Italian clitic pronoun *ne*:
functions and distribution in the input for L2 acquisition

Irene Caloi

(Goethe Universität Frankfurt am Main)

Introduction

Ne is a clitic pronoun in use in Standard Italian (1) and other Romance varieties, including French and Catalan (*en*). It grammaticalized from Latin INDE, indicating a source of movement, literally 'from there' (Carlier & Lamiroy 2014, Russi 2008). Along its grammaticalization process, the element gradually (but not completely) lost its locative meaning while developing other functions. At present, the pronoun is primarily studied for its partitive function and mostly referred to in the literature as *partitive pronoun*. However, this label overshadows the variety of functions covered by *ne* (e.g. genitive and source *ne*, see below).

(1) Ne ho   comprati due
    CL have bought   two
    'I bought two'

The definition of partitive pronouns is challenging *per se* and some authors seem to disagree when it comes to its characterisation. Sometimes the definition applies to all cases in which *ne* replaces a quantified referential expression, in others it is more restrictive, and it only applies to cases in which the pronoun contributes to expressing a relation between a part and a whole or set (see Giusti & Sleeman 2021, Franco & Zamparelli 2019 a.o.). The definition in use in the present study is the latter. This restrictive approach allows the identification of clear and well-defined criteria for distinguishing between related – yet different – functions of *ne* (which will be presented in detail below).

Ne has also been pointed out in studies on L2 acquisition as a particularly problematic aspect in the interlanguage of L2 learners whose L1 is not endowed with partitive pronouns. In case the L1 and the target L2 differ with respect to the expression of partitivity, difficulties arise at the (pre-)intermediate level and persist even beyond it (Sleeman & Ihsane 2017, 2021; see also Berends et al. 2021 for Dutch *er*). The wide range of functions covered enhances the element's complexity: L2 learners have to map one single phonologically-bound element to a

variety of morphosyntactic and semantic features. What cues do L2 learners find in the input for acquiring the multiple functions of *ne*? The contribution seeks an answer to this question.

The primary aim of the present study is to collect data on the occurrence of *ne* and learn which functions are more common and frequent in Italian. The partitive function might not be the dominant one after all (cf. Mariotti & Nissim 2014). This will be assessed through a corpus study including the analysis of 1000 occurrences of *ne* in written Italian texts (see Section 2). The secondary aim of the present study is to address the topic from the point of view of L2 acquisition. As a matter of fact, it is possible to interpret results from the corpus study as an insight into the input L2 learners receive. Results will raise new questions for L2 acquisition.

The contribution is structured as follow: Section 1 is mainly descriptive. It presents the clitic pronoun *ne* and provides an overview of its functions and the classifying criteria in use in the study. Section 2 describes the corpus study and presents its results. It also comments on some noteworthy occurrences of *ne* found in the corpus. Section 3 capitalizes on the results of the corpus study to comment on previous studies on L2 acquisition.

1.   The clitic pronoun *ne*

The particle *ne* shows the prototypical morphosyntactic distribution of clitic pronouns (Cordin 1988): it is proclitic to finite verbs (see example 1) and enclitic to non-finite ones (2), with the only exception of some forms of imperative[1] (3), which, again, is standard in Italian for all clitic pronouns.

(2) Comprando-ne   due il   terzo è gratis

Buying   CL two the third is free

'Buying two, the third one is for free'

(3) Compra-ne due!

Buy   CL two

'Buy two!'

Ne can also appear in combination with other clitic pronouns, i.e., indirect object clitics, reflexives, and the locative particle *ci*. Pronouns clusters are always characterized by fixed orders, based on their functions, e.g., indirect clitic pronouns always attach higher than direct

---

[1] In imperative forms, the position of clitics depends on person: second person (singular and plural) and first person plural require enclisis; third person (singular and plural) requires proclisis.

clitic pronouns. As for *ne*, the pronoun usually appears in the lowest position following indirect, reflexive and locative clitics, independently of whether the pronoun cluster is proclitic (4-6) or enclitic (7) to the verb (Schwarze 2009)[2]:

    (4) Me   ne comprano due

          Cl.   C_L buy   two

          'They buy two for me'

    (5) Se   ne comprano   due

          Themselves C_L buy   two

          'They buy two for themselves'

    (6) Ce   ne   comprano   due

          C_L.LOC C_L   buy   two

          'They buy two there'

    (7) Vogliono   comprar-se- ne due

          Want   buy-   C_L.REF-C_L two

          'They want to buy two for themselves'

1.1.   Functions of ne

Despite being known mainly for its partitive meaning, *ne* can cover a wide range of functions. How to define and classify all of them is not a straightforward task, though. Literature provides several examples of classification based on different criteria. For instance, Russi (2008) reports three main macro-categories: partitive, adnominal and *di*-complements. Mariotti & Nissim (2014) focus on two aspects: whether the pronoun is anaphoric or not in the given syntactic context, and whether the quantified expression refers to types or tokens (or internal vs. external features of the related element). The result is a multi-layered classification system with non-transparent labels. Sleeman & Ihsane (2017, 2021; see also Ihsane 2013) adopt classification criteria based on the fine-grained feature analysis of the replaced referring expression. This includes whether the replaced phrase consists of mass or countable nouns, the expression is referential or not, it is modified by an adjective, or it is negated, etc.. While this analysis is very detailed in some respects, it is not suitable for the present study on Italian because it neglects

---

[2] This generalization does not hold true when *ne* is part of a clitic cluster preceding impersonal pronoun *si*, as in (Pinzin, p.c.):

    (i)   Gliene   si   parla

               C_L.INOBJ.3P CL.IMP. talk.3PS

               'One talks to them about it'

other functions like the occurrence of *ne* with pronominal verbs and *da*-complements (see below).

The present study pursues some balance between a loose classification system and a very fine-grained one. A further desirable outcome is that the classification should be feasible also from a L2 teaching perspective, with categories on average accessible to adult learners. The classification in use looks into the main features of the replaced referential expression, namely whether it is a partitive, a quantified expression, an indefinite DP, a PP introduced by the prepositions *di* or *da*, or part of a verbal structure. These functions are exemplified in §1.2.

1.2. *Classification of the functions of* ne

The classification in use is based on the morpho-syntactic and semantic characteristics of the referential expressions replaced by *ne* and allows for the identification of six different functions. In what follows, the different functions will be presented and commented in turn. For each function, a label representing (one of) its main characteristic(s) is provided. Not all labels in use are standard in background literature, but they are adopted in the present study to ease the description and allow for a clear discussion of the results of the corpus analysis in Section 2. Similarities and differences among functions are also examined, thus revealing that the six functions can be roughly grouped into three classes: (a) cases in which *ne* replaces complements of quantifiers and numerals (i.e., 'quantitative *ne*', 'partitive *ne*', 'indefinite *ne*'); (b) cases in which *ne* replaces phrases otherwise introduced by a preposition (i.e., Italian *di* for 'genitive *ne*' or *da* for 'source *ne*'); (c) cases in which *ne* is lexicalized as part of a verb to express an idiomatic meaning ('pronominal verb *ne*', henceforth PV *ne*).

1. *Quantitative Ne* replaces the lexical complement of a quantifier or a numeral (8b).

 (8) a. Ho tre sorelle

    have three sisters

    'I have three sisters'

  b. Ne ho tre (*sorelle)

    CL have three (*sisters)

    'I have three (sisters)'

The pronoun and the noun are in a complementary distribution, unless the noun is right- or left-dislocated:

(9) Di sorelle ne ho tre

    Of sisters C<small>L</small> have three

    'Of sisters, I have three'

This characteristic holds true for all functions and contexts in which *ne* can appear, except for PV *ne* (see below).

    As for the syntactic context, *ne* is licensed in the argument internal position. In fact, it can function as the object of transitive verbs (as in 9, 11, 12; see Belletti & Rizzi 1981; Bentley 2004) or the subject of unaccusatives (as in 10, see also Sleeman 2022):

(10) Ne sono già   arrivati tre

     C<small>L</small> are   already arrived three

     'Three already arrived'

2. *Partitive Ne* replaces the complement of a quantifier and expresses the relationship between a part and a whole or a set.

(11) Ho   comprato tre mele e   ne ho   mangiate subito   due

     Have bought three apples and C<small>L</small> have   eaten   immediately two

     'I have bought three apples and immediately eaten two (of them)'

In the sentence above, *ne* replaces the complement of *due* ('two') in the object position of the verb *mangiare*. The partitive meaning is constructed in the context based on the number of eaten apples (two) out of the total amount of available apples (three). The difference between quantitative *ne* and partitive *ne* is semantic and syntactic and derives from the specific sentence context. Although other studies do not take this difference into account, the present study does, in order to isolate the purely partitive function in which *ne* replaces a definite nominal expression (intended as a part in relation to a whole or set) from similar ones, which involve expression of a (indefinite) quantity.

3. *Indefinite ne* can replace singular and plural indefinite DPs in complement position.

(12)   Hai mele?   Sì, ne ho

         have apples? Yes, C<small>L</small> have

'Do you have (any) apples? Yes, I have (some)'

On top of countable nouns, *ne* also replaces mass nouns:

(13)   Hai acqua?   Sì   ne ho
           Have water? Yes, CL have
           'Do you have (any) water? Yes, I have (it)'

In principle, partitive, quantitative and indefinite *ne* could be analysed more in details by taking into consideration the exact featural configuration of the nominal phrase they replace. For instance, Sleemann & Ihsane (2020) looked at definiteness, referentiality, countability, and polarity in order to map which contexts license the use of *ne*. However, the present study discards this fine-grained classification in favour of a broader one (with only partitive, quantitative and indefinite *ne*) that allows to focus more on cross-linguistic comparisons and challenges for L2 acquisition (see Section 3).

4. Genitive *ne* is the label in use for cases in which the clitic pronoun replaces an argument otherwise introduced by the preposition *di* ('of'):

(14)   a. Abbiamo   parlato di   politica
            have   talked of   politics
             'We talked about politics'
      b. Ne   abbiamo   parlato
            CL   have   talked
             'We talked about it'

Under this function, the pronoun can be licensed by verbs (as in 14b), nouns (15b) or adjectives (16b):

(15)   a. Ho necessità   di   aiuto
            have necessity   of   help
             'I need help'
      b. Ne ho   necessità
            CL have   necessity
             'I need it'

(16)   a. Sono   orgoglioso   di   mia   figlia

         am   proud   of   my   daughter

         'I am proud of my daughter'

         b. Ne   sono   orgoglioso

         CL   am   proud

         'I'm proud of her'

Ne also appears in structure with kinship nouns expressing inalienable possession (17b):

(17)   a. Alberto è   il   figlio di Piero

         Alberto is   the   son   of Piero

         'Alberto is   the   son   of Piero'

         b. Alberto ne è il   figlio

         Alberto CL is the   son

         'Alberto is the son (of him)'

5. *Source ne* replaces a complement otherwise introduced by the preposition *da*. The label
   refers to the semantic meaning of the replaced complements, usually expressing the origin
   of a movement or the source of a by-product or effect. This function clearly has a 'locative'
   nuance in its core meaning, a keyword which is also alternatively used to represent this
   function (cf., Russi 2008).

(18)   a.   Arrivo in ufficio   alle   9 e   esco dall'   ufficio alle 18

                 Arrive in office   at-the 9 and exit from-the office at-the 18

                 'I arrive to the office at 9 and leave from the office at 18'

         b.   Io arrivo   in ufficio   alle   9 e   ne esco   alle 18

                 I arrive   in office   at.the 9 and CL exit   at-the 18

                 'I arrive to the office at 9 and leave from there at 18'

(19)   a.   Tutti   traggono   benefici da   questa situazione

                 all   pull   benefits from this   situation

                 'Everyone benefits from this situation'

         b.   Tutti ne traggono   benefici

                  all   CL pull   benefits

                  'Everyone benefits from it'

6. PV *ne* is the label in use in the present study for cases in which the particle appears in combination with so-called pronominal verbs. Pronominal verbs are constructions in which high-frequency verbs like *avere* ('to have), *fare* ('to make') or *andare* ('to go') cluster with at least one pronoun, thus resulting in a different meaning. Sometimes the meaning of the newly formed verb is partially derived from the meaning of the elements in the construction (verb and pronouns); but in some cases, the meaning of the pronominal verb seems unrelated to the base verb (Espinal 2009):

(20)   a. *prendere* 'to take'   vs.   *prendersela* 'to get mad'

         b. *arrivare* 'to arrive'   vs.   *arrivarci* 'to understand'

         c. *fare* 'to make'   vs.   *farcela* 'to make it/to achieve something'

Ne is part of several pronominal verbs like *andarsene*:

(21)   Me ne vado   domani

         Me CL. go   tomorrow

         'I leave tomorrow (for good)'

As it is often the case with pronominal verbs, a reflexive pronoun is also present in (21) and combines with *ne* and the verb *andare* ('to go') to express altogether the meaning of 'leaving (for good'). Omission of either one of the two pronouns would result in an ungrammatical sentence:

(22)   *(Me) *(ne) vado domani

           Me   CL go tomorrow

         'I leave tomorrow (for good)'

While in examples like those in (20) the pronouns *-la* and *-ci* seem to be semantically unmotivated, the pronoun *ne* in (21) could be interpreted as the remaining of a source of movement complement. Considering the semantic meaning of the expression, it might well be the case that *ne* was originally used as a clitic pronoun for the complement expressing the source of movement. The frequent use of *ne* together with *andare* might have brought to a lexicalization of the element into a new verb expressing a different (still related) meaning (Russi

2008). In this regard, the co-occurrence of the pronoun *ne* and a complement for source of movement introduced by the preposition *da* is grammatical:

(23)   Me *(ne) vado da   questo posto domani
                  Me CL go   from this   place tomorrow
                  'I leave this place tomorrow'

In (23), the omission of *ne* would result in an ungrammatical sentence, thus meaning that it is not a mere doubling of the source of movement complement introduced by the preposition *da*. This clearly differs from the case of clitic right dislocation we observed in (9). In (23) *ne* is part of the verbal phrase, to be realized independently of the realization of the *da*-phrase to express the intended meaning of 'leaving (for good)'. Therefore, its function in the sentence seems to be more lexical than grammatical. The element has lost its pronominal function in the lexicalization process, which has brought it to become an obligatory formative of the verb (Russi 2008).

In sum, the six functions outlined above cover the vast majority of cases in which *ne* is used in Italian. Still, their actual frequency of use is unclear. We will try to grasp this in Section 2 with a corpus study looking at actual occurrences of *ne* in written Italian.

2.   Corpus study

The aim of the present study is to gain insight into the frequency of use of the different functions of *ne* to see which functions are the most frequent ones in the spontaneous production of Italian speakers.

Method & Material. The present study is based on the analysis of 1000 occurrences of *ne*, extracted from an online available corpus. The analysis and coding of the single occurrences were completed manually by two researchers according to the procedure described below.

1000 occurrences of *ne* were extracted from the itTenTen corpus, an Italian corpus made of texts collected from the web. The corpus belongs to the TenTen Corpus family, a set of comparable corpora built according to the same criteria and now available for more than 40 languages (Jakubicek et al. 2013).

For the present study, the 2020 version of the Italian corpus was used. This was built by the Masaryk University and the Lexical Computing Ltd company by collecting 30,718,525 web pages in November and December 2019 and December 2020. A total of 533,500,604 full sentences were obtained from those webpages. That corresponds to 14,514,566,714 tokens

including 12,451,734,885 words[3]. The corpus is available online on the SketchEngine website and can be searched for free.

The selection criteria for the web pages to be included in the corpus are unspecified; however, a certain variety in style and register was detected during the manual analysis and coding of the single occurrences. Texts visibly ranged from newspaper articles to forum discussions, from legal texts and public regulations to private blogs. Although the corpus is restricted to written language, some texts seem to be in the spectrum of diamesic variation defined in Italian as *parlato scritto*, namely written texts (*scritto*) that reproduce oral communication (*parlato*; see Nencioni 1976, Bazzanella 2011). Although it cannot be excluded that a corpus based on spoken language could provide different results, the itTenTen 20 corpus seems to qualify as a reliable sample of the uses of *ne* in Standard Italian, thanks to its size and heterogeneity.

Other dimensions of variation were detected in the corpus, namely diachronic and diatopic variation, i.e. variation in time and space, which represented a potential confounding factor and needed to be controlled for in the study. This will be described in detail below, as part of the coding criteria for the analysis.

Procedure. SketchEngine allows all registered users to search the available corpora for free on its website. Through the online software, it was possible to generate a set of 1000 occurrences of the pronoun *ne*. Each occurrence was listed as a data point in an Excel file together with the following information:

a. its linguistic environment, including 20 words preceding the pronoun *ne* and 20 words following it;
b. the link to the website from which the text was downloaded.

Two researchers (an experienced researcher and a student assistant) independently analysed the data by taking into consideration their linguistic environment (i.e., the sentence they were part of) and proceeded to classifying the item into one of the pre-determined categories (see § 1.2) according to the function played by *ne* in the sentence.

Whenever the two researchers classified a single item under different categories, the element was jointly discussed. If no agreement was reached, a third opinion from a senior

---

[3] Non-word tokens like numbers and punctuation were excluded from the counting. The total number of types in the corpus is not provided on the website.

researcher was requested. All researchers taking part in the analysis were native speakers of Italian, who grew up in Italy as monolinguals.

Analysis. The analysis consisted of two steps. In the first one, researchers assessed whether the occurrences qualified for the present study, i.e. whether they were actual occurrences of the clitic pronoun *ne* in Standard Italian. Reasons for discharging an item from the dataset were:

   a. typing and tagging errors: for instance, the negative marker *né* (nor) was typed without the graphic accent and tagged as a pronoun. Another example is the pronoun *me* (en. 'me') typed as *ne*. Cases like this can be easily detected from the syntactic context because the *ne* appeared after a preposition, a syntactic environment which does not allow clitics.

   b. the sentence altogether was not intelligible for native speakers of Italian, independently of the apparent function of *ne* in the structure.

   c. Lyrics: the occurrence was clearly drawn from poetry or songs, in which, for stylistic reasons, elements can be duplicated, or word order can be strongly marked.

   d. Diatopic variation: sentences marked by regional varieties were excluded from the dataset. This was assessed by researchers on the basis of morpho-syntactic features and the lexical items in the text chunks. The reason for this is that this kind of analysis would go beyond the scope of the present study. We know from comparative studies that there are inconsistencies among Romance varieties with respect to the uses and functions of *ne*/*en* (Sleeman & Luraghi 2022, a.o.). It is plausible that these extend to Italian dialects too (see for instance Ledgeway 2009 and Abete & Greco 2013 on Neapolitan); however, the methodology in use does not qualify as a suitable one for exploring this dimension of variation. The exclusion of regional varieties from the dataset served the purpose of avoiding potential confounding factors related to non-homogeneous data.

   e. Diachronic variation: sentences extracted from texts that undoubtedly dated back to older varieties of Italian were excluded for reasons like the one above (see d), namely potential inconsistencies in the use of *ne* with respect to modern Italian (Wanner 2009). For example, this was the case for occurrences of *ne* extracted from web pages that reproduced texts of Italian authors like Niccolò Machiavelli or Ludovico Ariosto, (XV-XVII Century).

The second step of the data analysis was based on six classes corresponding to the six functions of *ne* described in Section 1 and summarized here once again. Whenever the researchers could

not agree on how to classify the element or, alternatively, agreed on the fact that the element's function in the sentence was different from the classes in use, the item was classified as 'other':

1. Quantitative *ne*
2. Partitive *ne*
3. Indefinite *ne*
4. Genitive *ne*
5. Source ne
6. PV *ne*
7. Other

Results. The first step of the analysis consisted in the observation of 1000 occurrences of *ne* and the context in which they were used. 86 occurrences did not qualify as eligible occurrences for our study. They were discharged from the second phase of the analysis for either one of the reasons listed above: it was an occurrence of negative marker *né* (and therefore no clitic pronoun); it appeared in a text that could not be classified as Standard Italian (but rather as a diachronic or regional variety); or the sentence was altogether not comprehensible for native Italian speakers.

The second step of the analysis included 914 occurrences of *ne* which qualified in the first step, and focused on the function of each occurrence:

Table 1. Occurrences of *ne* according to functions

FUNCTIONS	n°	%
QUANTITATIVE	154	16.9
PARTITIVE	15	1.6
INDEFINITE	30	3.3
GENITIVE	516	56.4
SOURCE	94	10.3
PV	96	10.5
OTHER	9	1
TOT	914	100

2.1 Interim Discussion

The corpus analysis showed that the predominant function is the one labelled as genitive *ne*, namely cases in which the clitic pronominalizes phrases otherwise introduced by the preposition/complementizer *di* (see examples 14-17). Half of the occurrences of *ne* in the data-set plays this function, which is by far the most frequent one in the corpus. One might argue that the definition of this class was broad (especially in comparison to that of other classes, see below). In fact, it would be possible to distinguish between adverbal and adnominal cases, as well as genitive cases expressing possession. However, even taking into account a potential refinement of the sub-functions on genitive *ne*, it is remarkable how frequently *ne* appears in place of a phrase otherwise introduced by *di*.

On the other hand, the least frequent function is the partitive one, which only corresponds to the 1.6% of all occurrences in the data set. Results are in line with the data reported in Mariotti & Nissim (2014): the use of partitive *ne* seems to be very limited, despite this being its most studied function. One might also argue that results are due to the very restrictive classification criteria in use in the study, which focused on the expression of a relation between a part and a set or whole as a decisive factor. Broader classification criteria could collapse partitive *ne* and its closely-related functions – quantitative *ne* and indefinite *ne* – into one class (see Russi 2008). In the present study, the three functions together correspond to almost the 22% of all occurrences: a considerable part of the data-set, although not the dominant one.

The function Source *ne* represented the 10.3% of all occurrences in the analysed set. The corpus mainly comprises cases in which the replaced *da*-phrase express a locative meaning (i.e., source of movement), however there are also some instances in which it is part of a passive construction and *ne* replaces the *by*-phrase. A peculiar aspect of this function is that the *by*-phrase can be replaced by *ne* only in a limited number of cases. These are mainly passive structures in which the grammatical subject is an experiencer and the noun in the *by*-phrase is an inanimate non-agentive referent (e.g. *affascinare* 'to fascinate', *disgustare* 'to disgust', *colpire* 'to impress'):

(24)   Ne è profondamente   affascinato
         CL is profoundly   fascinated
         'He/She is profoundly fascinated by it'

With respect to pronominal verbs, it should be remarked that the frequency in the corpus (ca. 10.5%) very much depends on the high frequency of the verb *andarsene* ('to leave for good'); other examples of pronominal verbs in the corpus are *starsene* ('to choose to stay'), *fregarsene* ('not to care about something'), and *uscirsene* ('to say something unexpected').

One might consider the written nature of the corpus as a confounding factor in the study; still, the high variety in registers and text types make this corpus a good sample of the use of the Italian clitic *ne*. The results are a reliable overview of the distribution and frequency of the different functions of the clitic pronoun. Section 3 will discuss how the results could add to the interpretation of data from L2 acquisition and provide inputs for feature research. But before that, § 2.2 presents some worth noting examples found in the corpus.

2.2 Other functions of ne

While performing the corpus analysis, researchers came across some occurrence of *ne*, whose function, based on the semantic and syntactic context, could not be traced back to any of the categories in use in the present study. That is the case of sentences in which *ne* replaces PP introduced by prepositions other than *di* or *da*. For instance, the analysis revealed cases in which *ne* replaces phrases introduced by the prepositions/complementizers *con* or *a* when fully spelled out:

(25)   a. Un oggetto che da secoli affascina e confonde chiunque <u>ne venga in contatto</u>

            a object that since centuries fascinates and confuses whoever cl comes in contact

            'An object which since centuries fascinates and confuses whoever has contacts (with it)'   (Item 141)

    b. chiunque <u>venga in contatto con</u> l'oggetto

         whoever comes in contact with the object

         'Whoever has contacts with the object'

(26)   a. raramente si degnava di far uso della lingua inglese, a meno che non <u>ne fosse costretto</u> da qualche motivo

         rarely self condescended to do use of the language english, unless that not CL was forced by some reason

         'He reraly condescended to speak English, unless he was forced to do so by some reasons'   (Item 456)

    b. a meno che non <u>fosse costretto a</u> usare la lingua inglese da qualche motivo

         unless that not was forced to use the language English by some reasons

         'unless he was forced to use English by some reasons'

Sentences in (25b) and (26b) spell out the argument structure of the predicates in (25a) and (26a): in the former, the periphrasis *venire in contatto* ('to get in touch') requires the preposition *con* to introduce its argument; in the latter, *essere costretto* ('to be forced') selects the complementiser *a* to introduce a non-finite clause. Native speakers of Italian also report that in this specific context a pronominalization of the non-finite clause following the predicate *costretto* could proceed through the clitic pronoun *vi*, rather than *ne*. Still, we have to acknowledge the examples found in the corpus and conclude that *ne* also pronominalizes phrases introduced by *a* and *con*. Based on the extremely small number of occurrences of this kind in the corpus we assume that the phenomenon is limited. Still, it is not clear which mechanisms and constraints licence and limit the use of the pronoun *ne* in the place of a variety of prepositions and complementizers.

The corpus analysis brought to our attention also another kind of structure worth pointing out: sentences in which *ne* replaces an indefinite modified by an adjective. The use of *ne* in structures with adjectival modifiers is usually licensed by the presence of an indefinite article (27), while definite articles block it (28), as exemplified and discussed by Ihsane & Sleeman (2014):

(27)   Ne prendo   uno verde
         Cʟ. take   one green
         'I take a green one'
(28)   *Ne prendo   il verde
          Cʟ. take   the green

The present corpus also includes sentences in which the object pronominalized by *ne* is modified by an adjective introduced by the preposition *di*:

(29)   (Di pomodori) ne prendo   di verdi
         (of tomatoes) Cʟ. take   of green
         'I take some green (tomatoes)'

The structure is also allowed with mass nouns:

(30)   (Di latte) ne   prendo di fresco
        (Pf Milk) CL. take   of fresh
        'I take some fresh (milk)'

It is plausible to assume that *ne* replaces a plural determiner in the context above; however, another question arises: why is the adjective introduced by the preposition *di*? This seems to involve an elliptic bare noun, modified by the adjective.

An exhaustive answer to this question goes beyond the goals of the present study. Still, the structures above enlarge the body of different morphosyntactic contexts in which *ne* is used, as well as the list of functions the pronoun covers. This issue will be addressed again the next section, in which the phenomenon is considered from the point of view of L2 acquisition.

3.   *Ne* in L2 acquisition

It is a very well-known and studied phenomenon that clitic pronouns represent a particularly sensitive aspect for language acquisition. Their phonological weakness combined with their richness in encoded morphosyntactic features represent a true challenge common to all different kinds of acquisition, including monolingual L1 acquisition and adult L2 acquisition (Gavarrò et al. 2010, Leonini & Belletti 2004). The progressive acquisition of clitic pronouns (Varlokosta et al. 2016) ends with the acquisition of the clitic pronoun *ne* (Gavarrò et al. 2010). Its position at the bottom of the implicational scale for acquisition (Chini 2005) pairs the cross-linguistic implicational scale of cliticization by Benincà & Poletto (2008): learners have the most difficulties with the elements that are present in only few languages. This is a very interesting observation that provides insights into the link between the grammatical constraints observed by theoretical linguistics and the empirical data from language acquisition.

In comparison to the rich body of studies on the acquisition of object clitics, the number of studies on *ne/en* is more restricted and scattered. Previous studies focused on different and specific functions. For instance, Sleeman and Ihsane (2017, 2021) focus on the expression of partitivity and the pronominalization of different kinds of indefinite nouns. Dutch and German learners of L2 French gradually attain the use of *en* by building on the positive transfer of similar functional elements available in their L1s (e.g., the German indefinite pronoun *welch-*). The acquisition process is described as very slow, nonetheless previous studies report also cases of successful acquisition of partitive pronouns by very advanced L2 learners. This is reported for instance by Kraš (2009), who looks at subject cliticization with unaccusative verbs in Italian.

What is missing is, however, a comprehensive analysis on the acquisition of the numerous functions of *ne*.

In light of the results from the present corpus analysis, it becomes clear that studies focusing on the quantitative and/or partitive function sample only one specific aspect of the acquisition of clitic pronoun *ne/en*. Their results are informative with respect to the expression of partitivity, but conclusions should not be automatically extended to all other functions of *ne*, which might be acquired at different stages of the learners' interlingua.

The high frequency of genitive *ne* raises interesting questions for future research. If we assume that the corpus is illustrative of the spontaneous production of speakers of Italian, we suppose it is also exemplificative of the input L2 learners are exposed to when learning the language in Italy. Genitive *ne* is by far the most frequent function, but its role for the acquisition of *ne* is unknown and not straightforward. In fact, the use of genitive *ne* relies on solid knowledge of the argument structures of other lexical items. Learners must know that a verb selects a complement introduced by the preposition *di* in order to be able to correctly use the clitic pronoun in the context. By contrast, the use of partitive *ne* and quantitative *ne* can rely on overt lexical cues, because they are always licensed by quantifiers or numerals in the sentence.

The various functions of *ne* and their acquisition are the perfect test ground to evaluate the role of different factors in L2 acquisition. Is the adult L2 acquisition of functional element driven by positive transfer from L1, frequency in the input, or by lexical cues in the sentence? The intriguing question is to be addressed in future research.

4.   Conclusions

The present contribution has offered an overview of the different functions played by the clitic pronoun *ne* in Standard Italian and has analysed their frequency in spontaneous written text produced by native speakers. The corpus study has revealed that the most frequent function is the one in which *ne* replaces a phrase otherwise introduced by *di*. The pronoun is very often used to pronominalize the complement of a quantifier; while its partitive function, when a restrictive definition is adopted, is rather limited. Moreover, the use of *ne* as a formative of pronominal verbs is limited to few – but very recurrent – verbs (i.e., *starsene* and *andarsene*).

The results from the corpus study shed new light on on L2 acquisition: the slow acquisition of quantitative and partitive *ne* reported in previous studies might follow from the relative low frequency of these functions of *ne* in the input. This hypothesis should be tested in future research.

Data on the frequency of the different functions represent the foundations for future studies on L2 acquisition and will allow us to compare the role of input versus positive transfer from L1 and lexical cues in the sentence.

References

Abete, Giovanni, and Paolo Greco (2013). 'Sulla posizione del clitico ne nel dialetto di Pozzuoli1' *Actas del XXVI Congreso Internacional de Lingüística y de Filología Románicas. Tome II*. Vol. 2. Walter de Gruyter.

Bazzanella, Carla (2011). 'Oscillazioni di informalità e formalità: scritto, parlato e rete' in: *Formale e informale. La variazione di registro nella comunicazione elettronica*. Roma: Carocci: 68-83.

Belletti, Adriana, and Luigi Rizzi (1981). 'The Syntax of ne: Some Theoretical implications' *The linguistic Review 1*: 117-154.

Benincà, Paola, and Cecilia Poletto (2008). 'On Some Descriptive Generalizations in Romance' in: G. Cinque, R. Kayne *The Oxford Handbook of Comparative Syntax*. Oxford University Press.

Bentley, Delia (2004). 'Ne-cliticisation and split intransitivity' in *Journal of linguistics 40.2*: 219-262.

Berends, Sanne, Petra Sleeman, Aafke Hulk, and Jeannette Schaeffer (2021). 'The L2 acquisition of the referential semantics of Dutch partitive pronoun ER constructions' in: G.Giusti, P. Sleeman, *Partitive Determiners, Partitive Pronouns and Partitive Case*, *580*, 237.

Carlier, Anne, and Béatrice Lamiroy (2014). 'The Grammaticalization of the Prepositional Partitive in Romance' in: S. Luraghi, T. Huumo, *Partitive cases and related categories*: 477.

Cordin, Patrizia (1988). 'Il clitico ne' in: L. Renzi, G. Salvi, A. Cardinaletti, *Grande grammatica italiana di consultazione* 1: 633-641.

Chini, Marina (2005). *Che cos' è la linguistica acquisizionale*. Carocci.

Espinal, Maria Teresa (2009). 'Clitic incorporation and abstract semantic objects in idiomatic constructions' *Linguistics* 47(6):1221-1271.

Falco, Michelangelo, and Roberto Zamparelli (2019). 'Partitives and partitivity' *Glossa: a journal of general linguistics* 4.1.

Gavarrò, Anna, Maria Teresa Guasti, Laurice Tuller, Philippe Prévost, Adriana Belletti, Luca Cilibrasi, Hélène Delage, Mirta Vernice (2010). 'The acquisition of partitive clitics in

Romance five-year-olds' *Iberia: an international journal of theoretical linguistics* 3.2: 1-19.

Giusti, Giuliana, and Petra Sleeman (2021). *Partitive Determiners, Partitive Pronouns and Partitive Case*. Berlin: De Gruyter, 2021.

Ihsane, Tabea (2013). '*En* pronominalization in French and the structure of nominal expressions' *Syntax* 16.3: 217-249.

Jakubicek, Miloš, Adam Kilgarriff, Vojtech Kovár, Pavel Rychly, and Vít Suchomel (2013). 'The TenTen corpus family' *7th International corpus linguistics conference*. Lancaster University: 125-127.

Kraš, Tihana (2009). 'The lexicon-syntax interface in L2 Italian: Ne-cliticisation with intransitive verbs' *Proceedings of the 10th Generative Approaches to Second Language Acquisition Conference (GASLA 2009)*.

Ledgeway, Adam (2009). *Grammatica diacronica del napoletano*. Max Niemeyer Verlag.

Leonini, Chiara, and Adriana Belletti (2004). 'Adult L2 acquisition of Italian clitic pronouns and 'subject inversion'/VS structures' *LOT Occasional Series* 3: 293-304.

Mariotti, Alice, and Malvina Nissim (2014). 'Parting ways with the partitive view: a corpus based account of the Italian particle ne'in Proceedingsof the First Italian Conference on Computational Linguistics CLiC-it 2014 & of the Fourth International Workshop EVALITA. Pisa University Press: 249-253.

Nencioni, Giovanni (1976). 'Parlato-parlato, parlato-scritto, parlato-recitato', in *Strumenti critici*. Now available in: *Di scritto e di parlato. Discorsi linguistici*. Bologna: Zannichelli: 129-176.

Russi, Cinzia (2008). *Italian Clitics*. Berlin: De Gruyter Mouton.

Schwarze, Christoph (2009). 'I pronomi clitici' in: R. Simone, *Enciclopedia dell'Italiano*. Treccani.

Sleeman, Petra, and Tabea Ihsane (2017). 'The L2 acquisition of the French quantitative pronoun *en* by L1 learners of Dutch: Vulnerable domains and cross-linguistic influence' in: L. Blom, L. Cornips, J. Schaeffer, *Cross-linguistic influence in bilingualism: in honor of Aafke Hulk*: 303-330.

Sleeman, Petra, and Tabea Ihsane (2020). 'Convergence and divergence in the expression of partitivity in French, Dutch, and German' *Linguistics* 58.3: 767-804.

Sleeman, Petra, and Tabea Ihsane (2021). 'The L2 acquisition of the partitive pronoun 'en' in French by L1 speakers of German and the role of the L1' in: G. Giusti, P. Sleeman, *Partitive determiners, Partitive pronouns and partitive case*: 205-236.

Sleeman, Petra (2022). 'Partitive pronouns in intransitive contexts in Italian and Dutch' Linguistic Variation. https://doi.org/10.1075/lv.21018.sle

Sleeman, Petra and Silvia Luraghi (2022). 'Crosslinguistic variation in partitives: An introduction' *Linguistic Variation*.

Varlokosta, Spyridoula, Adriana Belletti, João Costa, Naama Friedmann, Anna Gavarrò et al. (2016). A cross-linguistic study of the acquisition of clitic and pronoun production' *Language acquisition* 23.1: 1-26.

Wanner, Dieter (2011). *The Development of Romance Clitic Pronouns*. Berlin: De Gruyter Mouton.