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On ellipsis structures involving a wh-remnant and a non-wh-remnant simultaneously



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Abstract

The goal of this work is to provide an account of the licensing of what we call Sluice-Stripping, an under-studied elliptical construction where a wh-phrase and a non-wh-phrase appear fragmentally. This construction, attested across Romance languages and beyond them, is apparently a combination of Sluicing (ellipsis with a wh-remnant) and Stripping (ellipsis with a non-wh-remnant). Through a detailed study of its properties, we propose that there are two distinct types of Sluice-Stripping, namely, (i.) Why-Stripping, where the wh-element is restricted to *why*, and the non-wh remnant is typically identical to its antecedent in the preceding clause; (ii.) Wh-Stripping, which involves a wh-remnant other than *why* and a non-wh-remnant which contrasts with its antecedent in the antecedent clause. We establish the following claims through a detailed study of the syntax of Spanish: (a) Why-Stripping involves a base-generated *why* and leftward movement of a focused non-wh-element followed by clausal ellipsis; (b) Wh-Stripping involves wh-movement followed by rightward movement of the focused non-wh-element and clausal ellipsis.

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1. Introduction: the outline of the problem

In the history of generative grammar, constructions involving clausal ellipsis have attracted much attention. Among others, two constructions, Sluicing (e.g., (1)a) and Stripping (e.g., (1)b, also referred to as Bare Argument Ellipsis) have often been analyzed as instances of clausal ellipsis (for the debate on the syntax of Sluicing, see Ross, 1969; Chung et al., 1995; Lasnik, 2001; Merchant, 2001, a.o.; for discussion on Stripping, see Hankamer and Sag, 1976; May, 1991; Reinhart, 1991; Heim and Kratzer, 1998; Depiante, 2000, a.o.).

(1) a. Sluicing

Juan comió algo, pero no sé **qué** {ellipsis}. Juan ate something but I don't know what

Spanish

a.' Juan ate something, but I don't know **what** {ellipsis}.

English

b. Stripping

Juan comió una manzana, y no **una naranja** {ellipsis}. Juan ate an apple and not an orange

Spanish

b.' Juan ate an apple, but not an orange {ellipsis}.

English

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Under the clausal ellipsis analysis of Sluicing and Stripping, (1)a and (1)b involve an elided clause as illustrated in (2)a and (2)b:

Juan comió algo, (2)a. pero no sé {Juan comió qué}. Juan ate something, but I don't know {Juan ate what \. b. Juan comió una manzana, y no {Juan comió una naranja}. Juan ate apple, and not {Juan ate orange).

Two major questions under the clausal ellipsis analysis have been: (i) what is the content of the ellipsis site; and (ii) how do the ellipsis survivors (the bolded phrases in (1), the so-called 'remnants') escape the ellipsis site. The first point is concerned with the nature of ellipsis in general. The point of contention is whether the "understood clause" (the clause in the curly brackets in the examples in (2)) involves a full-fledged syntactic structure at some level of representation. Starting from Ross's seminal work, the majority of the proposed accounts adopt a view that it does (e.g., Ross, 1969; Chung et al., 1995; Lasnik, 2001; Merchant, 2001, a.o.). In contrast, there are also some analyses that do not assume syntactic structure for the understood clause (Culicover and Jackendoff, 2005; Riemsdijk, 1978; Ginzburg and Sag, 2000).

The issue in (ii.) is related to the matter of constituency. Among the syntactic analyses of clausal ellipsis, it is controversial how the remnant escapes the scope of ellipsis. In (1)a, for instance, the object wh-phrase is left out of clausal ellipsis. If we assume that the object stays in its thematic position as shown in (3), the ellipsis must target a non-constituent (part of TP/VP excluding the object NP).

(3) Juan comió algo, pero no sé [TPJuan [VP-comió qué]].

However, if the general assumption that ellipsis does not target a non-constituent (see Merchant, 2004, a.o.) is true, the remnant-in-situ analysis cannot be an option. Instead, the major approaches, which originate from Ross (1969), assume that the remnant moves out of the clausal constituent before the clause undergoes ellipsis, as shown in (4).

(4) Juan comió algo, pero no sé [CP quéx [TP Juan [VP comió tx]]].

On the other hand, Lobeck (1995) and Chung et al. (1995), a.o., assume that the ellipsis site involves a "pointer" empty category which is eventually replaced by the clausal material provided from the antecedent site. In the case of Sluicing, the pointer can be a TP as shown in (5):

(5) Juan comió algo, pero no sé [$_{CP}$ qué [$_{TP}$ Δ]].

Crucially, within these "pointer" analyses, the remnant does not undergo movement. Specifically, the remnant is assumed to be base-generated in a position higher than the pointer element (i.e., [Spec, CP]). These two lines of approaches diverge with respect to whether the clausal ellipsis construction shows the trait of movement or not. In this respect, Merchant (2001) and Lasnik (2001), in particular, have shown numerous pieces of evidence for movement of the remnant.

This paper addresses similar issues in yet another type of elliptical structure, Sluice-Stripping. Typical examples of Sluice-Stripping from Spanish are found in (6). At a superficial level, Sluice-Stripping looks as if both Sluicing and Stripping take place in one sentence. E.g., in B's question in (6)a, the wh-phrase *why* and the PP *a María* 'to María' appear and the rest of the clause is omitted. Thus, we call this type of construction Sluice-Stripping, where the label is used for the sake of exposition without any theoretical commitment (Nevins, 2008 uses the label Incomplete Sluicing; still, we prefer Sluice-Stripping to underscore both the wh- and the non-wh-component).¹

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(6) Sluice-Stripping
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a. A: Juan besó a María.

Juan kissed to María.

'Juan kissed María.'
B: Por qué [XP a María] (y no a Susana)?

why to María (and not to Susana)

'Why María, and not Susana?'

Why-Stripping

¹ In Spanish, an inverted question mark is used to begin interrogative sentences. Throughout this work, we do not include such initial question marks to avoid confusion in readers unfamiliar with this practice.

A: Alguno de estos tíos besó a María.
 one of these guys kissed to María.
 'One of these guys kissed María.'

Wh-Stripping

B: Y cuál de ellos [XP a Susana]?² and which of them to Susana 'Which of them kissed Susana?'

The two sentences in (6) superficially look very similar in the sense that both involve a wh-remnant and a non-wh-remnant. In fact, Nevins (2008) puts forward a unified analysis of these data, merely noting that some speakers find Sluice-Stripping examples with *why* more acceptable than examples with other wh-phrases, an observation that also holds for Spanish. One of the main goals of this paper is, however, to show that (6)a and (6)b are examples of two different types of Sluice-Stripping and have distinct derivations. We refer to the former type as Why-Stripping. Descriptively, in Why-Stripping, the wh-remnant is *why* and the non-wh remnant is typically identical to an element in the antecedent clause, (e.g., a María as shown in (6)a; but see Section 4.2 for 'negative' Why-Stripping, where the non-wh remnant is contrasted to the correlate in the antecedent clause). Typically, the non-wh remnant receives focal stress. While Why-Stripping can also be used as an exclamative or rhetorical sentence conveying some sort of disappointment or disbelief, in this study we concentrate on the interrogative use of Why-Stripping. In turn, we call the latter type of Sluice-Stripping Wh-Stripping. In Wh-Stripping, a wh-remnant other than *why* precedes the non-wh-remnant (e.g., a Susana), and the non-wh-remnant is contrasted with (rather than repeated from) a phrase in the antecedent clause, its correlate (e.g., a María), as shown in (6)b.³

We establish the following claims: (a) Why-Stripping involves a base-generated *why* high in the left-periphery and leftward movement of a focused non-wh-phrase followed by clausal ellipsis (see Yoshida et al., in press); (b) Wh-Stripping involves movement of a wh-remnant to the left-periphery followed by rightward movement of a focused phrase and clausal ellipsis (Nevins, 2008), in a way similar to the derivation of Multiple Sluicing proposed in Lasnik (2013). Thus, the crucial differences between Why-Stripping and Wh-Stripping are: (i) the location of the wh-remnant and how it gets there, and (ii) the type of movement that the remnants undergo. One more factor, namely, the focus association properties of *why* is shown to play a crucial role in the derivation of Why-Stripping. Differences in these variables derive all the differences between these two Sluice-Stripping constructions.

While the analyses of Why-Stripping and Wh-Stripping we put forward are taken from Yoshida et al. (in press) and Nevins (2008), respectively, to the best of our knowledge it is the first time those two construction types are thoroughly compared. The discussion is further informed by a comparison with what we call CLLD-Sluicing (e.g., (7)), an elliptical structure where a wh-element is preceded by a phrase that undergoes Clitic Left Dislocation (CLLD) (see Section 5.1 for arguments in favor of the CLLD analysis of the non-wh-remnant; see (7)B' for the unelided counterpart with an overt clitic). The unavailability of CLLD-Sluicing in English is accounted for as well.

(7) CLLD-Sluicing

A: Alguno de estos tíos besó a María.

one of these guys kissed to María

'One of these guys kissed María.'

B: Y a Susana, cuál de ellos? and to Susana, which of them 'With regard to Susana, which of them kissed her?'

B': Y a Susana, cuál de ellos la besó?

and to Susana, which of them CL kissed

The paper is organized as follows. Sections 2 and 3 present the syntactic properties of the two types of Sluice-Stripping, partially introducing elements of the analyses along the way. Specifically, Section 2 discusses the properties that both kinds of Sluice-Stripping share, whereas Section 3 discusses the differences between Why-Stripping and Wh-Stripping. On the basis of those properties, Sections 4 and 5 fully develop the analysis of Why-Stripping and Wh-Stripping, respectively. Section 5.1 focuses on CLLD-Sluicing, including the justification for the CLLD analysis of the

² As Hernanz and Rigau (2006) and Silva-Villar (1998:260–261) note, *y* 'and' does not necessarily have a coordination value but rather it may link an utterance with previous discourse. (6)b exemplifies the latter use.

³ Ultimately, a further refinement of Sluice-Stripping constructions beyond Why and Wh-Stripping might be in order. The reader may see Grebenyova (2006), van Craenenbroeck and Lipták (2006) and Ince (2007) for discussion of other cases of Sluice-Stripping.

non-wh-remnant in the structure. Section 6 discusses some remaining issues and Section 7 concludes the paper. The discussion is illustrated with Spanish and English, unless otherwise noted.

2. Properties shared by both Why and Wh-Stripping

We start our inquiry by uncovering the basic properties of Why-Stripping and Wh-Stripping. The goal of this discussion is to show that both of them involve clausal ellipsis and movement of the non-wh remnant. In so doing we make use of several diagnoses for clausal ellipses (see Merchant, 2013b for an excellent summary of these diagnoses). The following properties of these constructions are considered in this Section: the height of the elements within the scope of the ellipsis, so as to determine the size of the ellipsis site (Section 2.1), and various types of connectivity effects (Section 2.2) which provide evidence that a full-fledged syntactic structure is associated with the ellipsis site in these constructions.⁴

2.1. Size of the ellipsis

The first question to ask is what constituent (TP, as was tentatively assumed in (4) and (5), VP or vP) is omitted in these Sluice-Stripping constructions. The initial indication of the "size" of the elided constituent comes from the fact that the verb is always elided in these constructions. In particular, it is typically assumed that main verbs raise to TP in Romance but not in English (Emonds, 1978; Pollock, 1989). Given that the ellipsis site includes the verb hosted in T in Romance, (6), it follows that the ellipsis site would have to be, minimally, as high as TP. The fact that auxiliaries in English, hosted in T, are elided shows that the ellipsis site includes TP in English as well.

(8) a. A: Lou will ask Doris about syntax. B: Why about syntax? Why-Stripping b. A: Lou will ask Doris about syntax. B: And who about phonology? Wh-Stripping

Furthermore, the observation that the subject is elided (unless it happens to be the focused non-wh-remnant) points in the same direction, though the existence of null subjects in most varieties of Romance renders the argumentation based on the elision of the subject slightly weaker.

The fact that no tense mismatches are tolerated provides further evidence that the category affected by ellipsis is at least TP as opposed to vP or any smaller category (Saab, 2010:92; see also references therein). E.g., (6)a, repeated here as (9), is interpreted as 'Why did Juan kiss María?' but not as 'Why will Juan kiss María' or 'Why is Juan kissing María?':

(9) A: Juan besó a María. =(6)a

Juan kissed to María.

'Juan kissed María.'
B: Por qué [XP a María] (y no a Susana)?

why to María (and not to Susana)?

'Why María, and not Susana?'

Furthermore, it has been established that the (in)tolerance for voice mismatch between the antecedent and the ellipsis clause is relevant to the size of the ellipsis. Specifically, as Merchant (2008, 2013a,b) observes, Sluicing does not tolerate voice mismatch between the antecedent clause and the ellipsis clause, unlike VP ellipsis. Thus (10)a and (10)b where there is no voice mismatch are grammatical, in contrast to (10)c (active Sluicing with a passive antecedent clause) and (10)d (passive Sluicing with an active antecedent clause; Spanish examples constructed after Merchant 2007).

(10) Sluicing

- Juan fue asesinado, pero no sé por quién.
 Juan was murdered, but not know.1st.sg by whom
 'Juan was murdered, but I don't know by whom.'
- Alguien asesinó a Koldo, pero no sé quién. someone murdered to Koldo, but not know.1st.sg who 'Somebody murdered Koldo, but I don't know who.'

⁴ For a full comparison between Sluice-Stripping, on the one hand, and Sluicing and Stripping, on the other, see Yoshida et al. (in press).

- *Juan fue asesinado, pero no sé quién.
 Juan was murdered, but not know.1st.sq who
- d. *Alguien asesinó a Koldo, pero no sé por quién. someone murdered to Koldo, but not know.1st.sg by who

Merchant contends that the category that denotes Voice, VoiceP, dominates VP (presumably the same position as the vP projection). In VP ellipsis, VoiceP is outside of the scope of ellipsis and thus the parallelism of Voice between the ellipsis site and the antecedent constituent is not required. On the other hand, VoiceP is within the scope of ellipsis in Sluicing (see Merchant, 2008, 2013a,b for details).

Much like Sluicing (and unlike VP-ellipsis), none of the Sluice-Stripping structures under consideration tolerate voice mismatch, as illustrated in (11) and (12).⁵

(11) Why-Stripping

A: Juan besó a María. B: *Por qué por Juan fue besada María?

Juan kissed to María why by Juan was kissed María

'Juan kissed María.' 'Why was María kissed by Juan?'

(12) Wh-Stripping

A: Alguno de estos tíos besó a María. one of this guys kissed to María 'One of these guys kissed María.'

B: *Y por cuál de ellos Susana fue besada? and by which of them Susana was kissed 'By which of them was kissed Susana?'

Therefore, the restriction against voice mismatches provides further evidence that Why-Stripping and Wh-Stripping both involve ellipsis of a category bigger than VoiceP (presumably TP-ellipsis) similarly to Sluicing, but not ellipsis of VP or any smaller categories.⁶

2.2. Evidence for a full-fledged syntactic structure at the ellipsis site: connectivity effects

As Merchant (2001) convincingly shows, connectivity effects provide evidence for the existence of a full-fledged syntactic structure in clausal ellipsis (see Hiraiwa and Ishihara, 2002 for a related discussion in Japanese Sluicing). The basic logic is that if the ellipsis remnant shows the properties typically seen in non-elliptical sentential environments, then we can conclude that the ellipsis remnant has originated from a full-fledged sentential structure.

2.2.1. Binding connectivity

Why-Stripping and Wh-Stripping show various kinds of connectivity effects. The examples below illustrate binding connectivity effects. Specifically, the anaphor embedded inside a picture NP in each of the Sluice-Stripping examples in (13) and (14) is bound by the subject NP in the first utterance, *Juan* and *uno de estos tíos*, respectively.⁷

⁵ To study the restriction against voice mismatches, it is important to control for P-stranding or else this could lead to the wrong conclusion that passive antecedents allow for active ellipsis clauses. For this reason, the examples in (10) illustrate Sprouting, that is to say, Sluicing without an overt antecedent for the wh-remnant - a construction known to ban P-stranding (Chung, 2005). In turn, (11) and (12) test an active antecedent clause combined with a passive ellipsis clause to control for this factor. See Section 3.2 for discussion of P-stranding in Spanish.

⁶ This kind of parallelism requirements (with the sole exception of VP-ellipsis) are typical of Surface Anaphora (derived transformationally), as opposed to Deep Anaphora, in the sense of Hankamer and Sag (1976). According to these researchers, still another feature of Deep Anaphora is that they allow for pragmatic control (non-linguistic antecedents), in contrast to Surface Anaphora. While Why-Stripping allows for pragmatic control, at least one other Surface Anaphora, VP-ellipsis, allows for pragmatic control under certain circumstances, and even some instances of Sluicing (see Saab, 2008 for recent discussion). Therefore, this criterion is not conclusive. See Depiante (2000) and Saab (2008) for relevant discussion on the properties of Deep and Surface Anaphora in Spanish.

⁷ To avoid the repetition of reflexives or R-expressions that may affect the acceptability of the examples, we are using examples with 'sprouted' reflexives and R-expressions (see also Footnote 5 for discussion of Sprouting). For the details of this type of Sluicing that contains 'sprouted' reflexives and R-expressions, see Yoshida et al. (2013).

(13) Why-Stripping

A: $Juan_x$ va a vender estas fotos. $Juan_x$ will to sell these pictures. 'Juan will sell these pictures.' [pointing at pictures of Juan]

B: Por qué **fotos de sí mismo**_x (y no de otros)? why **pictures of himself**_x (and not of others) 'Why will he sell pictures of himself, and not pictures of others?'

(14) Wh-Stripping

A: [Uno de estos $t(os]_x$ va a vender estas fotos. [one of these $guys]_x$ will to sell these pictures 'One of these guys will sell these pictures.'

[pointing at pictures of somebody other than the seller]

B: Y cuándo fotos de sí mismo_x?
and when pictures of himself_x
'And when will he/one of these guys sell pictures of himself?'

When the potential antecedent of the reflexive fails to c-command the correlate in the antecedent clause, on the other hand, the anaphor should also not be c-commanded in the elided clause resulting in a Binding Condition A violation. The prediction is borne out. As shown in (15) and (16), the sentence becomes ungrammatical in such cases.

(15) Why-Stripping

A: [La madre de $Juan_x$] va a vender estas fotos. the mother of $Juan_x$ will to sell these pictures 'Juan's mother will sell these pictures.'

B: *Por qué **fotos de sí mismo**_x (y no de otros)? why **pictures of himself**_x (and not of others) *'Why will Juan's mother sell pictures of himself?'

(16) Wh-Stripping

A: [La madre de [uno de estos $t(os]_x$] va a vender estas fotos. [the mother of [one of these $guys]_x$] will to sell these pictures 'The mother of one of these guys will sell these pictures.'

B: *Y cuándo fotos de sí mismo_x?
and when pictures of himself_x

*'And when will the mother of one of these guys sell pictures of himself?'

Given that there is no explicit antecedent that may c-command (or fail to c-command) the anaphor in B's utterances in (13)–(16), these connectivity effects suggest that there are hidden structures that support these binding connectivity effects, associated with B's sluiced utterances.⁸

2.2.2. Selectional restrictions

Sluice-Stripping shows connectivity effects with respect to selectional restrictions as well. Specifically, if the remnant phrase is a complement PP, it must be an appropriate type of PP that satisfies the selectional requirements of the verb in the antecedent clause, e.g, the verb *flirtear* 'to flirt' selects a prepositional phrase headed by *con* 'with' in Spanish, as opposed to a semantically empty preposition such as *a* 'to':

(17) Why-Stripping

A: Juan estaba flirteando con María en la fiesta. Juan was flirting with María at the party. 'Juan was flirting with María at the party.'

⁸ Note that this type of binding connectivity effects are potentially problematic for LF-copying analyses developed primarily by Chung et al. (1995), even though LF-copying analyses assume the full-fledged syntactic structure at LF by means of the 'copying' of the structure of the antecedent clause into the ellipsis site. Within Chung et al.'s version of LF-copying analysis, the remnant and its thematic position are linked via a binding-like relation, not a movement relation. Thus, the remnant that contains the reflexive does not have a copy in this thematic position.

B: Por qué con/*a María? why with/*to María 'Why was he flirting with María?'

(18) Wh-Stripping

- A: Alguno de estos tíos estaba flirteando con María en la fiesta. one of these guys was flirting with María at the party 'One of these guys was flirting with Mary at the party.'
- B: Y cuál de ellos con/*a Susana? and which of them with/*to Susana? 'Which one was flirting with Susana?'

Again in this case, there is no explicit verb in B's utterance, and therefore there must be an implicit verb that selects the appropriate preposition (some verbs are compatible with multiple prepositions, in which case the preposition in the remnant and that in the antecedent may differ, though both need to satisfy the said selectional restrictions; see Yoshida et al., in press). This suggests that there is a hidden clausal structure that supports such a selectional relation between the remnants and the verb.

There are also Case connectivity effects in Why-Stripping in languages with rich Case systems, such as German. In (19) the Case that the non-wh-remnant bears must be the one that is compatible with the verb in the antecedent clause. For example, in German, *gefallen* 'please' assigns the dative Case. If the antecedent clause contains *gefallen*, the correlate is assigned the dative Case. Crucially, the non-wh-remnant of Why-Stripping must also bear the dative Case.

(19) A: Peter will der Sekretaerin gefallen.
Peter wants dat secretary please
'Peter wants to be liked by the secretary'

B: Warum derl*die Sekretaerin? German why datl*acc secretary 'Why the secretary?'

3. Differences between Why-Stripping and Wh-Stripping

So far we have shown the properties that both types of Sluice-Stripping share. In what follows, we point out that Why-Stripping and Wh-Stripping differ in locality properties (Section 3.1) and in their compatibility with P-stranding (Section 3.2). It will be shown that Why-Stripping patterns with Sluicing in a number of respects, suggesting a closely-related derivation of these two ellipsis constructions. Wh-Stripping, on the other hand, patterns closely with constructions involving rightward movement, e.g., Multiple Sluicing (Lasnik, 2013) and Heavy NP-Shift. Section 3.3 includes a summary of the discussion.

3.1. Locality

3.1.1. Clause-mate condition between the wh-element and the remnant

In the case of Why-Stripping, the correlate of the non-wh-remnant can be embedded, and the long-distance interpretation is available, that is to say, both matrix and embedded clauses are included in the underlying question. ¹⁰

i. John gave a present to Jennifer, and me too. Gapping

ii. Peter and me are... Coordinated subject

i. A: María comentó [CP] que Pedro sirvió la paella].
 María mentioned that Pedro served the paella 'María mentioned that Pedro served the paella.'

B: Por qué la paella? why the paella

Short-distance interpretation: 'Why did Pedro served the paella?'

Long-distance interpretation: 'Why did María mention that Pedro served the paella?'

⁹ In the case of English, the availability of Default Case obscures the facts (see Schütze (2001) and Merchant (2004:700–704) for relevant discussion). E.g., it is well-know that pronouns may receive Default Case in both ellipsis contexts, (i.), and non-ellipsis contexts, (ii.):

¹⁰ The use of *negar* 'deny' forces the long-distance interpretation in (20) (Lasnik, 2013). Needless to say, in complex clauses where the long-distance interpretation is not forced, there is an embedded clause or short-distance interpretation available:

(20) Why-Stripping

a. A: María negó [CP que Pedro sirviera la paella].

María denied that Pedro served the paella

'María denied that Pedro served the paella.'

B: Por qué la paella? why the paella

Long-distance interpretation: 'Why did María deny that Pedro served the paella?'

The unboundedness is a regular property of leftward A'-movement, as the wh-movement found in questions or Sluicing. This long-distance interpretation is not a language-particular feature of Spanish. While we did not make systematic attempts to replicate this judgment in other languages, a long-distance Why-Stripping is seen in English as well. An indication of the availability of the long-extraction source comes from examples that involve bound pronouns. In (21) and (22), a pronoun is bound by a quantifier, thus the bound variable interpretation is possible. Given that the quantified DP in the antecedent clause is in the embedded subject position, the possibility of the bound-variable interpretation suggests that the ellipsis involves the structure of the matrix clause which hosts the quantified DP subject as well as the embedded clause. The same point holds for Spanish as illustrated below.

- (21) a. A: Every linguist₁ here claimed that *Lingua* should publish a certain kind of review on his₁ oldest book.
 - B: Why his₁ oldest book (not the latest book)?
 - b. A: Cada lingüista₁ aseguró que Lingua debería publicar un cierto tipo de reseña de su₁ every linguist claimed that Lingua should publish a certain kind of review of his libro más antiguo.
 book most old
 - B: Por qué de su₁ libro más antiguo (y no del más reciente)? why of his book most old and not of-the most recent
- (22) a. A: No linguist₁ believes that Lingua would publish his₁ best paper.
 - B: Why his₁ best paper?
 - b. A: Ningún lingüista₁ cree que *Lingua* vaya a publicar su₁ mejor trabajo. no linguist believes that *Lingua* would to publish his best paper
 - B: Por qué su₁ mejor trabajo? why his best paper

In contrast to Why-Stripping, Wh-Stripping does not allow long-distance readings. Specifically, Wh-Stripping is ungrammatical if the correlate of the wh-phrase (e.g., the indefinite phrase *alguno de estos tíos*) and the correlate to the non-wh remnant (e.g., *María*) are separated by a clause boundary in the antecedent clause and, thus, the long-distance reading is forced as shown in (23)B.

(23) Wh-Stripping

- a. A: Alguno de estos tíos negó [CP que Juan hubiera hablado con María]. one of these guys denied that Juan had.SUBJ talked with María 'One of these guys denied that Juan had talked to María.'
 - B: *Y cuál de ellos con Susana? and which of them with Susana 'And which of them denied that Juan had talked to Susana?'

This type of stricter locality restriction is not expected if Wh-Stripping were derived through leftward A'-movement. The clause-mate constraint seen in (23) is found in other types of omission constructions such as Gapping in Spanish (Brucart, 1987) and Multiple Sluicing in English, Japanese and Spanish (e.g., Lasnik, 2013; Hiraiwa and Ishihara, 2002; Rodrigues et al., 2009, respectively). Brucart (1987:80) provides evidence for the existence of such a constraint in Gapping by pointing out the lack of ambiguity of the following construction:¹¹

We leave this contrast between English and Spanish for future work.

¹¹ In contrast to Spanish, English Gapping is not subject to the clause-mate constraint. Still, as Neijt (1979) extensively argues, the relation between the English Gapping remnants is subject to other constraints on movement (see also Pesetsky, 1982; Richards, 2001). For example, Neijt argues that Gapping is sensitive to Wh-islands, on the basis of the following contrast (Neijt, 1979:138):

i. a. John tried to cook dinner today, and Peter tried to cook dinner yesterday.

b. *John wondered what to cook today and Peter wendered what to cook yesterday.

(24) Luis sabe que María juega al tenis y Antonio al baloncesto.
Luis knows that María plays to-the tennis and Antonio to-the basketball

'Luis knows that María plays tennis, and Antonio basketball.'

Short-distance reading: Luis knows that María plays tennis and that Antonio plays basketball.

Long-distance reading: *Luis knows that María plays tennis and Antonio knows that she plays basketball.

Similarly, as Lasnik (2013) observes, the correlates of the two wh-remnants in Multiple Sluicing cannot be separated by a finite clause boundary or else the sentence is ungrammatical, as shown by the following contrast (see Rodrigues et al., 2009 for Spanish):¹²

- (25) a. One of the students spoke to one of the professors, but I don't know which to which.
 - *One of the students said that Mary spoke to one of the professors, but I don't know which student to which professor.

The similarities among these three constructions suggest that a common operation is involved in the respective derivations. In particular, Lasnik argues that Multiple Sluicing shows the clause-mate effect because the second remnant undergoes rightward movement, as it is well known that rightward movement cannot escape a finite clause boundary (Stowell, 1981:234).

- (26) a. I expect t_{NP} to arrive, [NP my good friend John].
 - b. *I expect (that) t_{NP} will have arrived, [_{NP} my good friend John].

Following Lasnik's suggestion, we explore the idea that the non-wh remnant in Wh-Stripping is clause-bounded because it undergoes rightwards movement in Section 5 (see Nevins, 2008 for a similar argument).

3.1.2. Islandhood

In addition to the asymmetry in the availability of long-distance interpretations (Section 3.1.1), Why-Stripping and Wh-Stripping exhibit a remarkable difference in terms of their island sensitivity: In Why-Stripping the correlate corresponding to the non-wh-remnant can be embedded inside an island, while the correlate for the non-wh-remnant in Wh-stripping cannot. To illustrate this point, see (27) first, in which overt wh-movement and focus movement violate the complex NP-island, (27)a and (27)b, respectively.

- (27) a. *Qué jura Juan que va a conocer [a una chica que habla]? what swears Juan that he-will to meet to a girl who speaks *'What does Juan swear that he will meet a girl who speaks?'
 - b. *FRANCÉS jura Juan que va a conocer [a una chica que habla].

 French swears Juan that he-will to meet to a girl who speaks

 'Juan swears that he will meet a girl who speaks FRENCH.'

These examples are unacceptable, thus showing that Spanish wh- and focus-movement are sensitive to islands. As stated, Sluice-Stripping does not show a uniform behavior with respect to island-sensitivity. Why-Stripping is island-insensitive ((28)) in contrast to Wh-Stripping ((29)):^{13,14}

¹² The mechanism underlying Multiple Sluicing in Multiple Wh-Movement languages is different in that Multiple Sluicing in those languages is not subject to the clause-mate restriction (Lasnik, 2013); see Bošković (2002) and references therein for discussion of wh-movement in Multiple Wh-Movement languages.

¹³ As an anonymous reviewer notes, whether the correlate is specific or not can have an influence on the island sensitivity of the remnant (see Saab, 2008 for discussion). We stick, therefore, to bare noun correlates, to control for this factor. Irrespective of the explanation that the asymmetry in the extraction possibilities of specific vs. non-specific remnants should receive, the differential island sensitivity of Why-Stripping and Wh-Stripping calls for an explanation.

¹⁴ As expected, English patterns with Spanish with regard to the island insensitivity of Why-Stripping. E.g., (i.) is a Complex NP constraint violation (Merchant, 2001; Ross, 1967, 1969, among many others). Note that bound variable pronouns are employed to ensure the island-crossing interpretations (see the discussion on (21) and (22)):

i. Complex NP Constraint
 No linguist₁ recommended [DP a book that contains his₁ own article], but I don't understand why his₁ own article.

(28) Why-Stripping

- A: Juan jura que va a conocer [a una chica que habla francés].

 Juan swears that will to meet to a girl who speaks French

 'Juan swears that he will meet a girl who speaks French.'
- B: Por qué francés (y no alemán)? why French (and not German) 'Why does Juan swear that he will meet a girl who speaks FRENCH?'

(29) Wh-Stripping

A: Juan jura que va conocer a una chica que habla francés con alguno de speaks French Juan swears that he-will to meet to а girl who with one of estos tíos. these guys

'Juan swears that he will meet a girl who speaks French with one of these guys.'

B: *Y con cuál de ellos alemán? and with which of them German *'[With which of them]_x does Juan swear that he will meet a girl who talks German t_x?'

In (29), both the wh-element and the focused phrase originate within the relative clause, so as to meet the clause-mate condition (cf. Section 3.1.1). In the intended interpretation, both take scope over the whole clause, thus giving rise to an island violation. Note that one can also test whether island effects arise when only the non-wh remnant originates inside an island, (30). The resulting structure violates the clause-mate condition. As expected, (30) is ungrammatical:

- (30) A: Alguno de estos tíos jura que va a conocer una chica que habla francés. one of these guys swears that he-will to meet a girl who speaks French 'One of these guys swears that he will meet a girl who speaks French.'
 - B: *Y cuál de ellos alemán? and which of them German 'And which of them swears that he will meet a girl who speaks German?'

The island sensitivity of Wh-Stripping ((29) and (30)) is predicted under the analysis in 3.1.1, where the non-wh-remnant undergoes rightward movement. Why? Since rightward movement is clause-bounded (Stowell, 1981), the non-wh-remnant is trapped within the scope of ellipsis (see Section 5 for detailed discussion).

On the other hand, the island-insensitivity of the non-wh-remnant in Why-Stripping is reminiscent of syntax of Sluicing: it is well known that Sluicing ameliorates island violations (Chung et al., 1995; Lasnik, 2001, 2005; Merchant, 2001; Ross, 1969, among many others). Although the remnant *cuál* 'which' is assumed to have moved out of a complex NP in (31), the sentence is nevertheless acceptable:

(31)Juan quiere contratar a Balcanes, alguien que hable una lengua de los pero who speaks.SUBJ a to somebody Juan wants to-hire language of the Balkans, but recuerdo Sluicing no cuál. I don't remember which 'Juan wants to hire somebody who speaks a Balkan language, but I don't remember which.'

This suggests a unified analysis of Sluicing and Why-Stripping. We develop this view in Section 4.4 by comparing the locality properties of Why-Stripping to those of Sluicing in addition to other well-studied ellipsis constructions involving non-wh-remnants (Stripping and Fragment Answers).

3.2. P(reposition)-stranding of the non-wh-remnant

As is well known, there is a correlation between the availability of P-stranding and the directionality of movement. In particular, P-stranding is a property of leftward movement in languages where this operation is available (e.g., English):

(32) Who did you talk to?

In contrast, rightward movement such as Heavy NP Shift (HNPS) does not allow for P-stranding (Ross, 1967; Riemsdijk, 1978; Jayaseelan, 1990; Pesetsky, 1995; Lasnik, 1999; Drummond et al., 2011); see the unacceptability of (33)c, as opposed to (33)b.

- (33) a. John counted on a total stranger for support.
 - b. John counted for support *on* a total stranger.
 - c. *John counted on for support a total stranger.

(Jayaseelan, 1990:66)

If the differences between Why-Stripping and Wh-Stripping are indeed the consequence of leftward vs. rightward movement of the non-wh-remnant, it is predicted that only the former allows P-stranding. The prediction is borne out: in P-stranding languages such as English, the non-wh-remnant may strand the preposition in Why-Stripping, (34)a, but not in Wh-Stripping, (34)b,(see Nevins, 2008 for Wh-Stripping).¹⁵

(34) a. A: Lou will ask Doris about syntax. B: Why (about) syntax? =(8)a
b. A: Lou will ask Doris about syntax. B: And who *(about) phonology? =(8)b

In contrast to English, Spanish does not allow for P-stranding under wh-movement, (35), or focus fronting, (36):

- (35) a. Con cuál_x habló Felicitas t_x? with which talked Felicitas t_x 'With whom did Felicitas talk?'
 - b. *Cuál_x habló Felicitas con t_x?
- (36) a. CON PEDRO_x habló Felicitas t_x with Pedro talked Felicitas 'It is with Pedro that Felicitas talked.'
 - b. *PEDRO_x habló Felicitas con t_x

Still, P-stranding is attested in Sluicing (Rodrigues et al., 2009) and Stripping (Vicente, 2008; cf. Depiante, 2000), (37)a and b, respectively, in contrast to non-ellipsis contexts:

- (37) a. Felicitas habló con alguno de estos tíos, pero no sé (con) cuál de ellos. Felicitas talked with one of these guys, but I don't know with which of them 'Felicitas talked to one of these guys, but I don't know (with) who(m).'
 - b. A: He oído que Mauricio va a hablar sobre un tema de sintaxis. have.1st.SG heard that Mauricio goes to talk about a topic of syntax 'I have heard that Mauricio will talk about a syntax topic.'
 - B: En efecto, el ligamiento. that's right, the binding 'That's right. Binding.'

(Vicente, 2008)

If Why-Stripping is derived via leftward movement of the non-wh-remnant followed by clausal ellipsis in the same way as Sluicing and Stripping, P-stranding is predicted to be grammatical. This is indeed the case:¹⁶

¹⁵ As expected, a similar ban on P-stranding is found in Multiple Sluicing (Lasnik, 2013; his data):

i. Some linguist spoke about some paper on Sluicing, but I don't know which linguist?*(about) which paper on Sluicing.

¹⁶ According to our informants, P-stranding in Why-Stripping mimics the availability of this operation in Sluicing, in that it is (marginally) available also in French and Italian, and unavailable in Romanian. The latter fact is possibly due to the lack of clefts in Romanian (cf. Merchant, 2001; Grosu, 2006; van Craenenbroeck, 2010, a.o.). Specifically, the availability of P-stranding under ellipsis has been linked to the presence of an underlying cleft, a structure known as Pseudosluicing in the literature (see Merchant, 2001; Sáez, 2006; Almeida and Yoshida, 2007; Rodrigues et al., 2009; Stjepanović, 2008; Vicente, 2008 and references therein for relevant discussion concerning P-stranding and/or the relationship between Sluicing and clefts).

(38) Why-Stripping

A: Juan habló con María en la fiesta. Juan talked with María in the party 'Juan talked with María at the party.'

B: Por qué (con) María? why with María 'Why did he talk with María?'

In contrast, Wh-Stripping is predicted to be incompatible with P-stranding under the view that the non-wh-remnant undergoes rightwards movement. Indeed, the incompatibility of Wh-Stripping with P-stranding is interpreted as strong evidence in favor of the rightwards movement approach by Nevins (2008):¹⁷

(39) Wh-Stripping

A: Alguno de estos tíos habló con María. one of these guys talked with María 'One of these guys talked with María.'

B: Y cuál de ellos *(con) Susana? and which of them with Susana 'Which of them talked with Susana?'

P-stranding, therefore, provides further evidence in favor of leftwards movement of the non-wh-remnant in Why-Stripping as opposed to rightward movement in Wh-Stripping.

3.2.1. P-stranding of the wh-remnant

While *por qué* 'why' includes the preposition *por* 'for' in Spanish, stranding *por* in Why-Stripping is impossible due to the grammaticized nature of this reason wh-word. In contrast, the issue of P-stranding of the wh-remnant in Wh-Stripping merits some discussion. The ban on P-stranding of the non-wh-remnant in the latter construction is attributed to rightward movement, but the fact that the wh-element cannot strand the preposition in Spanish, either, remains unexplained given the availability of P-stranding in Sluicing and Stripping (see (37)):

(40) A: Faustino habló con alguno de estos tíos. Faustino talked with one of these guys 'Faustino talked to one of these guys.'

B: Y *(con) cuál de ellos Juan? and with which of them Juan 'With which of them did Juan talk?'

This follows naturally under the assumption that P-drop (in non-P-stranding languages) is related to the presence of underlying clefts (see Footnote 16). Clefts are biclausal, and while the wh-remnant could drop the preposition if an underlying cleft structure were present in Wh-Stripping, the non-wh-remnant would be trapped within the scope of ellipsis due to its clause-bound property (see Section 5 for further illustration). As a consequence, sentences where the wh-remnant strands the preposition as in (40) are ungrammatical (cf. Rodrigues et al., 2009:182 for Multiple Sluicing structures, where none of the wh-remnants may drop the preposition; note also that Spanish does not allow for clefts with multiple pivots). If true, this would explain the lack of P-stranding for the wh-remnant. As expected, in languages where P-stranding is not contingent on the presence of cleft-structures, e.g., English (see (32)), the wh-remnant may strand the preposition:

(41) A: Lou talked to Mary about syntax. B: And (to) whom about phonology?

¹⁷ Extraposition in English can target NPs (as long as they are not the object of a preposition). Those NPs need to be heavy (see Lasnik, 2013 for recent discussion). Spanish a priori does not have such a heaviness requirement, possibly because sentence stress falls on the last constituent by default (see Zubizarreta, 1998) making it qualify as heavy.

3.2.2. A comparison with the lack of P-drop in some closely related structures

The fact that P-drop is not possible in a number of constructions allegedly involving ellipsis though not rightward movement casts a doubt on the previous analysis of Wh-Stripping. Specifically, the lack of P-drop has been noted in the studies of Split Questions (Arregi, 2010), Gapping (Jayaseelan, 1990; Johnson, 2006, 2009; Yoshida et al., 2013) and a type of multiple wh-question in Italian (Moro, 2011) (we thank an anonymous reviewer for bringing these constructions to our attention).

Arregi (2010) provides evidence for the view that the tag in Split Questions, e.g., (42), is an elliptical non-wh question, where ellipsis is licensed in the same way as in other sentence fragments, that is to say, by means of leftward movement as seen in (43) (his data, unless otherwise noted):

- (42) Qué árbol plantó Juan, un roble? what tree planted Juan an oak 'What tree did Juan plant, an oak?'
- (43) [CP what tree, planted Juan t_i] [CP an oak, planted Juan t_i]

Evidence for the directionality of the movement of the remnant comes from the fact that the tag is not clause-bound, meaning it does not undergo rightward movement to escape ellipsis, rather it undergoes leftward movement. E.g., the tag in (44)a arguably has the structure in (44)b.

- (44) a. Qué le dijo que vería a Luis, todos los partidos de su equipo? what him he.told that he.would.see to Luis all the games of his team 'What did he tell Luis he would see, all his team's games?'
 - b. [all the games of his team], him he.told [GP that he would see t,] to Luis

According to Arregi, the tag does not allow for P-stranding in this structure, a fact that calls for an explanation:

(45) Con quién hablaron los médicos, *(con) Juan? with who talked the doctors with Juan 'Who did the doctors talk to, Juan?'

Still, we would like to note that P-drop is possible in at least some examples of Split Questions. In particular, Arregi notes that the tag can have an alternative question as the source, and extends his analysis in terms of ellipsis to those cases as well, though somewhat tentatively (see Arregi, 2010 for specific details concerning his proposal, which in any case sticks to the leftward movement of the remnants):

(46) Qué árbol plantó Juan, un olmo o un haya? what tree planted Juan an elm or a beech 'What tree did Juan plant, an elm or a beech?'

Crucially, according to our informants this kind of complex tags allows for P-drop when the wh-element is D-linked: 18

- (47) a. Con cuál de ellos habló el médico, Juan o Pedro? with which of them talked.3SG the doctors Juan or Pedro 'Which of them did the doctor talk to, Juan or Pedro?'
 - A qué hora llegará, las diez o las doce?
 at what hour arrived-he, the ten or the twelve 'What time will he arrive, ten or twelve o'clock?'

¹⁸ There are also cases where P-drop yields just mildly deviant results even if there is no (overt) alternative in the tag provided that the wh-element is D-linked:

i En qué mes estamos, (?)Marzo? in what month are-we March 'What month is it, March?'

Therefore, while a detailed study of P-stranding in Split Questions is beyond the scope of this article, the generalization that P-stranding is disallowed does not apply to all cases, as expected under the view that the remnant undergoes leftward movement, not rightward movement.

With regard to Gapping, it is well known that this construction does not allow for P-drop of the second remnant even in a language that allows for P-stranding (Jayaseelan, 1990; Yoshida et al., 2013).

- (48) a. John depends on his wife and Bill depends on his family.
 - b. John depends on his wife and Bill *(on) his family.

(Jayaseelan, 1990:74)

While Johnson's (1996) Across-the-Board (ATB) verb movement analysis assumes no movement of the remnants in the first place and thus trivially explains the lack of P-stranding, more recent versions of the ATB movement analysis (Johnson, 2006, 2009:315) assume that the second remnant undergoes rightward movement (see also Jayaseelan, 1990 in this regard).

Finally, Moro (2011) discussed the following structure, which involves one wh-element in the embedded CP and another at the right edge, which arguably does not undergo rightward movement (Moro, 2011):

(49) Yo sé cuándo fuiste allí y *(con) quién. I know when went.2SG there and with who 'I know when you went there and with whom.'

Crucially, Moro (2011) argues that this is not an ellipsis construction. According to him, these structures are derived in the following way, (50), where e corresponds to a coordination head, whereas in step in (50)c there is no PF deletion (ellipsis), but rather remnant movement of the CP:

If Moro's view is on the right track, the ban on P-stranding in this construction follows, as P-stranding is attested under ellipsis, but not under regular wh-movement (see Section 3.2).

3.3. Interim summary

Both Why-Stripping and Wh-Stripping include the verb within the ellipsis site and show connectivity effects (Sections 2.1 and 2.2, respectively). As discussed, these facts are relevant in determining the size of the ellipsis (at least TP) and the existence of full-fledged syntactic structure at the ellipsis site. The clause-mate condition involving the wh- and the non-wh-remnant applies to Wh-Stripping in contrast to Why-Stripping. This asymmetry provides evidence for the directionality of the movement of the non-wh-remnant: leftward movement in Why-Stripping and rightward movement in Wh-Stripping (Section 3.1.1). Finally, Why-Stripping shows island-amelioration effects and allows for P-stranding of the non-wh-remnant, in contrast to Wh-Stripping (Sections 3.1.2 and 3.2, respectively). The following table summarizes the properties of the two types of Sluice-Stripping we have observed so far: ¹⁹

(51) Table 1. Summary of the syntactic properties of Sluice-Stripping.

	Why-Stripping	Wh-Stripping
TP ellipsis	+	+
Connectivity effects of non-wh-remnant	+	+
Clause-mate condition between wh-element and non-wh remnant	_	+
Island amelioration effects of non-wh-remnant	+	_
P-stranding of non-wh-remnant	+	_

¹⁹ See Section 6.2 for discussion of one further asymmetry between Why and Wh-Stripping concerning the licensing of backwards ellipsis, where the wh-element and the non-wh-remnant precede the antecedent clause.

4. The analysis of Why-Stripping

In the previous discussion we saw a number of properties suggesting a unified analysis of Sluicing and Why-Stripping, in that the non-wh-remnant of the latter construction shows properties of leftwards movement under ellipsis (no clause-mate condition, Section 3.1.1, island insensitivity, Section 3.1.2, and P-stranding, Section 3.2). On the basis of those properties, we propose that the Why-Stripping example in (52) has the structure in (53): why is base-generated in CP, while the remnant undergoes leftward focus movement to FP, as suggested by the fact that it is stressed, and the rest of the TP undergoes PF-deletion.

(52)A: Juan besó а María. =(6)aJuan kissed to María 'Juan kissed María.' B: Susana)? Por qué [XP a María] (y no a to María (and not to Susana)? 'Why did he kiss María, and not Susana?' [CP Por qué [FP a María₁ [HP Juan besó t₄]]].²⁰ (53)

This analysis is supported by the evidence concerning the size of the ellipsis (at least TP; Section 2.1.) and the existence of full-fledged syntactic structure (connectivity effects; Section 2.2.). Based on those same features, Sluicing has been claimed to involve a full-fledged syntactic structure where wh-movement is followed by TP-deletion (Merchant, 2001; Chung, 2005, a.o.), whereas Stripping, which involves a non-wh remnant, has been argued to involve focus movement followed by TP-deletion (Depiante, 2000, a.o.). (54) illustrates the corresponding analyses for (1)a and b, respectively:

Juan kissed

to María

(54)a. Sluicing Juan comió algo, pero no sé CP quéx <u> [⊥⊵ Juan [√⊵ comió t∠]]].</u> =(4)Juan ate something but I don't know what Juan ate 'Juan ate something, but I don't know what.' b. Stripping Juan comió una manzana, y [FP una naranja₁ [FP Juan comió t₄]]. Juan ate an apple and not an orange Juan ate 'Juan ate an apple, but not an orange'.

Furthermore, the focus fronting of the non-wh-remnant is expected under the widely accepted view that Focus is quantificational and that the focused element moves to the left-periphery to bind a variable (cf. Rizzi, 1997, a.o.). Recent developments within generative grammar further support the relationship between Focus and movement by claiming that Internal Merge (movement) yields discourse related properties (Chomsky, 2005) and that complex syntax is naturally mapped onto complex semantics (Uriagereka, 2008).

4.1. The role of why in Why-Stripping

The goal of this section is to provide an argument for the position that there are two closely-related factors that are crucial for Why-Stripping to be licensed: The height of why (higher than Foc,P) and its focus association property.

Focus movement

²⁰ There is an adjacency requirement between elements undergoing focus fronting (or wh-movement) and the verb in Spanish and other Romance languages (e.g., Romanian, in contrast to Italian).

i. EL COCHE (#Juan) vio ayer.
 the car Juan saw.3SG yesterday
 'It is the car that Juan saw yesterday'

Still, this requirement is not found in ellipsis structures, (e.g., in Sluicing, Stripping, Why-Stripping or Wh-Stripping) and, therefore, we abstract away from it. See Irurtzun (2005) for a proposal on this adjacency requirement that, crucially, is compatible with the ellipsis facts.

4.1.1. The height of why

With regard to the first factor, authors such as Rizzi (1997) claim that the wh-phrase *why* is base-generated high in the left-periphery, as opposed to undergoing wh-movement. Evidence in favor of this view comes, for instance, from the fact that in a number of unrelated languages wh-elements trigger SV inversion, but not *why* (see Rizzi, 1997 for Italian, Alboiu, 2000 for Romanian, Suñer, 1994 for Spanish, and Uriagereka, 1999 for Basque and Hungarian). Though there is a crosslinguistic variation, this variation is explained by other factors such as how high the verb moves in each language (e.g., whether it moves out of vP/VP) and thus is compatible with Rizzi's claims concerning the syntax of *why* (see also Shlonsky and Soare, 2011 for further relevant discussion on the position of *why* in the structure).

Crucially, Rizzi's analysis of *why* can explain the fact that it is impossible to replace it with another wh-phrase in Why-Stripping (cf. Kawamura, 2007:212), as illustrated in (55).²¹

- (55) A: Juan besó a María. Juan kissed to María 'Juan kissed María.'
 - B: Por qué a María?/ *Cuándo a María?/ *Quién a María?/ *Dónde a María? why to María?/ when to María?/ who to María?/ where to María?

If why resides high in the left periphery while other wh-phrases occupy [Spec, FocP], the fact that only why is compatible with a non-wh phrase moved to [Spec, FocP] naturally follows.

The compatibility of *why* with focus movement is observed in the Romance languages where focus movement is attested, in contrast to the behavior of other wh-elements (e.g., see Rizzi, 2001:290–294 for Italian, his data, (56); see also (57) for Romanian).²²

(56) a. Perché QUESTO avremmo dovuto dirgli, non qualcos' altro? *Italian* why THIS we should have said to him, not something else 'Why THIS we should have said to him, not something else?'

Romanian

- *A chi QUESTO hanno detto (non qualcos' altro)?
 to whom THIS they have said (not something else)
 'To whom THIS they said (not something else)?'
- (57) a. A: Ion manc-a *natto*. Ion eating-was *natto*.

'Ion was eating natto.'

- B: De ce NATTO pro manc-a t_{natto}? why NATTO pro eating-was Lit. 'Why NATTO he was eating?'
- b. *Cine NATTO manc-a? who natto eating-was? Lit. 'Who NATTO was eating?'

```
    i. A: Juan besó a María.
        Juan kissed to María
        'Juan kissed María.'
    B: Y cuándo a Susana?/ Y quién a Susana?/ (?)Y dónde a Susana?
        and when to Susana?/ and who to Susana? and where to Susana?
```

Note that the non-wh-remnant in Wh-Stripping undergoes rightward movement and thus can co-occur with a wh-phrase in [Spec, FocP].

22 Similar data are slightly deviant in Spanish, though not ungrammatical:

(i) (?)Pero vamos a ver. Explícame: Por qué ESO teníamos que haber dicho y no otra cosa? but let's to see. Explain-me: Why THAT should.we that to-have said and not other thing 'But, let's see. Explain to me: Why should we have said THAT and not something else?'

We leave the issue of the mild deviance of (i) for future research.

²¹ The examples in (55)B are distinct from acceptable cases of Wh-Stripping in that the non-wh remnant is a repetition from the previous utterance (See Section 1). As expected, the Wh-Stripping counterparts where the non-wh-remnant is contrastive are grammatical (though the one with dónde 'where' is slightly unnatural for unknown reasons):

The same facts are found in unrelated languages, e.g., Uriagereka (1999) shows that focus fronting in wh-questions is also found with *why* in Basque and Hungarian and fairly restricted otherwise; see also Kandybowicz (2011) for this same observation in Krachi, a Kwa language of Ghana. Following the literature, we also interpret these facts as evidence that *why* is generated higher in the structure than other wh-phrases, although there might be some crosslinguistic variation as discussed in this Section.

4.1.2. Association with focus induced by why

Another factor that is peculiar to *why* is that only *why* can induce 'association with focus': the answer in (58)) changes depending on focus in contrast to (59) (Bromberger, 1992:161, examples translated from his work; see Kawamura, 2007 for a recent discussion).

- (58)a. A: Por qué comió ADÁN la manzana. Porque es al que Eva convenció. why ate Adam the apple because he is the-one that Eve convinced 'Why did ADAM eat the apple?' 'Because he is the one that Eve convinced.'
 - b. A: Porqué comió Adán LA MANZANA why ate Adam the apple 'Why did Adam eat THE APPLE?'
 - B: Porque ésa era la única comida disponible. because it was the only food available 'Because that was the only food available.'
- (59) a. A: Cuándo comió ADÁN la manzana? when ate Adam the apple 'When did ADAM eat the apple?'
 - B: A las 4 p.m. del 7 de Julio del 24,000,000 a.C. at the 4 p.m. of-the 7 of July of-the 24,000,000 B.C. 'At 4 p.m. on July the 7th, 24,000,000 B.C.'
 - b. A: Cuándo comió Adán LA MANZANA? when ate Adam the apple 'When did Adam eat THE APPLE?'
 - B: A las 4 p.m. del 7 de Julio del 24,000,000 a.C. at the 4 p.m. of-the 7 of July of-the 24,000,000 B.C.

We argue for the following: the observation that only *why* licenses Why-Stripping and only *why* triggers focus association is not an accident. Rather, the focus association triggered by *why* is derivationally related to the focus movement in Why-Stripping. In other words, the underlying structure of Why-Stripping crucially involves focus association triggered by *why*. Evidence in favor of this view comes from the fact that Why-Stripping examples, (60), receive the same interpretation

as the corresponding unelided why-questions with focus association (58). This can be seen in the answers, which clearly reveal focus association in both cases:

- (60) a. A: Por qué ADÁN?

 why Adam

 'Why did ADAM eat the apple?'
 - b. A: Porqué LA MANZANA? why the apple 'Why did Adam eat THE APPLE?'
- B: Porque él es al que Eva convenció. because he is the-one that Eve convinced 'Because he is the one that Eve convinced.'
- B: Porque ésa era la única comida disponible. because it was the only food available 'Because that was the only food available.'

Furthermore, focus association is island insensitive (see Krifka, 2006) and the focus association effects of Why-Stripping are not an exception. E.g., (61) has the same interpretation as (62), its unelided counterpart (note that the non-whremnants are focused in both cases; the remnant is capitalized in the latter case to clarify this for the reader). In our analysis, this follows from the base-generation of *why*, which as such is not subject to islands.

(61) Why-Stripping

A: Juan jura que va a conocer [a una chica que habla francés]. =(28)

Juan swears that will to meet to a girl who speaks French

'Juan swears that he will meet a girl who speaks French.'

- B: Por qué francés (y no alemán)? why French (and not German) 'Why does Juan swear that he will meet a girl who speaks FRENCH?'
- (62) Por qué (Juan) jura que va a conocer [a una chica que habla FRANCÉS]? why Juan swears that will to meet to a girl who speaks French 'Why does Juan swear that he will meet a girl who speaks FRENCH?'

We assume, therefore, that focus association itself is achieved via Long-Distance Agreement rather than movement. Under this view, the remnant in Why-Stripping undergoes focus movement so as to be able to escape ellipsis (see Section 4.3 for further discussion).

According to Kawamura (2007), the focused phrase and *why* form a unit at LF under focus association.²³ We do not commit ourselves to a particular theory of focus association, rather we claim that *why* can induce focus association and that this plays a crucial role in the licensing of Why-Stripping. For detailed discussion of the semantics of focus association see Krifka (2006) and Toosarvandani (2010).

Still another argument that not only the high base-generation of *why* but also its focus association property is crucial in the licensing of Why-Stripping comes from the behavior of D-linked wh-elements. It has sometimes been argued that D-linked wh-phrases are also generated in the high positions of the C-system (*van* Craenenbroeck, 2010, a.o.). In those Romance languages that allow for overt focus movement (e.g., Italian, Spanish), interrogatives involving D-linked wh-phrases are compatible with this operation (63), as predicted by this base-generation analysis (see Buesa García, 2011:5 for Spanish, his data; note that the information structural properties of the subject as well as its preverbal position provide support for the view that it is focused).

(63) Cuál de los libros JUAN compró ayer (no Carlos)? which of the books JUAN bought yesterday not Carlos 'Which of the books did JUAN buy yesterday (not Carlos)?'

Despite the compatibility with focus fronting, D-linked wh-phrases do not license Sluice-Stripping of the Why-Stripping kind (64), unlike *why*. This indicates that the focus-association property of *why* is also a necessary condition for the licensing of Why-Stripping.

- (64) A: Alguno de estos tíos estaba comiendo chorizo. one of these guys was eating chorizo 'One of these guys was eating chorizo.'
 - B: *Cuál de estos tíos chorizo? which of these guys chorizo 'Which of these guys was eating chorizo?'

Again, the examples in (64) should not be treated as instances of Wh-Stripping because the non-wh-remnant *chorizo* is repeated from, rather than contrasted with a phrase in the antecedent clause (see Footnote 21). The behavior of D-linked wh-elements, therefore, provides further evidence in favor of the relevance of focus association in licensing Why-Stripping.²⁴

4.1.2.1. Focus association properties of wh-elements other than why. Languages differ as to whether they have wh-words other than why that allow for focus association as well. E.g., how come in English allows for focus association and, as expected, also licenses How-Come-Stripping (see Yoshida et al., in press for details). In the case of Spanish como

Irrespective of the exact analysis of the lack of inversion under wh-movement, our point is that these wh-phrases are compatible with focus movement but yet cannot substitute why in Why-Stripping due to the lack of the focus association property.

²³ Furthermore, Kawamura argues that focus association with *why* entails exhaustivity. It is interesting to note that exhaustivity has been linked to focus movement in a number of languages, e.g. Hungarian (Kiss, 1998), and that this exhaustivity is absent in Wh-Stripping.

²⁴ Arnaiz (1992) analyzes wh-questions without inversion as in (63) in terms of topicalization of the wh-phrase, as opposed to D-linking. Specifically, he shows that aggressively-non-D-linked wh-phrases also may fail to trigger inversion:

i. ?Qué diablos Juan ha preparado para la comida? what hell Juan has prepared for the dinner 'What the hell has Juan prepared for dinner?'

qué 'how come' also allows for focus association ((65)) and, as predicted, it also allows for what we could call Como-qué-Stripping ((66)), the counterpart of Why-Stripping:

- (65) a. A: Cómo que ADÁN comió la manzana? how that Adam ate the apple 'What do you mean ADAM ate the apple?'
 - B: Es que él es al que Eva convenció. is that he is the-one that Eve convinced 'He is the one that Eve convinced.'
 - b. A: Cómo que Adán comió LA MANZANA? how that Adam ate the apple 'What do you mean Adam eat the APPLE?'
 - B: Es que ésa era la única comida disponible. is that that was the only food available 'It was the only food available.'
- (66) A: Le di el dinero a Juan. to-him gave.I the money to Juan 'I gave the money to Juan.'
 - B: Cómo que a JUAN? Te dije que se lo dieras a Pablo. how that to Juan to-you told.I that to-him it give to Pablo. 'What do you mean you gave it to JUAN? I told you to give it to Pablo.'

In any case, in this paper we focus on Why-Stripping, leaving the properties of *cómo que* for future research (we thank an anonymous reviewer for bringing these cases to our attention).

4.1.3. A remaining problem: unmovable remnants

An apparent problem for our focus movement analysis is that Why-Stripping allows for unmovable constituents to appear as non-wh remnants, e.g., bare verbs or prepositions.²⁵

(67) a. A: John should sell his banana boat.b. A: Veterans are honored after death, but not before death.B: Why SELL?B: Why AFTER?

As the following examples show, bare verbs or bare prepositions do not move higher than the subject in English.

- (68) a. $*[_V \text{ Sell}]$, John should t_V his banana boat.
 - b. *It is [v sell] that John should (do) tv his banana boat.
 - c. *[P After], veterans are honored to death, not before death.
 - d. *It is [p after] that veterans are honored to death, not before death.

The same behavior can be found in Spanish. For instance, past participles in verbal complexes cannot undergo movement in this language:

(69) a. Pedro ha ganado. Pedro has won 'Pedro has won.'

b. *GANADO (Pedro) ha (Pedro). won Pedro has

Focus movement

We leave this issue for future research.

²⁵ TP is another unmovable constituent that a priori could appear in Why-Stripping (see Abels 2003 for discussion on the highly restricted TP movement), contrary to the fact. Specifically, complementizer retention is obligatory under both Why and Wh-Stripping, as it is a property of movement in general irrespective of its directionality (see Merchant, 2004:689 and references therein for discussion):

i. A: John believes many strange things. One day he said that ghosts exist. Another day he said that trolls exist.

B: Why [CP *(that) trolls exist]?

i. A: Somebody said that Mary was coming and another person said that John was leaving.

B: That's right. Peter said that Mary was coming, but I don't know who *(that) John was leaving.

Still, participles can appear as non-wh-remnants in Why-Stripping, though the examples are somewhat degraded:

(70) A: Pedro ha ganado. B: ?Por qué GANADO? Pedro has won why won 'Pedro has won.' 'Why has he won?'

Crucially, these elements can be focus associated with *why* in Why-Interrogatives (see (71)a and (71)b for the English cases and (71)c for the Spanish cases).

- (71) a. Why should John SELL his banana boat (not LEND his banana boat)?
 - b. Why are veterans honored AFTER death (not BEFORE death)?
 - c. Por qué ha GANADO Pedro, y no ha terminado el último? why has won Pedro and not has finished the last "Why has Pedro won, as opposed to finishing last?"

Following Gallego's (2011) independent suggestion for closely related ellipsis cases with preposition remnants, we assume that "given" DPs can undergo ellipsis: the whole PP (e.g., after death) or VP (e.g., sell his banana boat) moves to the focus position and the "given" complement DP (e.g., death and his banana boat, respectively) is elided after movement. Thus, the constituent that moves is indeed a movable constituent. Thus, we can explain these facts by assuming that the head V or P is focus-associated with why, causing the focus movement of the VP or PP, followed by DP ellipsis.²⁶

If our view that focus association plays a role in the licensing of these unmovable remnants is on the right track, it is predicted that Wh-Stripping should not allow for that kind of remnants. The prediction is fulfilled. (72)a illustrates this point for prepositional remnants in English (cf. (67)b), and (72)b illustrates this point for Spanish participles (cf. (70)):

- (72) a. *Not everybody honors veterans in the same way. I honor veterans before death, but I don't know who after.
 - b. A: Alguno de estos tíos ha llegado. one of these guys has arrived 'One of these guys has arrived.'
 - B: *Y cuál de ellos NADADO? and which of them swam 'Which of them has swam?'

To sum up, examples of Why-Stripping of 'unmovable' remnants can also be accounted for in terms of focus association effects, at least tentatively.

4.2. Why-Stripping with a contrastive remnant: why not

The complex phrase why not can also host a non-wh-remnant in the same way as in regular Why-Stripping:

- (73) a. Even an ordinary man must be respected. Then, why not Mary?
 - b. Yo escribiré sobre sintaxis por esa razón, pero por qué no sobre fonología.

 I will-write about syntax for that reason but why not about phonology 'I will write about syntax for that reason, but why not about phonology?'

- i. A: The answer is no.
 - B: Why 'no'? Why not 'yes'?

This quotative use seems to be a subcase of the epistemic use of *why*. E.g., Hempel (1965) distinguished between reason-seeking *why*-questions (which illustrate the epistemic use of *why*) and explanation-seeking *why*-questions. The former seek reasons that justify believing that something is the case (e.g., 'what is the reason for believing that the answer is 'no'?' in (i)B), whereas the latter are usually motivated by knowledge that a specific event has occurred. This paper focuses on the explanation-seeking *why*-questions. It remains unclear at this point whether the epistemic use of *why* in Why-Stripping correlates with a Deep Anaphora in the sense of Hankamer and Sag (1976), as opposed to a Surface Anaphora, in contrast to explanation-seeking Why-Stripping. We leave this issue for future research noting that Gallego's (2011) can explain the data in a way compatible with our approach.

²⁶ Note that (67) and (70) are felicitous under a quotative use of *why* mentioned in Merchant (2006:22, footnote 1; his example) and illustrated below:

According to Merchant (2006), *why* is a phrasal adverb and *not*, which is a phrasal adverb as well, adjoins to *why*.²⁷ Though a detailed study of the structure in (73) goes beyond the goal of this paper, we hypothesize that this is case of Why-Stripping with one additional operation, the adjunction of *not* to *why*. It remains to be determined whether it is *not* that licenses ellipsis in Why-not-Stripping as suggested by the fact that it licenses ellipsis in other contexts (see Saab, 2008, 2010; see also (1)b/b').

Still, the remarkable feature of (73) is that the non-wh-remnant in these cases is contrasted with the correlate in the antecedent clause. That, however, is a feature of Wh-Stripping, not Why-Stripping (see (6)). Nonetheless, (73) should count as a subtype of Why-Stripping rather than Wh-Stripping, because the correlate and the remnant (e.g., 'an ordinary man' and 'not Mary', respectively, in (73)a) are compatible notions (more precisely, 'an ordinary man' is a subset of 'non-Mary') rather than separate, contrastive notions. As expected, other wh-phrases cannot appear in this context, that is to say, there is no such a thing as Wh-not-Stripping:

- (74) A: Alguno de estos tíos escribirá sobre sintaxis. one of these guys will-write about syntax 'One of these guys will write about syntax.'
 - B: *Y cuál de ellos no sobre fonología? and which of them not about phonology 'And which of them will not write about phonology?'

4.3. Surviving ellipsis in languages or dialects lacking overt focus movement

The analysis in (53) seems straightforward for Standard Spanish which allows for overt focus fronting, but it raises questions concerning the behavior of those varieties of Spanish which allegedly lack this operation. In particular, the example of overt focus fronting in (75), taken from Zubizarreta (1998:103), is grammatical in most varieties of Spanish and yet it is reported as deviant in Mexican Spanish by Gutiérrez Bravo (2002:171); (see also Martínez-Sanz, 2011 for Dominican Spanish):²⁸

- (75) a. Pedro detesta las espinacas.
 Pedro hates the spinach
 'Pedro hates spinach'
 - b. LAS ESPINACAS $_x$ detesta Pedro t_x (y no las papas). the spinach hates Pedro and not the potatoes 'It is spinach that Pedro hates.'

Focus movement

Nonetheless, Why-Stripping is acceptable even in Mexican Spanish. This fact can be dealt with in the following way: we argue that this property is the consequence of a general condition on focus, i.e., focused constituents must be pronounced to satisfy the recoverability condition on ellipsis (Pesetsky, 1997). In the default case, focalization in Mexican Spanish is manifested *in-situ* by focal stress.

(76) Pedro detesta LAS ESPINACAS.
Pedro hates the spinach
'Pedro hates spinach'

Arguably, focus movement in Mexican Spanish is covert in such cases. However, when a focused element is included in a 'to-be-elided' TP (as in (53) and (54)b), it must escape the ellipsis in order to be pronounced, and the otherwise-covert focus movement is manifested overtly *only under ellipsis* (see Nakao, 2009 for a similar approach to English Stripping). Under current theoretical assumptions where there is no overt/covert movement distinction, but rather a

²⁷ Other focus particles also can appear in Why-Stripping:

i. Why only/just/even John?

²⁸ Still another interesting case within the Romance family is Portuguese. While this language allows for Why-Stripping, Costa (2004) argues at length that overt focus movement is not available in this language. Nonetheless, Costa and Martins (2011) refine this view claiming that focus movement is attested though fairly restricted.

choice on which copy of the movement chain to pronounce, this means that PF constraints force the pronunciation of the upper copy.²⁹

We claim that the situation is parallel to Multiple Sluicing in languages lacking multiple wh-movement (e.g., Spanish, Italian and Portuguese, as opposed to Romanian, within the Romance family). Although the second wh-phrase usually undergoes covert wh-movement, (77), it can escape the TP only when there is ellipsis, (78) (see Bolinger, 1978; Lasnik, 2013; Nishigauchi, 1998; Richards, 2001; Takahashi, 1994, a.o., for discussions on Multiple Sluicing; see also Section 3.1.1):

- (77) a. Qué compré yo para quién?
 what bought I for who
 'What did I buy and for whom did I buy it?'
 - b. *Qué para quién compré yo?
- (78) (?)Yo compré algo para cada persona, pero no recuerdo [CP qué₁ para quién₂ I bought something for each person but not remember.I what for who [LP yo compré t₁ t₂]].
 - I bought t₁ t₂

'I bought something for each person, but I do not remember what I bought for whom.'

Under Lasnik's (2013) analysis, the second wh-phrase (e.g., *quién*) undergoes overt rightward movement rather than wh-movement to [Spec, CP]. Putting aside the kinds of movement, it is another case where elements that usually undergo covert movement, nonetheless, undergo overt movement in order to escape an ellipsis site. Furthermore, Wh-Stripping, as discussed below, illustrates a construction similar to Multiple Sluicing in which rightward movement occurs in order to escape ellipsis.

4.4. An excursus into the island-insensitivity of Why-Stripping

Why-Stripping shows island amelioration effects as seen in Section 3.1.2:

- (79) A: Juan jura que va a conocer [a una chica que habla francés]. = (28)

 Juan swears that will.3SG to meet to a girl who speaks French

 'Juan swears that he will meet a girl who speaks French.'
 - B: Por qué francés (y no alemán)? why French and not German 'Why did Juan swear that he will meet a girl who speaks FRENCH?'

Yoshida et al. (in press) argue for the following: i. base-generation of *why* in Why-Stripping explains the insensitivity to islands of *why*; ii. Merchant's (2001) island-amelioration system (see Section 3.1.2.) explains the island-insensitivity of the non-wh-remnant, in the same way as that of Sluicing wh-remnants.

In contrast to Sluicing, however, Stripping (and Fragment answers, see Merchant, 2004) are subject to islands. Merchant accounts for this asymmetry in the following way. Following Fox (1999), he assumes that wh-movement targets every maximal projection, and further assumes that every intermediate trace gets a *-feature when it crosses an island. Under Sluicing, the whole TP undergoes PF-deletion, thus deleting the *-marked traces, as illustrated in (80)b.

- (80) a. John wants to hire [island someone [who speaks a Balkan language]], but I don't know which.
 - b. ... [CPwhich1C [TP *t"4 [TP John [WP *t'4 [WP want to hire [weland someone who speaks t4]]]]]]

On the other hand, the non-wh remnant in Stripping/Fragment Answers lands in a higher position ([Spec, FP]) than the whelement in Sluicing and leaves one more intermediate trace above the elided TP, as shown in (81)b. As a consequence, not all *-marked traces are erased by ellipsis in Stripping/Fragment Answers.

²⁹ In fact, Mexican Spanish allows for both Why- and Wh-Stripping. Therefore, the factors that determine the choice of the operation that allows the non-wh-remnant to escape ellipsis are the same as those in other varieties of Spanish, (e.g., the presence or lack of a wh-element capable of triggering focus association and the height of the wh-element in the structure).

- (81)Does Abby speak [island the same Balkan language [that Ben speaks]]?
 - *No. Charlie. Fragment Answers

b. ... [FP Charlie 1 F [CP *t"" 1 C [TP *t" 4 [TP Abby [wp *t' 4 [wp speaks [wland the same language that t4 speaks]]]]]]]

Given that Why-Stripping shows island amelioration effects, we interpret this as evidence that focus movement in Why-Stripping is not exactly parallel with focus movement in Stripping and Fragment Answers. Instead, we assume that the non-wh-remnant in Why-Stripping moves to a focus position directly above TP and under CP (our IntP). This way, there is no extra *-marked intermediate trace and the island insensitivity is expected, as in the case of Sluicing. (82) illustrates the derivation for (79)B (we abstract away from irrelevant details such as the exact structure of the periphrastic expression va a conocer or the presence of intermediate traces within the island):

We admit that the claim that Stripping/Fragment Answers and Why-Stripping target two different FP positions is merely speculative at this point. However, if Merchant's speculation that FP is higher than CP in Stripping/Fragments is on the right track, this is the best speculation we can make based on his analysis. This analysis raises an interesting question regarding which position in C is targeted by which focus element, and why such difference holds true. Though the specifics of Merchant' proposal raise a number of questions (cf. Saab, 2008; Nakao, 2009; Griffiths and Lipták, 2013), from the present perspective the important point is that whatever explains the behavior of islands under Sluicing can also be applied to the present context.30

4.5. Interim summary

On the basis of the properties unveiled in Sections 3 and 4, the following analysis of Why-Stripping has been put forward:

B:
$$[_{CP}$$
 Por qué $[_{FP}$ a María $_1$ $[_{LP}$ -Juan bosó t_2]]. =(53) why to María Juan kissed

Evidence has been provided in favor of the view that the base-generation of why high in the left periphery and its focus association properties are crucial in the licensing of Why-Stripping (Sections 4.1.1 and 4.1.2, respectively). It has been shown how the present analysis can explain the existence of unmovable non-wh-remnants (Section 4.1.3) and the island-insensitivity of Why-Stripping (Section 4.4). Furthermore, other issues such as the focus association properties of wh-elements other than why (Section 4.1.2.1), the existence of Why-not-Stripping (Section 4.2) or dialectal variation regarding overt focus movement within Spanish (Section 4.3) have been discussed.

- francés. A: Juan quiere contratar a una chica que habla Juan wants to-hire girl to a who speaks French 'Juan wants to hire a girl who speaks French.'
 - por qué no holandés? and why not Dutch 'Why doesn't Juan want to hire a girl who speaks Dutch'

Furthermore, Griffiths and Lipták's system cannot explain the clause-mate condition involving the wh-element and the non-wh-remnant (see Section 3.1.1) and the unavailability of P-stranding (Section 3.2) in Wh-Stripping.

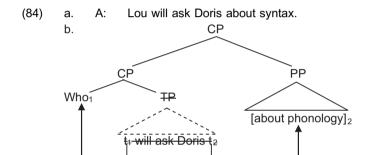
³⁰ Griffiths and Lipták (2013) put forward a proposal in terms of a scopal parallelism condition on ellipsis, which states that variables in the antecedent and the elided clause need to be bound from parallel positions. Technical details aside, their proposal is intended to make noncontrastive fragments island-insensitive, as opposed to contrastive fragments, where contrastiveness is defined in terms of an explicit relation of contrast between the ellipsis remnant and its correlate in the antecedent clause. A priori, this would seem to capture the asymmetry in islandsensitivity found in Why-Stripping and Wh-Stripping: the former includes a non-contrastive non-wh-remnant and is, therefore, island-insensitive, whereas the latter includes a contrastive non-wh-remnant and is, therefore, island-sensitive (see Section 3.1.2); note that the wh-remnants are non-contrastive in both constructions. Still, their view predicts that Why-Stripping with a contrastive non-wh-remnant (see Section 4.2) should be island sensitive, contrary to fact:

5. The analysis of Wh-Stripping

The purpose of this section is to further flesh out the analysis of Wh-Stripping, including the rightwards movement of the non-wh-remnant. So far, we have seen that Wh-Stripping is similar to Why-Stripping in that (i.) the size of the ellipsis is at least TP, as opposed to smaller categories (Section 2.1) and that (ii.) a full-fledged syntactic structure is involved at the ellipsis site (Section 2.2). On the other hand, Wh-Stripping is different from Why-Stripping in that it is sensitive to syntactic islands, it exhibits the clause-mate requirement (Section 3.1) and it disallows P-stranding (Section 3.2). These latter properties of Wh-Stripping pattern with Gapping and Multiple Sluicing, suggesting a rightward movement approach to Wh-Stripping (Nevins, 2008).³¹

While Nevins (2008) notes the locality and P-stranding restrictions on Wh-Stripping and thus claims that it involves rightward movement, he fails to draw the line between Wh-Stripping and Why-Stripping. Instead, he takes the syntactic behavior of Wh-Stripping to also hold for Why-Stripping, contrary to fact. In contrast, we have provided ample evidence suggesting that the movement that the non-wh-remnant undergoes in Why-Stripping is leftward movement, unlike that in Wh-Stripping.

Nevins (2008) proposes the following derivation for Wh-Stripping, where the remnant undergoes rightward movement and the wh-element regular wh-movement. We adopt this analysis.



B: And who about phonology?

Note that the clause-bounded nature of the rightward movement of the remnant strictly enforces the clause-mate condition, as the embedded remnant would be trapped within the scope of ellipsis if ellipsis takes place at a clause higher than the one where the remnant is generated (note that the derivation abstracts away from irrelevant details such as verb movement):³²

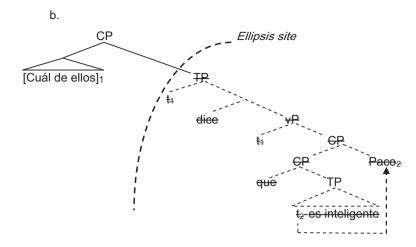
(85) a. A: Alguno de estos tíos dice que Florentino es inteligente.
one of these guys says that Florentino is intelligent.
'One of these guys says that Florentino is intelligent.'
B: *Y cuál de ellos Paco?
and which of them Paco

³¹ Most Wh-Stripping examples included in this paper involve D-linked wh-items (though see (16)). In this respect, Wh-Stripping parallels Sluicing, which is known to be most grammatical with D-linked wh-items (e.g., Chung et al., 1995:266) to the point that aggressively non-D-linked wh-phrases are banned in this construction (see Merchant, 2001:120–126 for discussion).

³² As is well known, rightward movement is subject to the Right Roof Constraint (RRC; Ross, 1967; Grosu, 1972), however, the nature of RRC has, as far as we know, not been explored in detail. Recently, Sabbagh (2007) tried to provide a unified account of the locality properties of rightward movement, e.g., Heavy NP-shift, and Right Node Raising (RNR). Sabbagh argues that RNR and rightward movement in general are basically unbounded, even though they are sensitive to some locality constraint. To explain the locality effects of RNR, he proposes the following constraint.

⁽i) Rightward Crossing Constraint (RCC)
Rightward movement of X may not cross phonologically overt material which is not contained within the cyclic node (= vP, PP) wherein X is initially merged.

According to (i.), changing linear order within the phase domain is allowed, but changing linear order outside the phase domain creates contradictory ordering statements, and it renders the sentence ungrammatical. Thus, rightward movement can cross a phase-mate overt material, but not the one outside the phase domain. Still, Wh-Stripping is clause-bounded even when ellipsis erases any contradictory ordering statements and, most importantly, even if there is no contradiction as in the case of remnants that are at the right edge of the structure before ellipsis and rightward movement apply. It remains to be seen, therefore, whether the present proposal can be made compatible with Sabbagh's approach.



Under this analysis, the lack of focus fronting to the left-periphery would follow from the lack of focus association with whphrases other than *why* (and possibly to the lack of an exhaustivity feature; see Footnote 23). Proposals concerning some version of rightward movement also exist in Romance for focalization in Spanish (Parafita Couto, 2005), right-dislocation in Catalan (López, 2009) or other ellipsis processes (e.g., comparative subdeletion constructions, Reglero, 2007), a fact that lends indirect support to the present approach.

Further support for this analysis comes from the fact that the clause-mate condition can be violated at least under certain circumstances in embedded subjunctive clauses, (86)a, and embedded infinitival clause, (86)b, in contrast to embedded finite indicative clauses, (86)c:

(86)a. Ceferino consiguió que España ganara los Juegos Olímpicos... Subjunctive Ceferino achieved that Spain won.SUBJ the Olympic Games 'Ceferino managed to have Spain win the Olympic Games...' no sé qué otro entrenador la Eurocopa. and I don't know which other coach the European Cup 'and I don't know what other coach managed to have Spain win the European Cup.'

b. Ceferino quería ganar los Juegos Olímpicos... Infinitival clause Ceferino wanted to-win the Olympic Games 'Ceferino wanted to win the Olympic Games...'

y no sé qué otro entrenador la Eurocopa. and I don't know which other coach the European Cup 'and I don't know what other coach wanted to win the European Cup.'

in terms of rightwards movement.

c. Ceferino dijo que España ganará los Juegos Olímpicos... Indicative
Ceferino said that Spain will-win the Olympic Games
'Ceferino said that Spain will win the Olympic Games...'
?y no sé quién/qué otro entrenador la Eurocopa.
and I don't know who/which other coach the European Cup

This is actually predicted under the current proposal because (i.) both subjunctive and infinitival clauses are known to be fairly porous to extraction when compared to finite indicative clauses (see Kempchinsky, 1987 for discussion); (ii.) in English, too, it has been claimed that the effects of the Right Roof Constraint (RRC; see Footnote 32) are lessened in subjunctive clauses (Kayne, 1998:166) and in infinitival clauses (see (26)) a fact that lends further support for an approach

'and I don't know what other coach said that Spain will win the European Cup.'

To recapitulate, we argue that the non-wh-remnant in Wh-Stripping escapes ellipsis via rightward movement (in the same way as Multiple Sluicing). If our analysis of Sluice-Stripping is on the right track, it provides evidence for two distinct mechanisms for non-wh-remnants to escape ellipsis: overt focus movement as in the case of Why-Stripping, and rightward movement as in the case of Wh-stripping.

5.1. A comparison with CLLD-Sluicing

It is well known that Spanish and Romance in general allow for topic-like elements dislocated to the left, and to varying degrees, to the right. Such structures are doubled by a clitic, hence the constructions are labeled CLLD and Clitic Right Dislocation (CLRD), respectively:³³

- (87) a. Pedro dijo que *el coche*, es obvio que lo comprarás. CLLD
 Pedro said that the car, is obvious that CL will-buy.2nd.SG
 'Peter said that, with regard to the car, it is obvious that you will buy it.'
 - b. Pedro dijo que es obvio que lo comprarás, el coche.

CLRD

The literature includes base-generation analyses of the CLLD-ed XP (e.g., Cinque, 1990 for Italian and Olarrea, 1996 for Spanish, a.o.) as well as movement analyses (e.g., Pablos, 2006, a.o., for Spanish; see the latter work for a recent overview of the debate; see also Ott, 2012 for an analysis where CLLD reduces to an interplay of movement and ellipsis in an underlying biclausal structure). Be that as it may, in this section we develop an argument for the existence of CLLD-Sluicing which does not hinge on the exact analysis of CLLD, but rather on well-described properties of CLLD. Additionally, evidence is provided that in Wh-Stripping the non-wh-remnant is not CLLD-ed or CLRD-ed.

Strong pronouns, which are obligatorily doubled by a clitic irrespective of their information structural properties (e.g., (88)) can surface as remnants of ellipsis such as Fragment Answers, (89) (see Arregi, 2010:568, a.o.; see Section 4.4. for an analysis of Fragment Answers):

- (88) a. Juan *(lo) mató a él. Juan CL killed to him 'Juan killed him.'
 - b. A ÉL *(lo) mató Juan. to HIM CL killed Juan 'Juan killed HIM.'

(Arregi, 2010:568)

- (89) A: A quién mató Juan? to who killed Juan 'Who did Juan kill?'
 - B: A él lo mató Juan.

Therefore, it is possible for an ellipsis remnant to be CLLD-ed, even if the PF-deletion process of ellipsis deletes the phonetic form of the clitic. Indeed, a number of approaches in terms of CLLD-ed ellipsis remnants exist in the literature. E. g., Saab (2008, 2010: 85; his data) provides evidence for a CLLD analysis of TP ellipsis. Specifically, he claims that TP-ellipsis is licensed by negation in the following example where *a Ana* 'to Ana' is CLLD-ed:

(90) Juan desaprobó a María, pero a Ana, no la desaprobó. Juan failed ACC María, but ACC Ana not CL failed 'Juan failed MARÍA, but not Ana.'

While CLLD-ed elements typically precede wh-elements, they may follow D-linked wh-phrases (Ordóñez and Treviño, 1999:47) in non-ellipsis constructions. In turn, CLRD-ed XPs of course appear to the right of wh-elements. Could the non-wh-remnant be CLLD-ed or CLRD-ed in Wh-Stripping? No, because CLLD and CLRD are not clause-bound (see (87)) in

```
    Con Pedro, no he hablado.
with Pedro, not have.1<sup>st</sup>.SG talked
'With regard to Pedro, I haven't talked to him.'
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We follow Villalba (2000) and Casielles-Suárez (2004), a.o., in assuming that in those cases a null clitic doubles the CLLD-ed element. Furthermore, in addition to CLLD, Spanish also allows for Left Dislocation (see Cinque's 1990 seminal work on Italian; see Olarrea, 1996 for detailed discussion on Spanish). Both PPs and DPs can be dislocated in CLLD as opposed to Left-Dislocation, which only allows DPs. Since both Wh-Stripping and CLLD-Sluicing allow for prepositional non-wh-remnants, this rules out an analysis of the data under consideration in terms of Left-Dislocation of that remnant. Note that while De Cat (2007) has argued for a unified analysis of Left-Dislocation and CLLD in French, it is not clear that Spanish patterns with French in all respects, as acknowledged in her work.

³³ Note that not all CLLD-ed elements co-occur with an overt clitic, e.g., certain PPs:

clear opposition to the non-wh-remnant in Wh-Stripping (see Section 3.1). In a similar vein, the fact that Wh-Stripping structures are found in English (e.g., (84)) provides evidence against an analysis of Wh-Stripping in terms of CLLD or CLRD of the non-wh-remnant, as CLLD and CLRD are absent in English.

On the other hand, there is a closely-related elliptical construction in which a non-wh remnant precedes the wh-phrase, as shown in (91)B. We argue that (a.) in this construction the non-wh-remnant is CLLD-ed; (b.) (91)B is derived from (91)B' through the application of ellipsis. Thus, we call this construction CLLD-Sluicing.

(91) CLLD-Sluicing

- A: Alguno de estos tíos besó a María. = (7) one of these guys kissed to María 'One of these guys kissed María.'
- B: Y a Susana, cuál de ellos la besé? and to Susana, which of them CL kissed 'With regard to Susana, which of them kissed her?'
- B': Y a Susana, cuál de ellos la besó? and to Susana, which of them CL kissed

The evidence in favor of this analysis is the following: first, there is an intonational break, represented by the semicolon, between the non-wh-remant and the wh-element in CLLD-Sluicing, (91). This break, absent in Wh-Stripping, is typically found between topics and the rest of the sentence, (87). Second, if indeed we are dealing with a case of CLLD, the clause-mate restriction is predicted to be absent in CLLD-Sluicing, in contrast to Wh-Stripping. The prediction is fulfilled:

(92) CLLD-Sluicing

- A: Alguno de estos tíos negó que Juan hubiera hablado con María. one of these guys denied that Juan had talked with María 'One of these guys denied that Juan had talked to María.'
- B: Y con Susana, cuál de ellos? and with Susana, which of them 'With regard to Susana, which of them denied that Juan had talked to her?'

(93) Wh-Stripping

- A: Alguno de estos tíos negó que Juan hubiera hablado con María. = (23) one of these quys denied that Juan had talked with María
- B: *Y cuál de ellos con Susana? and which of them with Susana 'Which of them denied that Juan had talked to Susana?'

Within the present analysis, the difference between Wh-Stripping and CLLD-Sluicing lies in the kind of movement that the remnant undergoes (CLLD, if indeed CLLD involves movement, vs. rightward-focus movement). The very existence of such differences and the distinct crosslinguistic distribution, therefore, lend further support to the analysis of Wh-Stripping.

6. Issues for future research in the syntax of Sluice-Stripping

6.1. Still another subcase of Sluice-Stripping

(94) exemplifies still another closely-related construction involving a wh- and a non-wh-remnant. Specifically, the whelement receives main sentence stress and licenses a non-wh-remnant which, unlike our previous Wh-Stripping cases, further specifies the content of the wh-element (we thank an anonymous reviewer for bringing these cases to our attention):

- (94) A: Voy a ir en Octubre a Buenos Aires. I-am-going to go in October to Buenos Aires 'I am going to go to Buenos Aires in October.'
 - B: CUÁNDO en Octubre? when in October 'When exactly?'
 - B': A DÓNDE en Buenos Aires? to where in Buenos Aires 'Where exactly?'

These constructions may have a rhetorical flavor, e.g., A's reply in (95) may imply that the money is not to be found anywhere on the table:

(95) A: Dónde pusiste el dinero? where you-put the money 'Where did you put the money?'

B: En la mesa. on the table 'I put it on the table.'

A (watching the empty table): DÓNDE en la mesa?

where on the table

'Where on the table did you put it?'

When the semantics of the wh-remnant are unrelated to the semantics of the non-wh-remnant, the result is infelicitous:

(96) A: Voy a ir en Octubre a Buenos Aires. I-am-going to go in October to Buenos Aires

> B: #A dónde en Octubre? to where in October *'Where exactly in October?'

This may suggest that, in contrast to the Sluice-Stripping structures discussed in this paper, the wh-remnant and the non-wh-remnant form a constituent, as suggested by their meaning: E.g., *DÓNDE en la mesa* in (95) means '(on) which part of the table'. We leave the study of these Sluice-Stripping constructions for future research.³⁴

6.2. Backwards ellipsis

Why-Stripping allows for backwards ellipsis, where the elided clause precedes the antecedent clause, as shown in (97), in contrast to Wh-Stripping (98).

- (97) No sé por qué a ella, pero Modesto quiere ver a Blancaflor. not know why to her, but Modesto want to-see to Blancaflor 'I don't know why her, but Modesto wants to see Blancaflor.'
- (98) (?)No sé cuál de ellos el chorizo, pero alguno de estos tíos se comió la paella. not know which of them the chorizo, but one of these guys refl ate the paella '(?)I don't know which of them the chorizo, but one of these guys ate the paella.'

In this respect, Why-Stripping patterns with Sluicing, whereas Wh-Stripping patterns with Gapping (Brucart, 1987:73; see Jackendoff, 1971) and Stripping. The possibility of backward ellipsis has been attributed to whether the constituent in which the ellipsis is taking place can be embedded or not. As Sag (1976) shows, ellipsis obeys the so-called Backward Anaphora Constraint: the (minimal) clause that contains the ellipsis site cannot c-command the antecedent clause, as illustrated by the following contrast (Sag, 1976:3–4; his data):

- (99) a. *[TP Betsy did [VP Ø]] after Peter went to the store.
 - b. [CP Although TP Sandy said she didn't VP Ø], Betsy actually did go to the store.

In an example like (99)a, the clause that hosts the VP-ellipsis c-commands the antecedent clause. On the other hand, in (99)b, the clause that contains the VP-ellipsis (she didn't [$_{VP}$ ø]) does not c-command the antecedent clause. Thus, the oddity of (98) is expected to correlate with a slight degradation when Wh-Stripping is embedded in contrast to

³⁴ Similarly, Sluice-Stripping with an echo question interpretation is left for future research. As is well known, echo questions have their own characteristics, e.g., their locality properties and licensing environments are different from regular questions as the ones studied in this article To our ear, (96)B, for instance, improves slightly under an echo question interpretation.

Why-Stripping. Indeed, some speakers find Wh-Stripping slightly degraded in embedded clauses, (100), whereas Why-Stripping does not have this restriction, (101):

- (100) A: He oído que Juan ama a María. I heard that Juan loves to María.
 - 'I have heard that Juan loves María.'
 - B: Interesante. Quisiera saber por qué [XP a María]. Interesting I-would-like to-know why to María 'Interesting. I would like to know why María?'
- (101) A: He oído que alguno de estos tíos ama a María.

 I heard that one of these guys loves to María
 'I have heard that one of these guys loves María.'
 - B: Interesante... (?)Quisiera saber cuál de ellos a Susana. Interesting I-would-like to-know which of them to Susana 'Interesting. I would like to know which of them loves Susana?'

It is not clear at this point why speakers should vary in the licensing of Wh-Stripping in embedded clauses. We leave this issue for future research.

7. Conclusion

This research provides evidence that there are two main types of Sluice-Stripping, that is to say, ellipsis structures involving a wh-remnant followed by a non-wh-remnant. Specifically, the following Sluice-Stripping types are found: (i.) Why-Stripping, where the wh-element is restricted to *why*, and the non-wh remnant is typically identical to an element in the antecedent clause (though see Section 4.2 for discussion of Why-Stripping combined with negation). *Why* is basegenerated in the left-periphery and the non-wh-remnant undergoes leftward focus movement followed by clausal ellipsis; (ii.) Wh-Stripping, which involves a wh-element other than *why*, and where the non-wh remnant contrasts with a phrase in the antecedent clause. The wh-remnant undergoes regular leftward wh-movement followed by rightward movement of the focused non-wh-remnant and clausal ellipsis. The analysis is informed by new data from Spanish.

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References

Alboiu, G., 2000. The Features of Movement in Romanian. University of Manitoba, (Doctoral dissertation).

Almeida, D., Yoshida, M., 2007. A problem for the preposition stranding generalization. Linguistic Inquiry 38, 349-362.

Arnaiz, A., 1992. On word order in *wh*-questions in Spanish. In: Kathol, A., Beckman, J. (Eds.), Papers from the Fourth Student Conference in Linguistics 1992. MITWPL, Cambridge, MA, pp. 1–10.

Arregi, K., 2010. Ellipsis in split questions. Natural Language and Linguistic Theory 28, 539-592.

Bolinger, D., 1978. Asking more than one thing at a time. In: Hiz, H. (Ed.), Questions. Reidel, Dordrecht, pp. 107-150.

Bošković, Ž., 2002. On multiple wh-fronting. Linguistic Inquiry 33, 351-383.

Bromberger, S., 1992. On what we know we don't know: explanation, theory, linguistics, and how questions shape them. The University of Chicago Press, Chicago.

Brucart, J.M., 1987. La elisión sintáctica en español. Publicacions de la Universitat Autònoma de Barcelona, Bellaterra.

Buesa García, C., 2011. El hueco de sujeto en español y algunas consecuencias teóricas y empíricas. Cuadernos de la ALFAL 3, 7–18. Casielles-Suárez, E., 2004. The Syntax-information Structure Interface. Routledge, London.

Chomsky, N., 2005. On phases. In: Freidin, R., Otero, C.P., Zubizarreta, M.L. (Eds.), Foundational Issues in Linguistic Theory. Essays in Honor of Jean-Roger Vergnaud. MIT Press, Cambridge, MA, pp. 133–166.

Chung, S., 2005. Sluicing and the Lexicon: the point of no return. In: Cover, R.T., Kim, Y. (Eds.), Proceedings of the 31st Annual Meeting of the Berkeley Linguistics Society. Berkeley Linguistics Society, Berkeley, CA, pp. 73–91.

Chung, S., Ladusaw, W.A., McCloskey, J., 1995. Sluicing and logical form. Natural Language Semantics 3, 239-282.

Cinque, G., 1990. Types of A'dependencies. MIT Press, Cambridge, MA.

Costa, J., 2004. Subject Positions and Interfaces: The Case of European Portuguese. Mouton de Gruyter, New York.

Costa, J., Martins, A.M., 2011. On focus movement in European Portuguese. Probus 23, 217-245.

Culicover, P.W., Jackendoff, R., 2005. Simpler Syntax. Oxford University Press, Oxford.

De Cat, C., 2007. French dislocation without movement. Natural Language and Linguistic Theory 25, 485-534.

Depiante, M.A., 2000. The Syntax of Deep and Surface Anaphora: A Study of Null Complement Anaphora and Stripping/Bare Argument Ellipsis. University of Connecticut, (Doctoral dissertation).

Drummond, A., Hornstein, N., Lasnik, H., 2011. A puzzle about P-stranding and a possible solution. Linguistic Inquiry 41, 689-692.

Emonds, J., 1978. The verbal complex V'-V in French. Linguistic Inquiry 9, 151-175.

Fox, D., 1999. Reconstruction, binding theory, and the interpretation of chains. Linguistic Inquiry 30, 157-196.

Gallego, A., 2011. Sobre la elipsis. Arco Libros, Madrid.

Ginzburg, J., Sag, I., 2000. Interrogative Investigations. CSLI Publications, Stanford, CA.

Grebenyova, L., 2006. Multiple interrogatives: Syntax, semantics and learnability. University of Maryland, College Park, (Doctoral dissertation). Griffiths, J., Lipták, A., 2013. Contrast and island sensitivity in clausal ellipsis. Syntax, (in press).

Grosu, A., 1972. The strategic content of island constraints. Ohio State University Working Papers in Linguistics 13, 1-225.

Grosu, A., 2006. An amalgam and its puzzles. In: Gaertner, H.-M. (Ed.), 40 to 60 Puzzles for Manfred Krifka. Website of the Zentrum fuer Allgemeine Sprachwissenschaft, Berlin. http://www.zas.gwz-berlin.de/fileadmin/material/40-60-puzzles-for-krifka/pdf/grosu.pdf, (01.01.12).

Gutiérrez-Bravo, R., 2002. Structural Markedness and Syntactic Structure: A Study of Word Order and the Left-Periphery in Mexican Spanish. University of Santa Cruz, (Doctoral dissertation).

Hankamer, J., Sag, I., 1976. Deep and surface anaphora. Linguistic Inquiry 7, 391-426.

Heim, I., Kratzer, A., 1998. Semantics in Generative Grammar. Blackwell, Malden, MA.

Hempel, C., 1965. Aspects of Scientific Explanation. Free Press, New York, NY.

Hernanz, M.L., Rigau, G., 2006. Variación dialectal y periferia izquierda. In: Fernández, B., Laka, I. (Eds.), Andolin Gogoan. Essays in Honour of Professor Eguzkitza. Euskal Herriko Unibersitatea, Gipuzkua, pp. 435–452.

Hiraiwa, K., Ishihara, S., 2002. Missing links: cleft, sluicing, and "No da" construction in Japanese. MIT Working Papers in Linguistics 43, 35–54. Ince, A., 2007. Non-wh phrases in sluicing in Turkish. In: Omaki, A., Ortega-Santos, I., Sprouse, J., Wagers, M. (Eds.), University of Maryland Working Papers in Linguistics 16. pp. 1–22.

Irurtzun, A., 2005. Reprojection & spell out (or vice-versa). In: Talk at the 15th Colloquium on Generative Grammar, University of Barcelona. Jackendoff, R., 1971. Gapping and related rules. Linguistic Inquiry 2, 21–36.

Jayaseelan, K.A., 1990. Incomplete Vp deletion and gapping. Linguistic Analysis 20, 64-81.

Johnson, K., 1996. Bridging the Gap. Ms. University of Massachusetts, Amherst.

Johnson, K., 2006. Gapping. In: Everaert, M., Van Riemsdijk, H. (Eds.), The Blackwell Companion to Syntax. Blackwell, Cambridge, pp. 407–435. Johnson, K., 2009. Gapping is not (Vp-) ellipsis. Linguistic Inquiry 40, 289–328.

Kandybowicz, J., 2011. Krachi Wh-in-situ and the grammar of why. In: Talk at 42nd Annual Conference on African Linguistics (ACAL42/ACAL2011), University of Maryland.

Kawamura, T., 2007. Some Interactions of Focus and Focus Sensitive Elements. Stony Brook University, (Doctoral dissertation).

Kayne, R.S., 1998. Overt vs. Covert Movements. Syntax 1, 128-191.

Kempchinsky, P., 1987. Romance subjunctive clauses and Logical Form. UCLA, (Doctoral dissertation).

Kiss, K.É., 1998. Identificational focus versus information focus. Language 74, 245-273.

Krifka, M., 2006. Association with focus. In: Molnár, V., Winkler, S. (Eds.), The Architecture of Focus. Mouton de Gruyter, Berlin, pp. 105–136. Lasnik, H., 1999. Pseudogapping puzzles. In: Lappin, S., Benmamoun, E. (Eds.), Fragments: Studies in Ellipsis and Gapping. Oxford University Press, New York, pp. 141–174.

Lasnik, H., 2001. When can you repair an island by destroying it? In: Kim, M., Strauss, U. (Eds.), Proceedings of the North East Linguistic Society 31, vol. 2. GLSA Publications, Amherst, MA, pp. 301–320.

Lasnik, H., 2005. How to Evade Moving Violations. Lecture at LSA Summer Institute, MIT, Cambridge, MA.

Lasnik, H., 2013. Multiple Sluicing in English? Syntax, http://dx.doi.org/10.1111/synt.12009.

Lobeck, A.C., 1995. Ellipsis: Functional Heads, Licensing, and Identification. Oxford University Press, New York.

López, L., 2009. A Derivational Syntax for Information Structure. Oxford University Press, Oxford.

Martínez-Sanz, C., 2011. Null and overt subjects in a variable system: The case of Dominican Spanish. University of Ottawa, (Doctoral dissertation).

May, R., 1991. Syntax, semantics, and logical form. In: Kasher, A. (Ed.), The Chomskyan Turn. Blackwell, Oxford, pp. 334–359.

Merchant, J., 2001. The Syntax of Silence: Sluicing, Islands, and the Theory of Ellipsis. Oxford University Press, Oxford.

Merchant, J., 2004. Fragments and ellipsis. Linguistics and Philosophy 27, 661-738.

Merchant, J., 2006. Why no(t)? Style 40, 20-23.

Merchant, J., 2008. An asymmetry in voice mismatch in Vp-ellipsis and pseudogapping. Linguistic Inquiry 39, 169–179.

Merchant, J., 2013a. Voice and ellipsis. Linguistic Inquiry 44, 77-108.

Merchant, J., 2013b. Diagnosing ellipsis. In: Cheng, L., Corver, N. (Eds.), Diagnosing Syntax. Oxford University Press, Oxford, pp. 537–542. Moro, A., 2011. Clause structure folding and the "wh-in-situ effect". Linguistic Inquiry 42, 389–411.

Nakao, C., 2009. Island Repair and Non-repair by PF Strategies. University of Maryland, College Park, (Doctoral dissertation).

Neijt, A., 1979. Gapping: A Contribution to Sentence Grammar. Foris, Dordrecht.

Nevins, A., 2008. Sluicing * stripping: evidence from P-stranding. In: Paper presented at The 3rd Annual Moscow Student Conference on Linguistics, Moscow, April 2008.

Nishigauchi, T., 1998. Multiple sluicing' in Japanese and the functional nature of Wh-phrases. Journal of East Asian Linguistics 7, 121–152. Olarrea, A., 1996. Pre- and postverbal subject positions in Spanish: a minimalist account. University of Washington, Seattle, (Doctoral dissertation).

Ordóñez, F., Treviño, E., 1999. Left dislocated subjects and the pro-drop parameter: a case study of Spanish. Lingua 107, 39-68.

Ott, D., 2012. Movement and ellipsis in contrastive left-dislocation. In: Proceedings of WCCFL 30. Cascadilla Proceedings Project.

Pablos, L., 2006. Pre-verbal structure building in Romance Languages and Basque. University of Maryland, College Park, (Doctoral dissertation).

Parafita Couto, M.C., 2005. Focus at the interface. University of Kansas, (Doctoral dissertation).

Pesetsky, D., 1982. Paths and categories. MIT, (Doctoral dissertation).

Pesetsky, D., 1995. Zero Syntax: Experiencers and Cascades. MIT Press, Cambridge, MA.

Pesetsky, D., 1997. Some optimality principles of sentence pronounciation. In: Barbosa, P., Fox, D., Hagstrom, P., Mcginnis, M., Pesetsky, D. (Eds.), Is the Best Good Enough. MIT Press, Cambridge, MA, pp. 337–383.

Pollock, J.-Y., 1989. Verb movement, universal grammar, and the structure of IP. Linguistic Inquiry 20, 365-424.

Reglero, L., 2007. On Spanish comparative subdeletion constructions. Studia Linguistica 61, 130-169.

Reinhart, T., 1991. Elliptic conjunctions – non-quantificational LF. In: Kasher, A. (Ed.), The Chomskyan Turn. Blackwell, Oxford, pp. 360–384. Richards, N., 2001. Movement in Language: Interactions and Architectures. Oxford University Press, Oxford.

van Riemsdijk, H.C., 1978. A Case Study in Syntactic Markedness: The Binding Nature of Prepositional Phrases. The Peter de Ridder Press, Lisse

Rizzi, L., 1997. The fine structure of the left periphery. In: Haegeman, L. (Ed.), Elements of Grammar: Handbook in Generative Syntax. Kluwer, Dordrecht, pp. 281–337.

Rizzi, L., 2001. On the position int (errogative) in the left periphery of the clause. In: Cinque, G., Salvi, G. (Eds.), Current Studies in Italian Syntax: Essays Offered to Lorenzo Rizzi. Elsevier, Amsterdam, pp. 287–296.

Rodrigues, C., Nevins, A., Vicente, L., 2009. Cleaving the interactions between sluicing and P-stranding. In: Torck, D., Wetzels, L.W. (Eds.), Romance Languages and Linguistic Theory 2006. John Benjamins, Amsterdam, pp. 245–270.

Ross, J.R., 1967. Constraints on Variables in Syntax. MIT, Cambridge, MA, (Doctoral dissertation).

Ross, J.R., 1969. Guess who? In: Binnick, R.I., Davison, A., Green, G.M., Morgan, J.L. (Eds.), Papers From the 5th Regional Meeting of the Chicago Linguistic Society. Chicago, pp. 252–286.

Saab, A., 2008. Hacia una teoría de la identidad parcial en la elipsis. Universidad de Buenos Aires, (Doctoral dissertation).

Saab, A., 2010. Silent interactions: TP-ellipsis and the theory of island repair. Probus 22, 73-116.

Sabbagh, J., 2007. Ordering and linearizing rightward movement. Natural Language and Linguistic Theory 25, 349-401.

Sáez, L., 2006. Sluicing with copula. In: Gees, R.S., Rubin, E.J. (Eds.), Theoretical, Experimental Approaches to Romance Linguistics. John Benjamins, Amsterdam, pp. 213–236.

Sag, I., 1976. Deletion and Logical Form. MIT, Cambridge, MA, (Doctoral dissertation).

Schütze, C., 2001. On the nature of default case. Syntax 4, 205-238.

Shlonsky, U., Soare, G., 2011. Where's 'why'? Linguistic Inquiry 42, 651-669.

Silva-Villar, L., 1998. Subject positions and the role of CP. In: Schwegler, A., Tranel, B., Uribe-Etxebarria, M. (Eds.), Romance Linguistics. Theoretical Perspectives. John Benjamins, Amsterdam, pp. 247–270.

Stjepanović, S., 2008. P-stranding under sluicing in a non-P-stranding language? Linguistic Inquiry 39, 179-190.

Stowell, T., 1981. Origins of Phrase Structure. MIT, Cambridge, (Doctoral dissertation).

Suñer, M., 1994. Verb movement and the licensing of argumental Wh-phrases in Spanish. Natural Language and Linguistic Theory 12, 335–372.

Takahashi, D., 1994. Sluicing in Japanese. Journal of East Asian Linguistics 3, 265-300.

Toosarvandani, M.D., 2010. Association with foci. University of California, Berkeley, (Doctoral dissertation).

Uriagereka, J., 1999. Minimal restrictions on Basque movements. Natural Language and Linguistic Theory 17, 403-444.

Uriagereka, J., 2008. Syntactic Anchors. Cambridge University Press, Cambridge.

van Craenenbroeck, J., 2010. Invisible last resort: a note on clefts as the underlying source for sluicing. Lingua 120, 1714–1726.

van Craenenbroeck, J., Lipták, A., 2006. The crosslinguistic syntax of sluicing: evidence from Hungarian relatives. Syntax 9, 248-274.

Vicente, L., 2008. On the Availability of Copular Clauses as Sources for Clausal Ellipsis. In: Talk at 44th Chicago Linguistics Society (CLS 44), at University of Chicago, Chicago, IL, USA.

Villalba, X.F., 2000. The syntax of sentence periphery. Universitat Autònoma de Barcelona, (Doctoral dissertation).

Yoshida, M., Dickey, M.W., Sturt, P., 2013. Predictive processing of syntactic structure: sluicing and ellipsis in real-time sentence processing. Language and Cognitive Processes 28, 272–302.

Yoshida, M., Nakao, C., Ortega-Santos, I., in press. The Syntax of Why-Stripping. Natural Language and Linguistic Theory, (in press).

Zubizarreta, M.L., 1998. Prosody, Focus and Word Order. MIT Press, Cambridge, MA.