A'-EXTRACTION FROM VERB-STRANDING VERB PHRASE ELLIPSIS IN BRAZILIAN PORTUGUESE

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ABSTRACT

This squib examines A'-extraction from verb-stranding VP-ellipsis (VVPE) in Brazilian Portuguese (BP). The two key observations around which the present article centers are as follows: (i) VVPE in BP is semi-transparent to A'-extraction, allowing A'-extraction in some configurations but not others; (ii) in sentences involving VVPE, BP permits movement of a VP-internal constituent to a low position in the clause, just outside the elliptical VP. Crucially, such movement is possible in precisely the same environments as is A'-extraction from VVPE. The pattern of A'-extraction permitted by BP VVPE is of broader theoretical interest in that it appears to undermine a core prediction of the leading account of semi-transparency. It is here that the second observation, above, proves illuminating; for in establishing that BP permits movement to a position just outside the elliptical VP — and that the distribution of such movement mirrors the distribution of A'-extraction from VVPE — it will be possible to reconcile the A'-extraction data with the leading account of semi-transparency.

Keywords: ellipsis, verb-stranding verb phrase ellipsis, extraction from ellipsis sites, Brazilian Portuguese

RESUMO

Este squib examina a extração-A' a partir da elipse de VP com encalhe do verbo (doravante, VVPE) no português brasileiro (PB). As duas observações cruciais são: (i) no PB, VVPE é semitransparente à extração-A', sendo esta permitida em algumas configurações, mas não em outras; (ii) em sentenças envolvendo VVPE, o PB permite movimento de um constituinte interno ao VP para uma posição mais baixa na oração, fora do VP elíptico. Crucialmente, tal movimento é possível precisamente nos mesmos ambientes em que há possibilidade de extração-A' a partir de VVPE. O padrão de extração-A' exibido pelo PB é de amplo interesse teórico pelo fato de parecer enfraquecer uma previsão central da análise tradicionalmente mais aceita da semitransparência. É aqui que a segunda observação se mostra esclarecedora, já que, ao estabelecer que o PB permite movimento para uma posição fora do VP elíptico — e que a distribuição de tal movimento espelha a distribuição da extração-A' a partir de VVPE — é possível conciliar os dados com extração-A' com a descrição tradicionalmente mais aceita para a semitransparência.

Palavras-chave: elipse, elipse de VP com encalhe do verbo, extração a partir do constituinte elíptico, português brasileiro

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1 INTRODUCTION

Brazilian Portuguese (BP) has a variant of verb phrase ellipsis known as verb-stranding VP-ellipsis (VVPE). VVPE differs from "standard" VP-ellipsis in that in VVPE, unlike in standard VP-ellipsis, the main verb moves out of the VP, thereby stranding the ellipsis site (e-site).

(1) Quando a Ana pôs os óculos na mesa, a Maria também
When the A. put the glasses on.the table, the M. also
pôs+T ~~[$_{VP}$ t$_{V}$ os óculos na mesa]~~
put
'When Ana put her glasses on the table, Maria did too.'

(CYRINO; MATOS, 2002, p. 182)

The present article examines A'-extraction from VVPE in BP. The two key observations around which the present article centers are as follows: (i) VVPE is semi-transparent to A'-extraction, allowing A'-extraction in some configurations but not others; (ii) in sentences involving VVPE, BP permits movement of a VP-internal constituent to a low position in the clause, just outside the e-site. Crucially, the latter type of movement is possible in precisely the same environments as is A'-extraction from VVPE.

The pattern of A'-extraction permitted by BP VVPE is of broader theoretical interest in that it appears to undermine a core prediction of the leading account of semi-transparency. It is here that the second observation, above, proves illuminating; for in establishing that BP permits movement to a position just outside the elliptical VP — and that the distribution of such movement mirrors the distribution of A'-extraction from VVPE — it will be possible to reconcile the A'-extraction data with the leading account of semi-transparency.

2 TIMING-BASED ACCOUNTS OF ELLIPSIS

In recent years, it has been observed that various elliptical constructions are semi-transparent to extraction, in the sense that they permit some types of extraction from the e-site, but not others. For example, Dutch VPE permits A-extraction but not A'-extraction.[1]

(2) a. Die broek MOET nog niet gewassen worden, maar hij$_{i}$ MAG al wel
those pants must still not washed become but he may already PRT
~~[t$_{i}$ gewassen worden]~~
'Those pants don't have to be washed yet, but they can be.'

1 AFF = 'affirmative particle', PRT = 'particle'.

b. ?* Ik weet niet wie Kaat wou uitnodigen, maar ik weet wel wie$_i$ ze moest
I know not who K. wanted invite but I know aff who she must.pst
~~[t$_i$ uitnodigen]~~
'I don't know who Kaat wanted to invite, but I do know who she had to.'

(AELBRECHT, 2010, p. 60, 63)

Immediately, the question arises as to why ellipsis should selectively block extraction. In response to this question, a number of authors have proposed "timing-based" accounts of ellipsis (AELBRECHT, 2010; BALTIN, 2012; PARK, 2017). The central ingredients of these accounts are as follows: (i) ellipsis involves deletion, rather than LF-copying; (ii) deletion takes place in the course of the narrow syntactic derivation, rather than at PF; (iii) deletion opacifies the ellipsis site, blocking all subsequent extraction from the e-site.

Given (iii), the relative timing of the deletion and the extraction operations is central. If extraction precedes deletion, extraction succeeds. If deletion precedes, extraction fails.

As a demonstration, consider the Dutch pattern in (2) once again. According to Aelbrecht (2010), Dutch VPE involves deletion of VoiceP, with deletion taking place immediately upon the insertion of the modal verb. Crucially, the modal verb sits above TP, but below CP.

(3) $[_{CP}\ [_{ModalP}\ \textit{verb}_{modal}\ [_{TP}\ [_{VoiceP}\ [_{vP}\ [_{VP}\ \ldots$

Since Dutch A-movement initially targets SpecTP on its way up to SpecModalP, A-extraction from the e-site (i.e. from VoiceP) takes place before the modal is inserted — hence, before VoiceP is deleted and thereby opacified. A-extraction is thus successful. A'-movement from the e-site, by contrast, targets SpecCP and will not take place until C is inserted. By this point, the ellipsis site will have already been deleted, thus blocking extraction.

3 THE SEMI-TRANSPARENCY OF BP VVPE

VVPE in BP is semi-transparent to A'-extraction. A'-extraction from VVPE is possible when A'-movement takes place within the confines of a single clause (see (4a,b)). By contrast, it is impossible when A'-movement spans a finite clause boundary, with VVPE targeting the upstairs vP (see (5a,b)).[2,3]

2 Note that the non-elliptical version of (5a) and the non-elliptical version of (5b) are grammatical, albeit somewhat heavy. The same holds for all of the ungrammatical elliptical sentences that follow. Note, also, that all example sentences that are *not* accompanied by a citation are original data, coming from personal fieldwork.

3 One might wonder whether it is possible to generate (4a) and (4b) as in (i) and (ii) respectively, with PP-ellipsis in (i) and adjunct ellipsis in (ii). If such were possible, the examples in (4) would not support the conclusion that A'-extraction from VVPE is possible. However, BP does not permit PP-ellipsis or adjunct ellipsis. That this is so is demonstrated by the ungrammaticality of (iii) and the interpretation of (iv).

(4) a. Eu sei qual desses meninos a Amanda pôs de castigo
I know which of.these kids the A. put of punishment
e qual ela não pôs+T [$_{vP}$ t$_V$ t$_{wh}$ ~~de castigo~~]
and which she NEG put
'I know which of these kids Amanda punished and which of them she didn't punish.'

b. Eu sei quais dos meninos o Lucas acorda cedo
I know which of.the kids the L. wakes.up early
e quais ele não acorda +T [$_{vP}$ t$_V$ t$_{wh}$ ~~cedo~~]
and which he NEG wakes.up
'I know which of the kids Lucas wakes up early and which of them he doesn't wake up early.'

(5) a. * Eu sei qual desses meninos a Amanda disse que ela pôs de castigo
I know which of.these kids the A. said that she put of punishment
e qual ela não disse+T [$_{vP}$ t$_V$ [$_{CP}$ ~~que ela pôs t$_{wh}$ de castigo~~]]
and which she NEG said
'I know which of these kids Amanda said that she punished and which of them she didn't say that she punished.'

b. * Eu sei em qual desses bolos o João disse que ele pôs um quilo de açúcar
I know in which of.these cakes the J. said that he put a kilo of sugar
e em qual ele não disse+T [$_{vP}$ t$_V$ [$_{CP}$ ~~que ele pôs um quilo de açúcar t$_{wh}$~~]]
and in which he NEG say
'I know in which of these cakes João said he put a kilo of sugar and in which of them he didn't say he put a kilo of sugar.'

Before inquiring whether the pattern of extraction exhibited above poses a problem for timing-based accounts of semi-transparency, two independent observations are in order. First, VVPE targets vP, not VP. The evidence for this conclusion comes from two sources: (i) the e-site contains manner adverbs, which are generally assumed to adjoin to vP; (ii) furthermore, the e-site contains secondary predicates that are predicated of an external argument. Given the strict locality of predication (see, e.g., WILLIAMS, 1980), it follows that

(i) … e qual ela não pôs+T [$_{vP}$ t$_V$ t$_{wh}$ [$_{PP}$ ~~de castigo~~]]
(ii) … e quais ele não acorda+T [$_{vP}$ t$_V$ t$_{wh}$ ~~cedo~~]
(iii) * A Amanda pôs o João de castigo e a Clara também pôs ele.
the A. put the J. of punishment and the C. also put him
(iv) A Maria acorda o João cedo, mas a Clara não acorda ele.
the M. wakes.up the J. early, but the C. NEG wakes.up him
= 'Maria wakes João up early, but Clara doesn't wake him up.'
≠ 'Maria wakes João up early, but Clara doesn't wake him up early.'

such secondary predicates are merged at the vP-level, and not internal to the VP — and hence that VVPE targets vP, not VP.[4]

(6) a. O Mané limpou o banheiro cuidadosamente e a Mara$_i$
the M. cleaned the bathroom carefully and the M.
também limpou+T ~~[$_{vP}$ [$_{vP}$ t$_i$ t$_v$ [$_{VP}$ t$_V$ o banheiro]] cuidadosamente]~~
also cleaned
'Mané cleaned the bathroom carefully and Mara also cleaned the bathroom carefully.'

(TESCARI-NETO, 2012, p. 154)

b. *Esse* roqueiro não canta bêbado, mas *aquele*$_i$ canta+T ~~[$_{vP}$ t$_i$ t$_v$ [$_{VP}$ t$_V$] bêbado]~~
this rocker NEG sings drunk, but that sings
'This rocker doesn't sing drunk, but that one sings drunk.'

Second, A-extraction from VVPE is possible. That this is so has in fact already been demonstrated by the preceding examples, which involve A-extraction of the external argument from the e-site. Further evidence in support of this conclusion comes from the following sentences, which likewise involve A-extraction from the e-site.

(7) a. Os alunos não chegam na escola cansados, mas os professores$_i$ chegam+T
the students NEG arrive in.the school tired but the teachers arrive
~~[$_{vP}$ t$_v$ [$_{VP}$ t$_V$ t$_i$ na escola cansados]]~~
'The students don't arrive at school tired, but the teachers do.'

b. O João parece cansado e o Pedro$_i$ também parece+T ~~[$_{vP}$ t$_v$ [$_{VP}$ t$_V$ [$_{SC}$ t$_i$ cansado]]]~~
the J. seems tired and the P. also seems
'João seems tired and Pedro does too.'

Consider, now, whether a timing-based account of ellipsis successfully accounts for the semi-transparency of BP VVPE. Given the logic of timing-based accounts, according to which deletion of a constituent renders that constituent opaque to extraction, it must be the case that A-extraction from vP takes place prior to the deletion of vP. Suppose, then, that the vP is deleted immediately after A-extraction, upon the completion of the TP. Under this assumption, A'-extraction in the clause-crossing cases (i.e. (5a,b)) is correctly ruled out. Schematically, the derivation proceeds as follows.

(8) a. [$_{TP}$ DP V+T [$_{vP}$ wh [$_{vP}$ t$_{DP}$ … [$_{CP}$ t$_{wh}$ … [$_{vP}$ t$_{wh}$ [$_{VP}$ … t$_{wh}$ …]]]]]]
b. [$_{TP}$ DP V+T ~~[$_{vP}$ wh [$_{vP}$ t$_{DP}$ … [$_{CP}$ t$_{wh}$ … [$_{vP}$ t$_{wh}$ [$_{VP}$ … t$_{wh}$ …]]]]]~~
c. * [$_{CP}$ wh C [$_{TP}$ DP V+T ~~[$_{vP}$ t$_{wh}$ [$_{vP}$ t$_{DP}$ … [$_{CP}$ t$_{wh}$ … [$_{vP}$ t$_{wh}$ [$_{VP}$ … t$_{wh}$ …]]]]]~~]]

The diagram in (8a) represents the point in the derivation at which the subject has just raised to SpecTP. The vP is now deleted and thereby opacified. The wh-phrase, which is currently situated in the outer specifier of the matrix vP, will therefore be unable to move to

4 Italicization is used to indicate contrastive stress.

SpecCP, and the derivation will crash, as desired. Unfortunately, A'-extraction in the single-clausal cases (i.e. (4a,b)) will likewise be excluded if deletion of vP takes place upon the completion of TP. In order to permit A'-extraction in the single-clausal cases, it must be the case that deletion of vP takes place only after the interrogative C has merged and attracted the wh-phrase to its specifier. Schematically:

(9) a. $[_{TP}$ DP V+T $[_{vP}$ wh $[_{vP}$ t_{DP} … $[_{VP}$ … t_{wh} …]]]]
b. $[_{CP}$ wh C $[_{TP}$ DP V+T $[_{vP}$ t_{wh} $[_{vP}$ t_{DP} … $[_{VP}$ … t_{wh} …]]]]]
c. $[_{CP}$ wh C $[_{TP}$ DP V+T ~~$[_{vP}$ t_{wh} $[_{vP}$ t_{DP} … $[_{VP}$ … t_{wh} …]]]]~~]

However, if deletion of vP takes place only after the wh-phrase has raised to SpecCP, the illicit clause-crossing cases are now ruled in, incorrectly.

Timing-based accounts thus seem ill-equipped to handle the pattern of semi-transparency exhibited by BP VVPE. The core of the dilemma lies in the fact that in both the single-clausal cases (4a,b) and the clause-crossing cases (5a,b), wh-extraction from the to-be-elided vP (specifically, from the outer specifier of the vP) takes place at precisely the same point in the derivation: namely, upon the merger of the interrogative C. Hence, timing-based accounts of ellipsis predict that both cases of extraction will pattern together with respect to their (in)ability to extract. In the remainder of this article, I argue that, contrary to initial appearances, a successful timing-based solution to the semi-transparency of BP VVPE is indeed possible, once a wider array of data is taken into consideration.

4 LOW MOVEMENT FROM VVPE

In this section, I argue that in sentences involving VVPE, BP permits movement of a vP-internal constituent to a position external to the e-site but lower than the verb's surface position. I will refer to such movement as "low movement".

(10) … V+T $[_{XP}$ YP ~~$[_{vP}$ t_V … t_{YP} …]~~]

Upon initial consideration, the following example appears to indicate that BP permits low movement from VVPE.

(11) a. A Ana compra revistinha pro *Tiago* mais frequentemente do que ela
the A. buys comic.books for.the T. more often of.the what she
compra __ pra *Clara*.
buys __ for.the C.
'Ana buys comic books for Tiago more often than she does for Clara.'

b. … ela compra+T $[_{XP}$ [pra Clara]$_i$ ~~$[_{vP}$ t_V revistinha t_i]~~]

c. … ela compra+T $[_{vP}$ t_V ~~[revistinha]~~ pra Clara]

However, given that BP permits argument ellipsis of direct objects (CYRINO; LOPES, 2016, *inter alia*), (11a) can simply be generated as in (11c). Hence, (11a) does not provide evidence for low movement from VVPE.

The following pair of examples furnishes a more convincing argument in favor of low movement from VVPE.

(12) (Context: Tiago is Clara's and Ana's father.)

a. O Tiago dá água nesse copo pra *Clara* mais frequentemente do que
the T. gives water in.this cup to.the C. more often of.the what
ele dá pra *Ana*.
he gives to.the A.
'Tiago gives water to Clara in this cup more often than he gives water to Ana in this cup.'

b. O Tiago dá água nesse copo pra *Clara* mais frequentemente do que ele dá água pra *Ana*.
'Tiago gives water to Clara in this cup more often than he gives water to Ana.'

Notice that the two examples differ from one another internal to the *than*-clause: (12b) contains an overt occurrence of *água* ('water'), whereas (12a) does not. Note, also, that the two examples are not synonymous. In (12a), but not (12b), the second clause can be understood as containing an implicit occurrence of the adjunct *nesse copo* ('in this cup'). Let us call this reading, "the adjunct reading". On the basis of this contrast, the following sequence of conclusions can be drawn. First, on the basis of the impossibility of the adjunct reading in (12b), we can conclude that BP does not have adjunct ellipsis — that is, an elliptical process that specifically targets adjuncts (see, also, fn. 3). After all, if BP had such a process, it would be possible to generate (12b) as in (13), which would yield the adjunct reading.

(13) … mais frequentemente do que ele dá água ~~[nesse copo]~~ pra *Ana*

Now, given that BP does not allow adjunct ellipsis, we can conclude that the adjunct reading in (12a) is *not* generated via adjunct ellipsis:[5]

(14) … do que ele dá [~~água~~] [~~nesse copo~~] pra *Ana*

Rather, (12a) is generated via ellipsis of some constituent that properly contains the adjunct. The natural candidate is vP, with the verb and the PP having raised out of the vP. In other words, (12a) is generated via low movement from VVPE:[6]

(15) … dá+T [$_{XP}$ [$_{PP}$ pra *Ana*] ~~[$_{vP}$ t$_{V}$ água nesse copo t$_{PP}$]~~]

5 In addition to adjunct ellipsis, (14) involves argument ellipsis of the direct object *água*.

6 Below, it will be argued that deletion of vP in BP takes place upon the completion of the TP. Hence, at the point in the derivation in which low movement extracts from vP, the vP has not yet been deleted, meaning that the vP is still transparent to extraction.

Interestingly, low movement exhibits the same distribution as A'-extraction from VVPE. Low movement can take place within a single clause, but it cannot take place across a finite clause boundary:

(16) a. * A Natália diz que ela compra revistinha pro *Bruno* mais frequentemente
the N. says that she buys comic.books for.the B. more often
do que ela diz __ pra *Clara*.
of.thewhat she says __ for.the C.
'Natália says that she buys comic books for Bruno more often than she says that she buys comic books for Clara.'

b. * … ela diz+T [$_{XP}$ [pra Clara]$_i$ ~~[$_{vP}$ t$_V$ [$_{CP}$ que ela compra revistinha t$_i$]]]~~

With regard to why low movement is unable to cross a finite clause boundary, there are two derivations to consider. In one derivation, movement from the base position to SpecXP takes place in one fell swoop, as in (16b). Such movement is ruled out by the Phase Impenetrability Condition (hereafter, PIC; CHOMSKY, 2001). Alternatively, movement to the outer specifier of the upstairs vP proceeds successive-cyclically, with the moved expression then raising to SpecXP.

(17) a. [$_{vP}$ [pra Clara]$_i$ [$_{vP}$ … [$_{CP}$ t$_i$ … [$_{vP}$ t$_i$ [$_{VP}$ … t$_i$]]]]]
b. [$_{XP}$ [pra Clara]$_i$ [$_{vP}$ t$_i$ [$_{vP}$ … [$_{CP}$ t$_i$ … [$_{vP}$ t$_i$ [$_{VP}$ … t$_i$]]]]]]

Assume that SpecXP is an A-position. Under this assumption, the derivation depicted in (17) is successfully ruled out, as it involves a movement chain in which A'-movement feeds A-movement.[7,8]

7 The assumption that SpecXP is an A-position accounts for the distribution of low movement. (See section 6 for further evidence.) It will also play a pivotal role in accounting for the distribution of A'-extraction from VVPE, as will be discussed below. Ultimately, it will be desirable to gather independent evidence for the A-status of SpecXP. Such an undertaking, however, lies beyond the scope of this short article.

8 Having assumed that SpecXP is an A-position, the derivation of sentences involving single-clausal low movement (e.g. (12a)) appears to involve two violations of minimality: first low movement skips over the subject in Spec,vP, and then the subject skips over the low-moved expression in SpecXP.

(i) a. [$_{XP}$ YP [$_{vP}$ DP [$_{VP}$ t$_{YP}$]]]
b. [$_{TP}$ DP [$_{XP}$ YP [$_{vP}$ t$_{DP}$ [$_{VP}$ t$_{YP}$]]]]

As a placeholder for a more thorough examination of this dilemma, I will assume, with Chomsky (1993) and, more recently, den Dikken (2007), that head movement extends minimal domains. Movement of the V+v complex to X will thus place SpecXP and Spec,vP within the same minimal domain, rendering the two positions equidistant from YP's base position. Similarly, movement of the V+v+X complex to T will render SpecTP and SpecXP equidistant from SpecvP.

(ii) a. [$_{XP}$ YP [$_{X'}$ [$_X$ [$_v$V+v]+X] [$_{vP}$ DP [$_{v'}$ t$_{V+v}$ [$_{VP}$ t$_V$ t$_{YP}$]]]]]
b. [$_{TP}$ DP [$_{T'}$ [$_T$ [$_X$ [$_v$ V+v]+X]+T] [$_{XP}$ YP [$_{X'}$ t$_{[V+v]+X}$ [$_{vP}$ t$_{DP}$ [$_{v'}$ t$_{V+v}$ [$_{VP}$ t$_V$ t$_{YP}$]]]]]]]

Notice, also, that single-clausal low movement does not violate the PIC (specifically, the version of the PIC proposed in Chomsky (2001)). According to this version of the PIC, the domain of the vP phase (i.e. VP) will not be spelled out until C is merged. Hence, low movement can move directly to SpecXP without having to stop over in the outer specifier of vP, an A'-position. This is an important detail, as an intermediate stop over in the outer specifier of vP would result in a movement chain in which A'-movement feeds A-movement, rendering low movement illicit.

5 ANALYSIS

We are now in a position to return to the semi-transparency of BP VVPE. The two central components of the analysis to be developed here are as follows. First, deletion of vP takes place immediately after the completion of the TP, with deletion of the vP rendering it opaque to all subsequent extraction from it. Second, movement to SpecXP is A-movement.

Consider clause-crossing A'-extraction from VVPE (see (5a,b)). (18) represents the point in the derivation at which the matrix vP has just been completed.

(18) $[_{vP}$ wh $[_{vP}$ DP … $[_{CP}$ t_{wh} … $[_{vP}$ t_{wh} $[_{VP}$ … t_{wh} …]]]]]

At this point, there are two possible continuations, both ultimately leading to crash. The first continuation runs as follows.

(19) a. $[_{TP}$ DP V+T $[\sout{_{vP}\ wh\ [_{vP}\ t_{DP} \dots [_{CP}\ t_{wh} \dots [_{vP}\ t_{wh}\ [_{VP} \dots t_{wh} \dots]]]]]}$
b. * $[_{CP}$ wh C $[_{TP}$ DP V+T $[\sout{_{vP}\ t_{wh}\ [_{vP}\ t_{DP} \dots [_{CP}\ t_{wh} \dots [_{vP}\ t_{wh}\ [_{VP} \dots t_{wh} \dots]]]]]}]]$

In (19a), construction of the TP is completed, at which point the vP is deleted. The wh-phrase is thus trapped inside of the vP, and the derivation fails.

The second continuation of (18) is as follows, with low movement of the wh-phrase from the outer specifier of the matrix vP to SpecXP, construction of the TP, deletion of the vP, and wh-movement to SpecCP. The illicit step in this derivation is (20a), as it involves a movement chain in which A'-movement has fed A-movement.

(20) a. * $[_{XP}$ wh $[_{vP}$ t_{wh} $[_{vP}$ DP … $[_{CP}$ t_{wh} … $[_{vP}$ t_{wh} $[_{VP}$ … t_{wh} …]]]]]]
b. $[_{TP}$ DP V+T $[_{XP}$ wh $[_{vP}$ t_{wh} $[_{vP}$ t_{DP} … $[_{CP}$ t_{wh} … $[_{vP}$ t_{wh} $[_{VP}$ … t_{wh} …]]]]]]]
c. $[_{TP}$ DP V+T $[_{XP}$ wh $[\sout{_{vP}\ t_{wh}\ [_{vP}\ t_{DP} \dots [_{CP}\ t_{wh} \dots [_{vP}\ t_{wh}\ [_{VP} \dots t_{wh} \dots]]]]]}]]$
d. $[_{CP}$ wh C $[_{TP}$ DP V+T $[_{XP}$ t_{wh} $[\sout{_{vP}\ t_{wh}\ [_{vP}\ t_{DP} \dots [_{CP}\ t_{wh} \dots [_{vP}\ t_{wh}\ [_{VP} \dots t_{wh} \dots]]]]]}]]]$

Clause-crossing A'-extraction from VVPE is thus ruled out, as desired. As to clause-internal A'-extraction from VVPE (see (4a,b)), such extraction is correctly predicted to be possible, due to the availability of low movement. At the point in the derivation at which the vP is deleted, the wh-phrase will already be positioned outside of the vP, in SpecXP, and will therefore be free to raise to SpecCP.

(21) a. $[_{TP}$ DP $[_{XP}$ wh $[_{vP}$ t_{DP} $[_{VP}$ … t_{wh} …]]]]
b. $[_{TP}$ DP $[_{XP}$ wh $[\sout{_{vP}\ t_{DP}\ [_{VP} \dots t_{wh} \dots]}]]$
c. $[_{CP}$ wh C $[_{TP}$ DP $[_{XP}$ t_{wh} $[\sout{_{vP}\ t_{DP}\ [_{VP} \dots t_{wh} \dots]}]]$

6 INFINITIVAL COMPLEMENTS AND EXTRACTION FROM VVPE

In the present section, I provide additional evidence in support of the analysis developed above, through an examination of sentences involving infinitival complements to control verbs.

There is considerable evidence within the literature on infinitival complemetation that infinitival clauses come in more than one size (WURMBRAND, 2003; GRANO, 2015; among many others). When the upstairs verb is a non-restructuring control verb, the infinitival clause is a full CP. When the upstairs verbs is a restructuring control verb, the infinitival clause is smaller than a full CP. I will follow Cinque (2004) and Grano (2015) in assuming that restructured infinitival clauses are vPs. I will also follow Cinque and Grano in assuming that restructuring control verbs are functional verbs, merged outside of the vP. The two structures are thus as follows.[9]

(22) a. $[_{TP}$ The student$_i$ $[_{vP}$ t$_i$ $[_{VP}$ decided $[_{CP}$ PRO$_i$ to read the book]]]]
b. $[_{TP}$ The student$_i$ $[_{FP}$ tried $[_{vP}$ t$_i$ $[_{VP}$ to read the book]]]]

The analysis developed above generates the following predictions. When the upstairs verb is non-restructuring (and hence takes a CP complement), material embedded within the complement clause will be unable to undergo low movement into the matrix clause. Such movement will be impossible for the same reason that low movement out of a finite CP is impossible: the movement either violates the PIC or it involves movement from an A'-position to an A-position (see the discussion surrounding example (16a)). Moreover, when the upstairs verb is non-restructuring, A'-extraction from VVPE of material in the complement clause will be impossible — again, for the same reason that A'-extraction from VVPE of material embedded within a finite CP is impossible. With restructuring verbs, by contrast, low movement is predicted to be possible, as such movement will violate neither the PIC nor the ban on movement from an A'-position to an A-position (see fn. 11, diagram (i)). And since low movement is allowed, A'-extraction from VVPE will likewise succeed, given that the extractee will be outside of the vP (namely, in SpecXP) prior to the deletion of vP.

The following examples demonstrate that the above predictions are borne out. When the verb is restructuring (*tentar* ('to try'), *conseguir* ('to manage')), low movement and A'-extraction from VVPE are allowed. When the verb is non-restructuring (*decidir* ('to decide'),

9 Following Grano (2015), control into restructured infinitival clauses is generated under movement, whereas control into non-restructured infinitival clauses involves PRO.

convencer ('to convince'), *obrigar* ('to require')), low movement and A'-extraction from VVPE are not possible.[10,11]

(23) A Ana tenta/consegue comprar revistinha pra *Maria* mais frequentemente
the A. tries/manages to.buy comic.books for.the M. more often
do que ela tenta/consegue __ pra *Clara*.
of.the what she tries/manages __ for.the C.
'Ana tries/manages to buy comic books for Maria more often than she tries/manages to buy comic books for Clara.'

(24) Eu sei em qual desses bolos o João tentou/conseguiu pôr um quilo de
I know in which of.these cakes the J. tried/managed to.put a kilo of
açúcar e em qual ele não tentou+T/conseguiu+T
sugar and in which he NEG tried/managed
'I know in which of these cake João tried/managed to put a kilo of sugar and in which of them he didn't try/manage to put a kilo of sugar.'

10 For reasons of space, I cannot present arguments for the (non)-restructuring status of the verbs in (23)-(28). For *tentar*, *conseguir*, *decidir*, I instead refer the reader to Modesto (2016). As to *convencer* and *obrigar*, note the contrast between (i) and (ii), which demonstrates the non-restructuring status of *convencer* and *obrigar* (see Modesto (2016, p. 167-169) for a discussion of the NPI *nunca* ('never') and an explanation of why the ungrammaticality of sentences such as (i) indicates that *convencer* and *obrigar* are non-restructuring.

(i) * A Maria não convence/obriga o João a ajudar nunca ao Pedro.
the M. NEG convince/require the J. to help never to.the P.
'Maria doesn't convince/require João to ever help Pedro.'

(ii) A Lina não tenta ajudar nunca à sua mãe.
the L. NEG try to.help never to.the her mother
'Lina doesn't try to ever help her mother.'

(MODESTO, 2016, p. 168)

11 The structure of (23) is as follows. (For reasons of legibility, I omit the strikethrough on vP.)

(i) … $[_{TP}$ ela $[_{T'}$ $[_{T}$ $[_{F}$ $[_{X}$ $[_{v}$ V+v]+X]+F]+T] $[_{FP}$ $[_{F'}$ t_{F} $[_{XP}$ [pra Clara] $[_{X'}$ t_{X} $[_{vP}$ t_{ela} $[_{v'}$ t_{v} $[_{VP}$ t_{V} $t_{PP}]]]]]]]]$

Note that movement of the V+v complex to X^0 places SpecXP and Spec,vP within the same minimal domain. The two positions are thus equidistant from the base position of *pra Clara*, thus allowing the latter to skip over the DP in Spec,vP without violating minimality. Similarly, the two positions are equidistant to SpecTP, which allows the subject in Spec,vP to licitly raise to SpecTP past *pra Clara* in SpecXP.

Note, also, that low movement of *pra Clara* does not violate the PIC; see fn. 8 for discussion.

Finally, note that the structure of (24) is identical to (i), modulo movement of the low-moved wh-phrase from SpecXP onward to SpecCP.

(25) ?* A Clara decide comprar revistinha pro Paulo mais frequentemente do
the C. decides to.buy comic.books for.the P. more frequently than.the
que ela decide __ pra *Ana*.
what she decides __ for.the A.
'Clara decides to buy comic books for Paulo more frequently than she decides to buy comic books for Ana.'

(26) ?* Eu sei em qual desses bolos o João decidiu pôr um quilo de açúcar
I know in which of.these cakes the J. decided to.put a kilo of sugar
e em qual ele não decidiu+T
and in which he NEG decided
'I know in which of these cakes João decided to put a kilo of sugar and in which of them he didn't decide to put a kilo of sugar.'

(27) ?* A Júlia convence/obriga a Paula a comprar revistinha pra *Maria* mais
the J. convinces/requires the P. to buy comic.books for.the M. more
frequentemente do que ela convence/obriga __ pra *Clara*.
frequently than.the what she convinces/requires __ for.the C.
'Julia convinces/requires Paula to buy comic books for Maria more often than she convinces/requires Paula to buy comic books for Clara.'

(28) ?* Eu sei em qual dessas gavetas a Júlia convenceu/obrigou o Pedro a
I know in which of.these drawers the J. convinced/required the P. to
guardar as camisas e em qual ela não convenceu+T/obrigou+T
put the shirts and in which she NEG convinced/required
'I know in which of these drawers Julia convinced/required Pedro to put his shirts and in which of them she didn't convince/require him to put his shirts.'

7 CLOSING REMARKS

The present article advanced three empirical claims. First, BP VVPE is semi-transparent to A'-extraction. Specifically, A'-extraction is possible when A'-movement takes place within a single clause, but impossible when A'-movement crosses a CP-boundary on its way out of the e-site. Second, in sentences involving VVPE, BP permits movement of a vP-internal constituent to a position just outside of the vP. Third, such movement (which was called "low movement") is possible in the same contexts as is A'-extraction from VVPE. It was argued that the pattern of semi-transparency exhibited by BP VVPE can be accounted for by means of a timing-based account. Crucial to the success of this account was the observation that low movement functions as an escape hatch for A'-extraction from VVPE.

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Squib received on April 7, 2020.
Squib accepted on May 29, 2020.