure kind interpretation, as in (35):

- (35) a. *I chili sono diffusi in tutta Europa.
 the kilos are widespread in all Europe
 intended reading: 'The kilo is commonly used throughout Europe'

¹⁵ The noun *chili* can be the head of a bare nominal only if it is focalized (*Ho comprato CHILI di quei biscotti* 'I bought TONS of these biscuits'). For this reason, lack of *dei* is indicated as marginal in (34a), which has no emphasis on *chili* ('kilos')

- b. ?*I chili hanno soppiantato le libbre.
 the kilos have replaced the pounds
 intended reading: 'The kilo replaced the pound.'

Thus, the perfect grammaticality of the partitive determiner contrasted with the impossibility of the kind-referring article with measure nouns contradicts Zamparelli's (2008) attempt to rescue Chierchia's (1997) unification of a NomExpr introduced by a partitive determiner with the partitive PP.

Extraction of the *wh*-PP *di quali studenti* 'of which students' sets the partitive determiner *dei* (36c) apart from the partitive P+art *dei* (36a) and on a par with quantifier *alcuni* (36b) and the indefinite singular article *un* (36d). Extraction from a bare NomExpr is marginal, while it is possible if the NomExpr is introduced by a definite article (36e):

- (36) a. *Di quali studenti hai corretto alcuni dei compiti [*di quali studenti*]?
 'Of which students did you check some of the tests?'
 b. Di quali studenti hai corretto alcuni compiti [*di quali studenti*]?
 'Of which students did you check some tests?'
 c. Di quali studenti hai corretto dei compiti [*di quali studenti*]?
 of which students did you check of-the tests (same as (34b))
 d. Di quali studenti hai corretto un compito [*di quali studenti*]?
 'Of which students did you check a test?'
 e. Di quali studenti hai corretto ?(i) compiti [*di quali studenti*]?
 'Of which students did you check (the) tests.'

The data discussed in this section favor hypothesis (9iii.b) over (9iii.a). The category of the partitive determiner cannot be unified with the partitive PP or with the quantitative QP, as stated in (37):

- (37) In Italian, the partitive determiner *di*+art is the plural/mass counterpart of the indefinite article *un*. It is different from the partitive P *di* bundled with a definite article. It is also different from the quantifier *alcuni* selecting a bare NomExpr.

The features to diagnose the category of the partitive determiner in Italian are given in protocol (38), which highlights the differences from both partitive constructions and existential quantifiers on the one hand, and bare nouns on the other hand, and the similarities with the singular indefinite determiner:

(38)

	Different types of <i>di+art</i> in Italian vs. existential quantifiers or bare nominals	Partitive PP <i>di+art</i>	<i>Alcuni</i> in quantitative construction	Indefinite <i>di+art</i>	Indefinite article	Null determiner in bare NomExpr
a.	The article can be replaced by a demonstrative	+	0	–	0	0
b.	induces part-whole interpretation	+	–	–	–	–
c.	can have scope over NEG	+	+	+	+	–
d.	can have scope below NEG	–	–	+	+	+
e.	the article refers to kind	–	0	–	0	0
f.	can embed a measure noun	–	+	+	+	+/–
g.	allows <i>wh</i> -extraction	–	+	+	+	–

2.4 Interim conclusions

Section 2 has provided three protocols to discriminate between the two sets of possible hypotheses spelled out in (9). I have shown that the unification hypotheses in (9i-iii.a) cannot be maintained. The partitive PP selected by a quantifier is not the same complement of Q as the mandatory indefinite NomExpr (9i.b); clitic *ne* is nominal and not prepositional (9ii.b); and the partitive determiner is not a quantifier, nor can it be derived from the partitive PP in syntax (9iii.b). The anti-unification hypotheses predict that these three elements behave differently from one another in certain syntactic environments. This is the topic of the next section.

3 Relevant syntactic environments

This section singles out the syntactic properties of partitive and genitive PPs that allow us to diagnose prepositional vs nominal status. The clause internal argument position distinguishes the dependency relation between the quantity item (when present) and the part of structure that provides the lexical content. The dislocated position distinguishes objects (which require a resumptive clitic) and subjects (which are resumed by null *pro*) from oblique arguments (which have optional resumption) and circumstantial adjuncts (which are not resumed at all).

3.1 Selection

Since predicates select the category of their arguments, the predicate-argument dependency is an important diagnostic to determine the category of a constituent. This subsection is divided into two parts. In 3.1.1 I distinguish partitive PPs selected by a quantifier and introduced by the functional preposition *di* from circumstantial partitive PPs introduced by the lexical preposition *tra* (also cf. Cardinaletti & Giusti 2006, 2017). In 3.1.2, I distinguish these partitive *di*-PPs from three different types of genitive *di*-PPs selected by lexical verbs, lexical nouns, and semi-lexical (measure) nouns, respectively. As anticipated in fn. 2 above, I consider P as an extended projection of the NomExpr and therefore attribute the interpretive properties of DP (theta-role, referential interpretation, definiteness, etc.) to the whole PP which contains it.

3.1.1 Two types of partitive PPs

In the discussion of (31) above, I reported Kupferman's (1979) observation that fragmentative verbs may select a *di*-PP with partitive interpretation, unlike other transitive verbs selecting a direct object. I adopted Kupferman's conclusion that it is a property of these verbs in their fragmentative interpretation to select a PP and not a generalized property of Italian to substitute an indefinite NomExpr with a PP embedding a definite NomExpr.

As anticipated in (8) above, according to Cardinaletti & Giusti (1992, 2006, 2017), partitive *di*-PPs are optional arguments of a subclass of existential Qs that also select a bare NomExpr providing the restriction. This is projected in a structure parallel to the one of ditransitive predicates. Notably, the partitive PP is never the internal argument of Q, unlike what we observed with the complement of qNs in (10) and (15) above.

As in (8), for the sake of simplicity, I keep the structure of QP to a minimum, merging the internal argument of Q under Q' and the partitive PP under QP. In (39a), the bare NomExpr *ragazze* ('girls') is the internal argument (direct complement) of Q, the PP is the second argument, and requires a preposition because it is not assigned case by Q. Note that universal quantifiers only select a definite NomExpr (39b). A demonstrative or definite article is a functional projection of N and does not have selectional properties. For this reason, it cannot occur with a partitive PP (39c):¹⁶

¹⁶ Indefinite and definite nominal expressions are indicated as DP in (39)-(42) for convenience, but the reasoning also holds if we assume determiners to be modifiers of N and nominal expres-

- (39) a. [_{QP} [_Q molte / alcune / tre [_{DP} ragazze]] [_{PP} delle ragazze che conosco]
 many / some / three girls of-the girls that I-know
 b. [_{QP} [_Q tutte [_{DP} le ragazze]] [_{PP} *delle ragazze che conosco]
 all the girls of-the girls that I-know
 c. [_{DP} [_D queste / le [_{NP} ragazze]] [_{PP} *delle ragazze che conosco]
 these / the girls of-the girls that I-know

The selectional relation between the quantifier and the partitive PP is confirmed by the observation that the intension of the two arguments of Q (the indefinite DP and the PP) must be lexically identical (Giusti 1991). In syntactic terms, this results in the identity of the lexical head N in the two arguments. Thus, although it would make perfect sense to pick some pupils out of a set of girls (40a), or pick some strawberries out of a set of fruits (40b), the partitive PP is ungrammatical:

- (40) a. [_{QP} [_Q molte / alcune / tre [_{DP} alunne]] [_{PP} *delle ragazze che conosco]
 many / some / three pupil.F.PL of-the girls that I-know
 b. [_{QP} [_Q molte / alcune / tre [_{DP} fragole]] [_{PP} *dei frutti che ho preso]
 many / some / three strawberries of-the fruits that I-have taken

Furthermore, the ungrammaticality of the partitive PP in (39b-c) cannot be motivated by logical incompatibility of the part-whole relation with universal quantification or deixis, as shown by the possibility of a circumstantial PP introduced by *tra/fra* ('out-of') in (41) rescuing (40) and in (42) rescuing (39b-c):

- (41) a. [_{QP} [_Q molte / alcune / tre [_{DP} alunne]] [_{PP} tra/fra le ragazze che conosco]
 many / some / three pupil.F.PL out-of the girls that I-know
 b. [_{QP} [_Q molte / alcune / tre [_{DP} fragole]] [_{PP} tra/fra i frutti che ho preso]
 many / some / three strawberries out-of the fruits that I-have taken
- (42) a. [_{QP} [_Q tutte [_{DP} le ragazze]] [_{PP} tra/fra le ragazze che conosco]
 all the girls out-of the girls that I-know
 b. [_{DP} [_D queste [_{NP} ragazze]] [_{PP} tra/fra le ragazze che conosco]
 these girls out-of the girls that I-know

Furthermore, as noted by Barker (1998), partitive PPs are generally definite. This holds of both the selected *di*-PP and the circumstantial *tra*-PP:

sions to be of category NP. The category NP in (39c) is of a different nature. DP is a full nominal object, a phase in the sense of Chomsky (2001). NP is a portion of it.

- (43) a. molte / alcune / tre di *(queste) ragazze
 many / some / three of *(these) girls
 b. tutte tra *(queste) ragazze
 all out-of *(these) girls

However, while the selected partitive PP cannot be universally quantified (44a), the circumstantial partitive PP can (44b):

- (44) a. molte / alcune / tre delle /*di tutte le ragazze che conosco
 many / some / three of-the / *of all the girls that I-know
 b. queste tra (tutte) le ragazze che conosco
 these out-of (all) the girls that I-know.'

Finally, note that the circumstantial partitive PP cannot substitute the partitive PP selected by fragmentative verbs, cf. (31a) and (32b), repeated here in (45):

- (45) a. Ho mangiato di questa carne / di questi biscotti. (cf. (31a))
 I-have eaten of this meat / of these biscuits
 'I ate some of this meat / of these biscuits.'
 b. *Ho mangiato tra questa carne / tra questi biscotti. (cf. (32b))
 I-have eaten out-of this meat / out-of these biscuits

From the discussion in (39)-(45), we can formulate the generalization in (46):

- (46) In Italian, there are two types of partitive PPs: a circumstantial PP introduced by the preposition *tra/fra* and a selected PP (the second argument of Q) introduced by the functional preposition *di*. Only the former is compatible with a universal quantifier that requires a definite referential NomExpr.

The diagnostics for the two different partitive PPs are given in protocol (47).

(47)	Partitive PPs	Selected partitive <i>di</i> -PP	Circumstantial partitive <i>tra</i> -PP
a.	identity of intension (lexical N)	+	–
b.	must be definite	+	+
c.	can be (universally) quantified	–	+
d.	can be selected by consumption predicates	+	–
e.	can be adjoined to any NomExpr	–	+

In (47a) we report on the data in (40)-(43). In (47b) I represent the parallel between (43a) and (43b). In (47c) I summarize the contrast in (44) and in (47d) the contrast in (45). Finally, in (47e) I report the contrast in (44)-(43).

3.1.2 Genitive PPs

We know that *di* is the most frequent functional preposition in Italian (Rizzi 1988). It can also express the theme of verbs of speaking (48a) and the stimulus of psych-verbs (48b):

- (48) a. Ho parlato a Maria di alcune delle mie studenti.
 ‘I talked to Maria about some of my students.’
 b. Mi preoccupo di alcune delle mie studenti.
 ‘I worry about some of my students.’

The oblique argument of a verb can freely extract as a *wh*-constituent (49) and as a clitic. In this case the form is oblique *ne* (50):

- (49) a. Di chi hai parlato a Maria [*di chi*]?
 ‘Who did you talk to Maria about?’
 b. Di chi ti preoccupi [*di chi*]?
 ‘Who do you worry about?’

 (50) a. Ne ho parlato a Maria [*ne*].
 ‘I talked to Maria about them.’
 b. Me ne preoccupo [*ne*].
 ‘I worry about them.’

The preposition *di* is also the whole-purpose preposition that instantiates the R-relation between a noun and its argument(s) (cf. Higginbotham 1985, 1987), expressed by genitive case in many languages. Like *of* in English, it can express any relation with the noun. Cinque (1980, 2014) shows that it is the only PP that can extract out of a NomExpr, cf. (51b) vs. (51c), thereby suggesting that it is the only constituent to be a genuine argument of the noun receiving structural case (examples are mine):

- (51) a. Ho sentito il discorso di Fortunato Ladu ai pastori sardi.
 I-have heard the speech of F.L to the Sardinian shepherds
 ‘I heard Fortunato Ladu’s speech to the Sardinian shepherds.’

- b. Di chi hai sentito il discorso [~~di chi~~] ai pastori sardi?
of whom you-have heard the speech to the Sardinian shepherds
'whose speech to the Sardinian shepherds did you hear?'
- c. *A chi hai sentito il discorso di Fortunato Ladu [~~a chi~~]?
to whom you-have heard the speech of Fortunato Ladu

Cinque shows that if there are two *di*-PPs, only the highest one (the external argument) can extract, displaying a 'relativized minimality' effect (cf. Rizzi 1990). In (52a-c), only the agent can extract, as shown by the grammaticality of (52b) and the ungrammaticality of (52c). But if the theme is the only genitive present, it can freely extract, as shown by the contrast between (52c) and (52d):

- (52) a. Ha documentato la conquista di Cesare della Gallia
(s)he-has documented the conquest of Caesar of-the Gaul.
'(S)he documented Caesar's conquest of Gaul.'
- b. Di chi ha documentato la conquista [~~di chi~~] della Gallia?
of whom (s)he-has documented the conquest of-the Gaul
'Whose conquest of Gaul did (s)he document?'
- c. *Di che regione ha documentato la conquista
of which region (s)he-has documented the conquest
di Cesare [~~di che regione~~]?
of Caesar
- d. Di che regione ha documentato la conquista [~~di che regione~~]?
'Of which region did (s)he-has document the conquest?'

The same hierarchy is observed with pronominal possessors. Only the highest argument can turn into a pronominal or a possessive adjective, as shown in (53b):

- (53) a. Ha documentato la sua/loro conquista [~~sua/loro~~] della Gallia
'(S)he documented his/their conquest of Gaul.'
- b. *Ha documentato la sua/loro conquista di Cesare [~~sua/loro~~]?
(s)he-has documented the its/their conquest of Caesar

Extraction of *ne* out of a NomExpr is marginally possible, with the same hierarchical restrictions, allowing the internal argument to extract only in the absence of the external argument (54b):

- (54) a. ?Ne ha documentato la conquista [~~ne~~] della Gallia. (*ne* = *di Cesare*)
'(S)he documented his conquest of Gaul.'

- b. ?Ne ha documentato la conquista (*di Cesare) [ne]. (*ne* = *della Gallia*)
 ‘(S)he documented its conquest (*of Caesar).’

Unlike the NomExpr in a partitive PP, which is always definite and cannot be quantified (cf. (43)-(44)), the complement of a lexical N can have any interpretive value: referential (51)-(53), quantificational (55a),¹⁷ or kind-referring (55b). When it is indefinite, the conditions for a bare NomExpr are restricted, as in (55c-d):

- (55) a. il compito di ogni studente / di molti studenti / di uno degli studenti
 ‘the test of every student / of many students / of one of the students’
 b. i doveri dell’insegnante / degli insegnanti
 ‘the duties of the teacher / of the teachers’
 c. la cartella di *(certi) studenti / di uno studente / ??di degli studenti¹⁸
 ‘the schoolbag of (certain) students / of a student / of some students’
 d. C’erano (delle) cartelle di studenti appoggiate per terra.
 ‘There were schoolbags of students lying on the floor.’

Let us now go back to measure nouns and other semi-functional nouns (qNs) selecting a genitive PP and giving rise to pseudo-partitive constructions (Czirmaz & Stavrou 2017, Tănase-Dogaru 2017). Unlike the partitive PP selected by a quantifier, which can only be definite and cannot be quantified, the partitive complement of a collective noun such as *gruppo* (‘group’) can be definite or indefinite (56a) and existentially quantified (56b) but not universally quantified (56c):

- (56) a. un gruppo di studenti / di questi studenti / degli studenti
 a group of students / of these students / of-the students
 b. un gruppo di ?molti / tre / ?alcuni studenti
 a group of many / three / some students
 c. *un gruppo di tutti gli studenti
 a group of all the students

¹⁷ Notably, the singular definite article in (55a) does not necessarily convey a definite referential interpretation on the possessed NomExpr. The interpretation of the genitive possessor is independent from the interpretation of the possessum but the interpretation of the possessum depends on the interpretation of the possessor (cf. Giusti 2002, 2015 for an analysis).

¹⁸ The three examples in (55c) present three different types of indefinite possessor. *Certi studenti* can be interpreted either as specific ‘certain students I have in mind’ or as ‘non-specific students of a certain type of students I have in mind’, cf. Giusti (2021). *Uno studente* ‘a student’ can be specific or non-specific. In either case, the whole NomExpr inherits the specificity feature of the possessor. *Di degli studenti* (‘of some students’) is marginal (probably due to an incompatibility of the preposition *di* and the partitive determiner *di*+art, which diachronically derives from it) but not ungrammatical.

Container nouns such as *scatola* only allow for cardinal numbers (57b) but not quantifiers. Measure nouns such as *kilo* do not allow for any quantification (58b-c):

- (57) a. una scatola di biscotti / di questi biscotti/
 a box of biscuits / of these biscuits/
 dei biscotti che ho preparato
 of-the biscuits that I-have prepared
 b. una scatola di venti / *molti / *alcuni biscotti
 a box of twenty / *many / *some biscuits
 c. *una scatola di tutti i biscotti
 a box of all the biscuits
- (58) a. un chilo di mele / di queste mele / delle mele che sono in frigorifero
 a kilo of apples / of these apples / of-the apples that are in [the] fridge
 b. *un chilo di molte / quattro / alcune mele
 a kilo of many / four / some apples
 c. *un chilo di tutte le mele
 a kilo of all the apples

Collective and container nouns can be preceded by a definite or indefinite determiner (59) like lexical nouns (60a) and unlike quantifiers (60b):¹⁹

- (59) a. il gruppo dei miei studenti
 ‘the group of my students’
 b. questa scatola di biscotti
 ‘this box of biscuits’
- (60) a. la rappresentante dei miei studenti
 ‘the delegate of my students’
 b. (*i/*questi) molti dei miei studenti
 (the/these) many of-the my students

Unlike the complement of lexical Ns (61), the complement of semi-lexical nouns cannot be substituted by a possessive adjective. In (62a-b), the collective noun *gruppo* ‘group’

¹⁹ Some quantifiers may appear after a definite article or a demonstrative, but in this case, they cannot select the partitive PP. Giusti (1991) and Cardinaletti & Giusti (2006, 2017) argue that they are (quantity) adjectives and, like all prenominal adjectives in Italian, do not select NP.

and the container noun *scatola* ‘box’ can be modified by a possessive only in the relational reading triggered by the lexical counterpart of the nouns, not in the partitive reading, which is relevant to our discussion. In (62c), the measure noun ‘kilos’ gives straight ungrammatical results because it does not have a lexical counterpart:

- (61) a. il suo aroma [suo = del caffè]
 ‘its aroma’ [its = of the coffee]
 b. la loro aula [loro = degli studenti]
 ‘their classroom’ [their = of the students]
- (62) a. il loro gruppo [loro = #degli studenti /*di studenti]
 ‘their group’ [their = of the students]
 b. la loro scatola [loro = #dei biscotti /*di biscotti]
 ‘their box’ [their = of biscuits]
 c. *tre suoi chili [suoi = *del caffè / *di caffè]
 three its kilos [its = of the coffee]

Semi-lexical nouns freely allow *wh*-extraction of their PP complement:

- (63) a. Di quali studenti hai contattato un gruppo [di quali studenti]?
 ‘Of which students did you contact a group?’
 b. Di quali biscotti hai comprato una scatola [di quali biscotti]?
 ‘Of which biscuits did you buy a box?’
 c. Di che mele hai comprato tre chili [di che mele]?
 ‘Of what apples did you buy three kilos?’

They also freely allow *ne*-cliticization of the genitive PP (64), unlike lexical nouns, which display restrictions on genitive *ne* (cf. (54)) and only partially like the bare NomExpr complement of a quantifier (*viz.* the DP in (41a)):²⁰

²⁰ In (64) *ne* is not glossed as CL.PART because it does not behave like partitive *ne* with respect to past participle agreement. Rather it behaves like genitive *ne*, in not requiring past participle agreement. It is however not exactly like genitive *ne*, which totally disallows agreement on the past participle. Here we observe a hierarchy of acceptability of agreement from almost ungrammatical to almost grammatical (64c). For this reason, it is not glossed as CL.GEN either.

Note the hierarchy of acceptability of agreement on the past participle. The more lexical the noun is, the less mandatory is the agreement for gender and number on the past participle, as shown by the different grammaticality judgements in (64). For reasons of space, I will not discuss this property here, which appears to distinguish different classes of semi-lexical/functional nouns.

- (64) a. Ne ho contattato/?*contattati un gruppo. [ne = di studenti]
CL I-have contacted/(?*M.PL) a group? [CL = of student.M.PL]
b. Ne ho comprato/?comprati una scatola. [ne = di biscotti]
CL I-have bought/(?*M.PL) a.F.SG box.F.SG [CL = of biscuit.M.PL]
c. Ne ho comprato /?comprate tre chili [ne = di mele]
CL I-have bought.(?F.PL) three kilo.M.PL [CL = of apple.F.PL]

From the discussion in (48)-(64), we can formulate the generalizations in (65):

- (65) In Italian, there are three types of genitive PPs, all introduced by the functional preposition *di*: (i) the complement of V, which receives a thematic role; (ii) the argument of N (subject or object), which is interpreted as having a relation with the possessum; (iii) the complement of semi-lexical Ns, which is interpreted as quantitative (indefinite) or partitive (definite).

The protocol to diagnose the three types of genitive PPs is given in (66):

(66)	Genitive <i>di</i> -PPs	Genitive <i>di</i> -PP selected by a lexical V	Genitive <i>di</i> -PP selected by a lexical N	Genitive <i>di</i> -PP selected by a semi-lexical N
a.	can be definite	+	+	+
b.	can be indefinite	+	–	+
c.	can be existentially quantified	+	+	+/–
d.	can be universally quantified	+	+	–
e.	can be resumed by a possessive pronoun or adjective	–	+	–
f.	can <i>wh</i> -extract	+	+	+
g.	can cliticize as <i>ne</i> ²¹	+	+	+

3.2 Dislocation with resumptive clitics

Italian displays pragmatically marked structures with topic arguments in clause-initial and clause-final positions. The occurrence and form of the resumptive clitic is a diagnostic for case, category and function of the displaced constituent. This

²¹ For the status of *ne* cf. protocol (29) above.

subsection provides the features to diagnose partitive PPs, genitive PPs, indefinite nominal expressions introduced by a partitive determiner, and bare nominal expressions.

First, note that while direct objects must be resumed by a clitic (67b) (cf. Cinque 1990), indirect objects need not (67c) and, according to normative grammar, they should not, as indicated by the % diacritic:

- (67) a. Ho dato questo libro a mia sorella.
 'I gave this book to my sister'
 b. Questo libro, *(l') ho dato a mia sorella.
 this book.M.SG CL.ACC.M.SG I-have given to my sister
 c. A mia sorella, (%le) ho dato questo libro.
 to my sister.F.SG CL.DAT.F.SG I-have given this book

Furthermore, as noted in (20)-(25) above, while object clitics (e.g. *li* ('them') in (68a)) trigger past participle agreement, oblique clitics (e.g. *le* ('to-her') in (68b)) do not:

- (68) a. Questi libri, li ho regalati/*o a mia sorella.
 these book.M.PL CL.ACC.M.PL I-have given/*(.M.PL) to my sister
 b. A mia sorella, (%le) ho regalato/*a questi libri.
 to my sister.F.SG CL.DAT.F.SG I-have given(*.F.SG) these books

As in (67) above, the accusative clitic is mandatory in (68a), while the dative clitic is optional in (68b) and sanctioned by normative grammar to the extent that some speakers judge it ungrammatical.

Partitive PPs of either type are not resumed by clitics. This can be argued in two steps. First, observe that when the *tra*-PP has locative interpretation (69a) it can be resumed by the locative clitic *ci* but not by *ne*. When it has partitive interpretation (69b), it cannot be resumed by any clitic:

- (69) a. Tra questi libri, (%ci / *ne) ho trovato tre romanzi.
 among these books CL.LOC/CL.GEN have found three novels
 'I found found three novels among these books.'
 b. Tra questi libri, (*ci / *ne) ho letto tre romanzi.
 out-of these books CL.LOC/CL.PART I-have read three novels
 'I read three novels out of these books.'

When the *di*-PP is the genitive complement of a verb (70a), it may be resumed by genitive *ne*, with the usual proviso of normative grammar, like other oblique

complements of verbs. When it has partitive interpretation (70b), it cannot be resumed by a genitive clitic, which does not trigger past participle agreement:²²

- (70) a. Dei libri di Morante, (%ne/*ci) ho parlato spesso.
 of-the books by Morante CL.GEN/CL.LOC I-have talked often
 ‘I often spoke of Morante’s books.’
 b. *Dei libri di Morante, (ne/ci) ho letto tre.
 of-the books by Morante CL.GEN/CL.LOC I-have read three
 intended reading: ‘I read three of Morante’s books.’

The second step is to observe that the presence of partitive *ne* in quantitative constructions is mandatory in (71), on a par with the presence of the accusative clitic in (67b) and (68a). Crucially, the clitic triggers past participle agreement with the internal object of a quantifier, which can be plural (71a) or singular (71b), while the partitive PP is always plural (cf. (13c) above):

- (71) a. Di lettere, ne ho lette (due/molte).
 of letter.F.PL CL.PART I-have read.F.PL (two/many.F.PL)
 b. Di lettere/Di lettera, ne ho letta *(una).
 of letter.F.PL/SG CL.PART I-have read.F.SG one.F.SG.
 c. Di lettere, ne ho lette (*una).
 of letter.F.PL CL.PART I-have read F.PL one.F.SG
 ‘Letters, I read two / many / one.’

In (71b), singular *ne* cannot resume a singular count noun unless the quantifier is overt. This makes *ne* parallel to a bare NomExpr which can occur without a quantifier only with plural count or mass nouns. Contrasting (71b) with (71c), we observe that the past participle does not agree with the dislocated NomExpr but with the internal object position. For this reason, in (71c), the plural past participle is incompatible with a singular quantifier.

The number mismatch between the dislocated plural indefinite and the basic position in (71b) thus shows that partitive *ne* does not resume a partitive PP but an indefinite NomExpr. This is further confirmed by its mandatory occurrence, not only in dislocated constructions (72a) but also in *wh*-interrogatives (72b), relative

²² The ungrammaticality of (70b) is due to the uninflected form of the past participle, which ensures that we are dealing with an oblique clitic and not a partitive one. In (72), we will come back to this.

clauses (72c), and fronted focuses (72d), as noted by Belletti (1979) and reported in (27) above:

- (72) a. Dei libri che mi hai dato, ne ho letti molti.
 of-the books that me you-have given CL.PART I-have read.M.PL many.M.PL
 ‘Of the books you gave me, I read many.’
 b. Di quali libri, ne hai letti molti?
 of which books CL.PART you-have read.M.PL many.M.PL?
 ‘Of which books did you read many?’
 c. Questi libri, di cui ne ho letti molti, sono buoni.
 these books of which CL.PART I-have read.M.PL many.M.PL are good
 ‘These books, of which I read many, are good.’
 d. Di questi LIBRI, ne ho letti molti, non di quelli!
 of these BOOKS CL.PART I-have read.M.PL many M.PL not of those
 ‘Of these BOOKS I read many, not of those!’

Given that *wh*- and focus fronting never allow for a resumptive clitic, the occurrence of *ne* in (72) is strong evidence that it does not resume the fronted partitive PP but has an independent life of its own.

Let us now turn to the behaviour of indefinite nominal expressions introduced by the partitive determiner *di*+art, which I argued to be DPs and not PPs. This is confirmed by the fact that they must be resumed by an accusative clitic (73a), minimally differing from bare nominal expressions, which are resumed by partitive *ne* (73b):

- (73) a. Dei libri, *(li) ho letti;
 of-the book.M.PL CL.ACC.M.PL I-have read.M.PL;
 degli altri, *(li) devo ancora leggere.
 of-the others.M.PL CL.ACC.M.PL I-must still read
 ‘Some books I read; others I must still read.’
 b. Libri, *(ne) ho letti;
 book.M.PL CL.PART I-have read.M.PL;
 riviste, non *(ne) ho lette.
 journal.F.PL NEG CL.PART I-have read.F.PL
 ‘I read books, not journals.’

The different form of the clitic can be straightforwardly captured by the proposal that a bare NomExpr is assigned partitive case, while an indefinite NomExpr introduced by *di*+art is assigned accusative case.

As Belletti (1988) observes, partitive case is only found in structurally governed positions, such as the direct object of transitive verbs (73b) and the postverbal subject of unaccusative verbs (74), but not in the preverbal subject of unergative verbs (75):

- (74) Libri, ieri, *(ne) sono arrivati.
 books.M.PL yesterday CL.PART are arrived.M.PL
 ‘Yesterday, some books arrived.’
- (75) *Libri, (ne) hanno deluso il pubblico.
 books CL.PART have disappointed the public
 intended reading: ‘Some books disappointed the public.’

A null pronoun can appear in a quantitative construction in preverbal subject position. In this case, there is no contrast between the preverbal subject of the unaccusative *arrivare* in (76a) and unergative *deludere* (76b):

- (76) a. (Libri,) [molti *pro*] sono arrivati ieri.
 ‘Many books arrived yesterday.’
 b. (Libri,) [molti *pro*] hanno deluso il pubblico.
 ‘Many books disappointed the public.’

However, a NomExpr introduced by a partitive determiner behaves like a referential NomExpr in being resumed by (nominative) *pro* with no quantifier:

- (77) a. Dei libri, ieri, [pro] sono arrivati per posta.
 some books.M.PL yesterday are arrived.M.PL through mail
 ‘Yesterday, some books arrived with the mail.’
 b. Dei libri, ieri, [pro] hanno deluso il pubblico.
 some books yesterday have disappointed the public
 ‘Yesterday, some books disappointed the public.’

Finally, dislocation can disambiguate the constituent *di*+DEM+NP in (78a), which can be an indefinite NomExpr with the interpretation of ‘N of this type’, which is resumed by partitive *ne* triggering past participle agreement (78b) or a PP selected by the verb (‘write about these letters’), which is resumed by genitive *ne* triggering no agreement (78c). Note that unlike what has been observed for the partitive determiner in (73a), *di*+DEM+NP cannot be resumed by an accusative clitic (78d):

- (78) a. Non ho mai scritto di queste lettere.
 NEG I-have ever written of these letters
 'I never wrote letters of this type / 'I never wrote about these letters'
- b. Di queste lettere, non ne ho mai scritte.
 of these letters.F.PL NEG CL.PART I-have ever written.F.PL
 'I never wrote letters of this type.'
- c. Di queste lettere, non ne ho mai scritto.
 of these letters.F.PL NEG CL.GEN I-have ever written
 'I never wrote about these letters.'
- d. *Di queste lettere, non le ho mai scritte.
 of these letters.F.PL NEG CL.ACC I-have ever written.F.PL

From the discussion of (67)-(78), we formulate the generalizations in (79)-(81):

- (79) Dislocation can distinguish direct objects, which must be resumed by a clitic, from oblique objects, which can but need not be resumed by a clitic, and from circumstantials, which cannot be resumed by a clitic.
- (80) Partitive PPs behave like circumstantials, oblique genitives behave like other oblique arguments (e.g. locatives); the indefinite complements of quantifiers behave like nominal arguments in object or subject position.
- (81) The partitive determiner is different from the bare partitive *di*+DEM+NP construction in that the former is resumed by an accusative clitic, while the latter is resumed by partitive *ne*.

The diagnostics created by dislocated structures are given in protocol (82).²³

²³ Recall that 0 stands for irrelevant feature, [(+)] stands for optional, [+/-] stands for present or absent in different contexts. In (82d) [+/-] captures the need of an overt Q in subject position (76).

(82)

Resumptive strategies	Oblique PP	Partitive <i>tra</i> PP	Partitive <i>di</i> PP	Definite NomExpr	Indefinite <i>di</i> +art NomExpr	Indefinite bare NomExpr
a. clitic pronoun in left dislocation, including prepositional <i>ne</i>	(+)	–	–	–	+	+
b. partitive <i>ne</i>	–	–	–	–	–	+
c. accusative <i>lo/la/</i> <i>li/le</i>	0	0	0	+	+	–
d. nominative <i>pro</i>	0	0	0	+	+	+/–

4 Conclusions

In this paper, I have argued against the unification of any of the structures in (1), repeated here as (83):

- (83) a. Alcune delle ragazze sono arrivate.
‘Some of the girls arrived.’
b. Alcune ragazze sono arrivate.
‘Some girls arrived.’
c. Delle ragazze sono arrivate.
of-the girls are arrived
‘Girls arrived.’
d. Ne sono arrivate (alcune).
CL.PART are arrived.F.PL some.F.PL
‘Some arrived.’

I have done so by applying a meta-theoretical approach that I named Protocol Linguistics, which provided us with diagnostics regarding constituency, categorical status, and syntactic distribution.

In section 2, I have evaluated three pairs of alternative hypotheses and have reached the following conclusions. Protocol (16) has shown that the partitive PP and the indefinite complement of a quantifier cannot be unified for semantic and morpho-syntactic reasons. Protocol (29) has shown that the clitic form *ne* is ambiguous between partitive *ne*, which behaves like a direct argument (object or subject), and prepositional *ne*, which can unify oblique arguments of V and

genitive arguments of N. Protocol (38) has set the partitive determiner *di+art* on a par with the indefinite singular determiner *un(a)* and apart from the existential quantifier *alcune* ('some'), the partitive preposition inflected for a definite article, and the null determiner that can be hypothesized to occur in a bare NomExpr.

In section 3, I have discussed two types of dependencies: selectional environments and dislocation structures. Protocol (47) has diagnosed two different partitive PPs: one is the second argument of a Q or the first argument of a fragmentation V, the other is a circumstantial PP that can be adjoined to different types of Nominal Expressions but not to VPs. Protocol (66) has compared different types of genitive PPs: the complements of a lexical V, of a lexical N, or of a semi-lexical Ns (measure nouns or group nouns, which we called qNs), showing that they are three different types of constituents. Finally, protocol (82) has distinguished the different partitive constituents studied in this paper by means of independent properties of left dislocated constructions in Italian: obligatory / possible / impossible presence of a resumptive clitic and has compared *ne* with other clitic pronouns, confirming the hypothesis that partitive *ne* is parallel to accusative clitics and null subject nouns and different from genitive *ne*, which behaves like oblique clitics.

In the discussion, I have relied on a wealth of observations done in previous literature on both Italian and French. These two languages and the non-standard varieties that represent a continuum in the Gallo-Romance area are a privileged area of study because, as far as I know, they are the only languages in which the four different types of partitives appear and are fully productive. In the perspective of this work, this is not surprising if the four constructions are not manifestations of one and the same phenomenon. Thus, presence or absence of a partitive clitic in a language is independent from the presence or absence of genitive morphology in the complement of quantifiers and / or presence or absence of a partitive determiner. The different properties of partitive clitics and partitive determiners should be studied in the cross-linguistic perspective as independent from one another and, importantly, as independent from the notion of true partitivity.

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