# Constraint interaction in binding and the feature specification of anaphoric forms

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#### 0. Introduction

In this paper I will be concerned with some alternations between anaphors and pronouns found in Brazilian Portuguese (BP), European Portuguese (EP) and Spanish (Sp) which, as exemplified by the BP contrast in (1), are triggered by quantificational elements like 'nobody':1,2

(1) a {O João/Nenhum aluno} tinha visto o livro atrás de {(?)?si/ele} {João/No pupil} has seen the book behind {(?)?SE/him} b Ninguém tinha visto o livro atrás de {si/\*ele} Nobody has seen the book behind {SE/\*him}?

As I will show, such alternations provide evidence for two general points. In sections 1 and 2 I argue that they are better understood as a result of the interaction of two *violable* constraints, NO GENDER and LOCALITY. This conclusion supports the general claim that constraints on anaphoric dependencies work as in an optimality-like system: rather than establishing outright (un)grammaticality of each anaphoric form, they evaluate their relative well-formedness (cf. Burzio 1992, 1995; Menuzzi 1995). Section 2 also describes the intricate pattern of variation which arises when we compare alternations like (1) in BP, EP and Sp. In sections 3 and 4 I argue that the variation comes from the different degrees of resistance to LOCALITY violations an anaphor can show depending both on its inherent feature specification, and on its specification relative to that of pronouns.

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Acceptability judgements are marked in the following way (see Menuzzi 1996 for justification): no mark = sentence is OK, i.e., fully acceptable and natural; ? = acceptable, perhaps not very natural; additional discourse justification may be needed; ?? = marginal; perhaps acceptable with strong discourse justification; \* = sentence is unacceptable.

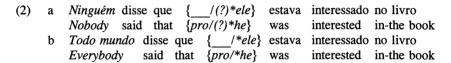
I will also use the following conventions to 'conflate' different or varying judgments:

<sup>(?) =</sup> from OK to ? (??) = from OK to ?? (?\*) = from ?! to \*
(?)? = from ?! to ?? (?)\* = from ?! to \*
(\*) = from OK to ?? (\*) = from OK to \*

This, in turn, strongly supports the idea that locality effects in sentential anaphora are to be associated with a requirement for morphological economy (cf. Burzio 1989, 1991; Menuzzi 1995, 1996).

### 1. NO GENDER

Dependencies between overt pronouns and quantificational antecedents are known to be subject to specific constraints in different languages.<sup>3</sup> One such constraint, found in BP, EP and Sp, concerns quantificational NPs such as 'nobody' and 'everybody', which are strongly disfavored as antecedents of an overt pronoun: this is shown in BP contrasts like (2) below, in which null pronouns are the only possible option:



Let me call the relevant type of NPs *NOBODY antecedents*, after its typical case, 'nobody' in BP, EP and Sp. NOBODY NPs oppose referential and other quantificational NPs, which may have either null or overt pronouns as an option:

- (3) a *O Paulo* disse que {\_/ele} estava interessado no livro *Paulo* said that {pro/he} was interested in-the book
  - b Nenhum estudante tinha dito que {\_/ele} gostou daquele livro No student has said that {pro/he} liked of-that book
  - c Todo estudante diz que {\_\_/ele} gosta daquele livro Every student says that {pro/he} likes of-that book

The contrast between NOBODY antecedents and other types of antecedents is not restricted to the null versus overt subject alternation in Sp, EP and BP: it recurs wherever pronouns are not the only anaphoric option. For example, besides their 3rd person possessive, most Romance languages may also use the genitive construction [de + pronoun] for possessive anaphora, as in the Spanish sentence in (4a) below. (4b) shows, however, that the pronoun is again excluded for NOBODY antecedents, as they are within PPs in which they would otherwise be an option to the anaphor, as in (5) (cf. Menuzzi 1995; the anaphor is glossed 'SE'):

<sup>&</sup>lt;sup>3</sup> For example, Spanish and Japanese exclude such dependencies where *null* pronouns are an option, cf. Montalbetti (1984). See Huang (1995) and Menuzzi (1996) for discussion and references.

Since the descriptive observations in this section hold in BP, EP and Sp with minor variation, they are exemplified only in one language. See Menuzzi (1996) for discussion of this point, too.

- (4) a Juan cree que {su patrón/?el patrón de él} es un tonto Juan believes that {his boss/?the boss of-him} is a fool
  - b Nadie cree que {su patrón/(?)\*el patrón de él} es un tonto Nobody believes that {his boss/(?)\*the boss of-him} is a fool
- (5) a Juan cargaba {con él/?consigo} una bolsa llena de dinero Juan carried {with him/?with-SE} a bag full of money
  - b Nadie cargaba {(?)\*con él/consigo} una bolsa llena de dinero Nobody carried {(?)\*with him/with-SE} a bag full of money

If we look at the anaphoric use of pronominal complements in BP, EP and Sp, the same contrast arises in a different way: direct and indirect pronominal objects may be bound without any trouble, as in the Spanish sentences (6a) and (7a); but if the antecedent is a NOBODY NP, direct pronominal objects become odd, while indirect ones do not, cf. (6b) versus (7b):

- (6) a *Juan* dijo que María *lo* había visto en el cine *Juan* said that María *him* has seen in the cinema
  - b (??)Nadie dijo que María lo había visto en el cine (??)Nobody said that María him has seen in the cinema
- (7) a *Juan* dijo que María *le* había traído un libro *Juan* said that María *to-him* had brought a book
  - b *Nadie* dijo que María *le* había traído un libro *Nobody* said that María *to-him* had brought a book

The pattern in (6)-(7) differs, however, from the others we have seen before in that the contrasting forms are not alternatives to each other (see also fn. 5 below). To sum up, we have the following the contrasts triggered by NOBODY antecedents in dependencies otherwise unproblematic in BP, EP and Sp:

(8) a 
$$\{pro/*\acute{e}l\}$$
 cf. (2), (3) c  $\{s\acute{e}l\}$  cf. (5) b  $\{su/*\acute{e}l\}$  cf. (4) d  $\{le/(??)lo\}$  cf. (6), (7)

What, then, distinguishes  $\{pro, su, si, le\}$  from  $\{él, lo\}$ ? If there is any property contrasting such forms, it is their specification for *gender* distinctions:  $\{pro, su, si, le\}$  are all *un*specified for gender in the sense that they can take either masculine or feminine antecedents, as shown in (9a) for si and in (9b) for null subjects in Sp (analogous examples can be easily constructed for su and le).

bolsa llena de libros (9)?{Juan/María} cargaba consigo una ?{Juan(m)/María(f)} carried with-SE a bag full of books {Juan/María} cree que es inteligente  $\{Juan(m)/Maria(f)\}\$  believes that (pro)intelligent is

 $\{\acute{el},\ lo\}$ , on the other hand, are *specified* for gender, i.e., they agree with the gender of their antecedent, as shown for  $\acute{el}$  in (10) below:

```
(10) a Juan cree que {?él/*ella} es inteligente

Juan believes that {?he/*she} is intelligent

b María cree que {*él/?ella} es inteligente

María believes that {*he/?she} is intelligent
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The generalization behind (8), then, is that gender-marked forms are disfavored with NOBODY antecedents. Assume the following constraint holds:<sup>4</sup>

(11) NO GENDER: 
$$*[NOBODY_i ... X [+gender]_i]$$

NO GENDER will, then, play against pronouns with NOBODY antecedents in BP, EP and Sp because pronouns are specified as [+gender]. Since in most of the contexts we have seen these languages allow an alternative form which does *not* violate NO GENDER, this form will be preferred over the pronoun.<sup>5</sup>

#### 2. The Interaction between NO GENDER and LOCALITY

Consider the fact that *anaphors* favor *local* dependencies, while *pronouns* favor *non-local* ones, as shown by the BP pattern in (12):

(12) a 
$$O$$
  $João$  tinha  $\{se\}$  visto  $\{*ele\}$  na TV (Transitive)  $João$  has  $\{SE\}$  seen  $\{*him\}$  on TV b  $O$   $João$  só fala de  $\{si/ele\}$  (Compl PP)  $João$  only speaks of  $\{SE/him\}$ 

<sup>4</sup> NO GENDER is plausibly a specific case of the general restriction according to which anaphoric forms have to agree in features with the interpretation of its antecedent, as in:

<sup>(</sup>i) The boy; said he/\*she; is sick-and-tired of chips
For obvious reasons, only he, not she, is compatible with the interpretation of the boy. NOBODY
NPs such as 'nobody', 'everybody', and 'who', have in their domain of quantification, however,
both female and male individuals, which suggests that NOBODY NPs disfavor forms specified for
gender because these cannot match their domain. For some discussion on the formulation of this
constraint, see Franks & Schwartz (1994), Menuzzi (1996) and references cited there.

<sup>5</sup> Similarly, absence of forms unmarked for gender leads English to tolerate NO GENDER violations: hence, the acceptability of dependencies involving NOBODY NPs and pronouns. Problematic, however, might the case of direct object clitics in Sp and EP: there is no option for these forms and, still, they feel the effects of NO GENDER, though in a milder way, cf. (8). Apparently, we have to say that, depending on the strength of a constraint's violation, lack of a better option may weaken but not eliminate its effects. Patterns like (18) below also support this conclusion.

- c *O João* viu uma cobra atrás de {(?)?si/ele} (Non-Compl PP)

  João saw a snake behind {(?)?SE/him}
- d *O João* disse que a Maria desconfia de {\*si/ele}(Embedded CP)

  João said that Maria suspected of {\*SE/him}

(12a) shows that, in the most local environment, only the anaphor is possible, and the pronoun is excluded. If we make the dependency less local, as in (12b), both forms become available. As the distance increases, the anaphor becomes less and less acceptable, cf. (12c), up to complete unacceptability, cf. (12d). There is, then, a condition playing against *anaphors* whose effects are somehow proportional to the distance of the dependency. Assume it to be (13), for concreteness (see Menuzzi 1995, Burzio 1989, 1992 for discussion):

(13) LOCALITY: the less local the dependency, the less acceptable the anaphor

Now, we have two conditions in BP, EP and Sp, NO GENDER and LOCALITY, which appear to conflict in the anaphoric choices they favor: NO GENDER plays against pronouns, LOCALITY plays against anaphors. Do we find evidence for interaction between these two conditions, or do they operate independently? Consider for example contexts where LOCALITY starts to be felt on anaphors in BP, as in (12c) above, repeated as (14a) below: if we substitute the referential antecedent in this context by a NOBODY antecedent, the pronoun becomes simply unavailable, and the anaphor is the only option, as in (14b):

```
(14) a
         O João
                  viu
                        o livro
                                 atrás de
                                             {(?)?si/ele}?
                                             {(?)?SE/him}?
         João
                   saw
                        the book behind
         Ninguém viu
                                             {si/*ele}?
                        o livro
                                 atrás de
                                             \{SE/*him\}?
         Nobody
                  saw the book behind
```

Thus, the effects of NO GENDER on pronouns in (14) appear to weaken those of LOCALITY on the anaphor slightly. Sp shows a similar paradigm:

(15) a Juan llevaba {con él/?consigo} una bolsa llena de libros
 Juan carried {with him/?with SE} a bag full of books
 b Nadie llevaba {\*con él/consigo} una bolsa llena de libros
 Nobody carried {\*with him/with SE} a bag full of books

The EP anaphor, on the other hand, shows no noticeable effect of LOCALITY in this context; thus, no wonder it is the only option for NOBODY antecedents:

Let me summarize the paradigms in (14) to (16) as in:

(17)	Structure	$[_{CP} NP_i]_{VP}$	V [PP P PRO]	N <sub>i</sub> ]]]
	Language	BP	EP	Sp
	$Ref/Q N NP_i$	(?)?si/ele	si/ele	(?)si/ele
	NOBODY NP:	si/*ele	si/*ele	si/*ele

It appears, then, that while the BP and the Sp paradigms in (14) and (15) provide some evidence for the interaction of NO GENDER and LOCALITY, the EP case is irrelevant, since the anaphor shows no independent effect.

Things become more interesting when the anaphor is excluded, and pronouns are the only option for referential antecedents. In BP the anaphor improves significantly with a NOBODY antecedent and becomes the best option:

- (18) a *O João* jamais admitiria que a Maria desconfiasse de {(?)\*si/ele} João never would-admit that Maria suspected of {(?)\*sE/him}
  - b Ninguém admitiria que a Maria desconfiasse de {(?)?si/(?)\*ele} Nobody would-admit that Maria suspected of {(?)?sE/(?)\*him}

The paradigm in (18) provides clear evidence that NO GENDER and LOCALITY interact in BP. In (18a) the pronoun does not violate any condition, and the anaphor violates LOCALITY; the anaphor is, then, excluded. In (18b) the anaphor still violates LOCALITY, but the pronoun also violates a condition, namely, NO GENDER: the fact that the anaphor is not only acceptable but also the best option shows that the NO GENDER violation of the pronoun in (18b) is strong enough to become more costly than the LOCALITY violation of the anaphor. EP shows a similar paradigm, differing only in that the LOCALITY effects on the anaphor appear to be much milder than in BP:

- (19) a *O João* jamais admitiria que a Maria desconfiasse de {(?)si/ele} João never would-admit that Maria suspected of {(?)sE/him}
  - b Ninguém admitiria que a Maria desconfiasse de {si/(?)\*ele} Nobody would-admit that Maria suspected of {SE/(?)\*him}

Spanish, on the other hand, differs from BP and EP: the anaphor is unacceptable with a referential antecedent in the same context, and pronouns are still preferred with NOBODY antecedents, suggesting that the effects of NO GENDER on pronouns are not sufficient to make the anaphor the best option:

But even in Spanish we find evidence for the interaction of NO GENDER with LOCALITY: compare the acceptability of the pronoun in (20b) and in contexts where the alternative form does *not* violate any condition, as in (21):

(21) Nadie dijo que 
$$\{ /(?)*\acute{e}l \}$$
 desconfiaba de María Nobody said that  $\{ pro/(?)*he \}$  was-suspicious of María

The pronoun is out in (21) because it violates NO GENDER, while pro violates nothing and, hence, is a better option. The pronoun, however, improves considerably in (20b) because the only alternative form, si, also violates a condition, LOCALITY, paying for the pronoun's cost. To sum up (18) to (20):

(22)	Structure	$[_{CP}  NP_i  [_{VP}  V  [_{CP}$	that NP $[_{VP}$ V $[_{PP}$ I	P PRON <sub>i</sub> ]]]]]
	Language	BP	EP	Sp
	$Ref/Q N NP_i$	(?)*si/ele	(?)si/(?)*ele	*si/ele
	NOBODY $NP_i$	(?)?si/(?)*ele	si/*ele	*si/(?)?ele

The point, then, is: if we want to explain patterns of anaphoric choices such as (17) and (22), we have to allow NO GENDER and LOCALITY to interact. And yet, this is not enough, for it offers no understanding of the variation we find in (17) and (22). More specifically, the questions we have to address now are:

- Why are the effects of LOCALITY on the anaphor weaker in EP than (23) a in BP and Sp (cf. (17) and (22))?
  - Why do the effects of NO GENDER overcome those of LOCALITY in BP and EP, but not in Spanish (cf. (22))?

### 3. The Feature Specification of Anaphors and LOCALITY

As we have seen above, the effects of LOCALITY on the anaphor appear to be stronger in Spanish than in BP or in EP, for they are not overcome by the effects of NO GENDER on pronouns in Sp. There is reason, on the other hand, to believe that LOCALITY effects are incremental in nature (cf. (12) and (13)), so that we may wonder whether they may eventually make the pronoun the best option in BP and in EP, too. Actually, this is what happens: if we add another level of clause embedding to (22), the anaphor becomes unacceptable, and the pronoun the best option both in BP and in EP (judgements conflated in (24)):

(24) Ninguém jamais admitiria que o Paulo contasse ao João ...

Nobody never would-admit that Paulo tell to João ...

... que a Maria desconfiava de {\*si/(??)ele}

... that Maria was-suspicious of {\*SE/(??)him}

This not only confirms the incremental nature of LOCALITY on anaphors, but also suggests that NO GENDER violations by pronouns may cover the cost of LOCALITY violations by anaphors up to a threshold; after this limit, the pronoun becomes the best option. If LOCALITY violations are proportional to the distance of the dependency, the strength of NO GENDER has to be steady, for only then can increasing LOCALITY violations eventually lead the anaphor to cover the cost of the pronoun. Moreover, if NO GENDER is basically a result of the mismatch between the interpretation of NOBODY antecedents and the gender specification of pronouns (cf. fn. 4 above), then there is no reason to believe that the strength of NO GENDER varies across the languages considered: in all, the trouble with gender specified forms arises because of the existence of alternative forms unspecified for gender in the lexicon. That is, we have reasons to believe not only that the strength of NO GENDER is steady within a language, but also that it is uniform across BP, EP and Sp. But, if the pattern of variation we have found does not arise from NO GENDER itself, it has to come from LOCALITY. This leads us to reformulate the questions in (23) as in (25):

- (25) a Why is the EP anaphor more resistant to LOCALITY violations than the BP and the Spanish (cf. (17) and (22))?
  - b Why is the BP anaphor more resistant than the Spanish (cf. (22))?

Since the effects of LOCALITY on anaphors are proportional to the distance of the dependency (cf. (13)), there might in principle be two sources of variation: either the anaphors themselves might differ among each other, or the way we count the distance of a dependency might differ in EP, BP and Sp. The latter alternative is not very appealing, though, for there is no reported difference between EP, BP and Sp with respect to locality of coindexing dependencies such as WH movement or A-movement. What about the second alternative: do anaphors differ in behavior in those languages? As a matter of fact, yes. As noticed in the descriptive literature on Portuguese, spoken EP makes use of the anaphor si instead of the (formal) second person form você 'you' in preposition-governed positions (see Teyssier 1976:100-1 and Cuesta & da Luz 1971:154-5):

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(27) a O João viu uma cobra atrás de {si/??você}
João saw a snake behind {SE(=you)/??you}
b O João jamais confiaria em {si/??você}
João never would-trust in {SE(=you)/??you}
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But this pronominal use of si appears to be restricted to the singular, that is, si cannot substitute the *plural* form of  $voc\hat{e}$  'you' (according to my informant, though this was reported to be possible by Teyssier, 1976:100):

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(28) a
         O João viu
                      uma cobra atrás de
                                          {si/??você}
         João
                 saw
                      a snake
                                 behind
                                           \{SE(=you(sing))/??you(sing)\}
     b
         O João viu
                      uma cobra atrás de
                                           {??si/vocês}
         João
                 saw
                      a snake
                                 behind
                                           \{??SE(=you(pl))/you(pl)\}
```

More interesting still is the fact that the *non-local* anaphoric *si* shows the same restriction as pronominal *si*: it is strongly disfavored if the antecedent is plural:

- (29) a Nenhum rapaz admitiria que a Maria desconfiasse de {(?)si/ele}

  No boy would-admit that Maria suspected of {(?)sE/him}

  b Poucos rapazes admitiriam que a Maria desconfiasse de {(?)\*Filede)
  - b Poucos rapazes admitiriam que a Maria desconfiasse de {(?)\*si/eles} Few boys would-admit that Maria suspected of {(?)\*SE/them}

The conclusion appears to be: non-local and pronominal si are essentially the same form, which is like locally-bound si except that it is specified for number, more specifically, as [-plural]. There is no evidence, however, that the  $[\pm plural]$  distinction ever plays a role in non-local dependencies involving the BP or the Sp anaphors (for example, the BP equivalents of (29a,b) show no contrast with each other). Thus, the distinctive property of the long-distance bound anaphor in EP, when compared to its cognates in BP and Sp, seems to come from its number specification, a feature for which the BP and the Sp forms are unspecified:

Of course we would like to know what the connection is between the non-local and the local use of si in EP, but this is an issue which I have no contribution to offer to here.

Notice that the pronominal use of si in (27) does *not* imply any difference for its *person* specification. Though  $voc\hat{e}$  refers to the 2nd person of the discourse, it behaves as a 3rd person form as far as agreement is concerned. For example, EP  $voc\hat{e}$  requires the 3rd person form of the inflected verb as well as the 3rd person reflexive, instead of the respective 2nd person forms:

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(iii) Voc\hat{e} não \{se/*te\} \{perturba/*perturbas\} ... You(formal) not \{SE(=you)/*you\} \{disturb(3ps)/*disturb(2ps)\} ... com este tipo de comentário? ... with this sort of remark? (iv) Tu não \{*se/te\} \{*perturba/perturbas\} ... You(informal) not \{*SE(=you)/you\} \{*disturb(3ps)/disturb(2ps)\} ... com este tipo de comentário? ... with this sort of remark?
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<sup>6</sup> Locally-bound si is unspecified for number in EP, as we can see in:

<sup>(</sup>i) O João confia em si próprio João(sing) trusts in SE own(sing)

<sup>(</sup>ii) O João & a Maria confiam em si próprios João & Maria(pl) trust in SE own(pl)

(30)	a	EP anaphor:	[ $\alpha$ person] [ $\beta$ Case] [ $\gamma$ number]	(=3)
	b	BP anaphor:	[ $\alpha$ person] [ $\beta$ Case]	(=2)
	С	Sp anaphor:	[ $\alpha$ person] [ $\beta$ Case]	(=2)

Recall now that we started from the assumption that the EP anaphor is more resistant to LOCALITY violations than the BP and the Sp (cf. (25a)) because of its distinctive properties. This and (30) lead us to conclude, then, that the EP anaphor is more resistant to LOCALITY because it has a different feature specification; more specifically, because it is *more specified* than the BP and the Sp anaphors. In general terms, this suggests that (31) holds:

(31) The more specified an anaphoric form is, the more resistant it is to

(31) is hardly surprising once we realize that the basic contrast which arises with respect to LOCALITY in sentential anaphora is that between *anaphors* and *pronouns*: the obvious difference between these two types of forms lies precisely in the fact that pronouns are more specified than anaphors. (31), then, generalizes over both anaphor/pronoun contrasts and the contrast between the EP anaphor versus the BP and Sp, a fact that provides strong support for it. (31) alone, however, cannot explain the contrast between the BP and the Sp anaphors (cf. (25b)): though the BP anaphor is more resistant to LOCALITY than the Sp, there is no evidence that they differ in feature specification (cf. (30b,c)); they both take 3rd person antecedents in general and are preposition-governed. What is, then, the source of the contrast between the BP and the Sp anaphors?

## 4. The Feature Specification of Pronouns and LOCALITY

Notice that the fact that (31) is a generalization which subsumes the behavior of *pronouns* suggests pronouns with different specification might lead to different LOCALITY effects. But, is there any reason to believe that the BP pronouns may differ from the Sp ones? The answer again is: yes. As is also well-known in the descriptive literature on Portuguese, spoken BP has lost its accusative clitics and uses the subject/oblique 3rd person pronouns as object forms instead (see, for example, Teyssier 1976:88, Cuesta & da Luz 1971:162):

(32)	a	Ele chegou tarde	(Subject)
		He arrived late	
	b	A Maria viu ele na TV	(Object)
		Maria saw him on-the TV	
	c	A Maria casou com ele	(Preposition-governed)
		Maria married with him	

Sp (and EP), on the other hand, preserved the accusative clitics, and with them the [+accusative] distinction:

(33) a		<i>Él</i> ha llegado	tarde	(Subject)
		He has arrived	late	
	b	María {lo} ha	abía visto {*él}	(Object)
		María {him} ha	ad seen {*him}	
	c	María se caso	ó con él	(Preposition-governed)
		María SE mar	ried with him	,

The fact that 3rd person pronouns in BP can occur in basically any Case position (32) suggests that they are not specified for Case distinctions (as first argued by Camara 1957); but since the [±accusative] distinction is still active in Sp and EP, pronouns in these languages do have to be specified for Case:

(34)	a	EP pronouns:	[ $\alpha$ person] [ $\gamma$ number] [ $\delta$ gender] [ $\beta$ Case]	(=4)
	b	BP pronouns:	[ $\alpha$ person] [ $\gamma$ number] [ $\delta$ gender]	(=3)
	c	Sp pronouns:	[ $\alpha$ person] [ $\gamma$ number] [ $\delta$ gender] [ $\beta$ Case]	(=4)

The distinctive property of BP pronouns, then, is that they are less specified than the Sp and the EP ones. Recall now that what we want to know is why the BP anaphor is more resistant to LOCALITY violations than the Sp one. If we compare the feature specification of anaphors and pronouns in both languages, what we see is that the BP anaphor is closer to BP pronouns in feature specification than the Sp is to Sp pronouns (EP patterning with BP in this aspect):

(35)			Pronouns	Anaphors	Difference
	a	EP:	4	3	1
	b	BP:	3	2	1
	c	Sp:	4	2	2

Thus, it appears that the closer an anaphor is to pronouns in a language L, the more resistant it is to LOCALITY violations. That is, resistance of an anaphor to LOCALITY is not only a function of its inherent feature specification, as stated in (31), but also of its feature specification as relative to that of the pronouns in L. More generally, then, something like (36) is also necessary:

(36)The closer an anaphoric form is in feature specification to more specified forms in L, the more resistant it is to LOCALITY.

Just like (31), (36) is also hardly surprising once we have concluded, as we have, that: patterns of anaphoric choices result from competition among alternative forms (cf. section 2); LOCALITY effects are a function of the feature specification of anaphoric forms (cf. (31)). Note that (36) and (31), though connected, are independent statements. We have seen in section 3 that (31) alone cannot explain the contrast between the BP and the Sp anaphors. By the same token, (36) alone cannot explain the contrast between the EP and the BP anaphors: (36) predicts LOCALITY violations on anaphors to be a function of the difference between their specification and that of the pronouns in the same language; but this difference is the same in EP and BP (cf. (35a,b)); (36) would, then, predict the EP and the BP anaphors to have the same behavior, contrary to fact.

Finally, consider what (31) and (36) have in common: both associate LOCALITY effects with the feature content of anaphoric forms, stating that LOCALITY violations are somehow proportional to the level of feature specification of a form, both inherently (31) and relatively to other forms (36).<sup>7</sup> This implies that the more local a relation is, the more favored a subspecified or 'economical' form will be. Thus, (31) and (36) strongly support the conclusion that locality effects in sentential anaphora are crucially related to economy of morphology, as first suggested by Burzio (1989, 1991) (see also Menuzzi 1995, 1996).

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The LIN reviewer suggests that (36) might be problematic for learnability, since the child would need 'a full command of paradigms of pronouns and anaphors before it can start using these elements'. Rather, it seems to me that, if we assume (36) to hold in every stage of acquisition, the prediction would be: the distribution of anaphoric forms in each stage depends on which forms the child has acquired, and with which specification. I am unaware of any result refuting this prediction.