

Ananda Lima, UCLA  
[lima@humnet.ucla.edu](mailto:lima@humnet.ucla.edu)

The Linguistic Association of the Southwest, October 9, 2005

## Introduction

Subject-verb agreement is usually obligatory in Brazilian Portuguese (BP) (1). However, there are constructions which allow for two grammatical possibilities for verb agreement (2):

- (1) As meninas foram/\*foi a causa da briga.  
*the girls were/was the cause of-the fight*  
 ‘The girls were the cause of the fight.’
- (2) A causa da briga foi/foram as meninas.  
*the cause-of-the fight was/were the girls*  
 ‘The cause of the fight was/were the girls.’

Today’s talk:

Main proposal: two related questions raised by the agreement behavior illustrated in (1) and (2):

- (i) What differentiates sentences like (1) from sentences like (2), and;  
 (ii) How can the optionality in (2) (and other cases to be seen soon) be represented?

I will propose the following answers to these questions:

- (i) What differentiates cases where there is only one possibility of verb agreement (1) and those where there are two (2) is that the latter group, but not the former, involves predicate inversion of the type proposed by Moro (1993, 1997). (Section 1)
- (ii) Assuming a Spec-Head theory of agreement (see Koopman, forthcoming), agreement optionality in BP is proposed to follow from the possibility of different elements ending up in Spec-TP in predicate-inversion structures:
- either a 3<sup>rd</sup> person singular pro similar to French ‘il’;
  - a pro predicate similar to English ‘there’, or;
  - an overt predicate DP. (Section 2.1)
- Canonical structures in BP offer no such possibility due to the nature of BP pro-drop. (Section 2.2)

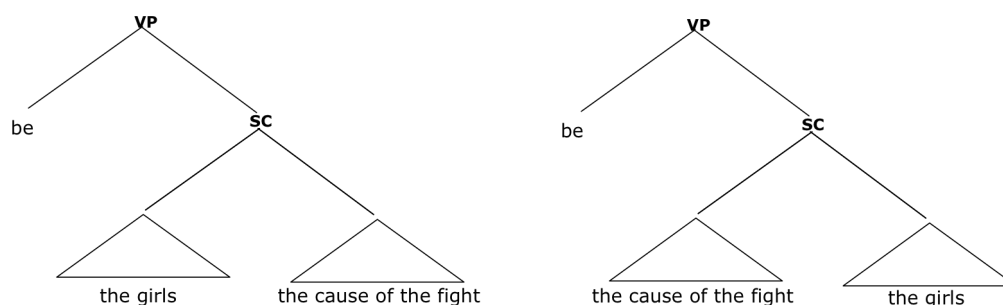
Interesting additional data: I will also present relevant data involving person asymmetries (with some ideas for future attempts to account for them following the main ideas of the proposals above). (Section 3)

## 1. Answer to question (i): Predicate inversion

### 1.1 Moro (1993, 1997) and Predicate inversion

Copular sentences as (1) and (2) have been standardly assumed to be different at the point of merging:

- (3) The girls were the cause of the fight. (4) The cause of the fight was the girls.



\* I thank Hilda Koopman, Dominique Sportiche, Mark Baker and the University of Queensland Linguistics Seminar audience for listening or commenting on the research that is partially presented in this talk. All mistakes are mine.

According to the standard analysis:

- What raises to the clausal subject is always the subject of the small clause.
- (3) and (4) are syntactically parallel.

→ Thus they are predicted to behave in pretty much the same way [for our purposes: **including agreement!**]

But, Moro points out this is not the case. One example is post-verbal DP extraction:

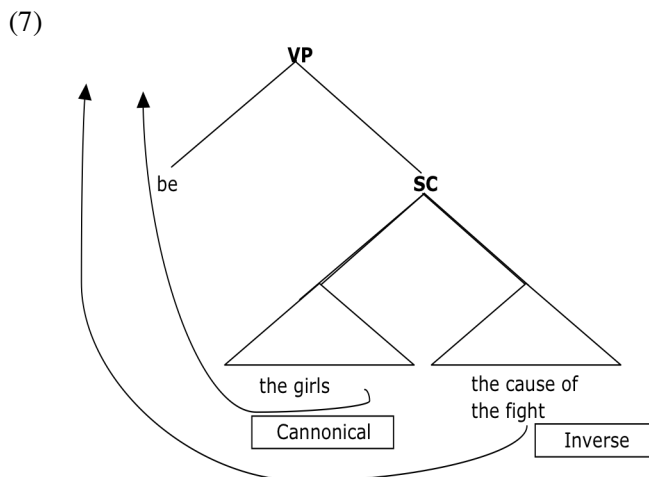
- (5) a. – Which fight was the picture of the girls the cause of t?  
 b. – [The picture of the girls] was [the cause of YESTERDAY's fight].
- (6) a. – \*Which girls were the cause of the fight pictures of t?  
 b. – [The cause of the fight] was [the picture of the GILMORE girls].

Based on this and other asymmetries in English and Italian, Moro (1993, 1997) proposes that the standard analysis is incorrect (i.e., (3) and (4) cannot be the correct representations for sentences of this type).

→ The BP asymmetry in (1) and (2) provides new data of in support of Moro's argument: if (1) and (2) had a parallel structure, as standardly assumed, no systematic agreement difference would be expected.

Moro's proposal:<sup>1</sup>

- Both (3) and (4) are derived from the same merge structure (represented in (3) and (7)).<sup>2</sup>
- The two different sentences arise depending on whether 'the girls' (a *canonical copular*) or 'the cause of the fight' (an *inverse copula*) raises to spec TP:



- Asymmetries are accounted for by the fact that the movement of the DP which ends up as the subject of the main clause has different sources.

→ Exactly the copular sentences proposed to be inverted turn out to show agreement optionality in BP.

→ **Answer to question (i)** (what differentiates the cases where agreement optionality occurs from those where it doesn't?): Predicate inversion.

### 1.2 Other cases of Agreement optionality: unaccusitives and existentials

Agreement optionality can also be found in sentences involving existentials and unaccusatives:

- (8) *Tinha/m uns meninos no parque.*  
*have-imp-3-sg/pl one-pl boys in-the park*  
 'There were some boys in the park.'

<sup>1</sup> Moro presents many examples of phenomena that can be accounted for by his proposal. Here is a quick summary of the main idea of how he accounts for the asymmetry in (3) and (4). It is independently observed that extraction from subject position yields ungrammaticality (e.g. (i) and (ii)). Adopting the structures proposed by Moro, the reason why (4) is bad and (3) is fine follows: the former involves subject extraction, while the latter doesn't.

(i) What did a picture of the suspect reveal a solution of/to t?

(ii) \*What did a picture of t reveal the solution of/to the puzzle?

<sup>2</sup> There are different possibilities for the internal structure of small clauses (e.g. see Moro (2000), Den Dikken (to appear)). For our purposes, the adopted structure will be required to distinguish the status of the two elements of the small-clause such that the DP on the left of the diagram above be systematically represented as the subject of predication and the DP on the right systematically the predicate. I will postpone the choice of a particular proposal for now.

- (9) Chegou/Chegaram umas cartas.  
*arrive-pst-3-sg/pl one-pl letters*  
 ‘There arrived some letters.’

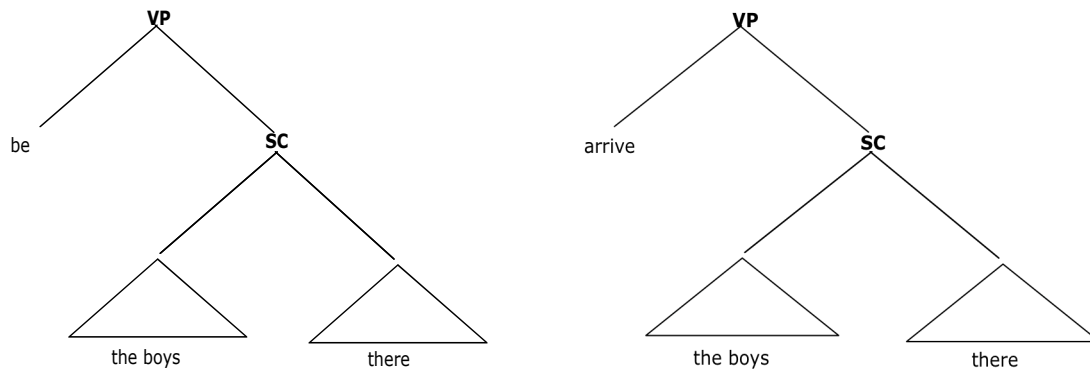
But not in all unaccusative and existential sentences:

- (10) Uns meninos estavam/\*estava no parque.  
*One-pl boys were/was in-the park*  
 ‘Some boys were in the park.’
- (11) Umas cartas chegaram/\*chegou.  
*Some letters arrive-pst-pl/sg*  
 ‘Some letters arrived.’

Again, this turns out to be consistent with the Predicate Inversion approach:

- Moro proposes that copular, existential, unaccusative should be analyzed in a uniform way, despite the fact that they may appear to be different empirical domains.<sup>3</sup>
- What they have in common: the **ability** for predicate inversion.
- Only those which Moro proposes to be cases of predicate inversion (i.e., where the ability is actually instantiated) show agreement optionality (just like in copulars).

(12)



Interim Summary:

- Moro groups copular, existential and unaccusative sentences due to their ability to undergo predicate inversion.
- Thus, the answer to question (i): the cases which Moro proposes to be instantiations of this ability of predicate inversion (based on evidence of a different sort) are those that turn out to have agreement optionality.
- The BP data here provides additional independent support for Moro’s (1993, 1997) idea that these constructions can be plausibly seen as a class.

## 2. Answer to (ii): How Predicate Inversion leads to agreement alternation

### 2.1. Possible predicates

Consider first VS unaccusatives and existentials. Both lack an overt pre-verbal subject. Compare this with examples from two non pro-drop languages (English and French):

<sup>3</sup> Raising constructions are a fourth group proposed to involve predicate inversion by Moro (1993, 1997), yet they do not show agreement optionality in BP:

- (i) Parece/\*m que as meninas saem muito.  
*seem-sg/pl that the girls leave-pres-3-pl much*  
 ‘It seems that the girls go out a lot.’

However, according to Moro’s proposal, in the predicate inverted raising construction (where there is no raising) the subject of the SC is a full CP, not a DP like in the other cases. Assuming that the CP has no phi-features, the only possibility of agreement under the analysis to be proposed here, would be for default agreement (possibly a 3 singular expletive inserted at spec-TP). Thus the lack of optionality of raising constructions is not a problem for my analysis, even if they involve predicate inversion as Moro proposes.

(13) There are/\*is some cats in the garden.

(14) Il y a/\*ont des chats dans le jardin.

→ A natural proposal would be to assume that there are two predicative pros in BP:

- *Pro-il*: triggers 3<sup>rd</sup> person singular agreement, as French 'il'.
- *Pro-there*: copies features from the subject of the small clause during predication. Thus, verb agreement matches those of the post-verbal subject of SC. Similar to English 'there'.

So unaccusative and existential verb agreement in predicate inversion depends on which pro serves as a predicate.

However, copular sentences appear to have overt pre-verbal subjects, yet they show agreement optionality.

- The solution is to adopt the idea that copular sentences [can] in fact have a pro as a subject. (Moro (1997), Cardinelli (2004)).
- Again the BP facts seem to support Moro (1997), who proposes that in Italian, what appears to be the overt subject of the clause in Italian is actually a pro, with an overt DP adjoined to TP:<sup>4</sup>

(15) [<sub>TP</sub> la causa della rivolta [<sub>TP</sub> pro<sub>i</sub> sono [<sub>SC</sub> le foto del muro t<sub>i</sub>]]]

- Adopting the same structure proposed by Moro allows us to have a similar account for unaccusatives, existential and copular agreement.

Notice that there is some plausibility to proposing the possibility of adjunction structures like those in (15) in BP. Costa and Galves (2002) discuss sentences like (16), which are quite natural in BP:

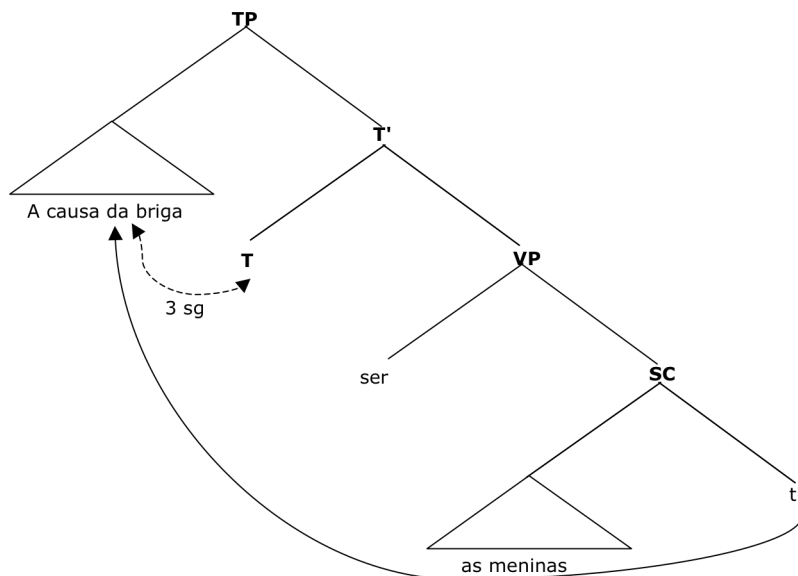
(16) O Pedro, ele telefonou.  
the Peter he called  
'Peter called.'

Assuming the possibility of a structure similar to (15) in BP, the following is proposed:

→ In predicate-inversion copular structures, agreement alternation arises from two possibilities:

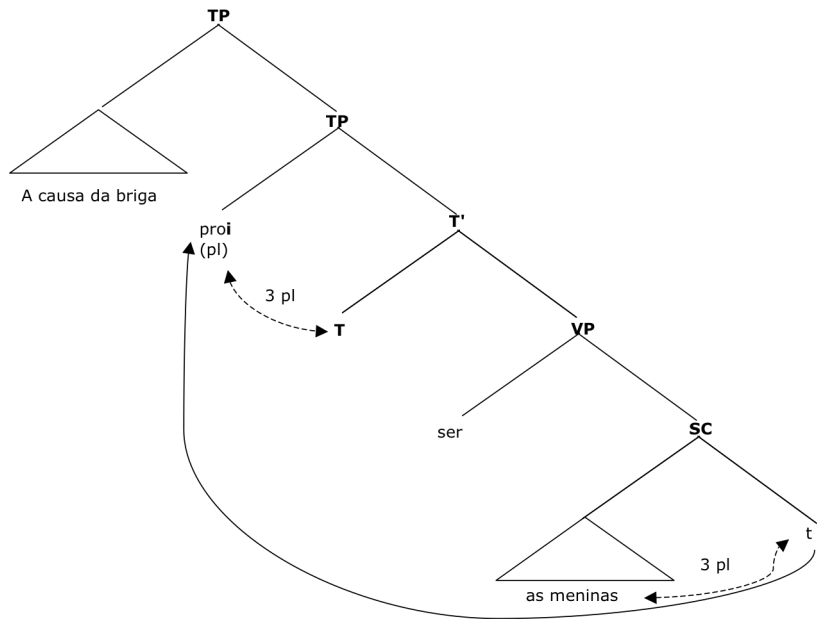
- The predicate is a full DP (like English) (17).
- The Predicate is pro-there (with a full DP being adjoined to TP) (like Italian) (18).

(17)



<sup>4</sup> Another possibility is to implement a similar idea by adopting 'cartographic' proposals, such as having pro in an AgrS position and the DP in SubjP as proposed in Cardinelli (2004). See also Koopman (forthcoming).

(18)



2.2 Some concerns:

### 2.2.1. Limitation to predicate inversion

The possibility of structures such as (18) may raise the possibility of having a similar structure for canonical structures (replacing the subject of SC with a pro and having another overt DP adjoined to them).

If a parallel structure were possible for cases other than predicate inversion, shouldn't it be possible to have verbs apparently 'disagreeing' with their apparent subjects in similar ways?

Interestingly, something like this may be possible in some dialects of Spanish (see Rodriguez-Monedo (1995) for a number of references):

- (19) Los estudiantes asistimos a la clase regularmente.  
*the students attended-1-pl to the class regularly*  
'We, the students, attended the class regularly'

However, (19) is not possible in BP. I propose that an adjunction configuration like that in (18) is only possible in cases of predicate inversion because of the limited nature of pro-drop in BP.

As discussed, there is some pro-drop in BP (cf. English):

- (20) *Tinha/m uns carros no estacionamento.*  
*have-pst-sg/pl one-pl cars in-the parking-lot*  
'There were some cars in the parking lot.' (cf. \*Were some cars in-the parking-lot.)
- (21) *Veio/vieram muitas pessoas na festa.*  
*came-sg/pl many people in-the party*  
'There came many people to the party.' (cf. \*came many people to the party.)
- (22) *Choveu muito ontem de noite.*  
*rained much yesterday of night.*  
'It rained a lot last night.' (cf. \*rained a lot last night).

However, it is not always possible (cf. Italian):

- (23) ?\*(Ele) dorme. (BP)  
*he sleeps*  
'He sleeps.'

- (24) Dorme. (Italian)  
*Sleeps*  
 'He sleeps'

→ Pro-drop in BP is limited: there are no referential pros.<sup>5</sup> There are only expletive or predicative pros.

This can account as to why the agreement alternation is possible in inverted but not canonical sentences:

→ The same structure would not be possible for the canonical counterpart of these sentences, as there would be no corresponding pro able to stand for a referential (or non-predicative/non-expletive) DP.

### 2.2.2. The impossibility of pro-il for copulars

Differently from unaccusatives and pro-il or default agreement is not possible:

- (25) *As causas de todas as brigas foram/\*foi as meninas.*  
*The cause of all the fights were/was the girls*  
 'The causes of all the fights were the girls.'

Why might this be? (some speculations as suggestions for further investigation)

- Pro-il may be ruled out due to its inability to license co-indexation with and adjoined DP.
- pro-il might really be something different, such as a trigger of 'default agreement', (possibly merged in Spec-TP, as opposed to re-merged/moved there), which may be related to either of the two previous points.<sup>6</sup>

#### **Summary of the answer to question (ii)** (how is agreement optionality syntactically represented)

Agreement optionality in BP follows from the possibility of having different elements in Spec-TP in non-canonical cases:

→ In unaccusatives and existentials, either a pro-there predicate can undergo predicate inversion (leading to apparent agreement with the post-verbal subject) or there can be default (pro-il) agreement.

→ In copular cases, the raised predicate may either be the pro predicate (again, leading to apparent agreement with the subject of SC) or an overt predicate DP (leading to ordinary Spec-head agreement with the predicate of SC).

-----  
 Quick Crosslinguistic comparison with BP (by 'crosslinguist', I mean BP, English and Italian ☺):

Italian (pro-drop):

- BP has pro-il, Italian doesn't.
- Italian predicate is always pro-there, (no full DP predicate as in BP).  
 → Italian verb agreement always matches the subject of SC.

English (non-pro-drop):

- No pros: adjunction structure in (26) is not possible.
  - English has 'there':  
 → Associate agreement with there.  
 → Agreement with overt-DP in spec-TP elsewhere.
- 

<sup>5</sup> For discussion on the characterization of Brazilian pro-drop as non-referential, see Duarte (1995, 2000), Figueredo Silva (1996), and Kato (2000b).

<sup>6</sup> This does not seem to affect my proposal, except that I have to use slightly different terminology. For example, as structures with pro-il would not necessarily involve predicate inversion (certainly not to spec-TP), I would not be able to say that optionality occurs only in cases of predicate inversion. Instead, I could say that it occurs in 'non-canonical' cases (covering predicate inversion as well as cases in which nothing moves out from SC to spec-TP, but still excluding canonical structures).

### 3. Person Asymmetries

Differently from cases above, 1<sup>st</sup> person pronouns have to trigger agreement with the verb, independent of whether it follows or precedes the verb:<sup>7</sup>

(26) Eu sou/\*e a causa da briga.  
*I am is the cause of-the fight*  
'I am the cause of the fight.'

(27) A causa da briga sou/\*e eu  
*the cause of-the fight am is I.*  
'The cause of the fight is me.'

Why can't we have 3<sup>rd</sup> person singular agreement (with 'the cause of the fight') as in the previous cases?

→ A complete account of the BP agreement in terms of predicate inversion will have to answer that question.

Some suggestions:

→ (First) person licensing may be obligatorily related to a position high in the clause (higher than the SC).

Data of a different sort that might be related to this idea: only 1<sup>st</sup> pronouns obligatorily cliticize in BP.

(28) As meninas chutaram ele/\*eu.  
*the girls kicked he I*  
'The girls kicked him/ me.'

(29) As meninas me chutaram.  
*The girls me kicked*  
'The girls kicked me.'

---

Some different proposals that may be somewhat compatible with this intuition:

- Baker (2005), inspired by work by Schlenker and Sigurdsson, proposes that 1<sup>st</sup> and 2<sup>nd</sup> person elements are inherently "anaphoric" depending on local binding by a S[peaker] context operator (which happens to be high up in the clause) or another element bound by that operator.
- Rodriguez-Monedo (2005) proposes that the (higher) T head in existential constructions in some dialects of Spanish have person features, while a lower head (which he proposes to be v) may be defective, lacking person features.

---

An idea that could be considered:

- Case in the DP remaining in SC may be checked by some mechanism low in the structure. (e.g. inherent or default case (Belletti (1988) Kato (2000, pp. 119-122) or a verbal head selecting the small clause (Nunes (1995), Viotti (2000), Rodriguez-Monedo (2005)).
  - Whatever is responsible for checking case low in the structure may not have person features, and thus not be able to license things containing (1<sup>st</sup> person) features.
- Person features might need to be licensed higher up in the clause – outside SC - because the case of a nominal carrying person features needs to be checked by something that matches it, which is only available high in the clause.

Applying the approach developed in sections 1 and 2:

- Licensing of person features seems to be possible when the pronoun raises (canonical structures (26))...
  - ...but also in cases where a pro-predicate sharing features with the subject of SC raises (inverse structures (27)).
  - Having a pro-there co-indexed with the 1<sup>st</sup> person pronoun high in the structure seems to be enough.
- Some mechanism of transmission through feature sharing with the subject of SC (c.f. Chomsky, 1986) may be involved.

---

<sup>7</sup>I refrained from using examples involving 2<sup>nd</sup> person because they would be confounded by the fact that the most commonly used 2<sup>nd</sup> person pronoun in BP ('voce') behaves as a 3<sup>rd</sup> person pronoun grammatically (e.g. in terms of verb agreement). The less common syntactic 2<sup>nd</sup> person pronoun has a limited distribution.

#### 4. Summary

- Agreement alternations in BP show evidence for a class which coincides with a class independently proposed by Moro.
- Agreement optionality occurs in cases of predicate inversion (answer to (i)).
- This is because there are different elements which may be predicates raising to Spec-TP (pro-there, pro-il or an overt DP), which are not available in canonical cases or non-predicational structures. (answer to (ii) above).
- This is not possible in canonical cases because of there are only expletive and predicative pros in BP.
- However, a complete account will also have to consider person asymmetries.

#### References

- Baker, M. 2005. *Agreement and Category Distinctions*. Lecture notes for LSA.131. Linguistics Society of America Summer Institute. Cambridge, MA.
- Belletti, A. 1988, 'The case of unaccusatives'. *Linguistic Inquiry* 19: 1-34.
- Costa, Joao and Charlotte Galves. 2002. 'External Subjects in two varieties of Portuguese'. In *Proceedings of Going Romance 2000*. Amsterdam: John Benjamins.
- Chomsky, N. 1986. *Knowledge of language*. New York: Praeger.
- Chomsky, N. 2000. 'Minimalist inquires: The framework'. In *Step by Step: Essays on minimalist syntax in honor of Howard Lasnik*, M. Roger and J. Uriagereka (eds.). Cambridge: MIT Press.
- Chomsky, N. 2001. 'Derivation by Phase'. In *Ken Hale. A Life in Language*, M. Kenstowicz (ed.). Cambridge: MIT Press.
- Den Dikken, M. to appear. *Relators and Linkers: The Syntax of Predication, Predicate Inversion and Copulas*. Cambridge: MIT Press.
- Duarte, M.E. 1995. *A Perda do Princípio 'Evite Pronome' no Português do Brasil*. Ph.D. Dissertation, UNICAMP.
- Duarte, M. E. 2000. 'The loss of the 'avoid pronoun principle in Brazilian Portuguese'. In *Brazilian Portuguese and the Null Subject Parameter*, M. Kato and E. Negrão (eds.). Germany: Vervuert.
- Figueredo Silva, M. 1996. *A Posição do Sujeito no Português do Brasil: Frases Finitas e Infinitivas*. Campinas: Editora da UNICAMP.
- Kato, M. 2000a, 'A Restricao de Mono-Argumentalidade da Ordem VS no Portugues do Brasil', *Forum Linguistico* Fpolis 2: 97-127.
- Kato, M. 2000b. 'The partial pro-drop nature and the restricted VS order of Brazilian Portuguese. In Kato, M & Negrão, E (eds.) *Brazilian Portuguese and the Null Subject Parameter*. Vervuert, Germany.
- Koopman, H. forthcoming. *Agreement configurations: in defense of spec-head*.
- Moro, A. 1993. *The Raising of Predicates: predicative nominals and the theory of clausal structure*. Ph.d. Dissertation. Milan: IULM.
- Moro, A. 1997. *The Raising of Predicates*. Cascadilla.
- Nunes, J. 1995. *The Copy Theory of Movement and Linearization of chains in the Minimalist Program*. Ph.D. Dissertation. College Park: University of Maryland.
- Moro, A. 2000. *Dynamic Antisymetry*. [Linguistic Inquiry Monograph 38]. Cambridge: MIT Press.
- Rodriguez-Monedo, M. 2005. *Case and Agreement in Spanish Existential Constructions (and beyond)*, Ms. University of Connecticut.
- Viotti, E. 2000. 'O caso do sintagma nominal das sentences existenciais', *Forum Linguistico* Fpolis 2: 41-71.

Ananda Lima  
University of California, Los Angeles  
Department of Linguistics  
3125 Campbell Hall  
Box 951543  
Los Angeles, CA 9005 - 1543

[lima@humnet.ucla.edu](mailto:lima@humnet.ucla.edu)  
<http://www.linguistics.ucla.edu/people/grads/lima/>