Brazilian Portuguese argument ellipsis: 
A hidden case of clitic doubling

Ezekiel Panitz
Universidade de São Paulo
ezekiel.panitz@usp.br

Received: 12-04-2023
Accepted: 06-07-2023
Published: 15-12-2023


Abstract

The present study puts forward a novel analysis of argument ellipsis (AE) in Brazilian Portuguese (BP), according to which AE in BP takes place in a clitic doubling configuration, where the clitic is a phonologically null clitic and AE targets the clitic doubled DP. The clitic doubling analysis accounts for a number of the properties of AE in BP. Specifically, it accounts for the ability of AE to target object DPs; for the inability of AE to target subject DPs, including not only subjects of finite clauses but also subjects of small clauses and infinitival clauses; and for the inability of AE to target non-specific indefinite DPs and idiomatically construed DPs. The present study also reviews the influential anti-agreement theory of AE and argues that it does not offer a viable account of AE in BP, as it both undergenerates and overgenerates AE in BP.

Keywords: argument ellipsis, null objects, clitic doubling, anti-agreement theory of argument ellipsis, Brazilian Portuguese.
1. Introduction

A number of languages have argument ellipsis (AE), an ellipsis operation that specifically targets syntactic arguments. Brazilian Portuguese (BP) is one such language (Cyrino 1997, Cyrino & Lopes 2016). The following examples serve as an initial illustration.

(1) **Brazilian Portuguese**

O Pedro mostrou a tese dele pro Chomsky.

the Pedro showed the thesis of.him to.the Chomsky

Já o João mostrou __ pro Lasnik.

but the João showed __ to.the Lasnik

‘Pedro showed his thesis to Chomsky. But João showed his thesis to Lasnik.’

✓ ‘João showed João’s thesis to Lasnik.’ (sloppy reading)

✓ ‘João showed Pedro’s thesis to Lasnik.’ (strict reading)

(2) **Brazilian Portuguese**

O Pedro mostrou a tese dele pro Chomsky.

the Pedro showed the thesis of.him to.the Chomsky

Já o João mostrou ela pro Lasnik.

but the João showed it to.the Lasnik

‘Pedro showed his thesis to Chomsky. But João showed it to Lasnik.’

* ‘João showed João’s thesis to Lasnik.’ (sloppy reading)

✓ ‘João showed Pedro’s thesis to Lasnik.’ (strict reading)

Null objects in BP give rise to sloppy readings and to strict readings (Cyrino 1997, Cyrino & Lopes 2016). Since overt pronouns in minimally paired sentences do not support sloppy readings, it is plausible to assume that the sloppy reading is not due to pro. AE, by contrast, successfully accounts for the ability of null objects to produce sloppy readings, as (3) demonstrates.

(3) Já o João mostrou [a tese dele] pro Lasnik.

The present article examines two prominent theories of AE through the lens of BP: the anti-agreement theory of AE (Saito 2007, Şener & Takahashi 2010, Takahashi 2014, Sato & Karimi 2016) and Bošković’s (2018) clitic doubling analysis of AE. I argue that the anti-agreement theory does not offer a viable account of AE in BP, as it both undegenerates and overgenerates AE in BP. I then consider Bošković’s clitic doubling analysis and argue that it does offer a viable account of BP AE, provided it is coupled with Kato’s (1993) proposal that BP has phonologically null 3rd person accusative clitics. According to the analysis proposed in the present article, AE in BP involves a clitic doubling structure, with ellipsis targeting the doubled DP. According to this analysis, AE in BP is generated as depicted in (4). The null clitic and the doubled DP are initially merged together in a “big DP” (Uriagereka 1995, Belletti 1999, 2005, Papangeli 2000, Cardinaletti 2019). The clitic then cliticizes onto the verb, and the associate DP subsequently elides at PF.
The article is structured as follows. As a preliminary to the examination of AE in BP, it is necessary to first establish which null arguments are generated under AE and which are not. Section 2 attends to this matter. With this in place, Section 3 presents and critiques the anti-agreement theory of AE, arguing that it does not adequately account for the properties of AE in BP. In Section 4, I turn to Bošković’s clitic doubling analysis of AE, explaining how it can be extended to BP. In Section 5, I apply the clitic doubling analysis to BP and advance a series of arguments in support of this analysis. In Section 6, I demonstrate how the present analysis accounts for the fact that null objects in BP are only selectively able to take [+human] antecedents. Section 7 concludes.

2. Two classes of null objects in Brazilian Portuguese

The claim that a particular type of null argument is generated under AE can be broken down into two smaller claims: (i) the null argument is generated under ellipsis; (ii) the ellipsis operation is AE, and not some other type of ellipsis. In this section, I examine two types of null arguments which have been argued to be generated under AE in BP: (i) sloppily construed null arguments (see (5)) (Cyrino 1997, Cyrino & Lopes 2016), and (ii) null indefinite arguments (see (6)) (Panitz 2018).

(5) Brazilian Portuguese
O Pedro mostrou a tese dele pro Chomsky.
the Pedro showed the thesis of.him pro the Chomsky
Já o João mostrou __ pro Lasnik.
but the João showed __ pro Lasnik
‘Pedro showed his thesis to Chomsky. But João showed his thesis to Lasnik.’

(6) Brazilian Portuguese
A Maria compôs duas sonatas em seis dias.
the Maria composed two sonatas in six days
Já a Clara compôs __ em oito dias.
but the Clara composed __ in eight days
‘Maria composed two sonatas in six days. But Clara composed two sonatas in eight days.’

I argue that although both of these types of null arguments are generated under ellipsis, only the first type (sloppily construed null arguments) is specifically generated under AE.

Consider, first, sloppily construed null arguments. As noted at the paper’s outset, null objects in BP produce sloppy readings, whereas overt pronouns in analogous sentences do not.
(7) Brazilian Portuguese
O Pedro mostrou a tese dele, pro Chomsky.
the Pedro showed the thesis of him to the Chomsky
‘Pedro showed his thesis to Chomsky.’

a. Já o João mostrou __ pro Lasnik.
   but the João showed __ to the Lasnik
   ‘But João showed his thesis to Lasnik.’

b. Já o João mostrou ela pro Lasnik.
   but the João showed it to the Lasnik
   ‘But João showed it (*João’s/√Pedro’s) thesis to Lasnik.’

(8) Brazilian Portuguese
A Ana pôs os óculos dela, na mesa.
the Ana put the glasses of her on the table
‘Ana put her glasses on the table.’

a. Já a Maria pôs __ na estante.
   but the Maria put __ on the shelf
   ‘But Maria put her glasses on the shelf.’

b. Já a Maria pôs eles na estante.
   but the Maria put them on the shelf
   ‘But Maria put them (*Maria’s glasses/√Ana’s glasses) on the table.’

Under the sloppy reading, an analysis of the null objects in terms of pro would be
difficult to sustain, given that overt pronouns in minimally paired sentences do not
support the sloppy reading. Ellipsis, by contrast, straightforwardly accounts for the
availability of sloppy readings, as (9) demonstrates.

(9) a. Já o João mostrou [a tese dele, pro Lasnik]
   b. Já a Maria pôs [os óculos dela, na estante]

Consider, now, null indefinite objects.

(10) Brazilian Portuguese
a. A Maria compôs duas sonatas em seis dias.
the Maria composed two sonatas in six days
   Já a Clara compôs __ em oito dias.
   but the Clara composed __ in eight days
   ‘Maria composed two sonatas in six days. But Clara composed two
   sonatas in eight days.’

b. O Tiago construiu duas casas em dois meses.
the Tiago built two houses in two months
   Já o Pedro construiu __ em três meses.
   but the Pedro built __ in three months
   ‘Tiago built two houses in two months. But Pedro built two houses in
   three months.’
Null indefinite objects cannot be analyzed as *pro*, as *pro* is a definite pronoun (Rizzi 1982). Ellipsis, on the other hand, straightforwardly accounts for the null object’s interpretation without difficulty:

(11)  

If the two types of null objects under consideration are indeed generated by the same ellipsis operation, it is expected that they should exhibit the same distribution. This expectation is not borne out, though. The set of contexts in which indefinites can elide is narrower than the set of contexts in which sloppily construed arguments can elide.¹

Consider the following examples, in which the null object is internal to a pseudocleft. The null objects in (12a) and (12b) permit the sloppy reading, which indicates that sloppily construed arguments can elide internal to pseudoclefts. By comparison, the null objects in (13a) and (13b) cannot be interpreted as *duas sonatas* ‘two sonatas’ and *duas casas* ‘two houses’, respectively, which demonstrates that indefinites cannot elide internal to pseudoclefts. Indeed, the null objects in (13a) and (13b) lack any interpretation altogether, which causes the elliptical sentences in (13a) and (13b) to be unacceptable, given that the verbs *compor* ‘to compose’ and *construir* ‘to build’ obligatorily select for an object.²

¹ There is quite a bit of inter-speaker variation with regard to ellipsis of indefinites. One group of speakers rejects ellipsis of indefinites in the two contexts enumerated in the body of the text: i.e., (i) when the indefinite is within a pseudocleft, and (ii) when the indefinite is island-internal. The second group of speakers accepts ellipsis of indefinites in one or both of these contexts, with variation internal to this group concerning how consistently these speakers accept ellipsis of indefinites in these two contexts. For this second group of speakers, the empirical picture is still quite unclear; I therefore set aside the second group in this paper.

² As expected, (13a) and (13b) become acceptable if the null object is replaced with an overt object:

(i) Brazilian Portuguese
   a. O que a Maria fez foi compor duas sonatas em seis dias.  
      the what the Maria did was compose two sonatas in six days  
   b. O que o Tiago fez foi construir duas casas em dois meses.  
      the what the Tiago did was build two houses in two months  

   ‘What Maria did was compose two sonatas in six days. What Clara did was compose two sonatas in eight days.’  
   ‘What Tiago did was build two houses in two months. What Pedro did was build two houses in three months.’
(12) Brazilian Portuguese
   a. O que o Pedro fez foi mostrar a tese dele pro Chomsky.
      the what the Pedro did was show the thesis of him to the Chomsky
      O que o João fez foi mostrar __ pro Lasnik.
      the what the João did was show __ to the Lasnik
      ‘What Pedro did was show his thesis to Chomsky. What João did was show his\textsubscript{ij} thesis to Lasnik.’

   b. O que a Clara fez foi pôr os óculos dela na mesa.
      the what the Clara did was put the glasses of her on the table
      O que a Maria fez foi pôr __ na estante.
      the what the Maria did was put __ on the shelf
      ‘What Clara did was put her glasses on the table. What Maria did was put her\textsubscript{ij} glasses on the shelf.’

(13) Brazilian Portuguese
   a. O que a Maria fez foi compor duas sonatas em seis dias.
      the what the Maria did was compose two sonatas in six days
      *O que a Clara fez foi compor __ em oito dias.
      the what the Clara did was compose __ in eight days
      ‘What Maria did was compose two sonatas in six days. (lit.) What Clara did was compose in eight days.’

   b. O que o Tiago fez foi construir duas casas em dois meses.
      the what the Tiago did was build two houses in two months
      *O que o Pedro fez foi construir __ em três meses.
      the what the Pedro did was build __ in three months
      ‘What Tiago did was build two houses in two months. (lit.) What Pedro did was build in three months.’

   Consider, also, the following examples, in which the null object is internal to an island. Island-internally, sloppily construed objects can elide, whereas indefinites cannot. Compare (14) and (15) with (16) and (17). The null objects in (14) and (15) permit the sloppy reading. In (16) and (17), by contrast, the null objects cannot be interpreted as \textit{duas sonatas} ‘two sonatas’ or \textit{duas casas} ‘two houses’, which shows that indefinites cannot elide island-internally. The sentences in (16) and (17) are in fact simply unacceptable, as the null objects fail to receive any interpretation.\textsuperscript{3}

(14) Brazilian Portuguese
   a. Me diga em que sala o Pedro mostrou a tese dele pro Chomsky e [island em que sala o João mostrou __ pro Lasnik].
      Chomsky and in what room the João showed __ to the Lasnik
      ‘Tell me in which room Pedro showed his thesis to Chomsky and in which room João showed his\textsubscript{ij} thesis to Lasnik.’

   b. Me diga por que a Ana pôs os óculos dela na mesa

\textsuperscript{3} Again, the examples become fully acceptable if the null objects are replaced by an overt object.
Tell me why Ana put her glasses on the table and why Maria put her glasses on the shelf.

(15) Brazilian Portuguese
a. Esse é o aluno que mostrou a tese dele pro Chomsky this is the student that showed the thesis of him to the Chomsky and that is the student that showed his thesis to Lasnik.

b. Esse é o aluno que pôs os óculos dele na mesa this is the student that put the glasses of him on the table and that is the student that put his glasses on the shelf.

(16) Brazilian Portuguese
a.*Me diga em qual desses pianos a Maria compôs duas sonatas em seis dias e [island em qual deles a Clara compôs em oito dias]. Tell me in which of these pianos Maria composed two sonatas in six days and in which of them Clara composed in eight days.

b.*Me diga em qual cidade o Tiago construiu duas casas em dois meses e [island em qual cidade o Pedro construiu em três meses]. Tell me in which city Tiago built two houses in two months and in which city Pedro built in three months.

(17) Brazilian Portuguese
a.*Essa é a pessoa que compôs duas sonatas em seis dias this is the person that composed two sonatas in six days and that is the person that composed in eight days.

b.*Essa é a pessoa que construiu duas casas em dois meses this is the person that built two houses in two months and that is the person that built in three months.
(lit.) ‘This is the person who built two houses in two months, and that is the person who built in three months.’

The preceding examples have shown that ellipsis of sloppily construed objects and ellipsis of indefinite objects exhibit distinct distributions: the former, but not the latter, may apply internal to pseudoclefts and islands. This suggests that we are dealing with two distinct ellipsis operations, one of which is responsible for eliding sloppily construed objects and the other, for eliding indefinite objects. As to which of these two ellipsis operations is AE, there are two reasons to conclude that it is the ellipsis operation underlying sloppy readings, and not the ellipsis operation underlying null indefinites, that is AE. First, in other languages with AE, AE can target arguments that are island-internal.

(18) Hebrew (Landau 2018:4; Landau p.c.)
   a. Gil nika et ha-šulxan šeloj [island axarey še-Yosi j nika __ ].
    Gil cleaned ACC the-table his after that-Yosi cleaned __
    ‘Gil cleaned his table after Yosi cleaned his table.’
   b. A: ani makir mišehu še-kana šlosha batim ba-šxuna
      I know someone that-bought three houses in.the-neighborhood
      ha-zot
      the-this
      ‘I know someone who bought three houses in this neighborhood.’
   B: ve-ani makir [island mišehu še-maxar __ ].
      and-I know someone that-sold __
      ‘And I know someone who sold three houses (in this neighborhood).’

The second reason for concluding that AE is not the ellipsis operation underlying the elision of null indefinites stems from the following observation: ellipsis of indefinites shares the same distribution as ellipsis of secondary predicates and adverbs. Consider (19)–(22).

(19) Brazilian Portuguese
    O Antônio não morreu surdo, mas o Joaquim morreu.
    the Antonio NEG died deaf but the Joaquim died
    ‘Antonio didn’t die deaf, but Joaquim died deaf.’

(20) Brazilian Portuguese
    A Clara não nada bem, mas a Maria nada.
    the Clara NEG swims well but the Maria swims
    ‘Clara doesn’t swim well, but Maria swims well.’

(21) Brazilian Portuguese
    a. O fato que o Antônio não morreu surdo me surpreende.
    the fact that the Antonio NEG died deaf me surprises
    Já [[island o fato que o Joaquim morreu] me entristecce].
    but the fact that the Joaquim died me saddens
    ‘The fact that Antonio didn’t die deaf surprises me. But the fact that Joaquim {*died deaf/√died} saddens me.’
b. Esse é o aluno que disse que o Antônio morreu surdo
this is the student that said that the Antonio died deaf
e aquele é [island o aluno que disse que o Joaquim morreu].
and that is the student that said that the Joaquim died
‘This is the student who said that Antonio died deaf, and that is the
student who said that Joaquim {*died deaf/√died}.’

(22) Brazilian Portuguese

a. O fato que a Clara não nada bem me surpreende.
the fact that the Clara NEG swims well me surprises
Já [[island o fato que a Maria nada] me alegra].
but the fact that the Maria swims me gladdens
‘The fact that Clara doesn’t swim well surprises me. But the fact that
Maria {*swims well/√swims} gladdens me.’

b. Esse é o cara que disse que a Clara nada bem
this is the guy that said that the Clara swims well
e aquele é [island o cara que disse que a Maria nada].
and that is the guy that said that the Maria swims
‘This is the guy who said that Clara swims well, and that is the guy who
said that Maria {*swims well/√swims}.’

The secondary predicate is recovered in the right-hand conjunct in (19), and the adverb is recovered in the right-hand conjunct in (20). In (21) and (22), by contrast, the secondary predicates and the adverbs are not recovered in the right-hand sentences. For instance, the right-hand sentence in (21a) simply means ‘the fact that Joaquim died saddens me’, and not ‘the fact that Joaquim died deaf saddens me’.

The contrast between (19)–(20) and (21)–(22) vis-à-vis the recoverability of secondary predicates and adverbs demonstrates that (i) BP has an ellipsis operation which can target secondary predicates and adverbs and that (ii) this ellipsis operation cannot apply island-internally. Notably, the ellipsis operation underlying the elision of indefinites exhibits the same distribution as the ellipsis operation underlying the elision of secondary predicates and adverbs (i.e., possible outside of islands; impossible internal to islands), which strongly suggests that we are dealing with a single ellipsis operation here, responsible for the elision of indefinites, secondary predicates, and adverbs, alike. Crucially, this ellipsis operation is not limited to targeting arguments: in addition to targeting indefinites, it targets secondary predicates and adverbs, neither of which are arguments. Thus, the ellipsis operation responsible for eliding indefinites is not argument ellipsis, but rather a distinct ellipsis operation with distinct properties from argument ellipsis: distinct with respect to the range of expressions it targets, and distinct with respect to its inability to apply island-internally.⁴

To summarize, the present section has argued that sloppily construed null arguments are generated under AE, whereas null indefinites are not. Going forward, I will use sloppy readings as a diagnostic for AE and disregard null indefinites.

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⁴ I leave for future work additional examination of the ellipsis operation underlying the elision of indefinites, secondary predicates, and adverbs. For present purposes, it suffices to have rendered plausible the conclusion that the operation responsible for eliding indefinites is not AE but rather some distinct ellipsis operation.
3. The anti-agreement theory of argument ellipsis

The anti-agreement theory (AAT) of AE was initially proposed by Saito (2007) as an account of why some languages allow AE and others do not. Saito proposes that the (un)availability of AE in a given language is determined by the presence of ϕ-features on T and v in that language. Specifically, languages in which T and v bear ϕ-features do not allow AE, whereas languages in which T and v lack ϕ-features permit AE.

Saito discusses two languages: English (a language without AE) and Japanese (a language with AE). Consider English.

(23)  Jim likes his boss. *Frank dislikes __.

The derivation of the elliptical sentence begins by copying the DP his boss from the LF-representation of the antecedent sentence and merging it with dislikes. The DP lacks phonological features (i.e., it is phonologically null), as it is copied from an LF-representation. In the representations here and below, phonological nullness is represented by means of light gray font.

(24)  [VP dislikes [his boss]_{ϕ}]

Importantly, the copied DP does not bear a Case feature, as this feature was previously valued and deleted during the derivation of the antecedent sentence. The DP is therefore unable to participate in further ϕ-feature probe-goal dependencies. Note that this follows from the Activity Condition (Chomsky 2001), according to which DPs are able to function as goals for ϕ-feature agreement only if they bear a Case feature; once their Case feature has been valued and deleted, the DP becomes unable to participate in subsequent ϕ-feature probe-goal dependencies. Given that the DP in (25) no longer bears a Case feature, it is unable to agree with v, whose ϕ-features thus remain unvalued, ultimately causing the derivation to crash.

(25)  [vP v_{ϕ} [VP dislikes [his boss]_{ϕ}]]

The impossibility of eliding subjects is accounted for in the same fashion.

(26)  Susan said her sister wrote a book. *Jill said [ __ wrote a song].

The DP her sister is copied from the LF of the antecedent sentence and merged with v’. T then enters the derivation and probes for matching ϕ-features. The DP is unable to function as a goal as it is no longer active, its Case feature having been valued and deleted during the derivation of the antecedent sentence. T’s ϕ-features remain unvalued, and the derivation crashes.

(27)  a.  [vP [her sister]_{ϕ} [v’ v [VP wrote a song]]]
   b.  [TP T_{uϕ} [vP [her sister]_{ϕ} [v’ v [VP wrote a song]]]]

Turning to Japanese, Saito proposes that T and v in Japanese do not carry ϕ-features. If so, the question arises as to how nominal arguments have their Case feature valued and deleted in Japanese. Saito suggests that Case-feature valuation in Japanese
does not depend upon \( \phi \)-feature agreement. Rather, nominative and genitive are structural cases, valued by merger of the nominal argument in [Spec,TP] and [Spec,DP], respectively, and accusative and dative are inherent cases, valued by merger with \( V \).

With this much in place, consider (28), an example of object-AE.

(28) Japanese (Takahashi 2014:89)
   a. Taroo-wa zibun-no hahaoya-o sonkeisiteiru.
      Taroo-TOP self-GEN mother-ACC respect
      ‘Taroo respects his mother.’
   b. Ken-mo __ sonkeisiteiru.
      Ken-also __ respect
      ‘Ken also respects his\( _i \) mother.’

The derivation of the elliptical sentence begins by copying \( \text{zibun-no hahaoya-o} \) ‘his mother’ from the LF-representation of the antecedent sentence and merging it with the verb. The object lacks a Case feature, as this feature was already valued and deleted during the derivation of the antecedent sentence. \( v \) then merges with VP. Given that the DP lacks a Case feature, the DP is inactive for \( \phi \)-feature agreement. However, \( v \) in Japanese lacks \( \phi \)-features, which means that the DP’s inactive status is irrelevant. The derivation thus converges, as desired.

(29) a. \([VP [zibun-no hahaoya-o]_\{\phi\} \text{sonkeisiteiru}]\)
   b. \([vP [VP [zibun-no hahaoya-o]_\{\phi\} \text{sonkeisiteiru}] v]\)

AE of subjects is accounted for in an analogous fashion.

(30) Japanese (Saito 2007:203)
   a. Hanako-i-wa zibun-i-no teian-ga saiyoosareru to omotteiru.
      Hanako-TOP self-GEN proposal-NOM accepted be that think
      ‘Hanako thinks that her proposal will be accepted.’
   b. Taroo-mo [ __ saiyoosareru to] omotteiru.
      Taroo-also __ accepted be that think
      ‘Taroo also thinks that his/\( _i \) proposal will be accepted.’

The antecedent is copied from the LF of the antecedent sentence into the elliptical sentence. Given that T lacks \( \phi \)-features, the DP’s inactive status is again irrelevant, thus enabling AE to successfully converge.

There are a number of languages in which AE is subject to a subject-object asymmetry.\(^5\) In such languages, AE can target objects, but not subjects. Given that BP is an example of such a language (see below), I present the AAT’s account of the subject-object asymmetry. For illustrative purposes, I present Şener & Takahashi’s (2010) AAT-account of the subject-object asymmetry in Turkish.

Turkish has overt subject-verb \( \phi \)-agreement.

\(^5\) Languages in which AE is subject to a subject-object asymmetry are: Chinese (Cheng 2013), Colloquial Singapore English (Sato 2014, 2016), Egyptian Arabic (Soltan 2020), Hindi (Simpson et al. 2013), Malayalam (Simpson et al. 2013), Persian (Sato & Karimi 2016), Serbo-Croatian (Bošković 2018), and Turkish (Şener & Takahashi 2010).
(31) Turkish (Şener and Takahashi 2010:86)
   a. (Ben) bu makale-yi yavaşyavaş oku-yacağ-im.
      (I) this article-ACC slowly read-FUT-1SG
      ‘I will read this article slowly.’
   b. (Biz) her hafta sinema-ya gid-er-iz.
      (we) every week movie-DAT go-AOR-1PL
      ‘We go to the movies every week.’

The existence of overt subject-verb agreement signifies that T in Turkish bears \( \phi \)-features, which probe and agree with the subject. This being the case, the AAT predicts that Turkish does not permit AE of subjects. This prediction is correct, as (32) demonstrates. Note that the null subject in (32b) does not allow a sloppy reading, which confirms that the null subject is not capable of being generated by AE.

(32) Turkish (Şener & Takahashi 2010:91)
      John his son-3SG English learn-PRES COMP know-PRES
      ‘John knows that his son learns English.’
      Phylis-however __ French learn-PRES COMP know-PRES
      ‘Phylis, however, knows that *her/\( \phi \)/his son learns French.’

As for objects, Şener and Takahashi assume that v lacks \( \phi \)-features in Turkish.\(^6\) It is thus expected that Turkish should allow AE of objects, which is indeed the case, as is confirmed by the null object’s ability to produce sloppy readings.

(33) Turkish (Şener & Takahashi 2010:87)
   a. Cani [proi anne-si]-ni eleştir-di.
      John his mother-3SG-ACC criticize-PAST
      ‘John criticized his mother.’
   b. Mete-yse ___ öv-dü.
      Mete-however ___ praise-PAST
      ‘Mete, however, praised his mother.’

As an additional piece of evidence for the AAT, Şener and Takahashi consider subjects of ECM clauses. Whereas subjects of finite clauses enter into subject-verb agreement, subjects of ECM clauses do not.

(34) Turkish (Şener & Takahashi 2010:96)
   Pelin I-ACC/you-ACC/(s)he-ACC high.school-DAT start-FUT think-PRES
   ‘Pelin thinks I/you/he/she will start high school.’

\(^6\) Şener & Takahashi (2010) do not address the question of how the Case feature on object DPs is valued in the absence of \( \phi \)-features on v.
Şener and Takahashi take the absence of subject-verb agreement to indicate that subjects of ECM clauses do not φ-agree with the T heading the ECM clause. Nor do subjects of ECM clauses agree with the upstairs ν, given Şener and Takahashi’s assumption that Turkish ν lacks φ-features. The AAT thus predicts that Turkish should allow AE of ECM subjects. This prediction is borne out.

(35)   Turkish (Şener & Takahashi 2010:96)
      ‘Pelin; her niece-3SG-ACC high.school-DAT start-FUT think-PRES
      ‘Pelin; thinks her niece will start high school.’
      ‘Susan, however, thinks that her niece will start grade school.’

Having reviewed the AAT, let us consider whether the AAT successfully accounts for AE in BP. BP has AE of objects, but not AE of subjects. The evidence in support of this conclusion comes from the distribution of sloppy readings: null objects admit sloppy readings; null subjects do not.

(36)   Brazilian Portuguese
   Sloppy Reading = ✓
   a. A Clara, mostrou/mandou/apresentou a tese dela, pro Chomsky.
      the Clara showed/sent/presented the thesis of.her to.the Chomsky
      Já a Ana, mostrou/mandou/apresentou __ pro Lasnik.
      but the Ana showed/sent/presented __ to.the Lasnik
      ‘Clara showed/sent/presented her thesis to Chomsky. But Ana showed/sent/presented her to Lasnik.’
   b. O Pedro, pôs o notebook dele, no sofá.
      the Pedro put the laptop of.him on.the sofa
      Já o João, pôs __ na cama.
      but the João put __ on.the bed
      ‘Pedro put his laptop on the sofa. But João put his laptop on the bed.’

(37)   Brazilian Portuguese
   Sloppy Reading = *
   a. O João, disse que a mãe dele, era médica.
      the João said that the mother of.him was doctor
      Já o Pedro, disse que __ era advogada.
      but the Pedro said that __ was lawyer
      ‘João said that his mother was a doctor. But Pedro said that his mother was a lawyer.’
   b. O Tiago, disse que a mãe dele, canta.
      the Tiago said that the mother of.him sings
      Já o Paulo, disse que __ dança.
      but the Paulo said that __ dances
      ‘Tiago said that his mother sings. But Paulo said that his mother dances.’
c. [A Maria e a Júlia] acreditam que a mãe delas comprou [the Maria and the Julia believe that the mother of them bought]
a televisão. Já [a Clara e a Ana] acreditam que __ comprou um rádio. [the Clara and the Ana believe that __ bought a radio]

‘Maria and Julia believe that their mother bought a television. But Clara and Ana believe that *Clara and Ana’s mother/ √ Maria and Julia’s mother bought a radio.’

Observe that BP has subject-verb agreement in finite clauses.

(38) Brazilian Portuguese

a. Eu canto.
   I sing.1SG
   ‘I sing.’

b. Ele canta.
   he sing.3SG
   ‘He sings.’

c. Eles cantam.
   they sing.3PL
   ‘They sing.’

Finite T thus bears φ-features, which probe and agree with the subject. The AAT thus correctly predicts that subjects of finite clauses cannot undergo AE.

To illustrate, consider the derivation of (37c), depicted in (39). The DP a mãe delas ‘their mother’ is copied from the LF of the antecedent sentence and merged with v’ . T then merges with the vP and probes for a goal with φ-features. The DP a mãe delas ‘their mother’ is inactive, as its Case feature was valued and deleted during the derivation of the antecedent sentence. T’s φ-feature therefore remain unvalued, and the derivation crashes.

(39)  
a. [vP [a mãe delas]φ [v’ [vP comprou um rádio]]]
b. [TP T[φ] [vP [a mãe delas]φ [v’ [vP comprou um rádio]]]]

Turning to AE of objects, given the logic of the AAT, it must be assumed that v lacks φ-features in BP. This, in turn, requires that we assume that the Case feature on object DPs is valued and deleted not through φ-agreement with v, but in some distinct fashion. In what follows, I argue that with respect to the distribution of AE in BP, (i) the AAT is too permissive in some cases (overgeneration), and (ii) too restrictive in others (undergeneration).

7 Regarding the twin assumptions that v in BP lacks φ-features and that the Case feature on object DPs must therefore be valued and deleted in some distinct fashion, I am adopting these assumptions only temporarily, so as to give the AAT a fighting chance. Following the discussion of the AAT, I return to the standard assumption that v in BP bears φ-features, and that object DPs enter into φ-feature agreement with v, valuing v’s φ-features and the object’s Case feature.
Consider (40a-b), which involves a small clause headed by a PP predicate. As can be observed, AE of the small clause’s subject is not possible.

(40) Brazilian Portuguese
Sloppy reading = *

a. A Ana, considerou a proposta dela de bom tom.
   the Ana considered the proposal of her of good tone
   Já a Clara, considerou [SC __ [PP de mau gosto]].
   but the Clara considered __ of bad taste
   ‘Ana, considered her proposal to have a good tone. But Clara considered her proposal to be in bad taste.’

b. A Maria, considera o patrão dela de grande delicadeza.
   the Maria considers the boss of her of big tenderness
   Já a Ana, considera [SC __ [PP de bom coração]].
   but the Ana considers __ of good heart
   ‘Maria, considers her boss very gentle. But Clara considers her boss good-hearted.’

Consider (40a). (Similar comments apply to (40b), mutatis mutandis.) Given that the antecedent sentence is acceptable, it can be concluded that the Case feature of a proposta dela ‘her proposal’ is (somehow) successfully deleted during the derivation of the antecedent sentence. After all, if the DP’s case were not deleted, the derivation of the antecedent sentence would not have converged.

Under the AAT, the derivation of the elliptical sentence in (40a) proceeds as follows. The DP a proposta dela ‘her proposal’ is copied from the LF of the antecedent sentence. Given that the DP’s Case feature was deleted during the derivation of the antecedent sentence, the DP is inactive for ϕ-feature agreement within the elliptical sentence. Crucially, however, the DP will not be required to enter into any ϕ-feature agreement dependencies. It clearly does not agree with the PP-predicate; nor does it agree with v, given the assumption that v lacks ϕ-features. The AAT thus predicts the derivation to converge, overgenerating AE.

The preceding pair of examples instantiates a case in which AE is impossible, despite the absence of agreement. The following pair of examples instantiates the opposite: a case in which AE is possible, despite the presence of agreement. The AAT incorrectly rules out AE here.

(41) Brazilian Portuguese
Sloppy Reading = ✓

   the João submitted [the thesis of him].F.SG torn.F.SG
   Já o Pedro, submeteu ___ amarrotada.
   but the Pedro submitted ___ creased.F.SG

b. A Maria, vendeu [o carro dela] lavado e polido.
   the Maria sold [the car of her].M.SG washed.M.SG and polished.M.SG
   Já a Carla, vendeu ___ imundo.
   but the Carla sold ___ filthy.M.SG
   ‘Maria sold her car washed and polished. But Carla sold her car filthy.’
The examples in (41) involve secondary predicates which agree (in number and gender) with the DP it is predicated of. Under the AAT, the agreement should block AE. Consider why. The antecedent DP is copied into the elliptical sentence from the LF of the antecedent sentence. At this point, the DP necessarily lacks a Case feature, as its Case feature was valued and deleted during the derivation of the antecedent sentence. The copied DP is therefore unable to agree with the secondary predicate (alternatively, with whatever functional head underlies agreement between secondary predicates and the DPs they are predicated of). The derivation of the elliptical sentence thus crashes, contrary to what is required, as the $\phi$-features on the (functional head associated with the) secondary predicate remain unvalued.

Summarizing, the AAT does not offer a viable account of AE in BP. First, there are instances in which a DP cannot undergo AE, even though it does not enter into $\phi$-agreement with any element in the elliptical sentence (see (40)). The AAT fails to rule out AE in such cases. Second, there are instances in which a DP can undergo AE, even though it enters into $\phi$-agreement within the elliptical sentence (see (41)). The AAT incorrectly rules out AE in such cases (but see fn. 9 for qualifying remarks). The AAT is therefore both too weak and too strong as an account of AE in BP.

4. Clitic doubling and argument ellipsis

In a series of papers, Bošković (2005, 2008, 2009, 2012) argues that the structure of argumental nominal phrases is subject to cross-linguistic variation: in some languages ("DP-languages"), argumental nominal phrases project all the way up to DP; in other languages ("NP-languages"), argumental nominal phrases project only to NP. Various
properties have been argued to follow from a language’s status as a DP- vs. NP-language (see Bošković 2012). Relevant here is the following claim, due to Runić (2014).

(42) Clitics give rise to sloppy readings only in NP-languages.

The following examples serve as an illustration. In Serbo-Croatian and Slovenian, which are both NP-languages, clitics allow sloppy readings. In Macedonian and French, both DP-languages, clitics allow only strict readings.

(43) Context: Nikola and Danilo are brothers and their family celebrates St. Nicholas. It is a common practice to invite a boyfriend/girlfriend to the celebration (slava). Both Nikola and Danilo have a girlfriend (thus, in this context, there are two girlfriends) and they invited their girlfriends to the celebration.

a. Serbo-Croatian (Bošković 2018:6)

Nikola, je pozvao (svoju) djevojku na slavu, a pozvao
Nikola is invited (his) girlfriend on slava and invited
ju je i Danilo,
her.CL.ACC is too Danilo
‘Nikola invited his girlfriend to the slava, and Danilo invited his girlfriend too.’

b. Slovenian (Bošković 2018:6)

Marko, je povabil (svojo) punco na zabavo, in povabil
Marko is invited (his) girlfriend on party and invited
jo je tudi Peter,
her.CL.ACC is also Peter
‘Marko invited his girlfriend to the party, and Peter also invited his girlfriend.’

c. Macedonian (Bošković 2018:6)

Nikola, ja povika devojka si na slava,
Nikola her.CL.ACC invited girl him.CL.DAT.REFL at slava
a Daniel, ja povika isto.
and Daniel her.CL.ACC invited too
‘Nikola invited his girlfriend to the slava and Daniel invited his girlfriend too.’

d. French (Bošković 2018:6)

Nicolas, a invité sa petite à la fête et Danilo,
Nicola has invited his girlfriend to the party and Danilo
l-a invité aussi.
her.CL.ACC-has invited too.
‘Nicola invited his girlfriend to the party, and Danilo invited his girlfriend too.’

Bošković (2018) proposes that examples such as (43a) and (43b) involve clitic doubling, with AE of the associate.
According to this proposal, the source of the sloppy reading is the doubled argument, not the clitic.

Bošković’s proposal correctly predicts that non-clitic pronouns in NP-languages do not permit sloppy readings. Since non-clitic pronouns do not permit doubling, the source of the sloppy readings is absent; hence, the impossibility of sloppy readings.

As to why clitics in DP-languages do not allow sloppy readings, Bošković follows Cheng (2013) in claiming that AE is possible only in NP-languages. The inability of clitics to produce sloppy readings in DP-languages thus follows from the following two points: (i) the source of the sloppy reading is not the clitic but rather the doubled argument, which undergoes AE; (ii) DP-languages do not allow AE, hence do not allow sloppy readings.

Upon initial consideration, it would appear that Bošković’s analysis of AE does not extend to BP. First, BP is a DP-language, as is confirmed by the existence of definite articles in BP.10

Second, AE in BP, unlike AE in Serbo-Croatian and Slovenian, does not appear to involve a clitic. Compare AE in Serbo-Croatian and Slovenian (see (43a-b)), where a clitic is clearly present, with AE in BP, which does not contain a clitic.

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10 Bošković (2008: fn. 3, 2009) assumes that whereas definite articles are D’s, and hence indicate a language’s status as a DP-language, indefinite articles may be merged lower than DP, and thus do not indicate a language’s status as a DP-language. I thus utilize the presence of definite articles as the litmus test for a language’s status as a DP-language.
Brazilian Portuguese argument ellipsis

(47) Brazilian Portuguese
O Paulo mostrou a tese dele pra Bresnan.
the Paulo showed the thesis of.him to.the Bresnan
Já o Júlio mostrou ___ pra Kratzer.
but the Julio showed ___ to.the Kratzer
‘Paulo showed his thesis to Bresnan. But Julio showed his/jth thesis to Kratzer.’

If AE in BP does not involve a clitic, the clitic doubling analysis would appear to be a nonstarter for BP.

In what follows, I argue that the clitic doubling analysis *can* apply to BP, despite initial appearances to the contrary. Specifically, (i) AE can indeed apply in DP-languages, contrary to what Cheng (2013) and Bošković (2018) claim, and (ii) BP has a phonologically null 3rd person accusative clitic (Kato 1993), which opens the door for extending the clitic doubling analysis to BP.

Concerning the claim that AE is possible only in NP-languages, this claim is factually incorrect. AE is possible in Basque (Duguine 2013), BP (Cyrino & Lopes 2016), Hebrew (Landau 2018), and Persian (Sato & Karimi 2016), each of which has definite articles and therefore qualifies as a DP-language.11 Note that the null arguments in (48)–(50) admit a sloppy reading (in addition to a strict reading), thus confirming that the null arguments are generated under AE (see the cited authors for additional arguments that these languages permit AE).

(48) Basque (Duguine 2013:106)
Jonetak bere txakurra parkera eraman ohi du, baina
Jon POSS dog park.to take HABIT AUX but
Miren__ mandira eramaten du gehienetan.
Miren __ mountain.to takes AUX mostly
‘Jon habitually takes out his dog to the park, but generally Miren takes out Miren’s/Jon’s dog to the mountain.’

11 Egyptian Arabic is a further example of a DP-language with AE (Soltan 2020). However, Egyptian Arabic does not allow AE of definite DPs, as Soltan (2020) observes. Examples analogous to (48)–(50), which involve AE of a sloppily construed definite argument, are therefore independently ruled out. In lieu of such an example, I present an example which contains a sloppily construed null PP argument.

(i) Egyptian Arabic (Soltan 2020:210)
Eman, bašat-it filūs li-zahla-hā wi Huda bašat-it hadāyā__.
Eman sent-3F.SG money to-family-her and Huda sent-3F.SG gifts __
‘Eman, sent money to her, family and Huda sent gifts to Huda’s/Eman’s family.’

See Soltan (2020) for additional evidence that Egyptian Arabic has AE.
Turning to Kato’s (1993) proposal that BP has null 3rd person accusative clitics, I present the evidence supporting Kato’s proposal in two steps. I begin by arguing, following Farrell (1990), Ferreira (2000), Grolla (2005), and Kato et al. (2023), that BP has object pro. I then argue that the null pronoun is specifically a null clitic pronoun.

One argument for the existence of object pro comes from the following observation: null objects in BP give rise to interpretations which, on the one hand, cannot be accounted for by AE but which, on the other hand, can indeed be accounted for by pro. Specifically, null objects, like overt pronouns, can be construed as a bound variable and give rise to E-type readings (Ferreira 2000).

AE is not capable of generating the null objects’ interpretations. For (51), AE would produce (53), which lacks the bound variable reading. For (52), it would produce (54), which lacks the E-type reading.

(49) Persian (Sato & Karimi 2016:4)
Kimea teacher-her-RÅ friend have. Parviz also _ friend have.
‘Kimea loves her, teacher. Parviz also loves Parviz’s/Kimea’s teacher.’

(50) Hebrew (Landau 2018:1)
Gil, hizmin et axot-o. Yosi gam hizmin__.
Gil invited ACC sister-his. Yosi also invited__
‘Gil invited his, sister. Yosi also invited Yosi’s/Gil’s sister.’

(51) Brazilian Portuguese (Ferreira 2000:105)
Nenhum filmei decepcionou as pessoas que foram assistir __/elei
no film deceived the people that went watch __/it
‘No film, x, deceived the people who went to watch x.’

(52) Brazilian Portuguese (Ferreira 2000:82)
Nenhuma criança que ganhar [um brinquedo novo], vai querer emprestar
no child that wins a toy new will want lend
__/elei pros irmãos.
__/it to.the siblings
‘No child who gets a new toy will want to lend it (i.e., the new toy s/he gets) to his/her siblings.’

(53) Brazilian Portuguese (Ferreira 2000:82)
Nenhum filme decepcionou as pessoas que foram assistir [nenhum filme],
no film deceived the people that went watch no film
‘No film deceived the people who went to see no film.’

(54) Brazilian Portuguese (Ferreira 2000:82)
Nenhuma criança que ganhar um brinquedo novo vai querer emprestar
no child that wins a toy new will want lend
[um brinquedo novo], pros irmãos.
a toy new to.the siblings
‘No child who gets a new toy will want to lend a new toy to his/her siblings.’
By contrast, *pro* clearly succeeds in generating the null object’s interpretations, given that overt pronouns similarly support such a reading.

The following paradigm further demonstrates that BP has object *pro*.12

(55) Brazilian Portuguese

a. Esse livro, eu conheço [uma menina que já leu ele, dez vezes].
   this book, I know a girl that already read it ten times
   ‘This book, I know a girl who already read it ten times.’

b. Que livro que você conhece [a menina que já leu ele, dez vezes]?
   what book that you know the girl that already read it ten times
   ‘Which book do you know the girl who already read it ten times?’

c. Esse é o livro que o João conhece [a autora que escreveu ele].
   this is the book that the João knows the author that wrote it
   ‘This is the book that João knows the author who wrote it.’

d.*Só esse livro, a Maria conhece [uma pessoa que leu ele].
   only this book, the Maria knows a person that read it
   ‘Only this book, Maria knows a person who read it.’

(56) Brazilian Portuguese

a. Esse livro, eu conheço [uma menina que já leu __i dez vezes].
   this book, I know a girl that already read it ten times
   ‘This book, I know a girl who already read (it) ten times.’

b. Que livro que você conhece [a menina que já leu __i dez vezes]?
   what book that you know the girl that already read it ten times
   ‘Which book do you know the girl who already read (it) ten times?’

c. Esse é o livro que o João conhece [a autora que escreveu __i].
   this is the book that the João knows the author that wrote it
   ‘This is the book that João knows the author who wrote (it).’

d.*Só esse livro, a Maria conhece [uma pessoa que leu __i].
   only this book, the Maria knows a person that read it
   ‘Only this book, Maria knows a person who read (it).’

The examples in (55) involve a resumptive pronoun, separated from its binder by an island. As the examples demonstrate, the resumptive pronoun can be bound by a topic, a wh-phrase, or a relativized DP, but not by a focused DP. As to (56), the distribution of judgements is precisely what is expected if BP has object *pro*. (56d) is ungrammatical, given that neither resumption nor movement is possible: resumption is not possible, since resumption is not allowed when the binder is a focused DP, as demonstrated by (55b), above; and movement is not possible, since movement incurs an island violation.

(57)  a. *Só esse livro, a Maria conhece [uma pessoa que leu *pro*]  
       b. *Só esse livro, a Maria conhece [uma pessoa que leu *ti*]

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12 (55a-c) and (56a-c) are from Grolla (2005), (55d) is due to Marcelo Ferreira (p.c.) and Jairo Nunes (p.c.), and (56d) is from Ferreira (2000).
By contrast, (56a–c) are grammatical, since resumption is allowed with topics, wh-phrases, and relativized DPs.

(58)  
a. Esse livro, eu conheço [uma menina que já leu proi dez vezes].
b. Que livroi que você conhece [a menina que já leu proi dez vezes]?  
c. Esse é o livri que o João conhece [a autori que escreveu proi].

The preceding examples have shown that BP has object pro. Kato (1993) proposes that the null pronoun is a null clitic pronoun. BP has 1st and 2nd person accusative clitics. However, the 3rd person accusative clitics were lost in the late 18th century/early 19th century (Nunes 1993, Cyrino 1997). Thus, (59b) is ungrammatical in modern colloquial BP.

(59)  
a. A Maria não me/te+viu.  
the Maria NEG me.ACC/you.ACC+saw  
‘Maria didn’t see me/you.’
b. *A Maria não o/a+viu.  
the Maria NEG him.ACC/her.ACC+saw  
‘Maria didn’t see him/her.’

Kato makes the following point: if pro in BP is a null 3rd person accusative clitic, rather than a weak pronoun, it becomes possible to maintain that BP has a uniform clitic system, with each cell in the paradigm filled.

(60)  
1st person: me  
2nd person: te  
3rd person: 0

In what follows, I present an additional piece of evidence in support of Kato’s proposal.

Recall that weak pronouns in BP can be used resumptively (see (55a–c), above). Notably, weak pronouns cannot be used resumptively when the binder is a predicative expression. For instance, the weak pronoun ele ‘it’ cannot be used resumptively in (61), where the binder is a predicative adjective.

(61)  
*Inteligentei, eu não conheci [island ninguém que é elei].  
Intelligent I NEG know nobody that is it  
(lit.) ‘Intelligent, I don’t know anybody who is it.’

With this much in place, consider (62).

(62)  
Inteligentei, eu não conheci [island ninguém que é __].  
Intelligent I NEG know nobody that is __  
(lit.) ‘Intelligent, I don’t know anybody who is.’
(62) is identical to (61), except that the the weak pronoun has been replaced by a gap. Moreover, (62) is grammatical, unlike (61). Crucially, the A’-chain in (62) is not generated via movement, as such movement would incur an island violation.

(63) *Inteligente, eu não conheço [island ninguém que é t₁].

Rather, the predicative adjective is base-generated in its surface position, from where it binds a null resumptive pronoun. Now, if null pronouns in BP were null weak pronouns, we would incorrectly predict examples such as (62) to be ungrammatical, given that weak pronouns in BP cannot resume predicative adjectives. On the other hand, if null pronouns in BP are null clitic pronouns, we correctly predict that such examples are grammatical, under the additional assumption that clitic pronouns can resume predicative adjectives in BP. Indirect evidence in support of this additional assumption comes from European Portuguese. Clitic pronouns in European Portuguese can resume predicative adjectives (and, indeed, predicate expressions, more generally).

(64) European Portuguese (p.c. Ana Maria Martins)
   Inteligente, eu não conheço [island ninguém que o₁ é].
   Intelligent I NEG know nobody that is it
   (lit.) ‘Intelligent, I don’t know anybody who is it.’

What European Portuguese shows us is that clitic pronouns can, in principle, resume predicate adjectives. It is thus not implausible to assume that clitic pronouns in BP can do so, as well.

In short, if pro in BP is a weak pronoun, we are left without an account for the grammaticality of (62). If, however, pro in BP is a null clitic pronoun, as proposed here, the grammaticality of (62) is accounted for, provided we make the additional, plausible assumption that the null clitic can resume predicative adjectives.

Summarizing, I have argued that the null object pronoun in BP is a null clitic pronoun, as originally proposed by Kato (1993). In evaluating the strength of this proposal it is important to bear in mind that the evidence in the literature for the existence of pro in BP (i.e., bound variable anaphora, E-type readings, resumption) is neutral with respect to pro’s status as weak vs. clitic. Thus, although the evidence I have presented in support of pro’s status as a clitic is perhaps more suggestive than definitive, this evidence is sufficient to tip the scales in favor of the clitic analysis, as there is no competing evidence that would motivate assuming that the null pronoun is a weak pronoun. I therefore assume that BP pro is a null clitic pronoun, following Kato (1993). As will be argued below, this assumption helps to explain a number of the properties of AE in BP, thus providing an additional, compelling reason for assuming that pro in BP is indeed a clitic.

5. Clitic doubling and argument ellipsis in Brazilian Portuguese

In this section, I extend Bošković’s (2018) clitic doubling analysis of AE to BP. I begin by presenting the details of the analysis. I then present a series of arguments in support of it.
5.1. The distribution of argument ellipsis in Brazilian Portuguese

Consider, first, an example in which AE targets an object DP.

(65)  
Braziliang Portuguese  
O Paulo mostrou a tese dele pra Bresnan.  
the Paulo showed the thesis of.him to.the Bresnan  
Já o Júlio mostrou __ pra Kratzer.  
but the Julio showed __ to.the Kratzer  
‘Paulo showed his thesis to Bresnan. But Julio showed his thesis to Kratzer.’

According to the present proposal, AE in BP involves clitic doubling, where the clitic is phonologically null and AE targets the clitic’s associate DP. Specifically, the clitic and its associate are initially merged in a big DP. Clitics in BP necessarily procliticize to the verb that ‘governs’ them. As such, the clitic must procliticize to mostrou ‘showed’. Finally, the associate elides at PF (see Section 5.3 for evidence that AE in BP involves PF-deletion, not LF-copying). Following standard practice, I assume that PF-deletion is licensed by an E-feature (Merchant 2001). Accordingly, I posit an E-feature on the clitic, which licenses the elision of its associate. The derivation of (65) thus runs as follows.\(^{13,14}\)

\(^{13}\) There is a fair amount of variation within the literature vis-à-vis the precise structure of big DPs. One point of variation concerns the position of the associate DP: Uriagereka (1995) proposes that the associate DP is the clitic’s specifier (see (i)), whereas Belletti (1999, 2005), Papangeli (2000), and Cardinaletti (2019) propose that the associate DP is the clitic’s complement. (Note that Uriagereka (1995) also assumes that the clitic takes a pro-NP complement.)

(i) \[DP [DP associate] [DP D^0 (= clitic) [NP pro]]\]

(ii) \[DP D^0 (= clitic) [DP associate]]\]

Within the ellipsis literature, heads endowed with an E-feature license ellipsis of their complement, not their specifier. I therefore adopt the structure in (ii), according to which the associate is the clitic’s complement.

\(^{14}\) An anonymous reviewer asks whether the null clitic always bears an \[E\]-feature. In the ellipsis literature, the \[E\]-feature is generally thought to be an optional feature. I therefore assume (but see below), that the \[E\]-feature on the clitic is optional. When the clitic bears an E-feature, its associate is elided. When the clitic does not bear an E-feature, its associate is not elided.

A consequence of this assumption is that many sentences involving direct objects will be structurally ambiguous: in such sentences, the direct object can be generated either with or without an accompanying clitic, where the clitic does not bear an [E]-feature and, therefore, does not trigger ellipsis of the direct object. So far as I can see, this aspect of the present analysis is unproblematic.

It is possible, however, that the insertion of the null clitic is subject to economy considerations, and that these considerations conspire to ensure that the clitic is inserted only if it bears an E-feature. For instance, suppose that economy requires that an element be present in the derivation only if it has an effect on LF or PF (or both) (cf. Chomsky 2001). If the null clitic does not have any effect on the LF interpretation of the sentences into which it is inserted
Since AE in BP is licensed by the clitic (specifically, its E-feature), the present analysis predicts that AE is excluded whenever the clitic is itself excluded. In this connection, recall that the clitic is an accusative clitic. The present analysis thus predicts, correctly, that subjects of finite clauses do not permit AE. As discussed above, null subjects of finite clauses do not permit sloppy readings, thus demonstrating that null subjects of finite clauses cannot be generated under AE.

(i.e., if sentences with the clitic are synonymous with the analogous sentences lacking the clitic), then the clitic will be inserted only if it has an effect on the PF representation. Since the clitic is phonologically null, the only way it can have an effect on the PF representation is by inducing ellipsis of its associate. Hence, economy will require that the clitic obligatorily bear an E-feature (at least in those sentences in which the clitic has no effect on LF).

An anonymous reviewer suggests an alternative explanation for why null subjects in BP do not permit sloppy readings. The reviewer’s explanation runs as follows. If the embedded subjects of the antecedent sentences in (67) are necessarily interpreted as discourse topics, the null subject, according to the reviewer, will necessarily refer back to the discourse topic, resulting in the strict reading.
In addition to being unable to target subjects of finite clauses, AE in BP cannot target subjects of small clauses or subjects of infinitival clauses. This conclusion is illustrated by the following sentences, which show that null subjects of small/infinitival clauses do not permit sloppy readings.16

(68) Brazilian Portuguese
a. A Júliai achou a apresentação dela um desastre.
the Julia found the presentation of her a disaster
Já a Anaí achou [sc __ um grande sucesso].
but the Ana found __ a great success
‘Juliai considered her presentation a disaster. But Anaí considered her presentation a great success.’

This account is insufficiently general. In (81) and (82), below, the null objects’ antecedents are non-specific indefinites, which clearly do not establish a discourse topic. The reviewer’s account does not explain why AE cannot apply here. The clitic doubling account does (see Section 5.2).

More generally, it is dubious that discourse topichood underlies the distribution of AE in BP. Compare (ia-b) with (68) and (69).

(i) Brazilian Portuguese
a. O Paulo, mostrou a tese dele, pra Bresnan.
the Paulo showed the thesis of him to the Bresnan
Já o Júlio, mostrou __ pra Kratzer.
but the Julio showed __ to the Kratzer
‘Paulo, showed his thesis to Bresnan. But Julio showed his thesis to Kratzer.’
b. O João, submeteu [a tese dele,] rasgada.
the João submitted [the thesis of him] torn
Já o Pedro, submeteu __ amarrotada.
but the Pedro submitted __ creased

The null arguments in (ia-b) permit a sloppy reading; whereas the null arguments in (68) and (69) do not. For the reviewer’s explanation to account for the distinction between (i) and (68)/(69), it must be the case that the null arguments’ antecedents in (68)/(69) are interpreted as discourse topics, and that the antecedents in (i) are not. However, the antecedents in (i) do not seem to differ from the antecedents in (68)/69) with regard to their interpretation vis-à-vis discourse topichood; either all of these antecedents are discourse topics, or none of them are. Evidently, if the reviewer’s explanation is to account for the distribution of sloppy readings in BP, there must be a method for establishing for a given antecedent whether it is a discourse topic or not. With this in place, it must be shown that the distribution of sloppy readings goes hand-in-hand with whether the antecedent is, or is not, a discourse topic. For instance, it must be shown that the antecedents in (67), (68) and (69) are indeed interpreted as discourse topics, and that the antecedents in (i) are not. Without such a method in hand, the reviewer’s explanation does not offer a viable alternative to the clitic doubling analysis proposed here.

16 For some speakers, the null subjects in (69b-c) do not permit the strict reading, either. See n. 18 for further discussion.
b. A Ana\textsubscript{i} considerou a proposta dela\textsubscript{i} de bom tom.
   the Ana considered the proposal of her of good tone
   Já a Clara\textsubscript{j} considerou [SC __ de mau gosto].
   but the Clara considered ____ of bad taste
   'Ana\textsubscript{i} considered her\textsubscript{i} proposal to have a good tone. But Clara\textsubscript{j} considered her\textsubscript{j/i} proposal to be in bad taste.'

c. O João\textsubscript{i} achou a tese dele\textsubscript{i} ruim.
   the João considered the thesis of him bad
   Já o Pedro\textsubscript{j} achou [SC ____ boa].
   but the Pedro considered ____ good
   'João\textsubscript{i} considered his\textsubscript{i} thesis bad. But Pedro\textsubscript{j} considered his\textsubscript{j/i} thesis good.'

(69)

Brazilian Portuguese

a. A Maria\textsubscript{i} viu o carro do amigo dela\textsubscript{i} atropelar um turista.
   the Maria saw the car of the friend of her run over a tourist
   Já a Clara\textsubscript{j} viu [TP ____ atropelar um ciclista]
   but the Clara saw ____ run over a cyclist
   'Maria\textsubscript{i} saw her friend's car run over a tourist. But Clara\textsubscript{j} saw her\textsubscript{j/i} friend's car run over a cyclist.'

b. A Maria\textsubscript{i} viu o carro dela\textsubscript{i} ser pichado.
   the Maria saw the car of her be spray painted
   Já a Clara\textsubscript{j} viu [TP ____ ser roubado]
   but the Clara saw ____ be stolen
   'Maria\textsubscript{i} saw her car be spray painted. But Clara\textsubscript{j} saw her\textsubscript{j/i} car be stolen.'

c. A Maria\textsubscript{i} viu o carro dela\textsubscript{i} ser pichado duas vezes.
   the Maria saw the car of her be spray painted two times
   Já a Clara\textsubscript{j} viu [TP ____ ser pichado três vezes]
   but the Clara saw ____ be spray painted three times
   'Maria\textsubscript{i} saw her car be spray painted two times. But Clara\textsubscript{j} saw her\textsubscript{j/i} car be spray painted three times.'

The clitic doubling analysis of AE accounts for the inability of AE to target subjects of small/infinitival clauses. For illustrative purposes, consider how the derivations of (68a), (69a), and (69b) proceed according to the current analysis. The clitic and its associate are merged together in a big DP. The clitic then cliticizes onto the verb, and the associate DP elides at PF.

(70)

a. Já a Ana\textsubscript{j} achou [SC [DP CL\textsubscript{[E]} [DP a apresentação dela\textsubscript{j}]] um grande sucesso] →
   b. Já a Ana\textsubscript{j} CL\textsubscript{[E]}+achou [SC [DP tCL [DP a apresentação dela\textsubscript{j}]] um grande sucesso] →
   c. Já a Ana\textsubscript{j} CL\textsubscript{[E]}+achou [SC [DP tCL [DP a apresentação dela\textsubscript{j}]] um grande sucesso] →

(71)

a. Já a Clara\textsubscript{j} viu [TP [DP CL\textsubscript{[E]} [DP o carro do amigo dela\textsubscript{j}]] atropelar um ciclista] →
   b. Já a Clara\textsubscript{j} CL\textsubscript{[E]}+viu [TP [DP tCL [DP o carro do amigo dela\textsubscript{j}]] atropelar um ciclista] →
c. Já a Clara CL[E]+viu [TP [DP tCL [DP o carro do amigo dela]]] atropelar um ciclista

(72)  a. Já a Clara CL[E]+viu [TP [DP CL[E] [DP o carro dela]]] ser roubado)
    b. Já a Clara CL[E]+viu [TP [DP tCL [DP o carro dela]]] ser roubado)
    c. Já a Clara CL[E]+viu [TP [DP tCL [DP o carro dela]]] ser roubado)

Notice that the derivations in (70)–(72) involve sub-extraction (of the clitic) from a larger DP. Similarly, the derivation in (66), repeated here as (73), involves sub-extraction (of the clitic) from a larger DP.

(73)  a. Já o Júlio CL[E]+mostrou [DP CL[E] [DP a tese dele]] pra Kratzer
    b. Já o Júlio CL[E]+mostrou [DP tCL [DP a tese dele]] pra Kratzer
    c. Já o Júlio CL[E]+mostrou [DP tCL [DP a tese dele]] pra Kratzer

In (73), sub-extraction is from an object. In (70)–(72), sub-extraction is from the subject of a small/infinitival clauses. Crucially, sub-extraction from subjects of small clauses and from subjects of infinitival clauses is independently excluded.

(74) Brazilian Portuguese
    a.*Só desse aluno o professor acha [SC [o pai t1] simpático]
      ‘Only of this student, x, does the teacher consider the father of x friendly.’
    b.*De quem a Maria acha [SC [o pai t1] simpático]?
      ‘Of which person, x, does Maria consider the father of x friendly?’

(75) Brazilian Portuguese
    a.*Só desse aluno a Clara viu [TP [o pai t1] falar com a diretora]
      ‘Only of this student, x, did Clara see the father speak with the principle.’
    b.*De quem a Clara viu [TP [o pai t1] falar com a diretora]?
      ‘Of which person, x, did Clara see the father speak with the principle?’

(76) Brazilian Portuguese
    a.*Só dessa criança a Maria viu [TP [o pai t1] ser demitido]
      ‘Only of this child, x, did Maria see the father be fired.’
    b.*De quem a Maria viu [TP [o pai t1] ser demitido]?
      ‘Of which person, x, did Maria see the father be fired?’

By contrast, sub-extraction from objects is possible.
Brazilian Portuguese argument ellipsis

(77) Brazilian Portuguese
a. Só desse paciente, o dentista obturou [o dente t₁]
only of this patient, the dentist filled the tooth
‘Only of this patient, x, did the dentist fill the tooth of x.’
b. De quem o dentista obturou [o dente t₁]?
of whom the dentist filled the tooth
‘Of which person, x, did the dentist fill the tooth of x?’

Under the clitic doubling analysis, the ban on eliding subjects of small clauses and subjects of infinitival clauses thus reduces to an independent ban on sub-extraction from subjects of small clauses and subjects of infinitival clauses.

Although the null subjects in (68)–(69) do not permit the sloppy reading, they do permit the strict reading (but see fn. 18 for qualifying remarks). This is expected, given that the strict reading can be generated without sub-extraction. The derivations run as follows, where the clitic is generated as the subject of the small/infinitival clause and subsequently cliticizes onto the verb.\(^\text{17}\) Note that cliticization to the verb does not involve sub-extraction. The availability of the strict reading is thus accounted for.\(^\text{18}\)

\(^\text{17}\) BP allows clitics to be generated as the subject of small/infinitival clauses.

\(^\text{18}\) With regard to the sentences in (69), all speakers agree that the null subjects do not permit the sloppy reading. When the infinitival clause is passive (i.e., (69b–c)), however, there is disagreement as to whether the strict reading is possible. For some speakers, the sentences are good under the strict reading. For other speakers, the sentences are simply out. In this connection, it is noteworthy that the speakers who reject the strict reading in (69b–c) also dislike analogous sentences involving a referential null subject. For example, the speakers who reject the strict reading in (69b–c) find (i) degraded, whereas the speakers who accept the strict reading in (69b–c) find (i) acceptable.

(i) Brazilian Portuguese
A Maria viu o meu carro ser pichado.
the Maria saw the my car be spray.painted
✓/??Já a Clara viu [TP ___ ser roubado]
but the Clara saw ___ be stolen
‘Maria saw my car be spray painted. But Clara saw it be stolen.’

For some speakers, then, the null clitic can only marginally occur as the subject of passivized infinitival TPs. The marginality of the null clitic in this position comes as a surprise, given that overt clitics happily occur in this position.

(ii) Brazilian Portuguese
A Maria me/te,+viu [TP t₁ ser expulso]
the Maria me.ACC/you.ACC+saw be expelled
‘Maria saw me/you be expelled.’
(78) A Júliai, achou [a apresentação dela]k um desastre.
   a. Já a Ana achou [SC CLk um grande sucesso] →
   b. Já a Ana CLk+achou [SC tCL um grande sucesso]

(79) A Mariai, viu [o carro do amigo dela]k atropelar um turista.
   a. Já a Clara viu [TP CLk atropelar um ciclista] →
   b. Já a Clara CLk+vii [TP tCL atropelar um ciclista]

(80) A Mariai, viu [o carro dela]k ser pichado.
   a. Já a Clara viu [TP CLk ser roubado] →
   b. Já a Clara CLk+vii [TP tCL ser roubado]

Summarizing, AE in BP may target objects, but not subjects: neither subjects
of finite clauses, nor subjects of small/infinitival clauses. The distribution of AE in BP
follows from the clitic doubling analysis. AE of subjects of finite clauses is excluded
for case-theoretic reasons, and AE of subjects of small/infinitival clauses is excluded
on account of an independent restriction on sub-extraction.

5.2. DPs that cannot be doubled

AE is licensed by the null clitic. This being so, the present analysis makes the
following prediction: DPs that cannot be clitic doubled cannot undergo AE. This
prediction is fulfilled.

Cross-linguistically, object clitics observe the following restriction: object
clitics cannot be doubled by non-specific indefinite DPs (see Anagnostopoulou 2006
and sources therein). The present analysis thus predicts that non-specific indefinites
cannot undergo AE in BP. As observed in Section 2, this prediction is correct. The null
objects in (81a)/(82a) and in (81b)/(82b) cannot be construed as duas sonatas ‘two
sonatas’ and duas casas ‘two houses’, respectively, as would be the case if non-
specific indefinites could elide. Indeed, the null objects fail to receive any
interpretation at all, which renders the sentences unacceptable, given that the verbs
compor ‘to compose’ and construir ‘to build’ obligatorily select for an object.

(81) Brazilian Portuguese
   a.*Me diga em qual desses pianos a Maria compôs duas sonatas em
      me tell in which of these pianos the Maria composed two sonatas in
      seis dias e [island em qual deles a Clara compôs ___ em oito dias]
      six days and in which of them the Clara composed ___ in eight days
      (lit.) ‘Tell me on which of these pianos Maria composed two sonatas in six
      days and on which of them Clara composed in eight days.’

I do not, at present, have an account for why the null clitic is, for some speakers, unable to
launch from the subject position of infinitival TPs headed by a passive verb. I hope to return
to this issue in a future study.
b.*Me diga em qual cidade o Tiago construiu duas casas em dois meses e [island em qual cidade o Pedro construiu __ em três meses] months
(lit.) ‘Tell me in which city Tiago built two houses in two months and in which city Pedro built in three months.’

(82) Brazilian Portuguese
a.*Essa é a pessoa que compôs duas sonatas em seis dias this is the person that composed two sonatas in six days e aquela é [island a pessoa que compôs __ em oito dias] and that is the person that composed __ in eight days (lit.) ‘This is the person who composed two sonatas in six days, and that is the person who composed in eight days.’

b.*Essa é a pessoa que construiu duas casas em dois meses this is the person that built two houses in two months e aquela é [island a pessoa que construiu __ em três meses] and that is the person that built __ in three months (lit.) ‘This is the person who built two houses in two months, and that is the person who built in three months.’

As an illustration, consider the following two possible derivations of (82a). The derivation in (83) contains a clitic, whereas the derivation in (84) does not. Both derivations are ruled out, as desired. (83) is ruled out, as it involves clitic doubling of a non-specific indefinite. (84) is ruled out, as AE is not licensed.

(83) … e aquela é a pessoa que CL[E]+compôs [DP tCL [DP duas sonatas]] em oito dias

(84) … e aquela é a pessoa que compôs [DP duas sonatas] em oito dias

Idiomatic DPs cannot be clitic doubled, either (Anagnostopoulou 1994). (85a) and (85b), which are the baseline sentences, involve clitic doubling with a referential (i.e., non-idiomatic) DP.

(85) Greek (Anagnostopoulou 1994:31-32)
a. Otan idha tin askisi tin thimithika tin lisi When saw-I the exercise it.CL remembered the solution ‘When I saw the exercise, I remembered the solution.’

b. O Jannis tin akouse tin dialeksi ke efige the John it.CL listened.to the lecture and left-he ‘John listened to the lecture and left.’

(86a) and (86b) both contain an idiomatic expression: in (86a), xano ta avga ke ta pasxalia ‘lose control’ (lit. ‘lose the eggs and the eastern devices’); in (86b), vrika/idha ta skura ‘I was in difficulty’ (lit. ‘I found/saw the darks’). As (86a) and (86b)
demonstrate, clitics cannot double idiomatic expressions; neither example is good under the idiomatic construal.

(86) Greek (Anagnostopoulou 1994:31-32)
   a.*Otan idha tin askisi ta exasa ta avga ke ta pasxalia
      when saw-I the exercise CL lost-I the eggs and the eastern
      (intended) ‘When I saw the exercise, I lost my control.’
   b.*O Janis ta idheta skoura ke efig
      the John CL saw-he the.darks and left-he
      (intended) ‘John was in difficulty and he left.’

Returning to BP, consider the following examples, which contain the idiomatic expression *abotoar o paletó* ‘to die’. (87) allows the idiomatic construal, as well as the literal construal. (88), by comparison, allows only the literal construal.

(87) Brazilian Portuguese
   O João abotoou o paletó.
   the João buttoned the jacket
   ✓ ‘João died.’ (idiomatic construal)
   ✓ ‘João buttoned his jacket.’ (literal construal)

(88) Brazilian Portuguese
   O João abotoou o paletó. O Pedro também abotoou.
   the João buttoned the jacket the Pedro also buttoned
   * ‘João died. Pedro also died.’ (idiomatic construal)
   ✓ ‘João buttoned his jacket. Pedro also buttoned his jacket.’ (literal construal)

The absence of the idiomatic reading in (88) indicates that AE in BP cannot target idiomatic DPs. Analyses of AE in BP must accordingly explain why AE cannot target idiomatic DPs in BP. The present analysis of AE offers such an explanation. Consider the following two possible derivations of (88).

(89) O Pedro também abotoou [\[DP o paletó\]]

(90) O Pedro também CL\[E\]+abotoou [\[DP tCL \[\[DP o paletó\]]\]]

The derivation in (89) is impossible, as ellipsis is not licensed. The derivation in (90), by contrast, is indeed possible, but only if *o paletó* ‘the jacket’ is construed non-idiomatically. The derivation is out under the idiomatic construal, as such a derivation would involve clitic doubling of an idiomatic DP, which is not possible. By contrast, under the literal interpretation of the object DP, the derivation involves clitic doubling of a referential definite DP, which is of course possible. The present analysis of AE thus predicts, correctly, that AE in BP cannot target idiomatic DPs.19

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Various authors have argued that BP has verb-stranding VP-ellipsis (VVPE) (Cyrino & Matos 2002, 2005, Tescari Neto 2012). As such, there is a further derivation of (88) to consider: namely, the one in which the idiomatic DP is elided via VVPE.

(i) O João abotoou o paletó. O Pedro também abotoou+T [\[o paletó\]]
The following examples provide further evidence that AE cannot target idiomatic DPs in BP. (91) and (93) contain the idiomatic expression *picar a mula* ‘to leave quickly’. (92) and (94) contain the idiomatic expression *chutar o balde* ‘to give up a task in an untimely fashion’.

(91) Brazilian Portuguese
A Maria picou a mula.
the Maria pricked the mule
✓ ‘Maria left quickly.’ (idiomatic construal)
✓ ‘Maria pricked the mule.’ (literal construal)

(92) Brazilian Portuguese
O Tiago chutou o balde.
the Tiago kicked the pail
✓ ‘Tiago gave up a task in an untimely fashion.’ (idiomatic construal)
✓ ‘Tiago kicked the pail.’ (literal construal)

(93) Brazilian Portuguese
A Maria picou a mula. A Carla também picou.
the Maria pricked the mule the Carla also pricked
* ‘Maria left quickly. Carla also left quickly.’ (idiomatic construal)
✓ ‘Maria pricked the mule. Carla also pricked the mule.’ (literal construal)

(94) Brazilian Portuguese
O Tiago chutou o balde. O Paulo também chutou.
the Tiago kicked the pail. the Paulo also kicked
* ‘Tiago gave up a task in an untimely fashion. Paulo also gave up a task in an untimely fashion.’ (idiomatic construal)
✓ ‘Tiago kicked the pail. Paulo also kicked the pail.’ (literal construal)

As can be observed, (92) and (94) do not allow the idiomatic reading, thus providing further confirmation that AE in BP cannot target idiomatic DPs. The explanation for why AE cannot target the idiomatic DP in (88), above, carries over to (92) and (94), *mutatis mutandis.*

The present section has considered two classes of expressions that cannot be clitic doubled: non-specific indefinites and idiomatic DPs. Neither class of expressions can undergo AE, as predicted by the present analysis of AE.

VVPE overgenerates the idiomatic reading. As such, a full account of why sentences such as (88) lack the idiomatic reading must account for two things: (i) it must account for why AE cannot target idiomatic DPs, and (ii) it must account for why VVPE is unable to generate the idiomatic reading.

The analysis of AE that I propose in this paper accounts for why AE cannot target idiomatic DPs. As to why VVPE is unable to generate the idiomatic reading, this is a question that evidently lies beyond the scope of the present paper, as this paper is concerned with AE, not VVPE. See, however, Panitz (2022), who proposes that BP does not, in fact, permit VVPE.
5.3. Argument ellipsis as PF-deletion

The current analysis of AE assumes that AE in BP involves PF-deletion, not LF-copying. To see why PF-deletion is assumed, consider the following two derivations of (95), one involving PF-deletion, and the other, LF-copying.

(95) Brazilian Portuguese
A Júlia i achou a apresentação dela i um desastre.
the Julia found the presentation of her a disaster
Já a Ana j achou [SC ____ um grande sucesso]
but the Ana found ____ a great success
‘Julia considered her presentation a disaster. But Ana considered her presentation a great success.’

(96) PF-deletion derivation:

a. Já a Ana j achou [SC [DP CL]E [DP a apresentação dela]] um grande sucesso →
b. Já a Ana j CL[E]achou [SC [DP tCL [DP a apresentação dela]]] um grande sucesso →
c. Já a Ana j CL+achou [SC [DP tCL a apresentação dela]] um grande sucesso

(97) LF-copying derivation:

Overt syntax
a. Já a Ana j achou [SC CL um grande sucesso] →
b. Já a Ana j CL+achou [SC tCL um grande sucesso]

LF:
c. Já a Ana j CL+achou [SC [DP tCL [DP a apresentação dela]]] um grande sucesso

The PF-deletion derivation involves an illicit instance of sub-extraction. As such, the impossibility of AE in (95) is accounted for if the clitic doubling analysis is implemented in terms of PF-deletion. In the LF-copying derivation, by contrast, the doubling structure is not created until LF, when the antecedent is LF-copied into the elliptical clause (see (97c)). At the point in the derivation in which the antecedent is LF-copied onto the verb, the clitic is not yet within a doubling structure. As such, cliticization does not involve sub-extraction. Cliticization is therefore licit, and the LF-copying derivation thus converges, overgenerating AE.

The present analysis therefore assumes that AE in BP involves PF-deletion. In what follows, I present a supporting piece evidence for this assumption. Specifically, I utilize what is arguably the strongest test for distinguishing PF-deletion from LF-copying: namely, overt extraction from the ellipsis site. In order to overtly extract from an ellipsis site, the ellipsis site must be present in the overt syntax, which distinguishes PF-deletion from LF-copying. The ability to overtly extract material from an ellipsis site thus provides evidence in support of a PF-deletion account of AE in BP and against an LF-copying account.

Possessive pronouns in BP come in two varieties: an overt variant and a null variant.
(98) Brazilian Portuguese (Floripi & Nunes 2009:51-52)
   a. [O João],i conversou com [o pai dele,i]  
      the João conversed with the father of.him  
      ‘João spoke with his father.’
   b. [O João],i conversou com [o pai ec,i]  
      the João conversed with the father  
      ‘João spoke with his father.’

The null variant differs from its overt cousin in that the former requires a local,  
c-commanding antecedent, whereas the latter does not.

(99) Brazilian Portuguese (Floripi & Nunes 2009:53)
   [A Marcela],i disse que [o André],i ligou para [o amigo ec*ui,i]  
   the Marcela said that the André called to the friend  
   ‘Marcela, said that André called *her/i/’his friend.’

(100) Brazilian Portuguese
   [O Marcelo],i disse que [o André],i ligou para [o amigo dele,i]  
   the Marcelo said that the André called to the friend of.him  
   ‘Marcelo, said that André called his,i/’friend.’

(101) Brazilian Portuguese (Floripi & Nunes 2009:53)
   [O amigo [do João],i]i telefonou para [a mãe ec*ui,i]  
   the friend of.the João called to the mother  
   ‘[João,’s friend] called his,i/’mother.’

(102) Brazilian Portuguese
   [O amigo [do João],i]i telefonou para [a mãe dele,i]  
   the friend of.the João called to the mother of.him  
   ‘[João,’s friend] called his,i/’mother.’

On the basis of this and additional evidence, Floripi & Nunes (2009) argue, following  
Hornstein (2007), that the null variant is not a pronoun, but rather the residue of A-
movement. Under their analysis, the possessor DP is initially merged with the noun,  
picking up the noun’s possessor θ-role, and is then A-moved to its surface position.  
For instance, in a sentence such as (98b), o João initially merges with pai, thereby  
receiving the noun’s possessor θ-role. Subsequently, the DP raises to [Spec,vP], where  
it receives v’s θ-role. Finally, it raises to [Spec,TP], checking T’s EPP-feature and its  
own Case feature.

(103)  
   a. [pai [o João]]
   b. [vP [o João],i [v v [VP conversou com [o [pai ti,i]]]]]
   c. [TP [o João],i [T T [vP ti,i [v v [VP conversou com [o [pai ti,i]]]]]]]

20 See, also, Floripi (2003) and Rodrigues (2004), who likewise argue for an analysis in  
terms of A-movement.
Under Floripi & Nunes’s (2009) account, the ban on non-local antecedents and non-
commanding antecedents is accounted for by the mechanics of A-movement: A-
movement cannot take place across a more local A-position; nor can it target a non-c-
commanding position.

Assuming with Floripi & Nunes (2009) that the null possessor is the residue of
A-movement, consider the following example, which involves object-AE.

(104) Brazilian Portuguese
A Maria mostrou [a tese $t_1$] pro Chomsky.
the Maria showed the thesis to the Chomsky
Já a Ana mostrou __ pro Lasnik.
but the Ana showed __ to the Lasnik
‘Maria showed her thesis to Chomsky. But Ana showed her thesis to Lasnik.’

The antecedent DP contains an A-trace. Parallelism demands that the elliptical DP
likewise contain an A-trace. Under the present analysis, the example above is thus
generated as follows. The null clitic and its associate are initially merged in a big DP
structure. The clitic then cliticizes to the verb. After additional structure building,
*a Maria* raises to [Spec,vP] and then to [Spec,TP]. Finally, the clitic’s associate deletes
at PF.

(105) a. mostrou [DP CL$_{[E]}$ [DP a tese [DP a Ana]]] pro Lanik. $\rightarrow$
b. CL$_{[E]}$+mostrou [DP $t_{CL}$ [DP a tese [DP a Ana]]] pro Lanik. $\rightarrow$
c. [$vP$ [DP a Ana] $[$v $v [VP CL$_{[E]}$+mostrou [DP $t_{CL}$ [DP a tese $t_1$]] pro Lanik]]] $\rightarrow$
d. [$TP$ [DP a Ana] $[$T $t_1$ [$v$ $v [VP CL$_{[E]}$+mostrou [DP $t_{CL}$ [DP a tese $t_1$]] pro
Lanik]]]]] $\rightarrow$
e. [$TP$ [DP a Ana] $[$T $t_1$ [$v$ $v [VP CL$_{[E]}$+mostrou [DP $t_{CL}$ [DP [a-tese-$t_1$]] pro
Lanik]]]]]

The preceding example demonstrates that overt extraction can take place from
the ellipsis site via A-movement. The following example provides additional evidence
that overt extraction can take place from the ellipsis site. Here, the extraction is an
instance of A’-movement.

(106) Brazilian Portuguese
A: Foi [do Pelé] que a Maria vendeu [a foto $t_1$] pra mim.
was of the Pelé that the Maria sold the picture to me
‘It was of Pelé that Maria sold the picture to me.’
B: Não, foi do Kaká que ela vendeu __ pra você.
no, was of the Kaká that she sold __ to you
‘No, it was of Kaká that she sold the picture to you.’

According to the present analysis, (106B) is generated in a manner analogous to (104),
except that extraction from the ellipsis site involves A’-movement, rather than A-
movement. The derivation of (106B) thus proceeds as follows. First, the null clitic and
its associate are merged in a big DP structure, with the clitic then cliticizing onto the
verb. Following additional structure building, *do Kaká* raises to [Spec,CP], and the
clitic’s associate subsequently deletes at PF. The derivation is schematized below, with irrelevant details suppressed.

(107) a. vendeu [DP CL[E] [DP a foto do Kaká]] pra você
b. CL[E]+vendeu [DP tCL [DP a foto do Kaká]] pra você
c. [CP [do Kaká], que ela CL[E]+vendeu [DP tCL [DP a foto tI]] pra você
d. [CP [do Kaká], que ela CL[E]+vendeu [DP tCL [tC-a foto tI]] pra você

To summarize, the analysis of AE put forward in the present paper implements AE in terms of PF-deletion, thus predicting that overt extraction from the ellipsis site is possible. This expectation is borne out.

6. Null objects and [+human] antecedents

Consider the following pair of examples. In (108a), the null object’s antecedent refers to a human (that is, the antecedent is [+human]), whereas in (108b), the antecedent refers to a non-human (that is, the antecedent is [-human]). As can be observed, the null object is possible only when its antecedent is [-human].

(108) Brazilian Portuguese (Kato et al. 2023:267-268)
a. *Essa atriz desapontou as pessoas que cumprimentaram __i
   this actress disappointed the people that greeted __i
   ‘This actress disappointed the people that greeted her.’
b. Esse livro desapontou as pessoas que tentaram ler __i
   this book disappointed the people that tried read __i
   ‘This book disappointed the people that tried to read it.’

On the basis of minimal pairs such as (108a-b), in which the grammaticality of the null object depends upon whether the null object’s antecedent is [+human] or [-human], various authors have proposed that null objects in BP cannot take [+human] antecedents (Cyrino 1997, Kato et al. 2023, inter alia).

The question arises as to whether the analysis of AE proposed in this paper accounts for this property of BP null objects. In addressing this question, it is important to bear in mind that BP has two distinct strategies for generating null objects: AE and pro.21 As such, it is important to ascertain whether both of these strategies, or only one of them, is unable to take [+human] antecedents. I will argue that pro cannot take [+human] antecedents, whereas AE can. I will then incorporate this conclusion into the analysis of AE proposed in this paper.

Suppose, as is proposed here, that AE can take [+human] antecedents and that pro cannot. This proposal predicts that null arguments with [+human] antecedents will be possible whenever it is possible to generate the null argument via AE. When AE is not possible and the only option is pro, [+human] antecedents will not be possible.

As shown throughout this paper, AE can target direct objects when the elided direct object takes as its antecedent the direct object in a preceding sentence. This so,

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21 Above, I argued that pro is a null clitic pronoun. For presentational reasons, I will temporarily set this conclusion aside and refer to the null clitic pronoun as pro.
the present proposal predicts that null objects in this configuration can take a [+human] antecedent. The following sentences show that this prediction is borne out.

(109) Brazilian Portuguese
      the Pedro put the Joãozinho on.the couch
   Logo depois a Maria (foi lá e) pôs __i na cadeira.
      soon after the Maria (went there and) put __ on.the chair
      ‘Pedro put Joãozinho on the couch. Soon afterwards, Maria (went there and) put him on the chair.’
   b. O Pedro pôs [o filho da Clara]i no sofá.
      the Pedro put the son of.the Clara on.the couch
      Já a Maria pôs __i na cadeira.
      but the Maria put __ on.the chair
      ‘Pedro put Clara’s son on the couch. But Maria put him on the chair.’
      the Maria introduced the supervisee of.the Júlia to.the Chomsky
      Já a Clara apresentou __i pro Lasnik.
      but the Clara introduced __ to.the Lasnik
      ‘Maria introduced Julia’s supervisee to Chomsky. But Clara introduced him to Lasnik.’

If null objects with [+human] antecedents are generated under AE, as proposed here, then such null objects are expected to permit sloppy readings. This prediction is likewise borne out.

(110) Brazilian Portuguese
   a. O Paulo pôs o filho delei no sofá.
      the Paulo put the son of.him on.the couch
      Já o João pôs __ na cama
      but the João put __ on.the bed
      ‘Paulo put his son on the couch. But João put his son on the bed.’
   b. A Maria apresentou a filha dela pro Chomsky.
      the Maria introduced the daughter of.her to.the Chomsky
      Já a Clara apresentou __ pro Lasnik.
      but the Clara introduced __ to.the Lasnik
      ‘Maria introduced her daughter to Chomsky. But Clara introduced her daughter to Lasnik.’

The present proposal generates a further prediction. According to the present proposal, AE, but not pro, can take [+human] antecedents. As such, [+human] antecedents will be impossible in those contexts in which pro, but not AE, is possible. As demonstrated above, null subjects of small clauses and null subjects of infinitival clauses can only be generated via pro, not via AE. As such, null subjects of small/infinitival clauses should be unable to take an [+human] antecedent. The following examples illustrate that this prediction is fulfilled. As the contrast between
the (a)-examples and the (b)-examples demonstrates, null subjects of small/infinitival clauses can only take a [-human] antecedent.22

(111) Brazilian Portuguese
   a. A Ana achou o filme legal.
      the Ana found the film cool.
      Já a Clara achou [sc __ chato]
      but the Clara found __ annoying
      ‘Ana considered the film cool. But Clara considered it annoying.’
   b. A Maria achou o João legal.
      the Maria found the João cool
      *Já a Clara achou [sc __ chato]
      but the Clara found __ annoying
      ‘Maria considered João cool. But Clara considered him annoying.’

(112) Brazilian Portuguese
   a. A Júlia viu/deixou o quarto da Maria arrumado.
      the Julia saw/left the room of the Maria tidy
      Já a Clara viu/deixou [sc __ bagunçado]
      but the Clara saw/left __ messy
      ‘Julia saw/left Maria’s room tidy. But Clara saw/left it messy.’
   b. A Carla viu o filho da Maria bêbado.
      the Carla saw the son of the Maria drunk
      *Já a Ana viu [sc __ sóbrio]
      but the Ana saw __ sober
      ‘Carla saw Maria’s son drunk. But Ana saw him sober.’

22 Note, however, that the null subject in (40b), repeated here, is able to take a [+human] antecedent.

(i) Brazilian Portuguese
   A Maria, considers o patrão dela, de grande delicadeza.
   the Maria considers the boss of her of big tenderness
   Já a Ana, considera [sc __ [PP de bom coração]].
   but the Ana considers __ of good heart
   ‘Maria, considers her boss very gentle. But Clara, considers her boss good-hearted.’

In (ii), the null subject is once again unable to take a [+human] antecedent.

(ii) Brazilian Portuguese
   A Maria, considera o chefe dela, um gentleman
   the Maria considers the boss her a gentleman
   *Já a Ana considera [sc __ um idiota].
   but the Ana considers __ an idiot
   ‘Maria considers her boss a gentleman. But Ana considers him an idiot.’

At present, I do not have an explanation for why the null subject in (i) is capable of taking a [+human] antecedent.
b’. A cerveja deixou o amigo da Maria bêbado.
the beer left the friend of the Maria drunk
*Já a maconha deixou [sc __ drogado].
but the marijuana left __ drugged
‘The beer left Maria’s friend drunk. But the marijuana left him drugged.’

(113) Brazilian Portuguese
a. A Maria viu aquele carro atropelar um turista.
the Maria saw that car run over a tourist
Já a Clara viu [TP__ atropelar um ciclista]
but the Clara saw __ run over a cyclist
‘Maria saw that car run over a tourist. But Clara saw it run over a cyclist.’
b. A Maria viu aquele homem atropelar um turista.
the Maria saw that man run over a tourist
*Já a Clara viu [TP__ atropelar um ciclista]
but the Clara saw __ run over a cyclist
‘Maria saw that man run over a tourist. But Clara saw him run over a cyclist.’

Having observed that null arguments that are generated via AE can take [+human] antecedents, consider the claim that null arguments generated via pro cannot take [+human] antecedents. The sentences in (111)–(113), above, have already provided initial evidence in support of this claim. In these sentences, the null arguments are necessarily pro (given that AE cannot target subjects of small/ininitival clauses) and the null arguments can only take [-human] antecedents.

As further evidence that pro cannot take [+human] antecedents, consider (114) and (115). The ungrammaticality of the (a)-sentences indicates that pro is not possible in the (a)-sentences. After all, if pro were possible in the (a)-sentences, these sentences would be grammatical.

(114) Brazilian Portuguese (Kato et al. 2023:267-268)
a.*Esse juiz, não gosta que os advogados contradiçam __i
this judge NEG like that the lawyers contradict __
‘This judge doesn’t like lawyers contradicting him.’
b. Esse brinquedo, permite que as crianças montem __i sem ajuda
this toy permits that the kids assemble __ without help
‘This toy allows children to assemble it without help.’

(115) Brazilian Portuguese (Kato et al. 2023:267-268)
a.*Essa atriz, desapontou as pessoas que cumprimentaram __i
this actress disappointed the people that greeted __
‘This actress disappointed the people that greeted her.’
b. Esse livro, desapontou as pessoas que tentaram ler __i
this book disappointed the people that tried read __
‘This book disappointed the people that tried to read it.’
With regard to why *pro* is unavailable in the (a)-sentences, there are two hypotheses to consider: (i) *pro* cannot take [+human] antecedents; (ii) *pro* can indeed take [+human] antecedents. The second hypothesis entails that *pro* is excluded in the (a)-sentences for some reason not having to do with the fact that *pro*’s antecedent is [+human].

The second hypothesis is not plausible. Observe that the null object in the examples above takes the matrix subject as its antecedent. Given that there is a clause boundary separating the antecedent and the null object, *pro* should be possible here, since Principle B is satisfied. Note, moreover, that examples such as (116), repeated from above, confirm that *pro* can take the matrix subject as its antecedent.

(116) Brazilian Portuguese (Ferreira 2000:105)

*Nenhum filme decepcionou as pessoas que foram assistir__*

no film deceived the people that went watch __

‘No film, x, deceived the people who went to watch x.’

The null object in (116) is interpreted as a bound variable. As discussed above (see Section 4), the null object’s interpretation as a bound variable indicates that the null object is *pro.*

Given that *pro* can take matrix subjects as its antecedent (provided Principle B is satisfied), the only plausible explanation for why *pro* can occur in the (b)-sentences above, but not in the (a)-sentences, is that *pro* cannot take [+human] antecedents. As will be recalled, this is a conclusion for which there is independent evidence (see (111)–(113)). I therefore conclude that *pro* cannot take [+human] antecedents.

Although *pro* cannot generally take a [+human] antecedent, there is one context in which *pro* is in fact able to take a [+human] antecedent: namely, when *pro* is a resumptive pronoun (Ferreira 2000, Kato et al. 2023).

(117) Brazilian Portuguese (Kato et al. 2023:269)

a. *Esse cantor, eu não conheço [island uma única pessoa que tenha elogiado pro]*

This singer INEG know a single person that has praised pro

‘This singer, I don’t know a single person who has praised him.’

b. *Esse ditador, [island os jornalistas que criticaram pro] acabaram na prisão.*

This dictador the journalists that criticized ended.up in the prison

‘This dictador, the journalists that criticized him ended up in prison.’

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23 As expected, examples analogous to (116) become ungrammatical when the antecedent is [+human].

(i) Brazilian Portuguese

*Nenhuma atriz, desapontou as pessoas que tentaram cumprimentar__*

no actress disappointed the people that tried to.greet __

‘No actress, x, disappointed the people that tried to greet x.’
Note that the null objects in (117) occur within an island. Hence, these sentences are not generated via movement of the topic from the complement position of *elogiado ‘praised’ / criticaram ‘criticized’ to the matrix [Spec,CP]. Rather, the topic is generated in the matrix [Spec,CP], from where it binds a null resumptive pronoun. These sentences thus show that *pro can take a [+human] antecedent when *pro is functioning resumptively. This observation will play an important role in my account of why AE can take a [+human] antecedent. I therefore begin by presenting Kato et al.’s (2023) explanation for why *pro can take a [+human] antecedent when *pro is functioning resumptively. With this in place, I then present my account of why AE can take [+human] antecedents.

Kato et al. (2023) propose that *pro in BP is underspecified in that it lacks a [human] feature. They propose, furthermore, that in the absence of a [human] feature, *pro receives a [-human] interpretation as a default interpretation, thus accounting for the fact that *pro is generally unable to take [+human] antecedents. The default [-human] interpretation can be overridden, however. Such is the case when *pro is a resumptive pronoun.

To see why this is so, consider (118). In sentences involving a topic, the TP that is predicated of the topic must contain a pronoun (or epithet) that is bound by the topic. Thus, the pronoun in (118) must take the topic as its antecedent; the pronoun cannot refer to some individual outside of the sentence.

(118) Brazilian Portuguese
Esse ditador, [island os jornalistas que criticaram ele] acabaram na prisão.
‘This dictador, the journalists that criticized him ended up in prison.’

In (117a–b), then, the requirement that the topic bind a TP-internal pronoun forces *pro to take the [+human] topic as its antecedent, thus overriding *pro’s default interpretation as [-human].

When *pro’s antecedent is not in topic position, *pro cannot take a [+human] antecedent. This indicates that the default interpretation of *pro as [-human] cannot be overridden when *pro’s antecedent is not in topic position. To appreciate why this is so, consider the following example. As can be observed, the pronoun can, but need not, take the matrix subject as its antecedent.

(119) Brazilian Portuguese
Essa atriz desapontou as pessoas que cumprimentaram ela
‘This actress disappointed the people that greeted her.’

As such, nothing forces *pro in (114a) and (115a) to take the [+human] subject as its antecedent. Thus, *pro must receive its default [-human] interpretation, hence its inability to take the [+human] antecedent as its antecedent.

Summarizing before continuing, I have argued that AE can take [+human] antecedents and that *pro cannot, unless *pro is functioning resumptively. Following Kato et al. (2023), *pro lacks a [human] feature, which generally results in *pro receiving a [-human] interpretation as a default interpretation. The default interpretation can be
overridden, however, when some other principle of grammar requires that \( pro \) be interpreted as [+human]. I now incorporate the above conclusions into the analysis of AE put forward in this paper.

According to this analysis, \( pro \) in BP is a null clitic pronoun. I propose, in line with Kato et al.’s (2023) analysis, that the null clitic pronoun lacks a [human] feature, which results in a [-human] interpretation as a default interpretation. The null clitic is therefore unable to take [+human] antecedents in sentences such as the following.

(120) Brazilian Portuguese

A Maria achou o João₁ legal.
the Maria found the João cool

*Já a Clara CL₁+achou [SC tCL chato] but the Clara found annoying
‘Maria found João cool. But Clara found him annoying.’

(121) Brazilian Portuguese

*Esse juiz₁ não gosta que os advogados CL₁+contradigam tCL this judge NEG like that the lawyers contradict
‘This judge doesn’t like lawyers contradicting him.’

The null clitic default’s interpretation as [-human] is overridden when some principle of grammar requires this. One such instance is when the clitic is functioning resumptively. Another instance in which the clitic’s default interpretation is overridden is when the clitic is in a clitic doubling configuration with a [+human] DP. Such is the case in sentences involving AE of a [+human] DP.

(122) Brazilian Portuguese

O Paulo₁ pôs o filho dele₁ no sofá.
the Paulo put the son of him on the couch

Já o João₁ pôs __ na cama but the João put ___ on the bed
‘Paulo put his son on the couch. But João put his son on the bed.’

(123) a. Já o João₀ pôs [DP CL₁E] [DP o filho dele₁] no sofá
    b. Já o João₀ CL₁E+pôs [DP tCL [DP o filho dele₁]] no sofá
    c. Já o João₀ CL₁E+pôs [DP tCL [pro filho dele₁]] no sofá

In sentences involving clitic doubling, the clitic and its associate share a single \( \theta \)-role. This, in turn, entails that the clitic and its associate refer to the same individual. Hence, if the associate refers to a [+human] individual, so too must the clitic. The null clitic’s default [-human] is therefore overridden.

7. Conclusions

The present article has proposed a novel analysis of AE in BP, which brings together two existing proposals: Kato’s (1993) proposal that BP has phonologically null 3\textsuperscript{rd} person accusative clitics, and Bošković’s (2018) clitic doubling analysis of AE. According to the analysis advanced in this article, AE in BP takes place in a clitic
doubling configuration, where the clitic is a phonologically null 3rd person accusative clitic and AE targets the clitic doubled DP.

The clitic doubling analysis accounts for a number of the properties of AE in BP, such as the inability of AE to target subject DPs. Under the proposed analysis, AE is licensed by a phonologically null accusative clitic. For case-theoretic reasons, this clitic cannot occur as the subject of a finite clause. This means that AE of subjects of finite clauses fails to be licensed and is therefore excluded. As to the inability of AE to target subjects of small clauses and subjects of infinitival clauses, AE of such subjects requires sub-extraction of the clitic from the subject of a small/infinitival clause. Crucially, sub-extraction from the subject of a small/infinitival clause is independently excluded in BP. Hence, the inability of AE to target subjects of small/infinitival clauses reduces to an independent ban on sub-extraction from subjects of small/infinitival clauses. Furthermore, the inability of AE to target non-specific indefinite DPs and idiomatic DPs reduces to the fact that such DPs cannot be clitic doubled, hence cannot be licensed for AE. Finally, the ability of AE to override the null clitic’s default [-human] interpretation stems from the fact that the clitic and its associate must share a single θ-role. This requirement overrides the null clitic’s default [-human] interpretation whenever the associate is [+human].

Under the clitic doubling analysis, the properties of AE in BP follow from independent properties of Case theory, sub-extraction, and clitic doubling. As such, these properties of AE need not be stipulated, nor accounted for through the introduction of additional machinery—always a welcomed result.

Acknowledgments

Many thanks to Jairo Nunes, Janayna Carvalho, Klaus Abels, and Renato Lacerda for providing comments on an earlier version of the present article, and to Claudia Coelho, Jairo Nunes, Janayna Carvalho, Renato Lacerda, and Rosi Bueno for helpful discussions. All errors are my own.

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