

Mixed-identity requirements in ellipsis.

The case of Topic-Remnant Elided Questions in Spanish

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Through a detailed examination of an understudied elliptical construction in Spanish that I dub Topic-Remnant Elided Wh-Questions (wh-TREQs), I argue that certain types of ellipsis exhibit ‘mixed-identity’ requirements. Specifically, I claim that while strict syntactic identity is necessary for one portion of the elided structure, no identity constraints are imposed on the remaining portion of the elided structure. The evidence presented supports an elliptical analysis of wh-TREQs and challenges the notion of a unified identity condition in ellipsis. Moreover, I propose a novel theory of ellipsis licensing based on a typology of [E]-features. Overall this research expands our understanding of ellipsis, presenting a more nuanced approach to ellipsis licensing and identity.

1. Introduction

Much of the discussion in the ellipsis literature has centered around answering the *identity question*, that is, what is the relationship between the omitted material and its antecedent, and what type of identity is required for ellipsis to be licensed? Prior work on ellipsis (see [Aelbrecht 2010](#); [Barros 2014](#); [Chung 2013](#); [Chung et al. 1995](#); [Fiengo and May 1994](#); [Lobeck 1995](#); [Merchant 2001, 2013, 2019](#); [Poppels 2022](#); [Ranero 2021](#); [Saab 2008](#); [Stigliano 2022](#); among many others) has worked under the assumption that there should be a universal identity condition that applies to all types of ellipsis in all languages. However, recent research has delved deeply into possible and impossible mismatches between the ellipsis site and its antecedent, revealing that some mismatches can be

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accounted for if a more restrictive identity condition only applies to certain portion of the structure. For instance, Kroll and Rudin (2017) and Rudin (2019) propose that only the *eventive core* (i.e., the vP and its constituent heads), must satisfy the requirement of syntactic identity, while the remaining elements are evaluated in terms of pragmatics. Similarly, Anand et al. (2022) enforce identity over the *argument domain* (i.e., an extension of the eventive core that encompasses any thematic domain). Elements outside of this domain are not required to conform to syntactic identity and are instead judged based on pragmatic and semantic calculations. Despite these recent developments, the challenge of permitting mismatches while maintaining identity between the ellipsis site and its antecedent has yet to be fully resolved.

The present study aims to extend this line of inquiry by proposing that certain types of ellipsis require *mixed-identity requirements*. In particular, I argue that a strict syntactic identity requirement is imposed on one portion of the structure, while no identity requirements at all are imposed on a different portion of the structure. This main argument is supported by a detailed examination of an understudied empirical domain of ellipsis in Spanish: an elliptical construction that I dubbed *Topic-Remnant Elided Wh-Questions* (or wh-TREQs, in short). Wh-TREQs, exemplified in B's response to A in (1) and (2), are elliptical questions interpreted as follow-up wh-questions, as shown by A's subsequent answer to B in the following examples:^{1,2,3}

¹In examples (1) and (2), A's first utterance is the prompt, B's utterance is the wh-TREQ, and A's second utterance is the response to B's wh-TREQ. In the rest of this paper, I won't include A's responses to B's wh-TREQs to avoid making the examples unnecessarily long, and I will just indicate the intended interpretation in the glosses.

²All the examples of wh-TREQs presented in this paper consist of the conjunction *y* 'and' followed by the remnant. It is worth mentioning that the presence of this conjunction is not compulsory (many speakers do indeed accept the examples without the conjunction), yet it is preferable over the variant without it. Importantly, this preference is not particular to the elliptical construction under examination given that non-elliptical versions of wh-TREQs also sound better/more natural with the conjunction preceding them. I thank an anonymous reviewer for bringing up this question.

³The translation of all the Spanish examples in this paper includes what I refer to as *what-about* questions, followed by a resumed wh-question. I opted for this translation/interpretation of wh-TREQs because it seems to me to be the construction that most closely resembles the meaning of wh-TREQs in Spanish, in particular considering that topicalizations out of wh-questions are ungrammatical in English:

- (i) A: Sonia ate pizza.
B: *And pasta, who ate?

Nevertheless, I caution against drawing any conclusions solely based on these translations, as I believe *what-about* questions and wh-TREQs in Spanish are different in nature. Although an in-depth analysis of *what-about* questions in English is out of the scope of this paper, I briefly discuss some of their characteristics in Appendix B.

- | | |
|---|--|
| <p>(1) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'</p> <p>B: Y Bruno?
and Bruno
Literal: 'And Bruno?'
Interpretation: 'What about Bruno?
What did he eat?'</p> <p>A: Pasta.
pasta
'Pasta.'</p> | <p>(2) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'</p> <p>B: Y pasta?
and pasta
Literal: 'And pasta?'
Interpretation: 'What about pasta?
Who ate that?'</p> <p>A: Bruno.
Bruno
'Bruno.'</p> |
|---|--|

It's important to note that, in general, Topic-Remnant Elided Questions could be ambiguous between a wh-question interpretation (i.e. what I call *wh-TREQs*) and a polar question interpretation (i.e., *polar TREQs*), as exemplified in (3)-(4). Usually, context disambiguates between the two interpretations. An analysis of polar TREQs is out of the scope of this paper, and I refer the reader to Stigliano (2022, 2023) for a thorough examination of this construction.

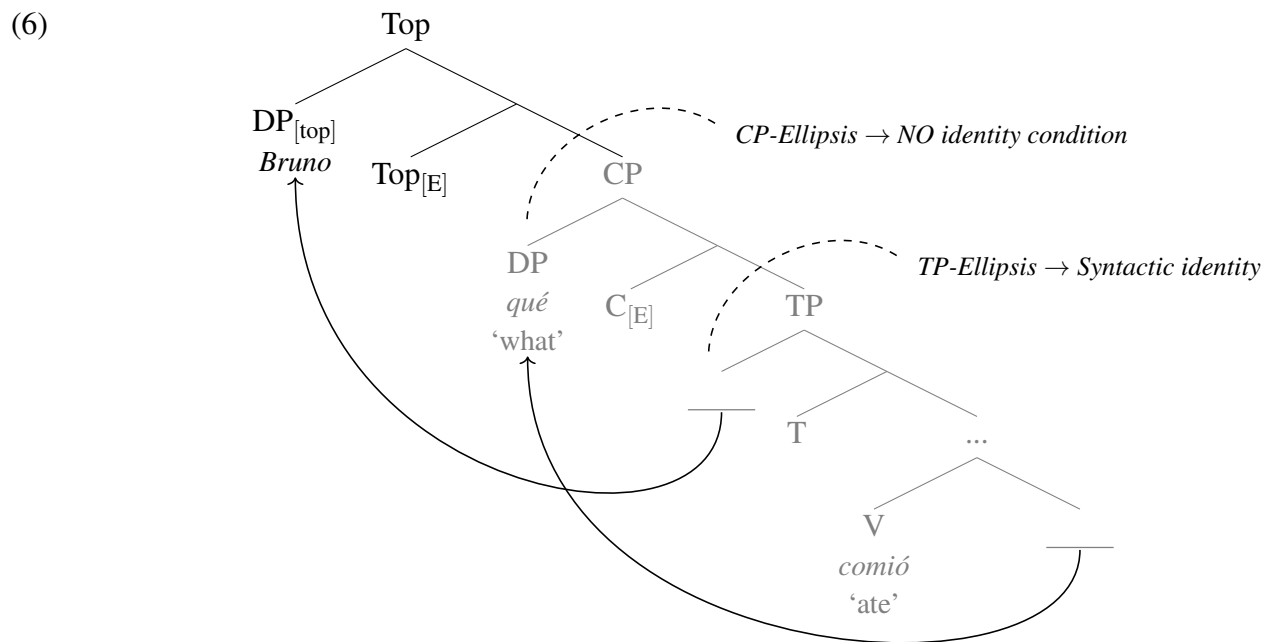
- | | |
|---|---|
| <p>(3) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'</p> <p>B: Y Bruno?
and Bruno
Literal: 'And Bruno?'
Interpretation: 'What about Bruno?
Did he also eat pizza?'</p> <p>A: No. (Está a dieta.)
no he.is on diet
'No. (He is on a diet).'</p> | <p>(4) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'</p> <p>B: Y pasta?
and pasta
Literal: 'And pasta?'
Interpretation: 'What about pasta?
Did she also eat that?'</p> <p>A: No. (Solo comió pizza.)
no only he.ate pizza
'No. (He only ate pizza).'</p> |
|---|---|

Examples such as those in (1) and (2) provide important insights into the study of ellipsis, though similar constructions have been examined before in languages like Mandarin Chinese, Korean, and Japanese, they have not been explored in such a systematic way (see Section 2 for an overview of previous works). In this paper, I analyze wh-TREQs as the result of the ellipsis of a wh-question, from which a Topic has moved out, surviving deletion. Furthermore, I show that

syntactic isomorphism between the antecedent and the ellipsis site is needed by providing evidence from connectivity effects (such as the impossibility of voice mismatches, P-stranding under sluicing, and spray-load alternations), and the fact that wh-TREQs are island sensitive. However, I also show that a syntactic identity condition is too strict and fails to account for the basic fact that the ellipsis site contains a wh-phrase *qué* ‘what’, which gets deleted although it doesn’t have an identical correlate in the antecedent—as shown in (5), the correlate would be the NP *pizza*:

- (5) A: Sonia comió pizza
 Sonia ate pizza
 ‘Sonia ate pizza.’
- B: Y [Bruno]_{top} ⟨ellipsis site qué_i⟩ comió t_i⟩?
 and Bruno what ate
 ‘And Bruno what did he eat?’

To account for these seemingly conflicting identity requirements, I argue that wh-TREQs arise as the result of two ellipses, one triggered by an [E]-feature on C, which imposes syntactic identity over its complement (namely, the TP), and one triggered by an [E]-feature on Top, which doesn’t impose any identity requirements at all and deletes what’s remaining in its complement (namely, the wh-phrase). This is schematized in (6) for the wh-TREQ in (5), where gray text represents elided material:



The structure of this paper is as follows. Section 2 provides an overview of previous work that has analyzed similar phenomena to what I called TREQs. Section 3 examines the syntactic distribution of wh-TREQs in Spanish and presents evidence supporting (i) an ellipsis approach of this construction, (ii) a move-and-delete analysis of the remnant, (iii) the claim that there is movement of the wh-phrase inside the ellipsis site, and (iv) the need for a syntactic identity condition to license ellipsis. In Section 4, I discuss the identity condition needed to license ellipsis in wh-TREQs, I argue that wh-TREQs are licensed under mixed-identity conditions, and I implement this by proposing that wh-TREQs are actually the result of two ellipses, triggered by two distinct [E]-features. Finally, Section 5 concludes, summarizes the findings, and posits some open questions. Two appendices follow the conclusions: Appendix A complements the data presented in Section 3 regarding wh-TREQs and islands, and Appendix B discusses differences and similarities between Spanish wh-TREQs and English *what-about* questions.

2. Previous works and background

In this section, I offer a brief overview of the previous literature that addresses constructions similar to what I refer to as TREQs. As I will show, there are significant differences between the phenomena discussed in these works and TREQs in Spanish. Crucially, none of the existing literature provides a detailed and unified analysis of the phenomena under study here, leaving them unable to account for the full range of properties exhibited by TREQs in Spanish. I want to underscore the importance of this work as a foundation for the investigation I undertake in this paper, which not only seeks to provide a comprehensive understanding of TREQs but also, and more importantly, aims to put forth a particular theory of ellipsis licensing and identity.

The term *Fragment Questions* has been used to refer to a construction similar to what I call *polar TREQs* in Spanish (Stigliano 2022, 2023). According to Wei (2013), Fragment Questions in Mandarin Chinese, like the one in (7)B, are interpreted as polar/A-not-A questions:

- (7) A: Zhangsan huilai le.
 Zhangsan back le
 ‘Zhangsan has already come back.’

B: Lisi ne?

Lisi Q

Interpretation: 'What about Lisi? Did she come back or not?'

(adapted from [Wei 2013](#), ex. 3)

Wei extends [Merchant's \(2004\)](#) proposal for fragment answers in English and analyzes Fragment Questions in Mandarin Chinese as involving focus movement of the remnant, followed by TP-Ellipsis. That is, Fragment Questions in Mandarin Chinese are considered a type of TP-Ellipsis, along the lines of sluicing, fragment answers, and so on. In contrast, I propose here that wh-TREQs in Spanish are a type of CP-Ellipsis. What is more, Wei claims that Fragment Questions do not require syntactic identity to be licensed, but only semantic identity, despite the fact that Fragment Questions in this language display connectivity effects and are island sensitive.

[Wei \(2018\)](#) revises their previous proposal and argues that Fragment Questions are derived via topic movement (not focus movement) and TP-Ellipsis. According to Wei, the remnant is a topic-like constituent the Specifier of TopP, followed by a particle *ne*, which functions as a topic marker and as a constituent question particle simultaneously (for more details on this analysis, see [Wei 2018](#)). My analysis regarding the topicalization of the remnant is in line with Wei's approach.

[Li \(2016\)](#) also analyzes Fragment Questions in Mandarin Chinese. However, Li's Fragment Questions differ from Wei's, as can be seen in B2 below. The crucial difference between Wei's and Li's Fragment Questions is that the latter have an explicit wh-question as its antecedent (i.e., A1):

(8) A1: Libai he-le shenme?

Libai drink-Asp what

'What did Libai drink?'

B1: Hongjiu.

red.wine

'Red wine.'

A2: Dufu ne?

Dufu NE

Interpretation: 'What did Dufu drink?'

B2: Baijiu.

white.wine

'White wine.'

(adapted from Li 2016, ex. 5)

Li proposes that Fragment Questions in Mandarin Chinese of the type exemplified above are derived from full wh-questions, with ellipsis targeting the entire question, minus the remnant, which is a contrastive topic. On the surface, this is similar to my proposal for wh-TREQs in Spanish. However, Li argues that the interpretation of Fragment Questions is context-dependent: they can be interpreted as wh-questions, alternative questions, A-not-A questions and yes-no questions, depending on the question that precedes them in a dialogue. In contrast, wh-TREQs in Spanish, which do not require such an explicit question in the context. The following example illustrates a Fragment Question interpreted as a polar question due to the presence of a polar question in A1:

- (9) A1: Libai laizi Shaanxi ma?
 Libai come.from Shaanxi QP
 ‘Is Libai from Shaanxi?’
- B1: Shi a.
 yes SFP
 ‘Yes, he is.’
- A2: Dufu ne?
 Dufu NE
 Interpretation: ‘Is Dufu from Shaanxi?’
- B2: Ye shi.
 too yes
 ‘Yes, he is too.’

(adapted from Li 2016, ex. 11)

The author argues that ellipsis is licensed under semantic identity, more specifically, a focus condition on ellipsis based on Rooth (1992) (for more details, see Li 2016). This contrasts with my proposal for wh-TREQs and, more broadly, with the theory of ellipsis identity I advocate.

It should be noted that while Li’s argument primarily focuses on the presence of an antecedent question for the analyzed construction, the author briefly notes that Fragment Questions can occur without an antecedent question, as illustrated in (10):

- (10) A: Libai he-le kafei.
 Libai drink-Asp coffee

‘Libai drank coffee.’

B: Na, Dufu ne?
then Dufu NE
‘What about Dufu?’

(adapted from Li 2016, ex. 35)

These ‘antecedent-less’ Fragment Questions can receive different interpretations. Although Li doesn’t provide a full account of these cases, he suggests that they are licensed by an implicit antecedent question (i.e., a *Question Under Discussion*), from which they take the relevant meaning. There is no further analysis into the syntax or the distribution of this construction, nor is it clear what the predictions of this analysis would be. If this were extended to wh-TREQs in Spanish, it would predict incorrect patterns, given that it wouldn’t be able to account for the connectivity effects (such as voice mismatches and spray/load alternations), or the island sensitivity effects found in this construction, as I will show in the rest of this paper.

Kim (2021) examines Fragment Questions in Korean. These are similar to Li’s Fragment Questions in that they do have a wh-question in its antecedent. Kim proposes a direct interpretation (i.e. non-sententialist) approach to this construction, *contra* e.g., Wei (2013, 2018). Despite the fact that Fragment Questions in Korean display connectivity effects such as case matching effects, and are island sensitive, Kim still argues for a non-sententialist approach based on some apparent case mismatches and some contexts of island insensitivity. Although I don’t have an explanation for how these mismatches arise, I take the evidence for sententialist account to be overwhelming to even consider the alternative non-sententialist approach viable.

Finally, Hiraiwa and Kobayashi (2020) discuss what they call *countersluicing* in Japanese, an elliptical phenomenon in which everything but a wh-phrase (and what follows it) survives deletion:

(11) A: Arne Jacobsen-ga dezainsita no-wa Ant Chair desu
Arne Jacobsen designed C-TOP Ant Chair COP
‘It was Ant Chair that Arne Jacobsen designed.’

B: Hans J. Wegner-ga dezainsita no-wa ~~nan-toiu~~ ~~isu-o~~ (desu-ka)?
Hans J. Wegner-NOM designed C-TOP what-called chair-ACC COP Q
Interpretation: ‘What chair was it that Hans J. Wegner designed?’

A: The Chair *desu*
The Chair *COP*
'It was The Chair.'

(adapted from Hiraiwa and Kobayashi 2020, ex. (5))

Hiraiwa and Kobayashi argue that both countersluicing and sluicing in Japanese are derived from a copular source. This is a key difference from *wh*-TREQs in Spanish: the fact that isomorphism is needed for *wh*-TREQs in Spanish plays a crucial role for the type of analysis I propose for this construction. Furthermore, according to the authors, sluicing results from applying Argument Ellipsis to *FinP*, whereas countersluicing involves applying Argument Ellipsis to *ForceP*. This contrasts with the analysis proposed here for *wh*-TREQs, and with the commonly assumed analyses for sluicing in Spanish. Additionally, it is worth noting that countersluicing in Japanese does not allow polar question readings (unlike Fragment Questions in Mandarin Chinese and polar TREQs in Spanish) and is restricted to matrix clauses, which contrasts with the existence of embedded *wh*-TREQs (see Stigliano 2022).

To sum up, the phenomenon I analyze in this paper—*wh*-TREQs in Spanish—shares similarities with Fragment Questions (of different types) in Mandarin Chinese and Korean, and Countersluicing in Japanese. Some of the ingredients of the analysis I propose here, such as the claim that remnant in a topicalized *XP*, have been proposed in some of the works cited above. However, there are crucial differences between TREQs and the other phenomena discussed in this section. Firstly, Fragment Questions with a *wh*-question meaning in Mandarin Chinese and Korean are typically associated with an explicit antecedent *wh*-question. The cases lacking an antecedent *wh*-question are not thoroughly examined. The fact that a *wh*-phrase can be elided even when there is no *wh*-phrase or indefinite in its antecedent is a crucial property of *wh*-TREQs. Moreover, the analyses of Fragment Questions often rely on (different flavors of) semantic identity, which permits structural mismatches between the antecedent and the ellipsis site. As I will show, (some type of) syntactic identity/isomorphism is indeed needed to license ellipsis in contexts of *wh*-TREQs. In this respect, it is crucial to reconcile this claim (and the facts that motivated it) with the empirical domain of *wh*-TREQs, which suggest that this syntactic identity requirement needs to be weakened. I will

achieve this by proposing that wh-TREQs are the result of two ellipses, each imposing different identity conditions—a new perspective that has not been previously discussed.

3. The distribution of wh-TREQs in Spanish

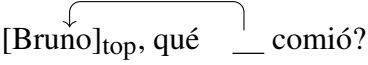
In this section I examine evidence in favor of an ellipsis approach to wh-TREQs that involves topicalization of the remnant *outside* the ellipsis site, and wh-movement of the wh-phrase *inside* the ellipsis site. First, I show that there is a strict correlation between the contexts in which topicalization is allowed out of wh-questions in Spanish, and the contexts that allow wh-TREQs. In particular, possible remnants for a wh-TREQ in Spanish are exactly those constituents that can otherwise be topicalized out of a wh-question (Section 3.1). Likewise, those constituents that cannot be topicalized out of a wh-question cannot be remnants of wh-TREQs (Section 3.2). Second, in Section 3.4 I discuss the island sensitive nature of wh-TREQs; specifically, I argue that the patterns found with respect to islands provide evidence for the claim that there is wh-movement inside the ellipsis site, and that the remnant is a topicalized XP that moves out of the ellipsis site. Finally, in Section 3.5, I show that wh-TREQs display connectivity effects, which provides further evidence for the need for (at least some type of) syntactic identity to license this construction.

3.1 Possible remnants

Possible remnants for wh-TREQs in Spanish are exactly those constituents that can otherwise be topicalized out of a wh-question in this language. This shows that there's indeed structure inside the ellipsis site, and that the remnant moves out of it. This argument will be complemented with the analysis of those constituents that cannot be topicalized out of wh-questions and that, as expected, cannot occur as wh-TREQs (see Section 3.2 below). In short, possible remnants include subjects and objects (both direct and indirect), prepositional phrases (both in the verbal and nominal domains), temporal and locative phrases, frequency and manner adverbs, predicative adjectives, and infinitival phrases. In what follows, I provide examples of each of them.

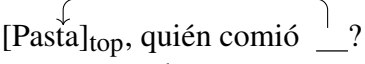
3.1.1 *Subjects, direct objects, and indirect objects*

As shown in (12), subjects can be topicalized out of wh-questions. As expected, they can also be remnants for wh-TREQs, as (13) shows:

(12) 
 [Bruno]_{top}, qué ___ comió?
 Bruno what ate
 ‘Bruno, what did he eat?’


(13) A: Sonia comió pizza.
 Sonia ate pizza
 ‘Sonia ate pizza.’
 B: Y Bruno?
 and Bruno
 Literal: ‘And Bruno?’
 Interpretation: ‘What about Bruno? What did he eat?’

Likewise, the example in (14) shows that direct objects can be topicalized out of a wh-question, and the example in (15) shows that, as expected, they can be remnants for wh-TREQs:

(14) 
 [Pasta]_{top}, quién comió ___?
 pasta who ate
 ‘Pasta, who ate?’

(15) A: Sonia comió pizza.
 Sonia ate pizza
 ‘Sonia ate pizza.’
 B: Y pasta?
 and pasta
 Literal: ‘And pasta?’
 Interpretation: ‘What about pasta? Who ate that?’

Finally, example (16) shows that indirect objects can be topicalized out of a wh-question. They can be remnants for wh-TREQs as well, as (17) shows:

(16) 
 [A Bruno]_{top}, quién le dio una pizza ___?
 to Bruno who CL.DAT.SG gave a pizza
 ‘To Bruno, who gave him a pizza?’

(17) A: Sonia le dio una
 Sonia CL.DAT.SG gave a
 pizza a Luciano.
 pizza to Luciano
 ‘Sonia gave a pizza to Luciano.’
 B: Y a Bruno?
 and to Bruno
 Literal: ‘And Bruno?’
 Interpretation: ‘What about
 Bruno? Who gave him a pizza?’

3.1.2 *Prepositional Phrases*

The examples below show that PPs can be topicalized out of a wh-question. This holds for PPs in the verbal domain, as in (18), and for PPs in the nominal domain, as in (19):

- (18) [Con Luciano]_{top}, quién habló ___?
 with Luciano who talked
 ‘With Luciano, who talked?’
- (19) [De Luciano]_{top}, quién vio [una foto ___]?
 of Luciano who saw a picture
 ‘Of Luciano, who saw a picture?’

As expected, PPs can be remnants for wh-TREQs, as shown in (20) and (21) below:

- | | | |
|------|--|---|
| (20) | A: Sonia habló con Bruno.
Sonia talked with Bruno
‘Sonia talked with Bruno.’ | B: Y con Luciano?
and with Luciano
Literal: ‘And with Luciano?’
Interpretation: ‘What about Luciano?’
Who talked with him?’ |
| (21) | A: Sonia vio una foto de Bruno.
Sonia saw a picture of Bruno
‘Sonia saw a picture of Bruno.’ | B: Y de Luciano?
and of Luciano
Literal: ‘And of Luciano?’
Interpretation: ‘What about Luciano?’
Who saw a picture?’ |

3.1.3 *Temporal and Locative Phrases*

As for temporal and locative phrases, the examples in (22) and (23) show that they can be topicalized out of wh-questions:

- (22) [El viernes]_{top}, quién corrió ___?
 the Friday who ran
 ‘On Friday, who ran?’
- (23) [En la playa]_{top}, quién corrió ___?
 on the beach who ran
 ‘On the beach, who ran?’

The examples in (24) and (25) show that, as expected, they can be remnants for wh-TREQs:

- (24) A: Sonia corrió el martes.
Sonia ran the Tuesday
'Sonia ran on Tuesday.'
- B: Y el viernes?
and the Friday
Literal: 'And on Friday?'
Interpretation: 'What about on Friday?'
Who ran that day?'
- (25) A: Sonia corrió en el parque.
Sonia ran in the park
'Sonia ran in the park.'
- B: Y en la playa?
and on the beach
Literal: 'And on the beach?'
Interpretation: 'What about on the beach?'
Who ran there?'

3.1.4 Adverbs

Similarly, frequency, manner, and temporal adverbs can be topicalized out of a wh-question, as shown in the examples below:

- (26) [Ocasionalmente]_{top}, quién corre ___?
occasionally who runs
'Occasionally, who runs?'
- (27) [Rápido]_{top}, quién corre ___?
fast who runs
'Fast, who runs?'
- (28) [Después]_{top}, quién corrió ___?
after who ran
'After, who ran?'

Likewise, examples (29), (30), and (31) show that they can also be remnants for wh-TREQs:

- (29) A: Sonia corre siempre.
Sonia runs always
'Sonia always runs.'
- B: Y ocasionalmente?
and occasionally
Literal: 'And occasionally?'
Interpretation: 'What about occasionally? Who runs occasionally?'
- (30) A: Sonia corre despacio.
Sonia runs slow
'Sonia runs slow.'
- B: Y rápido?
and fast
Literal: 'And fast?'
Interpretation: 'What about fast? Who runs fast?'

- (31) A: Sonia corrió antes.
Sonia ran before
'Sonia ran before.'
- B: Y después?
and after
Literal: 'And after?'
Interpretation: 'What about after? Who ran after?'

3.1.5 *Predicative adjectives*

As shown in (32), predicative adjectives can also be topicalized out of a wh-question. As expected, these adjectives can also be remnants for wh-TREQs, as (33) shows:

- (32) [Azul]_{top}, quién pintó el auto ___?
blue who painted the car
'Blue, who painted the car?'

- (33) A: Sonia pintó el auto rojo.
Sonia painted the car red
'Sonia painted the car red.'
- B: Y azul?
and blue
Literal: 'And blue?'
Interpretation: 'What about blue? Who painted the car blue?'

3.1.6 *Infinitival Phrases*

Bare infinitives can be topicalized out of wh-questions and be remnants for wh-TREQs, as examples (34) and (35) show:

- (34) [Comer]_{top}, quién quiere ___?
to.eat who wants
'Eating, who wants (to do that)?'

- (35) A: Sonia quiere cocinar.
Sonia wants to.cook
'Sonia wants to cook.'
- B: Y comer?
and to.eat
Literal: 'And to eat?'
Interpretation: 'What about eating? Who wants to eat?'

Additionally, (36) and (37) show that infinitival phrases can also be topicalized out of wh-questions and be remnants for wh-TREQs:

- (36) [Comprar un auto]_{top}, quién quiere ___?
 to.buy a car who wants
 ‘Buying a car, who wants (to do that)?’
- (37) A: Sonia quiere viajar a Chicago.
 Sonia wants to.travel to Chicago
 ‘Sonia wants to travel to Chicago.’
- B: Y comprar un auto?
 and to.buy a car
 Literal: ‘And to buy a car?’
 Interpretation: ‘What about buying a car? Who wants to buy a car?’

3.2 Impossible remnants

Impossible remnants for wh-TREQs in Spanish are exactly those constituents that cannot be topicalized out of wh-questions in this language. Again, I take this to show that there’s indeed structure inside the ellipsis site, and that the remnant must be topicalized out of it. This argument complements what I just presented in Section 3.1. In short, impossible remnants include TPs, sentential adverbs, and attributive adjectives.

3.2.1 TPs

As (38) shows, TPs cannot be topicalized out of wh-questions. As predicted, they cannot be remnants for wh-TREQs either, as shown in (39):

- (38) *[Compró un auto]_{top}, quién ___?
 bought a car who
 Literal: ‘Bought a car, who (did it)?’
- (39) A: Sonia viajó a Chicago.
 Sonia traveled to Chicago
 ‘Sonia traveled Chicago.’
- B: *Y compró un auto?
 and bought a car
 Literal: ‘And bought a car?’
 Intended interpretation: ‘What about buying a car? Who did that?’

3.2.2 Sentential adverbs

Example (40) shows that sentential adverbs cannot be topicalized out of wh-questions.⁴ Likewise, (41) shows that they cannot be remnants for wh-TREQs, as expected:

⁴Note that the problem with (40) is the topicalization of the adverb in the context of a wh-question. As shown below, sentential adverbs are possible in wh-questions as long as they remain in their base position:

- (40) *[←][Probablemente]_{top}, quién va a renunciar ___?
 probably who will quit
 Intended: ‘As for probably, who will probably quit?’
- (41) A: Va a renunciar Sonia seguramente.
 will quit Sonia for.sure
 ‘Sonia will quit for sure.’
- B: *Y probablemente?
 and probably
 Literal: ‘And probably?’
 Intended interpretation: ‘What about probably? Who will probably quit?’

3.2.3 *Post and pre-nominal adjectives*

Post-nominal adjectives cannot be topicalized out of wh-questions and they cannot be remnants of wh-TREQs, as shown in examples (42) and (43) below:

- (42) *[←][Joven]_{top}, quién contrató a un amigo ___?
 old who hired DOM an friend
 Intended: ‘As for young, who hired a young friend?’
- (43) A: Sonia contrató a un amigo viejo.
 Sonia hired DOM a friend old
 ‘Sonia hired an old friend (= a friend that’s old).’
- B: *Y joven?
 and young
 Literal: ‘And young?’
 Intended interpretation: ‘What about young? Who hired a young friend?’

Similarly, (44) and (45) show that pre-nominal adjectives cannot be topicalized out of wh-questions nor be remnants for wh-TREQs, as predicted:

- (44) *[←][Nuevo]_{top}, quién contrató a un ___ amigo?
 new who hired DOM a friend
 Intended: ‘As for new, who hired a new friend?’
- (45) A: Sonia contrató a un viejo amigo.
 Sonia hired DOM an old friend

(i) Quién va a renunciar probablemente?
 who will to.quit probably
 ‘Who is probably going to quit?’

‘Sonia hired an old friend (= long-time friend).’

B: *Y nuevo?

and new

Literal: ‘And new?’

Intended interpretation: ‘What about new? Who hired a new friend?’

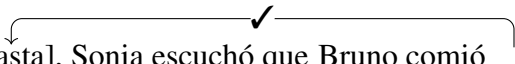
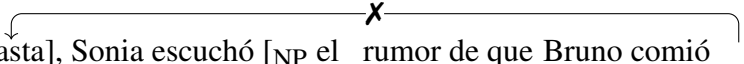
3.3 Interim summary

In Sections 3.1 and 3.2 I presented compelling evidence establishing a strong correlation between those constituents that can be topicalized out of wh-questions and those constituents that can be remnants in wh-TREQs in Spanish. These patterns support the argument made here that there’s structure inside the ellipsis site, and that the remnant has been topicalized out of it. In the next section I will examine wh-TREQs in the context of syntactic islands. As I will show, wh-TREQs that would involve topicalization or wh-movement, or both, from inside an island are not possible. These findings provide additional evidence for the need of syntactic isomorphism between the antecedent and the ellipsis site. Furthermore, they support the claim that the remnant undergoes topicalization out of the ellipsis site, and that there is also wh-movement inside the ellipsis site.

3.4 Islands

In this section I analyze the behavior of wh-TREQs in contexts of islands. To avoid making this section unnecessary long, I focus on complex NP islands, while other types of islands such as adjunct islands, relative clause islands, and interrogative wh-islands are illustrated in Appendix A. I provide evidence for the claim that wh-TREQs involve topicalization out of the ellipsis site and wh-movement inside the ellipsis site, and that the ellipsis site must be structurally isomorphic to its antecedent.

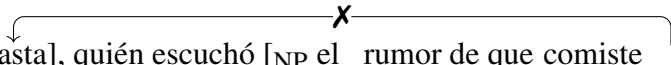
Topicalizations out of complex NPs are ungrammatical, giving rise to a *complex NP island*, as illustrated in (46-b). For the sake of explicitness, (46-a) shows that when the topicalization doesn’t involve an island, the sentence is fully grammatical, as expected:

- (46) a.  [Pasta], Sonia escuchó que Bruno comió ____.
 pasta Sonia heard that Bruno ate
 ‘Pasta, Sonia heard that Bruno ate that.’
- b.  *[Pasta], Sonia escuchó [NP el rumor de que Bruno comió ____].
 pasta Sonia heard the rumor of that Bruno ate
 Intended: ‘Pasta, Sonia heard the rumor that Bruno ate that.’

If, as proposed here, remnants of wh-TREQs are topicalized out of the ellipsis site and the ellipsis site contains a structure that is syntactically identical to its antecedent’s, then we expect wh-TREQs that would involve a topicalization out of a complex NP not to be possible. This prediction is borne out, as the following example shows:

- (47) A: Sonia escuchó el rumor de que comí pizza.
 Sonia heard the rumor of that ate pizza
 ‘Sonia heard the rumor that I ate pizza.’
- B: *Y pasta?
 and pasta
 Literal: ‘And pasta?’
 Intended interpretation: ‘What about pasta? Who heard the rumor that you ate that?’

In other words, the ungrammaticality of the wh-TREQ in (47) suggests that its source is the ungrammatical structure in (48):

- (48)  *[Pasta], quién escuchó [NP el rumor de que comiste ____]?
 pasta who heard the rumor of that ate
 Intended: ‘Pasta, who heard the rumor that you ate that?’

Importantly, the example above involves a topicalization from inside the island, and wh-movement from outside the island, indicating that only the former movement is illicit, while the latter is allowed. However, the reverse scenario also results in an ungrammatical wh-TREQ. This serves as supporting evidence for the claim that there is indeed wh-movement occurring inside the ellipsis site. To provide further clarity, the example in (49-a) illustrates the possibility of moving (i.e., topicalizing) material from outside an island, while (49-b) demonstrates that a wh-phrase cannot

be moved out of a complex NP, as expected:

- (49) a. [A Bruno]_{top}, le contaste ___ [NP el rumor de que comí pasta].
 to Bruno to.him told the rumor of that I.ate pasta
 ‘Bruno, you told him the rumor that I ate pasta.’
- b. *[Qué] le contaste a Bruno [NP el rumor de que comí ___]?
 what to.him told to Bruno the rumor of that ate
 Intended: ‘What_i did you tell Bruno the rumor that I ate t_i?’

When this is tested in the context of a wh-TREQ, the result is ungrammatical, as the following example shows:

- (50) A: Le conté a Sonia el rumor de que comiste pizza.
 to.her told to Sonia the rumor of that ate pizza
 ‘I told Sonia the rumor that you ate pizza.’
- B: *Y a Bruno?
 and to Bruno
 Literal: ‘And Bruno?’
 Intended: ‘What about Bruno? What_i did you tell him the rumor that I ate t_i?’⁵

Crucially, the ungrammaticality of (50) is not due to the topicalization of *a Bruno* ‘to Bruno’, since it doesn’t cross an island boundary, as (49-a) above shows. Instead, it is the wh-movement of *qué* ‘what’ that renders the sentence ungrammatical, as exemplified in (49-b) earlier. This suggests that the source of the ungrammaticality in (50) can be traced back to the structure in (51), where the ungrammaticality arises from the wh-movement rather than the topicalization:

- (51) *[A Bruno], [qué] le contaste ___ [NP el rumor de que comí ___]?
 to Bruno what to.him told the rumor of that ate
 Intended: ‘As for Bruno, what_i did you tell him the rumor that I ate t_i?’

This, in turn, provides evidence that there’s indeed wh-movement inside the ellipsis site.

Finally, for the sake of completeness, the following example shows that when both the topical-

⁵This fragment is indeed possible under a polar-question interpretation. Although polar TREQs are out of the scope of this paper, I should note that this type of interpretation, however, wouldn’t involve any islands violations.

ized remnant and the wh-phrase move from inside the island, the result is ungrammatical:

- (52) **[Pasta], [quién] escuchaste [NP el rumor de que ___ comió ___]?*
 pasta who you.heard the rumor of that ate
 Intended: ‘As for pasta_i, who_j did you hear the rumor that t_j ate that_i?’
-

As predicted, (53) shows that wh-TREQs are also ungrammatical in these contexts, given that the source would have been the illicit structure in (52) above:

- (53) A: Escuché el rumor de que Sonia comió pizza.
 heard the rumor of that Sonia ate pizza
 ‘I heard the rumor that Sonia ate pizza.’
- B: *Y pasta?
 and pasta
 Literal: ‘And pasta?’
 Intended: ‘What about pasta? Who_i did you hear the rumor that they_i ate that?’

In summary, through the analysis of wh-TREQs in island contexts, I have presented evidence supporting the following claims. Firstly, the remnant undergoes topicalization and moves out of the ellipsis site. This is evident from the fact that the unavailability of topicalization also renders wh-TREQs impossible. Secondly, the ellipsis site contains a wh-phrase that has undergone movement, as there is a parallel between the impossibility of moving wh-phrases out of islands in non-elliptical wh-questions and the impossibility of wh-movement out of islands in wh-TREQ contexts. Lastly, there is a requirement for syntactic identity between the ellipsis site and its antecedent—given that, when the antecedent includes a complex NP, the ellipsis site must also include this structure. In other words, evasion strategies such as copular sources or short sources are not available here.⁶

An outline of the analyzed patterns can be found in the table provided in (54). In short, the results indicate that wh-TREQs in Spanish are possible only when both topicalization and wh-movement are allowed, and are ungrammatical in cases where topicalization, wh-movement, or

⁶The same line of argumentation is replicated in Appendix A, where I extend the analysis to adjunct islands, interrogative wh-islands, and relative clause islands.

both are not possible:

	Topicalization	Wh-movement	wh-TREQs
Pattern 1	✓	✓	✓
(54) Pattern 2	✗	✓	✗
Pattern 3	✓	✗	✗
Pattern 4	✗	✗	✗

In the next section I discuss connectivity effects, as the last piece of evidence to argue for the need for a syntactic identity condition to license ellipsis in wh-TREQs.

3.5 Connectivity effects

In this section, I present additional evidence for the claim that syntactic identity between the ellipsis site and the antecedent is needed to license ellipsis in wh-TREQs. This evidence stems from various connectivity effects. Specifically, I examine the impossibility of case mismatches, P-stranding under ellipsis, voice mismatches, and spray/load-alternations.

3.5.1 Case mismatches

Although Spanish doesn't mark all of its objects with morphological case, definite animate objects must be preceded by an *a*, typically referred to as Differential Object Marking (or DOM—also known as ‘accusative *a*’, ‘personal *a*’, ‘*a*-marking’, among others) (see, e.g., [Brugè and Brugger 1996](#); [Torrego 1999](#); [López 2012](#); [Vicente 2015](#)), as illustrated below:

- (55) a. Sonia escondió (*a)l tesoro.
 Sonia hid DOM.the treasure
 ‘Sonia hid the treasure.’
- b. Sonia escondió *(a) Bruno.
 Sonia hid DOM Bruno
 ‘Sonia hid Bruno.’

As the following example shows, omitting the DOM is not possible in wh-TREQs, that is, DOM

cannot be absent from the remnant:

- (56) A: Sonia escondió a Bruno.
 Sonia hid DOM Bruno
 ‘Sonia hid Bruno.’
- B: Y *(a) Luciano?
 and DOM Luciano
 Literal: ‘And Luciano?’
 Interpretation: ‘What about Luciano?’
 Who hid him?’

The ungrammaticality of DOM-less remnants serves as evidence against non-isomorphic, copular sources. Such sources would actually necessitate a remnant without DOM. As shown in (57), the pivot of a copular source is ungrammatical if it bears DOM (57-a), whereas a topicalized object requires DOM (57-b). That is, if non-isomorphic sources (such as copular sources) were available in ellipsis, we would predict the DOM-less version of (56)B to be grammatical, contrary to fact:

- (57) a. Y *(a) Luciano, quién es la persona que lo escondió?
 and DOM Luciano who is the person that him hid
 ‘And Luciano, who is the person that hid him?’
- b. Y *(a) Luciano, quién lo escondió?
 and DOM Luciano who him hid
 ‘And Luciano, who hid him?’

Since Ross (1969), it has been observed that case matching between the remnant and its correlate is necessary in contexts of ellipsis. As discussed in Merchant (2001) (et. seq.) the impossibility of case mismatches follows trivially if the ellipsis site contains an elided version of the relevant case assigner (here, the verb). Furthermore, given the nature of DOM in Spanish (that is, only required for definite animate objects), this marking needs to be present even in contexts where there is no DOM in the antecedent, as shown below in (58). In other words, the correlate object in the antecedent in (58) doesn’t bear DOM because it’s an inanimate object, however, the remnant must bear DOM because it’s animate and definite:

- (58) A: Sonia escondió el tesoro.
 Sonia hid the treasure
 ‘Sonia hid the treasure.’
- B: Y *(a)l tesorero?
 and DOM.the treasurer
 Literal: ‘And the treasurer?’
 Interpretation: ‘What about the treasurer?’
 Who hid him?’

This example shows that what is relevant here is not case *matching*, strictly speaking, but case *assignment*, and that the ellipsis site contains a configuration in which Differential Object Marking is assigned to the remnant, regardless of the (lack of) case marking in the correlate in the antecedent.

3.5.2 *P-stranding under ellipsis*

As shown below, the preposition cannot be omitted from the remnant in wh-TREQs:

- (59) A: Sonia habló con Bruno.
Sonia talked with Bruno
'Sonia talked with Bruno.'
- B: Y *(con) Luciano?
and with Luciano
Literal: 'And with Luciano?'
Interpretation: 'What about Luciano?'
Who talked with him?'

Importantly, topicalization of PPs requires pied-piping the preposition, as illustrated in (60):⁷

- (60) a. [Con Luciano], quién habló ___?
with Luciano who talked
Literal: 'With Luciano, who talked ___?'
- b. *Y [Luciano], quién habló [PP con ___]?
and Luciano who talked with
Literal: '[Luciano]_i, who talked with t_i?'

⁷On the contrary, Hanging Topics require the preposition to be absent, and can be optionally preceded by *con respecto a* 'with respect to', as in (i):

- (i) (Con respecto a) Luciano, quién habló con él?
with respect to Luciano who talked with him
'With respect to Luciano, who talked with him?'

As the following example shows, a remnant derived from (i) is unavailable in this context, as evidenced by the ungrammaticality of (ii)B. This is despite the fact that its non-elliptical counterpart is perfectly possible, as (ii)B' shows:

- (ii) A: Sonia habló con Bruno.
Sonia talked with Bruno
'Sonia talked with Bruno.'
- B: *Y (con respecto a) Luciano?
and with respect to Luciano
Intended interpretation: 'With respect to Luciano, who talked with him?'
- B': Y (con respecto a) Luciano, quién habló con él?
and with respect to Luciano who talked with him
'And with respect to Luciano, who talked with him?'

I take these facts as evidence that remnants of TREQs are topicalized XPs, and not Hanging Topics.

This pattern shows the need for strict isomorphism between the linguistic antecedent and the ellipsis site, disallowing alternative structures (such as copular/cleft sources) as the source of ellipsis (in line with previous recent research on clausal ellipsis in Spanish, such as [Stigliano 2022](#)). For the sake of explicitness, the following example shows that a copular structure can indeed occur as an overt continuation to A's utterance:

- (61) A: Sonia habló con Bruno.
Sonia talked with Bruno
'Sonia talked with Bruno.'
- B: Y Luciano, quién es la persona que habló con él?
and Luciano who is the person that talked with him
'And Luciano, who is the person that talked with him?'

In this regard, if a cleft/copular source were a possible source for the ellipsis site, the availability of (61)B as an overt continuation would predict that the P-less version of (59)B above should be grammatical, contrary to fact.

3.5.3 *Voice mismatches*

Another piece of evidence for the need for syntactic identity between the ellipsis site and its antecedent comes from the unavailability of voice mismatches (see, e.g., [Merchant 2013](#)). As the following example shows, an active sentence (62)B cannot be elided if its antecedent is a passive sentence (62)A. Importantly, a non-elliptical version of (62)B is indeed possible in this context, as shown in (62)B', ruling out an explanation based on pragmatic or congruence factors:

- (62) A: La casa fue destruida por Sonia.
the house was destroyed by Sonia
'The house was destroyed by Sonia.'
- B: *Y Bruno
and Bruno
Literal: 'And Bruno?'
Intended interpretation: 'What about Bruno? What did he destroy?'
- B': Y Bruno, qué destruyó?
and Bruno what destroyed

‘And Bruno, what did he destroy?’

Further evidence comes from the possible answers that A can give to B’s wh-TREQ. As shown below, A’s answer must be a *by*-phrase:

- (63) A: La casa fue destruida por Sonia.
 the house was destroyed by Sonia
 ‘The house was destroyed by Sonia.’
- B: Y el auto?
 and the car
 Literal: ‘And the car?’
 Interpretation: ‘What about the car? Who was the car destroyed by?’
- A: *(Por) Bruno.
 by Bruno
 ‘By Bruno.’

I argue that, based on A’ answer to B’s wh-TREQ in (63), the ellipsis site in (63)B must contain a passive sentence, like the one in (64). This is evident from the mandatory presence of the preposition *por* ‘by’ in A’s subsequent answer:

- (64) Y el auto, por quién fue destruido?
 and the car by who was destroyed
 ‘What about the car? By whom was it destroyed?’

In other words, a non-isomorphic source like the one in (65) is not possible in the context above, otherwise a P-less answer by A would be perfectly possible, contrary to fact:

- (65) Y el auto, quién lo destruyó?
 and the car who CL destroyed
 ‘What about the car? Who destroyed it?’

For the sake of completeness, we see below that an active-passive mismatch in the other direction (i.e., passive source given an active antecedent) is also impossible:

- (66) A: Sonia destruyó la casa.
Sonia destroyed the house
'Sonia destroyed the house.'
- B: *Y por Bruno?
and by Bruno
Literal: 'And by Bruno?'
Intended interpretation: 'What about Bruno? What was destroyed by him?'

3.5.4 *Spray/load alternations*

The so-called *spray/load* alternation is a diathesis alternation in which a verb describing caused motion of one entity to another exhibits two arguments (see [Beavers 2017](#) and references therein for an overview of this topic). This is exemplified in (67):

- (67) a. *with* variant:
Sonia cargó el camión con libros.
Sonia loaded the truck with books
'Sonia loaded the truck with books.'
- b. *onto* variant:
Sonia cargó libros en el camión
Sonia loaded books in the truck
'Sonia loaded books onto the truck.'

This alternation is disallowed under ellipsis, as the examples in (68) show for sluicing:⁸

- (68) a. *Sonia cargó algún camión con libros, pero no sé en qué camión.
Sonia loaded some truck with books but not I.know in which truck
'Sonia loaded some truck with books, but I don't know onto which truck.'

⁸Crucially, a non-elliptical continuation would be perfectly possible, as shown in (i):

- (i) a. Sonia cargó un camión con libros, pero no sé en qué camión cargó los libros.
Sonia loaded a truck with books but not I.know in which truck loaded the books
'Sonia loaded a truck with books, but I don't know onto which truck she loaded the books.'
- b. Sonia cargó algo en el camión, pero no sé con qué cargó el camión.
Sonia loaded something in the truck but not I.know with what she.loaded the truck
'Sonia loaded something onto the truck but I don't know with what she loaded the truck.'

- b. *Sonia cargó algo en el camión, pero no sé con qué.
 Sonia loaded something in the truck but not I.know with what
 ‘Sonia loaded something onto the truck but I don’t know with what.’

Only structural matching is allowed, as shown in (69):

- (69) a. Sonia cargó algún camión con libros, pero no sé qué camión.
 Sonia loaded some truck with books but not I.know which truck
 ‘Sonia loaded some truck with books, but I don’t know which truck.’
- b. Sonia cargó algo en el camión, pero no sé qué.
 Sonia loaded something in the truck but not I.know what
 ‘Sonia loaded something onto the truck but I don’t know what.’

The unavailability of *spray/load* alternations under ellipsis is usually taken to be strong evidence for the need for syntactic identity and against semantic approaches.

Importantly, *spray/load* alternations are also disallowed in contexts of wh-TREQs. This is not due to pragmatic reasons or a question/answer incongruence, given that the non-elliptical counterpart of B’s wh-TREQ is possible, as shown in (70)B’ and (71)B’:

- (70) A: Sonia cargó el camión con libros.
 Sonia loaded the truck with books
 ‘Sonia loaded the truck with books.’
- B: *Y en el auto?
 and in the car
 Literal: ‘And in the car?’
 Intended interpretation: ‘What about the car? What did he load in it?’
- B’: Y en el auto qué cargó?
 and in the car what loaded
 ‘What about the car? What did he load in it?’
- (71) A: Sonia cargó libros en el camión.
 Sonia loaded books in the truck
 ‘Sonia loaded books in the truck.’
- B: *Y con revistas?
 and with magazines
 Literal: ‘And with magazines?’
 Intended: ‘What about magazines? What did Sonia load them with?’
- B’: Y con revistas qué cargó?
 and with magazines what loaded
 ‘What about magazines? What did she load them with?’

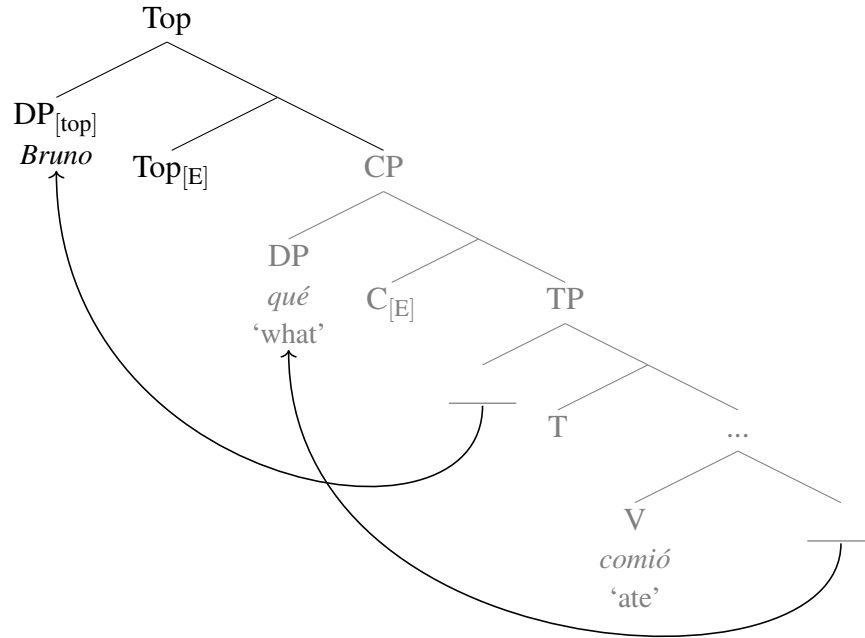
The only grammatical option is the one in which there's structural matching between the antecedent and the ellipsis site, which I take to show that syntactic identity is indeed needed:

- (72) A: Sonia cargó el camión con libros.
Sonia loaded the truck with books
'Sonia loaded the truck with books.'
- B: Y con revistas?
and with magazines
Literal: 'And with magazines?'
Int.: 'What about magazines? What did she load with them?'
- B': Y el auto?
and the car
Literal: 'And the car?'
Interpretation: 'What about the car? What did she load it with?'
- (73) A: Sonia cargó libros en el camión.
Sonia loaded books in the truck
'Sonia loaded books in the truck.'
- B: Y revistas?
and magazines
Literal: 'And magazines?'
Interpretation: 'What about magazines? Where did she load them?'
- B': Y en el auto?
and in the car
Literal: 'And onto the car?'
Interpretation: 'What about the car? What did she load there?'

3.6 *Interim summary*

So far, the evidence presented supports the following conclusions: (i) in wh-TREQs, there exists underlying structure within the ellipsis site, indicating that this construction results from ellipsis; (ii) the ellipsis site contains a wh-question with a moved wh-phrase; (iii) the remnant is a topicalized XP that undergoes movement out of the ellipsis site; and (iv) some form of syntactic identity or isomorphism between the ellipsis site and its antecedent is required. A schematic summary of my proposal is provided in (74):

- (74) B: Y [Bruno_{top}] <qué_i — comió t_i>?
and Bruno <what ate >
'And Bruno what did he eat?'



In the following section, I extensively discuss my proposal regarding the identity condition needed to license this elliptical construction, and I put forth a more detailed formalization of how wh-TREQs in Spanish are derived.

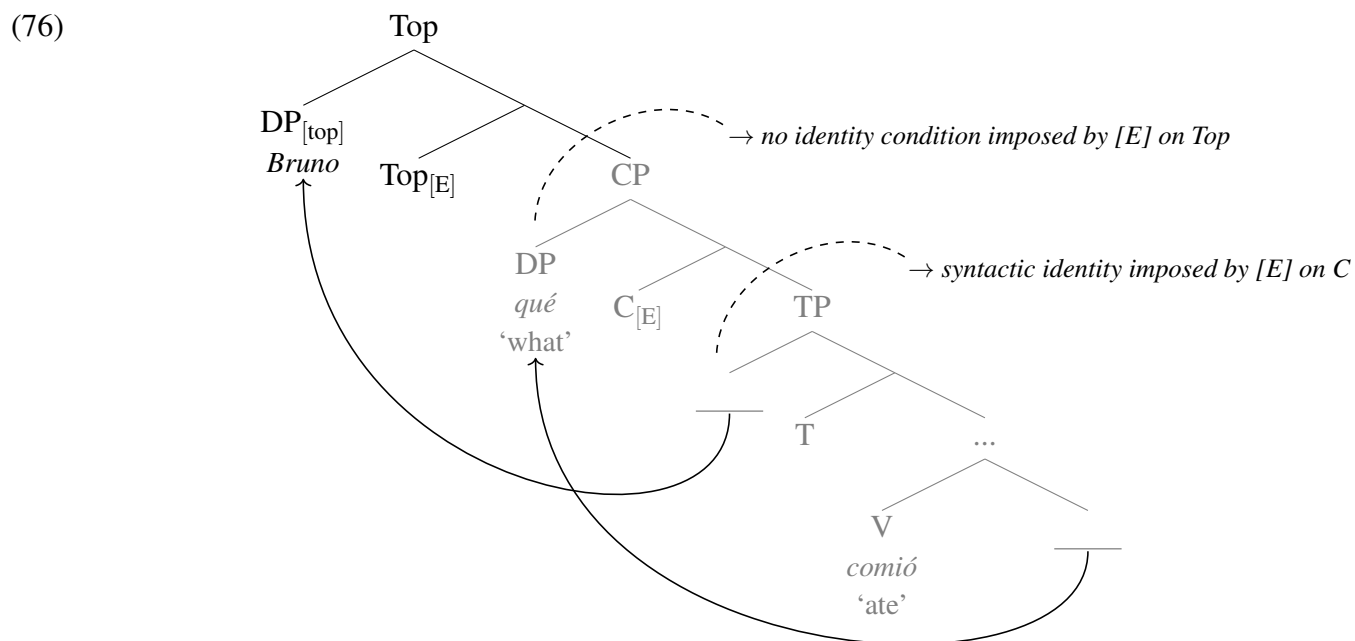
4. Mixed-identity requirements

In this section I present my proposal for deriving wh-TREQs in Spanish. In the previous section I have established that syntactic identity is needed to license this type of ellipsis. However, I will now demonstrate that an identity condition solely based on syntactic isomorphism is too strict and actually leads to the incorrect prediction that wh-TREQs are impossible. In particular, the problem for a strict syntactic account is that the wh-phrase *qué* ‘what’ gets deleted, while its correlate in the antecedent is the NP *pizza* ‘pizza’. Crucially, *qué* ‘what’ and *pizza* ‘pizza’ are not syntactically identical, failing to comply with any possible version of a syntactic identity condition:

- (75) A: Sonia comió pizza
 Sonia ate pizza
 ‘Sonia ate pizza.’
- B: Y [Bruno_{Top}] qué_i comió t_i?
 and Bruno what ate
 ‘And Bruno what did he eat?’

In light of this, I propose that wh-TREQs are licensed under ‘mixed-identity’ requirements. Specif-

ically, syntactic identity licenses ellipsis of the lower portion of the structure, namely the TP. This aligns with recent proposals on TP-Ellipsis in Spanish. However, as for deletion of material above the TP, I argue that pragmatic/general conditions related to discourse congruence come into play to determine what can be included within the ellipsis site between the TP and the CP. In other words, there doesn't seem to be a specific licensing condition for eliding material above the TP. In Section 4.1 I implement my proposal by positing the existence of two [E] features: one on C, and the other on Top. These features impose different identity requirements on their complements. This is schematized in (76):



Before delving into the specific implementation of my proposal, it is important to highlight the connection between this framework and the works of [Kroll and Rudin \(2017\)](#) and [Rudin \(2019\)](#). These authors suggest that both syntactic grammaticality constraints and pragmatic licensing constraints play a role in explaining the range of (im)possible mismatches in sluicing in English. According to their findings, syntactic identity strictly applies to material in the verbal domain (referred to as the ‘eventive core’). As a result, mismatches are allowed above the ν P level, as long as they comply with a pragmatic condition that requires contextual entailment between the local context and the ellipsis site.⁹ Similarly, I claim that wh-TREQs in Spanish display a comparable

⁹See, however, [Ranero \(2021\)](#) for a response to Rudin’s proposal, based on Spanish data.

pattern. That is, there exists a higher domain where strict syntactic identity doesn't appear to apply, and a lower domain where it is mandatory. Although the current analysis and the empirical domain under investigation differ significantly from the aforementioned work, there is a shared characteristic: both Spanish *wh*-TREQs and English sluicing involve independently attested ellipsis domains, namely TP-Ellipsis and ν P-Ellipsis, respectively. Furthermore, one of these domains is nested within the other, and it is the lower one that enforces the requirement of syntactic identity. This will be relevant for the analysis I propose here.

4.1 Deriving *wh*-TREQs

I follow Merchant (2001) in his assumption that ellipsis is licensed in the complement of heads bearing an [E]-feature. However, in the context of *wh*-TREQs, I propose the existence of two distinct [E]-features that impose different identity conditions: I will refer to them as [E^{syn}] and [E]. This idea draws inspiration from the framework presented in Aelbrecht (2010), who posits that there is a specific [E]-feature in the lexicon for each elliptical phenomenon. In line with Aelbrecht's proposal, each [E]-feature is only compatible with certain heads. This is encoded in its selectional features, as it will be explained shortly.

First, I argue that [E^{syn}] is compatible exclusively with the C head, thereby triggering TP-Ellipsis phenomena (e.g., sluicing, fragment answers, stripping) and enforcing strict syntactic identity. I adopt a head-by-head evaluation of the identity condition,¹⁰ although alternative implementations might yield similar results:

(77) Licensing of [E^{syn}]:

- a. Every head *h* in the complement of a head $z_{[E^{syn}]}$ is deleted iff *h* is not dominated by an [F]-marked node or a [Top]-marked node.^{11,12}
- b. A head *h* marked for deletion by [E^{syn}] is licensed iff it has an identical correlate *h'*

¹⁰For more specific proposals and detailed descriptions of particular implementations, I refer the reader to Saab (2008, 2010, 2022), Tanaka (2011), Rudin (2019), and Stigliano (2022), among others.

¹¹I take 'deletion' to be a neutral term for any implementation of non-pronunciation of syntactic material.

¹²The constraint on deletion of any [F] or [Top]-marked constituents follows naturally from the assumption that [F] and [Top]-marked constituents are usually marked with pitch accents.

in its antecedent A.

In particular, I adopt and modify Saab's (2008, 2010) definition of identity:

- (78) A morpheme α is identical to another morpheme β if and only if α and β match all their semantic and syntactic features.

(Saab 2010, p. 102-103)

Building upon Saab's framework, I assume that the calculation of ellipsis proceeds top-down, wherein identity is successively evaluated for each head within the ellipsis site, starting from the highest head that has been marked for deletion.

Additionally, I propose that [E] is only compatible with the Top head (and not with C). As I mentioned above, I argue that [E] doesn't impose any identity requirements:

- (79) Licensing of [E]:

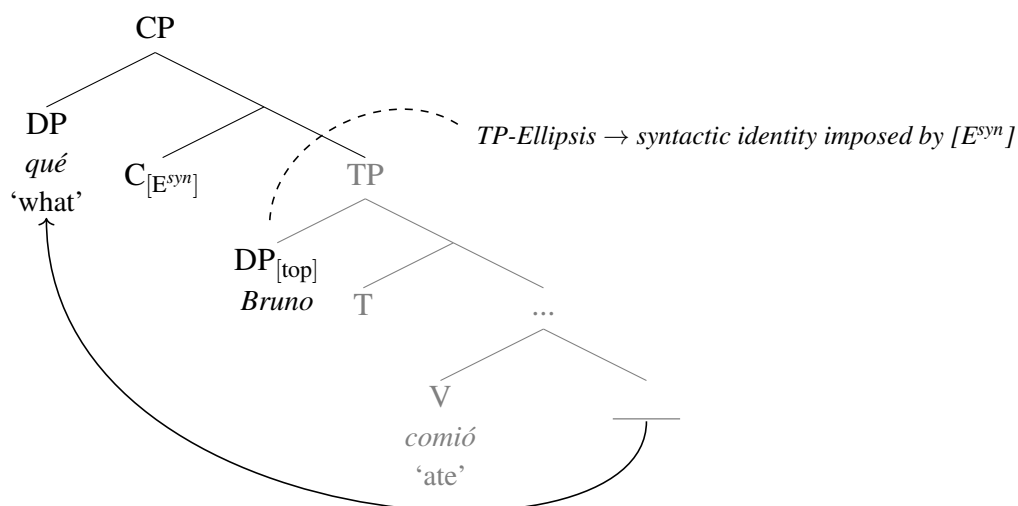
Every head h in the complement of a head $z_{[E]}$ is deleted.

Next, I provide an example of a derivation of a wh-TREQ, like the one in (75), repeated in (80):

- (80) A: Sonia comió pizza.
 Sonia ate pizza
 'Sonia ate pizza.'
- B: Y [Bruno_{top}] <ellipsis site ~~qué_i~~ ~~comió t_i~~>?
 and Bruno ~~what~~ ate
 'And Bruno ~~what did he eat?~~'
-

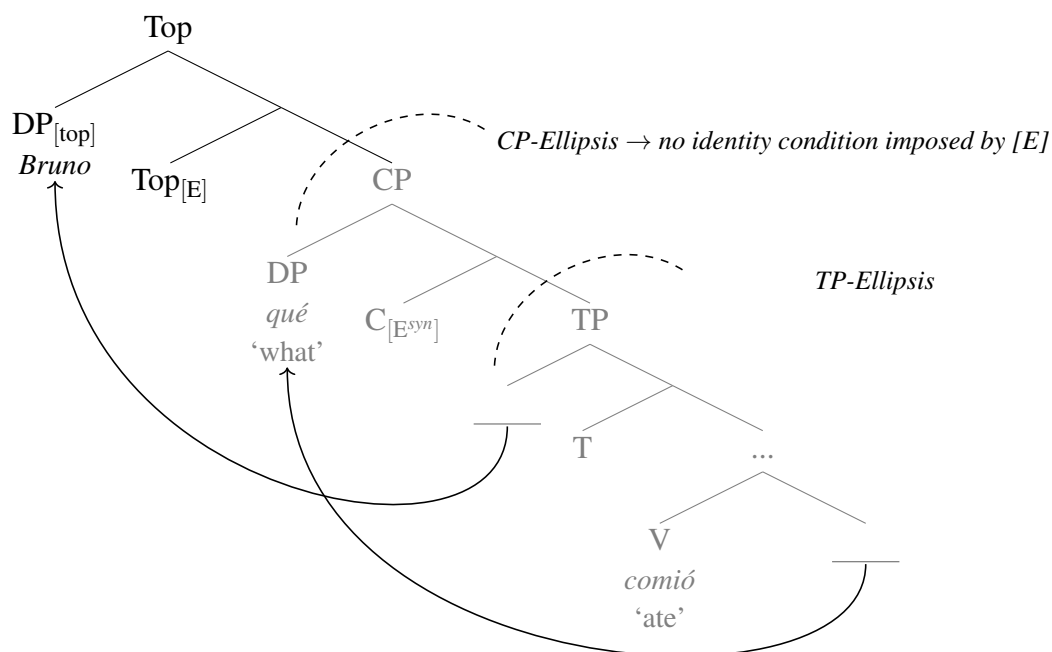
First, the wh-phrase *qué* 'what' undergoes wh-movement to the specifier of the CP. After that, ellipsis is triggered by the [E^{syn}]-feature on C, as shown in (81). This means that every head in the complement of C is marked for deletion and must find an identical correlate in the antecedent, which they do. It should be noted that the subject *Bruno* is not marked for deletion due to being [Top]-marked:

(81) Wh-movement and TP-Ellipsis:



Once ellipsis of the TP is triggered, the Top head, endowed with [E], is merged, as in (82). This head triggers topicalization of the subject, followed by deletion of the heads in its complement. The heads being deleted in this step are those of the wh-phrase and C, as the other—lower—heads have already undergone deletion in the previous step:

(82) Topicalization and CP-Ellipsis:



It's important to recall that the connectivity effects discussed in Section 3.5 provide strong

evidence for the need of syntactic identity in wh-TREQs. In this respect, if only the [E] on Top were present in the structure, anything could be deleted without any reference to the ellipsis site's linguistic antecedent, leading to incorrect predictions. To account for the observed patterns, I propose that the necessity for some form of syntactic isomorphism is achieved if ellipsis of material between the TP and the CP in wh-TREQs (i.e., the wh-phrase and the C head) depends on a prior application of ellipsis of the TP. This is because the ellipsis of the TP, triggered by [E^{syn}], enforces a stricter identity condition, imposing syntactic identity. In other words, I take this to mean that the presence of [E] depends on the presence of [E^{syn}] lower in the structure.

In order to implement this idea, I follow Aelbrecht (2010) in that ellipsis is licensed via an Agree relation. More specifically, according to Aelbrecht, each type of elliptical construction is associated with a specific ellipsis feature bundle in the lexicon. In the framework proposed here, this implies that each ellipsis-triggering features, namely [E^{syn}] and [E], consists of different feature bundles. Aelbrecht argues that the compatibility between the [E]-feature and a specific head is encoded in its *selectional* (SEL) features. Furthermore, she suggests that [E]-features also possess an *inflectional* (INFL) feature, corresponding to the *category* (CAT) feature of the ellipsis licenser head. Consequently, the licensing of different ellipsis-triggering features relies on establishing a checking relation with their licensers. It is also important to note the differences between Aelbrecht's proposal and the one put forth here. Firstly, the directionality of the Agree relation is standard (probing down) rather than upward. Secondly, I argue that an [E]-feature can require agreement with another [E]-feature (that is, the licensers do not need to be heads, but can also be features). The featural makeup of the ellipsis-triggering features in Spanish is shown in (83):^{13,14}

¹³The featural makeup of the [E]-features in different languages is likely subject to cross-linguistic variation. This remains as an empirical open question that requires further investigation.

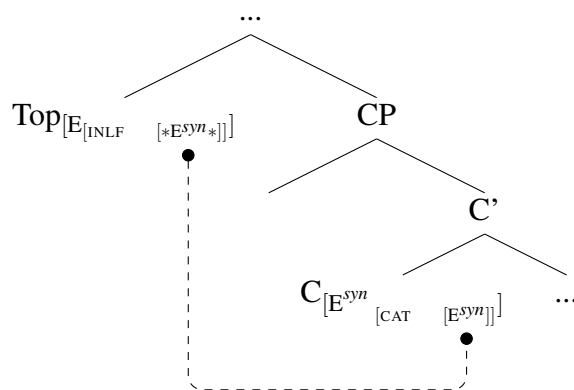
¹⁴My proposal does not suggest that the [E]-features I introduced here are the only ones available in Spanish. There might be other [E]-features in this language, potentially responsible for triggering different types of ellipsis, such as nominal ellipsis or other phenomena. Further research is needed to explore the full range of [E]-features in this language and their specific makeup.

(83) Ellipsis-triggering features in Spanish:

$$\begin{array}{cc}
 \text{a. } E^{syn} & \begin{bmatrix} \text{CAT} & [E^{syn}] \\ \text{INFL} & \\ \text{SEL} & [C] \end{bmatrix} \\
 \text{b. } E & \begin{bmatrix} \text{CAT} & [E] \\ \text{INFL} & [*E^{syn}*] \\ \text{SEL} & [\text{Top}] \end{bmatrix}
 \end{array}$$

Specifically, I argue that $[E^{syn}]$ in Spanish does not possess any inflectional features, thereby not requiring the establishment of Agree relations with other heads/features. The agreement relation between $[E]$ and $[E^{syn}]$ is illustrated in (84), with simplified feature matrices that highlight the relevant features. I assume that the $[E^{syn}]$ -feature on C remains accessible for further operations, including agreement with the $[E]$ -feature on Top, at a later stage in the derivation:

(84)



Before concluding this section, it is worth briefly addressing the potential for crosslinguistic variation in the existence of different $[E]$ -features, as proposed in this analysis. The specific construction I am exploring here (i.e. wh-TREQs) employs $[E]$ in a very restricted manner, and its featural makeup requires it to enter into an Agree relation with an $[E^{syn}]$ -feature lower in the structure. However, someone could argue that the logic of crosslinguistic feature variation should dictate that one might also expect the existence of an $[E]$ -feature which neither imposes an identity requirement nor enters into an Agree relation with other features—that is, whose existence is fairly unconstrained. If such an unconstrained $[E]$ -feature existed, one would expect to find a language where ellipsis of any constituent could occur in any context. To the best of my knowledge, no such

instances of unconstrained ellipsis have been reported. Consequently, I hypothesize that a fully unconstrained [E]-feature should not be possible at all. In light of this hypothesis, I propose that an [E]-feature should either impose some form of identity requirement with a linguistic antecedent, or enter into an Agree relation with a feature that imposes such requirements, or both. In concrete terms, this implies that [E]-features must possess, either directly or indirectly, an antecedent that satisfies the necessary conditions for ellipsis licensing and identity.

Finally, I acknowledge that alternative proposals could account for the patterns observed with respect to the mixed-identity requirements in *wh*-TREQs. While the implementation I put forth in this paper offers one way of analyzing the data and constructing a theory of ellipsis, it's important to recognize that alternative implementations may also be able to account for the phenomenon under investigation. For instance, an anonymous reviewer suggests a condition according to which, in Spanish, the largest domain where syntactic identity can be imposed would be the TP, regardless of whether the [E^{syn}]-feature is borne by (and hence elides the sister of) the Top head.

Although this alternative proposal could account for the data we found in Spanish, I believe there are conceptual advantages and empirical reasons to maintain the approach I propose here. For instance, it's standard to assume that, in Spanish, there is an [E]-feature on C that triggers TP-Ellipsis, leading to phenomena like sluicing, fragment answers, split questions, and pseudostripping, and that there is an [E]-feature on Num that triggers *n*P-Ellipsis (see, e.g., [Saab and Lipták 2016](#)). While it is not always explicitly stated, one can assume, following the proposal made by [Aelbrecht \(2010\)](#), that these are different [E]-features. Various facts support this hypothesis: these [E]-features are compatible with different heads (C and Num, for TP-Ellipsis and *n*P-Ellipsis, respectively) and are licensed under different conditions, among many others.

These characteristics likely vary crosslinguistically, as evidenced by differences in licensing conditions and what the available [E]-features are in each language's lexical inventories. For instance, one could argue that English has an [E]-feature compatible with *v*, which gives rise to VP-Ellipsis, but that Spanish doesn't have this [E]-feature in its inventory. Furthermore, there is also within-language variation as well; one example in Spanish comes from recent work by [Saab](#)

and Stigliano (2023), who show that there is an elliptical phenomenon in Spanish that, on the surface, looks like VP-Ellipsis, but that should actually be analyzed as PredP-Ellipsis; this type of ellipsis is triggered by an [E]-feature on the Pred head and needs to be licensed through Agree with focus/polarity, which is not required in other types of ellipsis in Spanish such as clausal ellipsis or nominal ellipsis. In other words, the range of elliptical constructions available in a language as compared to others, and the different identity and licensing conditions we observe both within a language and across languages, makes it reasonable to assume that there isn't just one [E]-feature, but, as Aelbrecht already proposed, there is one [E]-feature for each elliptical phenomenon. With this in mind, it's not unreasonable to assume that TP-Ellipsis (i.e., sluicing, fragment answers, stripping, etc.) and CP-Ellipsis (i.e., wh-TREQs) involve different [E]-features, that are licensed under different conditions, and that impose different identity requirements.

Besides these empirical considerations, I believe that my proposal also bears conceptual advantages since it doesn't need to resort to referencing specific domains (or their labels) over which identity is calculated, as the analysis suggested by the anonymous reviewer does. That is, the domain over which [E] takes scope is always the complement of the head that bears it, and the specific licensing and identity conditions depend on which [E]-feature is involved (and its featural specification). That being said, ultimately, what I proposed here is one way of implementing the empirical findings of this paper, but alternative implementations could achieve similar results. I leave this issue open to debate.

4.2 *On the 'optionality' of deleting the wh-phrase*

The claim that ellipsis of the CP depends on ellipsis of the TP, but not vice versa, predicts that there should be cases similar to wh-TREQs, but where only TP-Ellipsis occurs. These cases would resemble sluicing constructions with two remnants (i.e. a wh-phrase, as in regular sluicing, and a topicalized XP, as in wh-TREQs). This prediction is borne out, as shown in the examples below.¹⁵

¹⁵While the English translation of examples (85) and (86) might suggest that we are dealing with a juxtaposition of two sentences, this is not the case for the Spanish examples. Unlike English, in Spanish there is no intonation break between the topicalized constituent and the wh-phrase, which supports the claim that these are indeed single sentences, and not two separate sentences. I thank an anonymous reviewer for raising this question.

- (85) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'
- B: Y Bruno qué?
and Bruno what
'And Bruno, what?'
- A: Pasta.
pasta
'Pasta.'
- (86) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'
- B: Y pasta quién?
and pasta who
'And pasta, who?'
- A: Bruno.
Bruno
'Bruno.'

Although this gives the illusion that deletion of the *wh*-phrase is optional, I claim that these are actually cases of TP-Ellipsis, the only difference being the presence of an additional remnant (i.e. the topicalized XP). In other words, in these cases there is a Top head that makes *Bruno* in (85) and *pasta* in (86) undergo topicalization, but this Top head doesn't bear an [E]-feature—parallel to what happens, for instance, with the C[*wh*] head: when it doesn't bear an [E]-feature, a regular non-elliptical *wh*-question arises; when it does bear an [E] feature, sluicing arises. In the example above, the Top head would not bear an [E]-feature, and only the C head would bear one. This means that, given that the *wh*-phrase has move out of the scope of the [E] feature on C, it doesn't get deleted.

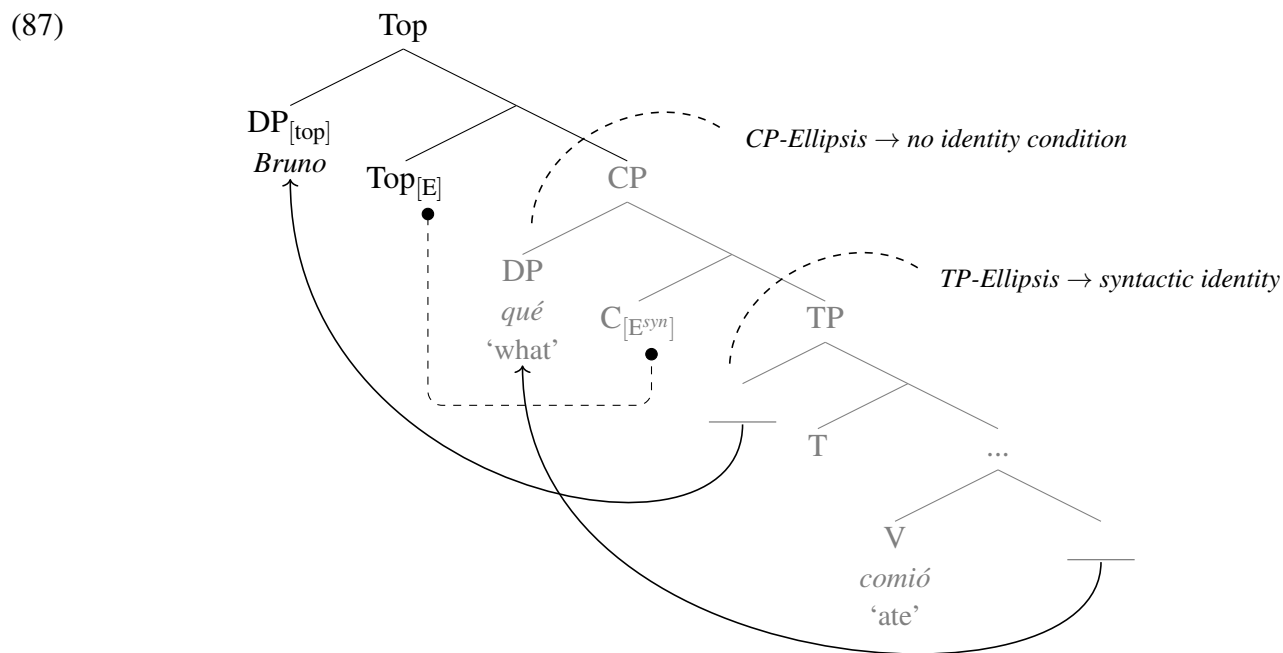
5. Conclusions and open questions

Altogether, this paper aimed to provide answers to the *identity* and the *licensing* questions in order to contribute to our understanding of ellipsis in natural language. The central claim put forward here is that certain types of ellipsis exhibit 'mixed-identity' requirements, imposing a strict syntactic identity condition on one part of the structure, and no identity requirements on another part. This claim was supported by the detailed examination of an understudied elliptical construction that I dubbed *Topic-Remnant Elided Wh-Questions* (wh-TREQs). A thorough analysis of this construction yielded significant insights that extend beyond its specific domain, contributing to the broader understanding of ellipsis.

Based on the empirical data presented in this paper, I proposed an elliptical account of wh-TREQs, suggesting that they involve the ellipsis of a *wh*-question from which a topic has moved. A crucial finding from the analysis of the data introduced here was that while syntactic identity

is needed for licensing ellipsis in wh-TREQs, it only applies to the lower portion of the elided structure, namely the TP. In contrast, no specific identity requirements were found to be necessary to elide the material located between the TP and the CP.

More specifically, I initially provided evidence to support the need for syntactic identity in wh-TREQs. This evidence came from the unavailability of voice mismatches, spray-load alternations, and the fact that wh-TREQs are island sensitive, among others. However, it became apparent that a strict syntactic identity condition alone would incorrectly predict the impossibility of this elliptical construction. To reconcile this apparent contradiction, I proposed an implementation according to which wh-TREQs arise as the result of two ellipses: one triggered by $[E^{syn}]$ on C, which imposes syntactic identity, and another one triggered by $[E]$ on Top, which does not impose any identity requirements at all, but must enter into an Agree relation with $[E^{syn}]$ lower in the structure. My proposal is schematized in (87):



In other words, the analysis of this understudied empirical domain led to the formulation of a theory of ellipsis licensing based a typology of $[E]$ -features. Concretely, each $[E]$ -feature triggers certain operations, is licensed in particular syntactic configurations (depending on its agreement

requirements), and can occur only with specific heads (C or Top). This proposal successfully accounts for the empirical patterns observed in the data under consideration here, without the need to propose construction-specific analyses or exceptional mechanisms.

A note on crosslinguistic variation is relevant here. In particular, I hypothesize that crosslinguistic variation can be found with respect to the typology of [E]-features and their featural make-up. While I proposed [E^{syn}] and [E] as ellipsis-triggering features in Spanish, I do not claim that these are the only ellipsis-triggering features that exist, either in this language or in others. On the contrary, my proposal acknowledges the possibility of the existence of other [E]-features with different identity requirements, and different inflectional, selectional, and category features. For instance, there could be an [E]-feature that imposes semantic identity (i.e. [E^{sem}]), or an [E]-feature that imposes a different type of syntactic identity, among others alternatives. Moreover, crosslinguistic variation may also extend to the heads that can select for these [E]-features. In Spanish, I argue that C can bear an [E^{syn}] and Top can bear [E], but it is plausible that, in other languages, other heads are the ones that bear (these or other) [E]-features, leading to different patterns of (im)possible mismatches in ellipsis.

A note on the identity condition is also relevant at this point. I claimed that an additional identity condition is not required to license the ellipsis of material above the TP. Furthermore, I propose that ellipsis of constituents located between the TP and CP is possible, as long as other, more general pragmatic/discourse conditions are satisfied (for instance, along the lines of [Büring 2003](#)). What matters here is that the conditions governing wh-TREQs also govern their non-elliptical counterparts, indicating that these constraints are not unique to elliptical structures. A special case is related to the (un)availability of sprouting. As the following example shows, at first sight, it may seem that sprouting is not allowed in the context of wh-TREQs. That is, each deleted wh-phrase must have an overt syntactic correlate in the antecedent:

- (88) A: Sonia comió.
 Sonia ate
 ‘Sonia ate.’
- B: *Y pizza?
 and pizza
 Literal: ‘And pizza?’
 Intended: ‘What about pizza? Who ate that?’

However, crucially, this ban on sprouting is not something special about wh-TREQs, as it is also observed in their non-elliptical counterparts (89):

- (89) A: Sonia comió.
 Sonia ate
 ‘Sonia ate.’
- B: #Y pizza, quién comió?
 and pizza who ate
 ‘And pizza, who ate?’

This suggests that the restriction on sprouting may be linked to a broader pragmatic condition (see, e.g., the *Contrastive Topic Congruence Condition* in Büring 2003). Again, why the sprouted question in (89) is not possible in the given context is out the scope of this paper, but what matters here is that the impossibility of sprouting in (88) mirrors the impossibility of sprouting in its non-elliptical counterpart. Interestingly, this contrasts with other types of ellipsis that do allow sprouting, such as sluicing; importantly, in these cases, a non-elliptical counterpart is also possible.

While it is impossible to definitively prove the absence of an identity condition, I am not aware of any data supporting the necessity of such a condition to license the deletion of material between the TP and CP. This, of course, remains as an open empirical question that should be revised if new data are discovered. Worth mentioning is the case of the so-called *inheritance of content* (see Barros 2014; Jacobson 2016; Weir 2014; Vicente et al. 2021; among others), which indirectly demonstrates that there can be some mismatches between the antecedent and the ellipsis site.

In the case of wh-TREQs, the remnants do not inherit the restriction of their correlates, as shown in (90). These facts contrast, again, with the patterns observed in other types of ellipsis, such as sluicing and fragment answers, which do inherit the restriction of their correlates:

- (90) A: Todos los directores invitaron a un actor. Por ejemplo, Tarantino invitó a
 all the directors invited DOM an actor for example Tarantino invited DOM
 Harvey Keitel.
 Harvey Keitel
 ‘Every director invited an actor. For example, Tarantino invited Harvey Keitel.’
- B: Y Scorsese?
 and Scorsese
 Literal: ‘And Scorsese?’
 Intended interpretation: ‘What about Scorsese? Who did Scorsese invite?’

A: A Francis Ford Coppola, pero no es actor.
DOM Francis Ford Coppola but not is actor
'Francis Ford Coppola, but he is not an actor.'

This again points to fundamental differences between the type of ellipsis I've examined here and other types such as sluicing, fragment answers, etc. As an anonymous reviewer points out, these facts open many questions, in particular: (i) when should we expect inheritance of content in ellipsis, and when not?, and (ii) how do we account for this restriction? I believe that a possible answer could be found in the identity conditions (and the lack thereof) I proposed for this construction, although a more explicit explanation is left for future explorations.

Overall, I believe this paper has addressed several questions, but it also highlights numerous avenues for future research. An immediate question that arises from the proposal I developed here concerns other types of ellipsis and the specific (featural makeup of the) [E]-features that license them. For instance, how do the [E]-features responsible for NP-Ellipsis, vP-Ellipsis, gapping, TP-Ellipsis, CP-Ellipsis, and others differ? How do these various [E]-features interact with each other, and with other features or heads? Furthermore, I have proposed the existence of an [E]-feature imposing syntactic identity and another [E]-feature that doesn't impose any identity requirements on its own. However, as I suggested above, it is conceivable that languages may possess different [E]-features, such as one imposing semantic identity, or an [E]-feature stipulating a different, possibly weaker, form of syntactic identity. If this proves to be case, it'd be necessary to explore what these identity conditions entail. Overall, these open questions pave the way for future investigations into the nature of ellipsis and its underlying mechanisms. As a final note, to gain a deeper understanding of ellipsis phenomena, it is crucial to extend the investigation of the empirical domains analyzed in this paper to other languages. This would allow us to uncover other generalizations and to explore how different types of ellipsis interact across languages.

In conclusion, this paper has presented a compelling challenge to existing notions and proposals concerning the identity condition that licenses ellipsis and the underlying mechanisms responsible for ellipsis. This was achieved by an in-depth analysis of an understudied elliptical construction

in Spanish, which allowed me to provide a complete empirical picture of the phenomena under examination. The main outcome of this investigation is a theory of ellipsis that not only accurately predicts the observed patterns in Spanish wh-TREQs, but also provides a foundation for the analysis of other forms of ellipsis across languages.

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6. Appendix A: adjunct, interrogative, and relative clause islands

This appendix complements the arguments presented in Section 3.4, specifically examining the behavior of wh-TREQs in the context of adjunct, interrogative, and relative clause islands. Following a similar structure to that of Section 3.4, the goal of this appendix is to provide additional evidence

in support of the claims made earlier regarding the structure underlying wh-TREQs in Spanish, and the need of syntactic identity to license this elliptical construction.

Topicalizations out of adjuncts, embedded wh-questions and relative clauses are ungrammatical, giving rise to *adjunct*, *interrogative* and *relative clause* islands, respectively, as shown in (91):

- (91) a. * $\left[\text{Pasta} \right]$, Sonia te felicitó $\left[\text{adjunct} \text{ porque comiste } __ \right]$.
 pasta Sonia CL.2S congratulated because you.ate
 Intended: ‘As for pasta, Sonia congratulated you because you ate that.’
- b. * $\left[\text{Pasta} \right]$, Sonia preguntó $\left[\text{embedded-wh} \text{ cuándo comió Bruno } __ \right]$.
 pasta Sonia asked when ate Bruno
 Intended: ‘As for pasta, Sonia asked when Bruno ate that that.’
- c. * $\left[\text{Pasta} \right]$, Sonia habló sobre la persona $\left[\text{relative clause} \text{ que comió } __ \right]$.
 pasta Sonia talked about the person that ate
 Intended: ‘As for pasta, Sonia talked about person that that.’

As explained in Section 3.4 for complex NP islands, if remnants of wh-TREQs are topicalized out of the ellipsis site, and the ellipsis site contains a structure that is syntactically identical to its antecedent’s, then we expect wh-TREQs that would involve a topicalization out of adjuncts, embedded wh-questions and relative clauses not to be possible. This prediction is borne out, as the following examples show:

- (92) a. A: Sonia me felicitó $\left[\text{adjunct} \text{ porque comí pizza} \right]$.
 Sonia CL.1S congratulated because I.ate pizza
 ‘Sonia congratulated me because I ate pizza.’
- B: *Y pasta?
 and pasta
 Literal: ‘And pasta?’
 Intended: ‘What about pasta? Who congratulated you because you that?’
- b. A: Sonia preguntó $\left[\text{embeddd-wh} \text{ cuándo comí pizza} \right]$.
 Sonia asked when I.ate pizza
 ‘Sonia asked when I ate pizza.’
- B: *Y pasta?
 and pasta

Literal: ‘And pasta?’

Intended: ‘What about pasta? Who asked when you ate that?’

- c. A: Sonia habló sobre la persona [relative clause que comió pizza].
 Sonia talked about the person that ate pizza
 ‘Sonia talked about the person that ate pizza.’

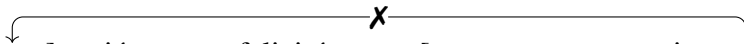
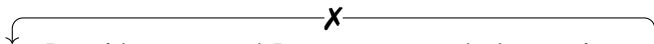
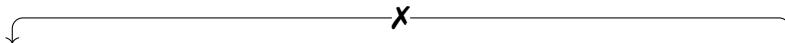
B: *Y pasta?

and pasta

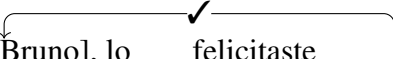
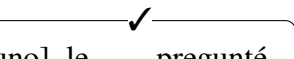
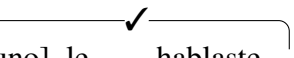
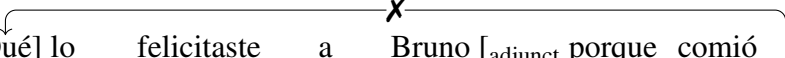
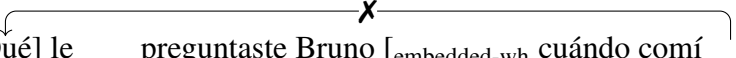
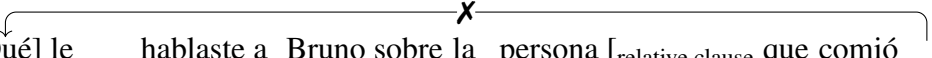
Literal: ‘And pasta?’

Intended: ‘What about pasta? Who talked about the person that ate that?’

That is, I take the ungrammaticality of the wh-TREQs in (92) to mean that their sources are the ungrammatical structures in (93):

- (93) a.  **[Pasta]*, quién te felicitó [adjunct porque comiste ___].
 pasta who CL.2S congratulated because you.ate
 Intended: ‘As for pasta, who congratulated you because you ate that?’
- b.  **[Pasta]*, quién preguntó [embedded-wh cuándo comiste ___]?
 pasta who asked when you.ate
 Intended: ‘As for pasta, who asked when you ate that?’
- c.  **[Pasta]*, quién habló sobre la persona [relative clause que comió ___].
 pasta who talked about the person that ate
 Intended: ‘As for pasta, who talked about the person that ate that?’

Importantly, the examples above involve a topicalization from inside the island, and wh-movement from outside the island. This means that only the former movement is illicit, while the latter is not. However, the reverse scenario also results in an ungrammatical wh-TREQ. This serves as supporting evidence for the claim that there is indeed wh-movement occurring inside the ellipsis site. The examples in (94) illustrate the availability of topicalizations of material from outside an island, while the examples in (95) demonstrate that a wh-phrase cannot be moved out of adjuncts, embedded wh-questions and relative clauses, as expected:

- (94) a. [A Bruno], lo felicítaste  [adjunct porque comió pasta].
 DOM Bruno CL.3S congratulated because he.ate pasta
 ‘Bruno, you congratulated him because he ate pasta.’
- b. [A Bruno], le pregunté  [embedded-wh cuándo comiste pasta].
 to Bruno to.him I.asked when you.ate pasta
 ‘Bruno, I asked him when you ate pasta.’
- c. [A Bruno], le hablaste  sobre la persona [relative clause que comió pasta].
 to Bruno to.him talked about the person that ate pasta
 ‘Bruno, you talked to him about the person that ate pasta.’
- (95) a. *[Qué] lo felicítaste a Bruno  [adjunct porque comió ___]?
 what CL.3S congratulated DOM Bruno because he.ate
 Intended: ‘What_i did you congratulated Bruno because he ate t_i?’
- b. *[Qué] le preguntaste Bruno  [embedded-wh cuándo comí ___]?
 what to.him asked Bruno when I.ate
 Intended: ‘What_i did you ask Bruno when I ate t_i?’
- c. *[Qué] le hablaste a Bruno sobre la persona  [relative clause que comió ___]?
 what to.him talked to Bruno about the person that ate
 Intended: ‘What_i did you talked to Bruno about the person that ate t_i?’

Furthermore, when this is tested in the context of wh-TREQs, the result is ungrammatical, as the following examples show:

- (96) a. A: La felicítaste a Sonia [adjunct porque comió pizza].
 CL.3S congratulated DOM Sonia because she.ate pizza
 ‘You congratulated Sonia because she ate pizza.’
- B: *Y a Bruno?
 and to Bruno
 Literal: ‘And Bruno?’
 Intended interpretation: ‘What about Bruno? What_i did you congratulated him because he ate t_i?’
- b. A: Le pregunté a Sonia [embedded-wh cuándo comiste pizza].
 to.her asked to Sonia when you.ate pizza
 ‘I told Sonia that you asked when I ate pizza.’

- B: *Y a Bruno?
and to Bruno
Literal: ‘And Bruno?’
Intended interpretation: ‘What about Bruno? What_i did you ask him when I ate t_i?’
- c. A: Le hablé a Sonia sobre la persona [relative clause que comió pizza].
to.her I.talked to Sonia about the person that ate pizza
‘I talked to Sonia about the person that ate pizza.’
- B: *Y a Bruno?
and to Bruno
Literal: ‘And Bruno?’
Intended interpretation: ‘What about Bruno? What_i did you talk to him about the person that t_i?’

Crucially, the ungrammaticality of the wh-TREQs in (96) is not due to the topicalization of *a Bruno* ‘to Bruno’, since it doesn’t cross an island boundary, as the examples in (94) show. Instead, it is the wh-movement of *qué* ‘what’ that makes these sentences ungrammatical, as shown in (95). This suggests that the source of the ungrammaticality in (96) can be traced back to the structures in (97), where the ungrammaticality arises from the illicit wh-movement:

- (97) a. *[A Bruno], [qué] lo felicitaste [adjunct porque comió ___]?
DOM Bruno what CL.3S congratulated because he.ate
Intended: ‘As for Bruno, what_i did you congratulated him because he ate t_i?’
- b. *[A Bruno], [qué] le preguntaste [embedded-wh cuándo comí ___]?
to Bruno what to.him asked when I.ate
Intended: ‘As for Bruno, what_i did you ask him when I ate t_i?’
- c. *[A Bruno], [qué] le hablaste [rel. clause que comió ___]?
to Bruno what to.him talked about the person that ate
Int.: ‘As for Bruno, what_i did you talked to him about the person that ate t_i?’

This, in turn, also provides evidence that there’s wh-movement inside the ellipsis site.

7. Appendix B: a note on *what-about* questions in English

In this appendix I briefly discuss what I will refer to as *what-about* questions in English.¹⁶ Unlike Spanish, English doesn't allow topicalization out of *wh*-questions, as shown in (98-a), but it does allow hanging topics followed up by a resumed *wh*-question, as shown in (98-b):

- (98) a. *Bruno, what ate?
 b. What about Bruno? What did he eat?

As an anonymous reviewer notes, *what-about* questions in English can be used without the following resumed *wh*-question, in a superficially similar way as *wh*-TREQs in Spanish:

- (99) A: Sonia ate pizza.
 B: And what about Bruno?
 A: Pasta.

In light of this data, it's worthwhile to explore the differences and similarities between English *what-about* questions and Spanish *wh*-TREQs, with the aim to determine if a unified approach is justified. One crucial question is whether a *what-about* question like the one in (99)B is indeed elliptical. Specifically, we must determine whether the follow-up resumed question we see in (98-b) undergoes ellipsis in an example like (99), or if there is no such resumed question at all. This empirical question goes beyond the scope of this paper. However, for now, let's consider the hypothesis that (at least some cases of) *what-about* questions in English, like the one in (99), are indeed elliptical. As suggested by an anonymous reviewer, this would involve hanging topics (the *what-about* question itself) followed by an elided resumed question. Importantly, these configurations are not possible in Spanish, as I discussed around P-omission facts in footnote 7.

An important difference is that *what-about* questions in English are available in contexts where topicalization is not possible, whereas *wh*-TREQs in Spanish are not, as I extensively showed. More striking is the fact that English *what-about* questions show island sensitivity—just like

¹⁶I thank two anonymous reviewers for prompting me to think about this phenomenon.

topicalization-based wh-TREQs in Spanish—, despite apparently not involving movement of the remnant (although one could think of an alternative approach where movement is indeed involved):

- (100) A: Sonia heard the rumor that I ate pizza yesterday.
B: And (what about) pasta? Who heard the rumour that you ate that yesterday?
A: Bruno.
- (101) A: Sonia heard the rumor that I ate pizza yesterday.
B: And (what about) pasta?
A: #Bruno

As an anonymous reviewer points out, the unacceptability of (101) on the relevant reading¹⁷ seems to be linked to the island-boundedness of the correlate. However, this cannot be directly attributed to an island-violating movement of the remnant, given that these are assumed to be based-generated. Based on these facts about English, an anonymous reviewer argues that the facts reported for Spanish regarding island sensitivity are not due to movement, but something else; in other words, whatever causes unacceptability in English should account for the ungrammaticality of Spanish wh-TREQs in contexts of islands.

However, I argue that this is not the case, and that English *what-about* questions cannot be equated to Spanish wh-TREQs. First, it's important to note that the examples provided above involve some contrastiveness between *pizza* in the antecedent and *pasta* in the *what-about* question. As Griffiths and Lipták (2014) noted, contrastive fragments cannot have non-contrastive correlates:

- (102) A: John was very tired and hungry. You know what he did? He left the office at three and he had a pizza in his favorite restaurant on his way home.
B2: No, a SALAD he had in his favorite restaurant on his way home.
B1: *No, a SALAD.

(adapted from Griffiths and Lipták 2014, ex. (30))

¹⁷The *what-about* question in (101) is impossible with the intended meaning in (100), but seems to be possible with a polar question meaning, which is not particularly relevant for the current discussion.

Griffiths and Lipták, propose, then, a *felicity condition on contrastive fragments* according to which ‘[c]ontrastive fragments are only felicitous if their correlate is contrastively focused’ (p. 202). I contend that this condition explains why the island examples provided by the anonymous reviewer are ungrammatical in English. Moreover, it predicts that a *what-about* question that inquires about anything in an embedded clause (not just an island) would be ungrammatical, given that it’s correlate would be background (i.e., not contrastively focused) information. This prediction is borne out. Importantly, the non-elliptical counterparts are perfectly grammatical:

- (103) A: Sonia said that I ate pizza yesterday.
 B: And what about pasta? Who said that you ate that yesterday?
 A: Bruno.
- (104) A: Sonia said that I ate pizza yesterday.
 B: And what about pasta?
 A: #Bruno.

Given these facts, I don’t think that the examples from *what-about* questions in English should directly inform an analysis of wh-TREQs in Spanish. Ultimately, further research on *what-about* questions in English is needed to determine: (i) whether these are elliptical structures, (ii) whether the *what-about XP* part is based-generated in the left-periphery or moved, and (iii) the relationship between the XP in the *what-about* question and the resumed element in the follow up question. At the moment, I don’t have enough data to provide a definite answer to any of these questions.