PROVIDING SYNTACTIC ARGUMENTS THAT ELLIPSIS SITES ARE DEFINITE DESCRIPTIONS

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1. Aim of the paper

The aim of the paper is to propose a Topic-based PF-deletion account of nominal ellipsis (henceforward, NPE) in Romanian. The specific objectives pursued in the paper are listed below.

- (i) We would like to prove that ellipsis is a periphery construction, and that 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.
- (ii) NPE will be regarded as a *discourse anaphora phenomenon*, relating the ellipsis site to an antecedent in the discourse, the two of them sharing a *common topic*. From a morphosyntactic perspective, anaphoricity is linked to definiteness, so that the main claim of the paper is that NPE is a unitary phenomenon in the sense the ellipsis site is always licensed by a definite determiner.
- (iii) 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] (=[a]) and [contrast] (=[c]), trigger particular syntactic operations, in addition to signalling specific interface effects. *Anaphoricity* requires establishing a suitable syntactic/semantic relation with an antecedent. *Contrastivity* is a feature assigned to any constituent that opens up a domain of quantification (in the sense of alternative semantics, cf. Rooth 1985, B hring 2003), and it entails Focus Fronting (i.e., movement to Focus in the terminology adopted by Merchant 2001), an operation which will be motivated on syntactic grounds. Recourse to notions like Topic and Focus is in line with the analysis of ellipsis as a periphery construction.

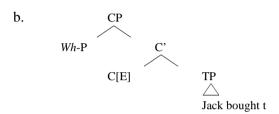
2. A Focus or a Topic account?

The theory that we propose builds on previous approaches, in particular on López (2000, 2009) and Merchant (2001). 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 constituents (NPs for NPE, TPs for Sluicing) for deletion. Elided NPs are complements of a head marked with an E(llipsis)-feature. In Merchant's analysis of Sluicing, ellipsis is optional; the indirect question in (1a) may be uttered in full or it may be sluiced. Extrapolating from his analysis of Sluicing (represented in (1b) below), we may say that

Merchant's theory makes an important prediction: overt and silent categories (TPs for Sluicing, NPs for NPE) have the same distribution, since the difference between them is invisible at LF. This represents an important empirical claim, especially 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 and, respectively, silent categories, as illustrated in (2):

(1) Sluicing

a. Jack bought something, but I don't remember what [TP]e].



- (2) 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, van Koopen (2009) for Dutch DPs. The essential syntactic feature of Merchant's account is, thus, movement of the remnant to FocP¹.

López (2000) stresses that ellipsis is a *Discourse Grammar* phenomenon rather than a sentence grammar one, and that the semantics of ellipsis primarily entails the *retrieval of a discourse topic*². Ellipsis is one of the phenomena involving *discourse linking* (= D-linking). López's account of ellipsis involves the licensing of an empty *pro* category by a D-linking functional head which connects it with the discourse topic. 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, likewise related to the discourse topic. López (2000) proposes that D-linking should be considered *a feature* of the licensing functional head, and that C, D and Σ (as in Laka 1990) can all license empty categories (López 2000: 186). His hypothesis is that: "Elided constituents are licensed when they are associated with a discourse-linking functional category" (López 2000: 187) and that this association is syntactically reflected as adjunction of the empty category to the licensing head.

Notice that in López's account stress shifts from the remnant (essential in Merchant's theory) to the elided category itself, to the NP, which must be capable to relate to an

¹ However, in Sluicing, movement of the remnant, i.e., the wh-phrase, to [Spec, CP] is not the effect of ellipsis, but is triggered by the need of valuing the [uwh] feature of the operator phrase. This is what gives the impression that ellipsis is syntactically optional.

² "[...] an understanding of the syntax of ellipsis involves D[iscourse] G[rammar]. (...) I argue that ellipsis is syntactically licensed by a functional category that has the property of connecting with a discourse topic" (López 2000: 184).

antecedent. López's analysis has an immediate empirical advantage. It may be extended to cases where there is no remnant:

(3) Ion cite te c r i, Petru doar cump r [c r i]. John reads books, Peter only buys books 'John reads books, Peter only buys them.'

We will adopt a variant of López's *topic-retrieving account*, precisely because it stresses the role of the (elided) 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 all entities referred to by the two DPs, the one containing the ellipsis and the antecedent (see section 6).

3. 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 (3) above).
- (B) A distinct situation occurs when there is a remnant, but the remnant is not a functional element, a D-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, 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 theory in which the elided category somehow depends on an overt determiner:
 - (4) a. Ion vrea ma in de curse, iar Petre vrea [ma in] de teren.

 John wants car of race, but Peter wants car of terrain

 'John wants a racing car, and Peter wants a terrain one.'
 - b. *Ion vrea ma in ro ie, iar Petru vrea* [ma in] galben. John wants car red, but Peter wants car yellow 'John wants a red car, and Peter wants a yellow one.'
 - c. Ma ina nou a lui Ion este ieftin, iar [ma ina nou] a lui Petre este mai scump. car.the new of John's is cheap but car.the new of Peter's is more expensive 'John's new car is cheap, and Peter's is 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).

- (C_1) 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:
 - (5) a. D -mi c r ile acestea i ia-le pe [c r ile] acelea. Give-me_{,DAT} books.the these and take-them_{ACC} PE books.the those 'Give me these books and take those.'
 - b. *Maria a cump rat pu ine c r i, iar Petru a luat mai multe* [c r i]. Maria has bought few books, but Peter has taken more many books 'Maria bought few books, and Peter bought more.'
 - c. Tu po i lua dou mere, iar Maria trei [mere].

you can take two apples, and Maria three apples 'You may take two apples and Maria three.'

- (C_2) A situation that has rarely been discussed is a remnant containing two functional (pre-nominal) elements. The two remnants are contiguous pre-nominal elements with distinct roles in ellipsis DPs. In Romanian, at least, cardinals alone as licensors of ellipsis (6b) have properties different from sequences of determiners + cardinals (6a):
 - (6) a. A vorbit de trei studen i buni. Din p cate, nu-i cunosc (he)has spoken of three students good unfortunately, not-them (I)know pe cei trei [studen i buni].

 PE the three students good 'He/She told me about three good students. Unfortunately, I don't know the three good ones.'
 - b. Maria cunoa te doi studen i, iar Ion tot doi [studen i].

 Maria knows two students but John as well two students 'Maria knows two students and John 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:
 - (7) a. doi copii ai Mariei i trei [copii] ai lui Ion two kids of Maria's and three kids of John's 'two kids of Maria's and three of John's'
 - b. dou case la mare ale lui Ion i dou [case] la munte ale lui Petre two houses at sea of John's and two houses at mountain of Peter's 'two houses of John's at the seaside and two of Peter's in the mountain side'
 - c. ace ti doi copii ai Mariei i aceia doi [copii] ai lui Ion these two children of Maria's and those two children of John's 'these two children of Maria's and two of John's'
 - d. cei doi copii de tep i ai Mariei i cei trei [copii] pro ti ai lui Ion the two children smart of Maria's and the three children stupid of John's 'Maria's two smart children and John'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 itself 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.

4. NPE and the partitive construction

It has often been remarked that the class of determiners that allow ellipsis is that of the determiners which occur in *partitive* constructions (Lobeck 1995, Sleeman 1996, López 2000, Giurgea, Nedelcu 2009). This analogy is extensively discussed in Lobeck (1995) and López (2000), to whom we now turn. For instance, English *no* and *every* occur neither with ellipsis, nor in partitives:

(8) Some men are decent, *but every is not.
*but two is not.
*but no is not. (apud López 2000: 191)

(9) 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. (apud López 2000: 191)

López (2000) inspects triplets containing an elided DP, an indefinite DP and a partitive DP, the three of them containing the same strong determiner (*most* in the examples below):

(10) a. [Some men]_i came in. [Most of them]_i sat down.

b. [Some men]_i came in. #[Most men]_i sat down

(11) [Some men]; came in. #[Most pro];/*i sat down

López makes the essential remark that the ellipsis DP in (11) is semantically equivalent with the partitive in (10a), not with the simpler [D+NP] construction (10b). *Most men* in (10b) 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 of a quantifier [most] refers to something that is discourse old [the NP man], what we find is a partitive PP instead of a NP" (López 2000: 191, emphasis added). Partitivity like ellipsis requires a complement that is discourse old and thus definite¹.

¹ 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 (8) 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 & 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

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 (12), are not identical (13):

- a. El a v zut [mul i chinezi], iar tu ai v zut [pu ini / *ni te]. He has seen many Chinese but you have seen few / some 'He saw many Chinese people, and you saw few.'
 b. [Pu ini /*ni te dintre ei] au citit Programul Minimalist. few some of them have read program.the minimalist 'Few of them read the Minimalist Program.'
- a. Am întâlnit trei prieteni. [Cei trei] m-au întrebat dac aflasem tirile.
 have met three friends the three me-have asked if (I)found out news.the
 'I met three friends. The three asked me if I found out the news'
 b. Am întâlnit trei prieteni, dar nu erau *[cei dintrei ei] pe care îi a teptam.
 (I)have met three friends but not (they)were the of them PE which them (I)expected
 b'. Am întâlnit trei prieteni, dar nu erau [aceia dintrei ei] pe care îi a teptam.
 (I)have met three friends but not (they)were those of them PE which them expected
 'I met three friends, but they were not those which I expected.'

As apparent, the degree quantifier *pu ini* ('few') is possible with elliptical and partitive constructions, while the indefinite *ni te* ('some') is excluded in both. On the other hand, the definite determiner *cel* ('the') licenses ellipsis with any type of remnants, but it does not occur in partitive constructions (see (13b) above and (15) below), even if in general it may cliticise on PPs (14):

- (14) *ceif r adapost* the without shelter 'the homeless'
- (15) *cei dintre prietenii mei the of friends.the mine 'those of my friends'

The resemblance between partitives and NPE is not accidental and will be accounted for.

5. 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. According to Chomsky (2000), 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, Birner 2001, McNay 2005, 2006, López 2009, a.o.). At least one group of researchers argues that features like Topic and Focus are too complex to be directly employable in the derivation. Using

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.

them directly has the disadvantage of a non-uniform behaviour of those constituents bearing the feature. Thus, if a constituent could be described as a contrastive Focus, either in situ, or at the left periphery, the feature [Focus] would not be too 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. Kiss 1995, Kiss 1998, Choi 1999), others prefer to give these features up or, at least, to decompose them into simpler components which would have unambiguous syntactic effects (B hring 2003, McNay 2005, 2006, Cornilescu 2007).

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 $[\pm a(naphoric)]$ and $[\pm c(ontrast)]$. We have chosen López's two-feature system because his 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 (Clitic Left Dislocation, Clitic Right Dislocation), anaphoric constituents also undergo displacement. As already stated, ellipsis requires an antecedent and, moreover, *the elided NP itself*, unlike a pronoun, *is not an inherently anaphoric constituent*, but may become so only in a discourse containing a suitable antecedent. The elided NP should, therefore, be assigned the feature [+a]. Since the anaphoric relation with the antecedent is established by virtue of the lexical content of the NP, we will assume that anaphoricity is interpretable on the NP itself and uninterpretable on the corresponding functional head. More generally, P-features are uninterpretable on the functional heads that carry them and are valued by matching phrases endowed with interpretable P-features.

As far as the internal structure of the DP is concerned, anaphoricity correlates with the presence of the morphosyntactic feature [+def(inite)]. Definiteness and anaphoricity open 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 signalling. Contrastive focus both *introduces* a variable and chooses a value for it from the set of alternative supplied by the context¹. This double semantic role is always signalled 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 constituent. In the analysis that follows, the remnant will be assigned the feature [+c], and will undergo FF to the left periphery of the DP, just as in Merchant's analysis. The feature [+c] remains an operator quantificational feature.

6. Definiteness and Anaphoricity

As already noted, determiners which license 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 ones 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

¹ "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).

should be definite is too strong and not entirely accurate. As first shown in Ladusaw's (1982) *Partitivity Constraint*, the complement in partitive constructions must be *entity denoting*, i.e., definite or indefinite specific, as in (17) and (18a). In contrast, definite *quantifiers* (even if definite) are excluded since they do not introduce any discourse referent (18b). The examples in (17) and (18) below are due to Abbott (1996):

- (16) *The Partitivity Constraint* (Ladusaw 1982: 238) The second DP in the partitive construction always denotes an individual.
- 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.
- (18) 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 (19) or indefinite specific (20). Definite quantifiers like *ambii/amândoi* ('both') or *fiecare* ('each') are excluded for the same reason as their English counterparts (21).

- (19) 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 numero ii studen i care au cerut l muriri* two of numerous.the students who have asked clarifications 'two of the numerous students who have asked for clarifications'
- (20) 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 mul i studen i* two of more many students 'two of many students'
- (21) 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:

- (22) 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
- (23) a. *Cei doi* au reu it s urce pianul pe sc ri împreun. the two have managed to lift_{subj} piano.the on stairs together 'The two ones managed to lift the piano together on the stairs'

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b. *Ambii au reu it s urce pianul pe sc ri (împreun ). both have managed to lift_{subi} piano.the on stairs together
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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, 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, i.e., a definite DP, as in (24). The two configurations differ in as much as the definite complement in a partitive construction is overt and requires Case, and this triggers the occurrence of the preposition, while the definite DP complement of the ellipsis structure is silent and it may be caseless. Moreover, as will be apparent, the syntax of both ellipsis determiners and partitive determiners is such that they scope over the definite (or specific) DP complement:

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(24) a. D_{partitive} + P [DP [+definite]] many + of the students b. D_{ellipsis} + [DP [+definite]] many [DP ec]
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In easy examples, the interpretative model of NPE is that of an anaphoric partitive construction:

(25) 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 the unique *superset* containing the referents of the two NPs given in the discourse.

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

As shown by von Fintel (1994), quantifiers of natural languages always have a two-fold restriction: the entities they range over satisfy 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), in ellipsis cases, 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.

Elbourne (2008) discusses the interpretation of the ellipsis site in nominal and VP-ellipsis cases and gives an explicit procedure for constructing this discourse (super)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, specifically because the antecedent itself contains an instance of ellipsis:

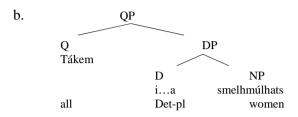
(28) After the book went on sale, thirteen *shoppers who had bought some* [] *earlier* complained, but after the magazines went on sale, only two [] did. [After the book went on sale, thirteen *shoppers who had bought some* [books] *earlier* complained, but after the magazines went on sale, only two *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 NPE, 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. Thus the interpretation of the elliptical DP in (28) is 'two of the {thirteen shoppers who had bought some books and two shoppers who had bought some magazines}'. And this unique set, Elbourne's (semantic) antecedent, is López's discourse topic, and it is the interpretation assigned to the definite DP complement of the ellipsis determiner. In the analysis that follows, we reserve the term antecedent to the DP which is overtly expressed in the discourse, while the term discourse topic will denote the constructed semantic antecedent, i.e., the nominal denotation common to the two DPs, which makes deletion possible.

We also retain from Elbourne's analysis 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 nominal, like the PP complement in partitive constructions, is in fact *a definite description*, a definite DP. The merit of Elbourne's analysis is that it provides an explicit procedure of constructing the elided nominal, allowing ellipsis to operate on identical constituents, 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, and the remaining D is strong, since its restriction is clearly non-empty.

In the case of ellipsis DPs (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 (Lillooet Salish), she argues that Qs apparently quantify over an entity (a denotation of type <e>>), rather than over the range of a predicate (a denotation of type <e,t>). Thus, in St'át'imcets, Qs are always sisters *of full DPs*, containing an overt plural determiners as in (29a) (represented in (29b)), 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).

(29) a. $t\acute{a}kem$ [i $smelhm\'{u}lhats -a$] all [Det-pl woman(Pl)- Det] 'all the 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 $\langle e \rangle$, not of type $\langle e \rangle$, to the interpretation of the invisible determiner, Matthewson suggests that this D might be a choice function which returns a contextually determined $\langle e \rangle$ type plural individual, over which the higher determiner/quantifier operates¹. 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 *only the NP complement of a definite D may be elided*, since only the complement of a definite D may be anaphoric. Ellipsis licensing is therefore consequent upon definiteness valuation.

7. On the remnant and the role of Focus Fronting

As shown, the elided (DP) constituent is anaphoric and definite ([+a, +def]) and, at the same time, the antecedent and the ellipsis DP implicitly refer to the common discourse topic, the unique set which sums up the denotation of the antecedent and the ellipsis DP.

While anaphoricity simply requires establishing the connection with an antecedent, the means of establishing a relation of anaphoricity may be diverse. Thus certain forms, such as the indefinite *one* in English, and, generally, definite pronouns are marked as anaphoric in the lexicon (for instance, using the features of Binding Theory). In the particular case of *ellipsis* and of *definite descriptions* more generally, the anaphoric connection is secured by the common descriptive content of the involved NPs. In more complex cases, a common NP restriction is inferred even if it is not overtly present. These are the well-known cases of *bridging* and *accommodation* (see van der Sandt 1992):

- (30) Two *men* entered the building. The *men* were tall.
- (31) They bought a cheap *house*. The *roof* was leaking.

In the case of lexical categories (nouns, verbs) as opposed to pro-forms, anaphoricity is established at the level of *discourse*. Sometimes the anaphoric connection is not signalled by any syntactic means; such is the case in (30) and (31) above. *Ellipsis is a syntactic means of signalling an anaphoric connection*, a cohesive device in terms of Discourse Grammar (cf.

¹ 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).

Halliday, Hasan 1976) Anaphoricity has semantic, syntactic, as well as prosodic effects. Semantically, the ellipsis DP and the target DP make reference to the discourse topic. It is essential that the common topic is systematically analysed into an identical part, which is assigned an explicit [+a] feature, and a non-identical part, which is assigned a [+c] feature. Assignment of [+c] is thus the effect of setting up the common topic, i.e., comparing the antecedent and the ellipsis DP^1 .

Ellipsis is thus a *double-figure*, silencing the identical term, while focusing the remnant. As a means of marking anaphoric relations, ellipsis could easily fall under the *Avoid Pronoun Strategy*. Through the mechanism provided, a lexical DP (the ellipsis site) becomes a discourse pronoun and may be silenced.

The elided constituent is anaphoric and non-contrastive, i.e., its specific feature composition is [+def, +a]. The feature specification [+def, +a] on a DP functions as a PF-instruction that the DP should go unpronounced. Merchant's E-feature becomes therefore superfluous. The intuition that ellipsis is optional is, however, on the right track. In the present analysis it is anaphoricity which is optionally incorporated as a feature on the identical nominal, triggering the construction of the common topic and the assignment of contrastive focus, and, as will be seen, it is focus movement which makes the difference between the syntax of full DPs and ellipsis DPs. When anaphoricity is not assigned, it is merely inferred as a semantic relation, and ellipsis does not occur. Thus, it is the featural make-up of a "pronominal" DP that triggers non-pronunciation.

FF is required as a means of giving the remaining Q/D scope over the definite restriction; it is a form of QP-raising, as discussed, for instance, in Herburger (1997).

Summing up the proposal, we may say that:

- (i) Assignment of [+c] to the remnant is consequent on the licensing of the [+a] feature. In turn, this is the effect of definiteness valuation.
 - (ii) FF is a means of giving scope to the remaining Q/D over the restriction.

8. Conclusion

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 discourse topic, a contextually constructed plural individual including 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, marked for deletion 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 [+def, +a]. While [+a] and [+c] are P-features, cyclically assigned at the end of each phase, definiteness is a morphosyntactic feature which plays an important part in the narrow syntax of DPs. From a syntactic perspective, informally, a D may assign the features [+a] to its

¹ The fact that **contrast** on the remnant signals ellipsis has often been remarked upon (Giannakidou & 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 .

complement only if its definiteness feature has been valued. Languages differ in the strategies used for valuing definiteness.

REFERENCES

- Abbott, Barbara, 1996, "Doing without a partitive constraint", in Hoeksema (ed.) 1996: 25-56.
- B hring, Daniel, 2003, "On D-Trees, Beans and B-Accents", Linguistics and Philosophy, 26, 5, p. 511-545.
- Choi, H-W., 1999, Optimizing structure in context. scrambling and information structure, Stanford, CA, CSLI Publications.
- Chomsky, Noam, 1995, The minimalist program, Cambridge Massachusetts, MIT Press.
- Chomsky, Noam, 2000, "Minimalist inquiries: the framework", in Martin, Michaels, Uriagereka (eds.) 2000: 89-156.
- Chomsky, Noam, 2001, Derivation by phase, in Kenstowicz (ed.) 2001: 1–52.
- Chomsky, Noam, 2009, "On phases", in Freidin, Otero, Zubizarreta (eds.) 2009: 133-166.
- Cornilescu, Alexandra, 2006, "Din nou despre «un prieten de-al meu»", in Pan Dindelegan, (ed.) 2006:
- Cornilescu, Alexandra, 2007, "Despre tr s turile periferice i cum le-am putea folosi", in Zafiu, Stan, Nicolae (eds.), 2007: 43-56.
- Corver, Norver, Marjo van Koppen, 2009, "NP-Ellipsis with adjectival remnants: a micro-comparative perspective", mss., University of Utrecht, available on lingBuzz (lingBuzz/000834).
- Eguren, Luis, 2010, "Contrastive focus and nominal ellipsis in Spanish", Lingua, 120, p. 435–457.
- Elbourne, Paul, 2008, "Ellipsis sites as definite descriptions", Linguistic Inquiry, 39, 2, p. 191-220.
- Freidin, Robert, Carlos Peregrín Otero, Maria Luisa Zubizarreta (eds.), 2009, Foundational Issues in Linguistic Theory. Essays in Honor of Jean-Roger Vergnaud, Cambridge Massachusetts, MIT Press.
- Gallego, Angel, 2007, "Phase theory and parametric variation", PhD dissertation, Universitat Autònoma de Barcelona.
- Giannakidou, Anastasia, Melita Stavrou, 1999, "Nominalization and ellipsis in the Greek DP", The Linguistic Review, 16, p. 295-331.
- Giurgea, Ion Tudor, 2008, Recherches sur la structure interne des pronoms et des expressions nominales sans nom exprimé, PhD dissertation, Université Paris 7 "Denis Diderot".
- Giurgea, Ion, Isabela Nedelcu, 2009, "Elipsa nominal i construc ia partitiv", in Zafiu, Stoica, Constantinescu (eds.), 2009: 109-124.
- Grimshaw, Jane, 2005, Words and structure, Center for the Study of Language and Information, Leland Stanford Junior University.
- Halliday, Michael Alexander Kirkwood, Ruqaiya Hasan, 1976, Cohesion in English, London, Longman. Heim, Irene, 1982, The semantics of definite and indefinite noun phrases, Ph.D dissertation, University of Massachusets, Amherst.
- Herburger, Elena, 1997, "Focus and weak noun phrases", Natural language semantics, 5, p. 53-78.
- Hoeksema, Jacob (ed.), 1996, Partitives: Studies on the syntax and semantics of partitive and related constructions, Berlin, Mouton de Gruyter.
- Jackendoff, Ray, 1977, X' Syntax, Cambridge Massachusetts, MIT Press.
- Kenstowicz, Michael (ed.), 2001, Ken Hale: a life in language, Cambridge Massachusetts, MIT Press.
- Kester, Ellen-Petra, 1996, "Adjectival inflection and the licensing of empty categories in DP", Journal of Linguistics, 32, p. 57-78.
- Kester, Ellen-Petra, Petra Sleeman, 2002, "N-ellipsis in Spanish", Linguistics in The Netherlands 2002, Amsterdam, John Benjamins, p. 107–116.
- Kiss, É. Katalin, 1998, "Multiple topic, one Focus?", *Acta Linguistica Hungarica* 45, p. 3-29. Kiss, É. Katalin, 1995, "One topic, multiple focus?", *GLOW Newsletter*, 34, p. 73.
- Ladusaw, William A., 1982, "Semantic constraints on the English partitive construction", Proceedings of WCCFL, 1, Stanford, Stanford Linguistics Association, p. 231–242.
- Laka, Itziar, 1990, Negation in Syntax, Ph.D. dissertation, MIT, Cambridge Massachusetts.

- Lobeck, Anne, 1995, *Ellipsis: functional heads, licensing, and identification*, Oxford, Oxford University Press.
- López, Luis, 2000, "Ellipsis and discourse-linking", Lingua, 110, p. 183–213.
- López, Luis, 2009, A derivational syntax for information structure, Oxford, Oxford University Press.
- Martin, Roger, David Michaels, Juan Uriagereka (eds.), 2000, *Step by step: essays on minimalist syntax in honor of Howard Lasnik*, Cambridge Massachusetts, MIT Press.
- Matthewson, Lisa, 2001, "Quantification and the nature of crosslinguistic variation", *Natural Language Semantics* 9, p. 145–189.
- McNay, Anna, 2005, "Split topicalisation motivating the split", Oxford University Working Papers in Linguistics, Philology & Phonetics, 10, p. 39–57.
- McNay, Anna, 2006, "Information structure at the phase level", mss., University of Oxford.
- Merchant, Jason, 2001, *The syntax of silence: sluicing, islands, and the theory of ellipsis*, Oxford, Oxford University Press.
- Pan Dindelegan, Gabriela (ed.), 2006, *Limba român*. *Aspecte sincronice i diacronice*, Bucure ti, Editura Universit ii din Bucure ti.
- Rooth, Math, 1985, Associations with focus, PhD Dissertation. University of Massachusetts, Amherst.
- Schiffrin, Deborah, Deborah Tannen, Heidi E. Hamilton (eds.), 2001, *Handbook of discourse analysis*, Oxford, Basil Blackwell,
- Schwarzschild, Roger, 1999, "Givennes, AvoidF and other constraints on the placement of accent", *Natural language semantics* 7, p. 141–177.
- Schwarzschild, Roger, 2006, "The role of dimensions in the syntax of noun phrases", *Syntax* 9, 1, p. 67–110.
- Sleeman, Petra., 1996, Licensing empty nouns in French, The Hague, Holland Academic.
- Ticio, Maria Emma, 2003, On the structure of DPs, PhD dissertation, University of Connecticut.
- Vallduvi, Enric, 1992, The informational component, New York, Garland.
- Van der Sandt, Rob A., 1992, "Presupposition projection as anaphora resolution", *Journal of Semantics* 9 (4), p. 333–377.
- von Fintel, Kai, 1994, *Restrictions on quantifier domains*, Ph.D. dissertation. University of Massachussets, Amherst.
- Ward, Gregory., Betty J. Birner, 2001, "Discourse and information structure", in Schiffrin, Tannen, Hamilton (eds.) 2001: 119–137.
- Winter, Yoad, 2005, "On some problems of (in)definiteness within flexible semantics", *Lingua* 115, 6, p. 767–786.
- Zafiu, Rodica, Camelia Stan, Alexandru Nicolae (eds.), 2007, *Studii lingvistice. Omagiu profesoarei Gabriela Pan Dindelegan, la aniversare*, Bucure ti, Editura Universit ii din Bucure ti.
- Zafiu, Rodica, Gabriela Stoica, Mihaela N. Constantinescu (eds.), 2009, *Limba român . Teme actuale*, Bucure ti, Editura Universit ii din Bucure ti.

Providing Syntactic Arguments that Ellipsis Sites are Definite Descriptions

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 (ellipsis with no remnant) with *partial* ellipsis (ellipsis with at least one remnant). In the proposed theory, ellipsis is viewed as a Discourse Grammar phenomenon, presupposing the retrieval of a 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 with respect to the antecedent, and the *contrastivity* of the remnant (if present) with respect to the same antecedent, a feature which triggers movement to the DP left periphery.