

No N-raising out of NPs in Spanish: ellipsis as a diagnostic of head movement

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Abstract In this paper, we present a novel test for diagnosing head movement across languages, based on the availability of X-stranding XP-ellipsis. As we argue, X-stranding XP-ellipsis phenomena should exist in languages where XP-ellipsis and X-movement out of XP are both available (as is the case in V-stranding VP-ellipsis in Hebrew or Portuguese, see Goldberg 2005 and references cited there). This has the effect that if a language has XP-ellipsis but lacks X-stranding XP-ellipsis, X-movement out of XP must be lacking in the language. We show the application of this test in the nominal domain, for the particular case of Spanish, one of the languages for which N-raising out of the NP has been proposed in the literature (Bosque and Picallo 1996). Spanish indeed has productive instances of NP-ellipsis, but lacks N-stranding NP-ellipsis. Carefully ruling out other reasons for the lack of N-standing NP-ellipsis, the paper shows that it can only be due to the lack of N-movement out of NP.

Keywords Head movement · X-stranding XP-ellipsis · Nominal phrase · Nominal ellipsis · Spanish

1 Introduction

The idea that head movement exists not only in the clausal, but also in the nominal domain has been in circulation for more than two decades in generative syntactic

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theorizing. Various researchers have found empirical arguments for the claim that the nominal head undergoes head movement to functional heads within the DP. This can take place either in the form of N-to-D movement (where D is the highest functional head, identified by Abney 1987) or in the form of movement to intermediate heads like Num(ber) (see for example Ritter 1988 on Semitic; Picallo 1991 and Bosque and Picallo 1996 on Spanish; Longobardi 1994 on Italian; Valois 1991 and Bernstein 1991 on French). Evidence for N-raising has been supplied from the various word orders that can be observed between the noun and its modifiers/arguments inside the DP within and across languages. The difference between the order of the noun and the adjective in the Spanish noun phrase in (1a) and the English (1b), for example, can be traced back to the presence of N-raising to the intermediate Num head in the former, but not in the latter. Postnominal placement of an adjective in Spanish is due to N-raising out of the phrase that contains the adjective.¹

- (1) a. una comedia musical *Spanish*, order: N-A
 a comedy musical
 b. a musical comedy *English*, order: A-N
- (2) a. [DP una [NumP comedia_i [NP musical [NP t_i]]]] (=1a)
 b. [DP a [NumP [NP musical [NP comedy]]]] (=1b)

Recent research has questioned the empirical foundation of these proposals by pointing out that the observed word order variation can, and in fact should, be explained in other ways (Alexiadou 2001b; Ticio 2003; Shlonsky 2004; Cinque 2010, and the references therein). Arguments *against* head movement in the DP come from various considerations. For reasons of space, we only consider two of these in detail.

The N-raising approach predicts that prenominal and postnominal adjectives occur in the exact same order on either side of the noun. Assuming a universal A-N order in the base (as in (1b) for example), adjectives that occur postnominally should retain the same order as adjectives that occur prenominally, since the only difference between them is the side on which they find themselves with respect to the noun. The position of the noun is determined by the height of N-raising. This prediction, however, is not borne out: the order of prenominal and postnominal adjectives is predominantly the mirror image of each other (example from Cinque 2010):

- (3) a. La causa prima più probabile della sua morte (è questa).
 the cause main most probable of his death is this
 b. The most probable main cause of his death (is this).

The N-raising account is also incapable of explaining robust cross-linguistic variation when it comes to the various readings or scopal relations adjectives allow in the various positions they can occupy. To be precise, if the noun reaches its position via head movement, prenominal adjectives should scope over postnominal adjectives.

¹The example (1) is adapted from Bosque and Picallo (1996), where a head movement analysis is proposed for deriving the final ordering of the DP. Here we abstract away from complexities in the ordering of adjectives in Romance and Germanic, also addressed in Bosque and Picallo, which are immaterial to our purposes.

This is, however, the opposite of what is found (see Cinque 2010, Chap. 2 in more detail):

- (4) E' una giovane promessa sicura. *Italian*
 he.is a young promise sure
 'He is a sure young promise.'

In (4), the postnominal *sicura* takes scope over the prenominal *giovane*, which suggests that the former c-commands the latter, something that the N-raising account does not predict.

In this paper we offer a new argument *against* the N-raising account out of the NP, from a field of inquiry which, to our knowledge, has not entered the discussion of the literature on N-raising: X-stranding XP-ellipsis. We show that languages like Spanish, with putative N-raising, do *not* show N-stranding NP-ellipsis that is predicted to exist if the noun raises out of the NP to some inflectional projection in the language. Spanish is a perfect language to investigate in this respect, as it has productive NP-ellipsis, where the size of the elided constituent excludes the inflectional domain (NumP). If Spanish had N-raising out of the NP, we would predict that the nominal head could survive the elliptical NP, as attested in several languages that exhibit V-raising out of the VP next to exhibiting VP-ellipsis, for example. As we will show, stranding type ellipsis is not observed in Spanish, showing that N-raising to the inflectional domain has not taken place.

The paper is organized in the following way. In Sect. 2, we discuss the interaction between ellipsis and head movement on the basis of well-known cases of *V-stranding VP-ellipsis* in the sentential domain (Goldberg 2005). In Sect. 3, we turn to ellipsis in the nominal domain in Spanish, our language of investigation, and show that Spanish lacks N-stranding NP-ellipsis, pointing towards the conclusion that it lacks N-movement out of the domain which ellipsis can target, the NP. In Sect. 4, we argue that the argument made in Sect. 3 remains unaffected in models that assign complex structure to DPs, and Sect. 5 shows that alternative explanations for the lack of N-stranding NP-ellipsis in Spanish, such as improper licensing, MaxElide or a bleeding effect of ellipsis, are unavailable or undesired. Section 6 summarizes and comments on the (un)availability of N-raising NP ellipsis in other languages.

2 Ellipsis and head movement

VP-ellipsis comes in two guises. In some languages, VP-ellipsis affects the entire *vP*-shell and leaves the inflectional domain stranded. This type of ellipsis is called *AUX-stranding VP-ellipsis*, and can be exemplified from English, where modals, tense, and other auxiliaries are stranded in VP-ellipsis:

- (5) Arthur brought a present to Hall,
 a. ... and Julia did [~~bring a present to Hall~~] too.
 b. * ... and Julia brought too.
 c. * ... and Julia will bring too. (Goldberg 2005:1)

The other type of VP-ellipsis involves the stranding of the verb, in what Goldberg (2005) calls *V-stranding VP-ellipsis*. Portuguese, Hebrew, Irish, among other languages, instantiate this type of VP-ellipsis (see also Cyrino and Matos 2002; McCloskey 1991, 2004; Gribanova 2013, among others). Consider the case of Portuguese, which has both V-stranding VP-ellipsis (cf. (6a), (6b)) and AUX-stranding VP-ellipsis (6c):²

- (6) a. Eu dei um livro pra Maria e o Pedro também deu;
I gave.1SG a book to.the Maria and the Pedro also gave.3SG
[~~eu um livro pra Maria~~].
a book to.the Maria
'I gave a book to Maria, and Pedro did, too.'
- b. A Ana deu o livro à mãe na segunda
the Ana gave the book to.the mother on.the Monday
e a Teresa deu na quinta [~~o livro à mãe~~].
and the Teresa gave on.the Thursday the book to.the mother
'Ana gave his mother the book on Monday and Teresa did it on
Thursday.'
(Santos 2009:28)
- c. O João já tinha lido este livro, mas a Maria não tinha
the João already had read this book but the Maria not had
[~~lido este livro~~].
read this book
'João had already read this book, but Maria hadn't.'
(Nunes and Zocca 2005:32)

Crucially, the VP headed by *deu* 'gave' in (6a) is interpreted as *deu um livro pra Maria* (i.e., the verb plus all its complements). This is an indication that this is ellipsis of the entire VP, and not an unelided VP involving null arguments. This conclusion is also reinforced by the fact that V-stranding VP-ellipsis requires full lexical identity between the verb in the antecedent and the verb in the elliptical clause (cf. (7a)/(7b)), while such verbal identity is not required with null objects (cf. (8)) (Cyrino and Matos 2002, 2005):

- (7) a. Quando a Ana pôs os óculos na mesa, a Maria
when the Ana put the glasses on.the table the Maria
também pôs ~~os óculos na mesa~~.
too put the glasses on.the table
'When Ana put the glasses on the table, Maria did too.'

²There is a controversy about the exact size of the elliptical gap in these constructions in Portuguese. Next to those arguing for VP-ellipsis here, there are accounts, such as Martins (1994) and Raposo (2000), that analyze (6) as involving head movement above T plus TP-ellipsis (or ellipsis of some higher functional category in the inflectional domain). We are aware of this variation and we do not want to settle the issue, as it is immaterial for our purposes. We opt for the VP-ellipsis analysis for Brazilian Portuguese adopted in Nunes and Zocca (2005) and Cyrino and Matos (2002, 2005), mainly because tense feature asymmetries between elliptical gap and antecedent are attested in this language, showing that the tense node is not affected by the identity condition on ellipsis. There are also proposals (cf. Cyrino and Matos 2005) which treat the difference between Brazilian and European Portuguese precisely as parametric variation with respect to the size of the elliptical gap.

- b. *Quando a Ana colocou os óculos na mesa, a Maria
 when the Ana placed the glasses on.the table the Maria
 também pôs ~~os óculos na mesa~~.
 too put the glasses on.the table
- (8) Ela tirou o anel do dedo e guardou no cofre.
 she took.off the ring from.the finger and put in.the safe
 ‘She took off the ring from her finger and put it in the safe.’

Since V-stranding VP-ellipsis only occurs in languages where the verb raises out of the VP in overt syntax (Goldberg 2005), the presence of V-stranding VP-ellipsis in a language can be used as a diagnostic for V-movement out of the VP. In other words, if a language allows V-stranding VP-ellipsis then this language has V movement out of VP.

It is worth noting that this implication does not hold backwards. If a language has V-movement, it does not follow that it must have V-stranding VP-ellipsis—since the language might lack VP-ellipsis of any sort. Most Romance languages have V-raising but no VP-ellipsis, either the AUX-stranding or the V-stranding variety. (For an insightful account of the availability of VP ellipsis in Romance languages, see Costa et al. 2012.) Consider the case of Spanish. The positions of floating quantifiers (cf. (9a)) and adverbs (cf. (9b)) show that Spanish is a V-raising language, but it does not have V-stranding VP-ellipsis (cf. (10a)) or AUX-stranding VP-ellipsis (cf. (10b)) (Zagona 1988 and much subsequent work).

- (9) a. Los estudiantes_i aprobaron_j [_{vP} [_{DP} *todos t_i*] *t_j* el examen].
 the students passed all the exam
 ‘The students all passed the exam.’
- b. Juan trabaja [_{vP} seguido aquí *t*].
 Juan works often here
 ‘Juan often works here.’
- (10) a. *Juan compró un libro para María y Pedro también compró.
 Juan bought a book for María and Pedro also bought
 ‘Juan bought a book for María and Pedro did, too.’
- b. *Juan había leído el libro y Pedro también había.
 Juan had read the book and Pedro also had
 ‘Juan had read the book and Pedro also had.’

Lack of V-stranding VP-ellipsis in Spanish therefore cannot be used as evidence that there is no V-raising out of the VP, since the language has no VP-ellipsis to begin with. The availability of VP-ellipsis must also be a prerequisite for V-stranding VP-ellipsis to be possible. On the basis of these considerations we propose the following condition on the presence of V-stranding VP-ellipsis, formulated for any X⁰ head, as follows:

- (11) A language has X-stranding XP ellipsis iff:
 (i) the language has XP-ellipsis and
 (ii) the language has X-raising out of XP.

Note that (11) only makes a prediction as far as head movement *out of* XP is concerned, and has no predictive power when it comes to head movement *inside* the XP: while an XP-ellipsis language lacking X-stranding XP-ellipsis cannot have X-movement out of XP, X-movement within XP is entirely compatible with (11) (see Sect. 4.1). For example, (11) does not rule out that languages with VP-ellipsis but no V-stranding VP-ellipsis have V-movement inside the domain that corresponds to the category deleted in VP ellipsis in the language.³

We assume that the X-raising referred to in (11) is head movement that takes place in the syntax (Embick and Noyer 2001 and all the literature before Chomsky 2001). Note, however, that the point we are making remains the same if this particular premise happens to be false and head movement turns out to be PF-movement (cf. Schoorlemmer and Temmerman 2012). For our argument to hold the important thing is that the term *head movement* refers to the same kind of operation when applied both to the verbal and the nominal domains.

We believe furthermore that (11) applies both to lexical and functional categories. Although in this paper we only deal with cases in which X is lexical (V in this section and N in the next one), there are instances of X-stranding XP-ellipsis where X is a functional category. The most well-known cases of such an ellipsis are found in languages like Finnish, which under some conditions can strand T in C in con-

³Consider for example the case of English, which has VP-ellipsis, but no V-stranding VP-ellipsis at least with main verbs (thanks to an anonymous reviewer for raising this point). VP-ellipsis elides a *vP* category (Merchant 2013), where *v* refers to the category that determines the transitivity (v_{trans} , $v_{intrans}$), unergativity (v_{erg}), or unaccusativity (v_{unacc}) of the predicate. Arguments for *vP* deletion come from certain observations about identity: mismatches in the content of *v* are not licensed under ellipsis (ib), while mismatches in voice are allowed (ii).

- (i) a. This can freeze. Please freeze this. (Merchant 2013:96)
 b. This can freeze. *Please do. (Johnson 2004:7 *apud* Merchant 2013:97)
- (ii) a. The janitor should remove the trash whenever it is parent that it needs to be ~~removed~~.
 b. The system can be used by anyone who wants to ~~use it~~. (Merchant 2013: 78–79)

Under the assumption that VP-ellipsis in English is *vP*-ellipsis, the ungrammaticality of (ib) is due to a violation of the identity condition on ellipsis (i.e., $v_{trans} \neq v_{intrans}$). Due to the same reasoning, VoiceP, the category selecting *vP* on the other hand is outside the ellipsis site, as voice mismatches in (ii) show.

- (iv) [_{TP} [_{VoiceP} Voice ~~VP~~]]] *configuration of VP ellipsis in English*

For English then the correlation in (11) predicts that the language should lack head raising out of *vP* (to Voice or T) but allowing for the possibility that there is head movement internal to *vP*, dovetailing with proposals such as Pesetsky (1989) or Koizumi (1995), the latter providing most robust empirical evidence that English has V-to-AgrO-to-*v* movement. (*v* is termed *upper V* in Koizumi's work, see Travis 1991 for a proposal that AgrO is an aspectual category, and López 2012 for a recent overview.)

- (v) [_{vP} [_v [_{AgrO} V + AgrO] *v*] [_{AGR_{OP}} *t* ...]]] [adapted from Koizumi 1995:102]

On the plausible assumption that *v* in (v) refers to Merchant's *v* that determines the predicate's argument structure, head movement in (v) is internal to *vP*, the category which undergoes deletion in VP-ellipsis contexts. As this movement is restricted to the *vP* domain, it is fully compatible with (11). What would be incompatible with (11), at least in its present form, is head movement taking place to Voice or T. We are not aware of any evidence for postulating verb movement to Voice or T in English, however.

texts of V-to-T-to-C movement (Holmberg 2001). B's answer in the following polar question-answer pair thus instantiates a case of T-stranding TP-ellipsis:

- (12) A: Onko Liisa kotona?
is-Q Liisa at.home
'Is Liisa at home?'
- B: On.
is
'She is.'

A possible counterexample for our biconditional in (11) is matrix sluicing in English. Although English does have T-to-C in matrix wh-questions, in matrix sluicing configurations movement does not seem to take place. As illustrated in (13), the finite auxiliary does not appear in the C head in the context of matrix sluicing.

- (13) A: Max has invited someone.
B: Who (*has)?
- (14) A: Max has invited someone.
B: [_{CP} Who [_{C'} C^o [_{TP} Max [_{T'} has invited]]]]
-

Research on ellipsis puts this down to the so-called *bleeding* effect of ellipsis (see Lasnik 1999; Merchant 2001; Boeckx and Stjepanović 2001), which in this particular case blocks the phonetic realization of C. The same effect shows up in embedded sluicing in Germanic and Slavic languages, where the otherwise possible complementizers can never be overt (cf. the Slovenian (15)). This is the so-called *sluicing*-COMP generalization from Merchant (2001), the status of which is still ill-understood.

- (15) a. Sprašujm se, koga ali Špela ljubi.
ask.I REFL whom C[+WH] Spela loves
'I wonder who Spela loves.'
- b. Špela ljubi nekoga, a nisem vprašal, koga (*ali).
Spela loves someone but NEG.AUX.1SG asked who C[+WH]
'Spela loves someone, but I didn't ask who.'

Thus, apparent lack of T-to-C in matrix sluicing is not a counterexample to (11), but is due to independent factors ruling out the realization of the C node. Indeed, we cannot ascertain that T-to-C has failed to apply in cases like (13B); it could perfectly be the case that movement from T to C has taken place in the syntax but the phonetic effects of such a movement are bled because of some PF factor. Therefore, exceptions to (11) can be attested for different reasons, such as some PF-mechanism that prevents the phonetic realization of a particular functional node (C in this case). We are not concerned with the nature of this mechanism.

After this important ramification of our condition (11), we move on to demonstrate our main claim, namely that the conditions on the availability of X-stranding XP-ellipsis in (11) can be used as a *diagnostic tool* for the *absence* of X-raising in a given

language. If a language has XP-ellipsis, but no X-stranding XP-ellipsis, it cannot have X-raising out of XP. In the next section, we argue that this is exactly the situation emerging in the Spanish nominal domain, where N-stranding NP-ellipsis does not exist, even though NP-ellipsis is a productive phenomenon.

3 Diagnosing N-raising in Spanish: the core argument

In this section, we lay out our core argument, and we do so on the basis of assuming the most basic (and thus uncontroversial) structure of Spanish DPs. In the next section, we turn to the question how a more complex DP structure would affect our main claim.

We assume that number features are encoded in an independent functional head Num above the NP (Ritter 1991 and much subsequent work) and gender features are encoded in the NP domain (Saab 2010):

(16) [DP D [NumP Num [NP N_[gender]]]]

The NP can contain AP and PP complements of the noun (for a precise position of these, see Ticio 2003).

Turning to ellipsis in the nominal domain, Spanish has productive NP ellipsis (Brucart 1987; Ticio 2003; Saab 2010; Eguren 2010, among many others). Consider the examples in (17) and (18):

- (17) a. Juan habló con tres estudiantes de física y yo hablé
 Juan talked with three students of physics and I talked
 con dos [~~NP estudiantes de física~~].
 with two students of physics
 ‘Juan talked to three students of physics and I talked to two.’
- b. Tu descripción de Holanda fue más clara que la mía
 your description of Holland was more clear than the mine
 [~~NP descripción de Holanda~~].
 description of Holland
 ‘Your description of Holland was clearer than mine.’
- (18) a. Juan leyó tres novelas policiales, pero yo leí solo dos
 Juan read three novels police.ADJ but I read only two
 [~~NP novelas policiales~~].
 novels police.ADJ
 ‘Juan read three detective novels and I only read two.’
- b. Juan vio un tren eléctrico y yo también vi uno
 Juan saw a train electric and I also saw one
 [~~NP tren eléctrico~~].
 train electric
 ‘Juan saw an electric train and I also saw one.’

In all these examples, the noun and its argument/modifier is missing. The elided constituent corresponds to an NP, and nothing bigger. Most importantly, NumP is never

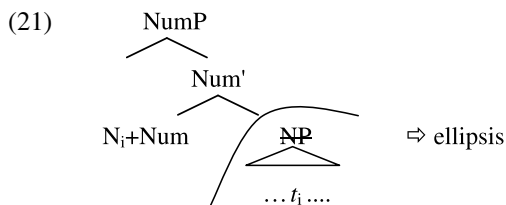
elided in NP-ellipsis, as is evidenced by the fact that the elided and the antecedent nominal do not show number identity effects:

- (19) a. Juan *prefiere* a su perro más que a los
 Juan prefers *a* his dog.MASC.SG more than *a* the.MASC.PL
~~perros~~ de Pedro.
 dog.MASC.PL of Pedro
 ‘Juan prefers his dog more than Peter’s dogs.’
- b. Juan *compró* dos libros de Borges y María *compró* uno ~~libro~~
 Juan bought two books of Borges and María bought one book
 de Cortázar.
 of Cortázar
 ‘Juan bought two books by Borges and María bought one book by Cortázar.’

This contrasts with gender, which must be identical across the antecedent and the elliptical noun phrase—this is because gender is specified on N or distributed within the NP domain (see Depiante and Masullo 2001, *inter alia*):

- (20) a. *Juan *prefiere* a su perro más que a la
 Juan prefers *a* his dog.MASC.SG more than *a* the.FEM.SG
~~perra~~ de Pedro.
 dog.FEM.SG of Pedro
 ‘Juan prefers his male dog more than Pedro’s female dog.’
- b. *Juan *prefiere* a su perra más que al
 Juan prefers *a* his dog.FEM.SG more than *a*.the.MASC.SG
~~perro~~ de Pedro.
 dog.MASC.SG of Pedro
 ‘Juan prefers his female dog more than Pedro’s male dog.’

Having seen that Spanish allows for NP-ellipsis, one can proceed to use the diagnostic force of (11) to test whether the nominal head raises inside the DP. We predict that if the language has N-raising out of the NP, like N-to-Num movement as suggested in Bosque and Picallo (1996), it should exhibit N-stranding NP-ellipsis as well. Since, if the nominal leaves the NP and adjoins to Num, the application of NP-ellipsis does not eliminate the noun when eliminating the NP node:



Cases in which NP ellipsis leaves the noun stranded, however, cannot be found. As shown in (22) and (23), it is impossible to interpret the italicized nominal phrases as phrases in which something is elliptical or ‘missing’ in Spanish:

- (22) a. Juan habló con tres estudiantes de física y yo hablé
 Juan talked with three students of physics and I talked
 con *dos estudiantes*.
 with two students
 (i) ‘Juan talked to three students of physics and I talked to two students
 (of some sort).’
 (ii) # ‘Juan talked to three students of physics and I talked to two stu-
 dents of physics.’
- b. Tu descripción de Holanda fue más clara que *mi descripción*.
 your description of Holland was more clear than my description
 (i) ‘Your description of Holland was clearer than my description (of an
 unspecified theme).’
 (ii) # ‘Your description of Holland was clearer than my description of
 Holland.’
- (23) a. Juan leyó tres novelas policiales, pero yo leí solo *dos novelas*.
 Juan read three novels police.ADJ but I read only two novels
 (i) ‘Juan read three detective novels and I only read two novels (of some
 sort).’
 (ii) # ‘Juan read three detective novels and I only read two detective
 novels.’
- b. Juan vio un tren eléctrico y yo también vi *un tren*.
 Juan saw a train electric and I also saw a train
 (i) ‘Juan saw an electric train and I also saw a train (of some sort).’
 (ii) # ‘Juan saw an electric train and I also saw an electric train.’

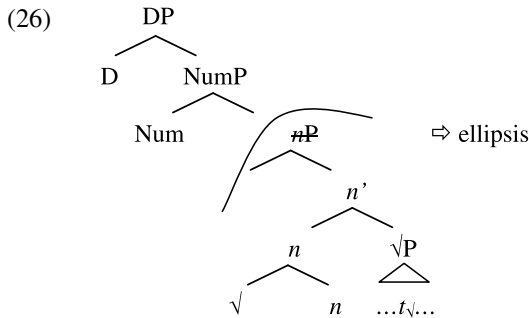
Unlike an example like (6a), where the elliptical VP following the verb *deu* ‘gave’ is interpreted as *deu um livro pra Maria* ‘gave a book to Mary’ (i.e., the verb plus all its complements), in (22a), for instance, the nominal *dos estudiantes* does not have any elliptical material following it: *dos estudiantes* does not denote students of physics, but refers to students in general, of any discipline. The same holds for (22b), where *mi descripción* is unspecified with respect to its object. As for relational adjectives, exactly the same situation obtains: the noun phrase *dos novelas* in (23a) does not denote crime novels, and *un tren* in (23b) does not refer to an electric train. What these examples show is that the specific interpretation (interpretation (ii)) is systematically missing in them. (22) and (23) thus do not contain any NP ellipsis: there is no elliptical material following the noun. In other words, N-stranding NP-ellipsis does not exist in Spanish. By (11), this means that Spanish does not have N-raising out of the NP. If it did have that, NP ellipsis would be predicted to exist in cases when the N has left the NP behind, contrary to facts.⁴

⁴The situation is the same in Portuguese. Just like in Spanish, examples of the following sort do not require an interpretation in which the elliptical noun phrase is construed as containing a modifier (João Costa p.c.):

- (i) O João falou com três estudantes de física e eu falei com dois estudantes.
 the João talked with three students of physics and I talked with two students
 ‘João talked to three students of physics, and I talked to two students (of some sort).’

NumP, as Num is never affected by nominal ellipsis (cf. (19)). As for strict gender-identity effects in this model (cf. (20)), these can be derived either assuming that gender is a Root property or an n property. Under the latter alternative, gender is not a lexical primitive but a morphological property of a designated functional head (see Saab 2010 for extensive discussion on both analytical possibilities). In any case, the fact that gender has to be identical in the antecedent and elided category follows as a violation of the identity condition.

Now, what does our condition in (11) predict about the possibility of $n + \surd$ raising? Since the biconditional in (11) is only concerned with the possibility of head movement outside the XP (i.e. the elided phrase), but not *inside* it, it says nothing about the possibility of \surd -to- n raising inside the n P (see the same point about the verbal domain in Footnote 2). It is fully compatible with the scenario in which there is internal head movement in the NP domain. What it does affect is $n + \surd$ movement *outside* the n P, as we illustrate with the abstract tree in (26). The absence of n -stranding n P-ellipsis argues for the fact that the complex $n + \surd$ does not escape the lexical domain, the n P.



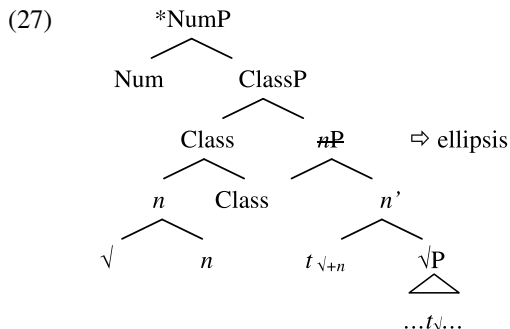
Putting this in the terms of Grohmann's (2000) theory of prolific domains, which Ticio (2003) applies to Spanish DPs, we can conclude that what the absence of n P stranding n P-ellipsis shows is that the nominal head never reaches the φ -domain in the DP field. Head movement inside the θ -domain is compatible with the basic facts, but is not forced by (11).⁵

4.2 Working with a complex NumP layer

The second option we consider is the possibility that the inflectional layer is complex and contains more than one projection. Suppose, for instance, that NumP takes as complement a GenP (Picallo 1991) or, alternatively, a WordMarkerP (Bernstein

⁵Ticio (2003) also adopts a double-layered structure for the θ -domain, where n conveys the thematic role associated to the external argument (when relevant) and N is in charge of internal thematic roles. Although related to a certain extent, this double layer should not be confused with the structure in (25), where the whole $n + \surd$ seems to correspond to Ticio's N head. As for the size of nominal ellipsis, Ticio considers that it only affects her NP domain and excludes her n P. This hypothesis does not confront with our main argument here, although see Saab (2009) for extensive discussion on the different predictions that such an assumption could have in connection with word ordering within DPs.

1993), a category redefined as a ClassifierP by Alexiadou and Gengel (2012). Indeed Alexiadou and Gengel propose that NP-ellipsis excludes ClassP as part of the elided gap. For the same reason that prevents *n* to Num movement, it is easy to see that *n* to Class cannot take place, either: if this were the case, N-stranding NP-ellipsis would be wrongly predicted as a grammatical option:



A ClassP-ellipsis analysis, of course, would be consistent with the data although inconsistent with Alexiadou and Gengel’s assumption that ClassP must be outside the elliptical gap. At the same time, such a reformulation would be indistinguishable from the *nP*-ellipsis analysis, as far as we can tell.

5 Refuting alternative analyses for the lack of N-stranding NPE in Spanish

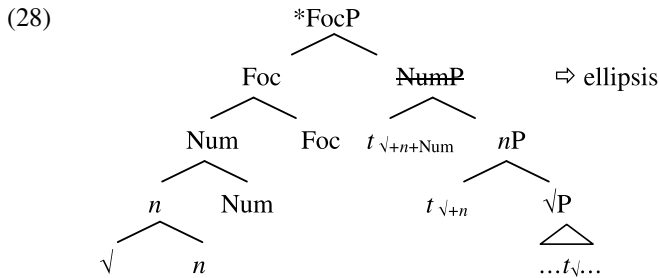
In this section we refute three alternative explanations for the lack of N-stranding NP-ellipsis, explanations which, if they were correct would invalidate our claim that Spanish lacks N-raising out of NPs. First, we explore and reject an alternative explanation for the lack of N-stranding NP-ellipsis that would posit that N-raising takes place to a position higher than Num, but N-stranding NP-ellipsis would be ruled out as *unlicensed* (see Sect. 5.1). Second, we reject an explanation for lack of N-stranding ellipsis in terms of MaxElide, according to which absence of N-stranding NP-ellipsis does not exist because there is a bigger elliptical constituent that blocks its application (see Sect. 5.2). Third, we discard the possibility that N-raising to a higher head is bled whenever NP-ellipsis applies (see Sect. 5.3).

5.1 Refuting an alternative analysis in terms of licensing

Following Saito and Murasugi’s (1990) generalization according to which only agreeing heads license ellipsis of their complements (see also Lobeck 1995), N-stranding NP-ellipsis in (22) and (23) would fail, not because of absence of N movement out of the NP, but because N targets a non-agreeing head. We show that this alternative account is inadequate.

Concretely, if this explanation were on the right track, it would be the case that N-movement targets a non-agreeing head higher than Num in the functional structure of DPs. Let us call that non-agreeing head Foc(us) (following Corver and van Koppen

2009) and illustrate this option in the following diagram:

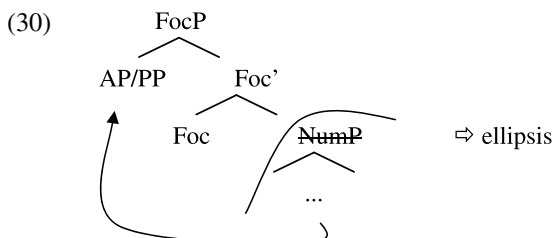


In this configuration, absence of N-stranding NP-ellipsis would follow from the inability of the non-agreeing head to license deletion of its complement.

The first problem with this approach is that there is empirical evidence that non-agreeing heads such as Foc *do* license ellipsis of their complements. The examples in (29) taken from Eguren (2010) show that Spanish allows ellipsis with bare adjectives or PPs as the only remnants of the elliptical gap.

- (29)
- a. Antes bebía cerveza alemana y ahora solo bebo__ española.
before drank.I beer German and now only drink Spanish
'I used to drink German beer before and I only drink Spanish beer now.'
 - b. No había leído cuentos de Cortázar, pero sí había leído__ de Borges.
no had.I read stories of C. but yes had read of B.
'She had not read stories by Cortázar, but she HAD read stories by Borges'.
 - c. Al principio llegaron estudiantes de físicas y luego llegaron__
to.the beginning came students of physics and then came
de químicas.
of chemistry
'There first came students of physics and then there came students of chemistry.'
- (Eguren 2010:437)

Examples of this type, in particular the PP remnant cases, are taken by Eguren as a definitive indication that inflection plays no role in the licensing of ellipsis phenomena. Note furthermore that the examples in (29) are instances of NumP-ellipsis, where the AP or PP remnant moves from the elliptical site to FocP in the ω -domain (i.e., the part of the derivation where discourse factors are encoded; see Ticio 2003; Saab 2009 and Eguren 2010 for extensive discussion), as shown in (30):



Clear evidence that NumP-ellipsis takes place comes from number mismatches. Thus, whereas Num-stranding NP-ellipsis allows for number variation between the antecedent and the elliptical gap (cf. (19)), this is never the case with NumP-ellipsis. Compare in this respect (31a) from Eguren (2010:437) with (31b). As this contrast suggests NumP-ellipsis is only possible under strict number identity.

- (31) a. Es mucho más fácil cortar la carne con cuchillos buenos que con
is much more easy to.cut the meat with knives good that with
~~cuchillos~~ malos.
~~knives~~ bad.PL
'It is much easier to cut the meat with good knives than with bad ones.'
- b. *? Es mucho más fácil cortar la carne con un cuchillo bueno
is much more easy to.cut the meat with a knife good.SG
que con ~~cuchillos~~ malos.
that with ~~knives~~ bad.PL
'It is much easier to cut the meat with a good knife than with bad ones.'

The same effect is found when the elliptical gap is modified by a PP remnant. In this case, notice also the contrast between NP-ellipsis (32a) and NumP-ellipsis (32b):

- (32) a. Juan me dio un libro de Borges aunque yo quería algunos/varios
J. me gave a book of B. although I wanted some/several
~~libros~~ de Cortázar.
~~books~~ of C.
'Juan gave me a book by Borges although I wanted some/several
books by Cortázar.'
- b. *? Juan me dio un libro de Borges aunque yo quería ~~libros~~
J. me gave a book of B. although I wanted ~~books~~
de Cortázar.
of C.
'Juan gave me a book by Borges although I wanted books by Cortázar.'

Suppose, however, that what licenses ellipsis in (29) is indeed an *abstract* spec-head agreement relation between the AP or PP remnant and the Foc head in strict consonance with Saito and Murasugi's original claim that spec-head agreement is the actual licensing mechanism in ellipsis (cf. the tree in (30)). One could conclude then that absence of N-stranding NP-ellipsis (strictly speaking now, Num-stranded NumP-ellipsis) would follow from the absence of spec-head agreement in (28).

The problem with this scenario, which constitutes the second problem for the alternative approach we are considering in this section, is that head movement to the ω -domain is unattested in Spanish. Consider (33) first, where the adjective *españolas* 'Spanish' moves to FocP and licenses ellipsis of the complex *comedias musicales* 'musical comedies':

- (33) Estuve viendo comedias musicales francesas, aunque prefiero
 was.I watching comedies musical.PL French.PL although prefer.I
 [_{FocP} españolas [_{NUMP} comedias musicales t]].
 Spanish.PL comedies musical.PL
 ‘I was watching French musical comedies, although I prefer Spanish ones.’

Movement from N to Foc resulting in an A + N ordering (i.e., *españolas comedias*) is ungrammatical in Spanish, even when a spec-head agreement relation between the AP and the Foc head is obtained:

- (34) *Estuve viendo comedias musicales francesas, aunque prefiero
 was.I watching comedies musical.PL French.PL although prefer.I
 [_{FocP} españolas comedias + Foc [_{NUMP} ~~*t*~~ musicales t_{AP}]].
 Spanish.PL comedies musical.PL

N-movement to a putative X head projection above Foc is also impossible under the relevant reading such that I prefer Spanish musical comedies, but is, of course, perfectly grammatical under the non-elliptical reading, according to which I prefer Spanish comedies regardless of their type (musical ones, dramatic ones, romantic ones and so on):

- (35) *Estuve viendo comedias musicales francesas, aunque prefiero
 was.I watching comedies musical.PL French.PL although prefer.I
 [_{XP} comedias + X [_{FocP} españolas [_{NUMP} ~~*t*~~ musicales t_{AP}]]].
 comedies Spanish.PL musical.PL

This shows that an approach that attributes the lack of N-stranding NP-ellipsis to a licensing problem cannot be on the right track, and we are left without an alternative explanation for the lack of this type of ellipsis. We believe this shows that N movement outside NP either to the φ - or to the ω -domain is not attested in Spanish.

5.2 Refuting an alternative in terms MaxElide

It is important to note that the absence of N-stranding NP-ellipsis in Spanish cannot be due to an effect of MaxElide (see Hartman 2011 for discussion and references), requiring that ellipsis *must* delete the maximally recoverable constituent available to it, i.e., the fact that the grammaticality of (17a), repeated as (36), where only the numeral survives the ellipsis, would block the derivation of (22a), repeated as (37), where both the numeral and the noun survives.

- (36) Juan habló con tres estudiantes de física y yo hablé con dos.
 Juan talked with three students of physics and I talked with two
 ‘Juan talked to three students of physics and I talked to two.’
- (37) Juan habló con tres estudiantes de física y yo hablé
 Juan talked with three students of physics and I talked
 con dos estudiantes.
 with two students
 (i) ‘Juan talked to three students of physics and I talked to two students (of some sort).’

- (ii) # ‘Juan talked to three students of physics and I talked to two students of physics.’

The reason why MaxElide cannot be responsible for ruling out (37) is because NP-ellipsis and V-stranding ellipsis are known for tolerating *non-maximal* deletion.

The fact that NP-ellipsis tolerates non-maximal deletion can be evidenced by the following Spanish data in (38) modeled after data in Eguren (2010), and the Dutch data in (39) from Corver and van Koppen (2009):

- (38) Juan leyó tres cuentos de Cortázar y yo también leí tres
 John read three stories of Cortázar and I also read three
 (de Cortázar).
 (of Cortázar)
 ‘John has read three stories by Cortázar and I have also read three (by Cortázar).’
- (39) Kijk, een bruine worm. En nog een (bruine).
 Look, a brown worm. And yet a brown
 ‘Look, a brown worm! And another (brown) one.’

In these examples, the bracketed remnants can undergo optional deletion, without a change in meaning (meaning to say that the sentence *without* the bracketed remnant can have the same meaning as that *with* it), exemplifying that MaxElide is not at work in the nominal domain.

MaxElide is clearly non-operative when it comes to blocking instances of V-stranding ellipsis, either. Consider the Brazilian Portuguese (6a) again, and its variant without the finite verb, the fully grammatical instance of TP-ellipsis in (40) (a case of stripping, Cyrino and Matos 2002), which is identical in meaning to (6a), repeated below as (41):

- (40) Eu dei um livro pra Maria e o Pedro também
 I gave.1SG a book to.the Maria and the Pedro also
 [TP ~~deu~~ — ~~um livro pra~~ — ~~Maria~~].
 gave.3SG a book to.the Maria
 ‘I gave a book to Maria, and Pedro did, too.’
- (41) Eu dei um livro pra Maria e o Pedro também deu;
 I gave.1SG a book to.the Maria and the Pedro also gave.3SG
 [vP ~~†~~ — ~~um livro pra~~ — ~~Maria~~].
 a book to.the Maria
 ‘I gave a book to Maria, and Pedro did, too.’

Clearly, the more maximal ellipsis strategy in (40) does *not* rule out V-stranding with the verb *deu* ‘gave’ overtly spelled out in (41), testifying that there is no competition between a more maximal and a less maximal ellipsis strategy. This, together with (38) and (39) above, fully invalidates any reasoning that would want to trace back the lack of elliptical readings in (22)/(23) to some effect of MaxElide.

5.3 Refuting an alternative in terms of bleeding effects under ellipsis

The last option we consider is whether the absence of N-stranding NP-ellipsis can be due to a bleeding effect of ellipsis on the movement of N to a higher head (a possibility raised by an anonymous reviewer). In Sect. 2, we mentioned that such a bleeding is attested in the sentential domain, where sluicing bleeds the phonetic realization of the C node (i.e., the *sluicing-COMP* generalization), blocking the visible effects of T-to-C movement in English.

Could the same reasoning be extended to account for the absence of N-stranding NP-ellipsis in (22) and (23)? If this were the case, N would raise to Num in Spanish in all configurations except those of NP-ellipsis, where the phonetic effects of such a movement would be blocked by an independent factor. There are two options to explore when it comes to the blocking factor: (a) nominal ellipsis blocks the phonetic realization of Num or (b) nominal ellipsis blocks head movement.

The first option, option (a) rests on the assumption that the phonetic realization of Num is blocked in NP-ellipsis contexts:

$$(42) \quad [\text{DP } [\text{NumP } \cancel{\text{N+Num}}] \quad [\text{NP } \cancel{\text{N}}]]$$

This would be similar to the case of non-realization of the complementizer in the Slovenian (15) under sluicing. If this were really what underlies the Spanish data in (22) and (23), we would expect to find that nominal ellipsis blocks the realization of the Num node *cross-linguistically*, independently of N-raising, in a similar fashion to the sluicing-COMP generalization. This is because the latter also operates cross-linguistically, independently of the means by which C is lexicalized. The phonetic realization of Num in this scenario would be missing under NP ellipsis of any kind.

However, what we find is exactly the opposite pattern: the Num node is realized under NP ellipsis in many languages. Agglutinative languages with productive NP-ellipsis are good cases to see this. We illustrate the facts for Hungarian and Persian. Consider first Hungarian, which lacks N-raising and where NPs can be elided under identity with a suitable antecedent (see (Bartos 2000; Dékány 2011; Saab and Lipták, to appear). NP ellipsis, however, never eliminates the morphological spell-out of the NumP node. When the noun is elided, number morphology (as well as case when overt) is obligatorily spelled out on the remnant of ellipsis.

- (43) Ezek régi kis ház-ak. Azok új nagy*(-ok).
 these old small house-PL those new big-PL
 ‘These are old small houses. Those are new big ones.’

Persian shows the same phenomenon. In non-elliptical noun phrases, plural morphology is spelled out on the noun. In elliptical noun phrases, the plural morphology necessarily survives and gets spelled out on a remnant (see Ghaniabadi 2010 for details, EZ corresponds to the *ezafe* morpheme):

- (44) a. behtar-in dânešju-hâ-ye javân-e dânešgâh
 best-SUP student-PL-EZ young-EZ university
 ‘the best young students of the university’

- b. behtar-in javân-hâ-ye dânešgâh
 best-SUP young-PL-EZ university
 ‘the best young ones of the university’

Both Hungarian and Persian show that nominal ellipsis does not block the overt realization of the Num node. Thus, (43)/(44) are unlike the Slovenian (15), where the realization of the C node is blocked under sluicing, independently of head raising. In sum, we find no empirical basis for a putative correlation between ellipsis and the lack of phonetic realization of the Num head.

We are thus left with option (b), according to which ellipsis has a bleeding effect on N-raising. We believe there are theory-internal considerations that do not favor such an account. The reason is that allowing for head movement to be bled in Spanish NPE would raise the question why head movement can be bled in this case but not in other cases, like in Portuguese or Hebrew V-raising. To differentiate the affected and non-affected instances of head movement would force us to introduce a non-desirable distinction into the typology of movement.

For example, we could implement the distinction in the following way. Assume that head movement can take place across domains, i.e., both in the syntax and in PF. Assume, furthermore, that ellipsis is PF-deletion (siding with many recent works on ellipsis). In this case a possible implementation of the fact that some types of head movement are and some are not affected by ellipsis would be to say that syntactic head movement is not bled by ellipsis, but head movement in PF is. (Note in passing that ellipsis interferes with some morphological operations such as affixation operative in the post-syntactic component, Saab 2009; Saab and Lipták, to appear.) This would mean that our (11) should actually read as (45):

- (45) A language has X-stranding XP ellipsis iff:
 (i) the language has XP ellipsis and
 (ii) the language has *syntactic* X-raising out of XP.

V-to-T in Portuguese in this view would have to be syntactic head movement, while Spanish N-raising to Num an instance of PF-movement.

However, this conjecture would bring more problems than solutions, we believe. First, the approach under consideration duplicates head movement across domains without any independent evidence.⁶ In other words, the difference between Spanish and Portuguese according to (45) would be captured only by stipulation. Second, while it is true that ellipsis blocks morphological operations, it seems that this is only restricted to descending operations and not to raising ones (see Saab 2009 for

⁶As noticed in Sect. 2, we remain neutral as far as the component of the grammar where head movement applies and assume that it is syntactic mainly for expository reasons. However, it is evident that duplicating head movement across domains would lead us to different predictions both on the interpretative and the formal aspects of head movement. For instance, this approach would contradict the conclusion about V-stranding VP-ellipsis being PF-movement, rather than syntactic movement, drawn by Schoorlemmer and Temmerman (2012) on the basis of the so-called identity condition on V-stranding ellipsis. Even though the verb raises out of the VP in V-stranding VP-ellipsis, and thus is not part of the ellipsis site, it must always be lexically identical to its antecedent (see for details Goldberg 2005); in other words, it must be e-given (as defined in Merchant 2001). Schoorlemmer and Temmerman (2012) argue that this might follow from the fact that verbal head only raises in PF, that is, it is part of the ellipsis site at LF.

discussion).⁷ Third, as noticed in the introduction, our argument against N-raising out of NPs nicely converges with other evidence pointing towards the lack of such an operation in the nominal domain, at least for the Romance languages well-studied in this respect. Therefore, given that the alternative suggested in this subsection is theoretically more costly than the conclusion that Spanish lacks N-raising out of NPs, the burden of the proof is on the proponents of the N-raising analysis.

6 Recapitulation and consequences for other languages

In this paper we have used X-stranding XP-ellipsis phenomena as a novel tool to diagnose head movement out of the domain of XP, and applied this test to N-movement in the nominal domain, in one of the languages that has been most prone to being analyzed as an N-raising language: Spanish. We have shown that Spanish has NP-ellipsis, but does not have N-stranding NP-ellipsis, indicating that N does not raise out of the NP in this language. As far as we could ascertain, other Romance languages share the same property (see Footnote 4 for Portuguese). The same holds, according to our informants, for Arabic, a language for which N-raising was also proposed at some point (Fassi-Fehri 1993), and for Polish, for which N-raising was proposed to apply across classificatory adjectives (Rutowski 2008). Thus the same argument against deriving word order variation in the nominal domain via head movement can also be made for these languages.

It is vital to emphasize that in this paper we are not making a claim regarding the universal lack of N-movement out of NPs in all languages. While we are fairly confident about the negative results of our test for Romance languages, we do not rule out that there are languages that show N-movement out of NP and can give rise to N-stranding NP-ellipsis.⁸

⁷More concretely, what the empirical evidence shows is that a morphological operation cannot affect an elliptical target. This is formulated by Saab and Lipták (to appear) in the following way:

(i) *Ellipsis-Morphology Generalization*

For every morphological operation MO that affects the domain of X, where X contains the target of MO, MO cannot apply in X if X is subject to ellipsis.

The effect of this can be seen clearly in English VP-ellipsis where lowering from T to *v* is blocked. When the target of a given morphological operation is instead outside the elliptical gap, there is no bleeding effect under ellipsis. According to Saab (2009) gender agreement on determiners or other modifiers outside an elliptical NP is never blocked:

- (ii) la casa de Juan y la ~~casa~~ de Pedro
 det.FEM house.FEM of Juan and the.FEM house.FEM of Pedro

Assuming Concord as a morphological operation (Halle and Marantz 1993), this is correctly predicted by the generalization in (i). The same conclusion has to be reached by the proponents of phonological head movement in languages like Hebrew or Portuguese (see Footnote 5).

⁸Languages where we expect to find evidence for N-raising NP ellipsis include languages with long N-raising, exhibiting N-Dem-Num-Adj word order in the nominal domain (Greenberg 1963; Cinque 2005). For these languages the correlation in (11) is expected to show positive results in case they also exhibit NP ellipsis. Due to the rarity of these tongues (Kikuyu, Turkana, Noni, Nkore Kiga, Abu', Bai and Moro,

One instance of N-raising NP ellipsis might actually be attested in English (on ordinary NP-ellipsis in English, see Lobeck 1995). The data in question involve indefinite pronouns followed by adjectives, which were in works like Abney (1987) and Kishimoto (2000) argued to have N-raising to a higher position (but see Larson and Marušič 2004 and Leu 2005 against an N-raising analysis). For Abney, the indefinite pronoun as a whole undergoes N-to-D; for Kishimoto, only the non-quantified nominal part *thing* or *one* undergoes N-to-Num:

- (46) something delicious, anyone suitable
- a. Abney: [DP something_i [NP delicious [N' t_i]]]
 - b. Kishimoto: [DP some [NumP thing_i [NP delicious [N' t_i]]]]

Under both analyses, the nominal (*something* or *thing*) moves over the adjective.

When constructing examples with these kinds of indefinite pronouns, we found that elliptical readings are available for 4 out of our 5 informants of English. These speakers can assign two possible readings to the second sentence: one where the indefinite pronoun is unmodified (interpretation (i)), and one in which it is modified by the adjective in the antecedent sentence (interpretation (ii)). Recall that this latter interpretation was unavailable in the Spanish examples in (22) and (23).

- (47) a. To fill this job opening, Bill is looking for someone experienced. I am also looking for someone.
 (i) I am looking for someone, irrespective of his experience.
 (ii) I am looking for someone experienced.
- b. To make this flat, you need to put something heavy on this side. I'll place something on that side, too.
 (i) I'll place something on that side, irrespective of weight.
 (ii) I'll place something heavy on that side.

We believe reading (ii) in these examples is what results of NP ellipsis applying to the noun phrase, stranding the indefinite in a higher head position, an instance of N-raising NP ellipsis, if these indefinites indeed undergo N-raising like proposed in the Abney-style analysis:

- (48) ... [DP someone_i [~~NP experienced~~ [~~t_i~~]]]

Interpretation (i) on the other hand results from a parse in which the noun phrase corresponds to an unmodified indefinite.⁹

That interpretation (ii) is not due to the content of the adjective being highly accessible in the context can be shown by slightly altered versions of the examples in (47),

according to Cinque 2005), we could not ascertain whether it is indeed the case that long N-movement languages show N-stranding ellipsis. We nevertheless thank an editor of *NLLT* for raising this point.

⁹Our speakers report that interpretation (i) is favoured if there is heavy stress on the indefinite:

- (i) It's cold out there, yet you haven't put on anything warm. Bill too hasn't put on ANYthing.

Heavy stress in this case steers the parser towards a simple NP parse where the indefinite is understood to mean *anything whatsoever* or *anything at all*.

which differ only to the extent that instead of the N-A order they make use of the A-N order (and consequently contain a lexical noun). The following utterances do not allow for a reading in which the nominal *a man*, *a thing* in the second sentence can be constructed with the specific reading containing an adjective. Only the non-modified reading is available (reading (i)).

- (49) a. To fill this job opening, Bill is looking for an experienced man. I am also looking for a man.
 (i) I am looking for a man, irrespective of his experience.
 (ii) # I am looking for an experienced man.
- b. To make this flat, you need to put a heavy thing on this side. I'll place a thing on that side, too.
 (i) I'll place a thing on that side, irrespective of weight.
 (ii) # I'll place a heavy thing on that side.

This difference between the set of examples in (47) and those in (49) shows that the relevant interpretation corresponding to the elliptical reading in (ii) is not due to some pragmatic factor in (47).¹⁰ Neither can it be due to semantic considerations, as the interpretation of the adjectives is restrictive in both types of examples. We conclude that the difference is linked to, and ultimately explained by, a *syntactic* difference in the configurations that these nominals represent: the elliptical reading is only allowed if the adjective is captured in a phrase that can be deleted to the exclusion of the noun. Such a configuration is only available in (47a, b) and thus exemplifies N-raising NP-ellipsis, in case the movement of the indefinite noun can be argued to proceed via head movement as argued by Abney (1987) and Kishimoto (2000). Our test offered in (11) thus gives positive results for the English data in (47).

And this result in turn strengthens the validity of the condition in (11) and its diagnostic potential across various languages. Needless to say, the application of the test

¹⁰Further indication that the restricted interpretation in (47a, b) is not due to pragmatic or semantic factors comes from the observation that languages differ with respect to the availability of this interpretation in indefinite noun phrases with postnominal modifiers. Spanish equivalents of (47) for example, do not allow for the relevant elliptical interpretation (see ib/iib):

- (i) Para este trabajo, Juan está buscando a alguien experimentado.
 for this job J. is looking-for *a* someone experienced
 Yo también estoy buscando a alguien.
 I also am looking-for *a* someone
 (a) I am looking for someone, irrespective of his experience.
 (b) # I am looking for someone experienced.
- (ii) Para aplanar esto, necesitas poner algo pesado de este lado.
 for flatten this need.you to.put something heavy of this side
 Yo también voy a poner algo de ese lado.
 I also go to put something of that side
 (a) I'll place something on that side, irrespective of weight.
 (b) #I'll place something heavy on that side.

If the restricted interpretation were licensed by pragmatic factors, it should be universally available across languages.

offered in (11) for individual languages should be constructed in a case-by-case fashion on the basis of the particular properties of each language, with special attention to possible independent factors and alternative analyses. We believe that for the case of Spanish, and other Romance languages, the diagnostic force of (11) has been proven essentially correct. It is our hope that future research on this topic provides new empirical and theoretical insight into our understanding of the interaction between head movement and the geometry of nominal constituents.

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References

- Abney, Steve. 1987. The English noun phrase in its sentential aspect. Dissertation. Cambridge: MIT.
- Alexiadou, Artemis. 2001a. *Functional structure in nominals*. Amsterdam: John Benjamins.
- Alexiadou, Artemis. 2001b. Adjective syntax and noun raising: word order asymmetries in the DP as the result of adjective distribution. *Studia Linguistica* 55: 217–248.
- Alexiadou, Artemis, and Kirsten Gengel. 2012. NP ellipsis without focus movement/projections: the role of classifiers. In *Contrast and positions in information structure*, eds. Ivona Kučerová and Ad Neeleman, 177–205. Cambridge: Cambridge University Press.
- Bartos, Huba. 2000. Az inflexiós jelenségek szintaktikai háttere. In *Strukturális magyar nyelvtan 3. Morfológia*, ed. Ferenc Kiefer, 653–761. Budapest: Akadémiai Kiadó.
- Bernstein, Judy. 1991. DPs in French and Walloon: evidence for parametric variation in nominal head movement. *Probus* 3(2): 101–126.
- Bernstein, Judy. 1993. The syntactic role of word markers in null nominal constructions. *Probus* 5: 5–38.
- Boeckx, Cedric, and Sandra Stjepanović. 2001. Heading toward PF. *Linguistic Inquiry* 32(2): 345–369.
- Bosque, Ignacio, and Carme Picallo. 1996. Postnominal adjectives in Spanish DPs. *Journal of Linguistics* 32: 1–36.
- Brucart, José María. 1987. *La elisión sintáctica en español*. Barcelona: Bellaterra.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale. A life in language*, ed. Michael Kenstowicz, 1–52. Cambridge: MIT Press.
- Cinque, Giulio. 2005. Deriving Greenberg's Universal 20 and its exceptions. *Linguistic Inquiry* 36: 315–332.
- Cinque, Giulio. 2010. *The syntax of adjectives*. Cambridge: MIT Press.
- Corver, Norbert, and Marjo van Koppen. 2009. Let's focus on noun phrase ellipsis. *Groninger Arbeiten Zur Germanistischen Linguistik* 48: 3–26. <http://irs.ub.rug.nl/dbi/4a489af7c1e64>.
- Costa, João, Ana Maria Martins, and Fernanda Pratas. 2012. VP ellipsis: new evidence from Cape Verdean. In *Romance languages and linguistic theory 2010. Selected papers from 'Going Romance' Leiden 2010 (RLLT)*, eds. Irene Franco, Sara Lusini, and Andrés Saab, 155–176. Amsterdam: John Benjamins.
- Cyrino, Sonia, and Gabriela Matos. 2002. VP-ellipsis in European and Brazilian Portuguese: a comparative analysis. *Journal of Portuguese Linguistics* 1(2): 177–195.
- Cyrino, Sonia, and Gabriela Matos. 2005. Local licensors and recovering in VP ellipsis. *Journal of Portuguese Linguistics* 4(2): 79–112.
- Dékány, Éva. 2011. A profile of the Hungarian DP. The interaction of lexicalization, agreement and linearization with the functional sequence. Dissertation. Tromsø: University of Tromsø.
- Depiante, Marcela, and Pascual Masullo. 2001. Género y número en la elipsis nominal: consecuencias para la hipótesis lexicalista. *I Encuentro de Gramática Generativa*, 22–24. Universidad Nacional del Comahue.

- Eguren, Luis. 2010. Contrastive focus and nominal ellipsis in Spanish. *Lingua* 120(2): 435–457.
- Embick, David. 2010. *Localism versus globalism in morphology and phonology*. Cambridge: MIT Press.
- Embick, David, and Alec Marantz. 2008. Architecture and blocking. *Linguistic Inquiry* 39(1): 1–53.
- Embick, David, and Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32(4): 555–595.
- Fassi-Fehri, Abdelkader. 1993. *Issues in Arabic clauses and words*. Dordrecht: Kluwer Academic.
- Ghaniabadi, Saeed. 2010. The empty noun construction in Persian. Dissertation. Winnipeg: University of Manitoba.
- Goldberg, Lotus. 2005. Verb-stranding VP-ellipsis: a cross-linguistic study. Dissertation. Montréal: McGill University.
- Greenberg, Joseph. 1963. Some universals of grammar with particular reference to the order of meaningful elements. In *Universals of language*, ed. Joseph Greenberg, 73–113. Cambridge: MIT Press.
- Gribanova, Vera. 2013. Verb-stranding verb phrase ellipsis and the structure of the Russian verbal complex. *Natural Language & Linguistic Theory* 31(1): 91–136.
- Grohmann, Kleanthes. 2000. Prolific peripheries: a radical view from the left. Dissertation. College Park: University of Maryland.
- Halle, Morris, and Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In *The view from building 20*, eds. Kenneth Hale and Samuel Jay Keyser, 111–176. Cambridge: MIT Press.
- Hartman, Jeremy. 2011. The semantic uniformity of traces. Evidence from ellipsis parallelism. *Linguistic Inquiry* 42(3): 367–388.
- Holmberg, Anders. 2001. The syntax of *yes* and *no* in Finnish. *Studia Linguistica* 55(2): 141–175.
- Johnson, Kyle. 2004. How to be quiet. In *Proceedings from the 40th Annual Meeting of the Chicago Linguistic Society*, eds. Nikki Adams, Adam Cooper, Fey Parrill, and Thomas Wier, 1–20.
- Kishimoto, Hideki. 2000. Indefinite pronouns and overt N-raising. *Linguistic Inquiry* 31(3): 557–566.
- Koizumi, Masatoshi. 1995. Phrase structure in minimalist syntax. Dissertation. MIT.
- Larson, Richard, and Franc Marušič. 2004. On indefinite pronoun structures with APs: reply to Kishimoto. *Linguistic Inquiry* 35(2): 268–287.
- Lasnik, Howard. 1999. On feature strength: three minimalist approaches to overt movement. *Linguistic Inquiry* 30(2): 197–217.
- Leu, Thomas. 2005. Something invisible in English. *University of Pennsylvania Working Papers in Linguistics* 11(1): 143–155.
- Lobeck, Anne. 1995. *Ellipsis: functional heads, licensing and identification*. New York: Oxford University Press.
- Longobardi, Giuseppe. 1994. Reference and proper names. *Linguistic Inquiry* 25: 609–665.
- López, Luis. 2012. *Indefinite objects. Scrambling, choice functions, and differential marking*. Cambridge: MIT Press.
- Marantz, Alec. 1997. No escape from syntax: don't try morphological analysis in the privacy of your own lexicon. In *UPenn Working Papers in Linguistics: 21st Penn Linguistics Colloquium*, eds. Alexis Dimitriadis, Laura Siegel, Clarissa Surek-Clark, and Alexander Williams, 201–225.
- Martins, Ana Maria. 1994. Enclisis, VP-deletion and the nature of Sigma. *Probus* 6: 173–205.
- McCloskey, James. 1991. Clause structure, ellipsis and proper government in Irish. *Lingua* 85: 259–302.
- McCloskey, James. 2004. Three puzzles about head movement. *Coloquio de Morfosintaxis*, University of Buenos Aires, 1–2 July.
- Merchant, Jason. 2001. *The syntax of silence: sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.
- Merchant, Jason. 2013. Voice and ellipsis. *Linguistic Inquiry* 44(1): 77–108.
- Nunes, Jairo, and Cynthia Zocca. 2005. Morphological identity in ellipsis. *Leiden Working Papers in Linguistics* 2(2): 29–42. Noureddine Elouazizi, Frank Landsbergen, Mika Poss and Martin Salzmann (eds.).
- Pesetsky, David. 1989. Language-particular processes and the earliness principle. Ms., MIT. Available at <http://web.mit.edu/linguistics/people/faculty/pesetsky/earliness.pdf>.
- Picallo M. Carme. 1991. Nominals and nominalizations in Catalan. *Probus* 3: 279–316.
- Raposo, Eduardo. 2000. Clitic positions and verb movement. In *Portuguese syntax: new comparative studies*, ed. João Costa, 266–297. Oxford: Oxford University Press.
- Resnik, Gabriela. 2010. Los nombres eventivos no deverbales en español. Dissertation. Barcelona: University of Pompeu Fabra.
- Ritter, Elizabeth. 1988. A head-movement approach to construct-state noun phrases. *Linguistics* 26: 909–929.

- Ritter, Elizabeth. 1991. Two functional categories in noun phrases: evidence from Modern Hebrew. In *Syntax and semantics 25: perspectives on phrase structure*, ed. Susan Rothstein, 37–62. New York: Academic Press.
- Rutowski, Paweł. 2008. From apposition to classification: Polish vs. Lithuanian. In *Issues in Slavic syntax and semantics*, eds. Anastasia Smirnova and Matthew Curtis, 1–13. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Saab, Andrés. 2009. *Hacia una teoría de la identidad parcial en la elipsis*. Dissertation. Buenos Aires: University of Buenos Aires.
- Saab, Andrés. 2010. (Im)possible deletions in the Spanish DP. *Iberia* 2(2): 45–83.
- Saab, Andrés, and Anikó Lipták. To appear. Movement and deletion after syntax: licensing by ellipsis reconsidered. *Studia Linguistica*.
- Saito, Mamoru, and Keiko Murasugi. 1990. N'-deletion in Japanese. In *University of Connecticut working papers in linguistics*, eds. Javier Ormazabal and Carol Tenny. Vol. 3, 87–107. Storrs: University of Connecticut, Department of Linguistics.
- Santos, Ana Lucia. 2009. *Minimal answers. Ellipsis, syntax and discourse in the acquisition of European Portuguese*. Amsterdam: John Benjamins.
- Schoorlemmer, Erik, and Tanja Temmerman. 2012. Head movement as a PF-phenomenon. Evidence from identity under ellipsis. In *West Coast Conference on Formal Linguistics (WCCFL)*, eds. Jaehoon Choi et al. Vol. 29, 232–240. Somerville: Cascadia Proceedings Project.
- Shlonsky, Ur. 2004. The form of Semitic noun phrases. *Lingua* 114(12): 1465–1526.
- Ticio, Ema. 2003. *On the structure of DPs*. Dissertation. Storrs: University of Connecticut.
- Travis, Lisa. 1991. Derived objects, inner aspect, and the structure of VP. *North East Linguistics Society (NELS) 22*, University of Delaware.
- Valois, Daniel. 1991. *The internal syntax of DP*. Dissertation. Los Angeles: UCLA.
- Zagona, Karen. 1988. Proper government of antecedentless VP in English and Spanish. *Natural Language & Linguistic Theory* 6: 95–128.