CLEAVING THE INTERACTIONS BETWEEN SLUICING AND P-STRANDING

CILENE RODRIGUES, ANDREW NEVINS, and LUIS VICENTE

Unicamp, Harvard University, and UC Santa Cruz

Merchant (2001) proposes that preposition stranding under sluicing is allowed only in those languages that also allow P-stranding in regular wh- questions. Spanish and Brazilian Portuguese (BP) seem to falsify this generalization, as both are non-P-stranding languages that allow P-stranding under sluicing. Our claim is that, despite initial appearances, Spanish and BP do not constitute counterexamples to Merchant's generalization. We propose that there are two sources of sluicing in Romance: wh-movement plus IP-deletion (Merchant 2001), and clefting plus IP deletion (Merchant 1998), the latter being the underlying source for P-stranding sluicing. The apparent P-stranding effect follows from the fact that, as opposed to regular interrogatives, clefts in BP and Spanish do not involve P-stranding at all. We reinforce this conclusion by showing that, in those cases where a cleft base is independently banned, P-stranding under sluicing becomes impossible too.

1.   *Introduction*

Merchant (2001) argues that sluicing involves wh- movement plus IP deletion:

(1)   John met someone, but I don't know [$_{CP}$ who [$_{IP}$ ~~John met~~ t]]

Considering how this analysis of sluicing interacts with preposition stranding, Merchant (2001:92) posits the following cross-linguistic generalization:

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

Although Merchant provides data from many languages in support of (2), recent research has uncovered cases of non-P-stranding languages that, nonetheless, do allow P-stranding under sluicing.[1] In this article, we focus on two languages that display this tension, namely, Spanish and Brazilian Portuguese (BP). As far as

---

[1] See, for instance, Hartman (2005) for Finnish, Szczegielniak (2006) for Polish, Stjepanovic (2006) for Serbo-Croatian, and Fortin (2007) for Indonesian. The appendix contains additional data we have collected in French.

we know, this is the first time the interaction of sluicing and P-stranding is analyzed in Spanish. As for BP, this interaction was noticed first by Almeida & Yoshida (2007), who take it as evidence against the generalization in (2). Here, we re-examine Almeida & Yoshida's findings, through a comparison of BP and Spanish, and advance an analysis contrary to their claim. We suggest that BP and Spanish have two independent sources of IP deletion: sluicing and pseudosluicing/clefts. Our conclusion is that deletion that involves P-stranding is in fact deletion of a clefted IP whose pivot has wh- moved. Indeed, as Merchant (2001:101,fn11) remarks, in "languages without overt morphological cases, we may be dealing with a truncation of something like '...*who it is*'". In addition to a wh- pivot and copular verb, we suggest that the cleft also may contain a postcopular relative clause in which the preposition is pied-piped by a relative pronoun.

2.   *Sluicing with P-stranding in Spanish and BP*

Merchant (2001) provides the paradigm in (3) for Spanish, with judgments as indicated (*: ungrammatical, ??: marginal/questionable status).

(3)   a * ¿Quién ha   hablado Juan con?
                who   has talked   Juan with
       b. ?? Juan ha hablado con alguien, pero no sé   quién.
              Juan has talked   with someone but   not know who

Merchant's claim is that the ungrammaticality of (3) supports the generalization in (2), but the issue is not so clear. For one, there is a difference in acceptability between (3a) and (3b): while Merchant notates (3a) as unacceptable, (3b) is indicated as only marginal. If P-stranding violations were really unaffected by sluicing, then one would expect (3b) to be as bad as (3a). In addition, the judgement reported in (3b) does not hold among all Spanish speakers. Several speakers of Peninsular Spanish consider (3b) to be only slightly marginal, and some of them report total acceptability. Consider, furthermore, examples such as (4b), where the wh- expression is the D(iscourse)-linked phrase *cuál* 'which'. Such examples are acceptable for everybody we have consulted so far, even though their non-elliptical counterparts (4a) are totally ungrammatical.

(4)   a. * ¿Qué chica ha hablado Juan con?
                what girl   has talked   Juan with
       b.   Juan ha hablado con una chica, pero no sé   cuál.
              Juan has talked   with a   girl   but not know which

Even though Merchant does not include BP in his corpus, the same contrast can be found in this language: while P-stranding is not allowed under regular wh-movement (5a), it is grammatical when the IP is elided (5b).

(5) a. * Quem que a Maria dançou com?
    who that the Maria danced with

    b. A Maria dançou com alguém, mas eu não sei quem
    the Maria danced with someone but I not know who

Thus, at first sight, one may conclude that the Spanish and BP falsify Merchant's P-stranding generalization in (2). However, we will demonstrate in what follows that this conclusion is incorrect, and that Merchant's generalization does in fact hold for the languages under discussion. We will show that apparent counter-examples, such as the ones presented above, do not stem from sluicing, *qua* a construction involving wh-movement plus IP deletion as in (1). Rather, they 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).[2] Our claim is that BP and Spanish have two sources of IP deletion: sluicing and pseudo-sluicing. However, only pseudo-sluicing 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.

3. *The proposal*

As mentioned above, we propose that grammatical cases of P-stranding under sluicing stem from an alternative source, one which is different from a regular interrogative. We propose a cleft based on a specificational copular sentence, as illustrated in (6a). The elided part of the structure is an IP, composed of a copula followed by a DP that is modified by a relative clause. Thus, since the subject of the copula (i.e., the pivot of the cleft) is not introduced by a preposition, ellipsis of the verb and the predicate yields the illusion of P-stranding. Crucially, though, this derivation does *not* involve P-stranding. As shown below, the proposition appears accompanying the head noun of the relative clause, since deletion targets everything inside the IP domain, the preposition is deleted.

---

[2] Strictly speaking, our analysis of cases of sluicing as constituted by an underlying cleft are not "pseudo-sluicing" in the sense of Merchant (1998), who analyzes instances of copula drop in Japanese. Kizu (2000) analyzes sentences such as (i), in which the copula is optional, as constituted by an underlying cleft:

(i) Dareka-ga sono hon-o yon-da rashii ga, watashi-wa dare (da) ka wakaranai
    someone that book read.PST I.heard but I.TOP who is Q don't-know

See van Craenenbroeck (2004:90-92, 2007) and Sáez (2006) for a comparison of pseudosluicing – in the sense of Merchant (1998) – with cleft-based sluicing, which we continue to call pseudo-sluicing here.

(6)   Juan ha   hablado con una chica…
       Juan has talked   with a   girl
       a.   pero no sé   cuál es la chica con la   que ha hablado Juan
             but   not know which is the girl   with the that has talked Juan
       b.   pero no sé   [CP cuál [IP es [DP la — chica [RC con la que ha
             but   not know   which is   the — girl   with the that has
             ha — hablado Juan]]]]
             has talked   Juan

As in Spanish, we propose that the input to P-stranding sluicing in Standard BP is
also a cleft containing a specificational copular sentence, in which the copular
verb is followed by a DP containing a restrictive relative clause. Consider as an
example, (7a), which is the Standard BP counterpart of (6a):

(7)   O João falou com una menina…
       the João talked with a   girl
       a.   mas eu não sei   qual é a menina com a qual   João falou
             but I not know which is the girl   with the which Joã   talked
       b.   mas eu não sei   [CP qual   [IP é [DP a — menina [DP com a — qual
             but I not know   which is   the — girl   with the which
             João — falou]]]
             João talked

At this point it is important to observe that in both BP (8a) and Spanish (8b), the
copular verb within the elided cleft may escape deletion, when marked with a
certain level of stress. We take the admissibility of an overt copula as initial
evidence for a pseudosluicing analysis.[3]

(8)   a.   O João está saindo   com alguém, mas eu não sei   quem É
             the João is   going.out with someone but I not know who is
       b.   Juan está saliendo con una chica, pero no sé   qué chica ES
             Juan is   going.out with a   girl, but not know what girl   is

In this way, we can derive apparent P-stranding effects while preserving the gener-
alization in (2). However, the licensing conditions on this ellipsis will have to be
semantic, rather than syntactic, a conclusion that independently supports approaches
like Merchant (2001) and especially Potsdam (2007), who argues that sluicing as
accomplished by wh-movement from a non-isomorphic underlying structure
(namely a pseudocleft, in Malagasy) supports a semantic identity condition for
sluicing. Let us now turn to independent evidence favoring the proposed analysis.

---

[3] Almeida & Yoshida (2007) argue against a clefting analysis on the grounds that the copula
cannot be retained in sluicing, but subsequently note that the acceptability improves when the
copula is stressed relative to the wh-word (cf. their (14e) vs. (14f)), even when P-stranding is not
at issue (their (15b) vs. (15c)). These observations follow from the fact that BP (like other
Romance languages observing Cinque's 1993 Nuclear Stress Rule) requires nuclear stress on the
most deeply embedded overt constituent, which is the copula, not the wh- that precedes it.

4.   *Support for the analysis*

4.1   *Multiple sluicing and P-stranding*
Both Spanish (9a) and BP (9b) allow for multiple sluicing, a phenomenon whose relevance for underlying cleft analyses is discussed in van Craenenbroeck (2004:23).

(9)   a.   Un estudiante ha leído un libro de Chomsky, pero no sé
              a   student   has read a   book by Chomsky but not know
              qué   estudiante qué   libro
              what student   what book
       b.   O João deu algo   para alguém, mas eu não sei   o   que
              the João gave something for someone but I not know the what
              para quem
              for who

Interestingly, however, preposition deletion is not possible under multiple sluicing, as shown in (10) and (11). Notice that it does not matter whether it is only the first preposition that is omitted, only the second one, or both: the result is always unacceptable. This is clearly unexpected if the ban on P-stranding is a PF constraint that is avoided only under sluicing by eliding the locus of the violation (as proposed by Almeida & Yoshida 2007). The examples in (10) exemplify cases in which only one of the wh- phrases is a PP, while in (11) we show cases in which both wh- phrases are PPs. In multiple sluicing, the preposition(s) are obligatory.

(10)   a.   Ella compró algo   para alguien, pero no sé   qué
              she bought something for   someone but   not know what
              (*para) quién
              for   who
       b.   Ela comprou alguma coisa para alguém, mas eu não sei
              she bought   some   thing for   someone but I not know
              o   que *(para) quem
              the what   for who

(11)   a.   Ella habló con alguien sobre algo,   pero no sé
              she talked with someone about something but not know
              *(con) quién *(sobre) qué
                with who   about what
       b.   Ela falou sobre alguma coisa para alguém, mas eu não sei
              she talked about some   thing to   someone but I not know
              *(sobre) o   que *(para) quem
                about the what to   who

Given our proposal that P-stranding sluicings stem from underlying clefts, it is tempting to try and attribute the ungrammaticality of these examples to the fact that pivots of clefts cannot accommodate more than one constituent (12).

(12) a. * No recuerdo [qué   chica] [qué restaurante] es la chica con
              not remember what girl   what restaurant   is the girl   with
              la que ha   cenado Juan
              which has dined   Juan
       b. * Eu não me lembro   o   que quem é que é a   coisa e
              I   not CL remember the what whom is that is the thing and
              a pessoa   que a   Jú falou
              the person that the Jú talked

Nonetheless, this analysis is unlikely to provide the full answer. As pointed out to us by Jeremy Hartman (personal communication), even in English (where P-stranding is independently allowed), omission of the preposition of the second wh-phrase is impossible (13). In other words, under multiple sluicing, the ban on deleting prepositions applies even in real cases of sluicing.

(13) Peter talked about something to somebody, but I can't remember (about) what *(to) whom.

It is quite telling that it is only the second wh- phrase in (13) that disallows P-stranding. This fact suggests that multiple sluicing is not an exceptional case of multiple wh-fronting (cf. Merchant 2001 and Richards 2001 for suggestions to this effect). Rather, following Lasnik (2006), we propose to analyze (13) as regular single wh-fronting plus rightward extraposition of the second wh- phrase, followed by IP deletion:

(14)   …but I can't remember [$_{CP}$ what [$_{IP}$ Peter talked [about t] [t]] [to who]].

Lasnik supports this analysis by showing that the second wh- phrase in cases of multiple sluicing respects the usual constraints on rightward extraposition (cf. Ross 1967). To begin with, the ungrammaticality of (13) can be directly explained as a consequence of the ban on P-stranding in cases of rightward movement.

(15) * Peter talked [$_{PP}$ about t] yesterday [a paper on sluicing].

Second, rightward extraposition obeys the Right Roof Constraint, which bans rightward movement from crossing a finite clause boundary. Consider (16), where the second wh-phrase (which belongs to the embedded clause) cannot extrapose all the way to the matrix domain.[4]

---

[4] Note that, if both wh-phrases are generated in the lower clause, multiple sluicing is reasonably acceptable – cf. (i). Lasnik argues this is because the elided structure is monoclausal: the upper clause is "accommodated" outside syntax, and the Right-Roof constraint is respected. We avoid

(16) * Some students said that Mary will speak to some professors, but I can't
          remember which students [IP said [CP that Mary will speak *t*]] to which
          professors.

Spanish and Brazilian Portuguese show the same behavior as English. First,
rightward extraposition is freely available:

(17) a.   Juan leyó un libro de Borges ayer
            Juan read a   book by Borges yesterday
      b.   Juan leyó ayer   un libro de Borges
            Juan read yesterday a   book by Borges

(18) a.   O João leu um livro do Machado ontem
            the João read a   book by Machado yesterday
      b.   O João leu ontem   um livro do Machado
            the João read yesterday a   book by Machado

In the same way as in English, rightward extraposition in Spanish and BP respects
the ban on P-stranding and the Right Roof Constraint.

(19) a. * María habló [PP sobre ____] ayer   [un libro de Borges]
             María talked   about   yesterday a book by Borges
      b. * Juan dijo [CP que María va a leer ____] ayer   [un libro de Borges]
             Juan said   that María will read   yesterday a book by Borges

(20) a. * O João falou [PP sobre ___] ontem   [um livro do Machado]
             the João talked   about   yesterday a book by Machado
      b. * A Lú disse [CP que o João vai ler ___] ontem   [um libro
             the Lú said   that the João will read   yesterday a   book
             do Machado]
             by Machado

We have seen in (10) and (11) above that both Spanish and BP behave in the same
way as English (13) in not allowing P-stranding with the second wh- phrase,
which suggests that Lasnik's extraposition analysis can also be extended to these
two languages. This conclusion is reinforced by the data below, which are
analogous to (16) and show that the Right Roof Constraint prevents the second
wh- phrase from originating in an embedded clause. Note, furthermore, that there
is no P-stranding in (21), hence its ungrammaticality can only be attributed to a
Right Roof Constraint violation.

---

this complication by considering only monoclausal examples or examples where each wh- is
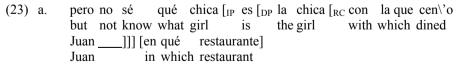generated in a different clause.

(i) ? Peter said that some students will talk to some professors, but I can't remember which
        students to which professors.

(21) a. * Unos estudiantes dijeron que Juan va a hablar con un profesor,
            some students   said   that Juan will talk   with a professor
            pero no recuerdo   qué   estudiantes con qué profesor
            but not remember what students   with what professor
     b. * Uns alunos   disseram que Jú vai falar com um professor,
            some students said   that Jú will talk with a   professor
            mas eu não me lembro   quais alunos   com qual professor
            but I   not CL remember which students with what professor

Thus, we conclude that multiple sluicing involves right extraposition of the
second wh-phrase in English as well as in Spanish and Brazilian Portuguese.
However, multiple sluicing in English differs from its counterpart in Spanish and
Brazilian Portuguese with respect to the first wh-phrase: while English forbids P-
stranding only in the second wh-phrase (13), Spanish and Brazilian Portuguese
forbid it on both wh- phrases. This was exemplified above in (11); another
example is provided below.

(22) a.   Juan cenó con una chica en un restaurante italiano, pero no
            Juan dined with a girl in a restaurant Italian   but not
            recuerdo *(con) qué chica *(en) qué restaurante.
            remember with what girl   in what restaurant
     b.   A Jú jantou com um rapaz num restaurante, mas eu não me
            the Jú dined with a guy in a restaurant but I not CL
            lembro   *(com) qual rapaz *(em) qual restaurante
            remember   with which guy   in which restaurant

The pseudo-sluicing analysis we are proposing explains the ungrammaticality of
(11) and (22). P-stranding on the second wh- is banned simply because, as in
English, rightward extraposition is incompatible with P-stranding. What about P-
stranding in the first wh- phrase? Suppose that we created a cleft to license P-
stranding in the first wh-. Given that clefts are bi-clausal structures, the second
wh- could only survive ellipsis if it moved out of the embedded relative clause.
This, however, would violate the Right Roof Constraint. We submit, therefore,
that the ungrammaticality of such examples is not due to P-stranding constraints,
but rather to an illicit movement of the second wh- phrase.[5]

(23) a.   pero no sé   qué chica [IP es [DP la chica [RC con la que cen\'o
            but not know what girl   is   the girl   with which dined
            Juan ____]]] [en qué   restaurante]
            Juan   in which restaurant

---

[5] Note that, on top of the Right Roof Constraint, the second wh- phrase also incurs a potential island
violation (extraction out of a relative clause). However, it is unlikely that this is a problem, given the
discussion of island repair in Merchant (2001). What is crucial for us, though, is that Right Roof
Constraint violations cannot be repaired by ellipsis. This is evidenced by the ungrammaticality of
(16) and (21), where there are no island or P-stranding factors that could contribute to their
unacceptability.

b.   mas eu não me lembro   qual rapaz [$_{IP}$ é [$_{DP}$ o   rapaz [$_{RC}$ com
      but I not CL remember which guy   is   the guy   with
      quem a   Jú jantou _]]] [em qual   restaurante]
      which the Jú dined   in which restaurant

In sum, the lack of P-stranding in multiple sluicing in Spanish and Brazilian
Portuguese follows from the biclausal nature of the cleft structures that form the
source of these examples. In order to license multiple sluicing at all, wh-
movement of the 1st wh- plus rightward extraposition of the 2nd wh- are needed,
neither of which license P-stranding.

4.2   'Else' modification
Merchant (2001:122) uses *else* modification (24a) to argue against a clefting
analysis of sluicing in English. He points out that *else* modification is not possible
with clefts (24b), but it is possible with regular interrogatives (24c). Hence, he
concludes that the elided substructure in (24a) is not a cleft, but a regular
interrogative.[6]

(24) a.   Harry was there, but I don't know who else.
      b.   …but I don't know who *(else) it was that was there.
      c.   …but I don't know who else was there.

Therefore, given our analysis, we would expect *else* modification to be impossible
in Spanish and BP sluices displaying P-stranding effects. Somewhat unexpec-
tedly, though, this prediction is not correct for BP.

(25) O João saiu   com a Maria mas eu não sei   quem mais.
      the João went.out with the Maria but I not know who else

This, however, is not a counterexample to our analysis. As shown in (26), BP
allows *else* modification in clefts. Therefore, the grammaticality of (25) is
compatible with a cleft analysis of P-stranding sluicing.[7]

---

[6] However, it might be important to observe that examples like (i) are available on the internet,
which suggests that some speakers of English do allow clefts with *else* modification.

   (i) I'd like to know what else it was that Clyde Tombaugh was looking for when he found it.
        (http://www.bautforum.com/archive/index.php/t-1762.html)
[7] Notice that Almeida & Yoshida (2007) present the sentence in (i) as ungrammatical, arguing that
BP does not allow *else* modification in clefts.

   (i) O Pedro estava aqui, mas eu não sei   quem mais *(é).
        the Pedro was   here but I not know who else   is

However, our example (26) shows that *else* modification in clefts is possible in certain contexts in
BP. As an anonymous reviewer points out, the acceptability of *else* modification may be mediated
by the presence of a postcopular constituent: notice that, in (26), there is a postcopular constituent,
in the same way as in the English example in this footnote.

(26)   Me fala quem mais é que você quer convidar para sua   festa.
         CL tell who else is that you want invite   to   your party

In Spanish, on the other hand, P-stranding sluices are incompatible with *else*
modification (27a). Similarly, *else* modification is impossible in clefts (27b), but
allowed in regular interrogatives (27c). This shows that P-stranding sluices in this
language stem from an underlying cleft.

(27) a.   Juan ha hablado con una chica rubia, pero no sé   *(con)
            Juan has talked with a   girl blonde but not know   with
            qué   chica más
            what girl   else
      b. * No sé   qué   chica más es la   chica con la que ha hablado Juan.
            not know what girl   else is the girl with which has talked   Juan
      c.   ¿Con qué   chica más ha hablado Juan?
             with what girl   else has talked   Juan

Given the parallelisms above, it is quite reasonable to assume that P-stranding
sluices stem not from regular interrogatives, but from clefts. Spanish and BP
independently have different restrictions on else-modification in clefts, that pattern
along with their corresponding P-stranding sluices. This difference is arguably due
to the fact that clefts do not impose an exhaustivity restriction in BP, as negative
quantifiers can serve as their pivots, in contrast to Spanish and English:

(28) a.   Não foi ninguém que bateu   na   porta
            not was nobody   that knocked on.the door
      b. * No fue nadie   que golpeó en la puerta
            not was nobody that knocked on the door
      c. * It was nobody that knocked on the door.

In sum, the (un)availability of *else* modification in Spanish and BP sluicings
pattern exactly with clefts, and this difference is arguably related to the bleached
nature of clefts in the latter.

4.3 *Aggressively non-D-linked wh-phrases*
Another diagnostic that Merchant (2001:123) uses to tease sluicing and pseudo-
sluicing apart is the licensing of aggressively non-D-linked (*the hell*) wh-phrases
such as *what the hell, who the f**k, when the devil, que diabos, qué ostia, quién
cojones*, or *que porra*. As the disribution and dependency of these phrases has
been linked to polarity items (den Dikken & Giannakidou 2002), and as their
expressive content involves either religion or reproduction (see Pinker 2007 for
discussion of why these topics might accompany expressive language), we
henceforth refer to such phrases as *RPI*s. Merchant offers the paradigm in (29) to
illustrate that while RPIs cannot occur in sluicing, they are perfect as pivots of
clefts, being thus allowed in pseudosluicing:

(29) Someone dented my car last night.
     a. * I wish I knew who the hell!
     b.   I wish I knew who the hell it was!

Almeida & Yoshida (2007) apply this diagnosis to BP in order to argue against a pseudosluicing analysis of IP deletion with P-stranding effects. As they observe, BP is similar to English in that RPIs (such as *que porra* in BP and *quién cojones* in Spanish) are perfect cleft pivots (30), but are not allowed in syntactic contexts involving IP deletion with P-stranding (31).[8]

(30) a.   Que porra é que a   Maria viu?
           what f**k is that the Maria saw
     b.   ¿Quién cojones es la   persona a la que ha visto María?
            who   testicles is the person   to which has seen María

(31) a. * A Maria tá gostando de alguma coisa naquela casa,   mas eu
           the Maria is liking   of some   thing in.that   house but I
           ainda não sei   que porra!
           yet   not know what f**k
     b. * María ha salido   con alguien, pero no sé   quién cojones
           María has gone.out with someone but not know who testicles

We would like to point out, however, that the unacceptability of (31) might not constitute strong evidence against a pseudosluicing analysis of IP deletion with P-stranding effects in BP and Spanish. To begin with, note that these examples are ungrammatical even if the preposition is not omitted.[9]

(32) a. * A Maria tá gostando de alguma coisa naquela casa,   mas eu
           the Maria is liking   of some   thing in.that   house but I
           ainda não sei   de que porra!
           yet   not know of what f**k
     b. * María ha salido   con alguien, pero no sé   con quién cojones
           María has gone.out with someone but not know with who testicles

Moreover, as shown in (33), *the hell* wh-phrases are compatible with pseudo-sluicing as long as the copular verb is not deleted. Notice that, as mentioned in section 3, the copular verb receives stress.

(33) a.   A Maria tá gostando de alguma coisa naquela casa,   mas eu
           the Maria is liking   of some   thing in.that   house but I
           ainda não sei   que porra É!
           yet   not know what f**k is

---

[8] Note that *a* in (30b) is not a preposition, but a differential case marker (cf. Torrego 1998, Cuervo 2003).
[9] Sáez (2006) is the first to note this for Spanish.

b. * María ha salido   con alguien, pero no sé   quién cojones ES
    María has gone.out with someone but   not know who testicles is

These facts are somewhat similar to the observation in Merchant (2002) that English disallows *the hell* wh- phrases in regular cases of sluicing (29a)/(34a) while allowing it when swiping occurs (34b). Merchant also notes that in swiping the preposition carries some level of stress.

(34) a. * They were arguing, but I don't know about what the hell.
     b.   They were arguing, but I don't know what the hell *about*.

Following the theory of Gussenhoven (1984) for the placement of sentence accents in English, Sprouse (2006) argues that the contrast between regular sluicing (29a)/(34a) and swiping (34b) with respect to RPI-licensing results from a combination of following phonological facts:

(35) a. Each focus domain must receive its own sentence accent (in accordance with Gussenhoven's Accent Projection Principle).
     b. Displaced wh-words form their own focus domain.
     c. The non-focused material that follows the wh-word is involved in the nearest focus domain.
     d. RPI expressions like *the hell* are not allowed to have an accent, as only an argument, a predicate or a preposition can bear accent (in accordance with Gussenhoven's Sentence Accent Assignment Rule).

Thus, applying (35), IP deletion gives us the following possible accented focus domains.[10]

(36) a.   …[but I don't know][**what**]
     b. * …[but I don't know][**what**][**the hell**]
     c.   …[but I don't know][**what**][**about**]
     d.   …[but I don't know][**what**][the hell **about**]

As required by (35a) and (35b), the wh-word in (36a) forms a focus domain, thus receiving an accent. (36c) and (36d) are cases of swiping, in which the wh-word receives its accent and material that follows it forms another focus domain receiving its own accent. In (36d), the *the hell* phrase is not accented because its syntactic status does not satisfy the Sentence Accent Rule (35d). The ungrammaticality of (36b) follows from a combination of the constraints in (35).

Turning now to BP and Spanish, let us assume that sentence accents in these languages are also subject to the constraints presented in (35). This allows us to derive the fact that RPIs are not allowed in cases of pseudo-sluicing unless

---

[10] We concentrate on the wh-word and the constituent that follows it, putting aside the accents of other constituents.

they are followed by some material, such as the copula.[11] Thus, (37) and (38), which are cases of pseudo-sluicing in BP and Spanish, are parallel to (36). In the same way as (36b), (37b) and (38b) are blocked by a combination of all the constraints in (35).

(37) a.   [mas eu não sei]   [o   **que**]
                   but I   not know the what
       b. * [mas eu não sei]   [**que**] [**porra**]
                   but I   not know   what f**k
       c.   [mas eu não sei]   [**que**] [porra **é**]
                   but I   not know   what f**k is

(38) a.   [pero no sé]   [**qué**]
                   but   not know what
       b. * [pero no sé]   [**qué**] [**cojones**]
                   but   not know   what testicles
       c.   [pero no   sé]   [**qué**] [cojones **es**]
                   but   not know   what testicles is

In sum, the non-licensing of RPIs in P-strading sluices in BP and Spanish should not be taken as an argument against a pseudo-sluicing analysis. As we have shown, this type of wh-phrase is disallowed only when everything but wh-the-hell phrase survives deletion. We have argued that his may follow from the fact that, due to restrictions on sentential accents, an RPI (such as *the hell* in English, *que porra* in BP, or *qué cojones* in Spanish) cannot be the last overt element prior to an ellipsis site.

4.4 *Complementizers under sluicing*
In BP, the complementizer *que* 'that' can appear in structures in which a wh-phrase occupies the spec of CP, as shown in (39):

(39) Quem que vôce viu?
        who   that you   saw

Our next argument for a clefting source of P-stranding under sluicing in BP relates to the presence of this complementizer in sluiced structures.[12] As shown in (40), in some dialects of this language, *que* can appear in a P-stranding sluiced clause (see Merchant 2001:74-82 for discussion of complementizer retention in ellipsis as related to prosodic cliticization).

---

[11] Unfortunately, neither BP nor Spanish allow swiping, thus we cannot test if a following preposition is also able to license *the hell* wh-phrases.
[12] Complementizer retention of this sort is routinely used in Southern-Central dialects of Brazilian Portuguese. We thank Paulo Medeiros for assistance in these judgments.

(40) a.   O João falou com alguém.
                the João talked with someone
      b.   Será   (com) quem que?
              will.be with   who   that

The retained complementizer, unlike the wh- word for 'what', undergoes
obligatory vowel reduction in these contexts, and induces nasal place assimilation,
both of which are evidence that its cliticizes and forms a prosodic word with the
element to its left, yielding [kẽŋki] for *quem que*. This encliticization of a
complementizer under ellipsis is not unique to wh- clefts, and occurs under finite
forms of the verb *ter* 'to have', wherein *tem que* surfaces as [tẽŋki]:

(41) O   João não quer fazer isso, mas ele tem que [fazer isso]
      the João not wants to.do this, but he has that   to.do this
      'John doesn't want to do this, but he has to'

We propose that examples like (39) are clefts, which entails that (41) is a case of
pseudo-sluicing. (The preposition *com* is optional in (41) because PPs can be the
pivots of clefts.) As we argue throughout this paper, there are two sources of
sluicing in Spanish and BP: one is regular wh- movement plus IP deletion (that
is, cases of "proper" sluicing), while the other is pseudosluicing, with deletion
of a cleft consisting of a copula and predicate. We argue that *que* in (40b) cannot
be related to an underlying regular interrogative, as it allows P-stranding.
Rather, it must be part of an underlying cleft. This is therefore an instance of
retention of the complementizer in sluicing. Under this analysis, (40b) receives
the following parse.[13]

(42) Será   quem que [IP é a pessoa com a   qual o   João falou]
      will.be   who   that   is the person with the who the João spoke

Since the complementizer can be retained under pseudo-sluicing, an RPI may now
appear, given that it has prosodic support to its right:

(43) O João comeu alguma coisa estragada, mas eu náo sei   que   porra
      the John ate   some   thing rotten,   but I not know what f**k
      que!
      that

---

[13] Van Craenenbroeck (2004) contains an extensive analysis of a similar construction in Dutch, in
which *da* 'that' survives sluicing along with the wh- phrase. In the same way as we do, he takes
this fact as evidence in favor of an underlying cleft. Although the conclusion is the same, it should
be noted that the Dutch data are somewhat different from BP, in that *da* is not a complementizer,
but a demonstrative pronoun; see van Craenenbroeck (2004:14-16) for justification.

The hypothesis that complementizer retention in sluicing diagnoses an underlying cleft is supported by the fact that *que* cannot follow both wh- words in cases of multiple sluicing:

(44) a.   A Lú deu algumas coisas para algumas pessoas.
           the Lú gave some   things for   some   people
     b.   Eu sei o   que para quem (*que)
           I   know the what for who   that

Our analysis correctly predicts that complementizer retention should be possible within multiple sluicing only when the second wh- phrase follows the complementizer. This is because, as discused in 4.1, the second wh- phrase is extraposed to the right, hence it must necessarily follow *que*.[14]

(45) a.   O Paulo deu algo   para alguem, mas eu não sei   o   que
           the Paulo gave something for someone but I   not know the what
           que para quem.
           that for   who
     b. * O Paulo deu algo   para alguem, mas eu não sei   o   que
           the Paulo gave something for someone but I   not know the what
           para quem que.
           for who   that
     c.   mas eu não sei o que que [é̶ ̶q̶u̶e̶ ̶o̶ ̶P̶a̶u̶l̶o̶ ̶d̶e̶u̶ *t*][*t*] [para quem]

In summary, the fact that complementizer-retaining sluicing allows apparent P-stranding is explained by an underlying cleft analysis, which in turn correctly predicts the distribution of multiple sluicing in these configurations.

4.5   *Split questions*
Arregi (2007) examines the phenomenon of split questions in Spanish, in which the answer to the question is apparently added to the question itself as a tag.

(46) ¿Qué libro ha leído Juan, *Guerra y   Paz*?
        what book has read Juan War   and Peace

Arregi shows that examples like (46) are actually composed of two syntactically independent sentences. The first one is regular wh- question, whereas the second one is a yes-no question that undergoes clausal ellipsis (stripping). Arregi's analysis is schematized in (47), reflecting the assumption that stripping also requires movement to the left periphery prior to ellipsis (Merchant 2004). We will assume that this analysis can also be extended to BP.

---

[14] It should be recalled in (44) that *que* 'what' does not undergo vowel reduction, surfacing as [ke], while *que* (the complementizer) must undergo vowel reduction and surface as [ki].

(47) ¿Qué libro ha leído Juan? ¿[*Guerra y   Paz*]ᵢ [~~ha leído Juan~~ t]?
          what book has read Juan   War   and Peace has read Juan

When the tag of a split question is a PP, we find the following pattern: if the first sentence is a regular wh- question, then the preposition in the tag cannot be dropped.

(48) a.   ¿Con qué chica ha salido   Juan, *(con) Elena?
               with what girl has gone.out Juan   with Elena
      b.   Com qual menina ele saiu,   *(com) a   Elena?
               with what girl   he went.out   with the Elena

However, if the first sentence is a cleft-based question, then the preposition in the tag must be omitted.

(49) a.   ¿Cuál es la chica con la que ha salido   Juan, (*con) Elena?
               which is the girl with which has gone.out Juan   with Elena
      b.   Qual é a menina com quem ele saiu,   (*com) a   Elena?
               which is the girl   with who he went.out   with the Elena

This paradigm follows from the assumption that ellipsis in the tag is licensed under parallelism with the antecedent. Thus, if the antecedent is a regular (non-cleft) wh- question, then the tag must also have a non-cleft structure. This blocks P-stranding. On the other hand, if the antecedent is a cleft, then the tag must also be a cleft, licensing P-stranding.

5.   *Refining aspects of the analysis: Empty-Headed and Free Relatives*

Thus far, we have seen that there are good reasons to treat IP deletion plus P-stranding effects as being derived from an underlying cleft. However, Spanish and BP show subtle differences that suggest they differ in the way in which this cleft is syntactically composed.

5.1   *Types of wh- pivots in Spanish*
We have seen that P-stranding sluices in Spanish are derived from a copular sentences. However, this hypothesis needs some refining, as not every copular sentence can result in a well-formed sluice. Consider the following contrast. In (50a), we see a well-formed copular sentence, which nonetheless becomes ungrammatical if IP is elided (50b). This example contrasts with (6), repeated here as (51).

(50) Juan ha hablado con una chica
     Juan has talked   with a   girl
      a.   pero no sé   quién es la chica con la que Juan ha hablado
               but not know who is the girl   with the that Juan has talked
      b. * pero no sé   quién.
               but not know who

(51) Juan ha hablado con una chica
     Juan has talked   with a   girl
     a.   pero no sé   cuál es la chica con la que ha hablado Juan
         but   not know which is the girl   with the that has talked   Juan
     b.   pero no sé   cuál
         but   not know which

Spanish P-stranding sluicing is preferred with D-linked wh- phrases (the same is noted for Polish by Szczegielniak 2006). This may be related to the fact that Spanish clefts impose a stronger exhaustivity requirement than BP (cf. section 4.2). In addition, we would like to raise the question of what the relative clause within the cleft is headed by. In Brazilian Portuguese, there need not be an overt head for the unsluiced cleft:

(52) O João dançou com alguém, mas eu não sei   quem é com a   qual
     the João danced with someone but I   not know who   is with the that
     o   João dançou
     the João danced

While in Spanish, an empty headed relative along with the wh- word *quién* is marginal:

(53) a. * Juan ha hablado con una chica, pero no sé   quién es con
        Juan has talked   with a   girl   but not know who is with
        la que ha hablado Juan
        which has talked   Juan
     b. ? Juan ha hablado con una chica, pero no sé   cuál es con
        Juan has talked   with a   girl   but not know which is with
        la que ha hablado Juan
        which has talked   Juan

Thus, the unavailability or dispreference for sluicing with \textit{qui\'en} may be related to its inability to license an empty headed-relative following the copula.

5.2 *Sluicing within free relatives*
In colloquial BP, relative clauses optionally allow dropping of the preposition, as also noted by Almeida & Yoshida (2007:359:360):

(54) A menina (com) quem o   João dançou na   festa estava bêbada
     the girl   with who   the João danced at.the party was   drunk

Therefore, in colloquial BP, deletion of an IP might actually be erasing a relative clause that does not have a preposition to begin with, cf. also (55).

(55) O João dançou com alguém…
      the João danced with someone
      a.   mas eu não sei   quem é que o   João dançou
            but I not know who is that the João danced
      b.   mas eu não sei   [CP quem [IP é [RC ~~que o   João dançou~~]]]
            but I not know   who   is   that the João danced

In addition, colloquial BP allows P-drop in free relatives as well as in headed relative clauses.

(56) Eu vi   quem você dancou na   festa
      I saw who you   danced at.the party

With these facts in mind, let us turn now to a case study in Brazilian Portuguese, lending additional support to the analysis proposed in this paper. In Colloquial Brazilian Portuguese, the verb *conhecer*, which translates into English as 'to know'/'to be acquainted with', does not subcategorize for clausal complements (57a), but for DPs (57b).

(57) a. * O João não conhece   quem saiu   com a   Maria
              the João not is.acquainted who   went.out with the Maria
      b.   O João não conhece   o novio   da   Maria
            the João not is.acquainted the boyfriend of.the Maria

Interestingly, *conhecer* may be used to embed a sluiced constituent:

(58) O João beijou alguém,   mas eu não conheço   quem
      the João kissed somebody, but I   not am.acquainted who

However, in this case, preposition stranding is obligatory:

(59) Eu deveria falar com alguém lá   na   administração, mas eu não
      I   should talk with someone there at.the administration but I not
      conheço   (*com) quem
      am.acquainted   with who

English allows the "acquainted with" reading of *know* when an overt free relative is used:

(60) I'm supposed to talk with someone in the administration, but I don't know whoever it is.

Example (59) poses two questions about the nature of sluicing. First, according to the literature, sluicing targets IPs. Thus, if *conhecer* selects DPs, what category has been elided in (58) and (59)? Second, what is forcing preposition stranding in

(59)? In answering these questions, we propose that the underlying verbal complements in (58) and (59) are free relatives. Following Donati (2006), we assume that free relatives are structures in which a wh-head moves to the CP domain and reprojects. In this way, it forms a clause headed by a DP. This analysis follows the general conclusion that free relatives involve a CP-internal wh-phrase but behave categorially as a DP discussed in Grosu (2002).

    To illustrate this, consider the free relative in (61a) and its derivation sketched in (61b)/(61c).

(61) a.   I ate [what you ate]
      b.   [CP [TP you [VP ate what]]]
      c.   [DP what [TP you [VP ate]]]

We suggest extending this analysis to (58) and (59), which we take to be cases of sluicing within free relatives. Doing so, (58), repeated here as (62), results from derivation in (63) with ellipsis of IP within the embedded DP. Elision, which is an optional process, is not obligatory in these cases either.

(62) O   João beijou alguém,   mas eu não conheço   quem
      the João kissed somebody, but I   not am.acquainted who

(63) a.   [TP eu não conheço [DP [TP o João beijou quem]]]]
      b.   [TPeu não conheço [DP quem [TP o João beijou t]]]]
      c.   [TP eu não conheço [DP quem [TP o̶ ̶J̶o̶ã̶o̶ ̶b̶e̶i̶j̶o̶u̶ t]]]]

This analysis allows us to preserve the idea that sluicing targets IP. Given that *conhecer* selects only for DP, in (59) the embedded domain cannot be headed by a prepositional phrase. Since Brazilian Portuguese allows preposition dropping within relative clauses, in (59) the wh-phrase is allowed to move alone, without pied-piping the preposition:

(64) Eu deveria falar com alguém lá   na   administração, mas eu não
      I   should talk with someone there at.the administration but I   not
      conheço   [DP quem [TP eu deveria falar lá   na   administração]]
      am.acquainted   who   I   should talk there at.the administration

Donati observes that in free relatives, the wh-item can reproject because it moves as a head. Thus, the examples in (65) are ungrammatical because they involve phrase-movement.

(65) a. * I ate what fruit you ate.
      b. * Eu comi qual   fruta você comeu
            I   ate which fruit you ate

As our analysis predicts in cases of sluiced free relatives embedded under *conhecer*, the wh-item cannot be a phrase either (66). This also explains why the preposition must be dropped, as shown in (59).

(66) * Eu deveria falar com alguém lá   no   prédio da
          I   should talk with someone there at.the building of.the
          administração, mas eu não conheço   com qual   pessoa
          administration but I   not am.acquainted with which person

In contrast to Brazilian Portuguese, Spanish cannot resort to a free relative to feed sluicing with *conocer*, regardless of whether the preposition is present or not:

(67) * Juan ha hablado con una chica rubia, pero no conozco
          Juan has talked   with a   girl blonde, but not am.acquainted
          con cuál
          with which

As discussed before, in Spanish, sluicing with preposition stranding occurs only when the moved wh-item is a D-linked element, having thus a phrasal status. Given that wh-items must be bare heads in free relatives, Spanish does license sluicing within a free relative and, as a consequence, any attempt to embed a sluiced clause under *conocer* will be ungrammatical.

     We note that the occurrence of sluicing underneath a verb that does not allow a clausal complement in BP is not unique to *conhecer*. The verb *arrumar*, meaning 'to fix', does not take CP complements, but allows a sluiced wh- phrase as its complement:

(68) Eu tenho que dançar com alguém   na   festa, e   eu já   arrumei
       I   have to dance   with someone at.the party and I   already fixed
       quem
       who
       'I have to dance with someone at the party, and I've already fixed who it will be.'

In sum, the occurrence of sluicing within free relatives shows that sluicing may apply to structures other than those with regular wh-movement. This type of sluicing is licensed in Brazilian Portuguese arguably because preposition deletion occurs within relative clauses. This strengthens our claim that Brazilian Portuguese p-stranding under sluicing is to be related to the availability of preposition-dropping.

6.   *Conclusion*

BP and Spanish are non-P-stranding languages that display P-stranding under IP-deletion. Hence, these two grammars might be taken as *prima facie* evidence

against the P-stranding generalization in (2), posited by Merchant (2001) – as done, for instance, by Almeida & Yoshida (2007). However, as we have shown above, in analyzing the robustness of (2) against BP and Spanish, one must consider that these grammars have two sources of IP deletion: sluicing, which conforms to Merchant's analysis in (1), and pseudosluicing, which involves deletion of a clefted IP. Crucially, only pseudosluicing presents P-stranding effects. Therefore, contrary to Almeida & Yoshida's claim, neither BP nor Spanish can be taken as evidence against the generalization (2).

The strongest implication of this analysis is that all languages that appear to violate this generalization (see footnote 1) should be reducible to a pseudosluicing analysis. English may lack the pseudosluicing derivations for one of three reasons: (i) pseudosluicing derivations are only available as a "last resort" (ii) pseudosluicing derivations are available in languages that have *pro* subjects for clefts (iii) pseudosluicing derivations are available in languages with bleached clefts that do not impose exhaustivity.[15]

Whichever of these turns out to be right for English, with respect to Romance, the conclusion is that (2) should be reformulated as (69), with the availability of P-stranding under sluicing relativized not to languages, but to individual syntactic configurations.

(69) *Form-identity generalization II: P-stranding (revised)*
      For any syntactic configuration *C*, if P-stranding is banned in *C* in non-
      elliptical environments, it will also be banned in *C* under sluicing.

The revision in (69) constitutes a confirmation of the underlying intuition in Merchant (2001) – namely, that the repair effect of sluicing is selective: while strong islands virtually disappear under ellipsis, P-stranding violations remain unaffected. As a consequence, (69) lends support to theories of locality that treat strong islands and P-stranding violations as independent phenomena.[16]

---

[15] Note, however, that in the course of our discussion we have shown that at least two of Merchant's original arguments, namely impossibility of *else* modification and impossibility of *the hell* wh- phrases, may not go through entirely for English. In addition, as noted by Fortin (2007:215), English disallows P-stranding in questions with the idiom *against x's wishes*, but allows P-drop in sluicing with it:

(i)   a. * Whose wishes did he get married against?
       b.   John got married against someone's wishes, but I don't know whose.

Note that *else* modification is possible with (ib), both in sluices and in clefts:

(ii)   a.   John got married against his parents wishes, and God knows who the hell else's.
       b.   It wasn't your fault? Then who the hell else's was it?

Thus, even English, under certain circumstances, may employ a cleft to circumvent P-stranding violations (see van Craenenbroeck 2007 for an elaboration of this idea). However, our focus in this paper is limited to Romance.

[16] In Lasnik (2003) and Lasnik & Park (2003), island amelioration under sluicing is attributed to one-fell-swoop movement across intermediate islands and deletion of otherwise unlinearizable chain copies, respectively. Neither of these strategies would be applicable to ameliorate P-stranding, a welcome conclusion. Merchant (2001) does not offer an account for why Preposition

References

Almeida, Diogo, and Masaya Yoshida. 2007. "A problem for the preposition stranding generalization". *Linguistic Inquiry* 38:349-362.

Arregi, Karlos. 2007. Ellipsis in split questions. Ms., University of Illinois, Urbana-Champaign. Available at http://ling.auf.net/lingBuzz/000542 .

Bayer, Josef. 1996. *Directionality and Logical Form: on the scope of focusing particles and wh- in situ*. Dordrecht: Kluwer.

Cinque, Guglielmo. 1993. A null theory of phrase and compound stress. *Linguistic Inquiry* 24:239-297.

van Craenenbroeck, Jeroen. 2004. Ellipsis in Dutch dialects. Doctoral Dissertation, Leiden University.

van Craenenbroeck, Jeroen. 2007. What lies beneath: on the hidden syntax of sluicing. Handout.

Cuervo, María Cristina. 2003. Datives at large. Doctoral Dissertation, MIT.

den Dikken, Marcel, and Anastasia Giannakidou. 2002. From hell to polarity: Aggressively non-D-linked wh- phrases as polarity items. *Linguistic Inquiry* 33:31-61.

Donati, Caterina. 2006. On wh- head movement. *Wh- movement: Moving on*, ed. by Lisa Cheng and Norbert Corver, 21-46. Cambridge, Mass.: MIT Press.

Erteschik-Shir, Nomi. 1977. *On the nature of island constraints*. Bloomington: Indiana University Linguistics Club.

Fortin, Catherine. 2007. Indonesian sluicing and verb phrase ellipsis. Doctoral Dissertation, University of Michigan.

Fox, Danny, and Howard Lasnik. 2003. Successive cyclic movement and island repair: The difference between sluicing and VP ellipsis. *Linguistic Inquiry* 34:143-154.

Grosu, Alexander. 2002. Strange relatives at the interface of two millenia. *GLOT International* 6:145-167.

Gussenhoven, Carlos. 1984. *On the grammar and semantics of sentence accents*. Dordrecht: Foris.

Hartman, Jeremy. 2005. Sluicing in Finnish. Ms., Harvard University.

---

stranding is illicit in certain languages, but his claim throughout the book is that movement violations alleviated by sluicing are due to PF violations that are redeemed by deletion, which presumably means that P-stranding is not a PF constraint. One possibility for why P-stranding is disallowed in BP and Spanish, following Bayer (1996), could be that it is actually due to an LF-movement violation: notably, focus sensitive particles such as *só* 'only', which arguably require LF movement, cannot appear between Preposition and DP (in contrast to English):

(i)   Eu falei só   com a   Maria
        I   spoke only with the Maria

(ii)   *   Eu falei com só   a   Maria
            I   spoke with only the Maria

If *só* and its complement need to move at LF, they will leave a trace next to the Preposition, and the ill-formedness of (ii) can be stated as a condition against stranded prepositions at LF, possibly supporting a broader conclusion that P-stranding is due to constraints on movement and not a PF filter.

Kizu, Mika. 2000. A note on sluicing in wh- in-situ languages. *MIT Working Papers in Linguistics* 36:143-160.

Lasnik, Howard. 2006. Multiple sluicing in English. Ms., University of Maryland, College Park.

Lasnik, Howard, and M.K. Park. 2003. The EPP and the subject condition under sluicing. *Linguistic Inquiry* 34:649-660.

Merchant, Jason. 1998. Pseudosluicing: Elliptical clefts in English and Japanese. *ZAS Working Papers in Linguistics*, ed. by Alexiadou et al., volume 10, 88-112. Berlin: Zentrum fur Allgemeine Sprachwissenschaft.

Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.

Merchant, Jason. 2002. Swiping in Germanic. *Studies in comparative Germanic syntax*, ed. by J.W. Zwart and W. Abraham, 289-315. Amsterdam & Philadelphia: John Benjamins.

Merchant, Jason. 2004. Fragments and ellipsis. *Linguistics & Philosophy* 27:661-738.

Pinker, Stephen. 2007. *The stuff of thought*. New York: Penguin.

Potsdam, Eric. 2007. Malagasy sluicing and its consequences for the identity requirements on ellipsis. *Natural Language and Linguistic Theory* 25:577-613.

Richards, Norvin. 2001. *Movement in language: Interactions and architectures.* Oxford: Oxford University Press.

Ross, John. 1967. Constraints on variables in syntax. Doctoral Dissertation, MIT.

Sáez, Luis. 2006. Sluicing with copula. *Theoretical and experimental approaches to Romance linguistics*, ed. by S. Gees and E.J. Rubin, 213-236. Amsterdam: John Benjamins.

Sprouse, Jon. 2006. The Accent Projection Principle: Why the hell not? *Proceedings of the 29th Penn Linguistics Colloquium*, ed. By Aviad Eilam, Tatjanan Scheffler, and Joshua Tauberer, 349-359.

Stjepanovic, Sandra. 2006. P-stranding under sluicing in a non-P-stranding language. Ms., University of West Virginia.

Szczegielniak, Adam. 2006. All sluiced up, but no alleviation in sight. Ms., Boston College.

Torrego, Esther. 1998. *The dependencies of objects*. Cambridge, Mass.: MIT Press.

Appendix: French Data

French disallows P-stranding in questions but allows apparent P-stranding in sluicing (cf. also Merchant 2001:98,fn7). Like Spanish, French prefers D-linked wh- phrases for sluicing:

(70) * Qui tu   as   dansé avec?
         Who you have danced with

(71) * Laquelle tu   as   dansé avec?
         Which   you have danced with

(72) ? Jean a   dansé avec quelqu'un, mais je ne sais pas qui
         Jean has danced with someone   but I NEG know NEG who

(73)   Jean a   dansé avec une des   filles, mais je ne sais pas laquelle
         Jean has danced with one of.the girls but I NEG know NEG which

French also does not allow P-stranding in cases of multiple sluicing:

(74) Jean a   mangé avec une des   filles dans un des   restaraunts mais
      Jean has eaten with one of.the girls at   one of.the restaurants but
      je ne   sais pas *(avec) laquelle *(dans) lequel
      I NEG know NEG with which   at   which

French also allows an overt copula. In fact, it offers overt evidence of a cleft possibility, given use of *c'était* 'it was'.

(75) Jean a   dansé avec une des   filles, mais je ne sais pas laquelle
      Jean has danced with one of.the girls but I NEG know NEG which
      c'était
      it.was

(76) Jean a   dansé avec une des   filles, mais je ne sais pas laquelle
      Jean has danced with one of.the girls but I NEG know NEG which
      c'était la fille avec qui il a   dansé
      it.was the girl with who he has danced

French allows *else* modification in the P-stranded sluice, and also has a weaker exhaustivity requirement in clefts:

(77) Jean a   dansé avec Marie, mais je ne sais   pas (avec) qui d'autre
      Jean has danced with Marie but   I NEG know NEG with who else

(78) C'est personne qui a   frappé   la porte
      it.is nobody   that has knocked the door