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# On the property-denoting clitic *ne* and the determiner *de/di*: a comparative analysis of Catalan and Italian

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**Abstract:** The clitic pronoun *ne* and the functional element *de* introducing nominal constituents have many nominal and prepositional functions across Romance languages. In this article, we focus on the nominal functions, singling out three different bundles of semantic features that characterize both *ne* and *de*. They can denote properties of individual entities, properties of kinds, or predicate properties. The article shows that Catalan *ne* and *de* display the three types of denotation, while Italian *ne* and *de* only display the first one. This article further supports the hypothesis that the indefinite determiner *de* can be overt or silent, thereby unifying *de*-phrases (and the Italian partitive article) with bare nouns. The analysis of *de* as an indefinite determiner is then extended to adjectival *de*, which is claimed to mark concord features on adjectives in both Catalan and Italian.

Keywords: Catalan; indefinite clitic; indefinite determiner; Italian

# **1** Introduction

Both Catalan and Italian can have bare plural and bare mass nouns in object position (1). Both languages have a special clitic (*en/ne*, henceforth NE) to resume such bare nouns, as in (2):<sup>1</sup>

<sup>1</sup> Catalan NE may have different spell-outs: *en/n*' in proclitic position and *en/ne/n* in enclitic position, depending on whether the following verb starts with a consonant or a vowel, or the preceding item is another clitic ending with *-s* or a verbal form ending with a consonant or a vowel. See Francalanci et al. (in press).

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(1)	a.	<i>He li</i> I.have r 'I read bo	ead l				
	b.	<i>He b</i> I.have d 'I drank v	lrunk	U			o <b>acqua</b> . K water
(2)	a.	<i>N'he</i> <sub>NE.</sub> I.have 'I read so	read				
	b.	N'he	begu	t./ <b>Ne</b>	ho	bevuta.	

M. I. A de Begul. / Ne no bevulu. Ne.I.have drunk Ne I.have drunk 'I drank some.'

When a bare nominal is dislocated, either to the left or to the right periphery of the sentence, an overt marker of indefiniteness (Cat. *de*, It. *di*, henceforth DE) appears preceding the nominal constituent in both languages, as in (3) and (4), where NE is the pronominal clitic that resumes the whole DE-nominal:

(3)	a.	De	llibre	s, <b>n</b> 'he	e	llegit. /	Di	libri,	ne	ho	letti.
		DE	book	s ne.I.	have	read	DE	books	NE	I.have	read
	b.	N'he	2	llegit,	de	llibres. /	Ne	ho	letti	i, <b>di</b>	libri.
		NE.I.	have	read	DE	books	NE	I.have	rea	d de	books
		'Books, I read some.'									

- (i) En bec. / N'he begut. NE I.drink NE.I.have drunk 'I drink some. / I have drunk some.'
- (ii) Donar-los-en. / Tenir-ne. / Beure'n.
   give.them.NE have.NE drink.NE
   'To give them some. / To have some. / To drink some.'

Italian NE does not display different forms. Elision of the final vowel in proclitic position before a vowel-initial word, as in (iii)–(iv) parallel to (2), is optional and distinctive of Tuscan varieties:

- (iii) *N'ho letti.* NE.I.have read 'I read some.'
- (iv) N'ho bevuta. NE.I.have drunk 'I drank some.'

For this reason, no elision will be found in the Italian examples presented in this article.

(4)	a.	<b>D'</b> aigua,	<b>n'</b> he	beguda. / <b>Di</b>		асqиа,	ne	ho		bevuta.
		DE.water	NE.I.have	drunk	DE	water	NE I.have		ave	drunk
	b.	N'he	beguda,	<b>d'</b> aigua. /	Ne	ho	bevuta, <b>di</b>		acqua.	
		NE.I.have	drunk	DE.water	NE	I.have	drunk de		water	
		'Water, I drunk some.'								

This article argues that NE in (2)–(4) is a property-denoting anaphora, parallel to the bare nominals in internal argument position in (1). It also argues that DE in (3) and (4) is an indefinite determiner that co-occurs with property-denoting nominals when they are dislocated. In other words, following Cardinaletti and Giusti (2015, 2016) and Espinal and Cyrino (2022a, 2022b), DE is the overt counterpart of the null determiner associated with indefinite bare nominals in Romance.

It is well-known that NE also occurs with weak quantifiers, such as Catalan *molts* and Italian *molti* 'many' as in (5). Crucially, *molts/molti* may also occur in a partitive construction pivoted by a marker of partitivity, also spelled out by means of Catalan *de* and Italian *di*, as in (6):

- (5) *N'he llegit molts.* / *Ne ho letti molti*. NE.I.have read many NE I.have read many 'I read many.'
- (6) He llegit molts d'aquests llibres. / Ho letto molti di questi libri. I.have read many of.these books I.have read many of these books 'I read many of these books.'

From this perspective, many scholars have argued for a unified analysis of NE and DE-nominals in (2) through (5) with the partitive construction in (6).<sup>2</sup> The literature

(i) a. Han apreciat els regals de la Maria. / Hanno apprezzato i they.have appreciated the presents of the Maria they.have appreciated the regali di Maria.
 presents of Maria 'They appreciated Maria's presents.'

- b. *N'han apreciat els regals. / Ne hanno apprezzato i regali.* NE.they.have appreciated the presents NE they.have appreciated the presents 'They appreciated the presents.'
- (ii) a. Не parlat de la Maria. / Ho parlato di Maria. Lhave talked of the Maria I.have talked of Maria 'I talked about Maria.'
  - b. *N'he* parlat. / *Ne* ho parlato. NE.I.have talked NE I.have talked 'I talked about her.'

**<sup>2</sup>** Note that *en/ne* can also resume genitive complements of nouns, as well as genitive and elative complements of verbs:

on NE and DE is vast, especially as regards French and Italian, and the diatribe between unified and separate treatments has been endemic, with the same linguists sometimes taking different stands in different works. In favor of differentiation are Ruwet (1972), Milner (1978), Cinque (1991), Belletti (1979), Belletti and Rizzi (1981), and Cardinaletti and Giusti (1992, 2006, 2017). In favor of unification are Kayne (1975) and Ruwet (1990) for French, Chierchia (1997) and Zamparelli (2005, 2008) for Italian, and Martí i Girbau (2010) for Catalan. The unification may regard the partitive constituent (with the determiner de forming the so-called partitive article as being derived from the partitive relator which appears with quantifiers) more than the prepositional genitive and elative constituents illustrated in Footnote 2. We refer the reader to Cardinaletti and Giusti (2006, 2017) for an overview of the literature, and to Giusti (2021b) for an overview of the different properties of prepositional versus quantitative ne and of prepositional di, partitive di, and indefinite di in Italian. We also refer the reader to Espinal and Cyrino (2022b) for arguments supporting a unified analysis of indefinite de and pseudopartitive de, which are argued to be distinct from the partitive relator formally identical to de in most Romance languages (with the exception of Romanian).

In view of these antecedents, the first goal of this article is to argue against the postulated syntactic unification and show that NE in (2)–(5) does not resume a partitive constituent. It is an indefinite pronoun that semantically denotes a property-type anaphora (Espinal and Cyrino 2022a). At the same time, we argue that DE in (3) and (4), which precedes a bare plural or a bare mass noun, introduces a property-type indefinite nominal, and therefore should not be unified with the partitive relator de/di in (6), which is merged with a definite DP (containing an article or a demonstrative) and introduces an entity-type nominal expression (Espinal and Cyrino 2022b).

The second goal is to extend this analysis of DE to adnominal predicative adjectives that modify the indefinite nominal and can be stranded by NE cliticization, as in (7b):

b. N'hem sortit. / Ne siamo usciti. NE.We.have gone.out NE we.are gone.out 'We got out of it.'

We will not consider these cases here, because they are not generally unified with NE in the literature, as is clear in the main text.

galleria. (iii) Нет sortit de la galeria. / Siamo usciti dalla a. we.have gone.out from the gallery gone.out from.the gallery we.are 'We got out from the gallery.'

- (7) a. He llegit llibres interessants. / Ho letto libri interessanti.
   I.have read books interesting I.have read books interesting 'I read interesting books.'
  - b. *N'he* llegit *d'interessants.* / *Ne* ho letti *di* interessanti. NE.I.have read DE.interesting NE I.have read DE interesting 'I read interesting ones.'

We claim that in these examples DE is a marker of nominal concord on the predicative adjective, a free morpheme that copies nominal features on adnominal adjectives. This is a phenomenon common to other languages, such as Greek, Albanian, Scandinavian languages and Romanian (cf. Giusti 2015: Ch. 4 for an analysis of adjectival concord). Such concord is silent when the nominal constituent is adjacent to its modifier (7a), and it is overt when the nominal constituent is the trace of NE, as in (7b).

The third goal is to account for the fact that DE and NE also appear as nominal and adjectival predicates of copular sentences in Catalan but not in Italian. Considering that predicates are uncontroversially property-denoting expressions, it is not surprising that they can be resumed by NE and are introduced by DE in dislocated positions, as in (8):

(8)	a.	La	Maria	és	mestra.	(De	mestra,)	la	Maria	<b>n'</b> és.		
		The	Maria	is	teacher	DE	teacher	the	Maria	NE. <b>is</b>		
		'Maria is a teacher. Teacher, she is.'										
	h	Ιa	Maria	óc	nohra	(Do	nohra) la	γ <u>λ</u>	Aaria n	'és		

b. La Maria és **pobra.** (**De** pobra,) la Maria **n**'és. The Maria is poor de poor the Maria NE.is 'Maria is poor. Poor, Maria is.'

What is surprising is that in Italian they cannot be resumed by NE or be introduced by DE, a difference that has gone unnoticed in the comparative analysis of the Romance languages. In fact, Italian does not display DE on dislocated predicate nominals or adjectives and does not have predicate NE with or without dislocated predicates, as in (9):

(9)	a.	Maria	a è	maestra	. *Di	i maestr	ra, Mar	ria ( <b>n</b>	<b>e</b> ) è.					
		Maria	a is	teacher	DE	teache	r Mar	ia ne	is					
		'Mari	a is a	teacher. T	eache	r, she is o	one.'							
	b.	Maria	a è	povera.	*Di	povera,	Maria	( <b>ne</b> )	è.					
		Maria	a is	poor	DE	poor	Maria	NE.	is					
		'Maria is poor. Poor, Maria is.'												
	c.	*Mae	stra	/ Povera,	ne	è.								
		teacher p		poor	NE	is								
	d.	*Ne	è.											
		NE	is											

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We account for the Catalan versus Italian contrast in (8) and (9) by maintaining the unified hypothesis of NE as a property-denoting anaphora and of DE as a determiner introducing property-denoting nominals. We further postulate that whereas NE in Catalan is ambiguous between a *'qua*-sets' and a *'qua*-property' anaphora, NE in Italian only corresponds to a *'qua*-sets' anaphora.<sup>3</sup>

The structure of the article is as follows: Section 2 supports one of the main claims of this article, that NE is a property-denoting anaphora. It first reviews the empirical and theoretical reasons for rejecting the hypothesis that NE can resume the partitive constituent that is found with indefinite quantifiers. It then shows that NE is the pronominal counterpart of a bare indefinite expression independent of the insertion of a quantifier. Section 3 turns to the differences between Catalan and Italian with respect to the possibility for NE to resume predicate nominals and adjectives. For the first time in the literature, in order to account for the data, we will postulate that NE in Catalan can both resume properties conceived extensionally (referring to properties of individual objects) or intensionally (referring to properties of kinds and to properties themselves), whereas in Italian it can only resume properties conceived extensionally. Section 4 provides an analysis of DE as a property-denoting determiner and addresses three types of indefinite DE; namely, the overt determiner that appears on dislocated indefinite arguments in (3) and (4), the overt concord marker that appears on stranded adjectives in (7b), and the overt property-denoting determiner that combines with predicate nouns and adjectives in Catalan predicational copular sentences in (8). The novelty of our analysis of NE will also account for the ungrammaticality of DE with dislocated predicate nominals and adjectives in Italian (9), leaving the characterization of DE as a property-denoting marker in both languages. Section 5 draws the conclusions.

# 2 NE is a property-denoting anaphora

In this section, we follow Cardinaletti and Giusti (2006, 2017) and argue against the claim that NE occurs with a hidden quantifier, which is a necessary assumption in all

- (i) a.  $[_{NP}$  boy] denotes the set of boys
  - b.  $[_{AdjP}$  handsome] translates as 'have  $P_{handsome}$ '

**<sup>3</sup>** See Beyssade and Dobrovie-Sorin (2005: 1–2), who argue that "the contrasts between the distribution of (sortal) nouns and adjectives can be understood only if we distinguish two types of one place predicates, which are both of type  $\langle e,t \rangle$ , but crucially differ regarding the way in which the argument position is saturated: sortal nominal predicates can be defined as extensional properties or '*qua*-sets' predicates, whereas adjectival predicates are intensional properties, or '*qua*-property' predicates". Thus, the semantic difference between the noun *boy* and the adjective *handsome* is described as in (i).

those accounts that unify NE with the partitive constituent (cf. Chierchia 1997 and Zamparelli 2008 for Italian, Martí i Girbau 2010 for Catalan). We show that the structures where NE appears are very different from the partitive construction. In Section 2.1 it is shown that the partitive constituent requires the presence of a quantifier, while NE does not. NE does not resume the (definite) partitive constituent, which is resumed by an entity-denoting anaphora, and NE is independent of the presence of a quantifier. In Section 2.2 it is shown that NE is a non-quantified indefinite clitic pronoun.

### 2.1 The definite partitive complement is not resumed by NE

A true partitive constituent cannot appear without an overt indefinite quantifier.<sup>4</sup> This is clear in Catalan (10), in which the absence of the quantifier *alguns* 'some' is ungrammatical.

- (10) La Maria ha tret en préstec \*(alguns) *d'aquests* llibres. a. the Maria has taken of.these books in loan some 'Maria borrowed some of these books.'
  - b. La Maria ha tret en préstec \*(alguns) dels llibres de la biblioteca. the Maria has taken in loan some of the books of the library 'Maria borrowed some of the books of the library.'

However, this claim seems to be challenged by Italian (11), which displays two cases in which the quantifier is apparently optional: the so-called bare partitive (Le Bruyn 2007a, 2007b) in (11a) and the so-called partitive article in (11b).<sup>5</sup>

(i) *\*La Maria ha tret en préstec tots d'aquells llibres.* The Maria has taken in loan all of.those books

**5** Note that the bare partitive in (11a) is not as productive and acceptable as the partitive article in (11b), and it is interpreted as corresponding to "books of this kind". Furthermore, the bare partitive is also present in Dutch and German (Le Bruyn 2007a, 2007b), which lack the partitive article that is only found in French, Italian, and Gallo-Romance dialects. The implication is that so-called bare partitives constructions are independent of the partitive article, as argued for by Giusti (2021b). This is confirmed by work on previous stages of Romance. Luraghi and Albonico (2021) argue that the development of the partitive article in old Italian is independent of the presence of the bare partitive, while Gerards (2020) argues that the combination of de+ART are not genuine partitive articles but bare partitives in Old Spanish and Old Portuguese. Finally, Treviño (2010) argues that bare partitives in Spanish are crucially different from the partitive articles in Italian and French, in that the former, unlike the latter, refer to a definite specific referent.

<sup>4</sup> This excludes universal quantifiers:

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- (11) a. Maria ha preso in prestito (alcuni) di questi libri. Maria has taken in loan some of these books 'Maria borrowed some of these books.'
  - b. *Maria ha preso in prestito (alcuni) dei libri della biblioteca.* Maria has taken in loan some of.the books of.the library 'Maria borrowed some of the books of the library.'

If a hidden quantifier was to be assumed in (11) when the quantifier is not overtly realized, we would expect bare partitives (11a) and nominals introduced by the partitive article *dei* (11b) to be resumed by NE when they are dislocated, contrary to fact. The contrast in (12) and (13) shows that both Catalan and Italian require the quantifier to be overt when the partitive complement is merged at the left periphery (12), while no overt partitive complement can be merged in the absence of the quantifier responsible for the part-whole relationship (13):<sup>6</sup>

- (12) a. D'aquests llibres. la Maria **n**'ha en préstec alguns./ tret taken of.these books the Maria NE.has in loan some Di questi libri, alcuni. Maria **ne** ha presi in prestito of these books Maria NE has taken in loan some 'Of these books. Maria borrowed some.'
  - b. Dels llibres de la biblioteca, la Maria n'ha tret en préstec alguns. / of.the books of the library the Maria NE.has taken in loan some Dei libri della biblioteca, Maria ne ha presi in prestito alcuni. of.the books of.the library Maria NE has taken in loan some 'Of the books of the library, Maria borrowed some.'
- (13) (\*D'aquests llibres), la Maria **n**'ha en préstec./ a. tret books of.these the Maria NE.has taken in loan questi libri), (\*Di Maria ha presi in prestito. ne of books Maria these NE has taken in loan

- (i) Questi libri, Maria li/\*ne prestito. a. ha presi in has these books Maria them/NE taken in loan 'These books. Maria borrowed them.'
  - Dei libri della biblioteca, Maria li/\*ne ha b. preso in prestito. of.the books of.the library Maria them/NE has taken in loan 'The books of the library, Maria borrowed them.'

**<sup>6</sup>** Note that (12) also shows that in Italian, the bare partitive (11a) or the partitive article (11b) are not possible antecedents for NE. In fact, partitive complements can only be resumed by accusative clitics. See also Section 2.2.

b. (\*Dels llibres de la biblioteca), la Maria n'ha tret en préstec. / of.the books of the library the Maria NE.has taken in loan (\*Dei libri della biblioteca), Maria ne ha presi in prestito. of.the books of.the library Maria NE has taken in loan

Furthermore, in both languages, clitic resumption of the nominal complement of an indefinite quantifier is mandatory. The ungrammaticality of (14), parallel to (12) without NE, shows that the dislocated partitive is not sufficient to license the empty category in the complement of the quantifier:

- (14) a. \*D'aquests llibres, la Maria ha tret en préstec alguns./ of.these books the Maria has taken in loan some \*Di questi libri, preso in prestito alcuni. Maria ha of these books Maria has taken in loan some \*Dels llibres de la biblioteca, la Maria ha tret en préstec alguns./ b.
  - b. Dets tubles de la biblioteca, la Maria ha tret en prestet alguns./ of.the books of the library the Maria has taken in loan some \*Dei libri della biblioteca, Maria ha preso in prestito alcuni. of.the books of.the library Maria has taken in loan some

On the contrary, the true partitive can be missing if the indefinite complement of the quantifier is pronominalized with NE as in (12) above or is realized as a full nominal as in (15):

(D'aquests llibres,) la Maria ha tret (15) a. en préstec només algunes of.these books the Maria has taken in loan onlv some novel·les. / novels (Di questi libri), Maria ha preso in prestito solo alcuni of these books Maria has taken in loan only some romanzi. novels 'Of these books, Maria borrowed only some novels.' (Dels llibres de la biblioteca), la Maria ha tret en préstec alguns b. of the books of the library the Maria has taken in loan some diccionaris. / dictionaries

*(Dei libri della biblioteca), Maria ha preso in prestito alcuni* of.the books of.the library Maria has taken in loan some *dizionari.* 

dictionaries

'Of the books of the library, Maria borrowed some dictionaries.'

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Furthermore, NE cannot be missing when the nominal complement of the quantifier is null, as in (16):

- (16)a. La Maria **n**'ha tret en préstec només alguns. taken the Maria NE.has in loan onlv some Maria **ne** ha presi in prestito solo alcuni. has taken loan only some Maria NE in 'Maria borrowed only some.'
  - \*La Maria ha tret b. en préstec només alguns. Maria has taken in the loan onlv some \*Maria ha preso in prestito solo alcuni. only some Maria has taken in loan

Therefore, the co-occurrence of NE and the partitive constituent in (12) is no compelling reason to suppose that NE resumes the true partitive complement introduced by DE, *pace* Chierchia (1997) and Zamparelli (2008) for Italian and Martí i Girbau (2010) for Catalan. Rather, NE resumes the indefinite nominal complement of the weak quantifier. This is confirmed by the co-occurrence of NE and the partitive in constructions, in which a moved constituent cannot be resumed by a clitic, as is the case of *wh*-phrases, relative phrases, and focused phrases. Compare (17), in which NE is obligatory in Italian (and improves the grammaticality in Catalan), with (18) in which the accusative clitic is ungrammatical in both languages and the empty category left by the fronted constituent is perfectly legitimate without the clitic:

- (17) Di auali libri. Maria \*(*ne*) prende in prestito molti? / a. of which books Maria loan NE take in many <sup>?</sup>De quins llibres, la Maria \*(en) préstec treu en molts? of which books the Maria loan NE takes in many 'Of which books Maria borrows many?'
  - libri b. Ι di cui Maria \*(ne) prende in prestito molti sono tutti the books of which Maria NE takes in loan many are all di storia. / of history <sup>??</sup>Els llibres dels quals la Maria \*(en) treu en préstec molts the books of the which the Maria NE takes in loan many són tots d'història. are all of.history 'The books of which Maria borrows many are all about history.'
  - c. Di questi LIBRI, Maria \*(ne) prende in prestito molti (non di quelli). / of these books Maria NE takes in loan many not of those

*D'aquests LLIBRES, la Maria \*(en) treu en préstec molts (no d'aquells).* of.these books the Maria NE takes in loan many not of.those 'Of these books Maria borrows many, not of those.'

- (18) a. Ouali libri Maria (\*li) prende in prestito?/ which books Maria them takes in loan Ouins llibres la Maria (\*els) treu en préstec? which books the Maria them takes in loan 'Which books does Maria borrow?'
  - b. *I libri che Maria (\*li) prende in prestito sono tutti di storia. /* the books that Maria them take in loan are all of history *Els llibres que la Maria (\*els) treu en préstec són tots d'història.* the books that the Maria them take in loan are all of.history 'The books that Maria borrows are all about history.'
  - Ouesti LIBRI, Maria (\*li) prende in prestito (non quelli). / c. these books Maria them takes in loan not those Aquests LLIBRES, la Maria (\*els) treu en préstec (no aquells). these books the Maria them takes in loan not those 'These books Maria borrows (not those).'

As originally proposed by Belletti (1979) and discussed in Cardinaletti and Giusti (2006, 2017), the cooccurrence of NE and the overt dislocated partitive in (17), as opposed to the ungrammaticality of the accusative clitic in (18), shows that NE does not resume the true partitive. In these clauses, the displaced constituents move from inside the sentence and bind a null constituent in this position, while NE is associated with the null nominal complement of the *in situ* weak quantifier.

A final confirmation of the hypothesis that NE does not resume the dislocated partitive constituent is given by the fact that NE cooccurs with the partitive located *in situ* in sentences like (19a). This is because NE resumes the nominal complement of the quantifier, which is realized by the bare nominal *libri/llibres* in (19b). The ungrammaticality of NE in (19c) further shows that NE cannot resume the dislocated partitive (*dei libri della biblioteca/dels llibres de la biblioteca*) in the presence of the overt indefinite complement (*romanzi/novel·les*) of the quantifier (*molti/moltes*).

(19) a. Maria ne prende in prestito molti di quelli che prima avevo preso io. / Maria NE takes in loan many of those that first had taken I La Maria en treu en préstec molts dels que jo havia tret the Maria NE takes in loan many of.the that I had taken anteriorment.
before
'Maria borrows many of those that I had borrowed before.'

b. *Maria prende in prestito molti libri* di quelli che prima avevo Maria takes in loan many books of those that first had preso io./ taken I La Maria treu en préstec molts llibres dels que jo the Maria takes in loan many books of the that I havia tret anteriorment. had taken before 'Maria borrows many books of those I had borrowed before.' libri della biblioteca, Maria (\*ne) ha preso in prestito molti c. Dei of.the books of.the library Maria NE has taken in loan manv romanzi. / novels Dels llibres de la biblioteca. la Maria (\***n'**)ha tret en of the library of the books the Maria NE.has taken in préstec moltes novel·les. loan novels many 'Of the books of the library, Mary borrowed many novels.'

Up to now, we have argued that:

- the partitive structure requires the insertion of a weak quantifier, NE does not;
- the definite partitive complement is optional, NE is either mandatory or ungrammatical; and
- NE resumes the nominal complement of the weak quantifier rather than the partitive complement of a partitive structure.

Having shown that NE does not resume a definite partitive complement is the first step to argue that NE is a non-quantified (i.e., non-partitive) clitic pronoun; more precisely, it is a property-type anaphora. This is the goal of the remaining part of Section 2.

#### 2.2 NE is a non-quantified indefinite clitic pronoun

In (1)–(4), we observed that NE resumes a bare indefinite. In (20), we see that this pronoun cannot resume a quantified expression, and in (21) we show that it cannot resume a nominal introduced by *uns* in Catalan or the partitive article in Italian, as already argued by Cardinaletti and Giusti (2016) and Espinal and Cyrino (2022a):

- (20) a. \*Molts llibres, ja n'he llegit. / \*Molti libri, ne ho many books already NE.I.have read many books NE I.have già letti. already read
  - b. Molts llibres, ja els he llegit. / Molti libri, li ho many books already them I.have read many books them I.have già letti.
    already read
    'Many books, I already read them.'
- (21) a. \*Uns llibres. ia n'he llegit. / \*Dei libri. ne ho already NE.I.have books read DE.the books I.have some NE letti. già already read
  - b. Uns llibres, ja els he llegit. / Dei libri, li ho some books already them I.have read DE.the books them I.have già letti. already read
    'Some books, I already read them.'

Note that this pattern unifies the categorial status of quantified phrases and indefinite nominals introduced by an overt determiner with definite and universal quantifiers in both languages. These are full arguments that refer either to sets of individuals (22a) or sets of sets (22b); given this, they are expected to introduce discourse relationships with entity-type anaphors, which is exactly what has been illustrated in (20b) and (21b), while bare nominals (see (1)–(2)) and DE-phrases (see (3)–(4)) denote properties and as such they are expected to introduce discourse relationships with property-type anaphors (Espinal and Cyrino 2022a):

- (22) a. Aquests llibres, **els/\*n'**he llegit. / Questi libri, **li/\*ne** ho letti. these books them/NE.I.have read these books them/NE I.have read 'These books, I read them.'
  - b. Tots els llibres, els/\*n'he llegit. / Tutti i libri, li/\*ne ho all the books them/NE.I.have read all the books them/NE I.have letti. read

'All the books, I read them.'

Catalan provides one more argument for the non-quantificational property-type denotation of NE. First consider that this language allows for what looks like bare singulars (i.e., bare nominals unspecified for Number; Espinal 2010; Espinal and McNally 2011) in the object position of a restricted class of predicates (so-called *have*-predicates). This nominal in object position is assumed to denote a property of kinds

(of type  $\langle e^k, t \rangle$ ), while Number – analyzed semantically as a realization or instantiation operator (Carlson 1977) – is a morphosyntactic category that applies to properties of kinds (the meaning of the noun) to yield properties of objects (of type  $\langle e^o, t \rangle$ ; Borik and Espinal 2012, 2015). Pronominalization by NE is, therefore, a privileged diagnostic for indefiniteness. Unfortunately, it does not apply to Italian because bare singular nominals are not productive in this language.<sup>7</sup>

(23)Tinc a. pis. En tinc des del 1980. /Ho casa. \*Ne ho 1980 I.have house NE I.have apartment NE I.have since Lhave 1980. dal since 1980 'I have an apartment. I have it since 1980.' b. Ouan vivia a Amsterdam portava bicicleta. En portava per anar when I.lived in Amsterdam I.rode bycicle I.rode NE to go a la feina./ to the work

> Ouando vivevo ad Amsterdam portavo \*(la) bicicletta. \*Ne Amsterdam I.rode when I.lived in the bycicle NE al portavo per andare lavoro. work I.rode to go to.the

'When I was living in Amsterdam I used to ride a bicycle to go to work.'

Thus, the impossibility for NE to resume a nominal introduced by an overt determiner or quantifier in both languages, together with the possibility for Catalan NE to resume a bare singular argument, strongly argues for the indefinite nature of NE, for its lack of partitive status and, more precisely, for its status as a property-type anaphora.

From the discussion so far, we conclude that Catalan and Italian NE is the pronominal counterpart of an indefinite nominal expression that may have various morphophonological forms: either a bare nominal or a DE-phrase (see (1)–(4)). NE

(i) a. \*Ne ho dal 1980. since 1980 I.have NE \*Ne faccio b. sempre. NE I.make always \*Ne ho sporta. c. filed NE I.have

We take these instances of V+N as idioms, which are not freely available to the application of syntactic rules such as NE cliticization.

<sup>7</sup> Note that in Italian it is possible to have bare singulars in some fixed expressions such as *aver casa* 'to have a house', *comprare casa* 'to buy a house', *fare colazione* 'to have breakfast', *fare festa* 'to have a party', *sporgere denuncia* 'to file a complaint'. Note, however, that they do not allow for *ne*-cliticization of the complement:

neither resumes a true partitive complement (see (19c)) nor a dislocated internal argument introduced by a partitive article in Italian (see (21a)).

In the next section, we discuss a surprising contrast between Catalan and Italian concerning the (im)possibility of resuming the predicate of a predicational copular sentence by means of NE.

# 3 On predicate NE in Catalan versus Italian

In Catalan, but not in Italian, NE can pronominalize the nominal predicate of a copular verb (e.g., *ésser* 'to be', *estar* 'to be'), as advanced in (8a) and (9a) above. In Italian, the uninflected clitic *lo* is the only possibility, whereas Catalan also displays a dedicated neuter clitic ho.<sup>8</sup> Consider the contrasts between (24) and (25).

(24)	La	Maria	és	mestra.	Ho/N'és	des del	1980.	
	the	Maria	is	teacher	it/ne.is	since	1980	
	'Maria is a teacher since 1980.'							

(25) Maria è maestra. Lo/\*Ne è dal 1980. Maria is teacher it/NE is since 1980 'Maria is a teacher since 1980.'

Note that Catalan, but not Italian, also allows NE to resume the adjectival predicate constituent of copular verbs (see the contrast between (8b) and (9b)). Again, both languages converge in allowing the uninflected neuter clitic (Cat. *ho*, It. *lo*):

**<sup>8</sup>** Note that Catalan has the possibility of resuming non-definite nominal predicates and adjectival predicates by means of various clitics:

 <sup>(</sup>i) a. *ho* – when what is resumed is the predicate of the copular verbs *ésser* 'to be', *estar* 'to be', *semblar* 'to appear'.

b. *hi* – when what is resumed is the predicate of the pseudo-copular verbs *trobar-se* 'to feel', *restar* 'to remain', *quedar-se* 'to remain', *tornar-se* 'to turn into', *fer-se* 'to become'.

c. *en* – when what is resumed is the non-definite predicate complement of copular or pseudocopular verbs and this predicate complement is silent, or dislocated and introduced by the marker DE.

Moreover, Catalan also allows resumption by *el/la/els/les* of the definite predicate complement of copular or pseudo-copular verbs. For Archaic and Old Catalan we refer the reader to Badia (1947) and Ribera (2020, 2022), for Contemporary Catalan we refer to Institut d'Estudis Catalans (2016), Solà (1973), Todolí (2002).

(26) La Maria és pobra. Ho/N' és./ Maria è povera. Lo/\*Ne è. a. the Maria is poor it/ne is Maria is poor it/ne is 'Maria is poor.' b. La professora està malalta. Ho/N' està. / La professoressa è the teacher is ill it/ne the teacher is is ammalata. Lo/\*Ne è. ill it/ne is 'The teacher is ill.'

Moreover, Catalan requires the dislocated (nominal or adjectival) predicate to be introduced by DE, unlike Italian:

- (27) a. (De) pobra, la Maria ho/n' és. / (\*Di) Povera, Maria lo/\*ne è. DE poor the Maria it/NE is DE poor Maria it/NE is 'Maria is poor.'
  - b. (De) malalta, la Maria ho/n' està. / (\*Di) Malata, Maria lo/\*ne è.
     DE ill the Maria it/NE is DE ill Maria it/NE is 'Maria is ill.'

We aim to account (i) for the possibility of NE-resumption and DE-insertion in dislocated predicates in Catalan and (ii) for the lack of both phenomena in Italian. This will be derived from the hypothesis that NE in Catalan may resume bare nominal objects (denoting properties of kinds), nominal objects specified for Number (denoting properties of individual objects), and nominal and adjectival predicates (denoting properties attributable to entities). By contrast, NE in Italian may only resume properties of individual objects.

Semantically, we start from the assumption (following Borik and Espinal 2012, 2015, 2019, 2020; Dobrovie-Sorin et al. 2006; Dobrovie-Sorin and Laca 1996, 2003; Espinal 2010; Espinal and McNally 2007, 2009, 2011) that the denotation of a noun unspecified for number is different from the denotation of a noun specified for number. In particular, we assume that bare common nouns denote properties of kinds. Consider the bare nominal objects of the *have*-predicates illustrated in (23) above (e.g., *tenir pis* 'to have an appartment', *portar bicicleta* 'to carry a bicycle').

In the nominal domain, properties of kinds are assumed to be instantiated into properties of objects by means of Number. Number is present in indefinite singulars introduced by *un* 'a' (e.g., *un llibre* 'a book'), in bare plurals (e.g., *llibres* 'books') in (1a)) and also in indefinite plurals complements of weak quantifiers (e.g., *molts llibres* 'many books' in (5)). Common nouns specified for Number are assumed to denote properties of individuals (Borik and Espinal 2015; Dobrovie-Sorin et al. 2006, among others), also referred to as extensional properties. In other words, common nouns specified for Number refer to entities via their properties. Adjectives, by contrast, do not necessarily denote sets of individuals and are assumed to correspond to descriptions of properties (Beyssade and Dobrovie-Sorin 2005), to be analyzed as predicates that denote properties

themselves. Given that in languages such as Catalan and Italian bare nouns and bare adjectives may occur in predicate position and that in this position Number is inherited via a concord relationship, we assume, following Beyssade and Dobrovie-Sorin (2005), that bare nouns and adjectives in predicate position denote 'qua-property' predicates (see Note 3). In other words, they refer to properties themselves.

With this in mind, it is important to note that both Catalan and Italian allow bare (nominal or adjectival) predicates in predicational copular sentences (Higgins 1973). These predicates attribute (nominal or adjectival) properties to referential subjects. Given this, we would expect both languages to show a similar pattern in terms of pronominalization. However, although they coincide in allowing clitic resumption of the predicate by means of a neuter clitic *ho/lo*, they differ in that only Catalan allows clitic resumption of the predicate by means of the clitic NE.<sup>9</sup> What is the difference between these clitics (i.e., *ho/lo* and NE)? Both clitics can be said to denote abstract semantic objects (Asher 1993); however, in Catalan, *ho* allows a broad spectrum of potential antecedents, including propositions, properties and situations, while *en* can resume properties but not propositions (Espinal 2009).

We postulate that pronominalization by *ho/lo* can be used as a test to support the hypothesis that bare predicate nouns and bare predicate adjectives can both be analyzed as properties themselves, that is, as '*qua*-property' predicates attributable to entities. By contrast, NE as a property-type anaphora, shows important differences in the two languages. In Catalan it may resume properties of kinds, properties of individual objects and '*qua*-property' predicates, whereas in Italian it only resumes properties of individuals. We represent these meanings in (28).

(28)	a.	$\llbracket en \rrbracket = \lambda P \lambda x^k \llbracket P(x)$	<sup>k</sup> )] property of <i>i</i>	kinds anaphora	(Cat.)
	b.	[[ <i>en</i> ]] = λΡλy <sup>o</sup> ∃x <sup>k</sup> [	$P(x^k) \wedge R(y^o, x^k)$ ]	property of indiv	iduals anaphora
					(Cat., It.)
	c.	$\llbracket en \rrbracket = \lambda P [P(x_i)]$	predicate anap	hora	(Cat.)

In (28a) the pronoun has the same denotation as the one attributed to a bare nominal unspecified for Number, that is, a property of kinds. In this case, the descriptive content of the clitic resumes the property *P* that corresponds to the descriptive content of the resumed noun as applied to  $x^k$ , where  $x^k$  corresponds to a kind entity (Carlson 1977). In (28b) the clitic resumes the property *P* that corresponds to the descriptive content of the resumed noun as applied to  $x^k$  and instantiated in individual objects  $y^o$  by means of the realization operator *R* (Carlson 1977), to be interpreted as the semantic correlate of syntactic Number (Borik and Espinal 2015; McNally and de Swart 2015).<sup>10</sup> In (28c) the clitic denotes properties: it looks for a

**<sup>9</sup>** An additional difference between Catalan and Italian is that in the former third-person clitics may resume definite predicates of non-predicational copular sentences. See Note 8.

property *P* that applies to an individual *x* (e.g., the subject). In this sense, the clitic corresponds to the description of the property *P* itself. The meaning of the neuter clitics (i.e., Cat. *ho* and It. *lo*) parallels the meaning of *en*, since they are predicate anaphors. Note that neither in (28a) nor in (28c) the realization operator is activated; in (28a) this is because the clitic, like the resumed nominal, is not specified by Number; in (28c) this is because the clitic, like the resumed predicate, gets Number as the output of a relation of agreement. Finally, note that (28b) correctly predicts that in Italian, the clitic *ne* is excluded in the absence of the realization operator that corresponds to the instantiation of Number.

# 4 DE as a property-denoting determiner

In the examples given so far, we have observed that in Catalan, DE is overtly instantiated in combination with left- or right-dislocated nominals (3)–(4), stranded adjectives (7b) and dislocated nominals or adjectival predicates (8). By contrast, in Italian, DE only appears on dislocated arguments (3)–(4) and stranded adjectives (7b), but never with dislocated predicate nominals or adjectives (9).

The aim of this section is to provide a unified analysis of DE building on the analysis of NE given in the previous section. We argue that DE is a determiner that ensures that the constituent it specifies is a property-denoting constituent. Parallel to what was proposed for NE in (28) above, the difference between Catalan and Italian is that DE introduces different sorts of properties in Catalan, but only one type in Italian.

This section is organized into four parts. Section 4.1 draws a parallel between DE and NE for the expression of indefiniteness in the nominal domain. We then focus on three different phenomena in which overt DE is involved. Section 4.2 discusses the apparent optionality of DE on fronted indefinite DPs in Italian but not in Catalan. It argues that DE is actually mandatory in both languages when the DP is dislocated (to the right or to the left). Optionality simply reflects the possibility of omitting DE in Italian, but not in Catalan, when the fronted DP is a hanging topic. This section also shows that only in Catalan DE may introduce dislocated nominals that denote properties of kinds. In Section 4.3 DE preceding stranded adjectives is analyzed as an

- (i) a.  $[[Num^{-PL}]] = \lambda P.\lambda x^{o}. \exists x^{k} (P(x^{k}) \& R(x^{o}, x^{k}) \& x^{o} \in At)$ 
  - b.  $\llbracket \text{Num}^{\text{\tiny PL}} \rrbracket = \lambda P.\lambda x^{\circ}. \exists x^k (P(x^k) \& R(x^{\circ}, x^k) \& x^{\circ} \in \text{Sum})$

Similarly, the clitic NE may resume individual atomic entities or sums of entities.

**<sup>10</sup>** To be precise, as stated in Borik and Espinal (2015: 238) a realization operator R instantiates  $x^k$  into an individual atomic entity  $y^o$  if Number is morphosyntactically specified as [–PL], or a sum of  $y^o$ 's if it is specified as [+PL].

overt concord marker of indefiniteness: the adjective modifies an indefinite null nominal object already instantiated by means of a property of individuals anaphora NE and by a dislocated DE-phrase. Section 4.4 focuses on dislocated predicate nominals and adjectives. As predicted by the hypothesis that DE is the determiner counterpart of the property-type denoting clitic NE, we expect to find dislocated predicate adjectives and nominals introduced by DE (and resumed by NE, as argued in Section 3) in Catalan but not in Italian, given that NE is not a predicate anaphora in this language.

#### 4.1 DE as the determiner counterpart of the clitic NE

Following recent work by Cardinaletti and Giusti (2015, 2016) and Espinal and Cyrino (2022a, 2022b), we assume that DE is a determiner that conveys indefiniteness with plural or mass nouns, no matter whether at Spell-Out it is instantiated as *de/di* or it is silent, thereby yielding a bare noun.<sup>11</sup>

Espinal and Cyrino (2022a, 2022b) observe that DE-phrases alternate with bare plurals and, like them, have an indefinite meaning and denote properties. Catalan and Italian are languages that allow bare mass nouns and bare plurals in direct-object position of transitive verbs (29a) (see also (1)) or in postverbal subject position of unaccusative verbs (29b). None of these positions allow overt DE, but still a null indefinite DE has been hypothesized by these authors to account for the indefinite reading of the nominal. Overt DE appears to be mandatory in the indefinite complement of semi-lexical nouns (30) and optional with some quantifiers in Catalan (31).<sup>12</sup>

**<sup>11</sup>** DE is a formative of the so-called partitive article in French and Italian, which combines with an apparent definite article. Abundant literature on the topic shows that the partitive article conveys indefiniteness and not true partitivity (Carlier 2007, 2021; Dobrovie-Sorin and Beyssade 2004; Ihsane 2008; Milner 1978; among many others). The debate is on whether the article does not convey definiteness at all (as argued by Cardinaletti and Giusti 2015, 2016) or whether the combination with DE shifts it to a different value (Chierchia 1997; Espinal and Cyrino 2022a, 2022b; Zamparelli 2008).

The very notion of "partitivity" is often extended in the literature to so-called pseudo-partitives, as illustrated in (30) below, and to so-called partitive case. Recent works on this extended notion of partitivity which includes the expression of indefiniteness are the contributions to Ihsane and Stark (2020), Sleeman and Giusti (2021), Ihsane (2021), and Sleeman and Luraghi (2023) that represent the results of the PARTE network (Partitivity in European Languages) http://www.parte.humanities.uva.nl/. **12** See Espinal and Cyrino (2022b) for detailed argumentation that DE in Romance indefinites is the overt Spell-Out of an abstract operator DE that is responsible for indefiniteness and that DE in pseudo-partitives shows crosslinguistic parallels with indefinites, the idea being that a semi-lexical N selects for a DE-phrase, in exactly the same way that quantifiers and cardinals select for indefinite DE-phrases.

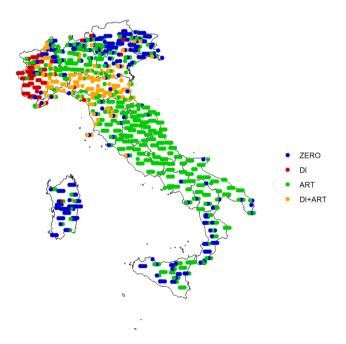
- (29) a. Не comprat (\***de**) pa. / Но comprato (\*di) pane. I.have bought bread I.have bought bread DE DE 'I bought bread.'
  - b. Han caigut (\*de) pedres. / Sono cadute (\*di) pietre. they.have fallen DE stones they.are fallen DE stones 'Some stones fell down.'
- (30) Не comprat una mica \*(**de**) pa./ Ho a. comprato un po' I.have bought а little de bread I.have bought а little \*(*di*) pane. DE bread 'I bought some bread.'
  - b. Han caigut un munt \*(de) pedres. / Sono cadute un sacco they.have fallen a lot DE stones they.are fallen a sack \*(di) pietre.
    DE stones 'Many stones fell down.'
- (31) a. He comprat molts (de) llibres. / Ho comprato molti (\*di) libri. I.have bought many DE books I.have bought many DE books 'I bought many books.'
  - b. *Ha* calgut bastant (*de*) temps. / *Ci* è voluto un bel po' has needed quite DE time there was needed a quite a bit \*(*di*) tempo.
    - de time
    - 'It took quite some time.'

On a different trend of research, Cardinaletti and Giusti (2015, 2016) propose that the partitive article is formed by the indefinite determiner DE in SpecDP, which is uninflected and needs to be merged with gender and number features in D (namely, the morphology of the definite article, henceforth ART). Looking at Italian dialects, Cardinaletti and Giusti (2018) further argue that DE and ART alternate with silent counterparts across varieties: DE-phrases that appear in basic positions, as in (32a), alternate with bare nominals, as in (32b), nominals introduced by an apparent definite article, as in (32c), or by the partitive article, as in (32d). The examples in (32), taken from the AIS map 1343, are all in Piedmont, suggesting that the overt or non-overt realization of DE and/or ART are subject to fine-grained variation:

(32) a.	а	gavár	<b>de</b> vín (13	2 Ronco Canavese, Torino)	[ <sub>DP</sub> <i>de</i> [ <sub>D</sub> 0 ] ]
		•	de wine		
b.	to	vín (	(124 Selveg)	lio, Vercelli)	[ <sub>DP</sub> 0 [ <sub>D</sub> 0 ] ]
	tal	ke wine	5		
с.	а	to	<i>l</i> vín (	128 Nonio, Verbania)	[ <sub>DP</sub> 0 [ <sub>D</sub> <i>l</i> ] ]
	to	take .	ART wine		
d.	а	tó	dul	vín (114 Ceppomorelli, Verbania)	[ <sub>DP</sub> d [ <sub>D</sub> ul ] ]
	to	take	DE.ART	wine	

'[go to the cellar] to take wine' (AIS – Jaberg and Jud 1928–1940; Tisato 2009)

The four possible combinations are claimed to create competing forms, that specialize for different "flavours" of indefiniteness when they are coexistent in the same language, but also give rise to variation across dialects and regional varieties of Italian (Cardinaletti and Giusti 2020; Giusti 2021a). Figure 1 presents the rendering by Lebani and Giusti (2022) of the distribution of the four possible determiners in the AIS maps 637, 1037, 1343, corresponding to '[to go look for] violets' (left); '[if there was] water' (central), [to go to the cellar] to take wine' (left). In blue we find silent DE and silent article (ZERO), in red the combination of overt DE and silent ART, in orange the combination of overt DE and overt ART and in green the combination of silent DE and overt ART:



**Figure 1:** Rendering of the AIS maps numbers 637, 1037, and 1343 (Lebani and Giusti 2022: 4, Figure 1, revised).

From the discussion above, we conclude that DE is an indefinite determiner that may but need not occur with overt ART across Romance varieties; it alternates with a silent counterpart, which also may but need not occur with overt ART. In this perspective, Catalan qualifies as a language with silent DE and silent ART in basic object position (29), but overt DE may be required for the expression of indefiniteness with semilexical nouns and indefinite complements of weak quantifiers (30)–(31).

### 4.2 DE with dislocated indefinite arguments

Recall that exactly like dislocated bare plurals, dislocated DE-nominals denote indefinite expressions that are antecedents of NE. Thus, in (3), repeated here as (33) for convenience, both the dislocated nominal expression and the clitic pronoun are interpreted as indefinites, associated with a non-unique, non-specific, non-familiar reading. Note that DE is mandatorily present in Catalan but optional in Italian leftdislocation (33a), while it must be overt in right-dislocation (33b):

(33)	a.	*( <b>De</b> )	llibres	i, 1	<b>n</b> 'he	llegit. /	(Di)	libri,	ne	ho	letti.
		DE	books	N	ve.I.have	read	DE	books	NE	I.have	read
	b.	N'he	lle	egit,	*( <b>de</b> )	llibres. /	Ne	ho	letti,	*( <b>di</b> )	libri.
		ne.I.ha	ave re	ad	DE	books	NE	I.have	read	DE	books
		'Books	, I read	l soi	me.'						

We deal with the contrast in (33) first showing that the difference does not reside in the optionality of DE in left-dislocated indefinite nominals but in the necessity for Catalan to have DE even in indefinite hanging topics. Following a suggestion by Cardinaletti and Giusti (1992, 2006, 2017) for Italian, we assume that *di libri* in (33) is a left-dislocated topic, while bare *libri* is possible only in a hanging topic construction.

As noted in much literature stemming from Cinque (1977, 1983, 1990), a hanging topic is less dependent on the host structure than a left-dislocated topic and, for this reason, it may appear as an independent nominal expression without displaying argumental marking, such as the dative preposition a or the overt determiner di (34a). In Catalan both the dative preposition and the indefinite determiner are mandatory (34b):<sup>13</sup>

**<sup>13</sup>** Escandell-Vidal (2009) suggests a hanging topic analysis of silent DE in the following Balearic Catalan examples (her examples (69)–(70)):

(i)	a.	( <b>De</b> )	fruita,	en	hi	ha	moli	ta, er	iguany		
		DE	fruit	NE	there	has	muc	h th	iis-year.		
	b.	En	hi	ha	molta,	engua	enguany, *(		fruita.		
		NE	there	has	much	this-year DE		DE	fruit		
		'This year, there's a LOT of fruit.'									

- (34) (A) Gianni, Maria gli ha regalato molti libri. / a. Gianni Maria him has given books to manv \*(A) en Ioan. la Maria li ha regalat molts llibres. the Joan to the Maria him has given many books 'To Gianni, Maria gave him many books as a gift.'
  - b. (Di) libri. Maria ne ha regalati molti a Gianni. / books Maria DE NE has given many to Gianni \*(De) llibres, Maria n'ha regalat molts al la Joan. books the Maria NE.has given many to.the Ioan DE 'Books, Maria gave many to Gianni as a present.'

Note that the sequences in (34) are ambiguous between a hanging topic and a leftdislocated structure. There is however a battery of diagnostics to disambiguate between the two. First, a property distinguishing hanging topics from left-dislocated topics is the fact that the resumptive element in the former can be a clitic but can also be a strong pronoun as in (35a), or a demonstrative pronoun as in (35b). Once again, Italian prefers no marker on the hanging topic (neither the preposition nor an overt DE), while Catalan rules out the hanging topic structures without overt dative/indefinite markers:

(<sup>??</sup>A) Gianni, Maria ha (35) a. regalato molti libri solo lui. / а Gianni Maria has given many books only to him to \*(A) en Joan, la Maria ha regalat molts llibres només a ell. the Joan the Maria has given many books only to him to (<sup>2</sup>Di) libri. h. Maria ha regalato a Gianni solo questi./ books Maria has given to Gianni only these DE Joan només aquests. \*(De) llibres, la Maria ha regalat al books the Maria has given to.the Joan only these DE

(ii) a. (De) cans, en he vist només un. DE dogs NE I.have seen only one b. En he només un, \*(de) cà. vist I.have seen only One DE dog NE 'I only saw ONE dog.'

This would suggest that this variety of Catalan is more similar to Italian than (standard) Central Catalan. Note however that Escandell-Vidal does not apply all the diagnostics that we apply here to Italian and Catalan to distinguish hanging topics from left-dislocated topics and that, at a first preliminary inquiry, bare plurals and bare mass nouns cannot be resumed by a strong pronoun even in this variety. See Note 14.

We thank S. Salvà and F. Torres-Tamarit (p.c.) for their judgments on the varieties of Majorca and Ibiza. For the moment, we leave the issue open with respect to the variation of the overt versus silent realization of DE in Balearic Catalan (and its insular varieties). A second diagnostic is that unlike left dislocated topics, hanging topics do not obey the restrictions that apply to extractions, for example the *wh*-island restriction displayed in (36). Italian prefers the bare noun in (36) whereas Catalan is reluctant to allow this construction.<sup>14</sup>

(<sup>??</sup>Di) sedie, (36) quanto тi fai pagare per queste qui? chairs how much me make DE pay for these here 'A regards chairs, how much do you ask for these?'

A third diagnostic is that unlike left-dislocated topics, hanging topics are root phenomena, they cannot be iterated and can only appear as the highest element in the left periphery of the main clause. Thus, only a left dislocated topic can be the second in the main clause, as in (37), or appear after the complementizer of an embedded clause, as in (38). In (37)–(38), we observe that in Italian, dislocated topics following a hanging topic must display overt DE (37a)–(38a), parallel to the overt dative preposition a (37b)–(38b). Indefinite hanging topics in (37b)–(38b) are completely acceptable without DE, parallel to the missing preposition on the dative hanging topic in (37a)–(38a).

(37)	a.	Gianni, *(	di) libri,	Mar	ria g	liene	ha	regalati	molti. /	
		Gianni di	books	Mar	ia h	im	has	given	many	
	b.	Libri, *(a	) Gianni,	Mari	ia gl	iene	ha r	regalati	molti.	
		books to	Gianni	Mari	a hi	m	has g	given	many	
(38)	a.	Gianni, la	maestra	dice	che	*(di)	libri	gliene	regalerà	molti. /
		Gianni th	e teacher	says	that	DE	books	him him	give	many
	b.	Libri, la	maestra	dice	che	*(a)	Giann	i gliene	regalerd	ù molti.
		books the	teacher	says	that	to	Gianr	i him	give	many

In Catalan (39)–(40), we observe only a slight possibility for the dative preposition ato be missing in the hanging topic position, sentence initial in (39a)–(40a), while DE must always be overt in any position (39b)–(40b):

(i)	a.	Aque: these		i <i>res, quan</i> irs how					<i>per</i> for			
		'How much do you ask me for these chairs?' (Villalba 2000: 92, ex. 113b))										
	b.			quant		dom	anac	nor	alla	-2		
	<b>D</b> .	DE	-	how much				for	the			

<sup>14</sup> See Villalba (2000) for hanging topics in Catalan, a structure this author exemplifies with entitytype denoting expressions. See the contrast in (i).

- (39) <sup>??</sup>(A) en Joan, \*(de) llibres, la a. Maria li n'ha regalat molts. the Ioan DE books the Maria him NE.has given to manv b. \*(De) llibres, \*(a) en Ioan, la Maria li n'ha regalat molts. DE books to the Joan the Maria him NE.has given many
- (40) a. <sup>??</sup>(A) en Joan, la mestra diu que \*(de) llibres li'n regalarà molts. to the Joan the teacher says that DE books him.NE give many
  b. \*(De) llibres, la mestra diu que \*(a) en Joan li'n regalarà molts. DE books the teacher says that to the Joan him.NE give many

Summing up, property-denoting hanging topics in Italian may be bare, while in Catalan they must have overt DE. Moreover, DE is mandatory in both languages with dislocated indefinites, as further illustrated by right-dislocation in (33b) above and (41) below:<sup>15</sup>

(41) Maria ne ha regalati molti а Gianni, \*(di) libri. / Maria NE has given many to Gianni DE books La Maria n'ha regalat molts a en Ioan, \*(de) llibres. the Maria NE.has given many to the Ioan books DE 'Maria has given many books to Gianni as a gift.'

Note that the comparative perspective has allowed us to discover an independent common property of Catalan and Italian: both languages do allow indefinites as hanging topics but differ in that Catalan requires DE to be overtly spelled out.

As a last remark, also note that from a semantic perspective, all the examples considered so far show DE preceding dislocated indefinite arguments whose denotation is a property of individual entities. This is expected since, as previously mentioned regarding (28b), both Catalan and Italian allow NE to be a property of individuals anaphora. Likewise, DE is a property-denoting determiner. This notwithstanding, Catalan DE may also introduce a dislocated argument that denotes a property of kinds (42a) (Espinal 2010; Espinal and McNally 2009), a possibility excluded in Italian (42b) because bare singular nouns are excluded in this language (see examples in (23)):

(42)	a.	Porto	barret. <i>De</i>		ba	barret, en		porto. /				
		wear	hat	DE	ha	t	NE	wear				
	b.	Metto	*(il)	cappel	llo.	Il/	*Di	cappello,	lo/	*ne	metto.	
		wear	the	hat		the	DE	hat	it	NE	wear	
		'I wear	r a hat.'									

**<sup>15</sup>** Right-dislocated topics, as in (41), are taken to be in the same structural position in the clause as left-dislocated ones (with movement of the remnant of the sentence to the left of the left-dislocated topic). See Kayne (1994) and Cardinaletti (2002), among others.

#### 4.3 Stranded DE with adjectives

In both Catalan and Italian, DE cannot precede the adjective *in situ* (43a) but must do so when the adjective is stranded by NE-cliticization (43b).

(43)	a.	<i>He</i> I.have	0		(* <b>d</b> ')interessants. / DE.interesting					<b>(*di)</b> DE
		interessanti. interesting								
		'I read i	0	ing boo						
	b.	N'he NE.I.hav interess interest 'I read i	e rea <i>anti.</i> ing	d de.in	<i>interessants. /</i> teresting s.'				*( <b>di)</b> DE	

Thus, stranded adjectives are similar to bare plurals in that they show overt DE only when they are adjacent to an indefinite nominal expression (44a)–(44b).

- (44) a. (De llibres), n'he llegit \*(d')interessants. / (Di libri), ne ho DE books NE.I.have read DE.interesting DE books NE I.have letti \*(di) interessanti.
  read DE interesting 'Books, I read interesting ones.'
  - b. N'he llegit \*(d')interessants, (de llibres). / Ne ho letti \*(di) NE.I.have read DE.interesting DE books NE I.have read DE interessanti, (di libri). interesting DE books 'Books, I read interesting ones.'

In the presence of an overt quantifier that does not select overt DE nominal complements *in situ* (45a), DE emerges in combination with stranded adjectives (45b), no matter whether a dislocated nominal appears to the left or to the right of the sentence. This shows that stranded DE correlates with but is distinct from the determiner DE that precedes dislocated nominals. The stranded adjective mandatorily displays overt DE in Catalan, while DE may be overt or silent in Italian (45b).

(45)	a.	Не	llegit	alguns	llibres	llibres (* <b>d'</b> )interessants.		
		I.have	read	some	books	DE.interesting		
	Но		letto	alcuni	libri	(*di)	interessanti.	
	I.have		read	some	books de		interesting	
'I read some interesting books.'								

b. {**De** llibres}, n'he llegit alguns \*(**d**')interessants, {**de** llibres}./ books NE.I.have read some **DE.interesting** books DE DE {Di libri}. ne ho letti alcuni (**di**) interessanti. {di libri}. books I.have read some DI NE DE interesting DE books 'Books, I read some interesting ones.

As observed by Cinque (1991) and Cardinaletti and Giusti (1992) for Italian and McNally and Boleda (2004) for Catalan, not just any adjective can be stranded. Apart from intersective adjectives (e.g., *interessants/interessanti*), classifying adjectives (e.g., *pulmonars/polmonare*) may be stranded as well, whereas those adjectives that constitute the prototypical examples of prenominal predicate modifiers (e.g., *presumptes/presunti*) cannot (see McNally and Boleda 2004: examples (17) and (13)).

- (46) En aquella època, de malalties, n'hi havia **de** pulmonars. / a. DE diseases at that time NE.there had DE pulmonary  $^{?}A$ auell' polmonari. di malattie n'erano di ероса. се pulmonary at that time DI diseases there NE.be DE 'At that time, diseases, there were pulmonary ones.'
  - b. \*D'assassins. no en vam veure, de presumptes. / DE.murderers alleged not NE we.past see NF. \*Di assassini vedo, di presunti. non пе murderers not NE **L**see DE alleged DE 'We did not see any, alleged murderers.'

According to Cardinaletti and Giusti (1992) for Italian and Martí i Girbau's (1995) for Catalan, the clitic *ne/en* and the marker *di/de* that precedes adjectives in structures with elliptical nominals are the manifestation of the same phenomenon: partitive case marking. We reformulate this analysis by postulating that the DE that introduces stranded adjectives is an overt concord marker of indefiniteness. Given the contrast in (43), we postulate that DE with stranded adjectives concords with the indefinite DE of the null nominal it modifies. As the examples in (44) illustrate, this nominal expression may very well be expressed by means of a dislocated DE phrase. This means that one single indefinite argument (the indefinite nominal expression) may be discontinuous at Spell-Out provided that the scattered portions display overt concord for relevant features. In other words, the co-presence of the dislocated DE, the clitic NE and the stranded DE must be considered discontinuous Spell-Outs of indefiniteness and therefore of the same property-type denoting constituent. If this is correct, it must be concluded that adjectives project a position that realizes concord for the indefiniteness of the nominal (as claimed by Giusti 2015: Ch. 4).

Finally, note that if the object nominal is definite, the stranded adjective cannot be introduced by a DE marker, thus supporting our hypothesis that DE with stranded

adjectives is the expression of a concord relationship with a property-denoting internal argument constituent. To illustrate this claim, consider the examples in (47) which show that, when the object nominal is definite and is *in situ*, DE cannot precede the adjective (47a), as was already observed with respect to (43a) for indefinite objects; when the object nominal is a dislocated definite, as expected, DE is also discarded (47b).

- (47) a. He demanat la carn (\*de) ben cuita. / Ho ordinato la carne I.have ordered the meat DE well cooked I.have ordered the meat (\*di) ben cotta.
  DE well cooked 'I ordered the meat well done.'
  - b. La carn, la compra (\*de) congelada. / La carne, la compra (\*di) the meat it bought DE frozen the meat it buy DE surgelata.
    frozen 'The meat, I buy it frozen.'

### 4.4 DE with dislocated predicates

Recall from Section 3 that predicates of copular sentences in Catalan, but never in Italian, are resumed by NE. In this section, we concentrate on the occurrence of DE introducing dislocated predicates, which constitutes one of the major points of divergence between the two languages. Observe that in (48) the dislocated predicate may be preceded by *de* in Catalan irrespective of whether it is resumed by *en* or *ho* and also irrespective of the nominal versus adjectival nature of the predicate. However, this is not possible in Italian under any condition.

- (48) a. (De) mestra, la Maria ho/n' és. / (\*Di) Maestra, Maria lo/\*ne è. DE teacher the Maria it/NE is DE teacher Maria it/NE is 'Maria is a teacher.'
  - b. (D')alegres, les criatures ho/en són. / (\*Di) Allegre, le bambine DE.happy the children it/NE are DE happy the children lo/\*ne sono.
    it/NE are 'Children are happy.'

Note that a lack of dislocated predicate adjectives and nominals with DE and a lack of resumption of these elements by NE in Italian cannot be related to competition with another strategy in the language, since in both Catalan and Italian a neuter non-

inflecting clitic is available (Cat. *ho*/It. *lo*). We propose that the impossibility of *di* in dislocated predicates in Italian is directly related to the absence of a predicate *ne* anaphora in this language, as discussed in Section 3. Therefore, we claim that resumption by NE and the possibility of the determiner DE must be considered two sides of the same phenomenon since NE is a property-type anaphora and DE is a property-type determiner. We understand that the difference between the two languages is a lexical one: namely, whereas Catalan allows that the lexical Spell-Out of both NE and DE denote at least three different types of properties, Italian only admits one.

# **5** Conclusions

In this article, we have compared the syntax and semantics of nominal, pronominal and adjectival indefinite expressions in Catalan and Italian. While some of the facts we have reviewed are rather well-studied in the syntactic literature of each of the two languages, the comparative perspective has allowed us to uncover a number of properties that had gone unnoticed.

First and foremost, we have argued that both NE and DE convey indefiniteness, rather than quantification or partitivity. Thus, we have shown the semantic parallel that exists between the property-denoting clitic NE and the determiner DE. Second, we have argued that NE is a property-denoting anaphora, but whereas NE in Catalan may either correspond to a property of kinds anaphora, a property of individuals anaphora, or a predicate anaphora, NE in Italian may only correspond to a property of individuals anaphora. Third, we have shown that DE is a property-denoting determiner, with the same three meanings attributed to NE in Catalan but with only one meaning attributed to NE in Italian. Fourth, we have argued that DE preceding stranded adjectives is a concord marker of indefiniteness.

Overall, this study modifies our current understanding of the syntax and semantics of NE and DE in Romance, with specific reference to Catalan and Italian. The novel comparison between these two languages also improves our knowledge of the different semantic categories that correspond to nominal expressions preceded by the determiner DE and resumed by NE.

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