BRAZILIAN PORTUGUESE UNDER MINIMALIST LENSES

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1. INTRODUCTION*

The last two decades of the 20th century witnessed two fundamental shifts in the generative enterprise. The first shift took place in the 80s with the formulation of the Principles and Parameters Theory (see e.g. Chomsky, 1981, 1986b, and Chomsky & Lasnik, 1993), which made it possible to deal with Plato’s problem in the domain of language in a tractable manner. By providing analyses with a considerable degree of explanatory adequacy, the Principles and Parameters Theory gave rise to an exponential growth in the identification of syntactic universals and in the description of specific languages. The richness of the empirical material uncovered in the 80s coupled with the sophisticated theoretical apparatus developed in the Government and Binding (GB) model (see e.g. Chomsky, 1981) quickly fueled the other shift that got crystallized in the beginning of the 90s: the Minimalist Program (see e.g. Chomsky 1995, 2000, 2001, 2004). Aiming at going beyond explanatory adequacy, the Minimalist Program broadened the domain of linguistic research as it sets itself to investigate why the language faculty has the properties it has, and not others. Although recent, the Minimalist Program has achieved considerable success in downsizing the technical apparatus developed within GB, while keeping or enlarging the empirical coverage previously attained.

Generative studies on Brazilian Portuguese syntax have been closely following the two shifts mentioned above. The GB model yielded a great number of important works on the specificities of Brazilian Portuguese when compared to other languages and, in particular, to European Portuguese (see e.g. Duarte, 1995; Figueiredo Silva, 1996; Cyrino, 1997; Galves, 2001; and the collection of papers in Roberts & Kato, 1993 and Kato & Negrão, 2000). More recently, some of these specificities have been

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This volume congregates recent minimalist analyses on some of the major syntactic properties of Brazilian Portuguese. The proposals are by and large mutually supportive, which provides both a more integrated view of the grammar of Brazilian Portuguese and a cohesive testing ground for some theoretical tools currently being explored in the Minimalist Program.

The volume is divided into two parts. Part I is devoted to movement and empty category issues and Part II to issues related to the syntax-morphology interface. The next sections provide a brief tour through the volume, highlighting the specific minimalist ingredients the analyses proposed are couched on.

2. MOVEMENT AND EMPTY CATEGORY ISSUES

2.1 Movement to Thematic Positions: Null Subjects and Null Possessors

It has been a point of consensus among scholars working on Brazilian Portuguese that it should not be analyzed as a typical pro-drop language, as its null subjects are severely restricted in distribution and interpretation.\(^1\) A very tough challenge has been to formally capture the description that Brazilian Portuguese is a partial null subject language.

Ferreira (this volume, chap. 2) shows that referential null subjects in Brazilian Portuguese display the general properties ascribed to obligatorily controlled PRO and, assuming Hornstein’s (2001) analysis of obligatory control as resulting from movement to \(\theta\)-positions, argues that null subjects in Brazilian Portuguese are traces of A-movement (see also Rodrigues 2004). Under this view, a sentence such as (1a) is to be derived along the lines of (1b), where the subject moves from the embedded [Spec, TP] to the matrix [Spec,vP], where it is assigned the external \(\theta\)-role of the matrix predicate, before reaching its final landing site in the matrix [Spec,TP].

\(1\) a. \([\text{João}]\) disse que ec\(_{\text{vp}}\) comprou um carro

\(\text{João said that he bought a car.}\)

b. \([\text{TP}[\text{João}], \text{vP} t\text{disse} [\text{CP que} [\text{TP t'} t\text{vP} t'\text{comprou um carro}]])\]

The analysis sketched in (1b) becomes viable within minimalism thanks to some departures from GB. First, with the abandonment of D-Structure, merger and movement operations are interspersed, which amounts to saying that \(\theta\)-relations are not established at a given starting point, but in the course of the derivation. Furthermore, given that \(\theta\)-roles are assigned under merger and that merger is necessarily involved in movement, there arises the possibility that movement can license \(\theta\)-assignment. This is arguably what happens when the embedded subject in

(1b) moves to the matrix [Spec,vP]. Once the null subject in (1b) is analyzed as an A-trace, we now have a natural explanation as to why it displays all the properties associated with A-movement.

One question that arises is why this derivation is not possible in languages such as English, for instance. Ferreira proposes that with the weakening of the verbal agreement morphology in Brazilian Portuguese (see e.g. Duarte, 1995), finite Ts became ambiguous as to having a complete or an incomplete set of φ-features. If the φ-complete version of T is selected, it assigns nominative to the subject, freezing it for purposes of A-movement. If the φ-incomplete version is selected instead, the subject of its clause remains Caseless and can undergo further A-movement. From this perspective, the derivation in (1b) involves a φ-incomplete T in the embedded clause and a φ-complete T in the matrix.

A nice empirical consequence of Ferreira’s proposal is that it predicts that A-movement out of finite embedded clauses in Brazilian Portuguese need not target a θ-position. An embedded subject may move directly to the matrix [Spec,TP] if there is no intervening θ-position. Hyper-raising constructions such as (2) show that this prediction is indeed correct.

(2) Os meninos parecem que fizeram a tarefa.

‘The boys seem to have done their homework.’

Movement to θ-positions is also a key ingredient in Floripi & Nunes’s (this volume, chap. 3) analysis of null possessor constructions in Brazilian Portuguese. Floripi & Nunes show that in absence of syntactic islands separating a null possessor from its antecedent, as is the case in (3) below, null possessors behave like obligatorily controlled PRO and can also be analyzed as traces of A-movement to a θ-position (see also Rodrigues, 2004). However, if islands intervene, as in (4), null possessors display properties associated with pronouns.

(3) [a Maria]k disse que [o João], conversou com o pai e[i/k]

‘Maria said that João talked with his father.’

(4) [a Maria]k acha que [o João], disse que [o amigo e[i/k] vai viajar]

‘Maria thinks that João said that his/her friend is going to travel’

The puzzle that these sentences pose is that if one postulates that null possessors in Brazilian Portuguese can be pro in order to account for (4), the anaphoric behavior of the null possessor in (3) is left unaccounted for. Floripi & Nunes propose that a solution for this puzzle can be found if one assumes with Hornstein (2001, 2007) that movement is derivationally more economical than pronominalization. Thus, null

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2 Reinterpreting Ferreira’s (this volume) proposal, Nunes (2008) argues that the feature person in Brazilian Portuguese may be a dissociated feature. Accordingly, a finite T may enter the derivation with both number and person or only number. In the latter scenario, T behaves as defective for purposes of Case assignment in the syntactic component and later receives a person feature in the morphological component via morphological redundancy rules.

possessors will always exhibit an anaphoric behavior if they are in a position from which a licit A-movement operation can be launched and pro will be employed only as a last resort strategy.

This solution raises the question of why the last resort usage of pro is not available in null subject constructions in Brazilian Portuguese. Floripi & Nunes propose that the answer is related to the licensing of pro in terms of Case. In null possessor constructions, pro can be licensed by receiving inherent Case from the selecting noun, whereas in null subject constructions the putative pro in an embedded subject position would remain Caseless, as T does not assign inherent Case. As we will see below, licensing of pro via inherent Case will be a determining factor in Kato & Nunes’s (this volume, chap. 5) account of apparent preposition deletion in relative clauses in Brazilian Portuguese.

2.2 Extraction out of Factive Complements

An interesting feature of Brazilian Portuguese is that it has different patterns of extraction out of factive complements. In addition to the more familiar cases of argument/adjunct asymmetries typical of weak islands, Augusto (this volume, chap. 4) shows that some factive constructions actually allow extraction of both arguments and adjuncts, as illustrated in (5).

(5) a. Quem o Pedro lamentou ter encontrado t_i na festa?  
    who the Pedro regretted have-INF met at-the party  
    ‘Who did Pedro deplore having met at the party?’

b. Como o aluno lamentou ter respondido a pergunta t_i?  
    how the student regretted have-INF answered the question  
    ‘How did the student regret having answered the question?’

Augusto proposes that the presuppositional character associated with factive complements is due to selectional restrictions. Factive predicates select for a [+specific] complement, which in turn may require a TopP projection above CP. The head Top imposes restrictions on the type of element that may pass through its Spec, which is ultimately responsible for the argument/adjunct asymmetry found in the standard cases. Augusto argues that the selectional requirements of the factive predicate may also be licensed if the embedded clause has its tense properties anchored in the matrix clause, as is the case with uninflected infinitives and some subjunctive clauses. In such circumstances, considerations regarding economy of representations (see Bošković, 1997) block resorting to TopP and extraction of both arguments and adjuncts is allowed (cf. (5)).

2.3. Relative Clauses and Null Objects

Tarallo (1983) has observed that besides familiar pied-piping and resumptive relative clauses such as (6a) and (6b) below, Brazilian Portuguese also has a chopping version, as illustrated in (6c), where the preposition subcategorized by the verb is not phonetically realized. Kato (1993) shows that the pattern seen in (6) is also found in left dislocation structures in Brazilian Portuguese and proposes that resumptive and chopping relative clauses like (6b) and (6c) are derived from structures where que is a relative pronoun base-generated in a left dislocated position.
Kato & Nunes (this volume, chap. 5) revamp Kato’s (1993) proposal, reinterpreting it in terms of Kayne’s (1994) analysis of relative clauses. Noticing that chopping relatives are to a great extent lexically conditioned, Kato & Nunes argue that the predicates that license chopping relatives assign inherent Case and that the empty category found in chopping relative clauses such as (6c) is pro. By correlating the possibility of chopping relatives with the availability of inherent Case, the authors account for why pro is Case-licensed in some chopping relatives but not others, which mirrors the contrast between resumptive null subjects and resumptive null possessors mentioned in section 2.1. The authors further argue that the prepositions that can be dropped in chopping relatives are actually realizations of inherent Case and that insertion of prepositions to realize inherent Case is subject to Last Resort. If the relative pronoun is generated in object position, insertion of the relevant preposition is triggered as the relative pronoun has phonetic content. By contrast, if the relative pronoun is base-generated in a left dislocated position in association with pro in object position, insertion of the preposition is blocked as pro does not have phonetic content.

Phonological evidence for Kato & Nunes’s proposal that chopping relative clauses involve pro is provided by Nunes & Santos (this volume, chap. 6). Santos (2002, 2003) has argued that stress shift in Brazilian Portuguese can occur across an intervening trace but not across an intervening pro, as illustrated in (7) below. Nunes & Santos show that pied-piping and chopping relatives replicate the contrast in (7) as far as stress shift is concerned, as illustrated in (8).

(7) a. [[esse casaco], [o João disse [ti que ele verIU ti JOJe]]] →
   [[esse casaco], [o João disse [ti que ele verSiu ti JOJe]]]
   this coat the João said that he dressed today
   ‘This coat, João said that he put on today.’
 b. [[esse casaco], [o João ficou elegante [depois que ele verIU pro, JOJe]]] →
   #[[esse casaco], [o João ficou elegante [depois que ele verSiu pro, JOJe]]]
   this coat the J. became elegant after that he dressed today
   ‘This coat, João became elegant after he put it on today.’

(8) a. [[a sala], [em que [ti quei ti ONtem]]] →
   [[a sala], [em quei ti ONtem]]
   the room in which I stayed yesterday
 b. [[a sala], [que, [eu fiQUEI pro, ONtem]]] →
   #[[a sala], [que, [eu fiQUEI pro, ONtem]]]
   the room which I stayed yesterday
   ‘the room in which I stayed yesterday’

Nunes & Santos also show that parasitic gaps in Brazilian Portuguese behave like traces in being ignored by stress shift, which provides evidence for analyses that take
parasitic gaps to be traces (see e.g. Chomsky, 1986a and Nunes, 2001), rather than pros (see e.g. Cinque, 1990). This empirical fact is of significance as it reveals that derivations of parasitic gaps in terms of movement are allowed even in a language like Brazilian Portuguese, which makes a widespread use of null objects. This in turn suggests that pronominalization is a general last resort strategy that is employed when movement is precluded, as proposed by Hornstein (2001, 2007). From an abstract point of view, this result thus corroborates Florip & Nunes’s (this volume, chap. 3) analysis of null possessors in Brazilian Portuguese in terms of competition between movement and resumption (see section 2.1).

3. ISSUES ON THE SYNTAX-MORPHOLOGY INTERFACE

3.1. Possession and Existential Constructions

Exploring the similarities between possessive, existential, and copular constructions documented in several languages (see e.g. Freeze, 1992 and Kayne, 1993), Avelar (this volume, chap. 7) argues that a set of facts involving the restricted interpretation of null possessors in possessive constructions in Brazilian Portuguese can be explained if the possessive/existential verb ter ‘have’ is morphologically derived from the combination of the features associated with the copula estar ‘be’ and the features associated with the comitative preposition com ‘with’. As we can see in (9), for instance, the null possessor must be bound by the matrix subject if ter ‘have’ or estar com ‘be with’ is involved, but not another verb, as illustrated with ver ‘see’.

(9) a. [[o Pedro] tem documentos da Maria na carteira ecj
   the Pedro has documents of-the Maria in-the wallet
   ‘Pedro has Maria’s documents in his wallet.’
   b. [[o Pedro] está com documentos da Maria na carteira ecj
   the Pedro is with documents of-the Maria in-the wallet
   ‘Maria’s documents are in Pedro’s wallet.’
   c. [[o Pedro] viu documentos da Maria na carteira ecj
   the Pedro saw documents of-the Maria in-the wallet
   ‘Pedro saw Maria’s documents in his/her wallet.’

Avelar also proposes that the emergence of ter as an existential verb in Brazilian Portuguese is related to the loss of referential null subjects and the availability of defective finite Ts in the language (see Ferreira, this volume, chap. 2).

3.2. Duplication of Verbs and Prepositions

In her discussion of topicalization of verbal projections in Brazilian Portuguese, Bastos-Gee (this volume, chap. 8) argues that it can be classified into three types, as illustrated in (10), based on the type of verbal constituent that is targeted and on whether it is derived by movement or is base-generated.

(10)a. Type I (movement of \(v^0\)):
   Temperar, o cozinheiro temperou o peixe (não a carne).
   season-INF the cook seasoned the fish (not the meat)
   ‘As for seasoning something, the cook seasoned the fish (not the meat).’
b. Type 2 (movement of vP):
Temperar aquele peixe, o cozinheiro temperou (mas...)
season-INF that fish the cook seasoned (but...)
‘As for seasoning that fish, the cook seasoned it (but...)’

c. Type 3 (base-generation of vP):
Temperar peixe, eu conheço um cozinheiro que só tempera com ervas.
season-INF fish I know a cook that only seasons with herbs
‘As for seasoning fish, I know a cook that only seasons them with herbs.’

In addition to providing a semantic and pragmatic characterization of the three types, Bastos-Gee also discusses why the constructions derived by movement surface with two copies of the verb phonetically realized, each with a different inflection (an infinitival and a finite form). Her starting point is Chomsky’s (1995) copy theory of movement and Nunes’s (1999, 2004) account of phonetic realization of multiple copies in terms of linearization and morphological fusion. She proposes that the infinitival morpheme is a morphological reflex of the agreement relation between v₀ and the head Top and that fusion between v₀ and the infinitival morpheme renders v₀ invisible to Kayne’s (1994) LCA, yielding a PF output with two instances of v₀.

Another type of duplication in Brazilian Portuguese discussed in this volume is investigated by Nunes & Ximenes (chap. 9). The authors examine inflected infinitival constructions whose coordinated subjects appear to involve PP-coordination instead of DP-coordination, as illustrated in (11).

(11) Eu fiquei contente pela Maria e pelo João ganharem o prêmio.
I was happy by-the Maria and by-the João win-INF-3PL the prize
‘I was happy because João and Maria won the prize.’

Extending Hornstein & Nunes’s (2002) proposal that the Parallelism Requirement may trigger the operation Copy in the syntactic component, Nunes & Ximenes argue that sentences like (11) do indeed involve DP-coordination in the embedded clause, as expected. However, morphological merger between a CP-internal preposition and the determiner of the first conjunct of the infinitival subject triggers the copying of this preposition and its merger with the determiner of the second conjunct – an instance of sideward movement (in the sense of Nunes (2001, 2004)) in the morphological component. After fusion between the prepositions and their associated determiners, the sentence then surfaces with what superficially looks like PP-coordination in the embedded subject position.

3.3. Feature Valuation and Ellipsis

Based on constructions such as the ones illustrated in (12) with English and (13) with Brazilian Portuguese, Nunes & Zocca (chap. 10) argue (contra Lasnik (1999)) that lack of morphological identity in VP ellipsis is unrelated to the availability of verb movement to T, for Brazilian Portuguese patterns with English with respect to tense mismatches in ellipsis constructions, in spite of having V-to-I movement.

(12) John slept and Mary will sleep too
Nunes & Zocca show that lack of identity in ellipsis constructions can be accounted for if inflectional morphology is to be hosted by functional categories and valued under agreement, as in Chomsky’s (2001) system, and if ellipsis resolution is computed before the valued affixes are attached to the relevant lexical heads.

4. CONCLUSION

The chapters summarized above covers a variety of topics, some of which quite peculiar to Brazilian Portuguese. Each chapter explores a key minimalist tool and it is fair to say that the analyses proposed always enhance the empirical coverage achieved within GB. To the extent that these analyses are on the right track, they provide independent evidence for movement to θ-positions (see the chapters by Ferreira, Floripi & Nunes, and Avelar), economy of representations (see the chapters by Augusto and Kato & Nunes), economy of derivations (see the chapters by Floripi and Nunes, Nunes & Santos, and Nunes & Ximenes), the copy theory of movement (see the chapter by Bastos-Gee), and the role of feature valuation in the computation (see the chapters by Ferreira and Nunes & Zocca).

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