

THE STRUCTURE OF ETHICAL CONSTRUCTIONS AND THE CONSTRAINT ON CO-REFERENCE IN BRAZILIAN PORTUGUESE

A ESTRUTURA DAS CONSTRUÇÕES ÉTICAS E A RESTRIÇÃO DE CO-REFERÊNCIA EM PORTUGUÊS BRASILEIRO

Ana C. Bastos-Gee

CEHUM / UNIVERSIDADE DO MINHO, PORTUGAL
abastos@ilch.uminho.pt

In this paper I discuss aspects of the grammar of ethical pronouns in Brazilian Portuguese, investigating the position where they are first merged into the structure and providing evidence that they undergo A'-movement to a projection in the split IP system (called OrientP), in order to check/ value a feature [+S] related to the sentential force and speaker orientation. Additionally, I study a constraint on co-reference: ethical pronouns cannot co-refer with referential elements in the same CP. I analyze the constraint on co-reference as a strong crossover violation in the sense of Postal (1971), Wasow (1972), Lasnik (1976).

Keywords: ethical constructions, pronouns, co-reference, speaker orientation

Neste artigo discuto aspectos da gramática dos pronomes éticos em Português Brasileiro, investigando a posição em que eles são concatenados à estrutura e fornecendo evidência de que eles realizam movimento-A' para uma projeção no sistema de IP partido (chamada OrientP), a fim de verificar/ validar um traço [+S] relacionado à força sentencial e à orientação para o falante. Adicionalmente, estudo uma restrição de co-referência: pronomes éticos não podem co-referir com elementos referenciais no mesmo CP. Essa restrição de co-referência é analisada como uma violação de cruzamento forte no sentido de Postal (1971), Wasow (1972), Lasnik (1976).

Palavras-chave: construções éticas, pronomes, co-referência, orientação para o falante.

1. Introduction⁽¹⁾⁽²⁾

The term *ethical constructions* is used here to refer to sentences in which a pronoun is used to express that someone is (negatively) affected by the content of the main assertion, as illustrated by the Brazilian Portuguese (BP) construction in (1).

- (1) a. Scenario: Mary spent a whole week organizing a surprise birthday party for John. On the day before, she found out that John went to São Paulo.
 b. Mary: o João *ME* foi pra São Paulo!
 the John me went to São Paulo
 ‘John went to New York (and the speaker disapproves of it)
 Alternatively: ‘John went to New York *ON ME!*’

In (1b), the pronoun *ME* is used to express that the speaker, *Mary*, is negatively affected by the fact that *John went to São Paulo*.

In this paper, I discuss aspects of the grammar of ethical constructions as well as one property that holds across languages: a constraint on co-reference. By constraint on co-reference, I mean that ethical pronouns cannot co-refer with referential elements in the same clause. This observation was originally made for Borer and Grodzinsky (1986) for Hebrew. In BP, the constraint on co-reference holds for all arguments in the same clause, but non-argumental elements are not subject to it.

This paper has two main goals: a. provide a structure that captures the main properties of these constructions in BP, and b. explain how the constraint on co-reference arises.

In section 2, I introduce major properties of ethical constructions in BP. In section 3, I discuss the structure of ethical constructions. My claim is that ethical pronouns start in a low projection in the VP system and move to a projection in the split IP system, which I refer to as OrientP, in order to check a [+S] feature related to speaker orientation. In section 4, I argue that the constraint on co-reference is a strong crossover violation in the sense of Postal (1971), Wasow (1972), Lasnik (1976).

-
- (1) Many thanks to Željko Bošković, Diane Lillo-Martin, and Jonathan Bobaljik for invaluable suggestions on the first versions of this paper. Parts of this work were presented at the Georgetown University Round Table and at the Annual Meeting of the Linguistic Society of America; I thank the audience of those two meetings for comments and questions. And also, thanks to two anonymous reviewers for recent comments on the current version of the paper.
- (2) The current version of this paper was developed within the project *Comparative study of traditional nominal phrases in Portuguese and Spanish*, sponsored by FCT [SFRH/BPD/90484/2012].

2. General properties

In this section, I discuss differences between ethical pronouns, on one hand, and benefactives and possessives, on the other hand, relating them as much as possible to the characteristics of ethical pronouns found in other languages.

Borer and Grodzinsky's (1986) tests for pronominal datives in Hebrew show that there are three types of pronouns that express affectedness: ethical, benefactives and certain possessives, as illustrated below with examples from BP.

(2) Ethical

O João **ME** viajou para São Paulo!

The John _{1ETH} traveled to São Paulo

“John went to São Paulo, and the affected speaker disapproves of it”

Alternatively: “John traveled to São Paulo on me!”

(3) Benefactive

O João **me** escreveu o relatório pro chefe (porque eu estava doente)

The John _{1BEN} wrote the report to-the boss (because I was sick)

“John wrote the report to the boss for me/ replacing me (because I was sick)”

(4) Possessive⁽³⁾

O João **me** vendeu o carro. [me = meu]

The John _{1POSS} sold the car. [me = my]

“John sold my car”

Despite the fact that these pronouns above are homophonous, they have different properties in BP regarding their prosody, restriction on persons, semantic inferences and internal structure.

As for the prosody, the ethical pronoun in BP is phonetically more prominent than the other two affected pronouns, and ethical constructions, as whole, have a different prosodic contour.

As for the restriction on persons, the ethical pronoun in BP occurs in the first person singular only, while benefactives and possessives occur in first, second and third persons.⁽⁴⁾ This property is highly variable across lan-

(3) The pronoun *me* in his sentence is ambiguous between ethical, goal, benefactive, and possessive readings. The intended reading for the example above is the one in which *me* is interpreted as ‘my’.

(4) With respect to third person benefactives and possessives, BP does not have pronominal forms for them anymore, since the oldfashioned benefactive *lhe* and possessive *seu* are now

guages. According to informants and judgments in the literature, Spanish and Hebrew have ethical elements for all persons; Italian has it only for first person, both singular and plural forms; Serbo-Croatian has ethical for first and second persons only, and American English has an ethical-like PP, e.g. *on me/ on you/ on her* as in sentences like “John died on me”, which allows the pronoun to appear in all three persons.⁽⁵⁾

As for its semantic properties, the ethical pronoun bears an inference that the speaker disapproves of the content of the main assertion or is bothered by it, while benefactives and possessives are neutral with respect to the attitude of the speaker. The common meaning of an ethical pronoun or ethical PP across languages is that there is an affected person and there is an inference of speaker’s disapproval. This disapproval ranges from a not-so-pleasant surprise to outrageousness. I refer the reader to Bastos-Gee (2011) for a detailed description of the semantics of ethical constructions and other related constructions. In BP, language that only has a singular first person ethical pronoun, the bothered speaker is also the affected. But this is not the cases for all languages. In languages like Spanish or English, in which ethical appear in other persons in addition to the first one, the sentence expresses something about the speakers’ attitude toward the main statement, in which someone else is the affected person.

As for the internal structure of pronouns that express affectedness, benefactives as in (5) and possessives as in (6) can appear in non-clitic forms as a PP or inside a DP respectively, while ethical pronouns only have a clitic form in BP. Thus, the following sentences cannot have the ethical reading.

- (5) O João escreveu o relatório pro chefe **por mim** (porque eu estava doente)
 The John wrote the report to-the boss **for me**(because I was sick)
 “John wrote the report to the boss for me/ replacing me (because I was sick)”
- (6) O João vendeu o **meu** carro.
 The John sold the **my** car.
 “John sold my car”

used as second person pronouns instead. There are, however, non-pronominal third person forms for benefactives, such as *por ele* ‘for him’ and for possessives, such as *dele* ‘of him’, which makes them different from the ethical pronoun.

(5) The list of languages presented in this paragraph is not intended to be an exhaustive list. And I focus on properties that are relevant for the discussion on Brazilian Portuguese; for European Portuguese, I refer the reader to the following studies on non-argumental datives: Vilela (1992) and Miguel, Gonçalves and Duarte (2011).

Notice that this final property does not hold crosslinguistically either. Languages like Hebrew, BP and Spanish (according to my informants and the judgments in the literature) are subject to it, but other languages like English allow PP-internal ethicals, such as *on me*, which can have the relevant semantic interpretation of an ethical.

In this paper, I focus on the properties of ethical pronouns only. Since these three types of pronouns are homophonous, I will make use of the of the non-clitic form of possessives and benefactives to disambiguate the sentence, whenever necessary, as exemplified below.

- (7) Scenario: Peter wants to put a frog in Mary's suitcase to scare her, but he does not know how to open the suitcase. John decides to help him.
- (8) E o João (*ME*) abriu a mala da Maria pro Pedro!
And the John (me) opened the suitcase of-the Mary for-the Peter.
"John opened Mary's suitcase for Peter (and the speaker disapproves of it)"

Since Mary is the possessor of the suitcase and Peter is benefited by John's act, the only available interpretation for *ME* is the ethical one. This strategy is justified given that a sentence in BP does not allow more than one benefactive, and an object cannot have more than one possessive element associated with it. In other words, using the PP/DPs forms in addition to *ME* will guarantee that *ME* is not interpreted as a benefactive or possessive.

3. The structure of ethical constructions

My main proposal for the structure of ethical constructions is that ethical constituents, such as the pronoun *ME* in BP, are merged into the derivation as specifiers of a low VP projection⁽⁶⁾, and that they move up to the specifier of an A'-projection, higher than vP, as shown in (9) below.

- (9) [_{orientP} ETH₁ [_{orient} Orient^o ... [_{vP} DP3 [_{v'} v [_{vP} PP2 [_{v'} V [_{vP} DP1 [_{v'} V [_{vP} t₁ [_{v'} V]]]]]]]]]]]]]]
-

(6) Essentially following the spirit of Koizumi (1993), (1995) and Lasnik (1995), I assume an argumental structure in which each argument is base-generated in an independent VP layer. Different from their system, I am assuming that vP is the projection where case assignment/checking takes place for internal arguments, and not Agr.P. The analysis presented above is actually compatible with any argumental structure as long as the ethical pronoun is based generated internally to the VP, as discussed in the text.

where DP3 = usually the subject, PP2 = usually the indirect object; DP1 = usually the direct object.

I assume that ME is both a maximal and a minimal projection in the sense of Chomsky (1994), and therefore can be base-generated as a specifier and undergo A'-movement.⁽⁷⁾ This assumption is discussed and largely motivated by empirical evidence provided in section 3.3, where I discuss relativized minimality effects, in the sense of Rizzi (1990).

The final landing position of ethical constituents in BP will be argued to be a result of overt movement, driven by a strong feature [+S] related to speaker-orientation. I call the relevant projection OrientP from now on. Tentatively, I assume that this A'-projection correlates with sentential force; more precisely with the exclamative force of the sentence, and its meaning is tied to the speaker's attitude toward a presupposed content. I refer the reader to Bastos-Gee (2011) for further discussion of the meaning of ethical constructions and other exclamative constructions.

In the following subsections I motivate the analysis proposed above. In section 3.1 I investigate the position where ethical constituents are generated. In section 3.2 I investigate the exact landing position of the ethical constituent. Finally, in section 3.3 I provide empirical evidence for OrientP as an A'-projection in ethical constructions and indirectly, I support the claim that ethical pronouns are specifiers, not pure heads, in BP.

3.1. *vP is not the basic position for ethical pronouns in BP*

In the previous section I proposed that an ethical constituent is merged into the derivation as a specifier of a low VP projection, and that it moves overtly in BP to check a strong feature [+S]. In this section, I argue against a potential alternative analysis, in which the ethical pronoun ME would be base-generated in vP. In order to do that, I study the availability of ethical pronouns in unaccusative constructions and passives. The test has the following format: if ethical pronouns are base-generated in vP in BP, we expect that unaccusative and passive constructions would not allow ethical

(7) Another possibility for the internal structure of the ethical pronoun in BP is that ME is a PP with a null preposition [_{PP} [_{P'} ∅ [_{DP} [_{D'} [_{NP} [_{N'} ME]]]]]]. Its structure would be then very similar to the English PP ON ME in its ethical-like interpretation. This analysis makes the same predictions as the maximal-minimal projection hypothesis, if we assume that the PP always moves up as a whole.

pronouns, since it is standardly assumed that these kind of constructions lack a vP projection. The relevant data from BP are presented in (10)-(11).

- (10) Unaccusative constructions
- a. As flores (ME) caíram no chão!
The flowers (ME) fell on-the floor
'The flowers fell on-the floor (and the speaker disapproves of it)'
- b. (ME) caiu um monte de florzinha no chão!
(ME) fell a lot of small-flower on-the floor
'A lot of small flowers fell on-the floor (and the speaker disapproves of it)'
- c. O João (ME) morreu na porta do hospital!
The John (ME) died on-the door of-the hospital.
'John died on the door of the hospital (and the speaker disapproves of it)'
- (11) a. O João (ME) foi apresentado pro Paulo pela Maria!
The John (ME) was introduced to-the Paul by Maria.
'John was introduced to Paul by Mary (and the speaker disapproves of it)'
- b. O João (ME) foi largado na porta do hospital!
The John (ME) was dumped on-the door of-the hospital.
'John was dumped on the door of the hospital (and the speaker disapproves of it)'

As we can see, ethical pronouns are possible in unaccusative constructions and passives. These results lead us to the conclusion that vP is not the base position of ethical pronouns in the structure in BP.

Given that vP is not the base position of ethical pronouns, I would like present some facts that support my claim that the ethical pronoun is base-generated very low inside the VP, by looking into the syntax of the PP 'ON ME' in English in a construction like (12) that has the same semantic interpretation as the ethical pronoun in BP. I propose that the ethical phrase in English is base generated in the same position as the ethical pronoun in BP.⁽⁸⁾

- (12) John kissed Mary ON ME!

(8) Since the ethical in BP is a clitic, which means it always moves overtly, it is difficult to investigate its base position. This is much easier with English ethicals, because they do not undergo overt movement. I leave open the possibility that they undergo movement to OrientP in LF. In fact, they also exhibit the constraint on co-reference. However, some specific properties are different from BP. I leave investigating the constraint in English for further research.

Under the assumption that linear order expresses the base position of the PP ‘ON ME’ in English, the following data suggest that the ethical element is indeed generated very low in the structure.

- (13) a. John kissed (*ON ME) Mary (ON ME).
 b. John sent an email (*ON ME) to Mary (ON ME).
 c. John put spinach (*ON ME) on the table (ON ME)⁽⁹⁾.
- (14) a. John watched an adult movie (ON ME) without permission (*ON ME).
 b. John left the classroom (ON ME) before the other kids (*ON ME)⁽¹⁰⁾.

In English, the ethical constituent must follow all arguments, but it must precede adjuncts, which can be accounted for under my claim that ethical constituents are base-generated in the lowest VP projection.⁽¹¹⁾ The adjuncts in (14) may be rightadjoined to VP. This suggestion may in fact be compatible with the applicative theory of Pylkkänen (2002). However, we would have to introduce in her original system the possibility of low event-related applicatives. This would be a crucial difference between ethical and benefactives discussed in her paper, which are usually treated as high applicatives in her system. This distinction in the position of event-related applicatives makes predictions regarding the syntactic distribution of ethical and benefactives. However, this is beyond the scope of this work.

To conclude, the data discussed in this section indicate that ethical are generated in the lowest VP projection.

(9) The sentence in (13b) can be improved, if ‘to Mary’ is interpreted as an afterthought or if it has a pause before it.

(i) John sent an email (? on me)... to Mary.

(10) According to my informants, both (14a,b) are bad when the ethical follows the adjunct, but (14a) is slightly better than (14b). I have no explanation for the variation in the judgments, but I still take the fact that they are not acceptable as evidence for the position of the ethical constituent.

(11) In section 4.6, I discuss the interaction between the ethical pronoun, on one hand, and arguments and adjuncts, on the other hand, providing empirical evidence for the position of base-generation, discussed above.

Notice that, whether the ethical itself is syntactically an argument or a non-argument of the verb is an independent issue. The classic tests to tease apart syntactic arguments from non-arguments involve extraction out of weak islands. Unfortunately as I show in section 4.1, ethical pronouns in BP cannot usually be within an embedded clause. Therefore, the relevant tests cannot be applied. I leave this question open to further research.

3.2. Landing position of ethical constituents

In this section, I examine the exact landing position of ethical constituents. In order to do that, I investigate the linear order found in BP, since in this language the ethical constituent moves overtly. The relevant order patterns are shown in (15) below.

- (15) a. E o João não ME vendeu a casa da Marta pra Maria!
 And the John not ME sold the house-of-the Martha to Mary.
 ‘And John didn’t sell Martha’s house to Mary on me!’
- b. O João não ME tava vendendo a casa da Marta pra Maria!
 The John not ME was selling the house-of-the Martha to Mary.
 ‘No. John wasn’t selling Martha’s house to Mary on me!’
- c. O João não ME tinha vendido a casa da Marta pra Maria!
 The John not ME had sold the house-of-the Martha to Mary.
 ‘No. John had not sold Martha’s house to Mary on me!’
- d. Subject – Negation – Ethical – (Auxiliary) – Main Verb

The ethical pronoun here follows the subject and negation, but precedes the auxiliary verb and the main verb. This makes it different from other pronominal clitics in BP, which are always proclitic to the main verb, and never proclitic to the auxiliary verb, as shown in (16)-(20) below.

- (16) Accusative “me”
 O João não (*me) estava (me) apresentando pra Maria.
 The John not (*me) was (me) introducing to-the Mary
 ‘John was not introducing me to Mary.’
- (17) Dative “me”
 O João não (*me) estava (me) vendendo a casa.
 The John not (*me) was (me) selling the house
 ‘John was not selling me/you/us the house.’
- (18) Reflexive “me”
 Eu não (*me) estava (me) interessando pela casa.
 I not (*me) was (me) getting-interested by-the house
 ‘John was not getting interested in the house.’
- (19) Locative “me”
 O café não (*me) tinha (me) respingado.
 The coffee not (*me) has (me) spilled
 ‘The coffee has not spilled on me.’

(20) Possessive “me”

O João não (*me) estava (me) ofendendo a mãe.

The John not (*me) was (me) offending the mother

“John was not offending my mother.”

As we can see, pronominal clitics in BP do not move higher than the auxiliary verb. This is a property of the ethical pronoun only.

It has been independently argued in the literature about verb movement in BP that this language has only “short” movement of the verb in finite clauses. In other words, given a split IP structure in Belletti’s (1990) style, the verb moves to the head of T, and stops there. This hypothesis finds support in the distribution of floating quantifiers, low adverbs and negation, and it is usually associated with the impoverishment of the verbal morphology in BP when compared to other Romance languages, including European Portuguese (See Galves (1993), (1998) for relevant discussion)⁽¹²⁾. Assuming this, it is possible to derive the linear order of the ethical constructions in BP in (15), as shown in the structures in (21).

- (21) a. [_{AgrSP} SUB [_{NegP} NEG [_{OrientP} ETH [_{TP} SUB [_T [T-v-V] ... ETH]]]]]
 b. [_{AgrSP} SUB [_{NegP} NEG [_{OrientP} ETH [_{TP} SUB [_T [T-AUX] ... [_v [v-V] ... ETH]]]]]

In the structures above, OrientP is located in the split IP system, higher than TP and lower than NegP. This assumption not only captures the linear order in ethical constructions in BP, but also provides a host for speaker-oriented adverbs. Speaker-oriented adverbs, as shown in (22) are high adverbs. They may precede the subject, separated from the rest of the sentence by a comma intonation, or follow the subject. This can be accounted for if in the constructions in question they can be either in the left periphery or adjoined to OrientP.

- (22) a. **Indubitavelmente/ certamente** o João ME vendeu a casa da Marta pra Maria!
 Undoubtedly/ certainly the John ME sold the house-of-the Martha to Mary.
 ‘John undoubtedly/certainly sold Martha’s house to Mary on me!’
 b. O João **indubitavelmente/ certamente** ME vendeu a casa da Marta pra Maria!
 the John undoubtedly/ certainly ME sold the house-of-the Martha to Mary.
 ‘John undoubtedly/certainly sold Martha’s house to Mary on me!’

(12) Galves (1998) argues that the specifier of the higher projection in the split IP, PersP (Person Projection), is accessible for DP topics that agree with the main verb, and she calls them subject-topics. The structure above follows the spirit of her suggestion.

In Bastos-Gee (2011), I propose that ethical constructions are semantically associated with the exclamative force of a sentence. If this proposal is in the right direction, this would be compatible with Rizzi (1996)'s assumption that force is underlyingly associated with I, but it would not be predicted by new developments of his theory (Rizzi 1997), in which sentential force is part of the left periphery. The presence of OrientP within the IP system is largely supported by empirical evidence, which I present next.

The suggestion that OrientP is an A'-projection, and that the ethical pronoun moves there, makes interesting predictions for A'-movement, such as focalization, wh-movement and clefting that cross OrientP. This will be discussed in the next section.

3.3. *OrientP as an A'-projection*

In this section I would like to explore some empirical consequences of the assumption that OrientP is an A'-projection, and that its specifier hosts the ethical constituents. If it is true that there is a filled A'-position in ethical constructions in BP, we should expect relativized minimality effects in the sense of Rizzi (1990) when an element undergoes A'-movement crossing that position. In other words, we expect that ethicals are an island to movement, just like negation or wh-islands (originally discussed by Ross (1967)). The results of the tests applied here show that this prediction is borne out.

This section has two parts. First I show that there are relativized minimality effects in BP in general, and second, I present the results of the tests involving movement crossing the ethical pronoun ME in BP in order to show that OrientP is really an A'-projection.

Wh-islands

In this subsection, I discuss wh-islands as independent evidence for relativized minimality effects in BP.⁽¹³⁾ Let us start with indirect questions, which have a filled intermediate spec-CP.

These are the basic types of sentences I use in the test.

- (23) a. A Ana se perguntou [_{CP} **o que** [_{AgrSP} o João vendeu t pra Maria]]
 The Ana REFL asked what the John sold t to-the Mary.
 'Anna asked what John sold to Mary.'
 b. A Ana se perguntou [_{CP} **pra quem** [_{AgrSP} o João vendeu a casa t]]

(13) I am going to use my own data, and the judgments of my informants, instead of the data discussed previously in the literature on BP (Augusto (1998), Miotto (1999)) in order to properly control for idiolectal variation on the judgments.

The Ana REFL asked to whom the John sold the house t.
 ‘Anna asked to whom John sold the house.’
 c. A Ana se perguntou [_{CP} **quem** [_{AgrSP} t vendeu a casa pra Maria]]
 The Ana REFL asked who t sold the house to-the Mary.
 ‘Anna asked who sold the house to Mary.’

If a wh-phrase undergoes focus movement crossing the filled intermediate CP, the results are the following.⁽¹⁴⁾

(24)

a. Focus movement of the indirect object

*PRA MARIA, a Ana se perguntou [_{CP} **o que** [_{AgrSP} o João vendeu, e não pro Pedro.
 TO-THE MARY, the Ana REFL asked what the John sold, and not to-the Peter.
 ‘Anna asked what John sold TO MARY, not to Peter.’

b. Focus movement of the direct object

*A CASA, a Ana se perguntou [_{CP} **pra quem** [_{AgrSP} o João vendeu, e não o carro.
 THE HOUSE, the Ana REFL asked to whom the John sold the house, and not the car.
 ‘Anna asked to whom John sold THE HOUSE, not the car.’

c. Focus movement of the subject

O JOÃO, a Ana se perguntou [_{CP} **o que [_{AgrSP} t vendeu pra Maria, não o Pedro!
 THE JOHN, the Ana REFL asked what t sold t to-the Mary, not Peter.
 ‘Anna asked what JOHN sold to Mary, not Peter.’

d. Focus movement of an adjunct

*HOJE, a Ana se perguntou [_{CP} **o que** [_{AgrSP} o João vendeu, e não ontem.
 TODAY, the Ana REFL asked what the John sold, not yesterday.
 ‘Anna asked what John sold to Mary TODAY, not yesterday’

e. Focus movement of an adjunct

*COM CHEQUE, a Ana se perguntou [_{CP} **o que** [_{AgrSP} o João comprou da Maria,
 WITH CHECK, the Ana REFL asked what the John bought from-the Mary,
 e não com dinheiro.
 not with cash.
 ‘Anna asked what John bought from Mary WITH A CHECK, not with cash.

All the sentences in (24) are unacceptable. Neither the internal arguments in (24a,b), nor the external argument in (24c), nor the adjuncts in (24d,e) can undergo focus movement crossing the filled intermediate CP. Similar results are found with cleft constructions.

(14) Long distance contrastive focus movement, long distance cleft and long distance wh-movement are all acceptable in BP.

(25)

a. Indirect object cleft

* Foi *é pra Maria* que a Ana se perguntou [_{CP} **o que** [_{Ag_{SP}} o João vendeu, e não pro Pedro.
 Was/is *to-the Mary* the Ana REFL asked what the John sold, and not to-the Peter.
 'It was to Mary that Anna asked what John sold, not to Peter.'

b. Direct object cleft

* Foi *é a casa* que a Ana se perguntou [_{CP} **pra quem** [_{Ag_{SP}} o João vendeu, e não o carro.
 Was/is *the house* the Ana REFL asked to whom the John sold the house, and not the car.
 'It was the house that Anna asked to whom John sold, not the car.'

c. Subject cleft

** Foi *é o João* que a Ana se perguntou [_{CP} **o que** [_{Ag_{SP}} t vendeu pra Maria, não o Pedro!
 Was/is the John that the Ana REFL asked what t sold t to-the Mary, not Peter.
 'Anna asked what JOHN sold to Mary, not Peter.'

d. Adjunct cleft

* Foi *hoje* que a Ana se perguntou [_{CP} **o que** [_{Ag_{SP}} o João vendeu, e não ontem.
 Was *today* that the Ana REFL asked what the John sold, not yesterday.
 'It was *today* that Anna asked what John sold to Mary, not yesterday'

e. Adjunct cleft

* Foi *com cheque* que a Ana se perguntou [_{CP} **o que** [_{Ag_{SP}} o João comprou da Maria,
 Was *with check* that the Ana REFL asked what the John bought from-the Mary,
 e não com dinheiro.
 not with cash.
 'Anna asked what John bought from Mary WITH CHECK, not with cash.'

I interpret the unacceptability of the sentences in (25) as evidence that the internal arguments in (25a,b), the external argument in (25c) and the adjuncts in (25d,e) cannot undergo movement in the cleft structure crossing the filled CP.

Finally, regarding wh-movement, the results are not entirely parallel to the results found for focus movement and cleft constructions, but the resulting sentences are still degraded.

(26)

a. Indirect object wh-movement

*? *Pra quem* a Ana se perguntou [_{CP} **o que** [_{Ag_{SP}} o João vendeu?
 To whom the Ana REFL asked what the John sold?
 'To whom did Anna ask what John sold?'

b. Direct object wh-movement

?? *O que* que a Ana se perguntou [_{CP} **pra quem** [_{AgrSP} o João vendeu?
What that the Ana REFL asked to whom the John sold.

‘What did Anna ask to whom John sold?’

c. Subject wh-movement

*? *Quem* que a Ana se perguntou [_{CP} **o que** [_{AgrSP} t vendeu pra Maria?
who that the Ana REFL asked what t sold t to-the Mary.

‘Who did Anna ask what sold to Mary?’

d. Adjunct wh-movement

* *Em que dia* a Ana se perguntou [_{CP} **o que** [_{AgrSP} o João vendeu?
In which day the Ana REFL asked what the John sold?

‘In which day did Anna ask what John sold to Mary?’

e. Adjunct wh-movement

* *Com que cheque* a Ana se perguntou [_{CP} **o que** [_{AgrSP} o João comprou da Maria?
With which check the Ana REFL asked what the John bought from-the Mary?

‘Which check did Anna ask what John bought from Mary with?’

All my informants agree that the sentences in (26d,e) are unacceptable, but there is variation in the judgments for (26a-c). The main point of these tests is that BP displays relativized minimality effects in the sense of Rizzi (1990).⁽¹⁵⁾

OrientP as an island for movement

Given that BP is a language that shows relativized minimality effects, it is possible to apply similar tests, in which moving elements cross the ethical pronoun. I consider three sets of data: movement of internal arguments, adjuncts, and external arguments. Let us start with internal arguments.

(27) Focus movement of indirect and direct objects

a. PRA MARIA, o João (*?ME) vendeu a casa da Marta, e não pro Pedro.

TO-THE MARY, the John ME sold the house of-the Martha, and not to-the Peter.

(15) As for topic constructions, truly independent base-generated topics are acceptable in ethical constructions, since there is no crossing over the ethical pronoun.

(i) Fruta, a Maria ME comprou as mais caras de todas.

Fruit, the Mary ME bought the most expensive of all.

‘As for fruits, Mary bought the most expensive of all ON ME.’

However, topics associated with a resumptive pronoun or an empty category are not acceptable in ethical constructions.

(ii) A modelo, a Maria (*?ME) elogiou ela.

the model, the Mary ME praised her.

‘As for the model, Mary praised her ON ME.’

This result is in line with movement analyses for topic constructions in BP, such as Kato (1998), Bastos-Gee (2009), among others.

'TO MARY, John sold Martha's house, not to Peter.'

b. A CASA (DA MARTA), o João (*?ME) vendeu pra Maria, e não o carro.
THE HOUSE (OF-THE MARTHA), the John ME selling to-the Mary, and not the car.
'(MARTHA'S) HOUSE, John sold to Mary, not the car.'

(28) Indirect and direct objects cleft

a. Foi/é pra Maria que o João (*?ME) vendeu a casa da Marta, e não pro Pedro.
Was/is to-the Mary that the John ME sold the house of-the Martha, and not to-the Peter.
'It was to Mary that John sold Martha's house, and not to Peter'

b. Foi/é a casa (da Marta) que o João (*?ME) vendeu para Maria, e não o carro.
Was/is the house (of-the Martha) that the John ME sold to Mary, and not the car.
'It was Martha's house that John sold to Mary, and not the car'

(29) Indirect and direct objects wh-questions

a. *Pra quem* que o João (??ME) vendeu a casa da Marta?
To whom that the John ME sold the house of-the Martha?
'To whom did John sell Martha's house?'

b. *O que* que o João (??ME) vendeu pra Maria?
What that the John ME sold to-the Mary?
'What did John sell to Mary?'

In short, the data in (27)-(29) show that internal arguments cannot undergo A'-movement crossing the ethical pronoun. Under my analysis, this is explained in terms of relativized minimality, since the internal arguments are undergoing an A'-movement crossing a filled A'-spec. The relevant structure is the following.

(30) [_{CP} PP2 [_{AgrSP} DP3 [_{OrientP} ETH [_{TP} t_{DP3} [_{vP} t_{DP3} v-V t_{PP2} DP1 t_{ETH}]]]]]

where DP3 = usually the subject, PP2 = usually the indirect object; DP1 = usually the direct object.

These restrictions on movement of internal arguments to the left periphery provide a strong argument in favor of an intermediate A'-projection higher than vP. Additionally, this suggests that ME is actually in a specifier position.⁽¹⁶⁾

(16) I am following Galves (1993), (1998) in assuming that the subject is in an A-position in BP. The movement of the subject across the ethical pronoun is an A-movement, and therefore, it does not trigger relativized minimality effects.

Now, let us see what happens with adjuncts. The plain sentences without movement to the left periphery are the following:

- (31) a. (E) o João (ME) vendeu a casa da Marta pra Maria hoje.
(and) the John ME sold the house of-the Martha to-the Mary today.
'John sold Martha's house to Mary today.'
- b. (E) o João (ME) vendeu a casa da Marta pra Maria sem a Ana.⁽¹⁷⁾
(and) the John ME sold the house of-the Martha to-the Mary without the Anna.
'John sold Martha's house to Mary without Anna.'

As for A'-movement of adjuncts crossing the ethical pronoun, the results are the following.

- (32) Focus movement
- a. HOJE, o João (*?ME) vendeu a casa da Marta pra Maria, e não ontem.
TODAY, the John ME sold the house of-the Martha to-the Mary, not yesterday.
'TODAY, John sold Martha's house to Mary, not yesterday'
- b. SEM A ANA, o João (*?ME) vendeu a casa da Marta pra Maria, e não sem o Pedro
WITHOUT THE ANNA, the John ME sold the house of-the Martha to-the Mary, not without the Peter
'WITHOUT ANNA, John sold Martha's house to Mary, not without Peter.'
- (33) Cleft constructions
- a. Foi *hoje* que o João (*?ME) vendeu a casa da Marta pra Maria, e não ontem.
Was *today* that the John ME sold the house of-the Martha to-the Mary, not yesterday.
'It was *today* that John sold Martha's house to Mary, not yesterday'
- b. Foi *sem a Ana* que o João (*?ME) vendeu a casa da Marta pra Maria, e não sem o Pedro
Was *without the Anna* that the John ME sold the house of-the Martha to-the Mary, not without the Peter
'It was without Anna that John sold Martha's house to Mary, not before Peter.'
- (34) Wh-questions⁽¹⁸⁾
- a. *Em que dia* o João (*?ME) vendeu a casa da Marta pra Maria?
In which day the John ME sold the house of-the Martha to-the Mary?
'In which day did John sell Martha's house to Mary?'

(17) For (31b), imagine a scenario in which Ana was supposed to be present when John sells the house, but he did not care, and he sold the house without her presence.

(18) Wh-element *como* 'how' was not used in this test, because it tends to be interpreted as an exclamative element when combined with ethical pronouns, as we can see below:

(i) (Mas) *como* que o João (ME) vendeu a casa da Marta pra Maria!

(But) how that the John (ME) sold the house of-the Martha to-the Mary!

'John sold Martha's house to Mary, and it surprises/ bothers me that this is so'

If ethical constructions are a type of exclamative constructions in BP as proposed in Bastos-Gee (2011), then this suggests that the special exclamative *how* stops in OrientP before moving higher.

- b. *Sem a ajuda de quem* o João (*?ME) vendeu a casa da Marta pra Maria?
Without the help of who the John ME sold the house of-the Martha to-the Mary?
 ‘Without the help of who did John sell Martha’s house to Mary?’

The data in (32)-(34) show that adjuncts, similarly to internal arguments, cannot undergo A'-movement in ethical constructions. The relevant structure is also similar to the one presented for internal arguments. When the adjuncts cross the OrientP, they are undergoing A'-movement, and this is blocked by Relativized Minimality.

Finally, let us see what happens with external arguments.

- (35) Movement to focus
 O JOÃO (ME) vendeu a casa da Marta pra Maria, não o Pedro!
 JOHN ME sold the house of-the Martha to Mary, not Peter.
 ‘John sold Martha’s house to Mary, not Peter.’
- (36) DP Cleft Constructions
 Foi/é o João que (ME) vendeu a casa da Marta para Maria, e não o Pedro!
 Was/is the John that ME sold the house of-the Martha para Maria, and not the Peter.
 ‘It was John that sold Martha’s house to Mary, and not Peter’
- (37) Wh-questions
Quem que (?ME) vendeu a casa da Marta para Maria!?
who that ME sold the house of-the Martha to Mary!?
 ‘Who sold Martha’s house to Mary?’

The data in (35)-(37) show that external arguments can move to the left periphery across ethical pronouns⁽¹⁹⁾. Notice that, under the structure assumed in section 3, the external argument does cross the ethical pronoun, as shown in the structure below.

- (38) [_{CP} DP3 [_{AgrSP} DP3 [_{OrientP} ETH [_{TP} t_{DP3} [_{vP} t_{DP3} v-V t_{PP2} DP1 t_{ETH}]]]]]]



where DP3 = usually the subject, PP2 = usually the indirect object; DP1 = usually the direct object.

(19) There is some variation regarding the acceptability of (35)-(37), but most speakers agree that there is a clear contrast between the external argument and internal arguments. A'-movement of adjuncts is unacceptable for all informants consulted. This relates to the variation found in the corresponding tests for wh-islands.

However, when external arguments cross the ethical pronoun, they are still undergoing A-movement to Spec-IP, only later they undergo A'-movement to the left periphery. In other words, the movement does not violate Relativized Minimality.

The prediction for long-distance subject movement is that it would cause a Relativized Minimality effect, since in that case, the subject would cross the ethical pronoun when undergoing A'-movement. As shown in (40), this prediction is borne out. (The sentence in (39) provides the acceptable non-interrogative counterpart of (40).)

- (39) A Marta (ME) achava que a Maria tinha vendido a casa do Pedro.
The Martha (ME) thought that the Mary had sold the house of-the Peter.
'Martha thought ON ME that Mary had sold Peter's house.'
- (40) Wh-questions
Quem que a Marta (*ME) achava que t_{quem} tinha vendido a casa do Pedro?
who that the Martha (*ME) thought that t_{who} had sold the house-of-the Peter.
'Who did Martha thought ON ME that had sold the house?'

Since the wh-phrase subject starts in a lower clause, it undergoes A'-movement when crossing the ethical pronoun, which results in an unacceptable sentence. I conclude therefore that the current analysis explains the extraction of subjects, as well as internal arguments and adjuncts, in ethical constructions.

4. The constraint on co-reference

The constraint on co-reference is a ban on other co-referring pronouns within the same clause. In section 2, I observed that the ethical pronoun in BP occurs in the first person only. Then, in BP the constraint on co-reference is manifested as a ban on other argumental first person pronouns in the same clause, as illustrated below.

- (41) O Pedro (ME) apresentou o João para a Maria!
The Peter (ME) introduced the John to-the Mary
'Peter introduced John to Mary (and the speaker disapproves of it)'
- (42) Subject x ethical pronoun
Eu (*ME) apresentei o João para a Maria!
I (*ME) introduced the John to-the Mary
'I introduced John to Mary (and the speaker disapproves of it)'

- (43) Direct object x ethical pronoun
 O João (*ME) apresentou **eu** para a Maria!
 The John (*ME) introduced I to-the Mary
 “John introduced me to Mary (and the speaker disapproves of it)”
- (44) Indirect Object x ethical pronoun
 O João (*ME) apresentou a Maria para **mim**!
 The John (*ME) introduced the Mary to me
 “John introduced Mary to me (and the speaker disapproves of it)”

The example in (41) is a regular ethical construction without other first person pronouns. In (42)-(44), we can see that neither the subject nor the objects can occur in the first person in the presence of an ethical pronoun.

On the other hand, adjuncts differ from arguments in this respect, as illustrated below.

- (45) Adjuncts x ethical pronoun
 Context: For the version of the sentence with “without me”: the speaker was supposed to be present during the introduction of Mary to Paul by John; for the version of the sentence with “before me”: the speaker was supposed to introduce Mary to Paul, but John made it first; for the version of the sentence with “behind me”: the introduction was done behind the speaker’s back.
 O João (ME) apresentou a Maria pro Paulo sem **mim**/ antes de **mim**/ atrás de **mim**!
 The John (ME) introduced the Mary to-the Paul without me/ before me/ behind me!
 “John introduced Mary to Paul (on me) without me/ before me/ behind me”

The example in (45) above has adjuncts with first person pronouns, and no constraint on co-reference arises with the presence of the ethical pronoun.

4.1. *The constraint is limited to its own CP*

The constraint on co-reference in ethical constructions is limited to its own CP. It does not arise when the other first person pronoun or phrase is in a different clause. The tests to show this are restricted because ethical pronouns in BP cannot usually be within an embedded clause, as shown below.

- (46) A Marta sabe/ afirmou/ garantiu que o João (*ME) abriu a mala da Maria pro Pedro!
- The Martha knows/ affirmed/ guaranteed that the John (*ME) opened the suitcase pro Pedro!

of-the Mary for-the Peter.

“Martha knows/ affirmed/ guaranteed that John opened Mary’s suitcase for Peter (and the speaker disapproves it)”

The ethical construction in (46) is excluded by the impossibility of embedding a clause that contains an ethical pronoun. In Bastos-Gee (2011) I argue that ethical constructions are a type of exclamative constructions with mixed properties, and they cannot be embedded because the main content of exclamative constructions is presupposed.

In spite of the general constraint on embedding clauses with an ethical pronoun, there are a few configurations under which an ethical clause can be embedded.⁽²⁰⁾ Grimshaw (1979:319) has noticed that the non-factive verb “believe” may have a special factive use in expressions like “I DON’T BELIEVE THAT...” and “YOU WOULDN’T BELIEVE THAT...” (I use small caps to indicate the expressive use of “believe” in these cases.) Under this special factive use, clauses with presupposed content, such as exclamatives in English, can be embedded (See also Zanuttini and Portner (2003)). In BP, the corresponding expressions *VOCÊ NÃO VAI ACREDITAR* ‘you won’t believe’ and *EU NÃO ACREDITO* ‘I don’t believe’ can take clauses containing an ethical pronoun as their complement, as shown below.

- (47) *VOCÊ NÃO VAI ACREDITAR* que o João *ME* abriu a mala da Maria pro Pedro!
 You not will believe that the John *ME* opened the suitcase of-the Mary for-the Peter.
 ‘You won’t believe that John opened Mary’s suitcase for Peter (and the speaker disapproves of it)’
- (48) *EU NÃO ACREDITO* que o João *ME* abriu a mala da Maria pro Pedro!
 I not believe that the John *ME* opened the suitcase of-the Mary for-the Peter.
 ‘I don’t believe that John opened Mary’s suitcase for Peter (and the speaker disapproves of it)’
- (49) *EU NÃO (*?ME) ACREDITEI* que o João abriu a mala da Maria pro Pedro!
 I not (*?ME) believed that the John opened the suitcase of-the Mary for-the Peter.

(20) Another potential case in which ethical pronouns can appear within an embedded clause is the case of cleft constructions. In section 3.3, I showed that subject cleft is acceptable across an ethical pronoun in (36), but not acceptable across internal arguments and adjuncts. Cleft constructions are analyzed as biclausal constructions in BP by Kato and Raposo (1994), Modesto (2001), Lopes-Rossi (1996), Miotto (2001), among others. Assuming their analyses, the acceptability of (36) exemplifies an exception to the ban on embedding. I do not have an explanation for this case, but I would like to suggest that maybe the clause containing the cleft phrase is a defective/ reduced and does not contain OrientP or other projections related to sentential force. I leave this possibility open to further study.

'I didn't believe that John opened Mary's suitcase for Peter (and the speaker disapproves of it)'

In (47), the clause with the ethical pronoun is embedded and it is acceptable. In (48), the first person pronoun subject and the ethical are in different clauses and the sentence is acceptable, and in (49), the first person pronoun subject and the ethical are in the same clause and the sentence is bad. These data show that the constraint on co-reference holds only for other co-referring pronouns or phrases within the same clause.

This result is also consistent with cases in which the ethical pronoun is in the matrix sentence and the co-referring pronoun is within the embedded clause.

- (50) A Marta (ME) afirmou pro João que eu abri a mala da Maria
 The Martha (ME) affirmed to John that I opened the suitcase of-the Maria
 pro Pedro!
 for-the Peter.
 "Martha affirmed to John that I opened Mary's suitcase for Peter (and the speaker disapproves it)"

When the ethical pronoun is in the matrix clause, the co-reference with a first person pronoun in a lower clause is possible, as we can see in (48) above.

4.2. *The constraint is exclusive to the ethical pronoun*

Another important characteristic of the phenomenon is that the constraint on co-reference arises in the presence of ethical pronouns only. Notice that in sentences without ethical pronouns, first person pronouns may co-occur and freely co-refer in BP.

- (51) A Marta me disse que eu não devo abrir a mala da Maria.
 The Martha me-DAT told that I not should open the suitcase of-the Maria.
 'Martha told me that I shouldn't open Mary's suitcase.'
- (52) A Marta disse pra mim que o Pedro vai apresentar eu pra Maria.
 The Martha told to me that the Peter will introduce I-ACC to Maria.
 'Martha told me that Pedro will introduce me to Mary.'

Given an appropriate scenario, many BP speakers even accept co-reference of first person pronouns within the same CP.

- (53) Cada pessoa tinha que fazer um vídeo em que apresentava um amigo aos outros.
 Every person had to do a video in which introduced a friend to-the others.
 Como eu estava sozinha, **eu** apresentei **eu** para **mim/ mim mesma**.
 Since I was by-myself, I-NOM introduced I-ACC to me/ myself.
 “I introduced me to me/ myself”

In (51), there are three first person pronouns: nominative *eu* ‘I’, accusative *eu* ‘I’, which is an innovation of colloquial BP, and the dative *pra mim* (*mesmo*) ‘to me/ myself’. No constraint on co-reference arises in this case.

4.3. *The constraint is not specific to the first person*

As mentioned above, the ethical pronoun in BP occurs in the first person only. In order to ensure that the relevant constraint is a co-reference constraint, not a person constraint specific to the first person, I use data from Spanish, in which ethical pronouns occur in all persons. More precisely, I use the third person ethical clitic in Spanish.⁽²¹⁾

- (54) Juan_i LE_{i/ *j/ *k/ l} presentó Pedro, a Miguel_k
 John_i 3ETH_{i/ *j/ *k/ l} introduced Peter_j to Miguel_k.
 “John introduced Peter to Miguel on him”
- (55) Nadie_i LE_{i/ *j/ *k/ l} presentó un estudiante_j a cada professor_k.
 Nobody_i 3ETH_{i/ *j/ *k/ l} introduced a student_j to each teacher_k.
 “Nobody introduced a student to each teacher on him”

As illustrated in (54)-(55), the third person ethical clitic cannot co-refer with the subject, or the direct object, or the indirect object. It can only refer to an outsider. My conclusion is that the constraint in question is a more general constraint on co-reference, not limited to first person.

4.4. *The constraint is not a Principle B violation*

Given what we have seen so far, the ethical pronoun cannot co-refer with other first person pronoun within the same clause, but it can, if the other

(21) Spanish data comes from both European informants and South American informants. With the clitic doubling reading, which is available for most dialects of Spanish, the following sentences are acceptable. But the clitic doubling reading is not the relevant one.

- (i) a) Juan le_i presentó Pedro a Miguel_j b) Nadie le_i presentó un estudiante a cada professor_k
 John 3CL introduced Peter to Miguel_j Nobody 3CL introduced a student to every professor_k
 “John introduced Peter to Miguel” “Nobody introduced a student to every professor”

pronoun is in an embedded clause. These facts partially overlap with the conditions under which a Principle B violation arises. However, Principle B is not an explanation for the constraint on co-reference in ethical constructions. Let us consider (56)-(57) below.

- (56) Subject x ethical pronoun
Eu (*ME) apresentei o João para a Maria.
 I (*ME) introduced the John to-the Mary.
 “I introduced John to Mary (*on me)”
- (57) Direct object x ethical pronoun
 O João (*ME) apresentou **eu** para a Maria.
 The John (*ME) introduced I to Mary.
 “John introduced me to Mary (*on me)”

In both cases, the constraint on co-reference holds, whether *eu* ‘I’ c-commanded by the ethical ME, or not. In addition to that, the pronoun “eu” (I-ACC) does not seem to be subject to usual Principle B effects in BP, as shown in (51), which is repeated here as (58).

- (58) **Eu** apresentei **eu** para **mim** (**mesma**).
 I introduced I-acc to me/ myself.
 “I introduced myself to myself”

Given the acceptability of (58), it is hard to see how Principle B could account for the full range of facts pertaining to the constraint on co-reference, especially the ungrammaticality of both (56) and (57). I conclude, therefore, that the constraint on co-reference in BP ethical constructions cannot be accounted for by Principle B.

4.5. *Strong Crossover*

In this section I am going to pursue an analysis for the constraint on co-reference in terms of a crossover effect. I am going to discuss the cases that could be characterized as strong crossover violations, and show similarities between them and the classical cases discussed in the literature.

Strong crossover is a violation involving A¹-movement of one phrase over a co-indexed phrase (see Postal (1971), Wasow (1972), Lasnik (1976)). One example of the relevant configuration is in (59), and the general schema of the violation is provided in (60):

- (59) a. * Who_i does he_i like?
 * Who_i [_{TP} he_i [_{VP} e_i [_{VP} like e_i]]]
- (60) * [_{ZP} XP₁ ... [YP₁ ... [... t₁ ...]], where spec-ZP is an A'-position

The following BP constructions involving wh-movement, focus movement and clefting provide additional illustration.⁽²²⁾

- (61) a. *Quem_i ele_i t_i gosta t_i ?
 Who_i he_i t_i like t_i
- (62) * [_{FocP} A MARIA_i (e não o Pedro) [ela_i viu t.]]
 [_{FocP} THE MARY_i (and not Peter) [she_i saw t]]
- (63) * Foi [_{FocP} a Maria_i [que [ela_i viu t]]
 Was the Mary_i that she_i saw t.

My proposal is that, when the ethical pronoun undergoes A'-movement to the specifier of OrientP, if it crosses a co-indexed phrase, it causes a strong crossover violation.

For subjects and direct objects, this is straightforward.

- (64) * **Eu** [_{OrientP} ME [apresentei [_{VP} **eu** o João para a Maria **ME**!
 I ME introduced I the John to-the Mary ME.
 "I introduced John to Mary (*on me)"
- (65) * O João [_{OrientP} (ME) apresentou **eu** para a Maria **ME**!
 The John (*ME) introduced I to Mary.
 "John introduced me to Mary (*on me)"

As for indirect objects, it is important to point out that the preposition in these cases is completely transparent to c-command.

- (66) Indirect object
 O João falou pra ela_i que a Maria_i foi demitida.
 The John told to her_i that the Mary_i was fired.
 'John told her that Mary was fired.'

The pronoun *ela* inside the PP in (66) cannot be co-referent with the referential expression *a Maria* in the embedded clause, which indicates that

(22) For the sake of simplicity, I use the notation of the trace theory of movement, in which moved elements leave behind a trace in the position where the movement originated from, but my analysis is fully compatible with the copy theory of movement (Chomsky (1993), (1995)).

the pronoun *ela* c-commands the referential expression *a Maria*. Since the preposition is syntactically vacuous in indirect PPs, we can extend the analysis of strong crossover to indirect objects, as well.

Further evidence for an analysis in terms of a crossover violation comes from the fact that other first person pronouns are equally subject to the constraint on co-reference if they undergo A'-movement crossing a co-indexed constituent.

- (67) **Eu** apresentei **eu** pra plateia
I introduced I-ACC to-the public.
'I introduced me to the public.'
- (68) Focus movement without co-indexed pronouns
EU (e ninguém mais) a Maria apresentou t_i pra plateia.
 I_i (and nobody else) the Mary introduced t_i pra plateia.
- (69) Focus movement
***EU** (e ninguém mais) eu apresentei t_i pra plateia.
 I_i (and nobody else) I introduced t_i pra plateia.
- (70) A Maria apresentou **eu** pra **mim**.
The Mary introduced I to me.
'Mary introduced me to me'
- (71) Focus movement without co-indexed pronouns
PRA MIM (e ninguém mais) a Maria apresentou o Pedro.
TO ME (and nobody else) the Mary introduced the Peter.
'To me, Mary introduced me.'
- (72) *PRA MIM (e ninguém mais) a Maria apresentou **eu**.
TO ME (and nobody else) the Mary introduced I-ACC.
'To me, Mary introduced me.'

(70) and (73) above show that first person accusative pronouns cannot undergo focus movement crossing other first person pronouns. (69) and (72) show that they can undergo movement when crossover is not an issue.

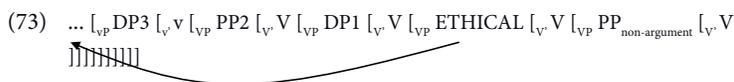
These facts support the analysis in terms of strong crossover for the constraint on co-reference, and indirectly the proposal that the ethical pronoun in BP moves to the specifier of an A'-position.

4.6. Argument-non argument asymmetry

One potential counterargument for an analysis in terms of crossover is the behavior of non-argumental PPs. As shown in section 4, non-argumental

PPs are not subject to the constraint on co-reference. Under the assumption that non-argumental PPs are left-adjoined (or right-adjoined) to the VP, the movement of the ethical pronoun to OrientP crosses them, hence we should expect them to be subject to the constraint on co-reference.

One way of dealing with the asymmetry between arguments and non-arguments and keep the assumptions about crossover is to assume a more complex layered structure of VP in which arguments are always higher than the ethical pronoun, and the ethical pronoun is always higher than non-argumental PPs, as illustrated in the following representation.



where DP3 = subject, PP2 = indirect object, DP1 = direct object

In a structure like (73) above, the ethical pronoun does not cross the non-argumental PPs.

In addition to capturing the asymmetry between arguments and non-arguments, a structure like this would also capture the facts about the linear order of arguments, ethical pronoun and non-argumental PPs discussed in section 3.2 for English, under a Larson (1988)-style analysis of traditional adjuncts, where sentence final adjuncts are lower in the structure than arguments.

Considering the symmetry between crossover effects and the constraint on co-reference, I conclude that the crossover analysis can account for the patterns found in ethical constructions in BP.

5. Final remarks

In this paper I investigated the properties of ethical constructions in BP. My central discussion focused on the structure of ethical constructions. I argued that ethical pronouns start in a low projection in the VP system and move to OrientP in the IP system in order to check a [+S] feature related to speaker orientation. Additionally, I studied a constraint on co-reference, which was characterized as a ban on argumental pronouns co-referring with an ethical element in the same clause. I argued that the constraint on co-reference in ethical constructions is a crossover violation.

References

- AUGUSTO, Marina. (1998). As restrições de ilha e a gramática gerativa. *Cadernos de Estudos Linguísticos*, n. 34, 1-179.
- BASTOS-GEE, Ana C. (2009). Topicalization of verbal projections in Brazilian Portuguese. In: Nunes, Jairo. *Minimalist Essays on Brazilian Portuguese Syntax*. John Benjamins.
- BASTOS-GEE, Ana C. (2011). On Exclamatives with a Bothering Inference. In: Buesa-GARCIA, Carlos (Editor). *University of Connecticut Working Papers in Linguistics*. MIT Press. Connecticut, Storrs, UConn.
- BELLETTI, Adriana. (1990). *Generalized Verb Movement: Aspects of Verb Syntax*. Turin: Rosenberg and Sellier.
- BORER, H. and Y. GRODZINSKY. (1986). Syntactic Cliticization and Lexical Cliticization. The Case of Hebrew Dative Clitics. In H. Borer (Ed.), *The Syntax of Pronominal Clitics*, Pp. 175-217. Academic Press. Syntax and Semantics; n. 19.
- CHOMSKY, N. (1993). A minimalist program for linguistic theory. In: Hale and Keyser, ed. *The view from Building 20*. MIT Press, Cambridge.
- CHOMSKY, N. (1994). Bare Phrase Structure. *MIT Occasional Papers in Linguistics 5*. Massachusetts Institute of Technology, Cambridge: MITWPL.
- CHOMSKY, N. (1995). *The minimalist program*. MIT Press, Cambridge.
- GALVES, C. (1993). O enfraquecimento da concordância no Português Brasileiro. In ROBERTS, Ian and KATO, Mary (orgs.) *O Português Brasileiro: uma viagem diacrônica*. Campinas, Ed. Unicamp.
- GALVES, C. (1998). Tópicos e sujeitos, Pronomes e Concordância no Português Brasileiro. *Cadernos de Estudos Lingüísticos*, Campinas, (34): 19-31.
- GRIMSHAW, Jane. (1979). Complement selection and the lexicon. *Linguistic Inquiry* 10(2):279-326.
- KATO, M. (1998). Tópicos como Alçamento de Predicados Secundários. In: *Cadernos de Estudos Lingüísticos* (34):67-76.
- KATO, Mary and RAPOSO, Eduardo. (1994). *European and Brazilian Portuguese word order: questions, focus and topic constructions*. Campinas, Ms, Unicamp/UCSB.
- KOIZUMI, Masatoshi. (1993). Object agreement phrases and the split VP hypothesis. In *Papers on Case and Agreement I: MIT working papers in linguistics* 18, 99-148.
- KOIZUMI, Masatoshi. (1995). *Phrase structure in minimalist syntax*. Doctoral dissertation, MIT, Cambridge, Mass.
- LARSON, R. (1988). On the double object construction. *Linguistic Inquiry*, 19: 335-391.
- LASNIK, Howard. (1976). Remarks on co-reference. *Linguistic Analysis* 2: 1-22.
- LASNIK, Howard. (1995). A note on pseudogapping. In *Papers on minimalist syntax*, MIT working papers in linguistics 27, ed. Rob Pensalfini and Hiroyuki Ura, 143-163. MITWPL, Department of Linguistics and Philosophy, MIT, Cambridge, Mass.

- LOPES-ROSSI (1996), M. A sintaxe diacrônica das interrogativas-Q do português. Campinas, Doctoral dissertation, UNICAMP.
- MIGUEL, Matilde, GONÇALVES, Anabela, and DUARTE, Inês. (2011). Dativos não argumentais em português. *Textos selecionados, XXVI Encontro da Associação Portuguesa de Linguística*, Lisboa, APL.
- MITO, Carlos. (2001). Sobre o sistema CP no português Brasileiro. Curitiba, *Revista Letras*, 56:97-140.
- MODESTO, M. (2001). As construções clivadas no português do Brasil: relações entre interpretação focal, movimento sintático e prosódia. Humanitas, SP.
- POSTAL, Paul. (1971). *Cross-over phenomena*. New York: Holt, Rinehart and Winston.
- PYLKKÄNEN, Liina. (2002). *Introducing Arguments*. Doctoral dissertation, MIT.
- RIZZI, Luigi. (1990). *Relativized Minimality*. Cambridge, Mass.: MIT Press.
- RIZZI, Luigi. (1996). Residual Verb Second and the Wh-criterion. *Parameters and Functional Heads. Essays in Comparative Syntax*, ed. by Adriana Belletti and Luigi Rizzi, 63-90. Oxford University Press, New York and Oxford.
- ROSS, J. R. (1967). *Constraints on Variables in Syntax*. Doctoral dissertation, MIT.
- VILELA, M. (1992). *As categorias de "objeto indireto" em português*. Coimbra: Almedina.
- WASOW, Thomas. (1972). *Anaphoric relations in English*. Doctoral dissertation, MIT, Cambridge, Mass.
- ZANUTTINI, Rafaella, and PORTNER, Paul. (2003). Exclamative Clauses: At the Syntax-Semantics Interface. *Language* 79:39-81.