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LACK OF MORPHOLOGICAL IDENTITY AND ELLIPSIS RESOLUTION IN BRAZILIAN PORTUGUESE

Jairo Nunes
Universidade de São Paulo

Cynthia Zocca
University of Connecticut

In this paper we investigate grammatical cases of verbal and nominal ellipsis in which there is no full morphological identity between the antecedent and the elided constituent. We argue that lack of identity in these cases can be captured if inflectional material is hosted by functional categories and valued in the course of the derivation, as in Chomsky's (2001) Agree-based system.

1. INTRODUCTION*

Lack of morphological identity in the verbal domain may or may not yield a good result in what concerns ellipsis resolution, as illustrated in (1) with English (see e.g. Warner, 1986; Lasnik, 1999; and Lightfoot, 1999) and (2) with Brazilian Portuguese (see Zocca, 2003; Nunes & Zocca, 2005).[1]

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[1] Throughout the text, elided material will be presented inside brackets.

(1) a. John **slept** and Mary will too. [**sleep**]
b. *John **was** here and Mary will too. [**be** here]

(2) *Brazilian Portuguese*
a. A Maria **estudou** muito, mas o João não vai. [**estudar**]
the Maria studied much but the João not goes study-INF
'Maria studied a lot, but João won't.'
b. *O João **era** famoso e o filho dele também vai. [**ser** famoso]
the João was famous and the son of.his also goes be-INF famous
'João was famous and his son will be famous too.'

In the nominal domain, we also observe that some ϕ-features can be mismatched in the antecedent and the ellipsis site, while others cannot. More specifically, whereas number differences can consistently be ignored, as shown in (3) and (4), gender has a more erratic behaviour, as shown in (5) and (6).[2]

(3) a. Mickey is a **mouse**, but Donald and Daisy aren't. [**mice**]
b. Pete and Drew are **children**, but Chris isn't. [**a child**]

(4) *Brazilian Portuguese*
a. Aquele rapaz é **americano**, mas esses dois não são. [**americanos**]
that guy is American-SG but these two are not American-PL
'That guy is American, but these two aren't.'
b. Estes esqueletos são **fósseis**, mas aquele ali não é. [**fóssil**]
these skeletons are fossil-PL but that there not is fossil.SG
'The skeletons are fossilized, but that one over there isn't.'

(5) a. Brad is an **actor** and Angelina is too. [an **actress**]
b. *Angelina is an **actress** and Brad is too. [an **actor**]
c. *Dracula is a **count** and Mina is too. [a **countess**]
d. *Mina is a **countess** and Dracula is too. [a **count**]

(6) *Brazilian Portuguese*
a. O João é **médico** e a Maria também é. [**médica**]
the João is doctor-MASC and the Maria also is doctor-FEM
'João is a doctor and Maria is too.'
b. ?A Maria é **médica** e o João também é. [**médico**]
the Maria is doctor-FEM and the João also is doctor-MASC
'Maria is a doctor and João is too.'
c. ?O Paulo é **ator** e a Fernanda também é. [**atriz**]
the Paulo is actor and the Fernanda also is actress
'Paulo is an actor and Fernanda is also an actress.'

[2] For further discussion on the kinds of nouns that allow for gender mismatches in ellipsis, see Bobaljik & Zocca (to appear).

d. ??A Fernanda é **atriz** e o Paulo também é. [**ator**]
the Fernanda is actress and the Paulo also is actor
'Fernanda is an actress and Paulo is an actor.'
e. *O Drácula é **conde** e a Mina também é. [**condessa**]
the Dracula is count and the Mina also is countess
'Dracula is a count and Mina is a countess.'
f. *A Mina é **condessa** e o Drácula também é. [**conde**]
the Mina is countess and the Dracula also is count
'Mina is a countess and Dracula is a count.'

In this paper we show that the similarities between English and Brazilian Portuguese present problems for proposals that rely on (verb) movement to account for crosslinguistic variation in ellipsis resolution, such as Lasnik (1999). We argue that the crucial aspect for the possibility of lack of identity in ellipsis resolution concerns the way in which lexical information is stored, something that is independently needed.

The paper is organized as follows. In section 2.1 we review Lasnik's (1999) proposal to account for contrasts such as the one in (1) based on properties of Infl. Section 2.2 discusses problems that such a proposal faces when VP-ellipsis data such as (2) in Brazilian Portuguese are taken into consideration. Section 2.3 proposes an account of morphological mismatches in ellipsis constructions in terms of Chomsky's (2001) Agree operation. Section 3 then extends this approach to ellipsis involving nominal predicates such as the ones in (3)-(6). Finally, we present some concluding remarks in section 4.

2. VERBAL MORPHOLOGY AND ELLIPSIS

2.1 Lasnik's (1999) Hybrid Lexicalist Approach

The traditional analysis of verbal morphology within GB (see e.g. Emonds, 1978; Chomsky, 1981; and Pollock, 1989) was essentially a development of Chomsky's (1957) original proposal that verbs and their corresponding affixes were generated in separate positions. Within minimalism, Chomsky (1993) proposes an alternative lexicalist approach, according to which verbs enter the derivation fully inflected and check their features against Infl heads.

Lasnik (1999) notes that the strictly lexicalist approach advocated by Chomsky (1993) does not capture the *do*-support facts of English, which the earlier analysis so nicely handled. He then proposes a hybrid approach according to which Infl is freely an affix or a set of abstract features. In case Infl is affixal, it must merge with the verb in the phonological component; conversely, if Infl is featural, it must check its features against the corresponding features of the verb.

To account for the difference between English and French with respect to verb movement, Lasnik makes the assumptions in (7) (see Lasnik, 1999:105).

(7) a. French verbs are fully inflected in the lexicon (possibly correlating with the fact that there are no bare forms; even the infinitive has an ending).
b. *Have* and *be* are totally inflected in the lexicon (possibly correlating with the fact that they are highly suppletive (...)).

c. All other English verbs are bare in the lexicon.
d. Finite featural Infl is strong in both French and English.

This proposal predicts the results in (8) below. (8a) illustrates the case of English main verbs. An affixal Infl and a bare verb must be merged in the phonological component under adjacency; otherwise, *do*-support is triggered. Since no strong feature is involved, no overt movement takes place. In turn, if an English main verb is inserted in a structure containing a featural Infl, as sketched in (8b), or if a French verb is inserted in a structure containing an affixal Infl, as shown in (8c), the relevant features will fail to be checked and the derivation will crash. A convergent result can however obtain if the relevant verb is inflected, as is the case with French verbs as well as English *be* and auxiliary *have* (cf. (7a)-(7b)) and Infl is featural, as represented in (8d). Given the assumption in (7d), the relevant feature checking required in (8d) must take place before Spell-Out; hence the overt movement of main verbs in French and *be* and auxiliary *have* in English as far as finite clauses are concerned.

(8) a. $\text{Infl}_{\text{affixal}}\ \text{V}_{\text{bare}}$
b. *$\text{Infl}_{\text{featural}}\ \text{V}_{\text{bare}}$
c. *$\text{Infl}_{\text{affixal}}\ \text{V}_{\text{inflected}}$
d. $\text{Infl}_{\text{featural}}\ \text{V}_{\text{inflected}}$

As evidence for this approach, Lasnik (1999:108-109) presents the intriguing paradigm in (9) (see Warner, 1986), which shows that ellipsis resolution in English may tolerate lack of morphological identity involving main verbs, but not *be* or the auxiliary *have*.

(9) a. John **slept**, and Mary will too. [**sleep**]
b. John **sleeps** every afternoon, and Mary should too. [**sleep** every afternoon]
c. *John **was** here, and Mary will too. [**be** here]
d. *John **has** left, but Mary shouldn't. [**have** left]

Given the picture in (8), the sentences in (9) are to be analyzed along the lines of (10). That is, the lack of morphological identity in (9a) and (9b) is only apparent. At the point where ellipsis resolution applies, the elided verb is identical to the verb in the first conjunct (cf. (10a) and (10b)). As for (9c) and (9d), if the elided verbs are inflected like their antecedents (cf. (10c) and (10d)), they will not have their features checked, causing the derivations to crash.

(10) a. [John -ED [$_{\text{VP}}$ **sleep**]] and [Mary will [$_{\text{VP}}$ **sleep**]] too
b. [John -S [$_{\text{VP}}$ **sleep** every afternoon]] and [Mary should [$_{\text{VP}}$ **sleep** every afternoon]] too
c. *[John was+$\text{Infl}_{\text{featural}}$ [$_{\text{VP}}$ **was** here]] and [Mary will [$_{\text{VP}}$ **was** here]] too
d. *[John has+$\text{Infl}_{\text{featural}}$ [$_{\text{VP}}$ **has** left]] and [Mary will [$_{\text{VP}}$ **has** left]] too

Lasnik's analysis is partly based on the difference between French and English and correctly predicts that VP ellipsis is not possible in French. We will see in the next section that although elegant, this account of the contrasts in (9) faces problems when we consider languages with verb movement that also allow for VP ellipsis, such as Brazilian Portuguese.

2.2 Shortcomings of Lasnik's system

Lasnik's proposal reviewed in section 2.1 makes the prediction that in languages with fully inflected verbs, VP ellipsis should not admit any lack of isomorphism, for the relevant features of the elided verb would fail to be checked. This prediction cannot be tested in French or in languages such as Spanish or Italian, for instance, which under Lasnik's analysis should also be fully inflected, for they do not allow for VP ellipsis even under strict identity, as illustrated in (11) (see e.g. Zagona, 1988; Depiante, 2000; and Lightfoot, 2006 for relevant discussion).[3]

(11) a. *Jean peut **travailler** et Marie peut aussi. [**travailler**] (French)
Jean can work and Marie can too work
'Jean can work and Marie can too.'
b. *Juan había **leído** este libro y Pedro también había. [**leído**] (Spanish)
Juan had read this book and Pedro also had read
'Juan had read this book and Pedro had too.'
c. *Gianni ha **letto** questo libro e anche Piero ha. [**letto**] (Italian)
Gianni has read this book and also Peter has read
'Gianni read this book and Piero did too.'

However, Brazilian Portuguese has an ideal combination of characteristics that can put Lasnik's predictions to the test: it has a paradigm for verbal inflection richer than English, it has verb movement (see e.g. Galves, 1994; Figueiredo Silva, 1996), and it allows for VP ellipsis (see e.g. Kato & Tarallo, 1992; Martins, 1994; Cyrino, 1997; Kato, 2003; Cyrino & Matos, 2002, 2005), as illustrated in (12).

(12) a. Eu **dei** um livro pra Maria e o Pedro também **deu**$_i$. [t_i um livro pra Maria]
I gave-1SG a book to.the Maria and the Pedro also gave-3SG a book to.the Maria
'I gave a book to Maria, and Pedro did, too.'

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[3] Nevertheless, as Andrés Saab (p.c.) points out, Spanish allows for other kinds of ellipsis that can be used to test the predictions of Lasnik's (1999) proposal, as shown in (i) below with sluicing, (ii) with stripping, and (iii) with gapping. All of these examples involve surface anaphora (see Hankamer and Sag, 1976) and lack of identity between the relevant verbs, contrary to what Lasnik's (1999) proposal would predict. For further discussion, see Saab (2008) and fn. 9 below.

(i) a. Recuerdo haber **visto** a Juan, pero no recuerdo dónde. [**ví** a Juan]
remember-1P.SG have-INF seen to Juan, but not remember-1P.SG where saw-1P.SG. to Juan
'I remember having seen Juan, but I don't remember where.'
b. Juan **arreglará** el auto aunque no sabe cómo. [**arreglar** el auto]
Juan fix-FUT the car even.though not knows how fix-INF the car
'Juan will fix the car even though he doesn't know how.'

(ii) Juan **fue** al cine y nosotros también. [**fuimos**]
Juan went-3P.PL to.the cinema and we also went-3P.PL
'John went to the movies and so did we.'

(iii) **Ahorrá** plata, no [**ahorres**] palabras
save-IMP money not save-SUBJ words
'Save money, not words.'

b. O João já tinha **lido** este livro, mas a Maria não tinha. [**lido** este livro]
the João already had read this book but the Maria not had read this book
'João had already read this book, but Maria hadn't.'

Contrary to what Lasnik's proposal would lead us to expect, Brazilian Portuguese patterns with English in tolerating lack of isomorphism in ellipsis involving main verbs, as shown in (13), but not when *ser* 'be', *estar* 'be', and the auxiliary *ter* 'have' are involved, as exemplified in (14).

(13) a. Eu já **comi**, mas a Maria ainda vai. [**comer**]
I already ate-1SG but the Maria still goes eat-INF
'I've already eaten, but Maria's still going to eat.'
b. Nós não **convidamos** o João, mas você deveria. [**convidar** o João]
we not invited-1PL the João but you should invite-INF the João
'We didn't invite João, but you should.'
c. Ontem eles **assistiram** este filme, e amanhã eu vou. [**assistir** este filme]
yesterday they watched-3PL this movie and tomorrow I go watch-INF this movie
'Yesterday, they watched this movie, and tomorrow I will.'

(14) a. *O João **era** famoso e o filho dele também vai. [**ser** famoso]
the João was famous and the son of-his also goes be-INF famous
'João was famous and his son will be famous too.'
b. *Ontem o João **esteve** aqui e amanhã a Maria vai. [**estar** aqui]
yesterday the João was here and tomorrow the Maria goes be-INF here
'Yesterday João was here and tomorrow Maria will be here too'
c. *Até ontem ele ainda não **tinha** chegado,mas até terça já vai. [**ter** chegado]
until yesterday he still not had arrived, but until Tuesday already goes [have arrived]
'Until yesterday, he hadn't arrived yet, but until Tuesday will already have arrived'

In fact, Brazilian Portuguese behaves like English even with respect to ellipsis involving main verbs where lack of isomorphism is not allowed. This is the case when the elided verb is in the progressive form, as illustrated in (15).

(15) a. *John will **sleep**. Mary is now. [**sleeping**]
b. *O João já **dormiu** e agora a Maria está. [**dormindo**]
the João already slept and now the Maria is sleeping
'John has already slept and now Mary is sleeping.'

Let us consider why exactly the sentences in (13) present problems for Lasnik's account, by examining in some detail the structure of (13a), for instance, given in (16).

(16) *[eu já comi+$Infl_{feat}$ [$_{VP}$ **comi**]] mas [a Maria ainda vai [$_{VP}$ **comi**]]
I already ate-1SG ate-1SG but the Maria still goes ate-1SG

Assuming the copy theory of movement, the trace of the verb in the VP of the first conjunct is a copy of the verb adjoined to Infl and, as such, it should be fully inflected. If ellipsis resolution

must involve identity, the main verb in the second conjunct should then be identical to the one in the first conjunct. That being so, the verb in the second conjunct cannot check its features even if Infl is featural, for the verb is specified as first person, whereas Infl is specified as third person. Similar observations apply to the tense mismatch between *comi* (past) and *vai* (present). Hence, if we assume Lasnik's system, sentences such as the ones in (13) should be as unacceptable as the ones in (14), contrary to fact.

Together with the Spanish data discussed in fn. 3, the acceptability of (13) could call into question Lasnik's original account of VP ellipsis in English. However, we show in the next section that it is possible to maintain the essentials of Lasnik's hybrid lexicalist analysis and still account for the ellipsis data in Brazilian Portuguese.

2.3 Lexical Specification and VP ellipsis

To account for the data discussed thus far, all we need to assume is that neither in English nor in Brazilian Portuguese are verbs lexically inflected, unless they are idiosyncratically specified as being so. To make the proposal concrete, let us assume Chomsky's (2001) Agree-based system of checking relations, according to which T probes into vP in search of a DP to value its uninterpretable ϕ-features. To make things simpler, let us consider a derivation involving an unaccusative structure, as illustrated in (17).

(17) a. [$_{TP}$ $\mathbf{T_{\phi:?}}$ [$_{VP}$ V $DP_{\phi:1SG}$]]
b. [$_{TP}$ $\mathbf{T_{\phi:1SG}}$ [$_{VP}$ V $DP_{\phi:1SG}$]]
c. [$_{TP}$ $DP_{\phi:1SG}$ [$_{T'}$ $\mathbf{T_{\phi:1SG}}$ [$_{VP}$ V $DP_{\phi:1SG}$]]

In (17a), T enters into an agreeing relation with the DP within VP and gets its features specified as first person singular (cf. (17b)); the DP then moves to check the EPP, yielding the structure in (17c).

What is relevant for out current discussion is the relation between T and V in (17c). If T does not have a strong feature, Lasnik's proposal can be adopted in full. That is, V and T will merge in the phonological component (see e.g. Halle & Marantz, 1993; and Bobaljik, 1994) and before such merger takes place, ellipsis resolution may apply, allowing VP ellipsis like the one found in English involving main verbs, as illustrated in (18).[4]

(18) a. John sleeps every afternoon, and Mary should too.
b. [$_{TP}$ John [$_{T'}$ T_{3SG} [$_{VP}$ **sleep** every afternoon]]] and [Mary should [$_{VP}$ **sleep** every afternoon]] too

If, differently from English, T in (17c) has a strong V-feature, triggering verb movement and yielding (19) below, nothing will essentially change with respect to ellipsis resolution. Crucially, the copy of the verb left behind within VP is *not* inflected.

(19) [$_{TP}$ $DP_{\phi:1SG}$ [$_{T'}$ V+$\mathbf{T_{\phi:1SG}}$ [$_{VP}$ V $DP_{\phi:1SG}$]]

Thus, VP ellipsis involving main verbs in Brazilian Portuguese will behave like their

[4] For presentational purposes we ignore the trace of the subject within VP.

counterparts in English, as illustrated in (20) below.

(20) a. Eu já comi, mas a Maria ainda vai.
I already ate-1SG but the Maria still goes
'I've already eaten, but Maria's still going to eat.'
b. [$_{TP}$ Eu já [$_{T'}$ com-+T_{1SG} [$_{VP}$ **com**-]]] mas [$_{TP}$ a Maria ainda [$_{T'}$ vai_{3SG} [$_{VP}$ **com**-]]]

The only relevant difference between English and Brazilian Portuguese in this regard is that, in the latter, bare stems cannot stand by themselves and require infinitival morphology, as illustrated in (21). But such a requirement does not mean that we have an infinitival projection in the second conjunct of (21), it just reflects the fact that the infinitival form is the default morphological form for Portuguese verbs.[5]

(21) Eu já comi, mas a Maria ainda vai comer.
I already ate-1SG but the Maria still goes eat-INF
'I've already eaten, but Maria's still going to eat.'

Let us now examine the sentences in (15), repeated below in (22). Lasnik analyzes cases like (22a) in terms of the Stranded Affix Filter (see Lasnik 1981) and such an analysis can be adequately extended to (22b), as well. More specifically, given that the tense/aspect features of gerundive T are [+interpretable], they are lexically specified and should be present throughout the derivation. Thus, if the gerund morpheme does not combine with the verb, as sketched in (23), a violation of the Stranded Affix Filter obtains.[6]

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[5] That this is indeed the case is suggested by the fact that the citation form for any verb in Portuguese is the infinitival form. Furthermore, Bastos (2001) and Bastos-Gee (this volume) have convincingly argued that verb topicalization in Brazilian Portuguese as in (ia) below proceeds along the lines of (ib), where the verbal complex V+v adjoins to T, leaving a copy, and then adjoins to a Top head. In the absence of specific overt topic morphology to support the highest copy of the verb in (ib), it surfaces in the default infinitival form, as seen in (ia).

(i) a. **Comprar**, eu **comprei** o livro.
buy-INF I bought-1SG the book
'As for buying something, I bought the book.'
b. [$_{TopP}$ [V+v]+Top [$_{TP}$ SUBJ [$_{T'}$ [V+v]+T_{ϕ} [$_{vP}$ SUBJ V+v [$_{VP}$ V OBJ]]]]

[6] It is worth mentioning that Brazilian Portuguese is actually more well behaved than English with respect to participial clauses, as shown in (i) below. If these sentences were to be analyzed like the ones in (18), as shown in (ii), both of them should give rise to a violation of the Stranded Affix Filter.

(i) a. John may be **questioning** our motives, but Peter hasn't. [**questioned** our motives]
b.*Só ontem o João **viajou**. Na semana passada, a Maria já tinha. [**viajado**]
only yesterday the João travel-PAST in.the week past the Mary already had travel-PART
'Only yesterday did João travel. Last week Maria had already [traveled]'

(ii) a. [$_{TP}$ Peter hasn't [$_{TP}$ -EN [$_{VP}$ question our motives]]]
b. [$_{TP}$ a Maria já tinha [$_{TP}$ -DO [$_{VP}$ viaja-]]]

Discussing the problem posed by the acceptability of the sentence in (ia), Lasnik (1999:fn. 8) speculates that "it is as if *-en* is spelled out as zero". As Oku (1998) observes, this idiosyncratic behavior of the participial morphology is also noticeable with respect to VP fronting, as illustrated in (iii) (see Oku 1998:21-30 for discussion).

(22) a. *John will **sleep**. Mary is now. [**sleeping**]
b. *O João **dormiu** e agora a Maria está. [**dormindo**]
the João slept and now the Maria is sleeping
'John slept and now Mary is sleeping.'

(23) a. [$_{TP}$ Mary is [$_{TP}$ -ING [$_{VP}$ sleep]] now]
b. [agora [$_{TP}$ a Maria está [$_{TP}$ -NDO [$_{VP}$ dormi-]]]]

As for *be* and *have* in English and *ser* 'be', *estar* 'be', and *ter* in Brazilian Portuguese, we may adopt Lasnik's proposal that they are inherently inflected, slightly adapting it under Chomsky's (2001) valuation approach to feature checking. More specifically, we may assume that the relationship between being interpretable and being valued is not a biconditional (see also Pesetsky & Torrego, 2004 and Bošković, 2007 for relevant discussion). In other words, whereas [+interpretable] features will always be valued, as in Chomsky's (2001) system, [-interpretable] features will be unvalued in the general case, but may be valued in some marked cases (perhaps associated with idiosyncratic morphology). Importantly, these marked cases will also require feature checking against [+interpretable] features so that they can be deleted for LF purposes.

Bearing in mind this reinterpretation of Lasnik's hybrid lexicalist approach to verbal morphology, consider the unacceptable cases of VP ellipsis in (24) and (25) below, for instance.[7] In both (24b) and (25b), the verb in the second conjunct cannot have its ([-interpretable]) tense features checked and so the derivation crashes.

(24) a. *John was here and Mary will too.
b. *[$_{TP}$ John [$_{T'}$ was$_{PAST.SG}$+T$_{3SG}$ [$_{VP}$ **was$_{PAST.SG}$** here]]] and [$_{TP}$ Mary [$_{T'}$ will [$_{VP}$ **was$_{PAST.SG}$** here]]] too

(25) a. *O João esteve aqui e a Maria também vai.
the João was here and the Maria also goes
'João was here and Maria will be here too.'
b. *[$_{TP}$ o João [$_{T'}$ esteve$_{PAST.3SG}$+T$_{3SG}$ [$_{VP}$ **esteve$_{PAST.3SG}$** aqui]]] e [$_{TP}$ a Maria também [$_{T'}$ vai [$_{VP}$ **esteve$_{PAST.3SG}$** aqui]]]

The discussion above shows that what is relevant for determining (lack of) identity in ellipsis resolution is not whether or not the verb must move overtly, but whether or not the [-interpretable] features associated with the verb are lexically specified. Based on work by Warner (1995), Lightfoot (1999) in fact provides very compelling evidence for such a conclusion. First, he shows that different forms of *be* in Modern English may select different complements, as illustrated in (26)-(28).

(iii) Mary once predicted that John would pass an exam eventually, and **pass** one he now has.

[7] Under this approach, obligatory movement of *be* and the auxiliary *have* in English must be tied to a property of these elements and not to Infl (i.e. these verbs must be associated with a strong feature; see Hornstein, Nunes & Grohmann, 2005 for relevant discussion). As for Portuguese sentences such as (20a), nothing special need be added, for Infl already has a strong V-feature triggering overt verb movement.

(26) a. Kim **was to** go to Paris.
b. *Kim will **be to** go to Paris.

(27) a. Kim has **been to** Paris.
b. *Kim **was to** Paris.

(28) a. I regretted that Kim **was reading** that chapter.
b. *I regretted Kim **being reading** that chapter.

Interestingly, as Lightfoot observes, in earlier stages of English the ungrammatical forms in (26b), (27b), and (28b) were attested, and so were ellipsis constructions that are ungrammatical nowadays, as respectively shown in the examples reproduced in (29) and (30) below. This clearly shows, as Lightfoot points out, that at a time when the forms of *be* were not listed separately in the lexicon with their own selection idiosyncrasies, ellipsis resolution did not treat *be* and main verbs differently.[8]

(29) a. You will **be to** visit me in prison with a basket of provisions; ... 1814 Jane Austen, *Mansfield Park*, ed. by J. Lucas, Oxford University Press, 1970: 122.
b. I **was** this morning **to** buy silk. 1762 Oliver Goldsmith, Cit W: 158 (meaning 'I went to...', not 'I had to...').
c. Two large wax candles were also set on another table, the ladies **being going** to cards. 1762 Daniel Defoe, *The Political History of the Devil*, Talboys, Oxford: 1840: 336.

(30) a. I wish our opinions **were** the same. But in time they will [**be** the same]. 1816 Jane Austen, *Emma*, ed. by R. W. Chapman, London: OUP, 1933: 471)
b. And Lady Middleton, **is** she angry?
I cannot suppose that she should [**be** angry]. 1811 Jane Austen, *Sense and Sensibility*, ed. by C. Lamont, London: OUP, 1970: 237.
c. I think, added he, all the Charges attending it, and the Trouble you had, **were** defray'd by my Attorney: I ordered that they should [**be** defrayed]. 1740-1 Samuel Richardson, *Pamela*, London: 3rd edition 1741, vol. 2: 129.

Selection restrictions of the type seen in Modern English are also found in Brazilian Portuguese for the verbs *ser* 'be' and *estar* 'be', as illustrated in (31) and (32) (see Zocca 2003), which supports our claim that their features are inherently specified.

(31) a. O João **estava para** sair quando a Maria chegou.
the João was to leave when the Maria arrived
'João was about to leave when Mary arrived.'

[8] Of relevance here is also Thompson's (2004) study of speech errors in which the verb and its inflection are separated. She found a distinctive contrast between English and Spanish in this regard. Whereas in English all the attested errors (13 instances) involved a main verb and none involved an auxiliary, in Spanish such errors are attested with both kinds of verbs (15 with main verbs and 5 with auxiliaries). Her conclusion, compatible with the analysis entertained here, is that auxiliaries in English enter the derivation fully inflected, whereas main verbs in English and all the verbs in Spanish enter the derivation as simple stems.

b. *O João **estará para** sair quando a Maria chegar.
the João be-FUT to leave when the Maria arrives
'João will be about to leave when Mary arrives.'

(32) a. **Era para** o João fazer isso.
was for the João do this
'João was supposed to do this.'
b. *Tinha **sido para** o João fazer isso.
had been for the João do this
'João had been supposed to do this.'

To sum up, English and Portuguese are much more similar than different in what concerns VP ellipsis constructions and this fact can be captured if the morphological inflection on the verb is to be specified in Infl under agreement as in Chomsky's (2001) system.[9] This is arguably the general case, which should be assumed by children acquiring either of these languages in absence of evidence to the contrary. By contrast, marked cases where a given verb is to be lexically associated with inflectional features in addition to the features present in Infl should require positive evidence for their acquisition. The fact that the exceptional cases discussed here involve verbs that are more functional in nature and have very salient morphological idiosyncrasies is consistent with this view.

3. LACK OF ISOMORPHY IN NOMINAL PREDICATES

3.1 Adjectival Predicates

The analysis outlined in section 2.3 can also be extended to apparent lack of isomorphism in ellipsis constructions involving adjectival predicates. Consider the sentences in (33), for instance.

(33) a. O João é **alto** e a Maria também é. [**alta**]
the João is tall-MASC.SG and the Maria also is tall-FEM.SG
'John is tall and Mary is too.'
b. O João é **alto** e aqueles meninos também são. [**altos**]
the João is tall-MASC.SG and those boys also are tall-MASC-PL
'John is tall and those boys are too.'

In (33a) there is a mismatch in gender and in (33b) a mismatch in number between the two conjuncts. Assuming that there is a functional head, say Agr, dominating the adjectival predicates, and that adjectives in general enter the derivation in their bare forms as well, the derivation of the first conjunct in (33) proceeds along the lines of (34) below. Agr probes into the AP and values its [-interpretable] ϕ-features as MASC.SG, as shown in (34a), and *o João* later

[9] The analysis proposed here can be extended to cases of lack of identity in constructions involving ellipsis of constituents bigger than VP (see the data in fn. 3, for instance) if we assume with Chomsky (2008) that the ϕ-features in T are actually generated in C and transmitted to T in the morphological component, perhaps via affix hopping. Thus, at the derivational step when identity is computed for purposes of ellipsis licensing, mismatching ϕ-features are still in C and TP can be elided.

moves to [Spec, TP], as shown in (34b).[10] Further concatenation between Agr and the adjective may take place overtly via head movement or in the phonological component via morphological merger. Be that as it may, the crucial point here is that the adjectival stem in (34) may license the ellipsis in the second conjuncts of (33) in virtue of being uninflected, as illustrated in (35).[11]

(34) a. [$_{AgrP}$ Agr$_{MASC.SG}$ [$_{AP}$ alt- o João]]
b. [[o João] é [$_{AgrP}$ Agr$_{MASC.SG}$ **[$_{AP}$ alt-]**]

(35) a. [[a Maria] também é [$_{AgrP}$ Agr$_{FEM.SG}$ **[$_{AP}$ alt-]**]
b. [[aqueles meninos] também são [$_{AgrP}$ Agr$_{MASC.PL}$ **[$_{AP}$ alt-]**]

3.2 Predicative Nouns[12]

In (3)-(6) above, repeated below as (36)-(39), we showed that, in predicative nouns, number differences can be ignored by ellipsis, but gender differences do not behave uniformly.

(36) a. Mickey is a **mouse**, but Donald and Daisy aren't. [**mice**]
b. Pete and Drew are **children**, but Chris isn't. [**a child**]

(37) a. Aquele rapaz é **americano**, mas esses dois não são. [**americanos**]
that guy is American-SG but these two are not American-PL
'That guy is American, but these two aren't.'
b. Estes esqueletos são **fósseis**, mas aquele ali não é. [**fóssil**]
these skeletons are fossil-PL but that there not is fossil-SG
'The skeletons are fossilized, but that one over there isn't.'

(38) a. ?Brad is an **actor** and Angelina is too. [an **actress**]
b. *Angelina is an **actress** and Brad is too. [an **actor**]
c. *Dracula is a **count** and Mina is too. [a **countess**]
d. *Mina is a **countess** and Dracula is too. [a **count**]

(39) a. O João é **médico** e a Maria também é. [**médica**]
the João is doctor-MASC and the Maria also is doctor-FEM
'João is a doctor and Mary is, too.'
b. A Maria é **médica** e o João também é. [**médico**]
the Maria is doctor-FEM and the João also is doctor-MASC
'Maria is a doctor and João is, too.'

[10] Again we will ignore the trace of the moved DP for presentational purposes.
[11] The contrast between (15b) and (ib) in fn. 6, on the one hand, and (33), on the other, seems to suggest that in languages like Portuguese, the Stranded Affix Filter only applies to morphemes that are [+interpretable]. We leave a fuller exploration of this idea to another occasion.
[12] We would like to thank Jonathan Bobaljik for comments and suggestions about the material discussed in this section.

c. ?O Paulo é **ator** e a Fernanda também é. [**atriz**]
the Paulo is actor and the Fernanda also is actress
'Paulo is an actor and Fernanda is also an actress.'

d. ??A Fernanda é **atriz** e o Paulo também é. [**ator**]
the Fernanda is actress and the Paulo also is actor
'Fernanda is an actress and Paulo is an actor.'

e. *O Drácula é **conde** e a Mina também é. [**condessa**]
the Dracula is count and the Mina also is countess
'Dracula is a count and Mina is a countess.'

f. * A Mina é **condessa** e o Drácula também é. [**conde**]
the Mina is countess and the Dracula also is count
'Mina is a countess and Dracula is a count.'

(40) summarizes the properties exhibited by (36)-(39).

(40) a. Differences in number do not matter, whereas differences in gender sometimes matter (cf. (36)-(37) *vs.*(38)-(39)).
b. Masculine can license feminine in some cases, but not *vice-versa* (cf. (38a)/(39c) *vs.* (38b)/(39d)).
c. In some cases, no difference in gender is allowed at all (cf. (38c-d) and (39e-f)).

Discussing related phenomena within Spanish DPs, as illustrated in (41) below, Depiante & Masullo (2001) propose that in Spanish, gender is an intrinsic feature of the noun, while number is syntactic and heads a functional projection intervening between DP and NP. In other words, nouns enter the numeration bare in number, but inflected in gender. The contrast between (41a-b) and (41c) is taken to show that since number features are acquired in the course of the derivation, the relevant nouns will be identical as far as number is concerned before they acquire such specification. On the other hand, nouns associated with different specification for gender will be morphologically distinct throughout the derivation.

(41) *Spanish*
a. Juan visitó a sus **tíos** y Pedro prometió visitar **al** de él.
*Juan visited to his **uncles** and Pedro promised visit **to-the-**MASC.SG of his*
'Juan visited his uncles and Pedro promised to visit his uncle.'
b. Juan visitó a su **tío** y Pedro prometió visitar a **los** de él.
*Juan visited to his **uncle** and Pedro promised visit to **the-**MASC.PL of his*
'Juan visited his uncle and Pedro promised to visit his uncles.'
c. *Juan visitó a su **tío** y Pedro prometió visitar a **la** de él.
*Juan visited to his **uncle** and Pedro promised visit to **the-**FEM.SG of his*
'Juan visited his uncle and Pedro promised to visit his aunt.'

Although interesting, this proposal does not account for fine-grained differences in acceptability when gender is involved. In Brazilian Portuguese, contrasts such as (41) are also found with pairs like *tio/tia* 'uncle/aunt', for instance, but not with pairs like *médico/médica* 'doctor-MASC/doctor-FEM', as shown in (42) and (43).

(42) a. O João visitou os **tios** dele e o Pedro prometeu visitar **o** dele.
*the João visited the **uncles** of-his and the Pedro promised visit **the-MASC.SG** of-his*
'João visited his uncles and Pedro promised to visit his uncle.'
b. *O João visitou**o** **tio** dele e o Pedro prometeu visitar **a** dele.
*the João visited the **uncle** of-his and the Pedro promised visit **the.FEM.SG** of-his*
'João visited his uncle and Pedro promised to visit his aunt.'

(43) a. O João visitou os **médicos** dele e o Pedro visitou **o** dele.
*the João visited the **doctor-MASC-PL** of-his and the Pedro visited **the.MASC.SG** of-his*
'João visited his doctors and Pedro visited his (male) doctor.'
b. O João visitou o **médico** dele e o Pedro visitou **a** dele.
*the João visited the **doctor-MASC.SG** of.his and the Pedro visited **the.FEM.SG** of-his.*
'João visited his doctors and Pedro visited his (female) doctor.'

Similarly to the contrast between (39a-b) and (39e-f), the alternation *médico/médica* in (43b) is possible, whereas *tio/tia* in (42b) is not. This indicates that purely syntactic accounts are not enough to accommodate this contrast.

Saab (2004) and Kornfeld & Saab (2004) propose a morphological alternative to handle contrasts such as (41). They propose that a sentence such as (41b), for instance, is to be associated with the simplified scheme in (44) below after Spell-Out. When insertion of lexical items is to take place, two possibilities arise. If all the items are inserted, we obtain the sentence in (45) after the relevant operations of fusion and phonological adjustment. It is also possible to skip the insertion of the phonological features of *tíos*, in which case the sentence with ellipsis in (41b) is generated. From this perspective, ellipsis means non-insertion of phonological features and can only happen when there is identity. Since the plural morpheme in (44) can be associated with the determiner, the instances of *tío* in both conjuncts are phonologically identical and the second one can be elided.[13]

(44) Juan visit *past pos-3SG* tío y Pedro promet *past* visitar D tío *PL* de D-3SG
Juan visit uncle and Pedro promise visit uncle of

(45) Juan visitó a su tío y Pedro prometió visitar a los tíos de él.
Juan visited to his uncle and Pedro promised visit to the uncles of his
'Juan visited his uncle and Pedro promised to visit his uncles.'

Again, without further amendments, this proposal is unable to account for why a masculine antecedent can license feminine ellipsis in some cases, but not in others (cf. (39)). Interestingly, the more idiosyncratic the alternation between the masculine and the feminine forms is, the less acceptable the corresponding ellipsis becomes, as illustrated in (46) and (47) with Brazilian Portuguese.

(46) a. ??O Brad é **ator** e a Angelina também é. [**atriz**]
the Brad is actor and the Angelina also is actress
'Brad is an actor and Angelina is an actress, too.'

[13] We refer the reader to Saab (2008:chap. 3), where these proposals are further elaborated to offer a more explicit account of how phrases are marked for non-insertion.

b. *A Angelina é **atriz** e o Brad também é. [**ator**]
the Angelina is actress and the Brad also is actor
'Angelina is an actress and Brad is an actor, too.'

(47) a. *O João já é **pai** e a Maria também já é. [**mãe**]
the João already is father and the Maria also already is mother
'Joao is already a father and Maria is already a mother.'
b. *A Maria já é **mãe** e o João também já é. [**pai**]
the Maria already is mother and the João also already is father
'Maria is already a mother and João is already a father.'

Natural gender in different languages seems at first glance to require a two-way distinction, i.e. male and female, as in the pair *lion/lioness* in English. This distinction could be accommodated in a binary feature system as either [±male] or [±female]. There are cases, however, that evoke the need of another category that is not specified for gender. Among the earliest examples pointed out in the literature is Jakobson's (1932/1984:2-3) observation that the Russian word *oslíca* 'she-ass' indicates the female sex of the animal, whereas the general meaning of the word *osël* 'donkey' contains no indication of the sex of the animal in question. In other words, the feminine word has a gender mark, say [fem], whereas the masculine word has no gender mark at all.

Taking this observation into consideration, the contrast between (38a) and (38b), for instance, repeated here in (48), can now receive an appropriate account if they are to be analysed along the lines of (49).

(48) a. ?Brad is an **actor** and Angelina is too. [an **actress**]
b. *Angelina is an **actress** and Brad is too. [an **actor**]

(49) a. Brad is an [Agr_{ϕ} **act-ø**] and Angelina is too an [Agr_{ϕ} **act-ø**]
b. Angelina is an [Agr_{ϕ} **act-FEM**] Brad is too an [Agr_{ϕ} **act-ø**]

In (49), regardless of whether Agr gets valued as [fem] or [ø] when it agrees with the subject, it is semantically compatible with the unmarked specification of *act-ø*. Thus, ellipsis can delete the second *act-ø* in (49a) under identity. By contrast, the [fem] mark in (49b) is only compatible with feminine and cannot be present in the second conjunct. Thus, ellipsis cannot apply (cf. (51b)), as the nominal predicates are not identical.

There are, however, cases in which Jakobson's notion of markedness does not work, such as the classes of nouns referring to family relations or nobility terms.[14] Take the forms *king* and *baron*, for instance, which arguably have a [ø] mark for gender. If they were unmarked for gender, the sentences in (50) should be felicitous in a context where the relevant groups involved kings and queens and barons and baronesses, contrary to fact.

(50) a. This is a group of kings.
b. This is a group of barons.

[14] Bobaljik and Zocca (to appear) present similar data from Russian, Spanish, English, German, and Portuguese, and in all these languages words for nobility and family relations do not license ellipsis containing the same word with a different gender. Once again, number mismatches do not create problems for ellipsis resolution.

This suggests that some classes of nouns are lexically specified for gender in a way that is similar to the lexical specification displayed by the verbs *be* and *have* in English and *ser*, *estar*, and *ter* in Brazilian Portuguese, as discussed in section 2.3. If so, the data in (38c) and (38d), repeated here in (51), can be analyzed along the lines of the structures in (52), which do not license ellipsis as the relevant terms are not identical

(51) a. *Dracula is a **count** and Mina is too. [a **countess**]
b. *Mina is a **countess** and Dracula is too. [a **count**]

(52) a. Dracula is a [**count-MASC**] and Mina is too a [**count-FEM**]
b. Mina is a [**count-FEM**] and Dracula is too a [**count-MASC**]

Mary Kato (p.c.) observes that the nouns in the anomalous classes can also be used as vocatives, which might suggest that they behave like proper nouns, which are arguably always marked for gender. A full investigation of the reasons for the different behaviours of different lexical fields, however, would be beyond the scope of this paper. What is important for our analysis here is the observation that mismatches in ellipsis of predicative nouns are more easily tolerated in the case of nouns that can be paired as marked/unmarked for gender than in the case of nouns that seem to be marked in both genders. This observation is compatible with what we proposed in the verbal domain, i.e. that there are items that enter the derivation fully specified and never have bare forms that can license ellipsis before they take their full morphological form.[15]

To summarize, a complete account of the lack of identity in ellipsis constructions involving predicative nouns must rely not only on the different ways number and gender may be encoded, but also incorporate a notion of markedness and lexical specification.

4. CONCLUDING REMARKS

The investigation of the behaviour of ellipsis in the absence of full identity between the antecedent and the elided elements can provide useful tools for the study of the distribution and computation of lexical features throughout the derivation. For instance, the fact that VP ellipsis works basically in the same way regardless of whether or not the language in question has verb movement to Infl or rich verbal agreement morphology indicates that in the unmarked case, inflectional morphology is not associated with verbs as they enter the derivation. This general conclusion has also been reached when ellipsis constructions involving nominal predicates are concerned. This state of affairs thus supports an approach in which [-interpretable] features are valued in the course of the derivation, as in Chomsky's (2001) system, combined with late insertion of vocabulary items, as proposed, among others, by Halle & Marantz (1993).

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