ON NOMINAL ELLIPSIS AND THE VALUATION OF DEFINITENESS IN ROMANIAN

Alexandra Cornilescu and Alexandru Nicolae

Abstract: The paper proposes a syntactic and interpretative account of nominal ellipsis in Romanian DPs. After reviewing previous accounts, we conclude that a suitable theory should unify *total* ellipsis (with no remnant) with *partial* ellipsis, (with at least one remnant). In the proposed theory, ellipsis is viewed as a discourse grammar phenomenon, presupposing the retrieval of suitable discourse antecedent. Since the ellipsis site is anaphorically related to the antecedent, it will be syntactically *definite*. Definiteness checking is thus obligatory in any DP which contains an ellipsis site, and it is this step which provides the unity of nominal ellipsis. Therefore, ellipsis is a double figure, involving both the *anaphoricity* of the elided NP and the *contrastivity* of the remnant (if present), a feature which triggers movement to the DP left periphery. In light of this theory, we examine two cases of nominal ellipsis in Romanian: partial ellipsis with cardinal remnants and total ellipsis.

Keywords: nominal ellipsis, anaphoricity, contrastivity, definiteness valuation, partitivity

1. Introduction

The aim of the paper[1] is to propose a Topic-based PF-deletion account of nominal ellipsis (henceforward NP-ellipsis, i.e. NPE) in Romanian. The specific objectives pursued in the paper are the following:

(i) We would like to prove that the interpretation of NPE follows from the syntactic structure of DPs containing ellipsis sites, all derivational steps having semantic import. In particular, the pragmatic features essential in the interpretation of ellipsis, namely, in the present account, the features [±anaphoric] and [±contrast], trigger particular syntactic operations, in addition to signaling specific interface effects. *Anaphoricity* requires finding a suitable discourse antecedent and establishing some syntactic/semantic relation with it. *Contrastivity* is a feature assigned to any constituent that opens up a domain of quantification (in the sense of alternative semantics), and it entails Focus Fronting (i.e. movement to Focus in the terminology adopted by Merchant 2001), an operation which should be motivated on syntactic grounds. Crucially, since ellipsis involves notions like Topic and Focus, ellipsis proves to be a periphery construction; moreover, the complement of an ellipsis determiner is a definite NP.

(ii) Secondly, we would like to prove that, even if ellipsis is PF-deletion, the syntax of DPs headed by elided nouns *differs from that of DPs headed by regular nouns*. Evidence for this claim is the fact that there are considerable distributional differences between DPs headed by elided nouns and DPs headed by overt nouns.

The paper is organized as follows: section 2 is devoted to an informal presentation of the ellipsis theory that we build; in section 3, we present our core assumptions regarding the structure of the Romanian DP (definiteness valuation, the syntax and interpretation of cardinal numerals, the syntax of the free standing definite article *cel*), as well as some of its salient properties; in section 4, we analyze NPE cases with cardinal remnants, which bring support for the analysis presented in the previous section; finally, in section 5 we analyze a case of total NPE, which is problematic for the Focus-based theories of nominal ellipsis which crucially include the remnant.

2. Towards a theory of nominal ellipsis

2.1 A Focus or a Topic account?

The theory that we propose builds on previous approaches, in particular on López (2000, 2009) and Merchant (2001). Both of these analysts stress that a suitable ellipsis theory should have a syntactic, as well as a semantic component. From Merchant's seminal analysis, we borrow the insight that the deletion site is *structured*, and deletion represents a PF phenomenon. Syntax merely marks the identical NP for deletion. Elided NPs are complements of a head marked with an E-feature. Merchant's theory makes an important prediction: overt and silent NPs have the same distribution, since the difference between them is invisible at LF. This represents an important requirement on proposed theories, particularly when it is recalled that analysts that assume that the elided NP is an empty category do so particularly in order to account for the distributional differences between NPs headed by overt/silent categories, as shown in (1):

(1)   a.   Every/Each student came to class.
        b.   *Every [e]/Each [e] came to class.

Both López (2009) and Merchant (2001) tacitly assume that ellipsis is a *pragmatic*, rather than a semantic, phenomenon. Merchant assumes that the elided category, the elided NP in the case of NPE, is context-given (as in Schwarzschild 1999), and stresses that the remnant category is focused, overtly moving to the focus position of the periphery. An analysis of this type is adopted in Corver and van Koppen (forthcoming) for Dutch DPs. The essential syntactic feature of Merchant's account is, thus, movement of the remnant to FocP. This implies that ellipsis is a periphery construction.

López (2000) stresses that ellipsis is a *Discourse Grammar* (=DG) phenomenon, rather than a sentence grammar one, and that the semantics of ellipsis primarily involves the *retrieval of a discourse topic*. Ellipsis is part of the phenomena involving *discourse linking* (= D-linking): "an understanding of the syntax of ellipsis involves DG. I argue that ellipsis is syntactically licensed by a functional category that has the property of connecting with a discourse topic" (López 2000: 184). In fact, it is precisely the elided NP in a later part of the discourse which forces an interpretation of the first NP occurrence as an antecedent, and thus as a discourse topic.

López (2000) proposes that D-linking should be considered *a feature* of a functional category and that C, D and Σ (as in Laka 1990) are all functional categories "that may have the optional feature 'narrow' D-linking and when that is the case they may license an empty category" (López 2000: 186). López's account of ellipsis involves the licensing of an empty

pro category, licensed by the D-linking functional constituent which connects it with the discourse topic antecedent. His hypothesis is that "elided constituents are licensed when they are associated with a discourse-linking functional category" (López 2000: 187). Association is syntactically reflected as adjunction of the empty category to the licensing head. It is the association with the D-linking functional category which makes possible the connection with the antecedent. "Further, I show that elliptical categories are pro-forms that adjoin to the licensing functional head and I hypothesize that this adjunction is necessary for the elided category to retrieve an antecedent" (López 2000: 184).

Notice also about López's account that the stress shifts from the remnant (essential in Merchant's theory) to the elided category itself, to the NP, which must be capable to retrieve an antecedent. López's analysis has an immediate empirical advantage. It may be extended to cases where there is no remnant:

(2)   Ion citeşte cărţi, Petru doar cumpără [cărţi].
       Ion reads books, Petru only buys   books
       'Ion reads books, Petru only buys them.'

We will adopt a variant of López's DG *topic-retrieving account*, precisely because it stresses the role of the NP, the only obligatory constituent with NPE. López's insight was independently corroborated by later semantic analyses of ellipsis. For instance, Elbourne (2008) shows that the interpretation of the ellipsis site presupposes the construction of a *discourse set* (López's discourse topic) involving entities referred to by the two DPs, the one containing the ellipsis and the one containing the antecedent (see below).

2.2 Types of DPs involving ellipsis

An account of NPE should be able to cover several distinct empirical situations:

(A) First, there are cases where the NP is elided and there is no remnant. These cases are problematic for remnant-based theories (see (2) above).

(B) A distinct situation occurs when there is a remnant, but the remnant is not a functional element, a discourse-linking D (as expected under theories of ellipsis as licensing of an empty category by some functional constituent − Lobeck 1995, Sleeman 1996, Kester 1996, Kester and Sleeman 2002, López 2000). Instead, the remnant is only a lexical constituent, i.e. a modifier or argument of the elided head. These examples are unaccounted for under any account in which the elided category somehow depends on an overt determiner:

(3)   a.   Ion vrea maşină de curse, iar Petre îşi   doreşte [maşină] de teren.
             Ion wants car   of race, but Petre CL3^rd SG DAT desire   car   of terrain.
             'Ion wants a racing car, and Petre wants a terrain one.'
       b.   Ion vrea   maşină roşie, iar Petru vrea [maşină] galbenă.
             Ion wants car   red, but Petru wants car   yellow
             'Ion wants a red car, and Petru wants a yellow one.'
       c.   Maşina nouă a lui Ion este ieftină, iar [maşina nouă] a lui Petre este puţin mai
             car-the new of Ion is cheap , but car-the new of   Petre is little more
             scumpă.
             expensive
             'Ion's new car is cheap, and Petre's's is a little bit more expensive.'

Situations (A) and (B) require theories that do not depend on licensing by a remnant functional category D, as also stressed in Eguren (2010).

(C₁) Thirdly, there are cases where there is a remnant determiner or a remnant functional element, but not all of them are alike. The more often discussed case is that of a determiner as the *only* remnant:

(4)   a.   Dă-mi   cărțile   acestea și ia- le   pe [cărțile]   acelea.
            Give-CL1ˢᵗ SG books-the these   and take cl3ʳᵈ PL F PE   books-the those
            'Give me these books and take those.'
     b.   Maria a   cumpărat puține cărți, iar Petru a   luat   mai   multe   [cărți].
            Maria has bought   few   books, but Petru has taken   more   many   books
            'Maria bought few books, and Petru bought more.'
     c.   Tu   poți lua două mere,   iar Maria trei [mere].
            you can   take two   apples, and Maria three apples
            'You may take two apples and Maria three.'

(C₂) A situation that has rarely been discussed is a remnant containing two functional (pre-nominal) elements. The two remnants are contiguous, pre-nominal elements, which have distinct roles in DPs containing ellipsis. In Romanian, at least, cardinals alone as licensors of ellipsis (5b) have properties different from sequences of determiners + cardinals (5a):

(5)   a.   A   vorbit de trei studenți buni. Din păcate,   nu-i   cunosc pe cei
            has spoken of three students good   unfortunately, not CL 3ʳᵈ CL PL M   know   PE *the*
            trei   [studenți buni].
            three students   good
            'He/She told me about three good students. Unfortunately, I don't know the three good ones.'
     b.   Maria cunoaște doi   studenți, iar Ion tot   doi [studenți]
            Maria knows   two   students but Ion as well two students
            'Maria knows two students, and Ion two as well.'

(D) Finally, the remnant may be discontinuous, including one or two pre-nominal functional elements and one or more than one post-nominal modifier/argument of the elided NP:

(6)   a.   doi copii ai Mariei   și   trei   [copii] ai lui Ion
            two kids of Maria's   and three kids   of   Ion
            'two kids of Maria's and three of Ion's'
     b.   două case   la mare ale lui Ion și   două [case] la munte   ale lui Petre
            two   houses at sea   of   Ion and two   houses at mountain of   Petre
            'two houses of Ion's at the seaside and two of Petre's in the mountain'
     c.   acești doi copii   ai Mariei și aceia doi [copii]   ai lui Ion
            these   two children of Maria's and those two children of   Ion
            'these two children of Maria's and two of Ion's'
     d.   cei doi copii   deștepți ai Mariei și   cei trei [copii]   proști ai lui Ion
            the two children smart   of Maria's and the three children stupid of   Ion
            'Maria's two smart children and Ion's three stupid ones'

Incidentally, in such examples it is not obvious which constituent is *the* remnant that moves to Focus, nor, on the other hand, if ellipsis is licensed, which of the two functional categories is responsible for licensing it, whether licensing an E-feature or licensing an empty category were at stake.

The informal survey of the elliptical DPs in (A) to (D) above leads to the following results, which should represent a starting point in a unified account a NPE:

(i) The only feature common to all the elliptical DP types reviewed is the existence of an elided *NP constituent*. This strengthens the need for an account in terms of the NP category rather than in terms of the remnant(s), since the latter is missing sometimes.

(ii) It is fair to say that NPE has more often than not been viewed as involving a *determiner + remnant* structure or only a *determiner as remnant* structure (see for instance the accounts in Lobeck 1995, Sleeman 1996 and Ticio 2003), but *multiple remnant ellipsis* should also be considered, and there must be a principled way of determining which remnant moves to Focus if such a movement is indeed required.

2.3 NP-ellipsis and the partitive construction

It has often been remarked that the class of determiners that allow ellipsis are those determiners which occur in *partitive* constructions (Lobeck 1995, Sleeman 1996, López 2000, Giurgea and Nedelcu 2009). This analogy is extensively discussed in Lobeck (1995) and López (2000) to which we now turn.

For instance, English *no/every* occurs neither with ellipsis, nor in partitives:

(7)   Some men are decent, *but every is not.
                                     *but two is not.
                                     *but no is not.   (López 2000: 191)
(8)   Some men are decent
                              ...but most/many/all three/each are/is not
                              *but every of them is not.
                              *but no of them is perfect.   (López 2000: 191)

In trying to explain the distributional similarities between the ellipsis construction and the partitive one, López (2000) inspects triplets of DPs containing an elided NP, as in (10), an indefinite NP complement, as in (9b), and a partitive DP where the same NP is definite, as in (9a), the three DPs containing the same strong determiner (*most* in the examples at hand):

(9)   a.   [Some men]$_i$ came in. [Most of *the men*/them]$_i$ sat down.
         b.   [Some men]$_i$ came in. #[Most *men*]$_i$ sat down.
(10)   [Some men]$_i$ came in. [Most *pro*]$_{i/*j}$ sat down.

López makes the essential remark that the elliptical DP in (10) is semantically equivalent with the partitives *most of the men/them* in (9a), not with the simpler D+NP construction *most men* in (9b). *Most men* in (9b) cannot refer back to *some men* in the previous sentence. Intuitively, what is wanted is that *most men* should refer to a subset of the referent previously introduced by *some men*, and this is exactly what is not possible: "When the *complement* [emphasis ours] of a quantifier [*most*] refers to something that is discourse old [i.e. the NP *man*], what we find is a partitive PP complement, instead of a NP" (López

2000: 191). *Partitivity, like ellipsis, requires a complement that is discourse old (and thus definite).*[2]

The similarity between partitives and NPE is apparent in Romanian as well, even if it is not perfect, since the ranges of determiners involved, while overlapping (11), are not identical (12):

(11)   a.   El a   văzut *mulţi* chinezi, iar tu   ai   văzut ***puţini*/**nişte**.
            he has seen many Chinese but you have seen few   some
            'He saw many Chinese people, and you saw few.'

       b.   ***Puţini*/**nişte** *dintre ei*   au   citit Programul Minimalist.
            few   some of   them have read program-the minimalist
            'Few of them read the Minimalist Program.'

(12)   a.   Am întâlnit trei prieteni. ***Cei trei*** m-   au   întrebat dacă aflasem
            have met   three friends *the* three CL1st SG have asked if   found out
            ştirile
            news-the
            'I met three friends. The three asked me if I had found out the news.'

       b.   Am întâlnit trei prieteni. *Dar nu erau ***cei*** *dintre ei*   pe care
            have met   three friends   but not were **the of**   **them** PE whom
            mă   aşteptam să-i   întâlnesc.
            CL 1st SG expected to CL 3rd PL meet

       b'. Am întâlnit trei prieteni, dar nu erau *aceia dintrei ei*   pe care   îi   aşteptam.
            have met   three friends but not were **those of**   **them** PE whom CL3rd PL M expected
            'I met three friends, but they were not those whom I expected.'

As apparent, the degree quantifier *puţini* 'few' is possible with elliptical and partitive constructions, while the indefinite article *nişte* 'some' is excluded in both. On the other hand, the definite article *cel* 'the' licenses ellipsis with any type of remnants, but it does not occur in partitive constructions – see (12b) above and (14) below – even if in general it may cliticise on PPs (14):

(13)   cei fără   adăpost
       the without shelter
       'the homeless'

_____

[2] The similarity between ellipsis and partitive has sometimes been attributed to the fact that both involve an empty category. A partitive DP like the one in (9) should be based on an empty nominal category (= *ec*):
(i)   Several [e] of the students…
If so, the ungrammaticality of examples like (7) above could be accounted for simply by stipulating that *every* and *no* do not select for an *ec*. In fact, Jackendoff (1977: 106-118) argues that partitives are a subcase of NP ellipsis. For him, this *ec*, which he assumes to be a pronominal category, is interpreted as UNIT. However, as shown by López (2000), this solution is suspect for several reasons. First, other instances of *pro* either refer to something or other, or they are expletives, but they do not refer to an abstract entity like UNIT. Secondly, we cannot find an overt counterpart for [e] in (i) (**several ones/UNITS*), but we can always find other counterparts for other elided pro-forms (*several [pictures] made in Canada*). Thirdly, we find partitive constructions with mass nouns, as in *most of the flour*, and in this case, the putative [e] does not mean unit – as a matter of fact, it is not clear what [e] would mean at all; for these reasons, López suggests that in partitive constructions the quantifier selects for a PP headed by *of*. This is a variant of the one DP analysis of the partitives, recently argued for by several authors (Schwarzschild 2006, Grimshaw 2005, Giurgea and Nedelcu 2009). While the one-DP-analysis of partitives is probably correct, from the point of view of NPE what counts most is that the prepositional phrase in partitive constructions must contain a definite DP, this being the well known definiteness constraint of partitives* (cf. Ladusaw 1982). Thus, the most significant difference between *most men* and *most of the men* is *the definiteness of the complement of the quantifier*. The partitive preposition is a case-assigner.

(14)   *cei dintre prietenii   mei
          the of   friends-the mine
        'those of my friends'

2.4 Selecting appropriate P-features

Since all analysts agree that ellipsis has a pragmatic component (focus on the remnant and retrieval of an antecedent for the missing NP), one should adopt a stand regarding the syntax-pragmatics interface. By and large, we follow Chomsky (2000), according to whom the set of UG features includes P-features which may play a part in the derivation. Like Chomsky (2001, 2009), López (2009), Gallego (2007), we assume that syntax and pragmatics interact cyclically, P-features being valued at each phasal periphery. The choice of suitable P-features is also somewhat controversial, as attested by the relevant literature (Vallduvi 1992, Choi 1999, Ward and Birner 2001, McNay 2005 and 2006, López 2009, a.o.). At least one group of researchers argue that features like Topic and Focus are too complex to be directly employed in the derivation. Using them directly has the disadvantage of a non-uniform behavior of constituents bearing the feature. Thus, if a constituent may be a contrastive Focus, either in situ, or at the left periphery, the feature [Focus] does not seem to be helpful in the derivation. Solutions to this problem are diverse: some researchers refine and thus multiply the types of Foci and Topics considered (e.g. Choi 1999, Kiss 1995 and 1998), others prefer to give these features up or, at least, decompose them into simpler components which would have unambiguous syntactic effects (Bühring 2003, McNay 2005 and 2006).

Of the proposals available, we have settled for the P-features in López (2009), from whom we have also adopted the idea of the cyclic assignment of P-features, at the end of each phase, more exactly when the next phasal head merges. The two P-features employed are [±a(naphoric)], [±c(ontrast)]. We have chosen López's two-feature system because these features have an unambiguous semantic content, as well as unambiguous syntactic correlates.

The notion of anaphor involves an obligatory link to an antecedent (López 2009: 38). Syntactically, in the constructions investigated by López (CLLD, CLRD), anaphoric constituents also undergo displacement. It is beyond doubt that the interpretation of ellipsis requires an antecedent, moreover, the elided NP itself, unlike a pronoun, is not an inherently anaphoric constituent, but becomes so only when ellipsis is possible (i.e. in a discourse containing a suitable antecedent). We therefore propose that the elided NP should be assigned the feature [+a]. We assume that P-features are interpretable on the head and uninterpretable on the constituent, since it is the syntactic relation with the periphery head which confers a periphery interpretation on an NP/DP which is not inherently anaphoric or focal.

As far as the internal structure of the DP is concerned, anaphoricity correlates with the presence of the morpho-syntactic feature [+def(inite)]. The [+a] P-feature opens a way towards the interpretation of ellipsis as a case of D-linking, involving reference to a common discourse topic denoted by the antecedent NP, as well as by the elided one.

As to the feature [+c], it is assigned to any constituent that opens up a domain of quantification (in the sense of alternative semantics). According to López (2009), the most significant difference between Rhematic and Contrastive Focus lies in the manner in which the variable interpreted by the Focus constituent is introduced. In the case of Rhematic Focus, the variable is supplied by the previous question word, so a value for this variable is expected, which is why Rhematic Focus is in situ and does not require special signaling. Contrastive Focus both *introduces* a variable and chooses a value for it from the set of alternative supplied by the context. "A contrastive focus is uttered when the previous discourse offers no such

variable […]. Thus, contrastive focus opens up a variable and simultaneously resolves it" (López 2009: 25). This double semantic role is always signaled syntactically (and sometimes prosodically too) by what López (2009) calls Focus Fronting (= FF), a rule that secures the left periphery position of the Contrastive Focus. In the analysis that follows, the remnant(s) will be assigned the feature [+c], and will undergo FF to the left periphery of the DP, just as in Merchant's/López's analyses. The feature [+c] remains an operator quantificational feature.

2.5 Definiteness and anaphoricity

As already noticed above, determiners which licenses ellipsis, i.e. ellipsis determiners, are largely the same as those which occur in partitive constructions, i.e. partitive determiners. Following López (2000), we suggested above that the essential similarity between ellipsis determiners and partitive determiners was that the NP complement of both is discourse old, therefore [+definite]. In fact, in the case of partitive constructions, the requirement that the complement should be definite is too strong and not entirely accurate. As first shown in Ladusaw's (1982) *Partitivity Constraint* (15), the complement in partitive constructions must be *entity denoting*, i.e. a definite or an indefinite specific DP, as in (16) and (18a). In contrast, definite *quantifiers* are excluded since they do not introduce any referent in the discourse (17b). The examples in (16) and (17) below are due to Abbott (1996):

(15)   *The Partitivity Constraint* (Ladusaw 1982: 238)
       The second DP in the partitive construction always denotes an individual.
(16)   a.   Any of several options //these options are open to us at this point.
       b.   This is one of a number of counterexamples//the counterexamples discussed by
               the author.
(17)   a   one of the two men
       b   *one of both men

The same constraint operates in Romanian partitives (cf. Cornilescu 2006). The PP complement of a partitive is therefore either definite (18) or indefinite specific (19). Definite quantifiers like *ambii /amândoi* 'both' or *fiecare* 'each' are excluded just like their English counterparts (20).

(18)   a.   Acestea sunt trei dintre argumentele   prezentate de autor.
               these   are three of   arguments-the presented by author
               'These are three of the arguments presented by the author.'
       b.   doi dintre numeroşii   studenţi care au   cerut lămuriri
               two of   numerous-the students who have asked clarifications
               'two of the numerous students who have asked for clarifications'
(19)   a.   Acestea sunt (doar) trei dintr-o serie de argumente prezentate de autor.
               these   are (only) three of   a series of arguments presented by author
               'These are (only) three from a series of arguments presented by the author.'
       b.   doi dintre mai   mulţi studenţi
               two of   more many students
               'two of many students'
(20)   a.   *unul dintre ambii/amândoi
                one of   both both
       b.   *doi dintre fiecare
               *two of   each

Notice the contrast between the synonymous definite DPs, *cei doi oameni* 'the two people' versus the quantificational *ambii oameni* 'both people', in the examples below:

(21) a.   unul dintre *cei doi oameni*
           one of   the two people
           'one of the two people'
      b.   *unul dintre *ambii oameni*
            one of   both people
(22) a.   Cei doi au   reuşit   să urce pianul   pe scări împreună.
           the two have managed to lift   piano-the on stairs together
           'The two ones managed to lift the piano together on the stairs.'
      b.   *Ambii au   reuşit   să urce pianul   pe scări (*împreună).
            both have managed to lift   piano-the on stairs together

While the complement of a partitive determiner may be definite or indefinite specific, provided that it is entity denoting, we claim that the complement of an ellipsis determiner can only be *definite*, since this complement must also be *anaphoric* and indefinites, even if they are specific, *cannot be anaphoric*. In terms of Discourse Representation Theory (DRT), indefinites always introduce a new discourse referent, satisfying Heim's (1982) *Novelty Condition*.

Thus, to the extent that ellipsis determiners and partitive determiners are alike, they share the fact that they must or may select a definite complement. Moreover, we claim that the syntax of both ellipsis determiners and partitive determiners is such that they scope over the definite (or specific) complement:

(23) a. $D_{partitive}+$ P [$_{DP}$ [+definite]]
           many +   of the students
      b. $D_{ellipsis}$ +   [$_{DP}$ [+definite]]
           many   [$_{DP}$ *ec*]

In easy examples, the interpretative model of NPE is thus that of an anaphoric partitive construction:

(24)   Ten people entered. Two [OF THEM] are my friends.

But this is hardly the general case, since the ellipsis-containing DP may have disjoint reference with respect to the antecedent DP. Thus, in the general NPE case, the common topic that the D-linked determiners refer to is not simply the discourse referent contributed by the antecedent (*ten people*, in the example above), but rather the *plural individual denoted by the NP restriction* of the antecedent, *people*, available in the particular context:

(25)   Some people entered the shelter. Many remained out in the cold.
       Some [of those] people entered the shelter. Many [of those people] remained out in the cold.

As shown by von Fintel (1994), quantifiers of natural languages have a two-fold restriction: the entities they range over have a particular *property* denoted by the common noun (ten *people*/ten *cats*/ten *dollars*); secondly, for each descriptive kind, each particular

context (discourse) supplies a *plural individual which is part of the domain of each discourse* and which represents the restricted domain of each quantifier. As underlined by López (2000), it is this plural individual, over which both the determiner of the antecedent and the determiner of the elided term range, which is the *common topic retrieved in the ellipsis* construction. And it is this plural discourse given individual that is anaphorically resumed by the elided NP, or rather DP, see (23):

(26)   Some [OF THE CONTEXT GIVEN SET OF] people entered the shelter. Many [OF THE CONTEXT GIVEN SET OF] people remained out in the cold.

Elbourne (2008) discusses the interpretation of the ellipsis site in nominal and VP-ellipsis cases and gives an explicit procedure for constructing this discourse set by summing up the set of NP-members denoted by the antecedent and of NP-members denoted by the ellipsis-containing DP, and additionally performing any operations required by the fact that the antecedent restriction and elided restriction need not be completely identical, even if they often are identical. Here is a type of situation discussed by Elbourne (2008), where the denotations of the restriction sets are not identical: the antecedent and the ellipsis site are not identical because the antecedent itself contains an instance of ellipsis:

(27)   After the book went on sale, thirteen ***shoppers who had bought some [books] earlier*** complained, but after the magazines went on sale, only two [] did.
[After the book went on sale, thirteen ***shoppers who had bought some [books] earlier*** complained, but after the magazines went on sale, only two ***shoppers who had bought some [magazines] earlier*** did].

In Elbourne's interpretation, this sentence means "After the book went on sale, thirteen shoppers who had bought some books earlier complained; but after the magazines went on sale, only two shoppers who had bought some magazines earlier complained". Thus, the antecedent NP contains an instance of NP-ellipsis, and finally the two NPs are not identical. Elbourne assumes, correctly in our view, *that in all cases an ellipsis site should have an antecedent* and that *it must be related to it by identity of meaning or of LF*. A(n) (unique) identical set must be constructed to satisfy this requirement and, in this particular instance, it is the unique set consisting of the thirteen shoppers who had bought some books and two shoppers that had bought some magazines, in this particular case. Thus the interpretation of the elliptical DP in (27) is two of the {thirteen shoppers who had bought some books and two shoppers who had bought some magazines}.

At this point we retain from Elbourne's analysis the fact that the interpretation of the ellipsis site in VP ellipsis and NP ellipsis cases presupposes an analysis of "silent VPs and NPs that makes them into higher order definite descriptions" (Elbourne 2008: 191). In other words, re-interpreting the similarity between partitives and ellipsis in Elbourne's terms, the elided NP, like the PP complement in partitive constructions, is in fact *a definite description*. Elbourne's analysis gives an explicit procedure of constructing the elided nominal, a procedure that is based on the anaphoric relation between the ellipsis site and its antecedent. Secondly, Elbourne's analysis reinforces the observation that the remnant quantifier *scopes over the definite restriction*. The interpretation of an ellipsis DP is that of a generalized quantifier, the remaining D is strong, since its restriction is clearly non-empty.

In the case of ellipsis DPs with (and presumably in the case of their antecedent DPs), generalized quantifiers appear to be constructed in two steps, as suggested in Matthewson

(2001). In her analysis of St'át'imcets, she argues that Qs apparently quantify over an <e> entity, rather than over the range of a predicate. Thus in St'át'imcets, Qs are always sisters *of full DPs*, containing an overt plural determiners as in (28a), represented in (28b), and there are always two steps in the creation of a generalized quantifier. The first is the creation of a (plural) DP of type <e>, the second involves quantification over parts of the plural individual denoted by the DP (Matthewson 2001: 147).

(28) a.   tákem [i   smelhmúlhats-a]
           all   [DET-PL woman(PL)   Det]
           'all the women'
      b.   QP
                        /   \
           Q   DP
           Tákem   /   \
                            D   NP
                            i…a   smelhmúlhats
           all   Det-pl   women

Matthewson suggests that English (and other languages for that matter) is a disguised version of St'át'imcets in that in both languages *quantifiers expect a sister of type <e>,* not of type <e, t>. As to the interpretation of the invisible determiner, Matthewson (2001) suggests that this D might be a *choice function* which returns a *contextually determined* <e> type plural individual, over which the higher determiner/quantifier operates.[3] Matthewson's syntactic proposal perfectly suits the present analysis of ellipsis. Putting Matthewson's and Elbourne's analyses together, we propose that in the ellipsis construction there is always a silent definite, anaphoric D with a role in the construction of the restriction. This is a semantic requirement on the interpretation of the ellipsis site.

The main syntactic claim that we advance is that this silent definite determiner, *always* present in the structure of ellipsis, is the functional element that licenses the E-feature on the NP, following the checking of the definite feature.

2.6 On the remnant and the role of Focus Fronting

A problem for the theory of ellipsis is the existence of two competing accounts that make use of the pragmatically complementary Topic-Focus notions, suggesting that both concepts are required in an adequate account of the phenomenon. It has already been shown that the elided (DP) constituent is anaphoric and definite [+a, +def].

At first sight, if the LF of an elided construction is identical with the LF of a non-elided structure, why should one require Contrastive Focus on the remnant? All analysts, in agreement with speakers' intuitions, however, agree that there is prosodic emphasis on the remnant, whether or not this correlates with movement to a syntactic Focus position.

We are led to hypothesize that the assignment of Focus, i.e. of the feature [+c] to the remnant, is the *effect of having assigned the E-feature*, i.e. [+a] to the elided constituent. In other words, the E-feature is not semantically innocuous. Traditionally, ellipsis is one of the figures of discourse; in more modern terms, *silencing the second occurrence of a constituent is a formal means of indicating anaphoricity with the first occurrence*. While ellipsis marks

---

[3] Recall that choice functions may shift predicates to entities, so that "For any set *E*, a *choice function* over *E* is a function that maps every non-empty subset *A* of *E* to a member of *A*" (Winter 2005: 769).

identity of two constituents, the complementary effect of *non-identity*, therefore contrast, is marked by prosodic Focus. Ellipsis is thus a double-figure, silencing the identical term, while focusing the remnant. Ellipsis is a means of marking anaphoric relations that could easily fall under the *Avoid Pronoun Strategy*. The fact that contrast on the remnant signals ellipsis has often been remarked upon (Giannakidou and Stavrou 1999: 305, Eguren 2010: 443): a nominal constituent α can be elided in constituent β only if the remnant of β is not identical to the corresponding part of the antecedent γ of α.

A more transparent account can be developed starting from López (2009), who explains that the pragmatic quantificational feature [contrast] opens up a quantificational domain, i.e. indicates that the remaining one of the alternatives available in the context is part of a set containing at least the remnant and the corresponding part of the antecedent (see also Eguren 2010: 443). On the formal side too, Focus Fronting is a means of giving the remaining Q scope over the definite restriction (i.e. a form of QP-raising, as discussed, for instance, in Herburger 1997).

In sum, we propose that (i) assignment of [contrast] on the remnant is consequent on the licensing of the E-feature, which, in its turn, is the effect of having checked definiteness (more on this below); (ii) FF is a means of giving scope to the remaining Q/D over the restriction.

The main points of the theory of nominal ellipsis sketched above are the following:
(i) The interpretation of ellipsis involves the retrieval of a common topic, a contextually constructed plural individual in the extension of the NP antecedent, as well as of the ellipsis site. Derivationally, it is the identity of the common topic which makes superfluous the pronunciation of the second copy, E-marked in syntax and unpronounced at PF.
(ii) Ellipsis determiners and partitive determiners must/may take definite DP/PP complements. In the case of NPE, definiteness of the NP/DP complement is the result of the anaphoric relation that holds between the contextual denotations of the two NPs.
(iii) Syntactically, NPE is a DP level construction, building a generalized quantifier in the two steps indicated by Matthewson (2001): determining the relevant plural individual (the lower D) and quantifying over this set (higher D).
(iv) NPE is induced by the feature composition of the ellipsis site, which should be [+definite, +anaphoric, −contrastive]. While two of these are P-features, cyclically assigned at the end of each phase, definiteness is a morpho-syntactic feature which plays an important part in DP syntax. From a syntactic perspective, informally, the [E]-feature is attached to a nominal only if its definiteness feature has been valued.

3. On the structure of the Romanian DP

Since in the theory of ellipsis that we have proposed, a DP is marked for ellipsis only if the D that heads it is valued for definiteness, it is necessary to review not only the internal structure of the Romanian DP, but also the assumptions required for definiteness valuation. In this brief section regarding the Romanian DP, the following problems will be briefly reviewed: (i) the system of the definite article and the syntax of definiteness valuation; (ii) the syntax of cardinals, reviewed since the descriptive goal of the paper is to present ellipsis with quantifiers, specifically cardinal remnants; (iii) the phasal structure of the DP; (iv) the syntax of the free standing definite article *cel*.

3.1 The Romanian definite articles

It is well known that in Modern Romanian the definite article *-(u)l* is a suffix whose position is fixed: it always occurs on the *first* N(oun) or A(djective) in the group. This distribution is illustrated in (29):

(29) a.   fat*a*   frumoasă   b.   frumoas*a*   fată
            girl-the beautiful   beautiful-the girl
            'the beautiful girl'   'the beautiful girl'
      c.   *fată   frumoas*a*   d.   *frumoasă   fat*a*
             girl   beautiful-the   beautiful girl-the

It is also important that the suffixed definite article is not the only definite article of Romanian. This language also disposes of a free morpheme definite article, *cel* 'the' in complementary distribution with the suffixed definite article. While the suffixed article occurs when the N is the first constituent of the phrase or is preceded only by As (which take over suffixal article), *cel* is the definite D employed elsewhere. More specifically *cel* is employed when the N is preceded by quantifiers: cardinal, ordinals, degree quantifiers, other lexical quantifiers:

(30) a.   cele două fete
            the two girls
            'the two girls'
      b.   cel de al doilea băiat
            the DE second   boy
            'the second boy'
      c.   cele câteva fete
            the few   girls
            'the few girls'

The process of definiteness valuation should be such that is secures the proper distribution of the definite articles *-(u)l* and *cel*.

3.2 Definiteness as an *(un)interpretable feature*

It is likely that in UG, the D head is *uninterpretable [φ]* and *interpretable definite* (i.e. [*u*φ, *i*def]), since, in as much as it is interpretable, definiteness is tied to "referentiality". Thus, definite DPs (proper names, pronouns, definite and demonstrative descriptions) have *determined reference* (Farkas and von Heusinger 2003, Farkas and de Swart 2007), requiring *unique discourse referents*. From a syntactic perspective it is the D-layer which secures argumenthood (Stowell 1989, Longobardi, 1994, Giusti 1996, 2005, Borer 2005). From a semantic perspective, in theories like DRT (Kamp and Reyle 1993, and references above), in a D + NP structure, it is the D which introduces the (unique) discourse referent, while the NP supplies a descriptive predicative condition.

Following the theoretical suggestions of Pesetsky and Torrego (2007) on the syntax of valuation, definiteness will be considered a nominal property, uninterpretable on the noun ([*u*def]) and interpretable (though *unvalued*) on the determiner ([*i*def]). Yet, definiteness *may be valued* on certain types of nouns, i.e. certain categories of nouns may be marked as [*u*+def]

from the lexicon. In UG, proper names are inherently [+def] and value the [$i$def] feature of D, as proposed in Longobardi (1994). Similarly, we propose that in languages where nouns morphologically vary for definiteness, like Romanian, nominal morphology *may* supply the value of the definiteness feature in D.

Concluding, definiteness in D is interpretable and unvalued [$i$def], and it will be valued either by external merge of a lexical determiner or by internal merge of an NP/DP which is morphologically definite, such as a noun suffixed by the definite article. Assuming that feature valuation is consequent upon external merge of the article, definiteness valuation for a language that has free-standing definite determiners like English might look like the following:

(31)

```
            DP
          /    \
        D        NP
       [uφ]      [iφ]
       [i+def]
       the       rose
```
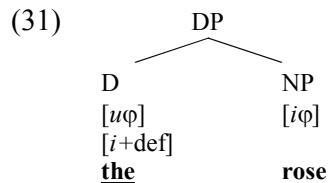
The D head agrees with the N head valuing its φ-features. At the same time, the definite article values the [$i$def] feature of the D head.

In agreement with other analysts, we assume that in MR, the enclitic article *-(u)l* is a suffix (cf. Ortmann and Popescu 2000, among many authors), subcategorized for an N—/A— complement, with which it merges in the lexicon:

(32)   a.   trandafir*ul* (frumos)   b.   frumos*ul*   trandafir
            rose-the   (beautiful)   beautiful-the rose
            'the beautiful rose'   'the beautiful rose'

Let us detail the mechanism of definiteness valuation. When the N is suffixed with the definite article, the result is a definite noun, therefore *an NP which is valued for definiteness,* marked [u+def, iφ]. These features of the N are used to value the corresponding interpretable (but unvalued) features of the D head, as shown below:

(33)

```
            DP
          /    \
        D        NP
       [uφ]      [iφ]
       [idef]    [u+def]
                 trandafirul
            Agree
```
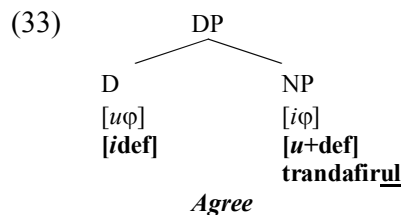
As mentioned, the definite article may also be suffixed to an A-head. Importantly, Romanian As may be suffixed with the definite article only when the AP is *attributive* and *pre-nominal*; in such cases, the A merges as a *specifier of the NP*, so that the adjectival head is in a configuration of local Agree with the NP:

(34)   frumos*ul*   trandafir
       beautiful-the rose
       'the beautiful rose'

When the A is predicative, e.g. a post-copular predicative (35a) or a post-nominal adjunct (35b), the definite article is impossible:

(35) a. *Trandafir<u>ul</u> este frumos<u>ul</u>.   b. *trandafir(<u>ul</u>) frumos<u>ul</u>
          rose-the is beautiful-the   rose(-the) beautiful-the

Definiteness is therefore an *agreement feature* for A. We assume that As, by virtue of being φ-complete, may also bear an [*u*def] feature which is never valued by As themselves, but may be valued by a definite N. The A probes the nominal that it c-commands and will agree with the N in definiteness and φ-features, so that the A, which enters the derivation [*u*φ, *u*def], may end up being [*u*φ, *u*+def], its features being thus identical with the N's. When this happens, phonology always realizes [*u*+def] on the *highest* copy below D, i.e. the highest N or A below D, which will bear the definite article at PF. This highest copy is the one that values the [*i*def] feature of the D head. The process of definiteness feature transmission assumes the form of a series of Agree relations, in (36b) and (36c); finally, the definite A immediately below D values the [*i*def] feature of D, in (36c):

(36) a. frumos<u>ul</u>   trandafir
          beautiful-the rose
          'the beautiful rose'

      b.
```
                        FP
                   ┌────┴────┐
                  AP         F'
                  │      ┌────┴────┐
                  │      F         NP
                  A                │
                                   N

              [uφ]                [iφ]
              [u+def]             [u+def]
              frumosul            trandafir
                        Agree
```

      c.
```
                    DP
              ┌─────┴─────┐
              D           FP
                      ┌────┴────┐
                     AP         F'
                     │     ┌────┴────┐
          [uφ]       A     F         NP
          [i+def]    [uφ]            │
                     [u+def]         N
                                     [iφ]
                                     [u+def]

                     frumosul       trandafir
              Agree
```

The description given above shows that in Romanian Agree is strictly local, as in (37):

(37) *Definiteness valuation in Romanian*: The [+def] GoalP which values [*i*def] in D must be a [+N] phrase immediately below D.

A definite AP/NP must end up immediately below the D, in a position where the [*u*+def] feature of the definite N/A is accessible to D head for *strictly local Agree*. This is why (29c) and (29d) are impossible. The article is too remote to function as a Goal for the probe in D. There is an opaque intervener (the NP in (29c), the AP in (29d)) between the Probe and the Goal. Pairs like (29a) and (29b)=(38) represent different derivations. Example (38a) has the derivation in (36c) above; (38b) has the derivation in (39) – irrelevant details aside, both observing the same generalization in (37):

(38) a. frumos<u>ul</u> trandafir   b.   trandafir<u>ul</u> frumos
         beautiful-the rose   rose-the beautiful
         'the beautiful rose'   'the beautiful rose'

(39)

```
                    DP
                  /    \
              D          NP
           [uφ]        /    \
          [i+def]   NP        AP
                    |         |
                    N         A
                   [iφ]      [uφ]
                  [u+def]
                  trandafirul   frumos
         Agree
```

We conclude that in Romanian, it is the first [+N] constituent (N or A) of the DP which values the feature in D, by local *Agree*. Romanian and French contrast with English in the following modifier + proper name structure:

(40) a. le vieux Paris   b.   vech<u>iul</u> Paris
         the old   Paris   old-the Paris
         'old Paris'   'old Paris'
      c. old Paris

Unlike the two Romance languages, English allows *Long Distance Agree*, in the sense that the N which values the feature in D may be separated from D by an intervening adjective. French and Romanian disallow LDA, but use alternative strategies to value definiteness: a free standing definite article (French) or a definite article suffixed on an A immediately below D (Romanian).

3.3 On the syntax of cardinal quantifiers

3.3.1 Cardinals as intensional modifiers

In important work, Ionin and Matushansky (2006) argue that the semantics of complex cardinals requires (all) cardinals to be modifiers of type <<e, t>, <e, t>>. This is the semantic type of intensional adjectives and apparently it is the only interpretation that may accommodate complex cardinals alongside of simplex ones in a unitary fashion. In particular, Ionin and Matushansky (2006) give evidence against the assumption that cardinals are determiners, and stress that, since cardinals *combine with determiners*, they are not determiners themselves. If one accepts this analysis, the syntax of cardinal phrases (CardPs) must be that of intensional adjectives, i.e. they must be *specifiers* of NPs or NP projections

(xNPs). Having the semantic type of intensional modifiers, cardinals necessitate an argument of type <e, t>; this can be any xNP, in other words any projection of the lexical NP. One possibility, which we adopt, is to assume that they merge as specifiers of NumP.

If Cardinals merge as specifiers of the NumP, then, the semantic interpretation of the combination *cardinal +xNP* is a denotation of type <e, t> as required:

(41)

$$
\begin{array}{c}
\text{NumP<e,t>} \\
\diagup \qquad \diagdown \\
\text{CardP}_{<<e,\,t>,\,<e,\,t>>.} \qquad \text{Num'} \\
\diagup \quad \diagdown \\
\text{Num} \qquad \text{xNP}_{<e,\,t>}
\end{array}
$$
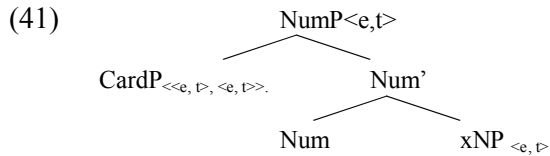
An apparent problem regards contexts where cardinals occur as predicates, not followed by any NP. It may be assumed that when they project as *predicates*, cardinals modify an empty *classifier phrase* (ClP), as suggested for independent reasons in a number of works by Kayne (2003 and 2005).

In fact, Ionin and Matushansky (2006) advance a stronger claim regarding the internal structure of CardP in languages with empty classifiers and number morphology (Romanian, English), a claim that again follows from a semantic requirement. They prove that the semantics of complex cardinals imposes *an atomicity requirement*, namely the lexical NP complement of a cardinal should denote an atomic set. For languages that have Number morphology and null classifiers, classifiers represent one way of *atomizing the NP* (*three flowers,* becoming three UNIT flower). It follows that the CardP will always end up modifying a null classifier NP, which also duly reduces its type to <e, t>.

The assumption that Cardinals, and more generally indefinites merge in [Spec, NumP] might appear to be contradicted by the fact that, demonstrably, in Romance and other languages, there is NP movement up to Spec, NumP (cf. Cinque 2004, among many authors) We propose that in such cases, the CardP merges in an outer specifier of NumP. This assumption is necessary to solve certain locality problems, as will appear below. Taking stock of what has beem said so far, the structure of the Romanian NumP might look as below.

(42)

$$
\begin{array}{c}
\text{NumP}_{<e,t>} \\
\diagup \qquad\qquad \diagdown \\
\text{CardP}_{<e,t>} \qquad\qquad \text{Num'} \\
\diagup \quad \diagdown \qquad\qquad \diagup \quad \diagdown \\
\text{Card}_{<<e,\,t>,\,<e,t>>.} \;\; \text{ClP}_{<e,t>} \;\; \text{NP}_{<e,t>} \qquad \text{Num'} \\
\diagup \quad \diagdown \\
\text{Num} \qquad t_{NP}
\end{array}
$$
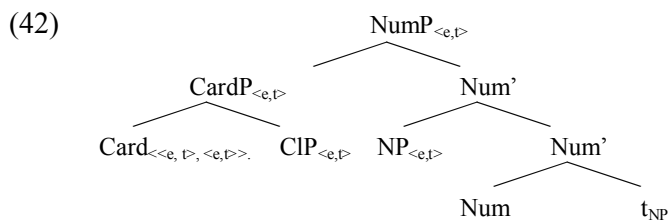
One consequence of the proposed analysis of cardinals as intensional modifiers is that they should not be viewed as determiners at any level of structure. It has sometimes been assumed (e.g. in Zamparelli 1995) that cardinals, and more generally weak Ds merge in a lower Predicative Phrase and then raise to the D position if the latter is empty and specified as indefinite. Ionin and Matushansky (2006) propose a different analysis, which we follow.

DPs containing weak determiners are either definite or indefinite. In the former case, there is a definite determiner in the D projection, so that the cardinal is clearly not a determiner:

(43) a.   These two birds sang.

      b.   Aceste două păsări cântau.
            these   two birds sang
            'These two birds sang.'

(44)   Cele două păsări cântau.
        the two birds sang
        'The two birds sang.'

(45)   The two birds sang.

When the DP containing the Cardinal is indefinite, it has existential force, and since only the cardinal is present, the problem is what is the source of the existential force in examples like (46a):

(46)   a.   Two birds sang.
        b.   A bird sang.

One traditional view is that predicate xNPs can become generalized quantifiers, type $\langle\langle e,t\rangle t\rangle$ as a result of a type shifting operation (as in Zamparelli 1995). Alternatively, the existential force could be introduced via global existential closure, per Heim (1982). For the limited semantic purposes of this analysis of ellipsis, we will adopt the position defended in Winter (2005) and Ionin and Matushansky (2006). These linguists notice that indefinites containing cardinals (*three birds, four books*) behave much like indefinites headed by *a* and *some* with respect to semantic properties, such as their exceptional scope-taking abilities. Therefore, like *a* and *some*, cardinals may be viewed as *choice functions*. If this solution is adopted, the existential force of indefinites comes from a phonologically null *choice function operator* ϕ in D.[4]

In conclusion, in DPs containing cardinals, the D position is held by a definite determiner, or by a null choice function inducing the existential force of the indefinite interpretation. The semantic type of the CardP does not shift.

3.3.2 The architecture of the DP: phases and peripheries

Regarding the syntax of the DP, we assume a correspondence between DP/CP structure, in that both contain internal phases. For nominals, these are the DP (*d**) and the *n*P(*n**) phases (cf. Svenonius 2004, Giusti 1996 and 2005, Cornilescu 2009, Cornilescu and Nicolae forthcoming). Phases spell out when all the features of the head have been checked and the head of the next phase has merged. There is thus an internal *n**-phase, corresponding to *v**, which spells out when the head of the D head merges. Phases have *peripheries* (cf. Chomksy 2009), i.e. projections which check P-features. Of interest for this paper is the *d**-periphery, since ellipsis will be analyzed as a *d**-periphery construction. Adopting a split D hypothesis

---

[4] Combined with the proposed $\langle\langle e,t\rangle\langle e,t\rangle\rangle$ semantics of cardinals above, this yields the structure in (i):

(i)   DP $_{\langle e\rangle}$

     D   NP $_{\langle e,t\rangle}$
     ϕ$_{CF \langle\langle e,t\rangle,e\rangle}$ two birds

On this proposal, a choice function ϕ applies to the set of all plural individuals x, such that x is divisible into two non-overlapping individuals, each of which is a bird, and returns a single such set. A DP such as two birds thus has type e: it is a plural individual, which is picked out by the choice function ϕ from the set of such plural individuals.

(Aboh 2004, Laenzlinger 2005) the *d**-periphery is the space between a lower agreement Determiner, and a higher deixis Determiner, as shown in (48).

(47)

```
              DP_outer
                |
               D'
           /        \
     D⁰_outer        FP*
     [idef]        /     \
     [ispecific]          F'
     [φ]              /        \
                    F⁰          DP_inner
                            /        \
                           D'
              [P-features]        /      \
                             D⁰_inner     NumP
                             [idef]      /    \
                             [+EPP]          Num'
                             [φ]           /      \
                                        Num        NP
```
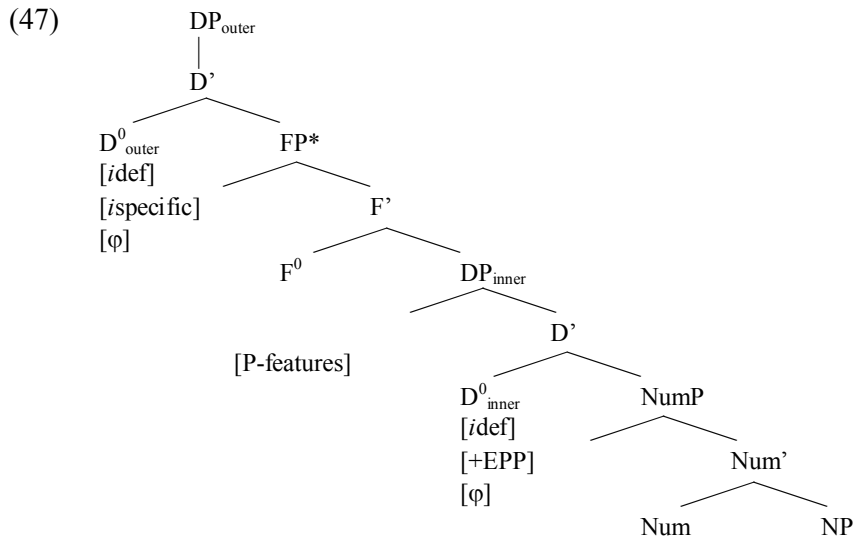
Like Butler (2004), López (2009), we accept that periphery projections are all quantificational and/or modal.

3.3.3 Definiteness checking with the free morpheme definite article *cel*

As already mentioned, the two definite articles, *cel* and *-(u)l* form a complementary set, with *cel* employed whenever there is no suffixed N or A sufficiently close to the D head. The typical situation of this kind is that of an intervening quantifier, a CardP in particular, in [Spec, NumP].

(48)   ***cele*** două fete
     the two girls
     'the two girls'

The analysis of *cel* should show that, in the eventuality of an intervening quantifier, the suffixed article on a noun or adjective cannot value the [*i*def] feature of the D head, so that this forces the last resort merger of the free standing definite article *cel*. Intuitively, *cel* is required because, unlike a pre-nominal A, the cardinal may not pass on the [*u*+def] feature of the N. This may be because cardinals are not φ-complete, lacking number variation, and the definite article may be realized only on φ-complete heads, or because cardinals are not categorially [+N], and the article is suffixed only to [+N] bases (Ns or As). Be that as it may, cardinals which c-command the N and agree with it, do not come from the (Romanian) lexicon bearing a [*u*def] feature and therefore do not probe for it.

At the end of the lower *n**-phase, the cardinal containing DP has the structure in (49a). When the D head merges, its [*i*def] feature does not find a matching goal in the strictly local domain (i.e. the first specifier below D), so that the derivation crashes, whether *cel* is inserted or not. If *cel* is inserted (49b), it values the [*i*def] feature of D, which becomes [*i*+def]; however the uninterpretable definite feature of the N is too low for Agree, and the presence of an uninterpretable unchecked feature (i.e. the N's [*u*+def] feature) leads to crash. If *cel* is not

inserted, the [*u*+def] feature of the N is again too low for Agree, and, moreover, the [*i*def] feature of the D is not valued either (49c).

(49)　a.

```
                    NumP
          ┌──────────┴──────────┐
       CardP               Num'
         │            ┌──────┴──────┐
       Card          NP          Num'
                      │        ┌────┴────┐
                      N       Num      t_NP
       [uφ]          [iφ]
                     [u+def]
       două          fetele
```

　b.

```
               DP
          ┌─────┴─────┐
         D          NumP
        [i+def]  ┌────┴────┐
              CardP      Num'
                │    ┌─────┴─────┐
              Card  NP         Num'
                     │      ┌────┴────┐
                     N     Num      t_NP
         [uφ]       [iφ]
                    [u+def]              (the N's [u+def] remains unchecked)
         cele  două  fetele
```

　c.

```
               DP
          ┌─────┴─────┐
         D          NumP
        [idef]  ┌─────┴─────┐
             CardP        Num'
             [uφ]    ┌──────┴──────┐
                    NP           Num'
                    [iφval]   ┌────┴────┐
                    [u+def]  Num      t_NP    [u+def] feature of the N is again
             două      fetele                      too low for Agree)
```

In the well-formed converging configuration (50), the N is not suffixed by the definite article, so that *cel* must be inserted to value the [*i*def] feature of the D head, on the model of English (cf. 31 above). *Cel* is clearly *a last resort*, whose presence is triggered by the intervening QP phrase, which blocks the suffixal definite article too low for Agree.

(50)

```
                  DP
          ┌────────┴────────┐
         D               NumP
        [i+def]    ┌────────┴────────┐
        [uφ]     CardP             Num'
                 [uφ]        ┌───────┴───────┐
                            NP             Num'
                            [iφ]       ┌─────┴─────┐
                                      Num        t_NP    (cel values the [idef] feature of D)
         cele    două    fete
```

4. Ellipsis with cardinal remnants

In the following, we present an analysis of a simple NPE case, specifically, ellipsis with cardinal remnants. In support of the theory sketched in section 2 above, one should bring evidence regarding the following: (i) evidence that the elided constituent is definite; (ii) evidence that the licensing of the E-feature involves definiteness checking and observes the same locality constraints as the checking of definiteness; (iii) evidence for Focus Fronting of the remnant. An important theoretical result follows, if statements (i) and (ii) are true: namely, it follows that the syntactic structure of ellipsis DP is different from that of DPs with overt heads.

Since NPE with cardinal remnants is common in all languages, understanding how it works is essential for any unitary account of NPE.

4.1 Definiteness of the complement

As mentioned, cardinals are good remnants with NPE (Lobeck 1995, Ticio 2003, Sleeman 1996, and Giurgea 2008 for Romanian) probably by virtue of their inherent meaning (cf. also Sleeman 1996). Cardinals are *scalar predicates* (Horn 1972) and thus they are inherently *contrastive*. This makes them good candidates for left periphery foci and, thus, good remnants for NPE.

(51) a   Ion a   cumpărat două mere   şi Ana a   cumpărat trei.
          Ion has bought   two apples and Ana has bought   three
          'Ion bought two apples, and Ana bought two.'
     b.   Ion a   ales   douăzeci de ouă din   coş,   iar Ana a   ales   treizeci.
          Ion has chosen twenty   of eggs from basket but Anna has chosen thirty
          'Ion chose twenty eggs from the basket, and Ana chose thirty.'
(52) a.   Am ales   din coş   trei mere roşii şi tu ai ales   două galbene.
          have chosen from basket three apples red and you have chosen two   yellow
          'I chose three red apples from the basket, and you chose two yellow ones.'
     b.   Au venit doi studen□i de la Cluj şi   trei de la Bucure□ti.
          have come two students from Cluj and three from Bucharest
          'Two students from Cluj and three from Bucharest came.'

As shown above, in sections 3.3.2 and 3.3.3, cardinals merge in the specifier of the NumP, counting as the leftmost element of the *n*P phase.

Cardinals might appear as counterexamples to the claim that ellipsis is based on the identification of a definite discourse topic, since cardinals ordinarily select an indefinite NP complement:

(53) a.   două fete
          two girls
          'two girls'
     b.   *două fete<u>le</u>
           two   girl-the

This notwithstanding, there are constructions where what is the complement of the cardinal at some stage of the derivation is an overt definite DP. The most prominent of these,

because it is cross-linguistically available, is the partitive construction, which exhibits definite PP complements of the cardinal:

(54) a.   două dintre fete*le*   din clasă
             two   of   girls-the from class
             'two of the girls from the classroom'
       b.   trei dintre case*le*   from pe stradă
             three of   houses-the from on street
             'three of the houses from the street'

The partitive construction is not unique in exhibiting definite complements of the cardinal. Romanian, unlike other languages, shows other situations where the complement of the cardinal is definite, one of them being that of the post-nominal demonstrative construction:

(55) a.   aceşti doi copii
             these two children
             'these two children'
       b.   copii*i*   aceştia doi
             children-the these two
             'these two children'

A cursory glance at construction (55a) vs. (55b) shows that the post-nominal demonstrative construction may be interpreted as the result of the *definite* N(P) movement past the demonstrative; since in this construction definiteness is expressed twice, by the demonstrative and by the definite N, it is reasonable to assume that this is a DP-periphery construction, the two determiners respectively having their features valued by the demonstrative (the lower D_{inner}) and the definite N (the higher D_{outer}). Significant for the present analysis is that, in the post-nominal demonstrative construction, cardinals co-occur with a definite NP. There is also a word order restriction in the post-nominal demonstrative construction, a restriction whose significance should be exploited all along this discussion: in the post-nominal demonstrative construction the order of the post-nominal constituents is rigid, adjectives always follow cardinals. In the pre-nominal demonstrative construction, the order of cardinals and adjectives is free.

Ellipsis in (57) patterns with the post-nominal demonstrative construction (56c, d) − not with the pre-nominal demonstrative one in (56a, b) −, requiring rigid word order, and thus *having the same definite NP complement* as the post-nominal demonstrative construction:

(56) a.   aceste două probleme dificile
             these   two problems difficult
             'these two difficult problems'
       b.   aceste dificile două probleme
             these difficult two   problems
             'these two difficult problems'
       c.   problemele   aceste*a* două dificile
             problems-the these   two difficult
             'these difficult two problems'
       d   *problemele aceste*a* dificile două
             problems-the these   difficult two

(57)   a.   acest*e*a două dificile
                  these   two   difficult
                  'these two difficult ones'
        b   *acest*e*a dificile   două
                   these   difficult two

Moreover, as apparent from the examples above, Romanian morphologically distinguishes the post-nominal demonstrative from the pre-nominal one through the final vowel *a*. The fact that the elided structure patterns with the post-nominal demonstrative overt one is also shown by the presence of the post-nominal demonstrative in the NPE structure, and not of the pre-nominal one (compare (58a) and (58b) below); this is a strong hint that the elided NP is a *definite one*.

(58)   a.   acest*e*a două dificile
                  these   two   difficult
                  'these two difficult ones'
        b.   *aceste două dificile
                   these   two   difficult

Given all this, NPE may be included in a class of constructions where cardinals have definite complements (DPs).

4.2 The analysis of ellipsis with cardinals

Recall that the hypothesis that we are pursuing is that certain NPs/DPs may go unpronounced if (they are in the proper syntactic configuration and) they have the relevant feature composition. As announced, we will take the elided NP to be a *silent topic*, characterized as [+a, –c] in terms of López's features. However, we differ from López in the implementation of the silent topic analysis. In particular, we assume that anaphoricity is dependent on definiteness, therefore the NPs that undergo ellipsis are definite, i.e. technically, specified as [u+def]. So far we have not specified the status of [±anaphoric], [±contrast] with respect to interpretability. Both are uninterpretable on lexical categories and interpretable, but unvalued on functional heads. Thus, [ia] may be a feature of a definite determiner, valued concomitantly with definiteness, by the same lexical determiner, or by the same NP which has [u+def] morphology. Such an NP will bear the P-feature[u+a].

(59)   a.   D'   b.   D'
             ┌──────────────┴──────────┐   ┌──────────┴──────────┐
             D   NP   D   NP**[E]**
           [$i$def]   [u+def]   [i+def]   [u+def]
           [ia]   [u+a]   [i+a]   [u+a]
                                                                              Agree

An anaphoric definite determiner may assign an E-feature to its nominal complement in the configuration above. In the proposed interpretation, an elided phrase requires both anaphoricity, as a semantic property, and definiteness as a syntactic property. While the NP is anaphoric, it is also [u–c] and does not undergo FF. The feature composition of the elided NP constituent is thus [u+def, u+a, u–c].
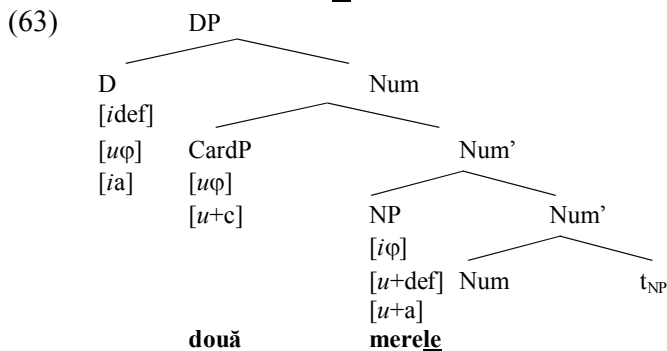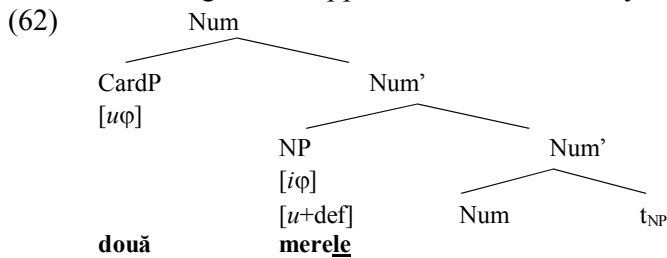
Consider the following maximally simple examples below, where the remnant is a bare cardinal:

(60)   a   Ion   a   cumpărat *două mere* şi   Ana   a   cumparat *trei*.
                Ion   has bought   two   apples and Ana has bought   three
                'Ion bought two apples and Ana bought three.'

        b.   Ion   a   ales   *douăzeci de ouă* din   coş,   iar   Ana   a   ales   *treizeci*.
                Ion   has chosen twenty   of   eggs from basket but Ana has chosen thirty
                'John chose twenty eggs from the basket, and Ana chose thirty.'

        c.   *Două fete* se   uită   la televizor, iar   *două* joacă şah.
                two girls   CL 3rd   watch at television but two   play   chess
                'Two girls are watching TV, and two are playing chess.'

The claim being made is that licensing ellipsis amounts to definiteness valuation. It may be assumed that the elided NP merges with the features [*u*+def, *i*φ], so that the elided NP bears the *definite article*. Like before, we assume that cardinals agree with the NP they c-command, and thus value their own uninterpretable φ-feature. At the end of the *n**-phase the nominal configuration underlying ellipsis looks like in (62). When the lower D, merges P-features for the *n**-phase will be introduced, as in (63) below. By assumption, the lower D in periphery constructions is EPP. Let us survey the derivation of a simple example of cardinal-remnant ellipsis.

(61)   Ion   a   cumpărat *trei   mere* şi   Ana   a   mâncat deja   *două [merele]*_E.
        Ion   has bought   three apples and Ana has eaten   already two   apples-the
   'Ion bought three apples and Ana ate already two (of them).'

(62)

```
              Num
          ╱         ╲
    CardP              Num'
    [uφ]           ╱        ╲
                 NP             Num'
                 [iφ]        ╱       ╲
                 [u+def]   Num        t_NP
    două        merele
```

(63)

```
              DP
          ╱         ╲
    D                  Num
    [idef]         ╱        ╲
    [uφ]       CardP            Num'
    [ia]       [uφ]         ╱       ╲
               [u+c]      NP            Num'
                          [iφ]       ╱      ╲
                          [u+def]  Num       t_NP
                          [u+a]
               două       merele
```

The P-feature are assigned when the lower D has been inserted: the cardinal remnant is [*u*+c], and will have to undergo FF. The (definite) NP is assigned [*u*+a], the feature which triggers the construction of the D-linked restriction discourse set, as explained above. The

intuition to formalize is that anaphoricity is felicitous only on constituents that are definite, the anaphoric function of the definite article distinguishing it from the epiphoric, novelty introducing, indefinite article. The NP in [Spec, NumP] is thus [u+def, iφ, u+a]. The NP must enter Agree to get rid of its uninterpretable definite/anaphoric feature(s), but given its position below the cardinal, it is not clear how this is accomplished.

At this point, an essential problem is how to characterize the difference between the configuration in (64) above and that in (50)-(51), in section 3.3.3, which causes the insertion of *cel*, because of the cardinal intervener. Moreover, if NPE is possible in configuration (64) above and if NPE is PF deletion, why is it that the overt counterparts of (64)/(62), i.e. **două merele* 'two apples-the' and **merele două* 'apples-the two', are not possible?

We claim that the relevant difference between the two constructions lies in the presence of the [u+c] feature on the cardinal, triggering movement to the periphery focus projection, here represented as ContrP, following López's system. Movement to [Spec, ContrP] is made possible by first adjoining the D$_{inner}$ head to the Contr head. This extends the domain of the Contr head (cf. Chomsky 1995) which may now attract the [u+c] CardP to value the [ic] feature of the Contr head. The cardinal cannot value the [$i$def] feature of the lower D head. By assumption, in periphery constructions the lower D is EPP and [Spec, DP] functions as an escape hatch to the periphery. But now it is perfectly possible for D$_{inner}$ to attract the definite NP to its specifier, where the NP enters Agree with D$_{inner}$, valuing the latter's [$i$def, ia] features, and marking its own [u+def, u+a] features for deletion. Notice that the two specifiers tuck-in in the sense of Richards (1997) each of them traveling the shortest distance. A relevant intermediate structure looks as follows:

(64)

două   mere<u>le</u>
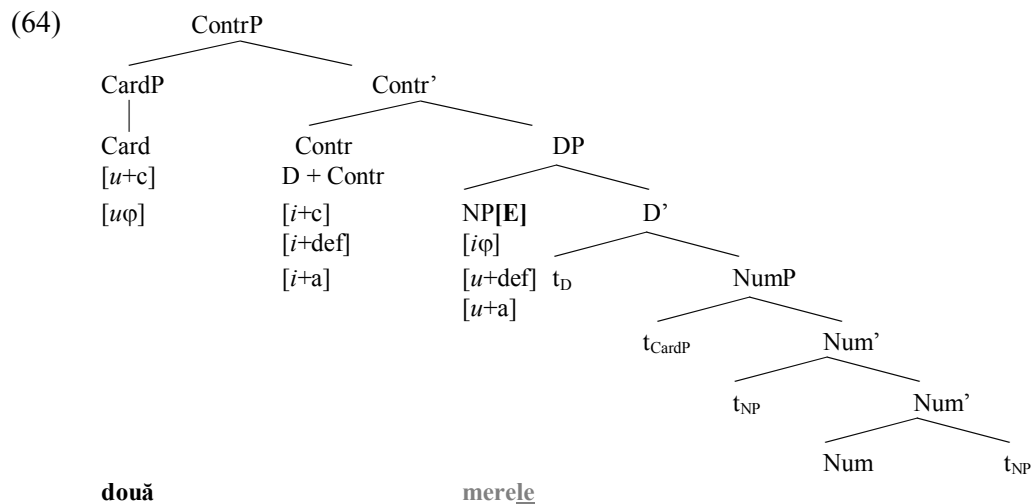
Checking of definiteness and anaphoricity allows the definite determiner to assign the E-feature to its complement. Conversely, we may say that if an NP is [iφ, u+def, u+a, u–c], this feature specification is sufficient for attaching the E-feature to this NP node.

Ultimately, D$_{outer}$ merges to type the phrase. Given the semantics of examples like (60) above, the DP with ellipsis is indefinite. The D head will contain a choice function [φ], which is responsible for the existential force that is part of the semantics of the cardinal headed DPs (see above, section 3.3.1).

(65)

```
                        DP
                        |
                        D'
              ┌─────────┴─────────┐
              D                 ContrP
          [i-def]        ┌────────┴─────────┐
                       CardP              Contr'
                         |          ┌───────┴────────┐
                       Card       Contr             DP
                       [u+c]     D + Contr    ┌──────┴──────┐
                       [uφ]       [i+c]     NP[E]          D'
                                  [i+def]   [iφ]     ┌──────┴──────┐
                                  [i+a]     [u+def]  t_D        NumP
                                            [u+a]          ┌──────┴──────┐
                                                        t_CardP        Num'
                                                            ┌───────────┴────────┐
                                                          t_NP                  Num'
                                                                        ┌────────┴────────┐
                                                                       Num              t_NP
```

[φ]　　**două**　　　　　　　　　　　　　**mere<u>le</u>**

Consider now the minimally different case of NPE in a *definite* DP, where the remnant is a cardinal.

(66)　cele două mere<u>le</u>
　　　the　two　apples.the

The derivation proceeds as explained above. The cardinal moves to the quantificational ContrP, to value [ic] of the Contr head. Finally, the higher D_outer is inserted to type the phrase. To get a definite reading the free definite article *cel* is inserted above the cardinal in [Spec, ContrP], valuing as [+def] the interpretable definite feature of the higher D.

(67)

```
                        DP
                        |
                        D'
              ┌─────────┴─────────┐
              D                 ContrP
          [i+def]        ┌────────┴─────────┐
                       CardP              Contr'
                         |          ┌───────┴────────┐
                       Card       Contr             DP
                       [u+c]     D + Contr    ┌──────┴──────┐
                       [uφ]       [i+c]     NP[E]          D'
                                  [i+def]   [iφ]     ┌──────┴──────┐
                                  [i+a]     [u+def]  t_D        NumP
                                            [u+a]          ┌──────┴──────┐
                                                        t_CardP        Num'
                                                            ┌───────────┴────────┐
                                                          t_NP                  Num'
                                                                        ┌────────┴────────┐
                                                                       Num              t_NP
```

cele　　**două**　　　　　　　　　　　　　**mere<u>le</u>**

Informally, what ellipsis leaves behind in the definite constructions are *two functional* categories, which do not represent one constituent. It is thus possible to separately modify either of these functional elements:

(68)   a.   Aproape/cam *douăzeci* au   venit.
              almost   about twenty   have come
              'Almost/approximately twenty ones came.'
        b.   Chiar cei aproape *douăzeci* care au   venit erau nemul□umiți.
              even the almost   twenty   who have come were unsatisfied
              'Even the almost twenty ones who came were unsatisfied.'

Such examples show that it is oversimplifying to speak of one remnant, which would play decisive role in NPE.

In the analysis we proposed, the unity of the NPE construction is the *definite NP topic*, which can be elided by virtue of its own feature content. What the (silent) D does in our analysis is to check definiteness in the local Agree configuration. This, in conjunction with the P-features on the NP [u+a, u–c] on the NP forces the insertion of the E-feature. To the extent that E-Insertion is contingent upon definiteness checking, one may say that *the licensor of ellipsis in Romanian is the D which checks definiteness*. Since with NPE, the cardinal is assigned the feature [u+c] and undergoes FF; ellipsis is a *periphery construction* (cf. also Merchant 2001, Ntelitheos 2004), a characteristic that is conceptually related to its being a DG phenomenon. In Romanian, since the article is a suffix, it is the definite article suffix which values the definite feature of the lower D_{inner}. In languages like English, the definite article will be inserted in D_{inner} to parse the [def] feature of the NP, and it will be deleted at PF since an empty complement does not satisfy the requirements of the definite article.

4.3 Some (more) evidence for this analysis

4.3.1 A locality problem: pre-nominal adjectives block ellipsis

A well-known restriction on NPE is that the remnant cannot be a pre-nominal intensional adjective (see Ticio 2003 for Spanish, Giurgea 2008 for Romanian, as well). While a pre-nominal intensional AP cannot be the remnant of NPE (69b), the intensional AP may be included in the elided NP as in (70):

(69)   a.   **doi** bieți copii
              two poor children
              'two poor/pitiable children'
        b.   ***doi** bieți [copii]
              two poor children
(70)   Ion are trei [foști cumnați],   iar Adrian are numai doi [foști cumnati].
        Ion has three former brothers-in-law but Adrian has only   two former brothers-in-law
        'Ion has three former brothers-in-law, and Adrian has only two.'

The difference between examples (69) and (70) can easily be described. In the well-formed example, the whole FP (including the AP and NP) is an edge constituent in [Spec, NumP], bearing the features [u+def, u+a, u–c], and can be marked with [E]. More specifically, the [u+def] feature of the N has been transmitted to the pre-nominal A by Agree, so that both the NP and the AP, therefore, the FP containing them, end up as definite and

anaphoric. Consequently the D-head licenses the E-feature on the whole FP immediately below it. In other words, the configuration in (71) is the one already discussed with FP replacing NP, as can be noticed in the representation below (irrelevant details aside):

(71)

```
                    DP
          ┌─────────┴─────────┐
          D                  NumP
        [idef]        ┌───────┴────────┐
                    CardP             Num'
                    [u+c]        ┌─────┴──────────┐
                    [uφ]        FP [E]           Num'
                            [u+def, u+a]      ┌───┴────┐
                         ┌──────┴──────┐     Num      tFP
                        AP            F'
                                 ┌────┴────┐
                                 F        NP
                        doi    foștii   cumnați
```
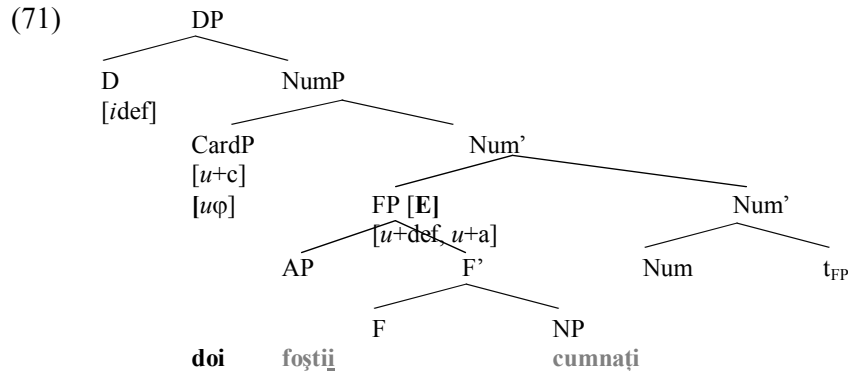
In contrast, in the ill-formed example, the higher adjectival constituent is the intended *remnant*, therefore a constituent which is non-anaphoric (i.e. [*u*+c] by definition). At the same time, the A is [*u*+def] by agreement; it is thus [*u*+c, *u*+def]. Therefore definiteness and anaphoricity do not coincide; the E-feature cannot be assigned to the NP because it cannot be assigned to the A as well.

4.3.2 Uniqueness of ContrP. Evidence for FF

There is also evidence for FF of the remnant. Such evidence is represented by certain systematic differences between the distribution of cardinals in DPs with overt/elided nominal heads. Assuming that there is a unique Contr position at the left periphery, if that position is held by the fronted remnant cardinal, no other constituent can be moved or merged there. In Romanian, contrastively focused adjectives may appear above the cardinal and below a demonstrative, as long as the nominal head is overt (72a). If there is NPE, the pattern is impossible (72b):

(72) a.   aceste importante **două** legi
              these important two   laws
              'these important two laws'
       b.   *aceste importante **două** [legi]
                these important *two*   laws

In the above, it was shown that there are syntactic conditions on NPE: (i) definiteness checking; (ii) focus fronting of the remnant weak determiner. Since the cardinal may be followed by an overt or a silent NP, at first sight it might appear that cardinals optionally license an E feature on the sister NP, a theoretically undesirable situation. However, at a closer scrutiny, there is evidence that the distribution of the cardinal is more constrained than in the overt-N-head construction; this indicates differences in the syntax of the overt head vs. elided head one.

4.3.3 On the interpretation of ellipsis with cardinals

The two steps syntactically required in the analysis of NPE are also required for semantic interpretation. Recall that we have assumed that DPs with NPE are generalized

quantifiers constructed in two steps: determining a contextual range; quantifying over it. Syntax closely mirrors the two steps. The lower DP provides the unique plural individual (set X) which is the discourse referent constructed as shown by Elbourne (2008). Focus fronting is required precisely as a means of quantifier raising, a means allowing the quantifier to scope over its restriction, obtaining the partitive like structure $D_{ellipsis}$^ DP[+def]. Thus the denotation of the NPE DP in (73) is as in (74), where X is a plural discourse referent, and !X shows that the context is such that X is uniquely determined (as in Farkas and de Swart 2007). Thus, following FF, the syntax is such that the quantificational operator scopes over the DP (75). As always, the D introduces the discourse referent, while the NP provides a descriptive restriction.

(73)   Ana are puține mere,   iar Petru are [DP **multe** [merele DP]]
        Ana has few   apples but Petre has many   apples-the
        'Ana has few apples, and Petre has many.'

(74) $\lambda P \exists! X, \exists x \, multe(x)[x \in X, \text{MERELE}(X)] \, (Px)$

(75)

$$
\begin{array}{c}
\text{DP} \\
\overbrace{\qquad\qquad\qquad}^{} \\
\text{ContrP} \\
\overbrace{\text{QP}\qquad\qquad\text{Contr'}} \\
\qquad\overbrace{\text{Contr}\qquad\text{DP}} \\
\text{\textbf{multe}}\qquad\text{D(X)}\qquad\overbrace{t_{multe}\;\text{\textbf{merele}}\;(X)}
\end{array}
$$

Furthermore, if Elbourne (2008) is right, then the cardinal is read both as a predicate inside the restriction and as a quantifier over the restriction. Recall his analysis of examples like (28), repeated below:

(28)   After the book went on sale, thirteen ***shoppers who had bought some [books] earlier*** complained, but after the magazines went on sale, only two ***shoppers who had bought some [magazines] earlier*** did.
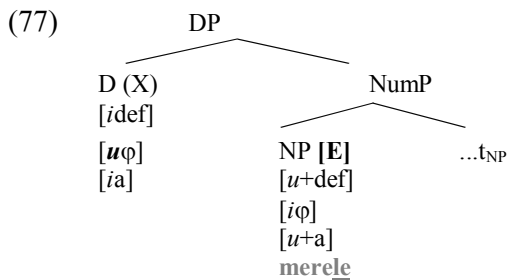
The meaning of this sentence is 'After the book went on sale, thirteen shoppers who had bought some books earlier complained; but after the magazines went on sale, only two shoppers who had bought some magazines earlier complained'; the antecedent NP contains thus an instance of NP-ellipsis, so that the two NPs are not identical. To satisfy the requirement that in all cases an ellipsis site should have an identical antecedent, proposes that in cases like the above the required interpretation is 'only two of the {thirteen shoppers who had bought some books and two shoppers who had bought some magazines} complained' (Elbourne 2008: 194). Thus the cardinal appears in the restriction (therefore below D in syntax), as well as being part of a complex existential quantifier, in its periphery position above D (Elbourne 2008: 194).

5. Total ellipsis

NPE with no remnants is theoretically important since it unambiguously shows that NPE does not depend on an overt determiner which should license it; therefore these examples are problematic for the remnant-based theories:

(76)   a.   Ion culege mere,   dar nu mănâncă [merele].
              Ion culls   apples, but not eats   apples-the
              'Ion culls apples, but he doesn't eat them.'
       b.   Ion cumpără cărţi,   iar Petru vinde [cărţile].
              Ion buys   books but Petru sells   books-the
              'Ion buys books, and Petru sells (/them).'

On the other hand, the anaphora theory of NPE that we proposed above has no difficulty with such examples. The anaphoric nominal retrieved in the ellipsis construction is precisely the plural discourse referent which is discourse given, and which is the denotation of the NP. Possible determiners range over this set. Definiteness of the elided NP (DP) is the effect of co-reference between the plural individual introduced as the referent of the antecedent NP and the plural individual which is introduced by the elided NP. Therefore, we assume that the structure of the ellipsis with no remnant is not different from ellipsis that leaves behind a constituent. The minimum syntactic requirement on ellipsis is thus checking definiteness to secure anaphoricity. The E-feature is licensed by the silent definite determiner as in all the other cases:

(77)   DP
        ┌─────────┴─────────┐
      D (X)   NumP
      [$i$def]   ┌──────┴──────┐
                   NP [E]   ...t$_{NP}$
      [$\boldsymbol{u}$φ]   [u+def]
      [ia]   [iφ]
                   [u+a]
                   mere<u>le</u>

The DP is interpreted as the unique plural individual !X which satisfies the descriptive content of the NP, the denotation of the whole DP is thus: $\lambda P \; \exists!X \; [NP(X)] \; \& \; P(x)$.
   Let us now consider NPE where the remnant is purely lexical, i.e. there is no overt functional category.

(78)   Ion   citeşte [romane franţuzeşti], iar Maria citeşte [romanele] englezeşti.
       Ion reads   novels French,   but Maria reads novels-the English
       'Ion reads French novels, and Maria reads English ones'

Unlike the previous instances, here there is a contrastive constituent, and in the analysis adopted here, the highest [u+c] constituent (i.e. everything under D, including the anaphoric head) moves to ContrP. Movement to the left periphery is not idle: syntactically, overt FF is a sign that there is structure above D, therefore a left periphery construction is signaled. Signaling the existence of an LP is a well-known attribute of Contrastive Focus.

6. Conclusions

We have proposed a Topic-based account of nominal ellipsis in Romanian which accounts for the great variety of nominal ellipsis patterns (reviewed in section 2.2). The main points of our theory, which accounts for all the problematic cases reviewed, are the following:

(i) Nominal ellipsis is a Discourse-Grammar phenomenon, whose interpretation involves the retrieval of a common topic (a contextually constructed individual in the extension of the NP antecedent), as well as of the ellipsis site. From a derivational point of view, it is the identity of this common topic which makes superfluous the pronunciation of the second copy, which is marked in syntax with an E(llipsis)-feature and becomes unpronounced at PF.

(ii) Licensing of the E-feature is intimately linked to definiteness valuation of the unpronounced constituent: definiteness is needed for the assignment of the [+anaphoric] feature, and E-feature assignment is consequent upon [+anaphoric] assignment. The remnant needs to be marked with a [+contrast] feature, which triggers (obligatory) Focus Fronting. The elided constituent has therefore the following feature composition [+definite, +anaphoric, -contrastive]. In the particular case thoroughly investigated in the paper (NPE with cardinal remnants), the complement of the CardP remnant is a definite DP.

(iii) Nominal ellipsis is a left periphery construction which involves Focus Fronting of the remnant. Movement of the remnant to a left periphery Focus position (in our implementation, to ContrP) is required for both syntactic and interpretative reasons.

Alexandra Cornilescu
University of Bucharest
alexandracornilescu@yahoo.com

Alexandru Nicolae
"Iorgu Iordan – Al. Rosetti" Institute of Linguistics
Bucharest
nicolae_bibi@yahoo.com

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