The limits of pseudosluicing
 (Remarks for Luis Vicente)

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Abstract: We argue, against the established consensus, that there is no conclusive argument for what we call the *Substantial Pseudosluicing Hypothesis* (i.e. the hypothesis that there are non-isomorphic ellipses, in which the sluice has a copular source). The semantic and syntactic arguments put forward in previous analyses are critically reviewed, with special reference to two of the languages that seem to give particular support for the Substantial Pseudosluicing Hypothesis, Spanish and Brazilian Portuguese (Vicente 2008, 2018 and Rodrigues *et al* 2009, a.o.). We show that there is no conclusive evidence for substantial pseudosluicing in Spanish, but that there is robust evidence ruling out the availability of Merchant's (1998) pseudosluicing (i.e. null expletive plus copula deletion). As for Brazilian Portuguese, we conclude that there is preliminary evidence for some form of pseudosluicing akin to what Merchant's proposed for Japanese.

Keywords: pseudosluicing, Spanish, Brazilian Portuguese, ellipsis, identity, copula deletion, cleft

1. The substantial pseudosluicing hypothesis

Merchant (1998) coined the term *pseudosluicing* to offer a more precise analysis of a putative case of surface anaphora in Japanese, which looks like simple sluicing under Ross's (1969) definition:

(1)   Dareka-ga   sono   hon-o   yon-da   ga,
        someone-NOM   that   book-ACC   read-PAST   but,
        watashi-wa   dare   ka   wakaranai
        I-TOP   who   Q   know.not
        'Someone read that book, but I don't know who.'

Merchant named it as *pseudosluicing*, which he defined as follows:

(2)   **Pseudosluice =**_{def} An elliptical construction that ***resembles*** a sluice in having only a wh-XP as remnant, but has the structure of a cleft, not of a regular embedded question.

Thus, for Merchant the structure of the silenced portion of (1) is in (3), which involves copula omission, a productive process in Japanese.

(3)   ...[CP [IP pro_{expl} dare   ~~da/de aru~~]   ka]
                         who   be-PRES   Q

‘... who it is.’

Merchant presented several compelling arguments in favor (3), which, as he observes, are not sluicing. What’s more, they do not result from any ellipsis process in the relevant sense, either. Thus, Merchant’s original analysis removes Japanese pseudosluicing (pseudoellipsis, we should say) from the debate about the proper nature of the identity condition in true cases of ellipsis.

In this paper, we discuss another type of phenomenon, which was also baptized as pseudosluicing (incorrectly, as pointed out by van Craenenbroeck 2010 and Vicente 2018). This phenomenon feeds the *substantial pseudosluicing hypothesis* (SPH), according to which there are non-isomorphic cases of ellipses, where the sluiced site may contain a full cleft clause. In what follows, we will discuss this hypothesis and its implications for the general theory of ellipsis. Here is a sketch of the specific problem we are interested in.

As is well known, Merchant (2001) argues in favor of the following generalization:

(4)   *Form-identity generalization II: P-stranding*
        A language *L* will allow preposition stranding under sluicing iff *L* allows preposition stranding under *wh*-movement.

If correct, the P-stranding generalization would be another piece of evidence for what Saab (2008) has called the *uniformity assumption*, an assumption that has its source in Ross’s (1969) seminal paper on sluicing, developed in more detail in Merchant (2001):

(5)   **Uniformity Assumption (UA)**: *Ceteris paribus*, the syntactic dependencies in contexts of ellipsis between the remnant constituent and the ellipsis site (Case, agreement, dislocation, thematic assignment, etc.) are obtained in the same way as in non-elliptical sentences.

Yet, it has been argued that there are languages that do not seem to support the P-stranding generalization. For instance, Spanish and Brazilian Portuguese (BP), languages, in which P-stranding is not allowed under regular wh-movement, but seems to be allowed under sluicing, as shown in the following examples (see also Almeida & Yoshida 2007 for BP):

(6)   a.   *¿Qué chica ha   hablado   Juan   con?
                  what   girl   has   talked   J.   with
        b.   Juan   ha   hablado   con   una   chica pero   no   sé
                J.   has   talked   with   a   girl   but   not   know.I
                (con)   cuál
                 with   which
                ‘Juan has talked to a girl but I don’t know to which.’

(7) a. *Quem   que   a   Maria dançou   com?
         who   that the M.   danced   with
     b. A   Maria dançou   com   alguém   mas   eu   não
         the   M.   danced   with someone   but   I   not

         sei   com quem
         know.I   with who
         'Maria has danced with someone but I don't know with whom.'
         [Rodrigues, Nevins & Vicente 2009]

Vicente (2008) and Rodrigues *et al* (2009) have argued that, despite appearances, (6b) and (7b) are not true counterexamples to the P-stranding generalization. In their analysis, these examples are not derived from an isomorphic E(llipsis)-site, but from a cleft structure:

[6 and 7] are derived from an alternative source: *pseudo-sluicing*, which consists of a cleft structure whose IP is deleted (see Erteschik-Shir 1977, Merchant 1998 and van Craenenbroeck 2004). Our claim is that BP and Spanish have two sources of IP deletion: sluicing and **pseudosluicing**. However, only **pseudosluicing** results in P-stranding effects. The reason is that, as we will see below, pivots of clefts in Spanish and BP need not be overtly headed by a preposition. (Rodrigues, Nevins & Vicente, 2009:3) [1]

(6′) b. Juan   ha   hablado   con   una   chica pero   no   sé
          J.   has   talked   with a   girl   but   not   know.I
          cuál   <es   la   chica con   la   que   ha   hablado   Juan>
          which is   the   girl   with the   that   has   talked   Juan
(7′) b. A   Maria dançou   com   alguém   mas   eu   não
          the   M.   danced   with someone   but   I   not
          sei   quem <é   a   pessoa   com   quem
          know.I   who   is   the   person   with   whom
          a   Maria dançou>
          the M.   danced

The evidence discussed by Rodrigues *et al* comes from several considerations involving multiple sluicing, *else*-modification, aggressively D-linked *wh*-phrases and complementizer retention in BP. Taking this evidence under consideration, and sustaining the substantial pseudosluicing hypothesis, then two important consequences follow for the general theory of ellipsis:

 The substantial pseudosluicing hypothesis and its consequences:
(A) The Uniformity Assumption is still supported by the facts.
(B) The identity condition on ellipsis might make reference to non-isomorphic dependencies between antecedent and E-site.

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[1] The emphasis on the term *pseudosluicing* is ours (AUTHORS).

Consequence (A) is self-evident: an example like (6b) and (7b) doesn't deviate from uniformity considerations, and in particular from the P-stranding generalization, just because its underlying analysis does not involve P-stranding in the first place. Consequence (B) is also easy to pinpoint, although much more controversial: if a cleft sentence is what underlies the E-site in (6b) and (7b), then A(ntecedent) and E-site are in a non-isomorphic identity relation. Thus, (B) calls for a particular identity condition theory. The controversial nature of this consequence comes from the (sometimes implicit, sometimes explicit) assumption that copular sources of the relevant type are indeed derived by ellipsis, an assumption that, as mentioned above, goes against Merchant's (1998) original claim that *pseudosluicing in languages like Japanese is pseudoellipsis*, meaning something different to what we usually mean by the term *surface anaphora* or just *ellipsis*. According to Merchant, English does not have pseudosluicing in the relevant sense (i.e. null expletive plus copula deletion of the Japanese type). However, according to Vicente (2018), the examples in (6b) and (7b) are not pseudoellipses in Merchant's sense, but true cases of deletion of full-structured clefts, which are descriptively a *wh*-phrase followed by a TP headed by a copular verb. This approach has significant implications for the theory of identity in ellipsis. That's why we characterize this hypothesis as a <u>s</u>ubstantial pseudosluicing hypothesis. We will come back to this controversy in section 3. Right now, it is important to emphasize that throughout this paper we will use the term *pseudosluicing* when referring to the phenomenon Merchant described for Japanese. When referring to the type of sluicing reported in Vicente and Rodrigues *et al*, we will use the expression *substantial pseudosluicing*. This distinction has to be made in order to avoid potential terminological confusion (see also van Craenenbroeck (2010), who also notices the terminological inconsistency).

In addition to the general consequences in (A) and (B), the substantial pseudosluicing hypothesis for languages like Spanish and BP makes also important empirical predictions. Vicente (2008:4) has formulated them in the form of the following correlations:

(8)   <u>Vicente's (2008) correlation</u>:
    a.   P-stranding effects ↔ Copular source for ellipsis
    b.   No P-stranding effects ↔ Non-copular source for ellipsis

The literature on sluicing and ellipsis in general has devoted a lot of discussion both to the theoretical consequences of the SPH and to the empirical predictions arising from Vicente's correlation, and pros and cons have been adduced.[2] Worth noticing here is the recent claim in Vicente, Barros, Messick & Saab (2018) that many instances of allegedly non-isomorphic readings in sluicing can be (and in some cases must be) derived without any copular syntax in the E-site. This argument is crucial as it opens up the analytical space in unexpected

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[2] For a lucid discussion regarding the tension between SPH and Merchant's original arguments against substantial pseudosluicing see van Craenenbroeck (2010). He argues that such a tension could be resolved if a last resort approach to substantial pseudosluicing is adopted. Yet, the critical overview of SPH we develop in this paper leaves such an analytic option in suspense.

ways, forcing us to refine our methical tools when it comes to finding (dis)confirming evidence for the underlying structure of grammatical silences.

The remaining of the paper is organized in the following way. In the next two sections we critically review both the semantic evidence presented in favor of substantial pseudosluing (section 2) and the formal evidence also adduced in its favor (section 3). We conclude that at least in Spanish there is no conclusive evidence for SPH. In section 4, we take Brazilian Portuguese as a case study, since that, unlike Spanish, there seems to be robust evidence for some type of pseudosluicing in this language (substantial or of the Japanese type). Based on previous and new evidence, our preliminary conclusion regarding BP is that this language might license some sort of Merchant's pseudoslucing. However, since BP doesn't seem to license copula omission in the same way as Japanese, we can only offer some conjectures about why this language would allow Merchant's pseudoslucing. At any rate, the final balance shows that P-omission both in Spanish and BP cannot be taken as a robust indication of substantial pseudosluicing.

2. On the nature of the semantic evidence

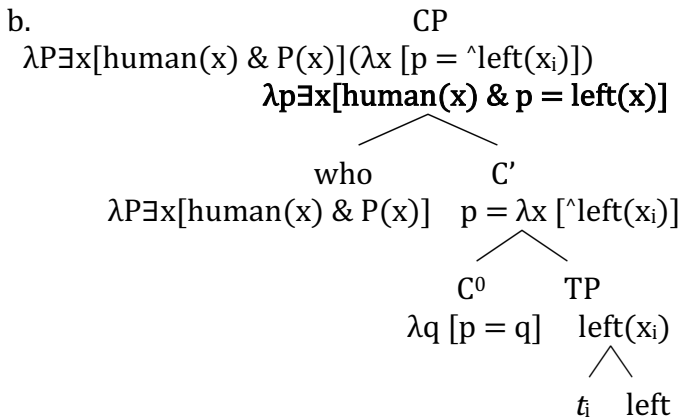### 2.1. Barros's semantic argument for substantial pseudosluicing

According to Barros, a sluice sentence like (9) constitutes a challenge to isomorphic approaches to the identity condition as it forces the adoption of a truncated cleft analysis for the E-site even when there is no truncated cleft antecedent.

(9)   John likes Sally and he likes someone else, but I do not know who **<it is>**
         a. #... who he likes.
         b. who it is.

A presluice sentence like (9a) is semantically incongruent: by asserting it, the speaker runs into self-contradiction, given that to be in a not knowing relation with respect to a question Q implies not having any partial answer to Q. Intuitively, *John likes Sally* is a partial answer to Q (Romero 1998). Barros's solution has two basic assumptions: (A) a Hamblin-Kartuneen approach to questions and (B) Dayal's (1996) theory of answerhood.

A. According to the Hamblin-Kartuneen approach, questions denote set of propositions, i.e. the set of possible answers to Q. Thus, for a sentence like (10a) we have the denotation of a set of propositions at the CP node:

(10)   a.   Who left?

b.

$$\lambda P\exists x[\text{human}(x)\ \&\ P(x)](\lambda x\ [p = {}^{\wedge}\text{left}(x_i)])$$
$$\lambda p\exists x[\text{human}(x)\ \&\ p = \text{left}(x)]$$

who   C'

$$\lambda P\exists x[\text{human}(x)\ \&\ P(x)] \quad p = \lambda x\ [{}^{\wedge}\text{left}(x_i)]$$

C^0 TP

$$\lambda q\ [p = q] \quad \text{left}(x_i)$$

t_i left

[Barros 2012]

Example:
In a model with just two individuals, say, {Jack, Sally}, [[*Who left?*]] = {$^{\wedge}$left(Jack), $^{\wedge}$left(Sally), $^{\wedge}$left(Sally+Jack)}

B. According to Dayal's (1996) theory of answerhood, we have two Answer operators:

(11)   Complete Answer: $\text{Ans}(Q) = \iota p[Q(p)\ \&\ {}^{\vee}p\ \&\ \forall p' \in Q\ [\ [{}^{\vee}p'\ \&\ Q(p')\ ] \rightarrow p \subseteq p'\ ]]$

(12)   Partial Answer: $\text{Ans}_{\text{partial}}(Q) = \lambda p[Q(p)\ \&\ {}^{\vee}p\ \&\ \text{Ans}(Q) \subset p\ ]$

Applied to (10) in a model with only Jack and Sally, *Ans* gives us (13) if it is the case that Jack and Sally left:

(13) $\text{Ans}(\lambda p\ [\ \exists x[\ \text{human}(x)\ \&\ p = {}^{\wedge}\text{left}(x)]) = {}^{\wedge}\text{left}(\text{Jack+Sally})$
       'Jack and Sally left.'

But according to (12), *Jack left* or *Sally left* are both partial answers to *Who left?* Thus, it is easy to see why (14) is semantically inconsistent: *John likes Sally* is a partial answer to the indirect question introduced by *know*.

(14)   #John likes Sally and he likes someone else, but I do not know who he likes

Now, consider (9) again, repeated here as (15):

(15)   John likes Sally and he likes someone else, but I do not who <it is>

Here the question *who it is* denotes a set of propositions of the form *λp∃x[human(x) & p = is(x = it)]*. In turn, the pronoun *it* has a meaning extension roughly paraphrased as *the non-Sally individual that John also likes* (see Barros 2012 for details). So, the question expressed in (9) both in the sluice and the presluice version in (9b) asks about *the identity*

of the non-Sally individual that John likes. Clearly, there is no partial answer to such a question out there; therefore (9) is felicitous both in its sluice and its presluice version. Notice that on this account, the semantic contribution of the proform ***it*** in (9) is the crucial ingredient.

2.2. Problems with Barros's solution
As first noticed by Lipták (2013), the Barros effects observed in (9) are also detectable with case-marked remnants that are syntactically unavailable as cleft pivots, as shown by the Hungarian example in (16), where the *wh*-remnant has to be marked as accusative, and is thus unable to be cleft pivot:

(16) Mari meg hívta   Jánost,   és   meg hívott   még
      M.   PV   invited   J.ACC   and   PV   invited.3SG also
      valakit,   de   nem tudom …
      someone.acc but not know.I
      a.   * ki   /   ü kit   *sluicing*
           who.NOM   who.ACC
      b.   #kit   hívott   meg   *wh-question*
           who.ACC   invited   PV
      c.   { ki   /   * kit }   volt   az   *cleft*
           who.NOM   who.ACC   was   that
      'Mari invited János, and she invited someone else, too, but I don't know who.'

As shown in Saab (2015), the same pattern is attested in Spanish with differentially case-marked objects. Consider, in this respect, the following sentences (DOM = Differential Object Marking):

(17) Juan besó   a   María y   besó   a   alguien   más también,
      J.   kissed ACC   M.   and kissed ACC   someone   else too

      a.   pero no   sé   a   quién
           but   not know.I   ACC   who
      b.   #pero no   sé   a   quién besó
            but   not know.I   ACC   who   kissed
           'Juan kissed María and he kissed someone else too, but I don't know who (#he kissed).'
      c.   *pero no   sé   a   quién era
            but   not know.I   ACC   who   was.IMP
      d.   #pero no   sé   a   quién era/fue   que   besó
            but   not know.I   ACC   who   was.IMP/PERF   that   kissed

In principle, the relevant data can be reproduced in any language that allows overtly case marked DPs and/or PPs to be remnants of sluicing, but not cleft pivots. To illustrate, below are analogous data from German (with *mit* necessarily assigning dative to its complement):

(18) a.   Hans hat   mit   Maria gesprochen, und   er   hat   auch

	H.	has	with	M.	talked		and	he	has	also
	wit jemandem	anders	gesprochen	aber	ich		weiß	nicht,	mit	wem
	with someone	else	talked		but	I	know	not	with	who
b.	* … aber	ich	weiß	nicht,	mit	wem	es	ist		
		but	I	know	not	with	who	it	is	
c.	# … aber	ich	weiß	nicht,	mit	wem	Hans	gesprochen	hat	
		but	I	know	not	with	who	Hans	spoken	has

'Hans talked to Maria and he talked to someone else too, but I do not know who.'

Finally, Vicente *et al* (2018) demonstrate that Barros's effects also show up in languages that lack cleft constructions, like Romanian:

(19)

Ivan	a	tucat-o		pe	Maria,	a	tucat
I.	has	kissed.PART-OBJ-CL	ACC	M.,	has	kissed.PART	

si	pe	altcineva,	dar	nu	stiu
and	ACC	someone-else	but	not	know.I

a.	# …	pe	cine	Ivan	a	tucat
		ACC	who	Ivan	has	kissed

b. …	pe	cine.
	ACC	who

'Ivan kissed Maria, and he kissed someone else, but I don't know who (#Ivan kissed).'

The data in (16)-(19) cannot be captured under a cleft-based analysis.

2.3. Vicente et al's (2018) solution: Cleft effects in ellipsis without a cleft syntax
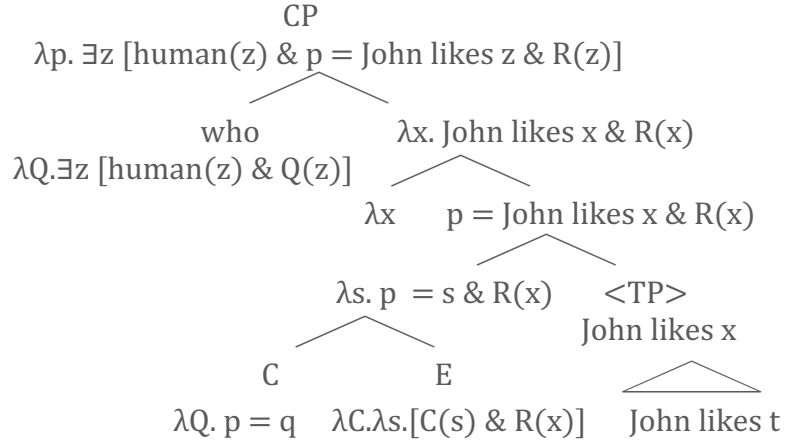
Vicente *et al* (2018) claim that sluicing comes with a deep anaphor ingredient (called *R*) that is obligatorily part of ellipsis licensing. They adopt the theory of ellipsis licensing developed in Merchant (2001) and much subsequent work. Under these accounts, ellipsis is licensed by the presence of an E-feature that can be added to the feature matrices of heads that license ellipsis. Vicente *et al*'s proposal is that E obligatorily introduces R, a suggestion already made by Elbourne (2008). Let's look at the analysis in some detail. First, they assume a standard syntax and phonology of a sluicing E-feature, but with the following semantics:

(20) $\llbracket E_{Q, uWh} \rrbracket = \lambda C. \lambda s. [C(s) \& R(x)]$

The E feature is of type $<<t,t>, <t,t>>$. It will take the interrogative C (type $<t,t>$) as its argument and return something of the same type while adding the R variable.

(21) a. John likes someone, but I don't know who

b.

$\lambda p.\ \exists z\ [\text{human}(z)\ \&\ p = \text{John likes } z\ \&\ R(z)]$ **CP**

who
$\lambda Q.\exists z\ [\text{human}(z)\ \&\ Q(z)]$

$\lambda x.\ \text{John likes } x\ \&\ R(x)$

$\lambda x \qquad p = \text{John likes } x\ \&\ R(x)$

$\lambda s.\ p = s\ \&\ R(x)$ <TP>
John likes x

C   E

$\lambda Q.\ p = q$ $\lambda C.\lambda s.[C(s)\ \&\ R(x)]$ John likes t

Second, they assume that the antecedent for the sluice in the last clause is (22a) with R picking out the property in (22b), which is provided by the exceptive semantics of *someone else* in the antecedent clause.

(22)   a.   John likes Sally, and [he also likes someone else]
      b. $\lambda x.\ [x \neq \text{Sally}\ \&\ \text{John likes } x\ \&\ \text{human}(x)]$
          (i.e. the property of being a non-Sally individual who John likes)

Plugging this R into the denotation of the sluiced clause gives us (23), a set of propositions. In a toy model with {John, Sally, Mary, Ann}, the denotation of (23) would be {that John likes Mary, that John likes Ann, that John likes Mary and Ann, etc.}

(23) $\lambda p.\exists z\ [\text{human}(z)\ \&\ p = \text{John likes } z\ \&\ z \neq \text{Sally}\ \&\ \text{John likes } z\ \&\ \text{human}(z)]$

Compare this analysis to Barros's. Barros's cleft analysis was successful because the cleft pronoun contained a property variable R that picks up salient properties in the discourse. Vicente *et al*'s novel proposal is that R is also introduced by the element licensing ellipsis (i.e. the E-feature).[3] This move makes it possible to have the necessary component of the cleft semantics without the cleft syntax, and it has at least two important advantages. First, it accounts for the paradigm in (16)-(19) where a cleft strategy is not amenable because of the morphological form of the sluice remnants. Second, it captures the fact that Barros's paradigm forms a natural class with the so-called *Inheritance of Content* effects.

(24) Juan   vio   a   unos   estudiantes   en   la   fiesta, pero   Pedro
      J.   saw   ACC   ones   students   in   the   party   but   P.

      a.   no   sabe   a   quién(es)   vio   Juan   en   la   fiesta
          not   knows   DOM   who(PL)   saw   J.   in   the   party

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[3] The idea of having this type of covert proforms in ellipsis is not new (for different implementations, see Elbourne 2008 and Bentzen *et al* 2013).

b. *no sabe a quién(es) eran
   not knows DOM who(PL) were
c. a quién(es)
   DOM who(PL)
   'Juan saw some students at the party, but Pedro does not know which students/who Juan saw at the party.'

Here, the sluice in (24c) is interpreted as restricted to the set of students, but (22a) is ambiguous between a restricted and unrestricted reading. Clefting is impossible in (22c) for exactly the same reasons as in Barros's paradigm: DOM marking on the *wh*-remnant is incompatible with an underlying cleft syntax. Again, the semantics of the E feature will give us the correct restriction for the *wh*-remnant. See Vicente *et al* for details.

Notice that Vicente *et al* do not argue against cleft-based sluicing in general. As they say quite explicitly:

Lurking here is the potential misunderstanding that this paper is an argument against cleft-based sluices in general. This is not correct, as we still accept the existence of such sluices (for example, the English data discussed in the previous sections, where there is no direct evidence against an underlying cleft, are in principle ambiguous between a cleft-*based* analysis and one based on contextual restriction). At best, the argument we are constructing here is one against specific arguments in favor of cleft-based sluices, namely, those based exclusively on the anaphoric properties of clefts.

[Vicente, Barros, Messick & Saab 2018: 10, fn.7]

What the argument leads us to refine are the diagnostic tools for detecting whether a cleft source is available or not in a given language. Again, we are particularly interested in those cases where a non-isomorphic cleft source is derived by ellipsis *sensu stricto*. That is to say, we are not concerned with the indubitable existence of Merchant's pseudosluicing of the Japanese type. Moreover, we are not (much) concerned with the existence of other cases of copular sources that are motivated by strictly grammatical factors. In languages in which clefting is a mandatory strategy for question formation, there seems to be little doubt that copular sources are the only way to model E-sites. Malagasy is a case in point (see Postdam 2007, Paul & Postdam 2012, and Vicente 2018 for a brief overview of the argument). In this language, question formation is done through pseudoclefts:

(25) nanontany aho hoe iza no mividy ny ozy
     ask.AT 1SG.NOM COMP who PRT buy.AT the goat
     'I asked who it is that is buying the goat.'
(26) a. nandoko zavatra I Bao fa hadinoko hoe inona [___]
        paint.AT thing Bao but forget.TT.1SG COMP what
        'Bao painted something, but I forget what it is that was painted by Bao.'
     b. nangalarin' ny olona ny fiarako fa tsy fantatry
        steal.TT the person the car.1SG but NEG know
        ny polisy hoe iza [___]
        the police COMP who

'My car was stolen by someone, but the police don't know who it is that stole my car.'

We'll return to cases like Malagasy after discussing adduced formal evidence for substantial pseudosluicing in the next section.

3. On the nature of the formal evidence

3.1. Vicente's correlation and its limits

One observation that seems to obviate the problems that purely semantic arguments raise is precisely Vicente's correlation presented in (8), and repeated here as (27):

(27)   **Vicente's (2008) correlation**:
    a.   P-stranding effects ↔ Copular source for ellipsis
    b.   No P-stranding effects ↔ Non-copular source for ellipsis

The argument is exclusively based on formal considerations; in this case, the form of the *wh*-remnant. Thus, for our case in (28), absence of P in the remnant forces us to model the E-site as already discussed:

(28) Juan ha   hablado   con   una   chica pero no   sé   cuál
       J.   has   talked   with   a   girl   but   not   know.I   which
       <es   la   chica con   la   que   ha   hablado   Juan>
         is   the   girl   with the   that has   talked   J.
       'Juan talked to a girl, but I don't know which one?'

Nonetheless, despite its apparent simplicity, Vicente's correlation doesn't seem to be entirely supported by empirical facts. In a recent paper, Stigliano (2018) proposes that the E-site has indeed an isomorphic source in sentences like (28). In her account, preposition omission in Spanish indicates neither P-stranding nor clefting; rather, it indicates that the preposition is simply part of the E-site. This analysis has two crucial underlying assumptions: (i) the sluice remains *in situ*, (ii) ellipsis is a syntactic process that affects everything in the complement of Merchant's E feature (including, in some cases that feature) except F-marked material. Thus, depending how much structure F-marking affects, one gets sluicing with P-retention (29a) or with P-deletion (29b):

(29) Juan ha   hablado   con   una   chica pero no   sé   (con) cuál
       J.   has   talked   with   a   girl   but   not   know.I with which

    a.   [$_A$ Juan ha hablado [$_F$ con una chica]] ... [$_{C[E]}$ ~~Juan ha hablado~~ [$_F$ con cuál]]
    b.   [$_A$ Juan ha hablado con [$_F$ cuál]] ... [$_{C[E]}$ ~~Juan ha hablado con~~ [$_F$ cuál]]

Evidence for this approach comes from a number of observations. On the one hand, Stigliano shows that P-omission doesn't reflect the properties of an underlying cleft source.

Crucially, P-less remnants allows for mention-*some* readings, which, are, in principle, incompatible with the strong exhaustivity semantics of clefts (see Merchant 1998, 2001):

(30) A: Deberías   hablar con   alguien   sobre tus   problemas
           should.you talk   with   someone   about your   problems
           financieros
           financial
           'You should talk with someone about your financial problems.'
      B.   (Con) quién, por   ejemplo?
           (with) who   for   example
           'Who, for example?'

      a.   Con   quién deberías   hablar,   por   ejemplo?
           with   who   should.I   talk   for   instance
           'Who I should talk with, for example?'
      b.   #Quién es   la   persona   con   la   que   debería
           who   is   the   person   with   the   that   should.I
           hablar,   por   ejemplo?
           talk   for   example
           'Who is the person that I should talk with, for example?'

Another indication that the E-site cannot be modeled as a copular source is *else*-modification, which, under some circumstances, is available in P-less remnant ellipsis but not in clefts. We refer the reader to Stigliano (2018) for relevant examples (for more discussion, see also Vicente 2008, Rodrigues *et al* 2009, and Martín González 2010).

On the other hand, Stigliano provides strong evidence for her generalization that P-stranding is allowed only if the remnant of a given E-site remains *in situ*. Among several pieces of evidence, the following argument is presented. Consider the rule on P-omission in fragment answers:

(31) A: Con   quién habló Juan?   B: *(Con)   María
           with   who   talked J.   with   M.

On Stigliano's *in situ* approach this is explained as a failure of syntactic identity: the deleted part in (32b) (i.e., *habló Juan con*) doesn't have an identical antecedent (i.e., *habló Juan*):

(32) a.   [$_A$ [$_F$ Con quién]$_i$ habló Juan t_i] … [$_{C[E]}$ ~~habló Juan~~ [$_F$ con María]]
      b.   [$_A$ [Con [$_F$ quién]]$_i$ habló Juan t_i] … [$_{C[E]}$ ~~habló Juan con~~ [$_F$ María]]

At any rate, Stigliano's approach leads to a re-evaluation of Vicente's correlation. P-less remnants cannot be taken as robust syntactic evidence for cleft sources, at least not without further investigation. Crucially, this conclusion is forced regardless of which approach one favors.

3.2. Preliminary balance

Given the discussion above, we conclude that no direct semantic or syntactic evidence for substantial pseudosluicing in Spanish has been presented so far in the literature on sluicing. At least, this kind of evidence is not freely available as proposed by some researchers (a radical position is Barros 2014). We agree that, in addition to Merchant's (1998) pseudosluicing, other non-isomorphic sources in sluicing (i.e., true ellipsis) might be unavoidable in languages that form questions *via* clefting (e.g. Malagasy, see the previous section), but this cannot be an argument against isomorphism as contemplated in the SPH. What the SPH implies is that the identity condition must be relaxed in ways that allow for different sources that don't obey *prima facie* syntactic isomorphism and that this condition is uniform both for sluicing and substantial pseudosluicing and, ideally, other types of ellipses as well. The Malagasy case only forces us to acknowledge something that Chomsky had already considered in a very-well known passage of *Aspects of the theory of syntax*, namely, that syntactic transformations could be relevant for syntactic recoverability:

The general principle for erasure operations, then, is this: *a term X of the proper analysis can be used to erase a term Y of the proper analysis just in case the inherent part of the formative X is not distinct from the inherent part of the formative Y*. But notice that this is an entirely natural decision to reach. The original intuition motivating this condition was that deletions should, in some sense, be recoverable; and the noninherent features of the formative are those that are determined by the context [understood as the syntactic context, AUTHORS], hence that are recoverable even if deleted. Similarly, it is natural to base the operation on nondistinctness rather than identity, because the features unspecified in underlying structures (such as number, in predicate position) also make no independent contribution to sentence interpretation, being added by what are, in essence, redundancy rules, and are, in fact, simply a reflection of context. Thus they are recoverable in the sense that the context that determined them is still present in the string after deletion of the item in question. Hence, the italicized condition formalizes a very reasonable sense of "recoverability of deletion". [Chomsky 1965: 182]

Even when Chomsky was particularly concerned about "lexical" identity (one of the main concerns of his chapter 4), the general idea extends much beyond lexical identity. What is "natural" or "reasonable" for Chomsky was a notion of *recoverability* sufficiently relaxed but also sufficiently restricted; crucially the relaxation and the restriction come entirely from syntactic considerations. For instance, syntactic information introduced by agreement transformations is enough for recoverability. In view of how things developed, especially after Merchant's dissertation, one can legitimately wonder why Chomsky didn't even consider the possibility of formulating identity in terms of "semantic-pragmatic context". The answer is that, according to Chomsky and much of the tradition he inaugurated, semantic-pragmatic identity is too weak and, unless extremely restricted, cannot account for why, say, every existing language is not of the Chinese type when it comes to recoverability of null arguments. In other words, why the pragmatic context is not enough to allow object and subject deletion in cases like (33) (see Huang 1984 for discussion):

(33)   a.   Did John see Bill?

b.   *Saw

Within the theory of ellipsis, Merchant's dissertation (and its reception, of course) marks an important turning point in our conceptions of recoverability. The SPH emerged within Merchant's framework for ellipsis and has pushed Merchant's initial objections to isomorphism to the extreme of exaggerating the role of semantic and pragmatic considerations. If substantial pseudosluicing is licensed by regular semantic/pragmatic conditions on recoverability (QuD, for instance), then the term "pseudosluicing" is simply misleading (see Vicente 2018), and the phenomenon is just another variant of sluicing (called *non-isomorphic sluicing* by Vicente). For Vicente, Malagasy and Spanish both allow non-isomorphic sluicing by whatever identity condition allows for non-isomorphic sluicing. According to Barros (2014), such a condition licenses copular sources only if there is semantic equivalence between the implicit question under discussion in the antecedent and the semantics of the question in the elliptical question.[4] This makes some important predictions in the domain of copular ellipsis. It allows us, for instance, to distinguish between substantial pseudosluicing and Merchant's pseudosluicing. Consider, for instances, cases in which the QuDs raised by two conjuncts in clausal coordination are not equivalent. This happens in Spanish and other languages with truncated clefts:

(34) a.   Voy   a   ir   a   lo   de   Ángela,
            go.PRES.1SG to   go.INF to   the.NEUTER of   Á.
            pero no   sé   (exactamente)   dónde   es
            but   not   know.I   exactly   where   is
            'I'm going to go to Ángela's place but I don't know where it is.'
      b.   Voy   a   ir   al   recital, pero no   sé
            go.PRES.1sg to   go.INF to.the recital but   not   know.I
            (exactamente)   cuándo   es
            exactly   when   is
            'I am going to a concert, but I know exactly when it is'
      c.   Voy   a   conocer   al   nuevo profesor,
            go.PRES.1SG to   know   to.the a   professor
            pero no   sé   cómo es
            but   not   know.PRES.1SG   how   is
            'I'm going to meet the new professor, but I don't how it is.'

---

[4] Identity conditions in QuD terms have been recently challenged by Barros & Kotek (2018) both for conceptual and empirical reasons. In principle, the same results to be discussed below would obtain under Barros & Kotek's (2018) identity condition.

Redundancy reduction:
(i) XP_E may be reduced (elided or deaccented) provided that it has a salient antecedent, XP_A, and $\cup[\![XP_E]\!]^f = [\![XP_A]\!]^f$.   [Barros & Kotek 2018: 33]

And arguably the same results would also obtain with reference to Merchant's (2001) mutual entailment approach provided that in both cases the presupposition of exhaustivity typical from clefts can be accommodated in some way. If we use Barros's QuD theory here is just because it is especially designed to deal with this type of mismatches between E-sites and antecedents.

The SPH predicts, along with Barros's identity condition, that without further considerations these truncated clefts cannot be the target of ellipsis, because the QuD in the antecedents and the putative E-sites are clearly not equivalent. For instance, in sentence (34a), we would have the problem that there is no evident QuD that we can infer from the antecedent or the complete discourse involving both conjuncts. Assuming with Barros that *cuándo* in the second conjunct makes salient an implicit temporal variable in the antecedent, we could in principle to derive the following QuD:

(35)   QuD in A for (34b) = (exactly) when will I go to the recital?

But the question in the putative E-site clearly denotes a different set of propositions:

(36)   Exactly when is the recital going to take place?

Similar considerations apply for (34c). At any rate, if copula deletion of the Japanese type is pseudoellipsis, meaning that it is not subject to the same recoverability conditions, there are no a priori reasons why the second conjuncts cannot be good deletion targets. Yet, it seems that Spanish doesn't have Merchant's pseudosluicing. All the deletions in (37) are out with the relevant meanings:

(37)   a.   #Voy a ir a lo de Ángela, pero no sé (exactamente) dónde <es>
        b.   #Voy a ir al recital, pero no sé (exactamente) cuándo <es>
        c.   #Voy a conocer al nuevo profesor, pero no sé cómo <es>

If we accept Barros' identity condition or relatives (AnderBois 2011, for instance), we can rule out the ellipses in (37) as identity failures. Now, given that Spanish does not allow for copula deletion either, the sentences in (34) cannot have any elliptical counterpart. Thus, given what we have discussed so far, we can safely conclude that Spanish doesn't have Merchant's pseudosluicing, and that we don't have at the moment conclusive evidence for *substantial* pseudosluicing either. Grammatically induced copular ellipsis of the Malagasy type is, of course, irrelevant for Spanish, a language in which there is no mandatory clefting for question formation. Hence, the bottom line for Spanish can be summarized as follows:

(38)   i.   Merchant's pseudosluicing (i.e., copula deletion): No
        ii.   Grammatically induced pseudosluicing: Irrelevant
        iii.   Substantial pseudosluicing: No conclusive semantic or syntactic evidence

4. The Brazilian Portuguese case

BP constitutes an ideal scenario for evaluating the existence of different varieties of pseudosluicing. First, examples like (7b) (repeated below, as (39)) are more productive and natural than in Spanish:

(39)   A   Maria dançou   com   alguém   mas   eu   não
        the   M.   danced   with   someone   but   I   not
        sei   quem

know.I   who
'Maria has danced with someone but I don't know with whom.'

Second, the language makes productive use of clefting for question formation, as shown here:

(40) a.   Quem é   que   você   viu   na   festa?
            who   is   that   you   saw   in.the party
            'Who did you see at the party?'
      b.   O   que   é   que   você   está   comendo?
            what   that   is   that   you   are   eating
            'What are you eating?'

Finally, clefting itself has particular semantic properties that seem to block some of Stigliano's crucial arguments against a pseudosluicing derivation of P-omission under ellipsis and to call Stigliano's Generalization into question.

4.1. Brazilian Portuguese doesn't obey Stigliano's Generalization
As show in Rodrigues *et al* (2009), *wh*-clefts in BP do not seem to entail exhaustivity, as illustrated in (41). Hence, the fact that modifiers like *for example* can occur with P-less sluicing, as in (42), is not strong evidence against the existence of substantial pseudosluicing in BP:

(41) a.   Quem mais   é   que   a gente   poderia   convidar   pra
            who   else   is   that   we   could   invite   to.the
            essa festa?
            this party
            'Who else could we invite to the party?
      b.   Quem, por   exemplo,   é   que   a gente   poderia
            who   for   example   is   that   we   could
            convidar para   essa festa
            invite   to.the this party
            'Who, for example, could we invite to this party'

(42) A: A   Valentina   poderia   dançar   com   alguém   do
            the   V.   could   dance   with   someone   of.the
            Brasil
            Brazil
            'Valentina could dance with someone from Brazil.'
      B: (com) quem, por   exemplo?
            with   who   for   example
            '(With) whom, for example?'

As for Stigliano's Generalization, recall that P-stranding is impossible in fragment answers in Spanish:

(43) A: Con   quién habló Juan?   B: *(Con)   María
        with who   talked J.   with   M.
        'Who did Juan talk to?'   '(He talked) to María.'

Nevertheless, the BP counterparts of these sentences are grammatical, making it difficult to extend Stigliano's *in situ* analysis to BP:

(44) A: Com   quem que você conversou   em   Buenos   Aires?
        with whom that you   talked   in   Buenos   Aires'
        'Who did you talk to in Buenos Aires'
     B: (com) (o)   Andrés
        with the   A.
        '(He talked) to Andrés.'

Contrastive sluicing is another case in point. Stigliano's analysis predicts that syntactic identity prevents P-omission in cases where the correlate occurs *ex situ*.

(45) a. Juan habló con   CINCO chicas, pero no   sé   (con)   CUÁNTOS
        J.   talked to   five girls but   not   know.I (with) how-many
        chicos
        boys
        'Juan talked to five girls, but I don't know to how many boys'
     b. Sé   con   CUÁNTaS   chicas habló Juan, pero no   sé
        know.I   with how.many   girls talked Juan but   not   know.I
        *(con) CUÁNTOS   chicos
        (with) how-many   boys

P-omission cannot be obtained in (45b) because it would cause a violation of syntactic identity:

(46)   Sé con CUÁNTOS chicos [_A **habló Juan *t***], pero no sé [_E **habló con**] CUÁNTOS chicos

The facts in BP are more complex, though. First, P-omission is strongly degraded when the correlate remains *in situ*, against Stigliano's prediction:

(47) O   Pedro dançou   com   CINCO   argentinas , mas   eu   não
     o   P.   danced   with five   Argentines, but   I   not
     sei   *?(com)   QUANTAS   brasileiras⁵

_____

⁵ The sentence in (47) improves significantly if the conjunction *but* is replaced by *and*, especially if the quantified *wh*-phrase *quantas* is stressed. Notice, however, that (i) can be parsed as in (ii), which is arguably a case of amalgamation within coordinated DPs.

(i)   O Pedro dançou com   cinco   argentinas   e   eu não   sei   (com)
        Pedro   danced with   five   Argentinians, and I not   know.I with
        quantas   brasileiras
        how.many   Brazilians

know.I with how-many Brazilians

'Pedro danced with five (female) Argentines, but I don't know how many (female) Brazilians.'

Interestingly, however, if the correlate within the antecedent clause has been moved, P-omission gets much better:

(48)   Eu   sei   com   QUANTAS   argentinas   o   Pedro dançou,   mas
       I   know.I with   how-many   Argentine   the P.   danced   but
       eu   não   sei   ?(com)   QUANTAS   brasileiras
       I   not   know   with   how-many   Brazilian
       'I know with many (female) Argentines did Pedro danced, but I do not know with many (female) Brazilians.'

This minimal pair is unexpected under Stigliano's approach, and a pseudosluicing analysis seems to do better, although there are some leftovers. On a pseudosluicing analysis, (47) would be ruled out for the incompatibility of cleft sentences in contexts of contrast sluicing (Merchant 2001). The case in (48) is harder to explain, but it suggests that movement of the correlate within the antecedent favors a clefted structure in the second conjunct:

(49)   a.   *O   Pedro dançou com   cinco   argentinas,   mas   eu   não
             the   P.   danced   with   five   Argentines,   but   I   not
             sei   (com) quantas   Brasileiras   foi
             know.I with   how-many   Brazilians   was
       b.   ?Eu   sei   com   quantas   argentinas   o   Pedro dançou,
             I   know   with   how-many   Argentines   the   P.   danced
             mas   eu   não   sei   (com) quantas   brasileiras   foi
             but   I   not   know   with how-many   Brazilians   was
             'I know with how many (female) Argentines did Pedro dance, but I don't know with how many (female) Brazilians.'

The contrast between BP and Spanish extends to other examples, as well. Consider, for instance, configurations in which the correlate seems to occur *ex situ*, as in split questions (see Arregi 2010, for an ellipsis analysis of split questions). Although P-omission is impossible under split questions in Spanish, it is fine in BP, as the contrast in (50) shows. Spanish, thus, accords with Stigliano's analysis, but BP does not.

(50)   a.   *Con   quién hablaste   en   Buenos Aires,   Andrés?
              with whom talked   in   Buenos Aires   A.
       b.   Com   quem que   você conversou   em   Buenos Aires, o   Andrés?
              with   whom that   you   talked   in   Buenos Aires, the A.
              Whom did talk to in Buenos Aires? Was it Andrés?'

(ii)   O Pedro dançou com [[DP cinco argentinas] e [DP/S eu não sei quantas brasileiras]]

Stigliano also observes that the ban on P-omission under sprouting follows from her analysis, given that the (putative) *in situ* preposition in the E-site would not have any identical preposition in the antecedent.

(51) Juan   bailó   la   noche entera, pero no   sé   *(con) quién
      J.   danced   the   night whole, but   not   know.I   with   whom

Under sprouting, P-omission is also impossible in BP:

(52) O   João   dançou   a   noite inteira,   mas   eu   não
      the   J.   danced   the   night whole   but   I   not
      sei   *(com)   quem
      know.I   with   who
      'João danced all night long, but I don't know with whom.'

A substantial pseudosluicing proponent might claim that this could be due to the presupposition of existence observed in clefts (more on this below), as the dancing event can have only one participant. Notice that with commutative verbs used with non-projected complements, like *encontrar* 'to meet' in (53), P-omission improves. It follows if the event structure of *encontrar* presupposes the existence of two participants, although only one is syntactically projected:

(53) O   diretor   vai   encontrar, mas   eu   não   sei
      the   director   will   meet,   but   I   not   know.I
      ??(com)   quem/que aluno
         with   who/which student
      'The director will meet (with someone), but I don't know (with) who/which student.'

Finally, although Stigliano does not discuss reversed sluicing (see Giannakidou & Merchant 1998), it must be observed that P-omission is blocked under this type of clausal ellipsis as well. Note, however, that clefts are also blocked, as argued in Rodrigues (2016). This is another piece of evidence that structural restriction on cleft licensing seems to be operative in cases of P-omission under sluicing.

(54) a.   Nós   ainda não   sabemos   se   e   *(com) quem
            we   still not   know.we   if   and   with   whom
            o   deputado   dançou
            the   deputy   danced
      b.   Nós   ainda não   sabemos   *(com) quem e   até mesmo
            we   still not   know.we   with whom and   even
            se   o   deputado   dançou
            if   the   deputy   danced
      'We don't know yet if and with whom the deputy danced.'

(55) a.   *Nós   ainda   não   sabemos   se   e   quem   foi
            we   still   not   know.we   if   and   who   was
            que   o   deputado   dançou
            that   the   deputy   danced

     b.   *Nós   ainda   não sabemos   quem foi   e   até mesmo
             we   still   not know.we   who   was   and   even
             se   o   deputado   dançou
             if   the   deputy   danced

At any rate, beyond Stigliano's generalization, there is also robust evidence from BP that the *in situ* analysis cannot be on the right track in certain particular cases. For instance, in some dialects of BP, complementizer retention occurs:

(56)   A: Eu   tenho que   levar   os   pratos?
            I   have   that   clean   the   dishes
            'Do I have to clean the dishes?'

     B: Tem   que!
            has   that
            'Yes, you do!'

Crucially, Rodrigues *et al* (2009) shows the complementizer can also be retained in cases of sluicing. This is strong evidence that the *wh*-remmant is in Spec, CP.

(57)   O   João   dançou   com   alguém,   mas   eu   não   sei
       the   J.   danced   with   someone but   I   not   know.I
       (com) quem   que
       with   whom that
       'João danced with someone, but I don't know with whom.'

It seems, then, that BP doesn't behave as expected under Stigliano's observation. This conclusion, of course, does not invalidate the coverage of the proposed generalization regarding Spanish.

4.2. Other type of evidence from Brazilian Portuguese

4.2.1. Syntactic evidence
In this section, we will present some of the syntactic evidence available in the literature to support the hypothesis that some sort of pseudosluicing is available in BP. First, when the antecedent is an amalgamated structure (Guimarães 2004, Kluck 2011 and Johnson 2013), sluicing with P-omission seems to be the only option:

(58)   O   Arturo dançou com - tenho   quase   certeza que   (foi/é)   alguém
       the   A.   danced with   have.I almost   sure   that   (was/is)   someone
       que   eu   conheço ,   mas   eu   não   sei   (*com)   quem
       that   I   know.I   but   I   not   know.I with   who

> 'Arturo danced with - I am almost sure it is someone that I know –, but I don't know who.'

Amalgamation is in itself a complex structure, which might on its own involve sluicing, as argued in the literature, especially by Kluck (2011), who suggests (60) as the underlying structure of sentences like (59):

(59)   Bob hit - you will never guess who- in the face
(60)   Bob hit [you will never guess who$_1$ ~~Bob hit t$_1$~~] in the face

If so, (58) is a complex structure in which the antecedent of the E-site is a clause containing sluicing. In addition, P-stranding is observed within the antecedent clause, as the preposition *com* is separated from its complement *alguém que eu conheço*.[6] Assuming so, and if the proposition *com* cannot be part of the remnant of the E-site, which, then, is the structure of E-site in (58)? There are four possibilities:

(61)   a.   ... quem <é   a   pessoa que   eu   conheço>
                  who   is   the   person that   I   know.I
       b.   ... quem <é   a   pessoa que   eu   conheço   com   quem
                  who is   the   person that   I   know.I   with   whom
            ele$_{João}$ dançou>
            he   danced
       c.   ... quem <é   a   pessoa com   quem ele   dançou>
                  who   is   the   person with whom he   danced
       d.   ... quem <ele dançou com>
                  who   he danced with

 The E-site in (61a) is arguably impossible, as it is semantically incongruent. In turn, (61d) is syntactically impossible as the preposition and its complement (*wh*-correlate) do not form a constituent in the antecedent clause. The two other options (61b,c) are both compatible candidates semantically speaking and they do not raise any constituency problem. Nevertheless, they are both clefts. Hence, Rodrigues (2018) argued that, no matter which underlying structure turns out to be the optimum option, in order to explain the obligatoriness of P-omission in (58), one ought to consider that a cleft was elided.

Another argument for the availability of some sort of pseudosluicing involves selectional requirements upon the elided sentences. It has been observed that verbs like *conhecer*

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[6] Based on a survey in different language, including BP, Guimarães (2004) argues that P-stranding in amalgamate structures is possible only in P-stranding languages. However, all the informants we consulted accepted sentences like (58), with or without sluicing. In addition, it seems to be equally accepted in Spanish, another P-stranding language. Interestingly, however, as (i) shows, Spanish, in contrast to BP does not license a clefted clause within amalgams. This shows that the two grammars (BP and Spanish) have different licensing restrictions on clefts, with BP being more lax.

(i)   Juan bailó con   – estoy seguro, alguien que   conozco
         J.   danced with   am.I   sure   someone that know.I

'know' and *considerer* 'consider' have different selectional requirements, which interact with P-omission under sluicing (Rodrigues *et al,* 2009). The data in (62), for instance, show that the verb *conhecer* can take as a complement a full DP or a bare noun (62a), but not a regular CP (62b), although it is fine with a question CP, with a *wh*-phrase in Spec, CP (62c). Crucially the moved-*wh* cannot be embedded within a PP (62d). Consequently, when this verb is followed by a sluiced clause, the remnant cannot be a PP. Thus, P-omission is forced under cases of sluicing (63).

(62) a. Eu   conheço você/cachorro/a menina que   você   me apresentou
         I   know.I you/ dog/   the girl that   you   me introduced
         'I know you/dogs/the girl that you introduced me.'
    b. * Eu   conheço   que   você   estava errado
         I   know   that   you   were   wrong
    c.   Eu   conheço   quem (que) você   demitiu
         I   know   who   that you   fired
         'I know t who you fired.'
    d. *Eu   conheço   com   quem você   dançou
         I   know.I   with whom you   danced

(63) Eu   sei   que   eu   tenho de   conversar   com   uma   pessoa
    I   know.I that   I   have.I of   to.talk   with a   person
    específica   no   hospital,   mas   eu   não   conheço *(com)   quem
    specific   in.the hospital,   but   I   not   know.I with   who
    'I know I need to talk to an specific person at the hospital, but I don't know who.'

Given the selection requirement illustrated in (62), one can reasonably assume that *conhecer* s-selects for expressions denoting an entity. If this is right (with (62c) being analyzed as free relative), the elided structure in (63) cannot be a regular CP.

In contrast, the verb *considerar* seems to have the opposite selectional requirement, selecting propositions, not entities. Thus, it takes regular CPs as its complement, as shown in (64). As expected, in cases of sluicing involving a prepositional remnant, the preposition cannot be omitted (see Rodrigues, 2016):

(64) a.   *Eu   considero   você/cachorro/a menina que você me apresentou[7]
          I   consider.I   you/ dog/   the girl   that you me introduced
    b.   Eu   considero   que   você   estava errado
          I   consider.I   that you   were   wrong
          'I consider you were wrong.'
    c.   ??Eu considero   quem (que) você   deveria   namorar
          I   know.I   who   that you   should   date.INF
    d.   Eu   considero   com   quem você   deveria   se   casar
          I   know.I   with whom you   should   SE   marry.INF

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[7] Note that the verb *considerar* should not be understood as *ter consideração por*. The lexical meaning we are interested in is the meaning *to analyze*.

(65) Eu   quero me   casar com   alguém,   mas   eu   ainda estou
     I   want.I me   marry with   someone,   but   I   still am
     considerando ??(com)   quem
     considering   with   who
     'I want to marry someone, but I am still considering with whom'

In conclusion, the selectional restrictions imposed on the E-site are another line of argument that has been used in favor of the availability of pseudosluicing in BP.

4.2.2. Semantic arguments
It is well-know that clefts trigger presupposition of existence. That is, there exists an entity that satisfies the property denoted by the cleft predicate (Higgins 1973, Rooth 1985, and den Dikken 2013). The sentence in (66), for example, presupposes that there is something that was eaten by Snow White, while stating that this something is an apple.

(66)   It is an apple that Snow White ate

Presupposition of existence is also observed in cases of sluicing with P-omission. Consider (67). While the continuation in (67a) automatically leads to an interpretation according to which there is at least one female friend of João's, who is an assassin, and, thank God, *João* did not say who she is. (67b), on the other hand, is neutral with respect to this presupposition. Hence, in contrast with (67a), (67b) can mean that there is no assassin among João's friends, and, thanks God, João is not crazy enough to name a non-existent friend.

(67)   O   João   está   doido e   fora   de   controle.
        the   J.   is   crazy and   out   of   control
        Na entrevista,   ele falou que   se   casou com uma amiga   assassina
        in.the interveiw, he said that   SE   married with a   friend   assassin-FEM
        Graças a   Deus   que   ele   não falou…
        thanks to   God   that   he   not said
        'João is crazy and out of control. He said that he married an assassin friend, thanks god, he did not say…'

a.   Quem!   (presupposition of existence)
        who
b.   com   quem!   (neutral)
        with   who

The same presupposition is observed in cases with an overt copula, non-elliptical sentences:

(68)   O João está   doido e   fora   de   controle.
        the J. is   crazy and   out   of   control
        Na   entrevista, ele falou que se casou   com uma amiga   assassina
        in.the interview, he said   that SE married with a   friend assassin-FEM

Graças a Deus que ele não falou quem é!
thanks to God that he not said who is
'João is crazy and he is out of control, he said that he married a assassin friend, but, thanks god, he did not say who it is.'

Sloppy *vs.* strict reading of pronouns is another semantic argument given by Rodrigues (2016) in favor of a cleft source for P-deletion under sluicing. While in (69), a case of sluicing with P-retention, the pronoun can receive both a strict and a sloppy reading, in (70), a case of sluicing with P-deletion, the pronoun receives only a strict reading:

(69) Os meninos ficaram bêbados na festa.
the boys got.3PL drunk at.the party
O Pedro não sabe com quem ele dançou,
the P. not knows with who he danced,
mas o João sabe com quem
but the J. knows wth who
'The boys got drunk at the party. Pedro does not know with whom he danced, but João knows with whom.'

= O João sabe com quem o Pedro dançou (Strict reading)
the J. knows with who the P. danced
= O J. sabe com quem o João dançou (Sloppy reading)
the J. knows with who the J. danced

(70) Os meninos ficaram bêbados na festa.
the boys got.3PL drunk at.the party
O Pedro não sabe com quem ele dançou,
the P. not knows with who he danced,
mas o João sabe quem
but the J. knows who
'The boys got drunk at the party. Pedro does not know with whom he danced, but João knows who.'

= O João sabe com quem o Pedro dançou (Strict reading)
the J. knows with who the P. danced
= * O João sabe com quem o João dançou. (Sloppy reading)
the J. knows with who the J. danced

The same effect is attested in copular, non-elliptical sentences:

(71) Os meninos ficaram bêbados na festa.
the boys got.3PL drunk at.the party
O Pedro não sabe com quem ele dançou,
the P. not knows with who he danced,
mas o João sabe quem é

but the J. knows who is
 "The boys got drunk at the party and Pedro does not know who he danced with, but João knows who it is."

In all of these examples, the antecedent clause asserts that Pedro danced with someone, but it does not assert that João danced with someone. Hence, the pronominal reading contrasts shown above might follow from the presupposition of existence characteristic of clefts: If the antecedent clause does not provide us with evidence that there is someone with whom João danced, then this entity cannot be presupposed within an elided cleft. It follows, thus, that, in (70), the pronoun cannot refer to an entity that João danced with, being, thus, forcibly interpreted as referring to Pedro.

4.3. Brazilian Portuguese: Pseudosluing or substantial pseudosluicing?
Given all that we have shown above, some sort of non-regular sluicing seems to obtain in BP. Nevertheless, none of the arguments presented allow us to answer with certainty the question as to whether BP supports substantial pseudosluicing or if BP is simply another case of pseudosluicing in the sense of Merchant (1988). To construct an answer to this question, we might start by investigating whether sentences like (72) can have the intended meaning in (73).

(72) Eu   queria   ir   no   show   do   Nando Reis,
     I   would.like   to.go in.the concert   of.the N.   R.,
     mas   eu   não   sei   exatamente   quando
     but   I   not   know.I exactly   when
(73) Intended meaning: I would like to go to Nando Reis's concert, but I don't exactly when it will be.

To investigate this, an informal pilot test was conducted on *Facebook*. Two videos of a native female speaker of BP uttering (72) were recorded and posted. In the first video, the *wh*-remnant was weakly deaccented, as a way of conveying only uncertainty by the speaker. In the second video, the *wh*-remmant was heavily deaccented, conveying uncertainty and frustration by the speaker. The two videos were presented separately, with an interval of five days between them. Native speakers of BP were invited to see the videos and answer the question in (74), chossing asnwers (a) or/and (b).

(74) O   que que   eu   não   sei?
     what that that   I   not   know.I
     'What is it that I don't not know?'

     a.   Quando   eu   vou   ao   show   do   Nando Reis?
           when   I   go.FUT to.the concert   of.the N.   R.
           'When I will go to Nando Reis's concert?'
     b.   Quando será o   show   do   Nando Reis?
           when   be.FUT the   concert   of.the N.   R.
           'When Nando Reis' concert will be?'

The results reported below indicate that in BP, in contrast with Spanish (see section 3.2, example (37)),[8] allow both readings (a) and (b), and these readings can be more or less salient depending on the intonation placed upon the *wh*-remnant.

Video	Number of Participants (native speakers of BP)	Answer (a)	Answer (b)	Answer (a) & (b)	Other responses[9]
1	74	59.4% (44/74)	13.5% (10/74)	24.3% (18/74)	1,3% (1/74)
2	34	17.6% (6/34)	52.9% (18/34)	26.4% (9/34)	2,9% (1/74)

Although this was just an experimental pilot ran in an informal setting, it clearly shows that the majority of BP speakers assigns the reading in (73) to (72). That is, these speakers attribute an antecedentless interpretation to the elided part of (72). Hence, BP seems to be similar to Japanese in licensing pseudosluicing. Thus, in the end, we are left with the issue we raised at the beginning of the paper. Is there conclusive evidence for SPH? Does BP support the SPH?

As discussed above, cleft questions are common and productive in BP, as examplifued by (40), repeated here as (75):

(75) a. Quem é   que   você viu   na   festa?
          who   is   that   you   saw   in.the party
          'Who did you see at the party?
      b. O   que   é   que   você está   comendo?
          what that is   that   you   are   eating
          'What are you eating?'

Although, on the basis of (75), we acknowledge the possibility BP being similar Malagasy, we observe, nevertheless, that cases of P-deletion under sluicing are arguably not derived from cleft questions, as P-deletion is not licensed in this type of cleft, as shown by the ungrammatically of the data in (76).[10] In addition, it is unclear how an analysis based on cleft questions would explain the occurrence of antecedentless sluicing.

(76) a. *Quem é   que   você dançou   na   festa?
          who   is   that   you   danced   in.the party
      b. *Quem   é   que   você sonhou   ontem   à   noite?

---

[8] Interestingly, one native speaker of Argentinian Spanish, who lives in Brazil for a long time, participated in the experiment. For both videos, she chose answer (a). This makes evident the different between Spanish and BP we are reporting here.

[9] One participant judged the uttered sentences of both videos as ungrammatical.

[10] An observation is in order here: maybe (76) is considered acceptable for some speakers of BP (we haven't check its acceptability on a large scale). However, our observation is valid for at least some speakers. We consulted five native speakers and, although they all accepted P-omission under sluicing, none of them accepted P-omission under cleft questions (e.g. (76)). Hence, at least for these speakers a cleft question is not the underlying structure in cases of sluicing with p-omission.

who   is   that   you   dreamed   yesterday   at.the night

Another idiosyncrasy of BP relevant to our discussion is allowance copula omission in certain structural contexts such as free small clauses, (75 - Kato 2007, Sibaldo 2013) and specificiational wh-questions (76 - Barros, forthcoming). While Kato and Sibaldo propose this reflects the existence of a zero copula in the language, Barros suggests that both (77) and (78) are derived by movement of a post-copula small clause to left periphery, followed by TP ellipsis/sluicing, as represented in (79).

(77)   Muito bonita   essa casa! '
       very   beautiful this house
       'What a beautiful house!

(78)   Qual   o   melhor jogador da   Argentina?
       which the   best   player of.the Argentina
       'Which is the best player of Argentina?'

(79)   a. $[_{CP} [_{SC}$ inteligente esse menino$]_1 [_{C'}$ C^0 $[_{TP}$ é́ t_1]]]
                    intelligent this   boy   is
       b. $[_{CP} [_{SC}$ qual o melhor sabor de sorvete$]_1 [_{C'}$ C^0 $[_{TP}$ é́ t_1]]]

The availability of copula omission in BP strengthens the similarities between BP and Japanese, suggesting the occurrence of pseudosluicing in BP as well. If so, the elided part of sentences containing p-less wh-remmants might be as represented in (78). Notice that BP is a partial null subject language, which licenses null expletives (Rodrigues, 2004). This explain why BP allows antedecentless sluicing.

(78   O João   dancou com alguém,   mas eu não sei $[_{CP}$ quem$_1[_{C'}$ C^0 $[_{TP}$ pro$_{expl}$ [T' (é) [t_1]]]]]
      the João danced with someone but I not know who   is
      'João danced with someone but I don't know who it is.'

The copula in (78) is only optionally omitted. Also, for some speakers, wh-movement is not obligatory, with the wh-phrase being spell-out in a post-copula position.

(79)   O   João dancou com alguém,   mas eu não sei   quem é
       the João danced with someone but I not know   who is

(80)   O   João dancou com alguém,   mas eu não sei   é quem
       the João danced with someone but I not know is who
       'João danced with someone but I don't know who it is.'

We will not discuss the mechanism responsible for copula omission in BP (insertion of a zero copula or TP-ellipsis). Whatever it is, the data presented above indicate that it is operative in cases like (72) and (78). If this right, the cleft analysis put forward by

Rodrigues *et al* (2009) is incorrect, assigning too much structure to the elided TP. In conclusion, BP does not offer evidence in favor of the SPH.

5.   Conclusion

No robust semantic or syntactic arguments force us to accept the Substantial Pseudosluicing Hypothesis, as presented in several recent studies. An important implication of the present study is that P-omission is not an authoritative way of testing the SPH. BP and Spanish are arguably the most studied languages with respect to P-omission under sluicing, and, as we have shown above, it is by no means clear that in these two languages P-omission is reliable evidence of substantial pseudosluicing. If we are on the right track (and subject, as always, to any new evidence that may be revealed in future studies), it seems that a proper theory of the identity in ellipsis can (and perhaps must) be constructed without reference to this type of non-isomorphic constructions.

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