The Null Subject Parameter revisited. The evolution from null subject Spanish and Portuguese to Dominican Spanish and Brazilian Portuguese

José Camacho
Rutgers University

Abstract

This paper analyzes changes in the null subject parameter in Caribbean Spanish and Brazilian Portuguese varieties. Assuming a Minimalist framework that ascribes parametric variation to differences in lexical settings, it is argued that increased frequency of overt pronominals and an anti-locality principle against Spec, head grammatical interactions trigger a shift from interpretable to unintepretable inflection, as well as a reorganization of the morphological paradigm and pronominal system. Once overt pronouns become more frequent, they take over the contexts formerly reserved for null subjects and they are no longer constrained by different semantic conditions.

1. Null subjects and variation in the Minimalist Program

The Minimalist program (Chomsky 1993 and much subsequent work) restricts the theoretical machinery that made it possible to express variation across languages in previous frameworks. The core operations associated with syntax involve merge, copy and deletion and AGREE. Merge assembles two items, and creates a new one that has the label of one of its components. Copy and deletion takes an existing constituent and merges it with a new one, potentially leaving a copy that is then deleted. Finally, AGREE matches two items’ features and, in some formulations copies feature information from one of the items to the other. These operations severely restrict the possibility of expressing variation across grammars.

Given this streamlined framework, variation typically arises in the lexical settings of individual words, which may result in variability at the interfaces (PF or LF). For example, in one language a wh-word may be bundled with an EPP feature that will trigger overt pied-piping of the wh-word, whereas in another language, the wh-word lacks an EPP feature and therefore no pied-piping takes place. As a result, the wh-words will be spelled out in different places at PF.

Given this conceptualization of variation, it is worth revisiting the status of the null subject parameter (NSP) and its associated properties. The classical formulation of the NSP (cf. Chomsky 1981, Rizzi 1986, Camacho 2013a, among others) assumes that null categories in NSLs of the Italian type are subject to two distinct conditions, licensing and identification. Licensing sanctions the syntactic presence of the category, and identification provides the content information to anchor that category in discourse. Typically, the φ-features of INF identify pro.

Several proposals have attempted to accommodate the cluster of properties of the NSP to Minimalism. Assuming that the underlying common property that all languages share is the Extended Projection Principle (EPP), we expect all clauses to have subjects. If so, then null subject languages (NSLs) must be able to satisfy it in one of two ways: either through a separate category (pro), as in the classical analysis and recent reformulations of it or through pronominal inflection. Pro, in turn, can be seen either as an independent lexical entry, or as the result of deletion of an overt pronominal (cf. Saab, this volume).

In this paper I analyze the properties of Romance varieties that are becoming obligatorily overt-subject languages, in particular Brazilian Portuguese and Dominican Spanish, and make a proposal about how this change happens through modifications in the lexical entries for inflection. I argue that the change is initiated by a ban on configurations where the Specifier and the head of a projection AGREE, which triggers reanalysis of

---

1 I would like to thank María Eugênia Duarte, Jairo Nunes, Ana Teresa Pérez-Leroux, Jacqueline Toribio, Andrés Saab an anonymous reviewer, and to the audiences of Romania Nova, Campos do Jordão, and UF Rio de Janeiro for comments and discussion of the data. Very special thanks go to Mary Kato and Paco Ordóñez for their organization of Romania Nova, and for the invitation to present this work. All errors remain mine.
overt subjects and changes in the pronominal paradigm, the inflectional paradigm, and the lexical specification of inflection.

2. The Null-subject parameter

Five properties were proposed to cluster together in the classical formulation of the NSP (cf. Perlmutter 1971, Chomsky & Lasnik 1977, Chomsky 1981): a) having null subjects, b) having free inversion in simple sentences, c) availability of “long wh-movement” of subjects, d) availability of empty resumptive pronouns in embedded clauses and e) presence of overt complementizers in *[that-trace] contexts, as illustrated in (1).

(1) a. Salimos. Null subject
left
“We left.”

b. Habló Marta. Subject-verb inversion
spoke Marta
“Marta spoke”

c. L’uomo che mi domando [chi abbia visto] Italian, Long wh-movement
the-man that CL wonder who has seen
“The man who I wonder who he has seen”

d. Esta es la mujer que me pregunto quien cree que pro no venga Null resumptive pro
this is the woman who CL wonder who thinks that pro not come
“This is the woman that I wonder who believes might come.”

e. ¿Quién piensas que vendrá? Violation of that-trace Filter
Who think that will come
“Who do you think that will come?”

In addition to these properties, several others have been related to NSLs: expletives must be null (cf. (2)), and null and overt pronominal subject differ substantially with respect to their interpretation in a number of ways. First, overt pronominals cannot be interpreted with arbitrary reference, as seen in (3) (cf. Suñer 1983, Jaeggli 1986, Hernanz 1990).

(2) a. Llueve. rains
“It is raining.”

b. *Ello llueve. it rains

(3) a. Dijeron que habían venido. said that had come
“They (specific or arbitrary) said that they had come.”

b. Ellos dijeron que habían venido. they said that had come
“They (specific only) said that they had come.”

Second, Montalbetti (1984) argued that whenever there is a contrast between overt and null pronouns, the overt version cannot be bound as a variable, as seen in (4), although not all speakers share these effect, known as the Overt Pronoun Constraint.

---

---
(4) a. Todo estudiante, cree que pro, es inteligente.
   every student thinks that pro is intelligent
   “Every student, thinks that he, is intelligent.”

b. Todo estudiante, cree que el, es inteligente.
   every student thinks that he is intelligent
   “Every student, thinks that he, is intelligent.”

Chomsky (1981) and Rizzi (1982) propose that the basic property of null-subject languages is subject-verb inversion (cf. (1b) above), all the others follow from the availability of the postverbal subject position in NSLs, which licenses several grammatical structures that were not available in languages without that position.

Although several researchers argue that the availability of a post-verbal position is still the key difference between NSLs and non-NSLs (cf., for example, Barbosa, Kato & Duarte 2005, fn. 7), if Koopman & Sportiche’s (1991) VP-internal subject hypothesis is correct, both NSLs and non-NSLs would have two subject positions and would not be distinguishable by this property (cf. Camacho 2013a).

In addition to the cluster of properties just described, many researchers have argued that subjects in NSLs have a different status and perhaps a different position than those of NNSLs. In particular, Spanish preverbal subjects show properties closer to A’, topic-like elements than English subjects. As a consequence, Contreras (1991) has proposed that Spanish preverbal subjects are adjoined to IP, whereas Alexiadou & Anagnostopoulou (1998) and Ordóñez & Treviño (1999) have proposed that they occupy a left-peripheral position (cf. Barbosa 1995, 2000), Barbosa, Kato & Duarte (2005) for the similar proposals for Portuguese, and Goodall (1991, 1999), Suñer (2003), Cardinaletti (1997, 2004) for opposing views). If correct, these proposals have important consequences for the null-subject parameter: whether the subject is copied to that peripheral position from Spec, IP, or whether it is directly merged there, that overt subject does not satisfy the EPP in Spanish. In the theory where the subject is merged directly in the left-periphery, some other mechanism must be invoked, such as satisfying the EPP through inflection (in Ordóñez & Treviño 1999 and in Barbosa, Kato & Duarte’s 2005 analyses). In English, on the other hand, it is the highest visible copy of the subject that satisfies the EPP.

As suggested earlier, several researchers have proposed a separate category pro that satisfies the EPP in NSLs (Chomsky 1981, Rizzi & Shlonsky 2007, Cole 2009, Camacho 2013a, among others). However, many others have argued that pro is neither necessary nor theoretically desirable, particularly if we assume that Infl has uninterpretable features that are copied to pro through agreement. Since these features would be uninterpretable, they would be deleted before the relevant interfaces, leaving pro without any reference (cf. Holmberg 2005: 537-8). This leaves two possibilities: a PF-deletion analysis (cf. Perlmutter 1971, Roberts 2007 and Saab 2009 among others), or the pronominal inflection analysis (cf. Jelinek 1984, Borger 1986, Ordóñez 1997, Ordóñez & Treviño 1999, Alexiadou & Anagnostopoulou 1998, Kato 1999, Barbosa, Kato & Duarte 2005, Barbosa 2010, Sigurðsson 2011 among others). In the PF deletion analysis, null subjects are simply the deleted counterpart of an overt pronoun, and in this sense, the availability of null subjects is just a matter of the conditions that regulate PF deletion. These proposals need to contend with the interpretive contrasts we saw in (3)-(4) above, and must assume that only weak pronouns can be deleted.

The other very productive line of analysis assumes that the referential properties of the subject are encoded in the morphology of the verb, following Jelinek’s (1984) initial idea, Roberts and Holmberg (2010) rephrase this idea as follows: if T bears a D-feature, the language will have null subjects, otherwise it will not. Several linguistic patterns pose a challenge for this idea, for example agreement patterns connected to word order differences in a number of Italian dialects. If inflection has referential properties, one would not expect agreement to be different depending on whether the subject is pre or postverbal, since agreement will always be located in the same position. However, this is what we find. Other challenges, summarized in Camacho (2013a, ch. 4), relate to expletives in Finnish, facts related to unaccusative verbs in Irish, as well as a generalization on what types of elements can be deleted (cf. Saab, this volume).

Conceptually, linking the NSP to the presence of D obscures two independent properties connected to this feature: what has been called the EPP requirement (the need for a subject), and the referential properties of D. This is clear in the case of English expletives, which have no referential properties but are nevertheless obligatory. For this reason, I will distinguish between D as a formal feature, and referentiality as an interpretive feature, and will focus on referentiality.

It should also be noted that both the pro-theory and the pronominal agreement theory rely on the intuitive notion of richness of agreement. It is this property that allows a language to either identify pro, or to have
pronounal agreement with referential properties. At the same time, the challenges of formalizing richness as an observable and testable property of the agreement paradigm are well-known (cf. Jaeggli & Safir 1989 and Speas 1995 for discussion). This has led some to argue that the property that licenses null subjects is simply not connected to morphological richness. However, for a subset of languages, there is a clear correlation between agreement richness and availability of null subjects richness, and recent proposals have attempted to capture this correlation (cf. Cole 2009 and Camacho 2013a).

3. Varieties in change

The grammar of Dominican Spanish (DS) and Brazilian Portuguese (BP) are particularly interesting to test hypothesis of parametric variation in the Minimalist program. On the one hand, they seem to be becoming non-null subject varieties (as compared to other varieties of Spanish and European Portuguese), and on the other, this change seems to be accompanied by a clear reduction in the morphological paradigm. However, the properties of these two varieties are not completely overlapping, raising the question of whether the cluster of phenomena traditionally ascribed to the pro-drop parameter is in fact, a cluster. Thus, although both varieties have an increasing proportion of overt subjects, DS lacks subject-verb inversion in questions, has overt expletives, and has examples where the that-t Filter is not violated (cf. Cabrera 2008), whereas BP does not have any of those properties. In the next two sections, I will review the basic distributions in each of these varieties, and suggest possible analyses within the Minimalist Program.

3.1 Dominican Spanish

As mentioned earlier, overt subjects are more frequent in DS than in other varieties of Spanish, although null subjects are not completely absent (cf. Henríquez Urenña 1940/1975, Jiménez Sabater 1984, Hinzelin & Kaiser 2007, among others). In their study of recently-arrived immigrants in New York, Otheguy, Zentella & Livert (2007) find 41% of overt pronouns among recently arrived Dominican speakers compared to 27% for Ecuadorians, 24% for Colombians and 19% for Mexicans. Cabrera (2008), on the other hand, finds the following percentages of overt and null subjects among speakers of two regions in the Dominican Republic. These frequencies suggest a clear tendency to produce overt subjects.

<table>
<thead>
<tr>
<th></th>
<th>El Cibao</th>
<th>Santo Domingo</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overt subjects</td>
<td>70%</td>
<td>68%</td>
<td>69%</td>
</tr>
<tr>
<td>Null subjects</td>
<td>30%</td>
<td>32%</td>
<td>31%</td>
</tr>
</tbody>
</table>

A well-known feature of certain varieties of DS is the presence of the overt expletive ello, illustrated in (6).

(6) En el campo ello sí hay mucho que hacer. (Dominican Spanish, from Toribio, p.c.)
    “In the fields there is much to do.”

This overt expletive would seem to be another indication of two tendencies: first, that DS is shifting towards a non-NSP setting, and second, that some of the properties ascribed to this parameter indeed go together. However, there is reason to question the validity of these conclusions. On the one hand, ello is not obligatory even for the same set of speakers (cf. Bullock & Toribio 2009). In this respect, Hinzelin & Kaiser (2007) found that speakers from both the capital of El Cibao and from rural regions overwhelmingly preferred null

---

3 Some of the NNSL properties of DS are stigmatized in this dialect (for example overt expletives) and many speakers are in contact with a prescriptive variety that is null-subject, so it is difficult to delimit the precise features of the variety. Toribio (2000) argues that the apparently mixed properties of DS reflect two coexisting and competing grammars.

4 The divergence in frequencies between the Otheguy et al. and the Cabrera studies may be due to the different methodologies: Otheguy et al. collected oral speech samples, whereas Cabrera’s data come from an experimentally controlled setting.
expletives over overt ones. The optionality of expletives has led Bullock & Toribio to propose that these are left-peripheral expletives, not IP-related ones. However, note that all of the examples of *ello in the literature involve postverbal subjects (i.e. EXP-V-S, not *EXP-S-V), a fact that is surprising if the expletive is left-peripheral, since DS is overwhelmingly and probably obligatorily SVO (cf. Camacho 2013b).

In addition, in DS, as in other Caribbean dialects, pronominal subjects do not invert in wh-questions (cf. (7)). There is some debate about how productively it inverts DPs (cf. Toribio 1993, 2000, Suñer & Lizardi 1995, Ordóñez & Olarrea 2006, henceforth O & O, Cabrera 2008, Gutiérrez-Bravo 2008, among others). In Puerto Rican Spanish (PRS), for example, Comíñguez’s (2013) experimental study on wh-questions with pre- or post-verbal DP subjects in wh-questions found that around 80% acceptability for pre-verbal subjects vs. 92% for postverbal ones.

(7) ¿Qué tú compraste?
    what you bought
    “What did you buy?”

The difference in word order in questions between Caribbean and non-Caribbean Spanish has been analyzed in two different ways. One natural assumption, that the verb does not move to C in Caribbean varieties, has been challenged by Suñer (1994) and O & O because of the distribution of adverbs, which can follow the verb. O & O note that their speakers prefer the order wh-SV mostly with pronominals, not with DPs, and that this follows from the fact that subject pronouns in Caribbean Spanish are weak in the sense of Cardinaletti & Starke (1999). As weak pronouns, they must move to AgrsP, whereas other subjects may either remain in base position, or move to Comp (with remnant movement of the IP to a Comp-related position, see O & O for details). This analysis derives parametric variation through a combination of different lexical specifications and different structural representations: pronominals may optionally be lexically specified as weak in Caribbean Spanish, but not in non-Caribbean Spanish. Additionally, weak pronouns occupy a different position than lexical DPs and strong pronouns.5

O & O note that lack of inversion is constrained by person and number: it is most productive with 2nd person pronouns, followed by 3rd person pronouns vs. DPs, and also more productive in singular than in plural. However, once again, the data from other sources do not converge with these observations, pointing to the difficulty in drawing clear conclusions. Specifically, Cabrera (2008) does not show a significant difference in acceptability judgments between preverbal lexical DPs and pronominals. In a separate task where speakers chose between preverbal or postverbal subject position, she found that speakers in El Cibao preferred the postverbal position 60% of the time for pronominals and 48% for lexical DPs, whereas in Santo Domingo, the postverbal position was chosen 43% of the time for pronominals and 50% for lexical DPs.

Assuming that some of this variation is due to the difficulties in obtaining data from a socially marginalized variety, or to the inherent instability of grammars that are changing, we can conclude that the weak/strong nature of the pronoun is reflected in the overt word order of questions, along O & O’s proposal. In the framework of variation discussed in the first section of this paper, the weak/strong difference and its syntactic correlates should follow from their respective lexical specifications. Specifically, weak and strong pronouns differ along at least two dimensions: they seem to be frozen in some structural position (IP in this case), and they are prosodically weak, and each of these properties must be lexically specified. However, any attempt to derive pronominal placement from prosodic properties must distinguish weak pronouns from clitics, since only the former can be separated by negation (as pointed out by Suñer 1994 and O & O).

3.2 Brazilian Portuguese

Duarte (1993, 1995) argues that BP has been gradually increasing the proportion of overt pronominal subjects, even with non-human antecedents. The rate of overt pronominal subjects has gone from 20% in 1845 to 74% in 1992 in Duarte’s corpus of popular plays (mostly from Rio, cf. Barbosa, Kato & Duarte (2005), ex. (10b)). This process correlates with two parallel changes. First, a well-documented erosion of the morphological paradigm inherited from European Portuguese (as has been also the case in DS and other Caribbean varieties of Spanish). This change can be seen in Duarte’s (2000: 19) description of three distinct stages in the evolution of the BP.

5 The original proposal that pronominals are clitics in Caribbean comes from Lipski (1977), see also Heap 1990.
verbal paradigm, shown in table 1.

Table 1. Evolution of inflectional paradigms in BP (adapted from Duarte 2000: 19)

<table>
<thead>
<tr>
<th>Person/number</th>
<th>Paradigm 1</th>
<th>Paradigm 2</th>
<th>Paradigm 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaker.sg.</td>
<td>am-o</td>
<td>am-o</td>
<td>am-o</td>
</tr>
<tr>
<td>Hearer.sg</td>
<td>am-a-s</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Other.sg.</td>
<td>am-a</td>
<td>am-a</td>
<td>am-a</td>
</tr>
<tr>
<td>Speaker.pl</td>
<td>am-a-mos</td>
<td>am-a-mos</td>
<td>--</td>
</tr>
<tr>
<td>--</td>
<td>am-a</td>
<td>am-a</td>
<td>--</td>
</tr>
<tr>
<td>Addresssee.pl</td>
<td>am-a-is</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Other.pl</td>
<td>am-a-m</td>
<td>am-a-m</td>
<td>am-a-m</td>
</tr>
</tbody>
</table>

The second process, which according to Duarte is the crucial one for the loss of null subjects, involves a reorganization of the pronominal paradigm, illustrated in table 2. As a result of this reorganization, the verbal paradigm was reduced to three distinct endings: one for ‘speaker sg.’, one for ‘hearer sg.’, ‘other sg.’ and ‘speaker pl.’, and one for ‘addresssee.pl’ and ‘other pl.’. Some of these changes have also taken place in varieties of Latin American Spanish, where vos/vosotros has been replaced by usted/ustedes. But in most of Latin American Spanish, ‘addressee sg.’ maintains an overt distinction (tú/usted or vos/usted) based on formality, with a parallel distinction in verbal endings. This is not the case in BP.

Table 2. Evolution of the pronominal paradigm in BP

<table>
<thead>
<tr>
<th>Person/number</th>
<th>Pronoun</th>
<th>Verbal ending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaker.sg.</td>
<td>Eu</td>
<td>amo</td>
</tr>
<tr>
<td></td>
<td>Tu</td>
<td></td>
</tr>
<tr>
<td>Hearer.sg</td>
<td>Vós</td>
<td>ama</td>
</tr>
<tr>
<td>Other.sg.</td>
<td>Ele/Ela</td>
<td>ama</td>
</tr>
<tr>
<td>Speaker.pl</td>
<td>Nós</td>
<td>ama</td>
</tr>
<tr>
<td>Addresssee.pl</td>
<td>Vós</td>
<td>amam</td>
</tr>
<tr>
<td>Other.pl</td>
<td>Eles/Elas</td>
<td>amam</td>
</tr>
</tbody>
</table>

Kato (1999) argues that verbal inflection in BP no longer satisfies the EPP, as a consequence of these two processes. For this reason, an overt (weak) pronominal must move to Spec, IP. This opens the possibility of generating a subject clitic left-dislocated items (SCLLD) lexical DPs, as in the case of a Clarinha in (8) and o Instituto de Física in (9) below (cf. Barbosa, Kato & Duarte 2005).

(8) A Clarinha, ela, cozinha que é uma maravilha
the Clarinha she cooks that is a wonder
“Clarinha, she cooks wonderfully.” (from Barbosa, Kato & Duarte 2005, exs. (11))

(9) Então [o Instituto de Física], ele, manda os piores professores... [Os melhores], eles, dão
then the Institute of Physics it sends the worst teachers ... the best they give
aula no curso de matemática.
class in the course of Mathematics
“Then the Institute of Physics sends the worst professors ... The best teach in Mathematics.”

SCLLDs lack the syntactic and semantic restrictions that constrain object CLLD structures in other Romance varieties, so, for example, SCLLD can be embedded, interpreted as arbitrary, indefinite, etc. In (9), for
example, an inanimate SCLLD is coindexed with an overt pronominal, something that is usually not possible in full productive NSLS.

A partially similar pattern applies to the evolution of lack of inversion in wh-questions in BP. Duarte & Kato (2002) note that inversion initially occurs with pronominals, first seen in the mid nineteenth century, later with NPs (by the 1930s). They argue that this change correlates with the overall loss of null subjects in BP: wh-SV orders first appear because children reanalyze wh-questions with null subjects as having a preverbal subject. Once null subjects disappear, the order is SV becomes the norm.

Although overt subjects are increasingly frequent in BP, Modesto (2000) points out that null subjects still remain active in the language, and that their interpretation is not the same as that of overt pronouns. According to him, null pronouns in BP must be locally bound by a c-commanding subject as seen in (10) (or by an A'-bound object, for example a wh-word). In the first example, a null *pro* can be bound by the preceding subject, but not by the preceding in situ object, whereas the overt counterpart in (10b) can be coreferential with either the object or with a third referent.6

(10)  

6  Barbosa, Kato & Duarte (2005: fn 29) argue that null pronouns in BP can be referential, contrary to Modesto’s assumptions, and also that *pro* is possible in root clauses as well. It is possible that Modesto’s data comes from a more restrictive variety than the one reported in Barbosa, Kato & Duarte (2005).

6 Thanks to Ana Teresa Pérez-Leroux for discussion of these examples.
feature $\alpha$ in A to category B. As a consequence of AGREE, the two categories end up having the same feature specification, as in (12)a. If both categories happen to have the same value, then AGREE applies vacuously, resulting in matching, as in (12)b. However, if the two categories have distinct values, one cannot be overwritten, so AGREE is blocked, as in (12)c.

(12) a. $A \ldots B \implies A \ldots B$ Valuation
   \[\alpha \leftrightarrow \alpha\]

   b. $A \ldots B \implies A \ldots B$ Matching
   \[\alpha \leftrightarrow \alpha\]

   c. $A \ldots B \neq A \ldots B$ No agreement
   \[\alpha \beta \leftrightarrow \alpha\]

In addition to being valued (cf. A in the left-hand side of (12)a above) or unvalued (B in the left-hand side of (12)a), categories may have interpretable or uninterpretable features, namely features that are processed by the interfaces, or not. I assume that the crucial difference between null subject languages and non-null subject languages relates to whether inflection is interpretable or not. Languages like Spanish and/or Italian have an interpretable Infl, languages like English have uninterpretable Infl. Interpretability indirectly correlates with having a valued Infl, is is well known. (Cf. Camacho 2013a, for a proposal on this correlation).

When a null referential category is valued as a consequence of AGREE, it acquires the relevant $\varphi$-features and it becomes contentful. However, as several researchers have noted, this may not be enough to be used appropriately in discourse. In effect, a null, contentful category must also be identified by a topic. This explains why null subjects are not particularly good as out-of-the-blue statements, and require an overt discourse antecedent (cf. Lozano 2002, Sheehan 2007, Camacho 2013a, among others). So, for example, Sheehan (2007: 84, ex. 158) notes that null subjects are not possible in certain contexts if the discourse antecedent is structurally ambiguous. In (13)a, the antecedent of the null subject is uniquely identified as ‘1$^{st}$ person sg.’ through verbal inflection, whereas in (13)b, it is not (because tenía is ambiguous between ‘1$^{st}$/3$^{rd}$ person’).

(13) a. María y yo llegamos a casa. Yo/pro abrí la puerta.
   María and I arrived home. I/opened the door.
   “María and I arrived home. I opened the door.”

   b. María y yo llegamos a casa. Yo/ella/*pro tenía las llaves.
   María and I arrived home. I/she/pro had.1/3.sg the keys
   “María and I arrived home. I/she found the keys.”

To illustrate how all these assumptions work in a fully NSL, the subject and the verb AGREE in the overt subject version of example (14)a, as illustrated in (14)b, and the pronoun serves as the topic antecedent for inflection. In the null subject counterpart, represented in (14)c, Infl is valued and interpretable (as indicated by the “i” subindex), and it will receive a topic antecedent from the sentence topic.

(14) a. (Ella) entró
   she entered.3sg
   “She entered.”

   b. [IP ella [IP entró]]

   c. [IP [i entró]]
      [3.sg]i

4.2. Licensing of null categories in BP and DS.
I suggest that the trigger for the change in BP and DS rests on the structural ambiguity in the analysis of null subject sentences, as well as on an increase in the statistical frequency of overt pronouns in those varieties. Both of these changes restructure the lexical entries for referential categories and trigger further syntactic consequences in the possible positions occupied by subjects.

First, let us consider structural ambiguity. In a typical NS variety as GS or EP, null and overt subject pronouns have specialized discourse functions; NS involve discourse continuity and overt pronouns a contrastive function (introducing a new topic). Structurally, Cardinaletti & Starke (1999) have argued that weak and strong pronouns occupy distinct positions, and Ordóñez & Olarrea (2006) have suggested that overt pronouns in DS are weak. From a different perspective, Camacho (2006) has claimed that different types of overt subjects may occupy different positions. All of this evidence suggests that subjects in Spanish are structurally ambiguous, being able to occupy at least two and possibly more positions (in IP and in the CP field).

Suppose now that the frequency of overt pronouns starts to increase in a NS variety. This increase can be triggered by a number of independent factors. It could be that the system is reorganized, as Duarte (1995) proposes, or it could be a random frequency increase. As a result, more overt pronouns will appear in contexts where they are not focused but they are still strong, so that the clear-cut association between discourse function, prosodic strength and structural position weakens. If that happens, we have two separate positions for pronouns without a clear functional or discourse-related distinction, one in Spec, IP, the other one in Spec, CP.

Next, and perhaps more controversially, I will assume a general principle that disfavors grammatical relations between a head and a category in its specifier that I will call an anti-locality constraint (following other researchers). Some version of such a constraint has been present throughout generative grammar, first as the doubly-filled COMP filter (a ban against a wh-word and an overt complementizer in the same projection), more recently as a derivational constraint against movement of a complement to the specifier position of its own projection (cf. among others Bošković 1994, 2005). Although with different formulations and coverage, these principles address similar ideas. For ease of exposition, I will use the notation *Spec, head.

*Spec, head does not generally ban a filled Spec position, but rather a Spec-head grammatical relation (typically agreement), so that an YP in Spec, XP that does not agree with a head X would be allowed, but one that does agree with a head Y would. As a result, *Spec, head would disfavor (15)a, where AGREE connects the head X and and YP. Furthermore, I suggest that *Spec, head operates only when both Spec and head contribute to AGREE, but not when one of them values the other. As a result, (15)b would be allowed because the feature of the specifier is copied on the head. Finally, if YP is not in the specifier of XP, then non-local AGREE between YP and X is legitimate, as in (15)c.

(15) Possible outcomes of *Spec, head

\[
\begin{align*}
   & \text{a.} \quad *XP \quad \text{b.} \quad XP \\
   \text{YP} & \quad \text{YP} \\
   & \quad \quad [\alpha] \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad [\beta] \\
\end{align*}
\]

As a result of *Spec, head, the presence of an overt subject in Spec, IP will only be possible if AGREE is directional (i.e. either the head or the subject are unvalued). Otherwise, an overt subject will tend to appear dislocated (as in (15)c).

Suppose, as suggested earlier, that frequency of pronouns begins to increase in BP/DS, and that some of those pronouns no longer have contrastive content. The NSL grammar will tend to locate them in Spec, IP, conflicting with *Spec, head. Four possible logical outcomes are available to result the conflict: 1) pronoun frequency decreases again, 2) Infl becomes unvalued/uninterpretable (and morphologically impoverished), 3) overt subjects always become dislocated or 4) pronouns become unvalued (expletives).

Arguably, some of these outcomes can operate simultaneously. For example, the simplification of the pronominal paradigm and the inflectional described earlier in BP go hand in hand, and can be seen as a consequence of the higher frequency of overt pronouns. This higher frequency favors pronouns in Spec, IP, which conflicts with *Spec, head. In order to preserve *Spec, head, Infl becomes unvalued and is no longer interpretable.
In DS, *Spec, head leads to undervaluation of the pronoun in at least one case (the expletive *ello). The reason why this option is so limited relates to the fact that pronouns need to have reference, so the appearance of expletives is severely restricted to situations in which absence of reference does not have an effect, namely with non-thematic subjects.

What about weak pronouns? If Cardinaletti & Starke (1999) are correct, these categories can only occupy Spec, IP. This poses a potential problem for the analysis in NS varieties with interpretable/valued Infl, because they would instantiate a case of AGREE under Spec, head. Note first that the fact that weak pronouns are morpho-phonologically reduced with respect to their strong counterparts supports the broader approach adopted here: the closer to the licensing head, the less contentful the pronoun. One possible implementation would be that weak pronouns in NSLs are not in Spec of IP, but rather incorporated to I. Thus, another possible way to by-pass *Spec, head would be for the XP to incorporate to the head. This suggestion relates to Alexiadou & Anagnostopoulou’s (1998) proposal that verb incorporation satisfies the EPP in NSLs. Weak pronouns in varieties with uninterpretable/unvalued Infl could be in Spec, IP (see below).

4.3. Other consequences

One consequence of the switch from interpretable to uninterpretable Infl is that null and overt pronouns no longer contrast, so that overt pronominals are no longer specialized (Chomsky’s 1981: 65 Avoid Pronoun Constraint). For example, in BP an overt pronoun can refer to an inanimate antecedent (cf. (16), from Duarte 2000: 22). This option is not possible in NS varieties.

(16) A casa virou um filme quando ela teve de ir abaixo.
    the house became a movie when she had to be demolished
    “The house became a film when it had to be demolished.”

Likewise, the contrast between arbitrary and non-arbitrary interpretation (cf. (3) above) will be lost: the overt pronominal will be able to receive an arbitrary interpretation, as seen in Barbosa, Kato & Duarte’s (2005) BP example in (17). On the other hand, pronouns like *él “he” in DS cannot receive an arbitrary interpretation in examples like (18)a. This may signal that unlike in BP, in DS Infl still remains interpretable, and that changes in the system are still at the beginning. It may also be the case that (18)b involves elision of the last consonant in *ellos. If so, DS would be at a stage where overt personal pronouns can be interpreted arbitrarily.9

(17) Você, no Canadá, você pode ser o que você quisier.
    You in-Ca-na-da, you can be whatever you want
    “In Canada, you can be whatever you want.”

(18) a. Ellos dicen que habian robado en la casa.
    they say that had robbed in the house
    “They (non-arbitrary) say that they had robbed in the house.”

b. Ello dicen que habían robado en la casa.
    EXPL/they say that had robbed in the house

---

8 (18) is generic, and generic 2p. sentences are possible in most varieties of Spanish. I do not know if the overt counterpart of (3) is possible or not. According to Nunes (p.c.), the overt subject pronoun cannot get an arbitrary interpretation in out-of-the-blue contexts, such as (i), as opposed to (ii). In the context of (iii), the second clause can have an arbitrary interpretation.

i. Eles disseram que tinham assaltado a casa.
    “They said that they had robbed the house.”

ii. Disseram que tinham assaltado a casa.
    ‘They (arbitrary/non-arbitrary) said that they had robbed the house.’

iii. Ontem eu liguei para a universidade. Eles disseram que o meu projeto foi aprovado.
    “Then I called the university. They said that my project had been approved.”

9 Thanks to Ana Teresa Pérez-Leroux and Jacqueline Toribio for data and discussion of this point.
“They (arbitrary) say that they had robbed in the house.”

The third consequence of $\text{Infl}_{[i]} \rightarrow \text{Infl}_{[u]}$ is that overt pronouns can be interpreted as bound variables, i.e., Montalbetti’s (1984) Overt Pronoun Constraint no longer holds, as shown in (19), from Barbosa, Kato & Duarte (2005), ex. (90a).

(19) [Ninguém no Brasil], acha que ele, é prejudicado pelo Governo.

on-one in-the Brazil thinks that he is harmed by-the government

“No one in Brazil thinks that he is harmed by the government.”

In NS languages, one possible analysis of OPC effects is that overt pronouns are focalized, hence somehow quantificational (cf. Larson and Luján 1989, Comínguez 2011) and therefore cannot be bound by a separate quantifier. If Infl becomes $[u]$, then the overt pronoun can appear in Spec, IP, it need not be focalized, it is no longer quantificational and it can therefore become a variable.

One final consequence of the generalization of $\text{Infl}_{[u]}$ relates to weak pronouns. Above I suggested that weak pronouns in NSLs may be incorporated. However, in mixed varieties such as BP and DS, this may not be the case. As noted above, O & O note that non-inverted subject pronouns in questions are more acceptable in 3rd person in DS. We could take this as a suggestion that they are indeed in Spec, IP, hence when fully valued φ-features appear on the pronoun (i.e. 1st/2nd person), they are barred from that position due to *Spec, head. When they are underspecified for person (as many have proposed for 3rd person features), they can appear in Spec, IP. This entails that Infl in DS still has valued/interpretable features in general.

In BP, on the other hand, I am not aware that person settings constrain the appearance of weak pronouns, so either Infl has become uninterpretable/unvalued (and weak pronouns are in Spec, IP) or weak pronouns are incorporated. In either case, we could view a pronoun’s prosodic weakness as the correlate of its local syntactic relationship with a head: either in its specifier or incorporated to it.

5. Conclusion

This paper has attempted to explain and formalize how a fully NS variety can become an increasingly overt-subject variety by looking at BP and DS. I have argued that the initial trigger for this change involves an anti-locality ban against Spec-head grammatical relations. Since overt subjects and inflection are initially interpretable, an increase in the statistical frequency of overt pronouns, produces anomalous cases where an overt, interpretable pronoun agrees with an interpretable inflection within the same maximal projection. Because of a general prohibition against matching AGREE in Spec, head configurations, appearance of the pronoun in Spec, IP leads to a change in inflection’s lexical entry from interpretable to uninterpretable and/or to pronouns and subjects moving outside of IP. Several syntactic consequences follow: pronouns can become weak as a reflection of their close structural proximity to Infl, and overt subjects escape *Spec, head by dislocating. Semantically, the overt/null division of labor disappears, together with all of the effects it carries.

References


Camacho, José. 2013b. On left-peripheral expletives in Central Colombian Spanish. Ms. Rutgers University.


