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THE SILENCE OF SYNTAX:
A THEORY OF ELLIPSIS LICENSING AND IDENTITY

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BY
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To my grandma,

for always encouraging me to follow my dreams.

It will be I? It will be the silence, where I am? I don't know,

I'll never know: in the silence you don't know.

You must go on.

I can't go on.

I'll go on.

The Unnamable. Samuel Beckett

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ACKNOWLEDGMENTS

Caminante, son tus huellas
el camino y nada más;
Caminante, no hay camino,
se hace camino al andar.
Al andar se hace el camino,
y al volver la vista atrás
se ve la senda que nunca
se ha de volver a pisar.
Caminante, no hay camino
sino estelas en la mar.

Antonio Machado

This journey has come to an end, and all types of feelings arise as I write these acknowledgments. I remember packing my bags in September 2016, ready to travel thousands of miles to pursue my dream, full of questions, fears, anxiety, but also hope and excitement. I didn't know what I would find at my destination, what paths I would take, or what would happen to me, but everything that came next exceeded my expectations. Almost six years later, I feel accomplished, lucky and grateful.

These were six incredible years, and, without a doubt, if I could go back in time, I'd choose the University of Chicago again. I can't think of a better place to do my Ph.D.: I learned a lot, I had countless opportunities to explore what I like, to find myself, to thrive; I grew personally, intellectually, and professionally; I felt supported, I had fun, and I met amazing people who made my days much better, much happier. It was a long journey, but I wasn't alone. My advisors, mentors, teachers, colleagues, friends, and family were all there for me when I needed them; they walked along with me, helped me, taught me, made me laugh, and supported me in any possible way. For that, I'm grateful. I couldn't have done it without all of them.

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Andrés Saab and Vera Gribanova for agreeing to join my committee and giving me honest advice and suggestions.

I came to UChicago knowing I wanted to work on ellipsis with Jason. Still, I never imagined what a fantastic mentor I'd find in him. Jason has taught me so much about ellipsis, linguistics, and science in general. I thank him for all the wisdom he imparted over these past six years. Jason has asked the most challenging questions, pointed to the most complex problems, and encouraged me to think deeper and better. I thank him for trusting in me, giving me many opportunities to grow as an independent researcher and thinker, and always being open to being challenged. Anyone who has read the title of this dissertation can see that it is a tribute to Jason's work.

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ABSTRACT

In this dissertation I investigate the syntax of *ellipsis*, the phenomenon in which, under particular circumstances, certain linguistic material can be omitted, but it's still understood in the context of its antecedent. Ellipsis has been a central topic in the study of linguistics because it raises fundamental questions about language in particular, and cognition in general. Its importance lies on the fact that it represents a case in which the association between linguistic form and meaning breaks down: *there is meaning without form.*

By examining different types of ellipsis in Spanish, I address two of the main questions that have occupied the ellipsis literature for more than 50 years: the *identity* question (1a) and the *licensing* question (1b):

(1) a. What is the relationship between the material that has been elided and its antecedent? What type of identity does ellipsis require in order to be licensed?

b. What syntactic configurations allow ellipsis? What heads, features and operations are involved in the licensing of ellipsis?

With regards to (1a), I claim that some types of ellipsis require a strict syntactic identity condition to be licensed while others are subject to 'mixed-identity' requirements that impose a strict syntactic identity requirement on a portion of the structure, and no identity requirements at all on a different portion of the structure. This main claim is supported by the detailed examination of two empirical domains in ellipsis in Spanish: (i) P-Omission facts in various types of TP-Ellipsis (such as sluicing, fragment answers, stripping and pseudostripping, and split questions, among others) and (ii) an understudied elliptical construction that I dub *Topic-Remnant Elided Questions* (or TREQs, in short).

With respect to (1b), I propose a theory of ellipsis licensing based on (i) a typology of [E]-features, and (ii) an ellipsis operation that can impose a syntactic identity requirement which is calculated head-by-head. In short, each [E]-feature triggers certain operations, is licensed in particular syntactic configurations, and can occur only with specific heads.

This proposal accounts for the different patterns found in the empirical domains under consideration here in a straightforward way, without the need to propose construction-specific analyses or exceptional mechanisms.

This dissertation is organized around two main parts: Part I (Chapters 2 and 3) studies P-Omission facts in Spanish, and provides an analysis of TP-Ellipsis based on a syntactic identity condition; Part II (Chapters 4 to 7) analyzes the understudied construction that I dub *Topic Remnant Elided Questions* (TREQs).

CHAPTER 1

INTRODUCTION

In this dissertation I investigate the syntax of *ellipsis*, the phenomenon in which, under particular circumstances, certain linguistic material can be omitted, but it's still understood in the context of its antecedent. Ellipsis has been a central topic in the study of linguistics because it raises fundamental questions about language in particular, and cognition in general. Its importance lies on the fact that it represents a case in which the association between linguistic form and meaning breaks down: *there is meaning without form.*

By examining different types of ellipsis in Spanish,[1] I address two of the main questions that have occupied the ellipsis literature for more than 50 years: the *identity* question (1a) and the *licensing* question (1b) (Merchant 2019):

(1) a. What is the relationship between the material that has been elided and its antecedent? What type of identity does ellipsis require in order to be licensed?

b. What syntactic configurations allow ellipsis? What heads, features and operations are involved in the licensing of ellipsis?

Throughout this dissertation I use the following standard terminology: the XP that survives ellipsis is called the *remnant*, and the gap that follows it is the *ellipsis site*. The *pre-elided* clause or *source* is the sentence formed by the remnant and the ellipsis site, before undergoing ellipsis. The linguistic *antecedent* is the sentence or clause that precedes the remnant, and that provides the meaning for the ellipsis site. The *remnant's correlate* (or *correlate*, in short) in the antecedent is an XP that occupies the same base position that the remnant occupies in the pre-elided sentence. This is illustrated in (2):

1. Unless otherwise noted, all reported judgments in this dissertation are my own, and have been checked against other native speakers of Spanish. The judgments have been collected informally, asking for speakers' linguistic intuitions, as is common practice in this field. Most of the native speakers consulted, as well as myself, are speakers of *Rioplatense* Spanish, a variety of Spanish spoken mainly in the areas around the Río de la Plata Basin of Argentina and Uruguay. I acknowledge that speakers of other varieties might differ with respect to the judgments reported here.

(2) A: $\underbrace{\underbrace{\text{Who}}_{\text{correlate}}\ \text{saw Sonia?}}_{\text{antecedent}}$ – B: $\underbrace{\underbrace{\text{Bruno}}_{\text{remnant}}\ \underbrace{\sout{\text{saw Sonia}}}_{\text{ellipsis site}}}_{\text{source}}$.

In the rest of this chapter I summarize my answers to the main theoretical questions addressed in this dissertation: in Section 1.1 I summarize my contributions to the identity question, and in Section 1.2 I summarize my contributions to the licensing question. Finally, in Section 1.3 I lay out the structure of the dissertation and a brief overview of the chapters.

1.1 The identity question

In this dissertation I claim that some types of ellipsis require a strict syntactic identity condition to be licensed while others are subject to 'mixed-identity' requirements that impose a strict syntactic identity requirement on a portion of the structure and no identity requirements at all on a different portion of the structure. This main claim is supported by the detailed examination of two empirical domains in ellipsis in Spanish: (i) P-Omission facts in various types of TP-Ellipsis (such as sluicing, fragment answers, stripping and pseudostripping, and split questions, among others) and (ii) an understudied elliptical construction that I dub *Topic-Remnant Elided Questions* (or TREQs, in short). In what follows, I summarize the main conclusions I draw from analyzing these two domains.

1.1.1 P-Omission

P(reposition)-omission refers to those elliptical contexts in which a preposition can be absent from the remnant in a context of ellipsis. This is shown in (3) for Spanish:

(3) Sonia habló con alguien, pero no sé (con) quién.
Sonia talked with someone but not I.know with who
'Sonia talked with someone but I don't know (with) who.'

It's worth mentioning that not every language allows P-Omission under ellipsis. In this respect, P-Omission facts are of special interest for the theory of ellipsis because they've been

taken to provide evidence for the claim that ellipsis is not licensed under strict syntactic identity, but that a semantic identity condition is sufficient to license ellipsis. According to some authors (such as Rodrigues et al. 2009; Barros 2014, among others), the aforementioned Spanish facts have been taken to provide evidence that the source of ellipsis can be a cleft/copular source like the one in (4):

(4) ...pero no sé quién es la persona con la que habló Sonia.
but not I.know who is the person with the that talked Sonia
'...but I don't know who is the person with whom Sonia talked.'

In other words, if this non-isomorphic source is possible, it ultimately means that ellipsis doesn't require a strict syntactic identity condition to be licensed.

In this light, a question arises about other elliptical contexts in which P-Omission facts could be observed. If cleft/copular sources are available for cases of sluicing like the one in (3) above, it'd be reasonable to assume that they should be also available for other types of TP-Ellipsis in this language, such as fragment answers. However, P-Omission is not possible in these cases (5B), despite the fact that a clef/copular source is possible as a non-elliptical continuation (5B'):

(5) A: Con quién habló Sonia?
with who talked Sonia
'Who did Sonia talk with?'

B: *(Con) Bruno.
with Bruno
'With Bruno.'

B': Bruno es (la persona) con la que habló.
Bruno is the person with the that she.talked
'Bruno is the person with whom she talked.'

If P-Omission in cases of sluicing arises from copular sources, and if copular sources are an available source for the ellipsis site, then the ungrammaticality of P-Omission in fragment answers in Spanish remains unexplained. One alternative could be to propose construction-specific conditions/mechanisms that could account for why non-isomorphic sources are possi-

ble in sluicing but not in fragment answers. However, this alternative would make it harder to generalize to other constructions or languages in a straightforward way. Ideally, there should be a way to account for the different patterns of P-Omission across the various types of TP-Ellipsis without proposing construction-specific mechanisms that apply in some cases but not others, given that there are no independent reasons to introduce such differential treatment.

In consequence, in this dissertation I reject the hypothesis that non-isomorphic sources (such as cleft/copular sentences) are a possible source for the ellipsis site and that ellipsis doesn't need syntactic identity to be licensed. On the contrary, I propose that the P-Omission facts actually show that TP-Ellipsis requires strict syntactic identity between the antecedent and the ellipsis site, that this identity condition is calculated head-by-head in the Syntax, and that remnants do not need to move to escape deletion (contra move-and-delete approaches to ellipsis). This particular syntactic identity condition, combined with the lack of exceptional movement under ellipsis, allows me to account for the original puzzle of why P-Omission is allowed in sluicing but not in fragment answers in a simple, straightforward way, also predicting the patterns found in all the other types of TP-Ellipsis in Spanish.

1.1.2 Topic-Remnant Elided Questions

Once it has been established that syntactic identity is needed to license TP-Ellipsis, I look at another type of ellipsis in Spanish, illustrated in (6B), which consists of an elliptical question that can be interpreted as a follow-up wh-question:

(6) 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?'

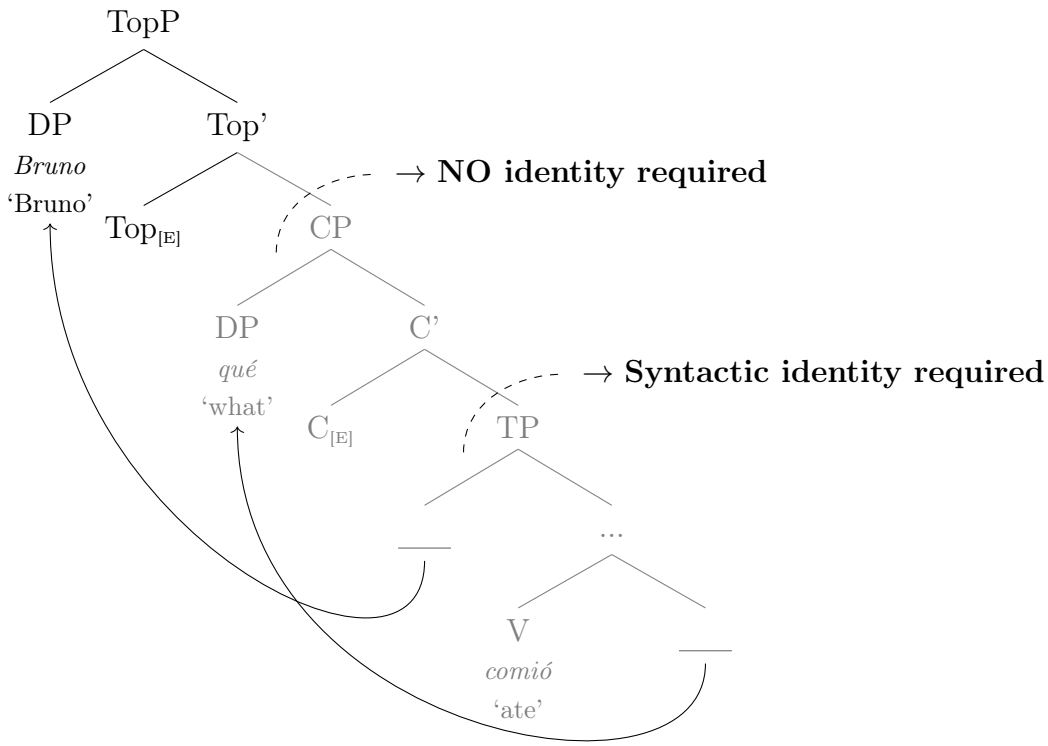
Examples like the one in (6) have never been discussed in the literature prior to this dissertation and provide important insights into the study of ellipsis more generally. I call this type of ellipsis, *Topic-Remnant Elided Questions* (or TREQs, in short). I first show that syntactic identity is needed here as well by providing evidence from voice mismatches, spray-load alternations, and island sensitivity, among others, in the context of TREQs. However, I also show that a syntactic identity condition is too strict and doesn't account for the basic fact that the ellipsis site contains a wh-phrase *qué* 'what', which gets deleted although its correlate in the antecedent is the NP *pizza* 'pizza'—and crucially, *qué* 'what' and *pizza* 'pizza' are not syntactically identical:

(7) A: Sonia comió [pizza]
Sonia ate pizza
'Sonia ate pizza.'

B: Y Bruno$_j$ ⟨$_{\text{ellipsis site}}$ [~~qué~~$_i$] t$_j$ ~~comió~~ t$_i$⟩?
and Bruno ~~what~~ ~~ate~~
'And Bruno ~~what did he eat~~?'

In this respect, to account for these seemingly contradictory identity requirements, I argue that TREQs arise as the result of two ellipses, one triggered by an [E]-feature on C, which imposes syntactic identity, and one triggered by and [E]-feature on Top, which doesn't impose any identity requirements at all. This is schematized in (8) for the TREQ in (7), where gray text represents elided material:

(8)



The heads that can bear an [E]-feature, the interaction between them and other features, as well as the mechanisms involved in ellipsis lead me to the next question I address in this dissertation: the licensing question.

1.2 The licensing question

In this dissertation I propose a theory of ellipsis licensing based on (i) a typology of [E]-features, and (ii) an ellipsis operation that can impose a syntactic identity requirement which is calculated head-by-head. In short, each [E]-feature triggers certain operations, is licensed in particular syntactic configurations, and can occur only with specific heads. This proposal accounts for the different patterns found in the empirical domains under consideration here in a straightforward way, without the need to propose construction-specific analyses or exceptional mechanisms.

1.2.1 Typology of [E]-features

Based on my analysis of TP-Ellipsis and TREQs in Spanish, and in order to explain why some ellipses seem to require strict syntactic identity while others seem to respond to a 'mixed-identity' requirement, I propose a typology of [E]-features, as follows:

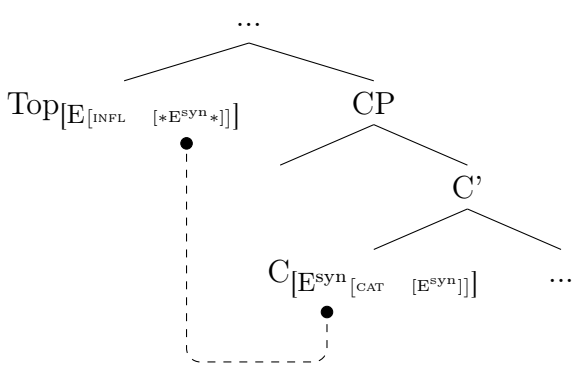
(9) Typology of [E]-features

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

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

I follow Aelbrecht (2010) in that [E]-features are made of *categorical*, *inflectional* and *selectional* features. Furthermore, I propose that there are (at least) two [E]-features in Spanish: while [E^{syn}] imposes a syntactic identity requirement, [E] doesn't impose any identity requirements at all. However, while [E^{syn}] doesn't have any inflectional specification, [E] needs to enter into an Agree relation with an [E^{syn}] to be licensed, which ensures that it always occurs in the context of an [E^{syn}]. This, in turn, explains the seemingly contradictory facts with regards to the identity requirements in TREQs. In other words, TREQs are the result of two ellipsis operations: one, triggered by an [E^{syn}] on C, which requires syntactic identity between the ellipsis site and its antecedent, and one triggered by an [E] on Top. Crucially, this latter [E]-feature doesn't require identity between what undergoes deletion and its antecedent, hence allowing for the deletion of the moved wh-phrase in the ellipsis site. This is illustrated in (10), where I simplify the matrices in (9), only showing the relevant features:

(10)



As indicated by the selectional features in the matrices in (9), each [E]-feature is only compatible with certain heads: [E^{syn}] can only occur with C, and [E] can only occur with Top. In consequence, and based on my analysis of TP-Ellipsis and TREQs in Spanish, I also propose a typology of C heads and Top heads, which allows me to account for the different patterns found in the language. The typology of C heads is shown in (11):

(11) Typology of C heads for Spanish

C head	**Phenomenon**
$C_{[\bullet wh\bullet] \succ [E^{syn}]}$	TP-Ellipsis, no P-Omission
$C_{[E^{syn}]}$	TP-Ellipsis, P-Omission
$C_{[\bullet wh\bullet]}$	wh-questions
$C_{[E^{syn}] \succ [\bullet wh\bullet]}$	not available

In particular, I claim that movement-triggering features always precede the ellipsis-triggering features in Spanish, and I claim the opposite is true in other languages, like English. This order, which is subject to crosslinguistic variation, is responsible for the patterns of P-Omission we see in each language. Furthermore, I claim that, in Spanish, the C head can bear (i) only a movement-triggering feature, like [•wh•], which would give rise to a wh-question, (ii) only an [E]-feature, which would give rise to TP-Ellipsis, or (iii) both features. Crucially, whether C has both [E] and [•wh•], or just [E], is one of the factors that determine if P-Omission is possible in this language—the other factor being whether the correlate in the antecedent has moved or not. Finally, a head bearing both features, but in the reverse

order is not available in Spanish.

Likewise, I propose a similar typology of Top heads, shown in (12):

(12) Typology of Top heads for Spanish:

Top head	**Phenomenon**
$\text{Top}_{[\bullet\text{top}\bullet]\succ[\text{E}]}$	CP-ellipsis
$\text{Top}_{[\bullet\text{top}\bullet]}$	topicalizations
$\text{Top}_{[\text{E}]\succ[\bullet\text{top}\bullet]}$	not available

The only difference between C and Top is that Top must always bear a [•top•]-feature (that is, it cannot bear only an [E]-feature). As I explained for C heads above, when Top bears both [•top•] and [E], the former should precede the latter (the opposite order is not available in Spanish, but it might be available in other languages). Finally, Top can only bear a [•top•], which would give rise to a topicalization.

1.2.2 The ellipsis operation

I claim that ellipsis is licensed by a special feature, which I represent as [†] (following the notation in Müller 2011). This [†]-feature is responsible for (a) deletion of any head that bears it, and (b) the licensing of ellipsis. I follow previous work (see Saab 2008, Aelbrecht 2010, Murphy 2016, Saab and Lipták 2016, among others) in taking 'deletion' to be non-application of Vocabulary Insertion (VI) (see Halle and Marantz 1993, and subsequent work). As I pointed out, I argue that there are (at least) two [E]-features that impose two different identity conditions. With regards to [E^{syn}], I propose that it assigns [†^{syn}] as in (13):

(13) Assignment, licensing and phonology of [†^{syn}]:

a. Assign [†^{syn}] to every head h in the complement of a head $z_{[\text{E}^{\text{syn}}]}$ iff h is not dominated by an [F]-marked node or a [Top]-marked node.

b. A head $h_{[\dagger^{\text{syn}}]}$ is licensed iff it has an identical correlate h' in its antecedent A.

c. A head $h_{[\dagger^{\text{syn}}]}$ is not subject to VI.

With respect to [E], I propose that it assigns [†] as in (14):

(14) Assignment, licensing and phonology of [†]:

a. Assign [†] to the phrase XP in the complement of a head $z_{[E]}$.

b. A head h dominated by an $XP_{[\dagger]}$ is not subject to VI.

That is, both [E^{syn}] and [E] trigger ellipsis of the complement of the head bearing them. The difference is that while [E^{syn}] imposes syntactic identity—via the assignment and licensing of [$\dagger^{syn}$]—, [E] does not impose any identity requirements.

To sum up, I analyze two empirical domains in ellipsis in Spanish—TP-Ellipsis and TREQs—with the aim to provide answers to the identity question and the licensing question. Based on an in-depth study of these domains, I put forth an analysis that accounts for the empirical facts without the need for construction-specific analyses or exceptional mechanisms.

1.3 Structure of this dissertation

This dissertation is organized around two main parts. Part I (Chapters 2 and 3) studies P-Omission facts in Spanish, and provides an analysis of TP-Ellipsis based on a syntactic identity condition. Part II (Chapters 4 to 7) analyzes the understudied construction that I dub *Topic Remnant Elided Questions* (TREQs).

In Chapter 2, I argue that P-Omission in Spanish doesn't arise from cleft/copular sources, and that ellipsis needs a stricter identity condition to be licensed. I propose that ellipsis requires syntactic identity, and that this identity is calculated head-by-head in the Syntax. In addition, I argue and provide evidence that the remnant in many elliptical constructions remains in-situ. To account for the patterns of P-Omission in Spanish, I argue that these patterns follow a novel *P-Omission Generalization*, according to which P-Omission in ellipsis in Spanish is only allowed when the following two conditions are met: (a) the remnant's correlate in the antecedent does not move, and (b) the remnant does not move. Finally, I

account for some crucial differences between English and Spanish with respect to P-Omission, based on the featural make-up of the C head in each language.

Chapter 3 discusses the availability of non-exhaustive readings (given by *mention-some* and *else* modification) in TP-Ellipsis with P-less remnants, which provides further evidence to rule out copular/cleft sources as the source of P-Omission. In addition I show that the analysis proposed in Chapter 2 makes the correct predictions regarding the (un)availability of P-Omission in other types of TP-Ellipsis in Spanish, such as contrast sluicing, split questions, fragments, stripping and pseudostripping, and sprouting.

Chapter 4 serves as an introduction to Part II, and provides a brief overview of TREQs. Chapter 5 analyzes root wh-TREQs, which are elliptical questions interpreted as follow-up wh-questions. I claim that root wh-TREQs in Spanish are the result of the ellipsis of a wh-question, from which a Topic has moved out, surviving deletion. I argue that root wh-TREQs provide further evidence for the need for a syntactic identity condition to license ellipsis. However, I also argue that this identity condition only applies to the lower portion of the elided structure (i.e. the TP and everything below it). With respect to the upper part of the structure (i.e. material above the TP), I show that there is in fact no need to propose a specific identity condition to license ellipsis of the elements lying between C and Top. Finally, I argue that this type of construction involves the presence of two [E] features, one that enforces syntactic identity and is located on C, and one that doesn't enforce any particular identity condition, and is located on Top.

In Chapter 6 I discuss embedded wh-TREQs, which are elliptical questions that convey ignorance with respect to the remnant. I put forth an analysis for embedded wh-TREQs that follows the main ideas developed in Chapter 5, but also points out and discusses some important differences between the derivation of root and embedded wh-TREQs. In brief, I claim that in this type of wh-TREQ the remnant first moves to an intermediate TopP within the embedded clause. Crucially, I show that the remnant can either stay in that intermediate TopP, or it can further move to matrix TopP.

In Chapter 7 I analyze root and embedded polar TREQs. Polar TREQs, are elliptical questions interpreted as follow-up polar (yes/no) questions. Based on its interpretation, I argue that both root and embedded polar TREQs require a polar (yes/no) question to go unpronounced. In this respect, I claim that polar TREQs are the result of ellipsis of a polar question, from which a Topic has moved, surviving deletion. Importantly, I analyze polar TREQs as the result of ellipsis triggered by an [E^{syn}]-feature on C. This analysis differs from my analysis of wh-TREQs in Chapters 5 and 6, which also involved an [E]-feature on Top. As I show, this higher ellipsis operation is not necessary here.

Finally, Chapter 8 summarizes the findings of this dissertation and concludes.

Part I

TP-Ellipsis, syntactic identity, and the P-Omission Generalization.

CHAPTER 2

TP-ELLIPSIS REQUIRES SYNTACTIC IDENTITY[1]

2.1 Introduction

Merchant (2001), based on a survey of more than twenty languages, argues that *Preposition-stranding under sluicing* is allowed only in languages that allow P-Stranding in regular wh-questions. This claim is known as the *P(reposition)-Stranding Generalization* (1). For reasons that will become clear soon, I've replaced "P-Stranding" with "P-Omission" from Merchant's original version of (1). In particular, I define *P-Omission* as *the omission of a preposition in an ellipsis fragment*:

(1) A language L will allow *P-Omission* in sluicing iff L allows preposition stranding under regular wh-movement.

(adapted from Merchant 2001, p. 92)

Merchant provides data from four Romance languages (Catalan, French, Spanish, and Italian) and notices that there is a difference in the grammaticality status of P-Omission in the sluicing examples, such as the Spanish example in (2a), which are characterized as deviant but not entirely ungrammatical, compared to P-Stranding in regular wh-questions, as in (2b), which is undoubtedly ungrammatical in the four Romance languages analyzed:

(2) a. Sonia habló con alguien, pero no sé ??(con) quién.
Sonia talked with someone but not I.know with who
'Sonia talked with someone but I don't know who.'

1. Most of the ideas in this chapter, as well as the the ideas in Chapter 3, appear in Stigliano (2019) and Stigliano (2022). Given that the latter has been evaluated by three anonymous reviewers and a handling editor, I decided to leave the references to their comments in the main text and the footnotes, as they appear in the published version.

b. *Quién habló Sonia con?[2]
who talked Sonia with
Intended: 'Who did Sonia talk with?'

(adapted from Merchant 2001, p. 98)

In recent years, compliance with the P-Stranding Generalization has been explored for different languages (see Fortin 2007 and Sato 2011 for Indonesian, Hartman 2005 for Finnish, Szczegielniak 2008 for Polish, Stjepanović 2008 for Serbo-Croatian, Algryani 2010 for Arabic, Abels 2017 for Bulgarian, Molimpakis 2019 for Greek, among many others; for Romance languages, see Almeida and Yoshida 2007 for Brazilian Portuguese, Rodrigues et al. 2009 for Brazilian Portuguese and Spanish, and Vicente 2008 for Spanish). In particular, Rodrigues et al. (2009) analyze the interaction between sluicing and P-Omission in Spanish and Brazilian Portuguese;[3] according to them, P-Omission in sluicing in Spanish is only slightly marginal or even totally acceptable, as shown in (3):

(3) Sonia habló con una chica, pero no sé (con) cuál.
Sonia talked with a girl but not I.know with which
'Sonia talked with a girl but I don't know which.'

(adapted from Rodrigues et al. 2009, ex. 4)

To account for the data in Brazilian Portuguese and Spanish, they claim that the P-less

2. Spanish orthographic conventions require adding an inverted question mark (i.e. '¿') at the beginning of questions. However, I chose not to follow this convention to avoid any confusion with other conventional marks used for grammaticality judgments throughout the dissertation, such as '?' or '??'.

3. Almeida and Yoshida (2007) were the first to note that Brazilian Portuguese offers a counterexample to the P-Stranding Generalization (1) since it is possible to omit the preposition in sluicing in this language, but P-Stranding is banned from regular wh-questions, as in any other Romance language. According to them, the variants with and without the preposition in (ia) are 'entirely acceptable and mutually interchangeable' for most of the speakers consulted. They report finding similar judgments for other prepositions (i.e. *para* 'to', *de* 'of, from', *entre* 'between', *em cima de* 'on top of, above', and *debaixo de* 'under').

(i) a. A Maria dançou com alguém, mas eu não lembro (com) quem.
the Maria danced with someone but I not remember with who
'Maria danced with someone, but I don't remember who.'

b. *Quem que a Maria dançou com?
who that the Maria danced with
Intended: 'Who did Maria dance with?'

(adapted from Almeida and Yoshida 2007, ex. 5-6)

version of the remnant arises from a non-isomorphic copular source: the remnant—*cuál* 'which'—is actually the pivot of a cleft/copular sentence that undergoes ellipsis, as schematically shown in (4) (for further details on this proposal see Rodrigues et al. 2009):

(4) ...no sé cuál ~~es la chica con la que habló Sonia~~.
not I.know which is the girl with the that talked Sonia
'...I don't know which girl is the girl that Sonia talked with.'

(adapted from Rodrigues et al. 2009, ex. 6)

However, an interesting contrast arises in Spanish when comparing the availability of P-Omission in sluicing (2a)-(3) with the availability of P-Omission in other types of TP-Ellipsis, such as *fragment answers*, a type of ellipsis in which the answer to a question is stated as a fragment instead of a full sentence (Merchant 2004).[4] Merchant notes that 'bare'

4. An anonymous NLLT reviewer pointed out that the claim that fragment answers are derived from TP-Ellipsis should be stated as an assumption, given that there is a debate regarding the status of these fragments. Here, I consider the following evidence to argue for an ellipsis-based analysis (see, e.g., Merchant 2004, Barros et al. 2015, Weir 2014, among many others), and contra 'non-sententialist' analyses (see, e.g., Progovac et al. 2006, Stainton 2006, Jacobson 2016, among others); see also Hall (2019) for a brief overview on this topic. Spanish displays case connectivity/case-matching effects with Differential Object Marking, as the example in (i) shows (which parallels data from languages with morphological case). In particular, the case on the fragment is the same that the object DP (iB) would have in the non-elliptical sentence:

(i) A: A quién vio Sonia? – B: *(A) Bruno.
DOM who saw Sonia DOM Bruno
'A: Who did Sonia see? – B: Bruno.'

Additional evidence comes from Principle C and Principle B violations. The fragments in (iiaB) and (iiiaB) are not possible as answers to the preceding questions; this is because the sources for these fragments would be those in (iib) and (iiib) respectively, which are also ruled out with the intended meanings:

(ii) a. A: Dónde vive ella$_1$? – B: *En la casa de Sonia$_1$.
where lives she in the house of Sonia
Intended: 'A: Where does she$_1$ live? – B: In Sonia$_1$'s house.'
b. *Ella$_1$ vive en la casa de Sonia$_1$.
she lives in the house of Sonia
Intended: 'She$_1$ lives in Sonia$_1$'s house.'

(iii) a. A: A quién vio Sonia$_1$? – B: *A ella$_1$.
DOM who saw Sonia DOM her
Intended: 'A: Who did Sonia$_1$ see? – B: Her$_1$.'
b. *Sonia$_1$ la vio a ella$_1$.
Sonia CL saw DOM her
Intended: 'Sonia$_1$ saw her$_1$.'

DP answers (i.e. P-less remnants) are impossible in non-preposition stranding languages, extending his P-Stranding Generalization to this type of TP-Ellipsis. He provides data from Greek, German, Yiddish, Czech, Russian, Bulgarian, and Hebrew. In Spanish, P-Omission is impossible in this type of ellipsis as well, as predicted by Merchant:

(5) A: Con qué chico habló Sonia? – B: *(Con) Bruno.
with which boy talked Sonia with Bruno
'A: Which boy did Sonia talk with? – B: With Bruno.'

This contrast between sluicing and fragment answers with regard to the availability of P-Omission in Spanish seems hard to explain within current proposals that argue that counterexamples to the P-Stranding Generalization are derived from non-isomorphic copular sources (e.g., Rodrigues et al. 2009 Vicente 2008, Barros 2014), given that a copular source for the fragment answer in (5) is available as a non-elliptical answer, as (6) shows:[5]

(6) B': Bruno es el chico con el que habló.
Bruno is the boy with the who she.talked
'Bruno is the boy that she talked with.'

If P-Omission in TP-Ellipsis arises from copular sources, and if copular sources are just another available source for the ellipsis site, then the ungrammaticality of P-Omission in fragment answers in Spanish remains unexplained.

To sum up, on the one hand, both sluicing and fragment answers are types of TP-Ellipsis and are derived from the same mechanism of TP-deletion; on the other hand, while sluicing allows P-Omission in Spanish, as shown in (3), fragment answers do not, as shown in (5), despite the fact that a copular continuation is perfectly possible, as shown in (6). Ideally, there should be a way to account for this difference without proposing construction-specific mechanisms that apply in one case but not in the other, given that there are no independent reasons to introduce such differential treatment. In this chapter I develop a proposal that

5. For additional arguments against an analysis of P-Omission based on copular sources see Chapter 3, where I present evidence to rule out copular/cleft sources as the source of P-Omission in Spanish. In Chapter 3, I also show how my proposal correctly predicts the patterns found in other types of TP-Ellipsis, such as contrast sluicing, fragments, stripping, pseudostripping, split questions, and sprouting.

accounts for this puzzle in a simple way, also predicting the patterns found in other types of TP-Ellipsis (as discussed in Chapter 3).

In a nutshell, against previous proposals that claim that P-Omission in Spanish arises from copular sources, and that ellipsis is licensed under semantic identity (Vicente 2008; Rodrigues et al. 2009; Barros 2014), I argue that (i) TP-Ellipsis is licensed under strict syntactic identity (which is calculated head-by-head), and (ii) that the remnants can stay in situ—given that, in the relevant cases, the head that would trigger movement in non-elliptical cases does not trigger it under ellipsis. This proposal will account for the following generalization, which I motivate in this and the following chapter:

(7) The *P-(reposition) Omission Generalization* for Spanish:
P-Omission in ellipsis in Spanish is only allowed when the following two conditions are met: (a) the remnant's correlate in the antecedent does not move, and (b) the remnant does not move.

Although data from apparent violations to Merchant's P-Stranding Generalization have been taken as evidence for the existence of non-isomorphic sources and the need for semantic identity approaches to ellipsis, a careful analysis of several types of TP-Ellipsis will demonstrate that these data in fact point to the need for strict identity between the antecedent and ellipsis site, especially with regard to the position of the remnant and the position of its correlate. In addition, I show that remnants of ellipsis can stay in situ. Finally, I show that the P-Omission Generalization holds because movement of the remnant's correlate in the antecedent creates a configuration where, in order to comply with the strict syntactic identity condition I propose, it is necessary to leave the preposition outside the ellipsis site.

The structure of this chapter is as follows: Section 2.2 advances a syntactic identity analysis that accounts for the original puzzle regarding the (un)availability of P-Omission in sluicing and fragment answers. Section 2.3 presents additional predictions related to the interpretation of in-situ remnants. Section 2.4 discusses the locus of crosslinguistic variation. Finally, Section 2.5 summarizes my proposal and concludes.

2.2 A syntactic identity approach to TP-Ellipsis

As I pointed out above P-Omission is possible in sluicing but not in fragment answers in Spanish. In this section I put forth a proposal that accounts for the basic patterns found with regard to the (un)availability of P-Omission in this language in a uniform manner. First, in Section 2.2.1, I state a generalization that accounts for the patterns found in TP-Ellipsis in Spanish. Then, in Section 2.2.2, I propose an explicit implementation to derive those cases that allow P-Omission, and to rule out the those cases that don't allow it.

2.2.1 Deriving the P-Omission Generalization

When comparing the two relevant examples (3) and (5), repeated below in (8),[6] it becomes evident that one of the features that distinguishes sluicing from fragment answers is the position of the remnant's correlate in the antecedent: whereas *con alguien* 'with someone' doesn't move in the antecedent of sluicing (8a), *con quién* 'with who' has been fronted due to wh-movement in questions that elicit fragment answers (8b):

(8) a. Sonia habló con alguien, pero no sé (con) quién.
Sonia talked with someone but not I.know with who
'Sonia talked with someone but I don't know who.'

b. A: [Con quién] habló Sonia __? – B: *(Con) Bruno.
with who talked Sonia with Bruno
'A: Who did Sonia talk with? – B: With Bruno.'

I claim that this distinction with regards to the movement/non-movement of the remnant's correlate is what gives rise to the (un)availability of P-Omission in each case. This idea can be stated as follows:

6. Although previous literature has sometimes used examples with D-linked wh-phrases to illustrate this point (see examples from Rodrigues et al. 2009 above), I will use non-D-linked wh-phrases here to avoid any possible confounding factors. Pesetsky (1987) was the first to notice that D-linked wh-phrases behave differently in a number of contexts, for example, superiority effects in English can be circumvented when D-linked phrases are used. Given that D-linked wh-phrases are known to circumvent certain syntactic constraints, I avoided them—whenever possible—here.

(9) The *P-Omission Generalization* for Spanish (first version):

P-Omission in ellipsis is only allowed when the remnant's correlate does not move.

The rest of this section will develop a proposal that derives the P-Omission Generalization in Spanish. In a nutshell, I claim that TP-Ellipsis is licensed under syntactic identity, and that the remnant doesn't need to move to escape ellipsis (see Section 2.3 for additional predictions). Importantly, I argue that these components—i.e. the strict syntactic identity condition to license ellipsis, and the lack of movement of the remnant—are what give rise to the availability of P-Omission in some types of TP-Ellipsis in Spanish.

In what follows, I describe the main intuition behind this proposal, as a preview of the specific implementation offered in Section 2.2.2. Consider sluicing in (10) first, where the underlined text represents the portion of the antecedent taken into account for the identity condition; struckthrough text represents what's being elided:

(10) Sonia habló con alguien, pero no sé (con) quién.
Sonia talked with someone but not I.know with who
'Sonia talked with someone but I don't know (with) who.'

a. [$_{\text{Antecedent}}$ Sonia habló con alguien] ... [$_{\text{Source}}$ ~~Sonia habló~~ con quién]
Sonia talked with someone Sonia talked with who
Literal: 'Sonia talked with someone but I don't know with who.'

b. [$_{\text{Antecedent}}$ Sonia habló con alguien] ... [$_{\text{Source}}$ ~~Sonia habló con~~ quién]
Sonia talked with someone Sonia talked with who
Literal: 'Sonia talked with someone but I don't know who.'

(10a) illustrates a case in which the entire PP *con quién* 'with who' survives ellipsis, hence, there is no P-Omission. What's being deleted here (i.e. *Sonia habló* 'Sonia talked') is syntactically identical—in a way to be defined soon—to the relevant portion of its antecedent (which is underlined). Likewise, (10b) illustrates a case where the preposition falls inside the ellipsis site, giving rise to P-Omission. Here, again, what is being deleted (i.e. *Sonia habló con* 'Sonia talked with') is identical to the relevant portion of its antecedent. What's crucial in these examples is that the remnant doesn't move; in consequence, the preposition

can optionally fall inside the ellipsis site. Although this proposal seems to imply that (10b) is a case of non-constituent deletion, I will soon show that this is only an illusion.

In fragment answers, on the other hand, movement of the wh-PP *con quién* 'with who' in the antecedent prevents the preposition from being deleted, as (11) shows:

(11) A: [Con quién] habló Sonia __? – B: *(Con) Bruno.
with who talked Sonia with Bruno
'A: Who did Sonia talk with? – B: With Bruno.'

a. [$_{\text{Antecedent}}$ [Con quién] habló Sonia __?] – [$_{\text{Source}}$ ~~habló Sonia~~ con Bruno]
with who talked Sonia talked Sonia with Bruno
Literal: 'A: Who did Sonia talk with? – B: With Bruno.'

b. *[$_{\text{Antecedent}}$ [Con quién] habló Sonia __?] – [$_{\text{Source}}$ ~~habló Sonia con~~ Bruno]
with who talked Sonia talked Sonia with Bruno
Intended: 'A: Who did Sonia talk with? – B: Bruno.'

(11a) illustrates a case in which the preposition doesn't fall inside the ellipsis site; this is derived as (10a) above. However, if the preposition falls inside the ellipsis site, as (11b) illustrates, the identity condition won't be met, given that what's being elided—*habló Sonia con* 'talked Sonia with'—and the relevant portion of the antecedent (which is underlined) are not identical (i.e. the latter is lacking the preposition).

To sum up, the P-Omission Generalization holds because movement of the remnant's correlate in the antecedent creates a configuration in which it is necessary to leave the preposition outside the ellipsis site to comply with a syntactic identity condition. In the remainder of this section I will put forth an implementation of this analysis. In Chapter 3, I expand the empirical domain to other types of TP-Ellipsis, showing how the patterns of P-Omission in Spanish fall under the P-Omission Generalization.

2.2.2 An implementation of a head-by-head syntactic identity condition

Moving on to the explicit implementation I propose, I claim that ellipsis is triggered by [E] (Merchant 2001), and licensed by a special feature, which I represent as [†] (following

the notation in Müller 2011). In particular, the [†]-feature is responsible for (a) deletion of any head that bears it, and (b) the licensing of ellipsis. Here I follow previous work (see Saab 2008, Aelbrecht 2010, Murphy 2016, Saab and Lipták 2016, among others) in taking 'deletion' to be non-application of Vocabulary Insertion (VI) (see Halle and Marantz 1993, and subsequent work) for any head bearing [†], which follows from the principle in (12):

(12) Phonology of [†]: A head containing the feature [†] is not subject to VI.

Following Saab (2022), this can be implemented by deleting the *Q-variables* from the morphemes that are assigned [†]. In particular, Saab defends a model for the timing of ellipsis according to which ellipsis is an 'all-the-way operation applicable in the way from syntax to morphology consisting in the deletion of the variables (called Q) that instruct PF for vocabulary insertion' (Saab 2022, p. 8). This idea comes from Halle's 1990 *replacive* approach to Vocabulary Insertion who proposes that certain morphemes do not have a phonological exponent as part of their underlying representation, but a 'place-holder' Q. Embick (2015) follows Halle (1990) and proposes that this Q element 'functions as a variable, such that the effect of Vocabulary Insertion is to replace Q with a phonological exponent, which can be seen as the value of the Q variable' (p. 89). Furthermore, according to Embick, Vocabulary Insertion, amounts to 'substitution of a free variable' (Embick 2015, p. 90). For more details on these proposals see Halle (1990), Embick (2015), and Saab (2022).

The [†]-feature is assigned as in (13) (see Saab 2008, 2010, 2022 on I-Assignment for a similar proposal). The constraint on the assignment of [†] to any [F]-marked constituents follows naturally from the assumption that [F]-marked constituents cannot be deleted:

(13) Assignment of [†]: Assign [†] to every head h in the complement of a head $z_{[\mathrm{E}]}$ iff h is not dominated by an [F]-marked node.

I follow Merchant (2001) in his assumption that ellipsis is licensed in the complement of heads bearing the feature [E].[7] Furthermore, as I pointed out above, I claim that ellipsis is

7. Merchant (2001) was the first to introduce the [E] feature as crucial feature for ellipsis. I focus here

licensed under syntactic identity (for additional arguments for syntactic identity, see Chung et al. 2006 Chung 2013 Merchant 2013, among others). As a way of implementing this claim, I adopt a head-by-head evaluation of the identity condition (see Saab 2008, 2010, 2022, Tanaka 2011, and Rudin 2019 for similar proposals):

(14) Identity Condition: A head $h_{[\dagger]}$ is licensed iff h has an identical correlate h' in A, where A is the antecedent.

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

(15) Identity:

a. An abstract morpheme α is identical to another abstract morpheme β if and only if α and β match all their semantic and syntactic features.

b. A root A is identical to a root B if and only if A and B share the same index.

(adapted from Saab 2010, p. 102-103)

Following Saab (2022), I assume that the calculation of ellipsis proceeds top-down. In consequence, identity is calculated in turn for each head in the E-site, starting from the top-most head that has been [†]-assigned, and that identical heads must be in the same structural position to license ellipsis. Given that the [†]-feature has consequences for Vocabulary Insertion, I claim here that the identity condition should be evaluated in the syntactic component of the grammar, before Spell-Out.

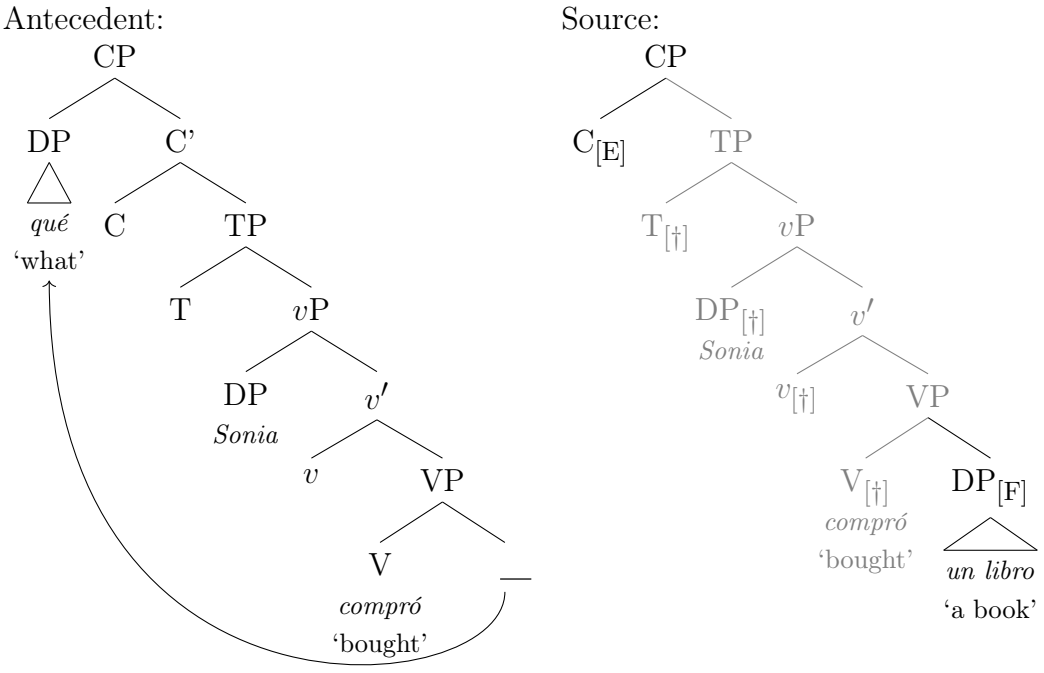
I now move on to briefly illustrate how the current proposal derives a simple case of a fragment answer with a DP remnant, like (16). For ease of exposition I present a simplified version of trees, leaving aside some details like head movement of V to v to T, movement of the subject, etc. The trees on the left are meant to represent the antecedent, and the trees on the right (i.e the pre-elided clause or source) include the ellipsis site—represented in gray—, and the remnants. As the structures below show, I use ' __' to signal the base position of

only on cases where it is C that bears the [E]-feature. Which heads can bear an [E]-feature in each language deserves a further discussion but is beyond the scope of this proposal/analysis.

the moved constituents, to simplify the trees, although I acknowledge that the same results could be obtained using copies, under the assumption that only the highest copy can serve as a proper correlate to calculate identity. This derives the fact that whatever undergoes movement in the antecedent won't be able to serve as a correlate for a given head in the ellipsis site, following the original observation by Thoms (2015) that a trace cannot be the antecedent for a non-trace (see also Potsdam 1997 for a similar proposal):

(16) a. A: [Qué] compró Sonia __? – B: Un libro.
what bought Sonia a book
'A: What did Sonia buy? – B: A book'

b. [$_{\text{Antecedent}}$ [Qué] compró Sonia __] – [$_{\text{Source}}$ [$_{\text{C[E]}}$ ~~compró~~$_{[\dagger]}$ ~~Sonia~~$_{[\dagger]}$ [un libro]$_{[F]}$]]



In (16), every head that bears a [†]-feature in the tree on the right has an identical correlate in the tree on the left (i.e. the Antecedent); recall that heads that are dominated by an [F]-mark cannot be assigned [†]. For the sake of explicitness, and following Saab (2022), in (17) I list the *identity reference set* of each head bearing [†]. The order in which the heads appear below is the order in which identity is calculated. The subscripts 'E' and 'A' are only meant to identify heads belonging to the E-site and to the Antecedent respectively:

(17) Identity reference set: $\{\langle T_E, T_A\rangle, \langle \text{Sonia}_E, \text{Sonia}_A\rangle, \langle v_E, v_A\rangle, \langle \text{compró}_E, \text{compró}_A\rangle\}$

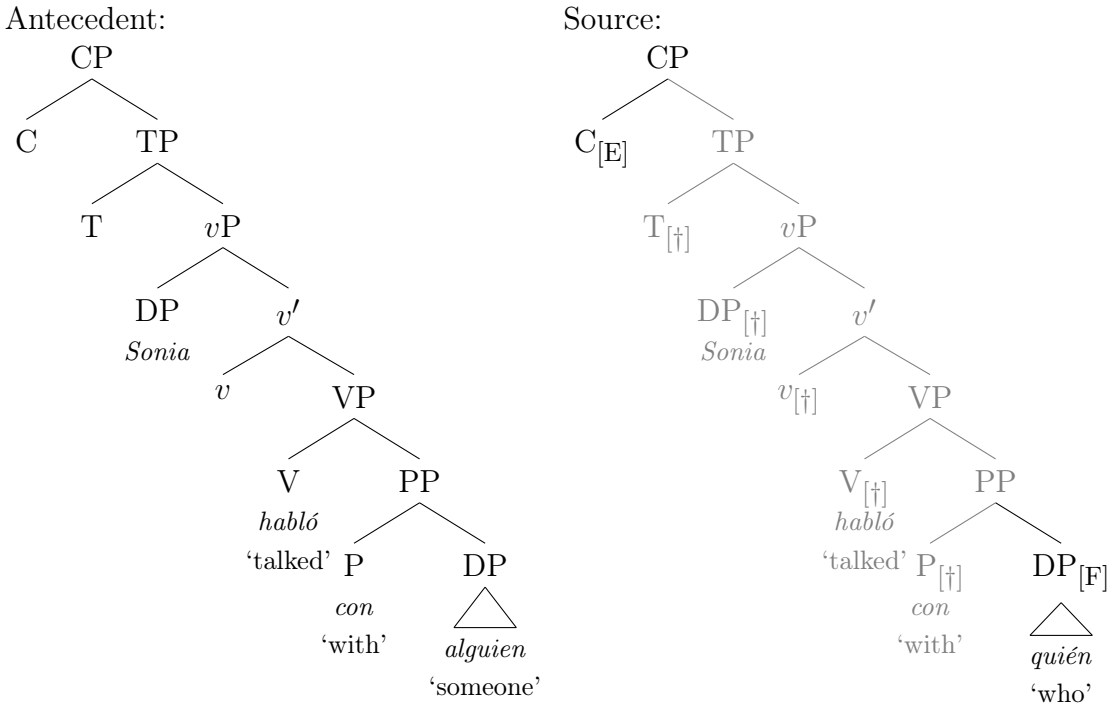
Crucially, the remnant *un libro* 'a book' is not considered when calculating identity because it's not assigned [†] due to being [F]-marked. Importantly, the claim that [F]-marked material cannot be [†]-marked dispenses with the need for positing (exceptional) movement of the remnant to escape ellipsis, as proposed for fragment answers by some move-and-delete approaches (see, e.g., Merchant 2004, Weir 2014, among many others). Given my proposal above, movement is not necessary for the remnant to escape the ellipsis site at all. In cases of sluicing, this is derived by the assumption that the C head can optionally bear an [E]-feature or a [wh]-feature in Spanish, but not both. When the elliptical C only bears an [E]-feature, ellipsis is triggered, but the remnant stays in situ (I assume that only the features on the probe must be checked).[8] This in-situ analysis makes important empirical predictions, which are discussed in Section 2.3. It's worth mentioning that a third option is logically possible, that is, when both features are present; this is discussed in Section 2.4 for English. For the time being, I will discuss cases in which the elliptical C bears only an [E]-feature in Spanish. However, this doesn't mean that the remnant cannot move at all in this language; as I will show in Chapter 3, if movement is triggered by a feature located higher than C (e.g., on Top), the remnant will indeed move.

P-Omission in Spanish arises from configurations in which the preposition falls inside the ellipsis site. Crucially, when only the DP/wh-phrase complement of P is [F]-marked, the preposition ends up being assigned [†], as shown in (18):

(18) a. Sonia habló con alguien pero no sé quién.
Sonia talked with someone but not I.know who
Literal: 'Sonia talked with someone but I don't know who.'

b. $[_{\text{Antecedent}}$ <u>Sonia habló con</u> alguien$]$ – $[_{\text{Source}}\ [_{C[E]}$ ~~Sonia~~$_{[\dagger]}$ ~~habló~~$_{[\dagger]}$ ~~con~~$_{[\dagger]}$ quién$_{[F]}]]$

8. For a different in-situ approach to ellipsis see Abe (2015), and subsequent work. See also Ott and Struckmeier (2018) for an argument against a move-and-delete approach to TP-Ellipsis.



In this case, the Identity Condition is satisfied just as illustrated above. The identity reference set is provided in (19):

(19) Identity reference set: $\{\langle \mathrm{T_E}, \mathrm{T_A}\rangle, \langle \mathrm{Sonia_E}, \mathrm{Sonia_A}\rangle, \langle v_\mathrm{E}, v_\mathrm{A}\rangle, \langle \mathrm{habló_E}, \mathrm{habló_A}\rangle, \langle \mathrm{con_E}, \mathrm{con_A}\rangle\}$

To reiterate, here the preposition *con* 'with' is assigned [†], hence it must find an identical correlate, which it does. Given that *con alguien* 'with someone' hasn't moved, the preposition *con* 'with' in the Antecedent serves as its identical correlate.

To derive a case of sluicing in which the preposition is spelled-out along with the DP (i.e. no P-Omission), as in (10a), repeated in (20), I claim that both the wh-word and the preposition P are [F]-marked. This prevents the preposition from being [†]-marked:

(20) Sonia habló con alguien pero no sé [con]$_{[\mathrm{F}]}$ [quién]$_{[\mathrm{F}]}$.
Sonia talked with someone but not I.know with who
Literal: 'Sonia talked with someone but I don't know with who.'

To obtain an [F]-marked preposition, I assume, following Büring (2016) (see also Selkirk 1995,

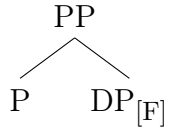
Büring 2011, among others), that Focus can project horizontally. The relevant projection rule for the purposes of this analysis is stated in (21):

(21) *Horizontal Focus Projection*: [F]-marking of an internal argument of a head licenses the F-marking of the head.

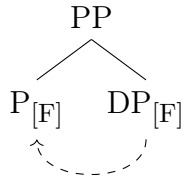
(adapted from Büring 2016, p. 77)

This is illustrated in (22) for the PP *con Bruno* 'with Bruno', although I assume that the same happens for PPs that include wh-words like *con quien* 'with whom' above. Büring's Question-Answer Congruence rule states that '[i]n an answer to a constituent question, the element corresponding to the wh-phrase in the question must be a focus' (Büring 2016, p.12). This means that, for instance, given the question *Con quién habló Sonia?* 'Who did Sonia talk with?', [F]-marking in the question will correspond to the wh-phrase, and [F]-marking in the answer will correspond to the DP. However, given the Horizontal Focus Projection rule (21), [F]-marking can either target the DP (22a), which corresponds to the wh-phrase, or the PP dominating it (22b), as illustrated in (22) below:

(22) a. i. Sonia habló con $[\text{Bruno}]_{[\text{F}]}$.
Sonia talked with Bruno

ii.


b. i. Sonia habló $[\text{con}]_{[\text{F}]}$ $[\text{Bruno}]_{[\text{F}]}$.
Sonia talked with Bruno

ii.


To prevent [F]-marking from continuing to project, for instance, to the entire VP, Büring (2016) proposes the following condition:[9]

9. I thank two anonymous NLLT reviewers for raising this question.

(23) Maximize Background: In any tree, maximize the number of (non-synonymous) constituents that are in the background.

(Büring 2016, p. 92)

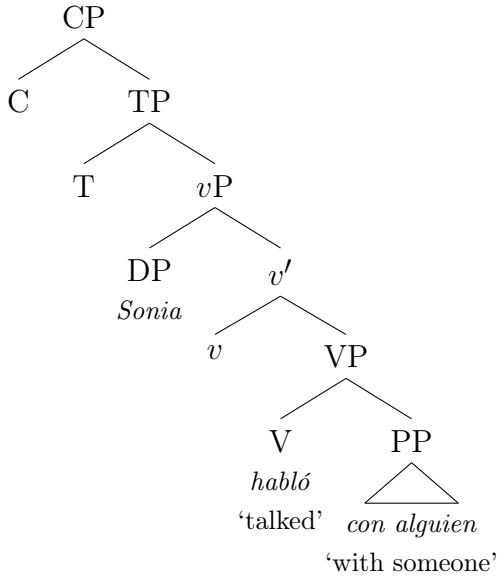
Where 'being in the *background*' roughly means 'being *given*'.[10] I assume here that [F]-marking the preposition in configurations like these 'comes for free', but that focus projection further up the tree would incur in a violation of (23).

Going back to the derivation of (20), repeated in (24), the structure below shows how ellipsis targets the material in the complement of C, except for the preposition *con* 'with' and the wh-word *quién* 'who' which are [F]-marked and cannot be assigned a [†]:

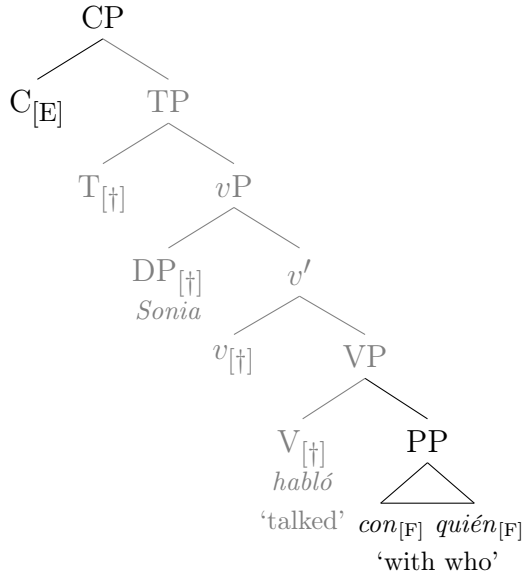
(24) a. Sonia habló con alguien pero no sé $[\text{con}]_{[F]}$ $[\text{quién}]_{[F]}$.
Sonia talked with someone but not I.know with who
Literal: 'Sonia talked with someone but I don't know with who.'

b. $[_{\text{Ant}}$ Sonia habló con alguien$]$ – $[_{\text{Source}}\ [_{\text{C[E]}}$ ~~Sonia~~$_{[\dagger]}$ ~~habló~~$_{[\dagger]}$ con$_{[F]}$ quién$_{[F]}]]$

Antecedent:



Source:



In (24) every head assigned [†] in the complement of $\text{C}_{[E]}$ has an identical correlate in the Antecedent. For the sake of explicitness, (25) provides the identity reference set. The

10. Alternatively, a condition such as AvoidF (Büring 2016; Schwarzschild 1999), which requires [F]-marking of 'as little as possible' would obtain the same results.

PP-remnant *con quién* 'with who' is not considered when calculating identity because it's not assigned [†] due to being [F]-marked.

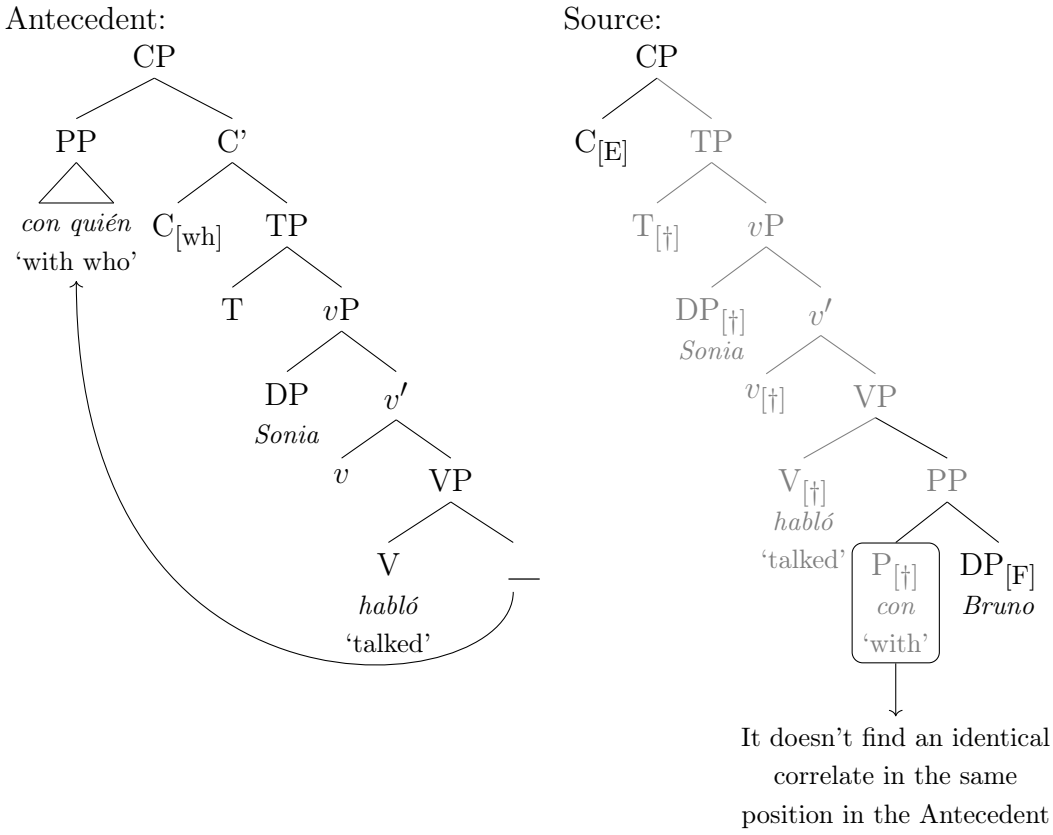
(25) Identity reference set: $\{\langle \mathrm{T_E}, \mathrm{T_A}\rangle, \langle \mathrm{Sonia_E}, \mathrm{Sonia_A}\rangle, \langle v_\mathrm{E}, v_\mathrm{A}\rangle, \langle \mathrm{habló_E}, \mathrm{habló_A}\rangle\}$

Moving on to deriving the patterns of P-Omission found in fragment answers, recall that this type of ellipsis bans P-Omission because the movement of the remnant's correlate in the antecedent makes it necessary to leave the preposition outside the ellipsis site to comply with the syntactic identity condition proposed above. This means that whatever undergoes movement in the Antecedent cannot serve as a correlate for a given head in the E-site when checking the identity condition. This idea that 'traces do not count' can also be found in Thoms's (2015) observation that a trace cannot be the antecedent for a non-trace (see also Potsdam 1997 for a similar proposal).

Crucially, when [F]-marking doesn't project horizontally, the preposition ends up being assigned [†]. In fragment answers, where the remnant's correlate has moved, a [†]-marked preposition is not licensed, as it fails to find an identical correlate in the Antecedent. This is because the remnant's correlate (i.e. the PP *con quién* 'with who') has moved, so the preposition *con* 'with' in the Antecedent won't be matched with *con* 'with' in the E-site. Hence P-Omission is ruled out. Recall that I assume that traces cannot serve as antecedents for non-traces when checking the identity condition. This is illustrated in the example and the trees in (26):

(26) a. A: [Con quién] habló Sonia __? – B: *(Con) Bruno.
with who talked Sonia with Bruno
'A: Who did Sonia talk with? – B: Bruno'

b. *[A [Con quién] habló Sonia __] – [S [C[E] ~~habló~~[†] ~~Sonia~~[†] ~~con~~[†] Bruno[F]]]



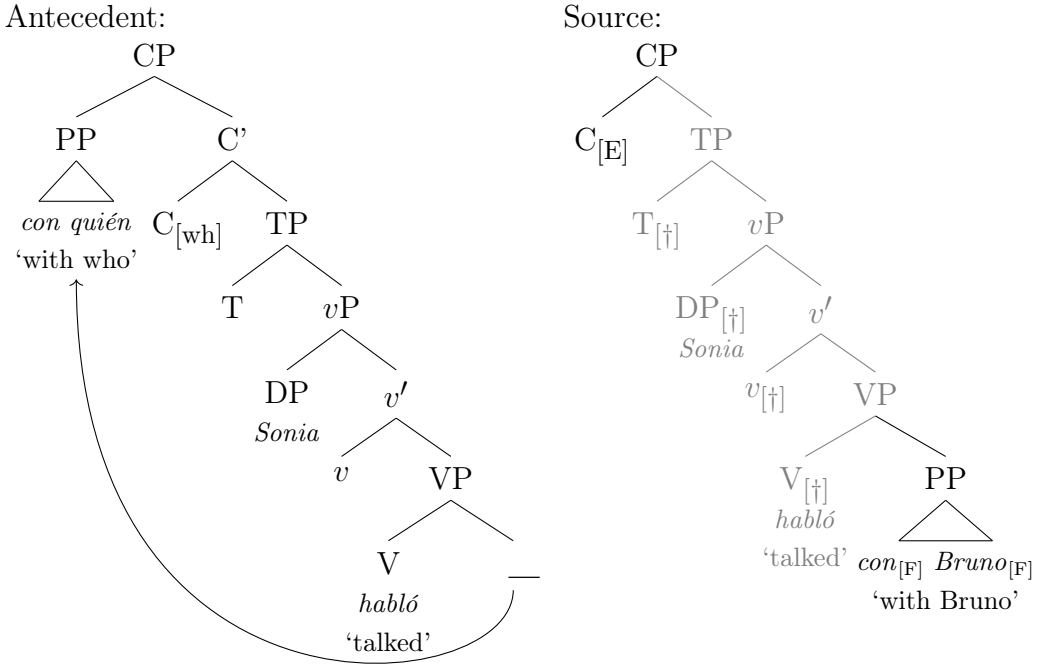
As the structure above shows, the preposition *con* 'with' in the E-site doesn't find an identical correlate, given that the preposition *con* 'with' in the Antecedent is not in the same structural position, and its trace 'doesn't count', correctly predicting the ungrammaticality of P-Omission. As (27) shows, the identity reference set is not complete:

(27) Identity reference set: $\{\langle T_E, T_A\rangle, \langle Sonia_E, Sonia_A\rangle, \langle v_E, v_A\rangle, \langle habló_E, habló_A\rangle, \langle con_E, \varnothing_A\rangle\}$

The only grammatical possibility for fragment answers is illustrated below in (28). In this case, [F]-marking projects horizontally and the preposition ends up being [F]-marked, hence it cannot be assigned a [†]:

(28) a. A: [Con quién] habló Sonia __? – B: Con Bruno.
with who talked Sonia with Bruno
'A: Who did Sonia talk with? – B: With Bruno.'

b. [A [Con quién] habló Sonia __] – [S [C[E] ~~habló~~[†] ~~Sonia~~[†] con[F] Bruno[F]]]



In (29) I provide the identity reference set, which show that all [†]-bearing heads have an identical correlate in the Antecedent:

(29) Identity reference set: $\{\langle T_E, T_A\rangle, \langle \text{Sonia}_E, \text{Sonia}_A\rangle, \langle v_E, v_A\rangle, \langle \text{habló}_E, \text{habló}_A\rangle\}$

To sum up, from the comparison between sluicing and fragment answers it's possible to account for the patterns of P-Omission in Spanish stated in the P-Omission Generalization in (9), repeated in (30):

(30) The *P-Omission Generalization* for Spanish (first version):

P-Omission in ellipsis is only allowed when the remnant's correlate does not move.

In sluicing the remnant's correlate stays in situ, which in turn allows the preposition in the Source to fall inside the ellipsis site given that it will find an identical correlate in the Antecedent. In fragment answers, on the contrary, the remnant's correlate moves, creating a configuration in which the only possible option that complies with the Identity Condition is the one in which the preposition is not deleted, giving rise to the unavailability of P-Omission in this type of construction.

2.3 In-situ remnants

In this section, I will present some predictions derived from the claim that elliptical C can bear only an [E] feature in Spanish, without the need to bear a [wh]-feature or any other movement-triggering feature. Crucially, this predicts that remnants do not need to move and can be interpreted in situ. This prediction is borne out in several domains, such as the licensing of Negative Concord Items (NCIs), and reciprocals (some of these tests are based on the argumentation in Weir 2014). Here I provide data from two types of TP-Ellipsis: fragment answers and fragments (which are further discussed in Chapter 3). It's worth noting that, following the analysis put forth in the previous section, these predictions can only be tested in constructions whose non-elliptical counterpart doesn't involve movement.

In the first place, as the following example shows, when there's negation, NCIs are only licensed in their base position (31B); that is, they cannot be fronted (31B'):

(31) A: Sonia vio la mayoría de las películas de Martin Scorsese, pero hay
Sonia saw the most of the movies of Martin Scorsese but there.are
algunas que no vio.
some that not saw
'Sonia watched most of Martin Scorsese's movies, but there are some that she didn't watch.'

B: No vio ninguna de las últimas.
not he.watched any of the last.ones
'She didn't watched any of the last ones.'

B': *[Ninguna de las últimas] no vio __.
any of the last.ones not he.watched
Intended: 'Any of the last ones, she didn't watch.'

However, the claim that remnants do not need to move to escape deletion and an stay in situ predicts that NCIs should be able occur as remnants of ellipsis. This prediction is borne out, as the examples from fragments (32B) and fragment answers (33B) show:

(32) A: Sonia no vio algunas de las películas de Martin Scorsese.
Sonia not watched some of the movies of Martin Scorsese
'Sonia didn't watch some Martin Scorsese's movies.'

B: Es cierto, ninguna de las últimas.
indeed any of the last.ones
'Indeed, any of the last ones.'

(33) A: Qué películas de Martin Scorsese no vio?
which movies by Martin Scorsese not watched
'Which M. Scorsese's movies didn't she watch?'

B: Ninguna de las últimas.
any of the last.ones
'Any of the last ones.'

In both cases, the source should be (31B), and not (31B'), showing that certain constituents can occur as the remnant of ellipsis, although they cannot move in non-elliptical sentences.

Another case that points to the same conclusion comes from reciprocals, in particular *cada* 'each' binding *los otros* 'the others' (34a) in Spanish. Here again, movement gives rise to an ungrammatical structure, as shown in (34b):

(34) a. A cada uno le gustan las fotos de los otros.
to each one CL.DAT like the pictures of the others
'Everyone likes the pictures of the others.'

b. *[Las fotos de los otros] le gustan a cada uno __.
the pictures of the others CL.DAT like to each other
Intended: 'The pictures of each other, everyone likes.'

Crucially, *los otros* 'the others' can occur as a remnant of ellipsis, both in fragments (35B) and in fragment answers (36B):

(35) A: A cada uno le gustan las fotos de alguien.
to each one CL.DAT like the pictures of someone
'Everyone likes the pictures of someone.'

B: Sí, la (foto) de los otros.
yes the picture of the others
'Indeed, each other's ones.'

(36) A: Qué fotos le gusta a cada uno?
which pictures CL.DAT like to every one
'Which pictures does every one like?'

B: Las (fotos) de los otros.
the pictures of the others
'Each others' pictures.'

To sum up, in this brief section I have provided examples in which the DPs cannot move in non-elliptical contexts, but can nevertheless occur as remnants of ellipsis. That is, in these cases, remnants behave as if they don't move, which points to the conclusion that movement is not necessary to escape the ellipsis site.

2.4 Crosslinguistic differences

As I discussed in Section 2.2.2, my working hypothesis is that, in principle, in Spanish, the remnant doesn't need to move to escape deletion, since the C head can bear only an [E]-feature, without the need to bear a [wh]-feature (or any other movement-inducing feature, which I will call [M] for simplicity). In the previous section I presented evidence to show that remnants in Spanish behave as if they do not move. That is, I've argued that in Spanish, elliptical C can bear only an [E] feature, which makes the remnant stay in situ. This dispenses with the need to propose exceptional movement in contexts of ellipsis. In this section, I briefly discuss TP-Ellipsis in English. I claim that in this language the C head can bear an [E]-feature, an [M]-feature (i.e. a movement-triggering feature), or both. Crucially, the featural make-up of the C head will provide an explanation for the differences found in English and Spanish with respect to the (un)availability of P-Omission in (some contexts of) TP-Ellipsis. In Section 2.4.2 I discuss how this can account for crosslinguistic differences more generally.

2.4.1 Spanish vs. English

In English, P-Omission is optional in fragment answers (37a), which seems to be exactly the opposite of what the proposal in the previous sections of this chapter, based on the Spanish

data in (37b) discussed so far, predict:[11]

(37) a. A: [With whom] did Sonia talk __? – B: (With) Bruno.

b. A: [Con quién] habló Sonia __? – B: *(Con) Bruno.
with who talked Sonia with Bruno
Literal: 'A: With whom did Sonia talk?' – B: With Bruno.'

I will argue here that this difference between Spanish and English with respect to the (un)availability of P-Omission in fragment answers is due to the featural makeup of the C head. Although, for simplicity, I've proposed that the C head can only bear an [E]-feature or a movement-triggering feature in Spanish, I noted already that this can be subject to crosslinguistic variation. What is more, I propose that the actual possibilities for a featural makeup of the C head in Spanish are more complex, and that the C head can indeed bear both [E] and [M] features in this language; evidence for this claim will be provided in Part II of this dissertation, and won't be discussed for the time being. With regard to English, I claim that cases such as the one in (37a) arise from a structure in which the C head bears both an [E] feature and an [M]-feature. Following Müller (2011, 2017), and references therein, operation-inducing features on heads are ordered. Therefore, when [E] and [M] are both present on a given C head, they will be triggered in a specific order. I claim that this order is subject to parametric variation, that is, it can vary across languages (see also Section 2.4.2). In particular, I claim that [E] is ordered before [M] in English, and this is what derives the difference with respect to the optionality of P-Omission in fragment answers between Spanish and English, illustrated in (37) above.

Specifically, in English, the features are ordered [E] $\succ$ [M], which means that [†]-assignment occurs *before* movement of the remnant to the Specifier of the CP is triggered. This gives rise, in principle, to three logical possibilities, summarized in (38). Two of these (i.e. (38a) and (38c)) give rise to grammatical structures, and one (i.e. (38b)), gives rise to an ungram-

11. This was is briefly discussed in Merchant (2004), who claims that 'bare' DP answers to pied-piping questions are possible, although he also refers to Ginzburg and Sag (2000), who report that 'bare' DP answers are infelicitous. I thank two anonymous NLLT reviewers for pointing this out to me.

matical configuration, ruled out by the Identity Condition:

(38) a. B: [with Bruno] ~~Sonia~~ ~~talked~~ __.

b. B: *[Bruno] ~~Sonia~~ ~~talked~~ ~~with~~ __. → ruled out by the Identity Condition

c. B: [~~with~~ Bruno] ~~Sonia~~ ~~talked~~ __.

The representation in (38a), in which the entire PP is [F]-marked and then moves to the left periphery, will generate a PP remnant (i.e. no P-Omission); this is further illustrated in (39). First, the [E]-feature triggers [†]-assignment to every head that's not [F]-marked in its complement. As the second step indicates, an [M]-feature triggers movement of the PP to the Specifier of the CP. This derivation complies with the Identity Condition, as I showed for Spanish earlier in this chapter:

(39) a. Step 1: [E] triggers [†]-assignment:

~~Sonia~~$_{[\dagger]}$ ~~talked~~$_{[\dagger]}$ [with Bruno]$_{[F]}$

b. Step 2: Movement of the PP:

B: [with Bruno] ~~Sonia~~$_{[\dagger]}$ ~~talked~~$_{[\dagger]}$ __

A second logical option would be the one in (38b), further illustrated in (40). In this case, the preposition, which is not [F]-marked, ends up being assigned [†]. Crucially, this derivation would be ruled out, given that it doesn't comply with the Identity Condition. This is because the preposition in its in-situ position cannot be deleted since it doesn't have an identical correlate (as already discussed for Spanish throughout this chapter):

(40) a. Step 1: [E] triggers [†]-assignment:

B: ~~Sonia~~$_{[\dagger]}$ ~~talked~~$_{[\dagger]}$ ~~with~~$_{[\dagger]}$ [Bruno]$_{[F]}$

b. Step 2: Movement of the DP:

B: *[Bruno] ~~Sonia~~$_{[\dagger]}$ ~~talked~~$_{[\dagger]}$ ~~with~~$_{[\dagger]}$ —

Finally, the structure shown in (38c), further illustrated in (41), generates a P-less remnant; this is allowed in this language given that the [E]-feature is ordered first, hence the preposition can be [†]-marked, and then the entire PP moves, pied-piping the preposition. Here the preposition in the moved PP will find an identical correlate (i.e. the preposition in the moved PP in the Antecedent), complying with the Identity Condition:

(41) a. Step 1: [E] triggers [†]-marking:

B: ~~Sonia~~$_{[\dagger]}$ ~~talked~~$_{[\dagger]}$ ~~with~~$_{[\dagger]}$ [Bruno]$_{[F]}$

b. Step 2: Movement of the PP:

B: [~~with~~$_{[\dagger]}$ Bruno] ~~Sonia~~$_{[\dagger]}$ ~~talked~~$_{[\dagger]}$ —

The claim that elliptical C heads in English can bear either only an [E]-feature, or both [E] and [M] features could have further consequences such as accounting for the seemingly contradictory findings with respect to the interpretation of fragments. In particular, while Weir (2014) argues that fragments seem to be in situ based on interpretative facts such as NPI licensing, quantifiers, binding, etc., Shen (2018), based on superlative examples, argues that fragments must have moved. Although this is worth exploring in depth, it's beyond of the scope of this dissertation.

Unlike English, I argued that C heads in Spanish bear either an [E]-feature or an [M]-feature. It could also be the case that the C head bears both features in Spanish (although this should be supported with independent empirical evidence, which I will do in Part II of this dissertation). In these cases, I claim that the order of these features is [M] $\succ$ [E] (that is, the opposite of English). Therefore, we would have, in principle, two logical possibilities, as shown in (42), but only one, i.e. (42a), gives a grammatical result. On the contrary, (42b) is ruled out given the ban on P-Stranding in this language. This option, which doesn't violate any language constraints and complies with the Identity Condition, gives rise to a remnant

with a preposition (i.e. no P-Omission):

(42) a. B: [con Bruno] ~~Sonia~~ ~~habló~~ __.
with Bruno Sonia talked

b. B: *[Bruno] ~~Sonia~~ ~~habló~~ ~~con~~ __. → ruled out by the ban on P-Stranding
Bruno Sonia talked with

The structure in (42a) involves, first, movement of the entire PP, and second, [†]-assignment, triggered by [E]. Example (43) provides a step-by-step derivation:

(43) a. Step 1: Movement of the PP:

B: [con Bruno] Sonia habló __
with Bruno Sonia talked

b. Step 2: [E] triggers [†] marking:

B: [con Bruno] ~~Sonia~~$_{[\dagger]}$ ~~habló~~$_{[\dagger]}$ __
with Bruno Sonia talked

The second option (42b) would be ruled out in Step 1, given that it involves stranding the preposition, which is banned in Spanish:

(44) Step 1: Movement of the DP:

B: *[Bruno] Sonia habló con __
Bruno Sonia talked with

Finally, a structure parallel to English's (41b), in which the preposition is assigned [†] and *then* the entire PP moves, will never be generated in Spanish, given that movement is triggered *before* ellipsis (and, in consequence, the preposition will already be out of the scope of the [E]-feature).

2.4.2 A note on the locus of crosslinguistic variation

One advantage of the proposal I advanced in this chapter is that it provides a plausible explanation for crosslinguistic variation. In the first place, I proposed here that there could be variation in the featural makeup of C heads. On the one hand, these differences could be found in which features can be present or absent, and which features can co-occur in a given head. On the other hand, there might be differences in the order in which features are triggered when they co-occur in the same head (e.g. [E] $\succ$ [M] vs. [M] $\succ$ [E]). This is the hypothesis I introduced in the previous section to explain the differences between Spanish and English. It's worth mentioning that this is not just a theoretical conjecture, but it makes empirical predictions as well. As I mentioned, if [E] and [M] can occur independently of each other, then we expect to find data that shows that remnants of ellipsis do not move, as the data presented in Section 2.3. If, on the contrary, we allow for both possibilities (i.e. only an [E] feature or both [E] and [M]), we can expect to find seemingly contradictory data, as mentioned with regard to the findings by Weir (2014) and Shen (2018) for English.

In the second place, there could be variation based on the (un)availability of P-Stranding in regular wh-questions in a given language. As I will show in the next chapter (Section 3.3.4), P-Omission is ungrammatical in Spanish in cases of pseudostripping because of the ban of P-Stranding in this language. This means that it should be possible, in principle, to find cases of P-Omission in those contexts (i.e. pseudostripping) in a language that does allow P-Stranding (provided that the Identity Condition is met). Another aspect of the proposal that can explain crosslinguistic variation could be the assignment of Focus, and how the focus projection rules work in each language. However, it's important to mention that this mere comment on the locus of crosslinguistic variation does not pretend to be a full theory/proposal, but a sketch of hypothesis that's worth exploring, and that should ultimately be supported with empirical data.

Finally, I briefly consider the consequences that the proposal I advanced here have for

Merchant's original *P-Stranding generalization*, repeated in (45):[12]

(45) A language L will allow P-Stranding in sluicing iff L allows preposition stranding under regular wh-movement.

(Merchant 2001, p. 92)

There are two ways in which this generalization can be interpreted. On the one hand, it can be interpreted as stating that if a language doesn't allow P-Stranding in regular wh-questions, P-Stranding under ellipsis won't be allowed either, that is, ellipsis doesn't create a configuration in which the violation that arises from stranding a preposition can be 'repaired'. Under this interpretation, I believe that Merchant's generalization should be maintained, since there's nothing special in the ellipsis mechanism that allows for exceptional P-Stranding in languages that don't usually allow it. A different interpretation—the one I've adopted in this dissertation, given my modification of (45) in (1)—interprets 'P-Stranding in sluicing' as 'P-Omission' (i.e. the omission of a preposition in an ellipsis fragment). In this case, then, Merchant's generalization is not valid, in that a language doesn't need to allow P-Stranding in regular wh-question to allow P-Omission in contexts of ellipsis.

2.5 Summary of the Chapter

In this chapter I argued that P-Omission in Spanish doesn't arise from cleft/copular sources, and that ellipsis needs a stricter identity condition to be licensed. I proposed that ellipsis requires syntactic identity, and that this identity is calculated head-by-head in the Syntax (before Spell-Out). In addition, I argued and provided evidence for an in-situ analysis of remnants. To account for the patterns of P-Omission in Spanish, I proposed the generalization in (7), repeated in (46), whose part (a) was motivated by the original puzzle regarding the (un)availability of P-Omission in sluicing and fragment answers in Spanish (part (b) will be discussed in Chapter 3):

12. I thank an anonymous NLLT reviewer for raising this question.

(46) The *P-(reposition) Omission Generalization* for Spanish:

P-Omission in ellipsis in Spanish is only allowed when the following two conditions are met: (a) the remnant's correlate in the antecedent does not move, and (b) the remnant does not move.

Finally, I accounted for some crucial differences between English and Spanish with respect to the patterns of P-Omission, based on the featural make-up of the C head in each language.

In the next chapter I discuss the availability of non-exhaustive readings (given by *mention-some* and *else* modification) in TP-Ellipsis with P-less remnants, which provides further evidence to rule out copular/cleft sources as the source of P-Omission. In addition, I show that the analysis proposed here makes the correct predictions regarding the (un)availability of P-Omission in other types of TP-Ellipsis in Spanish, such as contrast sluicing, split questions, fragments, stripping and pseudostripping, and sprouting.

CHAPTER 3

EXHAUSTIVITY AND SYNTACTIC IDENTITY[1]

In this chapter I provide further evidence (i) for the proposal I put forth in Chapter 2 with respect to the identity condition necessary to license TP-Ellipsis, (ii) for my analysis of how P-Omission is obtained in Spanish, and (iii) against copular/cleft sources. In Section 3.1 I discuss data relative to the availability of non-exhaustive readings (given by *mention-some* and *else* modification) in cases of TP-Ellipsis with P-Omission. In Section 3.2 I discuss adjectival sluices in Spanish, and I claim that the patterns found in this language actually point against a cleft/copular source analysis of TP-Ellipsis. In Section 3.3 I show that the analysis proposed in Chapter 2 makes the correct predictions regarding the (un)availability of P-Omission in other types of TP-Ellipsis in Spanish. In particular, I discuss contrast sluicing in Section 3.3.1, split questions in Section 3.3.2, fragments in 3.3.3, stripping and pseudostripping in Section 3.3.4, the interaction between sluicing and fragment answers in Section 3.3.5, and sprouting in Section 3.3.6. Finally, Section 3.4 discusses three open issues: the interaction between P-Omission and pronouns, the patterns of P-Omission in the nominal domain, and the interaction between P-Omission and multiple sluicing. Finally, I summarize and conclude the proposal and findings of Part I in Section 3.5.

3.1 P-Omission and exhaustivity

As I pointed out in the Introduction to Chapter 2, Rodrigues et al. (2009) extensively discuss the so-called 'P-Stranding effects' in ellipsis in Spanish (and Brazilian Portuguese). They claim that apparent counterexamples to Merchant's (2001) P(reposition)-Stranding Generalization (i.e. cases of P-Omission in languages that do not allow P-Stranding) are in

1. Most of the ideas developed in this chapter, as well as the the ideas developed in the previous one appear, with some minor modifications, in Stigliano (2019) and Stigliano (2022). Given that the latter has been evaluated by three anonymous reviewers and a handling editor, I decided to leave the references to their comments in the text and the footnotes, as they appear in the published versions.

fact derived from what they call *pseudolsuicing*, which is the name they give to a sluice with a cleft or copular source, as exemplified in (1b):

(1) a. Sonia habló con una chica pero no sé cuál.
Sonia talked with a girl but not I.know which
'Sonia talked with a girl, but I don't know which.'

b. ...no sé cuál ~~es la chica con la que habló Sonia~~.
not I.know which is the girl with the that talked Sonia
'...I don't know which is the girl that Sonia talked with.'

(adapted from Rodrigues et al. 2009, ex. 6)

In this section I provide evidence from the availability of non-exhaustive readings in TP-Ellipsis with P-Omission to argue that P-Omission cannot be derived from a cleft/copular source. That is, in clefts/copular sources, as the ones proposed by Rodrigues et al. (2009), the pivot entails exhaustivity, hence, these should only allow a *mention-all* interpretation and are predicted to be incompatible with modifiers that require a *mention-some* interpretation like *for example* and *else*. As I will show in the rest of this section, this prediction is not borne out. I apply these two tests proposed by Merchant (2001), which intended to provide evidence against the reduction of sluicing to pseudosluicing. In particular, while TP-Ellipsis with P-Omission allows non-exhaustive readings, non-isomorphic copular sources only allow exhaustive readings.

There are other tests proposed by Merchant (2001) to rule out cleft/copular sources, such as the aggressively non-D-linked wh-phrases test. However, I follow van Craenenbroeck (2010) in claiming that this test does not actually provide any evidence regarding the syntactic structure inside the ellipsis site. As the the following examples show, aggressively non-D-linked wh-phrases cannot be remnants for ellipsis (2b), but they can occur in regular wh-questions (2c) and as pivots of pseudoclefts (2d). In this respect, this test does not seem to give any clues about the pre-elided structure:

(2) a. Alguien rayó mi auto anoche...
someone scratched mi car last.night...
'Someone scratched my car last night...'

b. ...quisiera saber quién (*carajo)!
I.wish to.know who the.hell
Intended: '...I wish I knew who the hell!'

c. ...quisiera saber quién carajo rayó mi auto!
I.wish to.know who the.hell scratched my car
'...I wish I knew who the hell scratched my car!'

d. ...quisiera saber quién carajo es la persona que rayó mi auto!
I.wish to.know who the.hell is the person that scratched my car
'...I wish I knew who the hell is the person that scratched my car!'

Other tests, such as the *mention-all* modification test and the *swiping* test, cannot be applied in Spanish for independent reasons (i.e. Spanish lacks *mention-all* modifiers to wh-questions and the swiping phenomenon altogether). For this reason, I will not discuss them here.

3.1.1 Mention-some *modification*

P-Omission in ellipsis in Spanish is compatible with *mention-some* modifiers like *por ejemplo* 'for example', as the fragment in (3B) shows:

(3) A: Deberías hablar con alguien sobre tus problemas financieros.
you.should talk with someone about your problems financial
'You should talk with someone about your financial problems.'

B: (Con) quién, por ejemplo?
with who for example
'Who, for example?'

Crucially, wh-questions allow this type of modification (4a), but cleft/copular questions do not allow it (4b). This is because cleft/copular questions entail exhaustivity and this is at odds with a *mention-some* modifier such as 'for example':

(4) a. Con quién debería hablar, por ejemplo?
with who I.should talk for example
'Who I should talk with, for example?'

b. Quién es la persona con la que debería hablar, (*por ejemplo)?
who is the person with who I.should talk for example
Literal: 'Who is the person that I should talk with, for example?'

The same pattern is found in fragments, another type of TP-Ellipsis that allows P-Omission (see Section 3.3.3 for more examples and a full analysis of this type of ellipsis). The following example shows that P-Omission is possible even when the sentence has a non-exhaustive interpretation, given by *por ejemplo*:

(5) Sonia recomienda servir la carne con un buen tinto, por ejemplo, (con) un
Sonia suggests to.serve the meat with a good red.wine for example with a
Malbec
Malbec.
'Sonia suggests to serve the meat with a good red wine, for instance, a Malbec.'

(adapted from Vicente 2008, ex. 18)

Nevertheless, Vicente incorrectly proposes (6a) as a source for (5). I claim that (6a) cannot be the source because it's incompatible with a *mention-some* interpretation given by *por ejemplo* 'for example', as (6b) shows:

(6) a. El tinto con el que Sonia recomienda servir la carne es un Malbec.
the wine with which Sonia suggests to.serve the meat is a Malbec
'The red wine with which Sonia suggests to serve the meat is a Malbec.'

b. *El tinto con el que Sonia recomienda servir la carne es un Malbec, por
the wine with which Sonia suggests to.serve the meat is a Malbec for
ejemplo.
example
'The wine with which Sonia suggests to serve the meat is a Malbec, for example.'

The data presented so far shows that the P-less variant in (3) and (5) cannot arise from a cleft/copular source because these sources are incompatible with non-exhaustive readings, but the P-less variants of those examples are indeed compatible with these modifiers.

3.1.2 Else *Modification*

Rodrigues et al. (2009) claim that P-Omission is incompatible with *else* modification, providing the examples in (7). According to them, this is in line with the fact that their proposed non-isomorphic sources entail exhaustivity, hence they do not allow non-exhaustive modification, as in (7b):

(7) a. Sonia habló con una chica rubia, pero no sé *(con) qué chica más.
Sonia talked with a girl blonde but not I.know with what girl else
'Sonia talked with a blond girl, but I don't know which other girl.'

b. *...no sé qué chica más es la chica con la que habló Sonia.
not I.know what girl else is the girl with that talked Sonia
Intended: '...I don't know which other girl is the girl that Sonia talked with.'

(adapted from Rodrigues et al. 2009, ex. 27)

According to them, the fact that P-less remnants are impossible when a non-isomorphic cleft/copular source is unavailable shows that P-Omission actually arises from non-isomorphic sources. Nevertheless, I claim that the previous example is ruled out for independent reasons and that *else* modification is in fact available in the context of P-Omission in sluicing in particular, and TP-Ellipsis in general. What is more, Martín González (2010) provides the example in (8a), which shows that non-exhaustive readings are indeed possible when the preposition is omitted. It is worth mentioning that in this case a copular source like (8b) is ungrammatical. Crucially, this example is presented in a way that it is conveyed that Sonia talked with several people; this reading is lacking in (7a) above:[2]

(8) a. Sonia habló con varias personas. Habló con Bruno y con Luciano,
Sonia talked with several people she.talked with Bruno and with Luciano
pero no sé (con) quién más.
but not I.know with who else
'Sonia talked with several people. She talked with Bruno and with Luciano, but I don't know who else.'

b. *...no sé quién más es (la persona) con la que habló.
not I.know who else is the person with who she.talked
Intended: '...I don't know who else is the person she talked with.'

(adapted from Martín González 2010, ex. 23)

In addition, when (7a) is slightly modified to convey that Sonia talked with more than one person, *else* modification is now allowed, as (9) shows:

2. I don't have an answer for why this is required in elliptical contexts but not in non-elliptical ones. I leave this question open for future research.

(9) Sonia habló con Bruno y con alguien más, pero no sé (con) quién más.
Sonia talked with Bruno and with someone else but not I.know with who else
'Sonia talked with Bruno and with someone else, but I don't know who else.'

As for the source of (9), while a cleft/copular source is still impossible, as in (10a), a wh-question is perfectly acceptable, as in (10b):

(10) a. *...no sé quién más es (la persona) con la que habló Sonia.
not I.know who else is the person with that talked Sonia
Intended: '...I don't know who else is the person that Sonia talked with.'

b. ...no sé con quién más habló Sonia.
not I.know with who else talked Sonia
'...I don't know who else Sonia talked with.'

To further illustrate this point, the following sentences provide additional examples showing that *else* modification is possible in other cases of sluicing with P-less remnants, while cleft/copular sources are ungrammatical:

(11) a. Sonia habló de sintaxis y morfología, pero no sé (de) qué
Sonia talked about Syntax and Morphology but not I.know about what
más.
else
'Sonia talked about Syntax and Morphology, but I don't know what else.'

b. *...no sé qué más es el tema del que habó.
not I.know what else is the topic about.the she talked
Intended: '...I don't what other topic she talked about.'

The same pattern is found in other types of TP-Ellipsis. For instance, (12B) combines fragments and sluicing:

(12) A: Escuché que Sonia habló sobre varios temas interesantes.
I.heard that Sonia talked about several topics interesting
'I heard Sonia talked about several interesting topics.'

B: Sí, sobre elipsis seguro, pero no sé sobre cuál más.
yes about ellipsis for.sure but not I.know about what else
'Yes, (she talked) about ellipsis for sure, but I don't know (about) which else.'

Here both remnants can appear without the preposition, as shown in (13):

(13) B': Sí, elipsis seguro, pero no sé cuál más.
yes ellipsis for.sure but not I.know what else
'Yes, (she talked about) ellipsis for sure, but I don't know which else.'

I already showed that the source of sluicing—when combined with modifiers that entail non-exhaustive readings—cannot be a cleft/copular question because this type of questions entails exhaustivity. For the sake of completeness, the same is true for the example above:

(14) *...no sé cuál (tema) más es el tema sobre el que habló.
not I.know which topic else is the topic about that she.talked
Intended: '...I don't know which other topic is the topic she talked about.'

With respect to the source of P-Omission in the first remnant—(*sobre*) *ellipsis* '(about) ellipsis'—in (13), the non-isomorphic copular source is also ruled out, as shown in (15B'), given the availability of *mention-some* modification, as in (15B). For the sake of completeness, an isomorphic source is perfectly possible, as (15B") shows:

(15) A: *I heard Sonia talked about several interesting topics...*

B: Sí, (sobre) elipsis, por ejemplo.
yes about ellipsis for example
'Yes, (she talked) about ellipsis, for example.'

B': *Sí, elipsis es el tema sobre el que habló, por ejemplo.
yes ellipsis is the topic about that she.talked for example
Intended: 'Yes, ellipsis is the topic she talked about, for example.'

B": Sí, habló sobre elipsis, por ejemplo.
yes she.talked about ellipsis for example
'Yes, she talked about ellipsis, for example.'

A possible counterargument that has been suggested to me by Matt Barros (p.c.) is that cases such as (15B) could in fact arise from the source in (16) below, in which the definite (*el tema* 'the topic') is replaced by an indefinite (*uno de los temas* 'one of the topics'). This is indeed compatible with *mention-some* modification:

(16) B"': Sí, elipsis es uno de los temas sobre los que habló, por ejemplo.
yes ellipsis is one of the topics about that she.talked for example
'Yes, ellipsis is one of the topics she talked about, for example.'

Nevertheless, once these sources are allowed for some cases, there is no reason to prevent them to be the source of any other case of ellipsis with P-Omission, like (17a). However, the problem with (17b) is that the proposed source conveys that Sonia talked with more than one person, and this meaning is absent in (17a). In this respect, this shows that sources like (16) cannot be possible in these cases.

(17) a. Sonia habló con alguien pero no sé quién.
Sonia talked with someone but not I.know who
'Sonia talked with someone but I don't know who.'

b. #...no sé quién es una de las personas con las que habló Sonia.
not I.know who is one of the persons with that talked Sonia
Intended: '...I don't know who is one of the persons that Sonia talked with.'

The data presented in this section show that P-Omission in (8a), (9) and (12) cannot arise from a non-isomorphic cleft/copular source given the inherent exhaustive readings of this type of source. To sum up, I have presented compelling evidence to rule out non-isomorphic copular/cleft sources as the possible sources for P-Omission in various types of TP-Ellipsis in Spanish. This evidence came from the availability of non-exhaustive readings (given by *mention-some* and *else* modification) in TP-Ellipsis with P-Omission. In the next section, I discuss another empirical domain that has been taken as evidence for copular sources—adjectival sluices.

3.2 Adjectival sluices

Barros (2016) analyzes a class of gradable adjectives that acquire an idiomatic meaning as attributive modifiers (for example, in English, *old* in *old friend* can refer to the length of the friendship or to the age of the friend). These adjectives cannot license adjectival sluices, as the following examples show (grammatical judgments are Barros's):

(18) a. #She hired a heavy drinker, but I don't know how heavy.

b. #She hired an old friend, but I don't know how old.

c. #She hired a hard worker, but I don't know how hard.

(adapted from Barros 2016, ex. 2.10)

According Barros, the ungrammaticality of the examples above is due to the fact that a copular source is not available, as (19) shows:

(19) She hired a heavy drinker, but I don't know how heavy *(he is).

This is because a copular source gives an interpretation that is ruled out by semantic parallelism/identity conditions (see, e.g., Sag and Hankamer 1976; Merchant 2001; AnderBois 2011; Barros 2014; Thoms 2015, among others)—that is, the non-elliptical sentence is only acceptable under the interpretation of how much the worker weights. This is confirmed by the following example, in which the idiomatic reading is absent from the antecedent. In this case, the adjectival sluicing becomes grammatical:

(20) She hired a drinker who is heavy, but I don't know how heavy (he is).

It's worth mentioning that, according to Barros, an isomorphic source would also be unavailable in examples like (19) above, since it involves an extraction that violates the Left-Branch Constraint (LBC), as shown below in (21):

(21) *She hired a heavy drinker, but I don't know [how heavy] she hired a __ drinker.

He argues that further evidence for his claim that copular sources are possible comes from Spanish. In Spanish, idiomatic readings only arise when the adjective precedes the noun it modifies, as in (22a). When the adjective follows the noun, only the non-idiomatic reading is possible, as in (22b):

(22) a. Sonia contrató a un viejo amigo.
Sonia hired DOM a old friend
'Sonia hired a long-time friend.'

b. Sonia contrató a un amigo viejo.
Sonia hired DOM a friend old
'Sonia hired an elderly friend.'

(adapted from Barros 2016, ex. 2.16)

He claims that adjectival sluices are only possible with the non-idiomatic readings, as (23a) shows, and that they are unavailable with the idiomatic reading, as shown in (23b):[3]

(23) a. Sonia contrató a un amigo viejo pero no sé cuán viejo.
Sonia hired DOM a friend old but not I.know how old
'Sonia hired an elderly friend, but I don't know how elderly.'

b. *Sonia contrató a un viejo amigo pero no sé cuán viejo.
Sonia hired DOM a old friend but not I.know how old
'Sonia hired a long-time friend, but I don't know how old.'

(adapted from Barros 2016, ex. 2.17)

Furthermore, according to him, this pattern arises because non-idiomatic readings are the only readings available in copular questions, as (24) shows. This means, he claims, that the source for sluicing in the adjectival sluices above can only be a copular source:

(24) Cuán viejo es el amigo que Sonia contrató?
how old is the friend that Sonia hired
'How old is the friend that Sonia hired?'

However, there is no principled reason to rule out (24) (or a reduced version) for (23b) above. As (25) shows, a copular continuation is perfectly possible (given a proper context), just like in English:

(25) Sonia contrató a un viejo amigo pero no sé cuán viejo es.
Sonia hired DOM a old friend but not I.know how old he.is
'Sonia hired a long-time friend, but I don't know how old he is.'

I claim, on the contrary, that the problem with the idiomatic reading of *viejo* 'old' is that it's a non-gradable adjective, so its degree cannot cannot be questioned. Evidence for this claim comes from the fact that these pre-nominal adjectives cannot license degree modifiers, such as *muy* 'very', *extremadamente* 'extremely', *súper* 'super', or *re* 'very (informal)', as (26a) shows. Both are possible with post-nominal adjectives, as shown in (26b), which provides additional evidence to tease them apart.

3. I slightly changed Barros' examples and replaced *cómo de viejo* 'how old' in his data for *cuán viejo* 'how old' in this paper, since the latter is the one used in my dialect.

(26) a. Sonia contrató a un {??muy | *extremadamente | *súper | ??re} viejo amigo.
Sonia hired DOM a very extremely super very old friend
Intended: 'Sonia hired a {very | extremely | super} old-time friend.'

b. Sonia contrató a un amigo {muy | extremadamente | súper | re} viejo.
Sonia hired DOM a friend very extremely super very old
'Sonia hired a {very | extremely | super} elderly friend.'

In addition, supporting evidence for my analysis comes from echo questions (27), multiple wh-questions (28), and exclamatives (29). In echo questions and multiple wh-questions, the adjectival wh-constituent stays in situ, avoiding the LBC violation that Barros refers to, but the sentences are still ungrammatical, as predicted by my proposal, since it's not about movement, but about whether it's possible to create the relevant sentence:

(27) Echo questions

a. (No te escuché bien...) Sonia contrató a un amigo CUÁN VIEJO?
not you heard well Sonia hired DOM a friend how old
Literal: '(I didn't hear you well...) Sonia hired a friend HOW OLD?'
Interpretation: '(I didn't hear you well...) How old is the friend that Sonia hired?

b. *(No te escuché bien...) Sonia contrató a un CUÁN VIEJO AMIGO?
not you heard well Sonia hired DOM a how old friend?
Literal: '(I didn't hear you well...) Sonia hired a HOW OLD FRIEND?'
Intended: '(I didn't hear you well...) How long have they been friends?'

(28) Multiple wh-questions

a. ?Quién contrató a un amigo cuán viejo?
who hired DOM a friend how old
'Who hired a friend and how old is he?'

b. *Quién contrató a un cuán viejo amigo?
who hired DOM a how old friend
Intended: 'Who hired a friend and what's the length of the friendship?'

As for exclamatives, the examples below provide further evidence that the pre-nominal adjectives are not gradable:

(29) Exclamatives

a. Qué amigo viejo contrató Sonia! (...Pensé que contrataría a uno
what friend old hired Sonia I.though that she.would.hire DOM one
más joven.)
more young
'Sonia hired such an elderly friend! (I thought she would hire a younger friend.)'

b. *Qué viejo amigo contrató Sonia! (...Pensé que contrataría a
what old friend hired Sonia I.though that she.would.hire someone
alguien que conoció hace poco.)
DOM that she.met recently
Intended: 'Sonia hired such a long-time friend! (I thought she would hire a new acquaintance.)'

To sum up, the examples above show that (23b) is ungrammatical because it involves an *impossible* degree question. That is, the pre-elided clause would have to be an 'ineffable' question to convey the desired meaning (i.e. it's impossible to ask about the length of the friendship in Spanish, using the pre-nominal adjective+noun configuration). In (23a), on the other hand, this question is perfectly possible because the post-nominal adjective is indeed gradable; hence, the adjectival sluice is grammatical with the correct interpretation.

Further support for this analysis comes from adjectives like *buen(o)* 'good' or *mal(o)* 'bad'. When these adjectives occur in a post-nominal position, as in (30a), they can either mean 'good as a lawyer' or 'good person'. When the adjective occurs in a pre-nominal position, as in (30b), it can only mean 'good as a lawyer':

(30) a. (Esta vez) Sonia contrató a un abogado bueno...
this time Sonia hired DOM a lawyer good
'(This time) Sonia hired a lawyer that's good...'

i. ...está decidida a ganar el juicio.
she.is determined to win the trial
'...she's determined to win the trial.'

ii. ...está cansada de trabajar con gente tóxica.
she.is tired of working with people toxic
'...she's tired of working with toxic people.'

b. (Esta vez) Sonia contrató a un buen abogado...
this time Sonia hired DOM a good lawyer
'(This time) Sonia hired a good lawyer...'

i. ...está decidida a ganar el juicio.
she.is determined to win the trial
'...she's determined to win the trial.'

ii. #...está cansada de trabajar con gente tóxica.
she.is tired of working with people toxic
'#...she's tired of working with toxic people.'

Crucially, this adjective is gradable both in its pre-nominal and post-nominal positions:

(31) a. Sonia contrató a un {muy | ??extremadamente | súper | re} buen
Sonia hired DOM a very extremely super very good
abogado.
lawyer
'Sonia hired a {very | extremely | super} good lawyer.'
(Only means 'good as lawyer')

b. Sonia contrató a un abogado {muy | extremadamente | súper | re} bueno.
Sonia hired DOM a friend very extremely super very old
'Sonia hired a {very | extremely | super} good lawyer.'
(Ambiguous between 'good person' and 'good as lawyer')

Further evidence is provided below, where both positions can be used in exclamatives:

(32) a. Qué abogado bueno contrató Sonia!
what lawyer good hired Sonia
'Sonia hired such a good lawyer!'
(Ambiguous between 'good person' and 'good as lawyer')

b. Qué buen abogado contrató Sonia!
what good lawyer hired Sonia
'Sonia hired such a good lawyer!'
(Only means 'good as lawyer')

My analysis predicts that, if the adjective is gradable in both positions, then the adjectival sluices should be perfectly possible both with the pre-nominal and the post-nominal configurations. This is indeed the case:

(33) a. Sonia contrató a un abogado bueno, pero no sé cuán bueno.
Sonia hired DOM a lawyer good but not I.know how good
'Sonia hired a good lawyer, but I don't know how good.'
(Ambiguous between 'good person' and 'good as lawyer')

b. Sonia contrató a un buen abogado, pero no sé cuán bueno.
Sonia hired DOM a good lawyer but not I.know how good
'Sonia hired a good lawyer, but I don't know how good.'
(Only means 'good as lawyer')

Interestingly, while *cuán bueno* 'how good' in (33a) is ambiguous in that it could be asking either how good as lawyer he is or how good as person he is, it is not ambiguous in (33b), where it can only be interpreted how good as lawyer. I claim that the fact that (33b) has only one possible interpretation is because there is syntactic isomorphism between the antecedent and the ellipsis site, so the sluice has the interpretation of its antecedent. This is unexpected under an account based on copular sources, that is, if (34) were the source, ambiguity would be predicted, contrary to fact:

(34) Sonia contrató a un buen abogado, pero no sé cuán bueno es (el
Sonia hired DOM good lawyer but not I know how good is the
abogado que contrató)
lawyer that she.hired
'Sonia hired a good lawyer, but I don't know how good he is.'
Interpretation 1: '... but I don't know how good as a lawyer he is.'
Interpretation 2: '... but I don't know how good as a person he is.'

To sum up, in this section I analyzed adjectival sluices, which have been taken as evidence for a cleft-source analysis of ellipsis. Furthermore, I showed that, in fact, a non-isomorphic analysis predicts the wrong patterns with regards to the interpretation of adjectival sluices like (33). It's worth mentioning that the findings here are in line with the findings in Ronai and Stigliano (2020) for Hungarian. In particular copular sources have been proposed (Barros 2016) to explain the different agreement patterns found in adjectival sluices in languages such as Hungarian, German and Dutch. However, in Ronai and Stigliano (2020) we claim that a detailed analysis of the phenomenon in Hungarian actually rules out copular sources in that language, and we argue for the need for strict isomorphism to license ellipsis.

3.3 Further evidence and predictions

In this section I provide further evidence for the P-Omission Generalization, repeated in (35), and I show that the analysis developed in Chapter 2 correctly predicts the patterns found regarding the (un)availability of P-Omission in other types of TP-Ellipsis in Spanish.

(35) The *P-(reposition) Omission Generalization* for Spanish:

P-Omission in ellipsis in Spanish is only allowed when the following two conditions are met: (a) the remnant's correlate in the antecedent does not move, and (b) the remnant does not move.

Likewise, I provide further evidence to show that an analysis based on non-isomorphic, copular sources is on the wrong track, since it incorrectly predicts the two way correlation that (a) if P-Omission is possible, a copular source will be available, and (b) if a copular source is available, P-Omission should be possible. A summary is provided in (36):

(36)

Ellipsis type	P-Omission	Movement of the correlate in the antecedent	Copular source
Sluicing	✓	✗	✓
Fragment answers	✗	✓	✓
Contrast sluicing	✓	✗	✗
	✗	✓	✓/✗
Split questions	✗	✓	✓
Fragments	✓	✗	✓
	✗	✓	✓
Stripping	✓	✗	✗
Pseudostripping	✗	✗	✓

I also discuss the second part of the P-Omission Generalization—i.e. P-Omission in ellipsis in Spanish is allowed when the remnant doesn't move—which is justified by the stripping/pseudostripping contrast, and how it's predicted by the analysis I propose here. Finally, I discuss the unavilability of P-Omission in sprouting, and how it can be accounted for with the analysis developed in Chapter 2.

3.3.1 Contrast sluicing

The term *contrast sluicing* is introduced in Merchant (2001) to refer to a type of sluicing in which the wh-phrase contains contrastive material. This is exemplified in (37) for Spanish:

(37) a. Sonia tiene cinco gatos, pero no sé cuántos perros.
Sonia has five cats but not know how.many dogs
'Sonia has five cats, but I don't know how many dogs.'

b. Sé cuántos gatos tiene Sonia, pero no sé cuántos perros.
know how.many cats has Sonia but not know how.many dogs
'I know how many cats Sonia has, but I don't know how many dogs.'

According to the P-Omission Generalization in (9), cases of contrast sluicing in which the remnant's correlate in the antecedent stays in situ should allow P-Omission in Spanish. As (38a) shows, this is indeed the case. Crucially, in these examples, a copular source is not available (38b)-(38c), providing evidence against a non-isomorphic analysis:

(38) a. Sonia habló con dos chicas, pero no sé (con) cuántos chicos.
Sonia talked with two girls but not know with how.many boys
'Sonia talked with two girls, but I don't know how many boys.'

b. * ...no sé cuántos chicos son (los chicos) con los que habló.
...not know how.many boys are the boys with the that she.talked
Intended: '...I don't know how many boys are the ones that she talk with.'

c. # ...no sé cuántos chicos eran.
...not know how.many boys were
Intended: '...I don't know how many boys it was.'

Interestingly, some cases of contrast sluicing involve movement of the remnant's correlate, as in (39) (also (37b) above). The proposal developed here predicts that whenever the remnant's correlate moves, P-Omission will be impossible. Again, this prediction is borne out, as shown in (39):

(39) Sé con cuántas chicas habló Sonia, pero no sé *(con) cuántos chicos.
know with how.many girls talked Sonia but not know with how.many boys
'I know how many girls Sonia talked with but I don't how many boys.'

A copular continuation for (39) would be ungrammatical, as shown in (40):

(40) a. * ...no sé cuántos chicos son (los chicos) con los que habló.
...not know how.many boys are the boys with the that she.talked
Intended: '...I don't know how many boys are the ones that she talk with.'

b. # ...no sé cuántos chicos eran.
...not know how.many boys were
Intended: '...I don't know how many boys it was.'

However, the availability of a copular source for (41a) predicts P-Omission to be acceptable in that case, yet it is not. By contrast, the theory developed here predicts that P-Omission will be impossible, due to the movement of the remnant's correlate. This provides additional evidence against non-isomorphic sources:

(41) a. Sé con qué chica habló Sonia, pero no sé *(con) qué chico.
know with which girl talked Sonia but not know with which boy
'I know which girl Sonia talked with, but I don't which boy.'

b. ...no sé qué chico es (el chico) con el que habló.
...not know which boy is the boy with which talked
Intended: 'I don't know which boy is the one that she talked with.'

In short, two different configurations for the same type of ellipsis (i.e. contrast sluicing) pattern like sluicing and fragment answers in that only when the remnant's correlate in the antecedent stays in situ is P-Omission allowed. I showed that a non-isomorphic account based on copular sources would make incorrect predictions, but most importantly, I showed the analysis and the generalization proposed here can account for this pattern without introducing further stipulations.

3.3.2 Split questions

Split questions are structures that contain a wh-question part followed by a *tag* that is separated from the preceding material by an intonation break (Arregi 2010):

(42) Qué árbol plantó Sonia, un roble?
what tree planted Sonia an oak
'What tree did Sonia plant, an oak?'

(adapted from Arregi 2010, ex. 1)

Arregi shows, based on data in Spanish, Basque and English, that the two parts of a split question are independent clauses, and that the tag is the remnant of ellipsis in a non-wh-question (for further details on this proposal see Arregi 2010). In addition, he shows that it is not possible to omit the preposition in split questions in Spanish (43):

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

(adapted from Arregi 2010, ex. 103)

Crucially, this is despite the fact that a copular continuation is possible (44):

(44) ...Sonia es la persona con la que hablaron?
Sonia is the person with who they.talked
'...Is Sonia the person with whom they talk?'

Rodrigues et al. (2009) agree with Arregi (2010) in that the ellipsis in the tag is licensed under syntactic parallelism with the antecedent, but they claim that sluicing and split questions are licensed under different identity conditions. However, this solution is undesirable, since there are no independent reasons to posit different licensing mechanisms for two types of TP-Ellipsis. Under the account proposed in this paper the ungrammaticality of P-Omission in split questions is expected: the remnant's correlate in the antecedent moves, predicting the unavailability of P-Omission, in the same way as fragment answers.

In addition, Rodrigues et al. (2009) observe that P-Omission is obligatory whenever the antecedent is a cleft-based question, as the following example shows:[4]

4. I thank an anonymous NLLT reviewer for bringing this to my attention.

(45) Cuál és el chico con el que habló Sonia, (*con) Bruno?
which is the boy with the that talked Sonia with Bruno
'Which one is the boy with whom Sonia talked, Bruno?'

(adapted from Rodrigues et al 2009, ex. 49)

These authors argue that this follows from the assumption that 'ellipsis in the tag is licensed under parallelism with the antecedent.' Therefore, this is not a true case of P-Omission in that it doesn't involve the deletion of a preposition: the ellipsis site should be a copular clause (matching its antecedent), as in (46), which is ungrammatical with a preposition:

(46) ...(*con) Bruno es el chico con el que habló Sonia?
with Bruno is the girl with the that talked Sonia
'...Is Bruno the girl with whom Sonia talked?'

3.3.3 Fragments

The term *fragments* refers more generally to constructions in which only one argument survives ellipsis.[5] These can arise from dialogue sequences, as in the following example:

5. An anonymous NLLT reviewer asks whether there is a reason to think that the fragments discussed in this section are in fact elliptical. Building on the discussion in footnote 4 from Chapter 2, I consider the following to be evidence in favor of an ellipsis analysis. First, case-matching effects are attested here as well. As the example in (i) shows, the fragment appears with the same case as in a full sentence (ii) (that is, DOM cannot be omitted):

(i) A: Escuché que Sonia vio a alguien. – B: Sí, *(a) Bruno
heard that Sonia saw DOM someone yes DOM Bruno
'A: I heard that Sonia saw someone. – B: Yes, Bruno.'

(ii) B': Sí, Sonia vio *(a) Bruno
yes Sonia saw DOM Bruno
'Yes, Sonia saw Bruno.'

Another piece of evidence comes from binding facts, such as Principle C effects (iii). Here, the patterns found for fragments are the same as their sentential non-elliptical counterparts (iv):

(iii) A: Escuché que ella$_1$ vive en un lugar increíble. – B: *Sí, en la casa de Sonia$_1$.
heard that she lives in an place amazing yes in the house of Sonia
Intended: 'A: I heard that she$_1$ lives in an amazing place. – B: Yes, she$_1$ lives in Sonia$_1$'s house.'

(iv) *Sí, ella$_1$ vive en la casa de Sonia$_1$.
yes she lives in the house of Sonia
Intended: 'Yes, she$_1$ lives in Sonia$_1$'s house.

(47) A: Escuché que Sonia leyó un libro de Borges.
heard that Sonia read a book by Borges
'I heard that Sonia read a book by Borges.'

B: Sí, *El Aleph*.
yes, the aleph
'Yes, *The Aleph*.'

Regarding P-Omission in this type of ellipsis in Spanish, the examples in (48) show it is indeed possible, as predicted: in both (48aB) and (48bB) the remnant can optionally appear with or without the preposition (these examples are similar the one in (12), in Section 3.1.1):

(48) a. A: Escuché que Sonia habló sobre un tema interesante.
I.heard that Sonia talked about a topic interesting
'I heard that Sonia talked about an interesting topic.'

B: Sí, (sobre) elipsis.
yes about ellipsis
'Yes, about ellipsis.'

(adapted from Vicente 2008, ex. 16)

b. A: Escuché que Sonia habló con un chico.
I.heard that Sonia talked with a boy
'I heard that Sonia talked with a boy.'

B: Sí, (con) Bruno.
yes, with Bruno
'Yes, Bruno.'

It's important to notice that the fragment in (48b) contrasts with the unavailability of P-Omission in fragment answers discussed above, and repeated below in (49):

(49) A: Con quién habló Sonia?
with who talked Sonia
'Who did Sonia talk with?'

B: *(Con) Bruno.
with Bruno
'With Bruno.'

Crucially, the difference between these two configurations is related to the position of the remnant's correlate in the antecedent (i.e. a moved one in fragment answers vs. an in-

situ one in fragments), not to the availability of non-isomorphic copular sources (since both fragment answers and fragments allow them).

Another example that shows that P-Omission is possible in fragments is provided in (5), repeated below in (50):

(50) Sonia recomienda servir la carne con un buen tinto, por ejemplo, (con) un
Sonia suggests to.serve the meat with a good red.wine for example with a
Malbec
Malbec.
'Sonia suggests to serve the meat with a good red wine, for instance, a Malbec.'

(adapted from Vicente 2008, ex. 18)

In sum, the availability of P-Omission in fragments is predicted by the analysis proposed in this paper, given that the remnants' correlates (i.e. *sobre un tema interesante* 'about an interesting topic', *con un chico* 'with a boy', and *con un buen tinto* 'with a good red wine') do not move.

Additionally, the analysis put forth here predicts that if the remnant's correlate in the antecedent moves (for instance, due to contrastive focus fronting), P-Omission will be banned, as in fragment answers. This prediction is borne out, as (51) shows:

(51) A: [CON UN CHICO] habló Sonia __ (, no con una chica.)
with a boy talked Sonia not with a girl
'Sonia talked with a boy (, not with a girl).'

B: Sí, *(con) Bruno.
yes, with Bruno
'Yes, with Bruno.'

Here, again, a copular continuation would be perfectly possible, which adds further evidence against a non-isomorphic analysis:

(52) B: Sí, Bruno es el chico con el que habló.
yes, Bruno is the boy with the that she.talked
'Yes, Bruno is the boy she talked with.'

3.3.4 Stripping and pseudostripping

All the examples provided so far illustrate the first part of the P-Omission Generalization:

(53) The *Preposition Omission Generalization* for Spanish:

P-Omission in ellipsis in Spanish is only allowed when the following two conditions are met: (a) the remnant's correlate in the antecedent does not move, and (b) the remnant does not move.

In this section, I will motivate the second part of this generalization with evidence from stripping and pseudostripping. I use the term *stripping* to refer to coordinated constructions in which all elements from the second conjunct are deleted, except for an argument and the negative particle *not* (Sag and Hankamer 1976).[6] This is illustrated in (54). Crucially, in Spanish, there are two possibilities regarding the order between the remnant and the negative particle (Depiante 2000), unlike English, which only allows for one of them (i.e. negation preceding the remnant). Depiante dubbed cases like (54b), in which the remnant precedes negation, *pseudostripping*:

(54) a. Sonia leyó *El Aleph*, pero no *Ficciones*. *stripping*
Sonia read the Aleph but not Fictions.
'Sonia read *The Aleph* but not *Fictions*.'

b. Sonia leyó *El Aleph*, pero *Ficciones* no. *pseudostripping*
Sonia read the Aleph but Ficciones not.
'Sonia read *The Aleph* but not *Fictions*.'

(adapted from Depiante 2000, p.125)

These two configurations give rise to different patterns regarding the availability of P-Omission, in that only stripping allows it:

(55) a. Hablé con Sonia, no (con) Bruno. *stripping*
I.talked with Sonia not with Bruno
'I talked with Sonia, not (with) Bruno.'

6. It's worth mentioning that the stripping constructions analyzed here differ from other constructions such as *why-stripping* (Yoshida et al. 2015); the analysis of why-stripping (or any other related constructions) is beyond the scope of this paper.

b. Hablé con Sonia, *(con) Bruno no. *pseudostripping*
I.talked with Sonia with Bruno no
Intended: 'I talked with Sonia, I didn't talk with Bruno.'

Interestingly, the non-isomorphic approach would predict the exact opposite pattern, given that a copular source is available for the pseudostripping example in (55b), as (56b) shows, but not for the stripping example in (55a), as (56a) shows:[7]

(56) a. *...no Bruno es con quien hablé
not Bruno is with whom I.talked
Intended: 'It is not Bruno with whom I talked.'

b. ...Bruno no es con quien hablé
Bruno is not with whom I.talked
'Bruno is not with whom I talked.'

Although the unavailability of P-Omission in (55b) seems to constitute a counterexample to first part of the P-Omission Generalization as stated in (9) (i.e. *P-Omission in ellipsis in Spanish is only allowed when the remnant's correlate does not move*), the analysis proposed in this paper can actually account for these cases. I claim that this difference regarding the availability of P-Omission in stripping (55a) and pseudostripping (55b) is due to the

7. It should be mentioned that Vicente (2008) provides the examples in (i), acknowledging that the ungrammaticality of P-Omission in pseudostripping (ia) does not correlate with the impossibility to create a relevant copular source (ib):

(i) a. Mauricio escribe artículos para *La Nación*, *(para) *Clarín* no.
Mauricio writes articles for La Nación for Clarín not
'Mauricio writes articles for *La Nación*, not *Clarín*.'
b. ...*Clarín* no es el periódico para el que Mauricio escribe artículos.
Clarín not is the newspaper for which Mauricio writes articles
'...*Clarín* is not the newspaper that Mauricio writes articles for.'

(Vicente 2008, ex. 13-14)

Crucially, in stripping, where negation precedes the remnant, P-Omission is grammatical (iia), (similarly to (55a) above), even when a copular source is not possible (iib). This word order is not analyzed by Vicente:

(ii) a. Mauricio escribe artículos para *La Nación*, no (para) *Clarín*.
Mauricio writes articles for La Nación not for Clarín
'Mauricio writes articles for *La Nación*, not for *Clarín*.'
b. *No *Clarín* es el periódico para el que Mauricio escribe artículos.
not Clarín is the newspaper for which Mauricio writes articles
Intended: '*Clarín* is not the newspaper that Mauricio writes articles for.'

position of the remnant with regard to the negative particle. In particular, Depiante (2000, p. 127) argues that pseudostripping is derived via movement of the remnant 'to a higher functional head F, encoding contrastive focus', as in (54b), repeated in (57b). This movement is required to obtain the desired word order in pseudostripping, but not in stripping (recall that, according to the analysis put forth in Chapter 2, the remnant doesn't need to move):

(57) a. Sonia leyó *El Aleph*, [$_{\Sigma P}$ no [$_{TP}$ ~~leyó~~ *Ficciones*]] *stripping*
Sonia read the Aleph not read Fictions
'Sonia read *The Aleph*, not *Fictions*.'

b. Sonia leyó *El Aleph*, [$_{FP}$ *Ficciones* [$_{\Sigma P}$ no [$_{TP}$ ~~leyó~~ __]]] *pseudostripping*
Sonia read the Aleph Fictions not read
'Sonia read *The Aleph*, not *Fictions*.'

To obtain P-Omission in pseudostripping it would be necessary to posit movement of the DP remnant over the negative particle, leaving the preposition stranded inside the ellipsis site, which is independently banned in Spanish:

(58) *Hablé con Sonia, [$_{FP}$ Bruno [$_{\Sigma P}$ no [$_{TP}$ ~~habló con~~ __]]] (=55b)
I.talked with Sonia Bruno not talked with
Intended: 'I talked with Sonia, not Bruno.'

I claim that this movement is what causes the ungrammaticality of P-Omission in pseudostripping, motivating the second part of the P-Omission Generalization in (53) above.

Before finishing this subsection, I'd like to add two additional points. First, as I discussed for fragments in Section 3.3.3, my analysis predicts that in cases of stripping where the remnant's correlate moves, P-Omission will be banned. This prediction is borne out, as shown in (59), where the PP *Con Bruno* 'with Bruno' is fronted:

(59) [Con Bruno] hablé __, no *(con) Luciano. (cf. 55a)
with Bruno I.talked not with Luciano
'With Bruno, I talked, not with Luciano.'

Finally, Merchant (2001) observed that when the remnant is fronted in sluicing in Spanish, the preposition cannot be omitted (60b). This contrasts with the non-fronted cases of sluicing

like (60a), which optionally allow P-Omission:

(60) a. Sonia habló con alguien, pero no sé (con) quién.
Sonia talked with someone but not know with who
'Sonia talked with someone but I don't know who'.

b. Sonia habló con alguien pero *(con) quién, no sé.
Sonia talked with someone but with who not know
'Sonia talked with someone but, with whom, I don't know.'

If these cases are derived as pseudostripping (i.e. via fronting of the remnant), the unavailability of P-Omission is accounted for by the unavailability of P-Stranding in this language. For the sake of completeness, a copular continuation for (60b) would be perfectly possible, providing further evidence against a copular source analysis of P-Omission:

(61) ...pero quién es la persona con la que habló, no sé.
but who is the person with that the she.talked not know
'...but who is the person with whom she talked, I don't know.'

3.3.5 Interaction between sluicing and fragment answers

An interesting prediction made by the analysis put forth here is related to the interaction between sluicing and fragment answers, as in (62). What the example below shows is that when a sluiced question allows for the preposition to be omitted, the fragment answer to it also allows P-Omission (contrary to what happens in fragment answers to full wh-questions, as discussed before). This availability of P-Omission in A's reply is independent of the omission of the preposition in B's sluice, and depends only on the fact that *(con) Bruno* '(with) Bruno' remains in situ:

(62) A1: Sonia habló con alguien.
Sonia talked with someone
'Sonia talked with someone.'

B: (Con) Quién?
with who
'Who?'

A2: Bruno.
Bruno
'Bruno.'

In (62A1) the remnant's correlate *con alguien* 'with someone' in the antecedent is in situ, which makes P-Omission in B's sluiced question possible, as shown in (62B). This, in turn, would mean that the remnant *Quién* 'Who' in (62B) has remained in situ, as argued above. Furthermore, this predicts that P-Omission is possible in a fragment answer to that question. This prediction is borne out, as shown in (62A2). Crucially, this example provides evidence that the (un)availability of P-Omission is not dependent on the type of TP-Ellipsis, but on their syntactic structures and, crucially, on the position of the remnant's correlate.

3.3.6 Sprouting

Sprouting is a type of sluicing in which the remnant's correlate is an implicit argument or adjunct (Chung et al. 1995). Chung (2006) noted that P-Omission is impossible in sprouting even in P-Stranding languages like English (original observation by Rosen 1976). In Spanish, P-less remnants are also ruled out:

(63) a. Sonia habló toda la noche, pero no sé *(con) quién.
Sonia talked all the night but not know with who
'Sonia talked all the night but I don't know with whom.'

b. Sonia habló toda la noche, pero no sé *(de) qué.
Sonia talked all the night but not know about what
'Sonia talked all the night but I don't know about what.'

c. Sonia está celosa, pero no sé *(de) quién.
Sonia is jealous but not know of who
'Sonia is jealous, but I don't know of who(m).'

To account for the impossibility of omitting the preposition in sprouting, Chung (2006) proposed a condition, which stated that 'every lexical item in the numeration of the sluice that ends up (only) in the elided IP must be identical to an item in the numeration of the antecedent CP' (p. 11); this condition was further implemented in other proposals such as

the one by Rudin (2019), cited before. The formalization proposed here, partially based on Saab (2008), states that the preposition can only be deleted if it's [†]; if this happens, it must find an identical correlate in the antecedent. Crucially, there is no such identical correlate (in line with the original proposal by Chung 2006), hence the deletion of the preposition gives rise to an ungrammaticality.

3.3.7 Interim summary

In this section I provided further evidence for the analysis put forth in Chapter 2. The evidence presented came from different types of TP-Ellipsis and the contrasts found with respect to the (im)possibility of omitting the preposition in those contexts. Additionally, I showed how my proposal doesn't make predictions based on particular 'types' of ellipsis, but on the structure that they occur in, as I discussed for the interaction between sluicing and fragment answers. I provided independent evidence for an in-situ analysis of remnants, and I showed that an analysis based on non-isomorphic, copular sources incorrectly predicts the two way correlation between P-Omission and copular sources, which is summarized in (36), repeated in (64):

(64)

Ellipsis type	P-Omission	Movement of the correlate in the antecedent	Copular source
Sluicing	✓	✗	✓
Fragment answers	✗	✓	✓
Contrast sluicing	✓	✗	✗
	✗	✓	✓/✗
Split questions	✗	✓	✓
Fragments	✓	✗	✓
	✗	✓	✓
Stripping	✓	✗	✗
Pseudostripping	✗	✗	✓

3.4 Open issues

In this section I briefly discuss three open issues: the interaction between P-Omission and pronouns in Section 3.4.1, P-Omission in the nominal domain in Section 3.4.2, and the interaction between P-Omission and multiple sluicing in Section 3.4.3.

3.4.1 P-Omission and pronouns

In Spanish, as in many languages, when pronouns are complements of prepositions, they appear in oblique case. For example, the first person singular pronoun, for most prepositions, has the form *mí* 'me' (instead of the nominative form *yo* 'I' or the accusative form *me* 'me'). What is more, when this first person singular pronoun appears in the complement of the preposition *con* 'with', the pronoun is realized as *migo*:[8]

(65) a. Sonia habló de mí.
Sonia talked about me
'Sonia talked about me.'

b. Sonia habló conmigo
Sonia talked with.me
'Sonia talked with me.'

In stripping, if the remnant is the first person pronoun, it is impossible to omit the preposition (contrary to what happens when the remnant is a referential DP, as I showed in Section 3.3.4 above). This is shown in (66a)-(66b). A P-less remnant with a nominative pronoun is ungrammatical as well, as (66c) shows:

(66) a. Sonia habló con Bruno, no *(con)migo.
Sonia talked with Bruno not with.me
Intended: 'Sonia talked with Bruno, not with me.'

b. Sonia habló con Bruno, no *(con) mí.
Sonia talked with Bruno not with me
Intended: 'Sonia talked with Bruno, not with me.'

8. The same happens in some Spanish varieties with the second person singular pronoun *tí*, which is spelled out as *tigo* when combines with *con*: *contigo* 'with.you.sg'.

c. *Sonia habló con Bruno, no yo.
Sonia talked with Bruno not I
Intended: 'Sonia talked with Bruno, not with me.'

What is more, the ban on P-Omission seems to be found for all pronouns, not just those that have a special oblique form. This contrasts with (55a), repeated below as (67b), which shows that P-less remnants are otherwise allowed in stripping:

(67) a. Hablé con Sonia, no *(con) {vos | él/ella | nosotros | ustedes | ellos}.
I.talked with Sonia not with you.sg him/her us you.pl them
'I talked with Bruno, not with {you | him/her | us | them}.'

b. Hablé con Sonia, no Bruno.
I.talked with Sonia not Bruno
'I talked with Sonia, not Bruno.'

To complete the paradigm, another set of data needs to be shown. In (68), when a pronoun is the correlate in the antecedent, P-Omission is impossible, even though I showed before that other correlates (e.g. *con Bruno* 'with Bruno') license P-Omission. This is regardless the form of the pronoun:

(68) a. Hablaste conmigo, no *(con) Sonia.
you.talked with.me not with Sonia
'You talked with me, not with Sonia.'

b. Hablaste con {él/ella | nosotros/as | ustedes | ellos/as}, no *(con) Sonia.
I.talked with him/ella us you.pl them not with Sonia
'You talked with {him/her | us | you | them}, not with Sonia.'

A possible explanation of the unavailability of P-Omission when the preposition co-occurs with a pronoun could be that, unlike what happens with DPs in general, when the complement of the preposition is a pronoun, [F]-marking must target/project to the entire PP. This is schematically shown in (69) for the case in which the pronoun and the preposition form a single word, but this should in fact apply to all the pronouns. P-Omission is impossible because, even when the correlate is in-situ, it's not possible to only [F]-mark *migo* 'me', or any other pronoun on its own:

(69) a. [$_A$ Sonia habló [$_F$ conmigo]] ... [$_{\sout{C[E]}}$ ~~Sonia habló~~ [$_F$ con Bruno]]
Sonia talked with.me Sonia talked with Bruno

b. *[$_A$ Sonia habló con[$_F$migo]] ... [$_{\sout{C[E]}}$ ~~Sonia habló con~~ [$_F$ Bruno]]
Sonia talked with.me Sonia talked with Bruno

c. *[$_A$ Sonia habló [$_F$ conmigo]] ... [$_{\sout{C[E]}}$ ~~Sonia habló con~~ [$_F$ Bruno]]
Sonia talked with.me Sonia talked with Bruno

3.4.2 P-Omission in the nominal domain

Another open issue revolves around the availability of P-Omission in the nominal domain. The analysis I put forth in Chapter 2, predicts that P-Omission should be available in these cases as well. However, the patterns found in the data are less clear-cut. In cases of sluicing, P-Omission seems to be possible, as shown in (70a), which also involves deletion of the verb (as in other cases of sluicing), as well as the determiner and noun:

(70) a. Rompí el auto de alguien, pero no sé (de) quién.
I.broke the car of someone but not I.know of whom
'I broke someone's car, but I don't know whose.'

b. Rompí el auto de alguien, pero no sé el (auto) de quién.
I.broke the car of someone but not I.know the car of whom
'I broke someone's car, but I don't know whose (car).'

Interestingly, in stripping, the P-less version seems to be degraded, as shown in (71a):

(71) a. Rompí el auto de Sonia, no ??(de) Bruno.
I.broke the car of Sonia, not of Bruno
'I broke Sonia's car, not Bruno's.'

b. Rompí el auto de Sonia, no el (auto) de Bruno.
I.broke the car of Sonia, not the car of Bruno
'I broke Sonia's car, not Bruno's one.'

I don't have an clear explanation for these differences between the two types of ellipsis. So, I leave the study of them for future research.

3.4.3 Multiple Sluicing

Finally, I should mention *multiple sluicing* (usually defined as a type of sluicing in which multiple wh-phrases survive deletion). Rodrigues et al. (2009) note that P-less remnants are impossible in multiple sluicing in Spanish (72).[9] Crucially, my proposal would predict, in principle, that the prepositions from both PPs could be optionally omitted, contrary to fact:

(72) Habló con alguien sobre algo pero no sé *(con) quién *(sobre) qué.
talked with someone about something but not know with who about what
'She talked about something with someone but I don't know about what with whom.'

(adapted from Rodrigues et al. 2009, ex. 11)

Although (72) is indeed ungrammatical with both remnants omitting the preposition, it has been noted by Martín González (2010) that similar examples optionally allow omitting the preposition only for the first remnant, as the following example shows:

(73) Habló sobre algo con alguien pero no sé (sobre) qué *(con) quién.
talked about something with someone but not know about what with who
'She talked about something with someone but I don't know about what with whom.'

(adapted from Martín González 2010, ex. (i), fn.9)

Comparing examples such as (72) and (73) complicates the empirical picture, because it doesn't seem to be the case that P-Omission is always banned in these contexts. Likewise, I must note that multiple sluicing seems to be special in many aspects. For instance, it seems to be the case that P-Omission is also unavailable under multiple sluicing in languages with more generalized availability of P-Omission, such as English (see, e.g. Lasnik 2014). At the moment, I don't have a clear explanation for why this is the case, so I leave an in depth investigation of this type of ellipsis for future work.

9. I thank an anonymous NLLT reviewer for bringing this into my attention.

3.5 Summary and conclusions

In this chapter I showed that a copular/cleft source analysis of P-Omission makes the wrong predictions with respect to the (un)availability of exhaustive readings in Spanish (Section 3.1). In addition, I showed that adjectival sluices, which have been taken as evidence for the availability of non-isomorphic sources, actually provide evidence that ellipsis requires syntactic isomorphism between the ellipsis site and its antecedent (Section 3.2).

In Section 3.3 I provided data from different types of TP-Ellipsis in Spanish that show that some types (namely, sluicing, contrast sluicing, fragments, and stripping) allow P-Omission, but other types (namely, fragment answers, split questions, and pseudostripping) don't allow it. These data fall under the P-Omission Generalization, repeated below in (74):

(74) The *Preposition Omission Generalization* for Spanish:
P-Omission in ellipsis in Spanish is only allowed when the following two conditions are met: (a) the remnant's correlate in the antecedent does not move, and (b) the remnant does not move.

In Section 3.3, I also argued against a non-isomorphic, copular source analysis of P-less remnants by showing that there is no one-to-one correspondence between the contexts in which P-Omission is available and the contexts in which copular sentences are possible as sources for the ellipsis site. More importantly, I showed that all these patterns follow straightforwardly from the analysis proposed here: I accounted for the distribution of P-Omission in Spanish by arguing that (a) whether remnants move or not is construction-specific as implemented by the proposal with varying features on the ellipsis-licensing head, and (b) ellipsis is licensed under strict syntactic identity to/with an antecedent. This provided a unified analysis of all types of TP-Ellipsis in Spanish without the need for construction-specific stipulations.

It's worth mentioning that a very important aspect of the analysis in this chapter and the previous one is that, while most analyses of ellipsis concentrate on the comparison of the Antecedent and the E-site as a whole, I showed that it's crucial to focus on the specific

position of the remnant's correlate in the antecedent as well.

I should note that, although Chapter 2 and 3 mostly focused on a very specific empirical zone (i.e. apparent violations to the P-Stranding generalization in TP-Ellipsis) in a particular language (i.e. Spanish), I believe that the proposal put forth here could have further consequences for the analysis other elliptical phenomena, both in Spanish and in other languages, that are worth examining. Some of these are examined in Part II of this dissertation. In the reminder of this section, I will briefly discuss some other possible consequences and extensions, but I leave an in-depth exploration of them for future work.

One consequence of my proposal is that it could account for island repair/amelioration effects found in sluicing (first noted by Ross 1969), and other types of TP-Ellipsis (see, e.g. Culicover and Jackendoff 2005, Fukaya 2007, Valmala 2007 for fragment answers and Potter 2017 for stripping, among many others), in a fairly straightforward way: if remnants do not need to move, no islands would, in principle, arise (for previous proposals that attempted to provide an explanation for this phenomenon see Ross 1969, Lakoff 1970, Chung et al. 1995, Merchant 2001, Culicover and Jackendoff 2005, Müller 2011, among many others; see also Abels 2019a for an overview of this topic). Therefore, it may be possible to eliminate the need for proposing non-isomorphic copular sources, short sources, or exceptional mechanisms to 'repair' ungrammatical structures.[10] This analysis of islands will become relevant in Part II of this dissertation, where I discuss some cases of ellipsis that are sensitive to islands, and where I claim that in these cases there is indeed movement of the remnant.

The strict identity condition to license ellipsis I proposed here also has further consequences for the analysis of (the unavailability of) case-mismatches. In particular, Spanish marks some direct object DPs with Differential Object Marking (DOM) (see López 2012 for a thorough discussion of DOM in Spanish). The prediction here is that, given than DOM is

10. It should mentioned, however, that the sprouting facts behave differently (as pointed out originally by Albert 1993), and more generally, in embedded contexts as well (this is also shown in Nakao 2009, who attributes the observation to a handout by Lasnik). Although this should be researched in depth, it's out of the scope of this dissertation and I'll leave this issue aside.

a case-marker, there cannot be DOM mismatches, in line with what happens with respect to case in other languages (although some exceptions have been found—see Vicente 2015 for a brief summary), and following the original observation by Ross (1969). The case-matching effects follow trivially if the sluicing site contains an elided version of the relevant case assigner (here, the verb), and the remnant occupies a position in which it can be assigned the correct case. However, under a hypothesis that deletion of copular sources is just another case of sluicing (like the one I argued against in this paper) it is hard to account for data like (75) below—in which the remnant of sluicing must appear with the DOM 'a'—, given that the pivot of clefts bears nominative. In other words, the only possible source for (75) is the wh-question in (76a):

(75) Sonia vio a alguien, pero no sé *(a) quién.
Sonia saw DOM someone but not know DOM who
'Sonia saw someone but I don't know who.'

(76) a. *(A) quién vio Sonia?
DOM who saw Sonia
'Who did Sonia see?'

b. Quién es la persona a la que vio Sonia?
who is the person DOM the that saw Sonia
'Who is the person that Sonia saw?'

Furthermore, Merchant (2001) showed that Ross's (1969) observation, which he dubbed the *Case Matching Generalization*, holds even when there is no explicit correlate (that is, in cases of sprouting).[11] In sprouting there is no correlate but the remnant still appears with the correct case marking (i.e. in Spanish, with DOM if the object is human/animate, and without DOM otherwise). This marking is obligatory (77a), even when a copular source with an unmarked DP is available (77b):

(77) a. Sonia está leyendo, pero no sé {*(a) qué autor | (*a) qué libro}.
Sonia is reading but not know DOM which author DOM which book
'Sonia is reading but I don't know {which author | which book}.'

11. For exceptions to Merchant's 2001 *Case Matching Generalization* see Vicente (2015) and Balabanian et al. (2020), among others.

b. Qué autor es el (autor) que está leyendo?
which author is the author that is reading
'Which author is the authors that she is reading?'

That is, the data from DOM matching, both in sluicing and sprouting points to the need for having an isomorphic E-site, and against something like a copular/cleft source.

To conclude, in this chapter and the previous one I discussed apparent violations to the *P-Stranding Generalization*—which I referred to as cases of *P(reposition)-omission*—in Spanish, a language that does not allow P-Stranding in regular wh-questions. I examined different types of TP-Ellipsis such as sluicing, fragment answers, contrast sluicing, stripping and pseudostripping, split questions, and sprouting, and I provided an uniform treatment for all of them. I claimed that P-Omission in TP-Ellipsis in Spanish is only allowed when the following two conditions are met: (a) the remnant's correlate in the antecedent does not move, and (b) the remnant does not move. I accounted for the distribution of this phenomenon by arguing that ellipsis is licensed under strict syntactic identity. Additionally, I showed that previous approaches that derived P-Omission from non-isomorphic, copular sources make incorrect predictions with regard to the patterns found in different types of TP-Ellipsis in Spanish.

Part II

Mixed-identity requirements:

Topic-Remnant Elided Questions.

CHAPTER 4

TOPIC-REMNANT ELIDED QUESTIONS

4.1 Introduction

In this chapter I introduce what I call *Topic-Remnant Elided Questions*, or TREQs, in short.[1] As the Table in (1) shows, TREQs are elliptical (matrix and embedded) questions that can be interpreted either as wh-questions or as polar (yes/no) questions:

(1) Types of TREQs in Spanish:

	wh-question meaning	polar question meaning
Root	root wh-TREQs	root polar TREQs
Embedded	embedded wh-TREQs	embedded polar TREQs

It's worth mentioning that, in general, TREQs are ambiguous between a wh-question interpretation and a polar question interpretation. Usually, context disambiguates between the two interpretations. As I will show next, disambiguation can also be obtained by adding a response that points to the intended interpretation. However, in most of the examples in this dissertation I won't include responses to TREQs to avoid making the examples unnecessarily long, and I will just indicate the intended interpretation in the glosses.

As I argue in this part of the dissertation, TREQs provide important insights for the theory of ellipsis. There is no unified approach to TREQs in previous literature. Only a handful of papers discuss somewhat similar constructions in Mandarin Chinese, Japanese and Korean (Wei 2013, 2018; Li 2016; Hiraiwa and Kobayashi 2020; Kim 2021). The structure of this chapter is as follows: In Section 4.2, I provide an overview of TREQs in Spanish and I summarize the analysis I propose for them in the next three chapters. Then, in Section 4.3, I provide a brief background and summarize previous literature on similar constructions found in other languages.

1. I thank Karlos Arregi for helping me come up with the name for this phenomenon.

4.2 TREQs in Spanish

In this section, I provide an overview of the empirical landscape of TREQs in Spanish, and the analysis I will propose to account for them in the following three chapters (Chapters 5 to 7). As I summarized above, TREQs can be root and embedded and can have a wh-question and a polar-question meaning. In Section 4.2.1 I will provide an overview of wh-TREQs, and in Section 4.2.2 I will provide an overview of polar-TREQs.

4.2.1 Wh-TREQs

Root wh-TREQs, exemplified in speaker B's response to A in (2B) and (3B), are elliptical questions interpreted as follow-up wh-questions, as shown by speaker A's answers to B in the examples below:[2]

2. Sentences that are similar in form to root TREQs can occur in out-of-the-blue contexts, in limited situations. In these cases, they mean something along the lines of *Where is X?* or *What happened with X?*, as the following examples show:

(i) Context: *B was supposed to go to a party with Bruno. When B arrives at the party, A, the host, sees that B is at the party alone. Then, A asks:*
A: Y Bruno?
and Bruno
Literal: 'And Bruno?'
Intended interpretation: 'Where is Bruno?' or 'What happened with Bruno?'
B: En casa.
at home
'(He stayed) at home.'

(ii) Context: *A sees B walking barefoot. Then, A asks:*
A: Y tus zapatos?
and your shoes
Literal: 'And your shoes?'
Intended interpretation: 'Where are your shoes?' or 'What happened with your shoes?'
A: Me los robaron.
to.me them they.stole
'Someone stole them from me.'

Although these are interesting cases of antecedent-less ellipsis, I won't discuss them in this dissertation. It's also worth mentioning that something similar is found in Fragment Questions in Mandarin Chinese—a construction similar to what I call root polar-TREQs in Spanish—as noted in Wei (2013).

(2) 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?'

A: Pasta.
pasta
'Pasta.'

(3) 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?'

A: Bruno.
Bruno
'Bruno.'

Similarly, embedded wh-TREQs, exemplified in (4A) and (5A), are embedded elliptical questions that usually convey ignorance with respect to the remnant. The wh-question meaning is confirmed with B's subsequent response to A's embedded wh-TREQ:

(4) A: Sonia comió pizza, pero Bruno, no sé.
Sonia ate pizza but Bruno not know
Literal: 'Sonia ate pizza, but Bruno, I don't know.'
Interpretation: 'As for Sonia, she ate pizza, but as for Bruno, I don't what he ate.'

B: Yo sí sé. Comió pasta.
I yes know he.ate pasta
'I do know. He ate pasta.'

(5) A: Pizza, comió Sonia, pero pasta, no sé.
pizza ate Sonia but pasta not know
Literal: 'Pizza, ate Sonia, but pasta, I don't know.'
Interpretation: 'As for pizza$_i$, Sonia ate that$_i$, but as for pasta$_j$, I don't know who ate that$_j$.'

B: Yo sí sé. Bruno comió pasta.
I yes know Bruno ate pasta
'I do know. Bruno ate pasta.'

Unlike other types of sentential ellipsis that involve wh-questions—like some of the types of TP-Ellipsis analyzed in Part I such as sluicing—wh-TREQs require a wh-phrase to go unpronounced. Crucially, this occurs even though there is no explicit wh-question or wh-phrase in the antecedent. Thus, I claim that wh-TREQs in Spanish are the result of the ellipsis of a (matrix or embedded) wh-question, from which a Topic has moved out, surviving deletion, as illustrated in (6) and (7):

(6) B: Y [Bruno$_{\text{top}}$] $\langle_{\text{E-site}}$ ~~qué~~$_i$ __ ~~comió~~ t$_i\rangle$? = (2B)
and Bruno ~~what~~ ~~ate~~
'And Bruno ~~what did he eat~~?'

(7) Sonia comió pizza, pero [Bruno$_{\text{top}}$] no sé $\langle_{\text{E-site}}$ ~~qué~~$_i$ __ ~~comió~~ t$_i\rangle$. = (4A)
Sonia ate pizza but Bruno not I.know ~~what~~ ~~ate~~
'Sonia ate pizza, but Bruno, I don't know ~~what he ate~~.'

In Chapters 5 and 6 I will analyze wh-TREQs in detail, discussing possible and impossible remnants, however, it's worth noticing that when more than one constituent can be questioned in a given sentence, there is more than one possibility as to which is the source of the ellipsis site. In these cases, the meaning will depend on the context, and more specifically, on the current topic of conversation (sometimes referred to as the *Question Under Discussion*—see e.g., Roberts 1996, 2012, among many others). An example is given below, where the different interpretations of the root wh-TREQ in (8B) are further confirmed by the possible answers in (8A'), (8A"), and (8A"'):

(8) A: Sonia comió pizza el martes.
Sonia ate pizza the Tuesday
'Sonia ate pizza the Tuesday.'

B: Y Bruno?
and Bruno
Literal: 'And Bruno?'
Interpretation #1: What about Bruno? What did he eat on Tuesday?

Interpretation #2: What about Bruno? When did he eat pizza?
Interpretation #3: What about Bruno? What did he eat when?

A': Pasta. → Answer to Interpretation #1
pasta
'Pasta.'

A": El miércoles. → Answer to Interpretation #2
the Wednesday
'On Wednesday.'

A"': Pasta, el miércoles. → Answer to Interpretation #3
pasta the Wednesday
'Pasta, on Wednesday.'

In other words, the QUD that would give rise to Interpretation #1 would be *Who ate what on Tuesday?*, the QUD that would give rise to Interpretation #2 would be *Who ate pizza when?*, and the QUD that would give rise to Interpretation #3 would be *Who ate what when?*. To give rise to those interpretations, I claim that the source for the ellipsis site in (8B) could either be (9a), (9b), or (9c) below:

(9) a. Y Bruno $\langle_{\text{E-site}}$ ~~qué comió el martes~~$\rangle$? → Source for Interpretation #1
and Bruno what he.ate the Tuesday
'And as for Bruno, what did he eat on Tuesday?'

b. Y Bruno $\langle_{\text{E-site}}$ ~~cuándo comió pizza~~$\rangle$? → Source for Interpretation #2
and Bruno when he.ate pizza
'And as for Bruno, when did he eat pizza?'

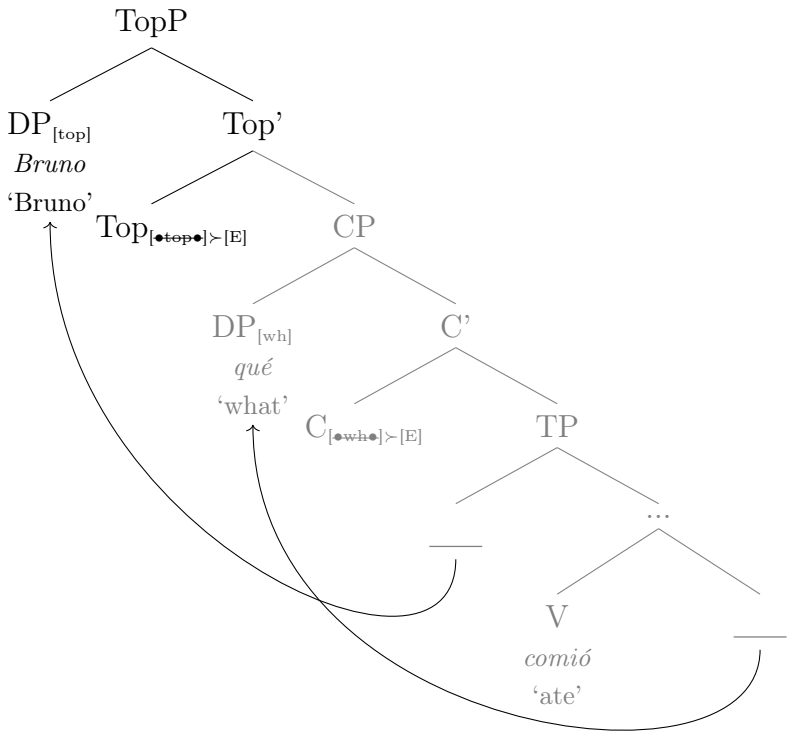
c. Y Bruno $\langle_{\text{E-site}}$ ~~cuándo comió qué~~$\rangle$? → Source for Interpretation #3
and Bruno when he.ate what
'And as for Bruno, when did he eat what?'

The same is true for embedded wh-TREQs, as shown in (10):

(10) Sonia comió pizza el martes, pero Bruno, no sé.
Sonia ate pizza the Tuesday but Bruno not know
Literal: 'Sonia ate pizza the Tuesday, but Bruno, I don't know.'
Interpretation #1: ... but I don't know what Bruno ate on Tuesday.
Interpretation #2: ... but I don't know when Bruno ate pizza.
Interpretation #3: ... but I don't know when Bruno ate what.

As a preview of the analysis I will propose in the following chapters, I claim that, in wh-TREQs, the [E] feature that triggers ellipsis is located on the Top head. Ellipsis targets the complement of the head bearing the [E]-feature, that is, the entire CP. The ellipsis site contains a wh-question minus the topicalized DP. In addition, I will argue that wh-TREQs provide further evidence for the need for a syntactic identity condition to license ellipsis; however, as I will show, this identity condition only applies to lower portion of the elided structure (i.e. the TP and everything below it). With respect to the upper part of the structure (i.e. material above the TP), I will show that there is in fact no need to propose a specific identity condition to license ellipsis of the elements lying between C and Top. Finally, I will argue that wh-TREQs involve the presence of two [E] features, one that enforces syntactic identity and is located on C, and one that doesn't enforce any particular identity condition, and is located on Top. This is illustrated in (11) for root wh-TREQs:

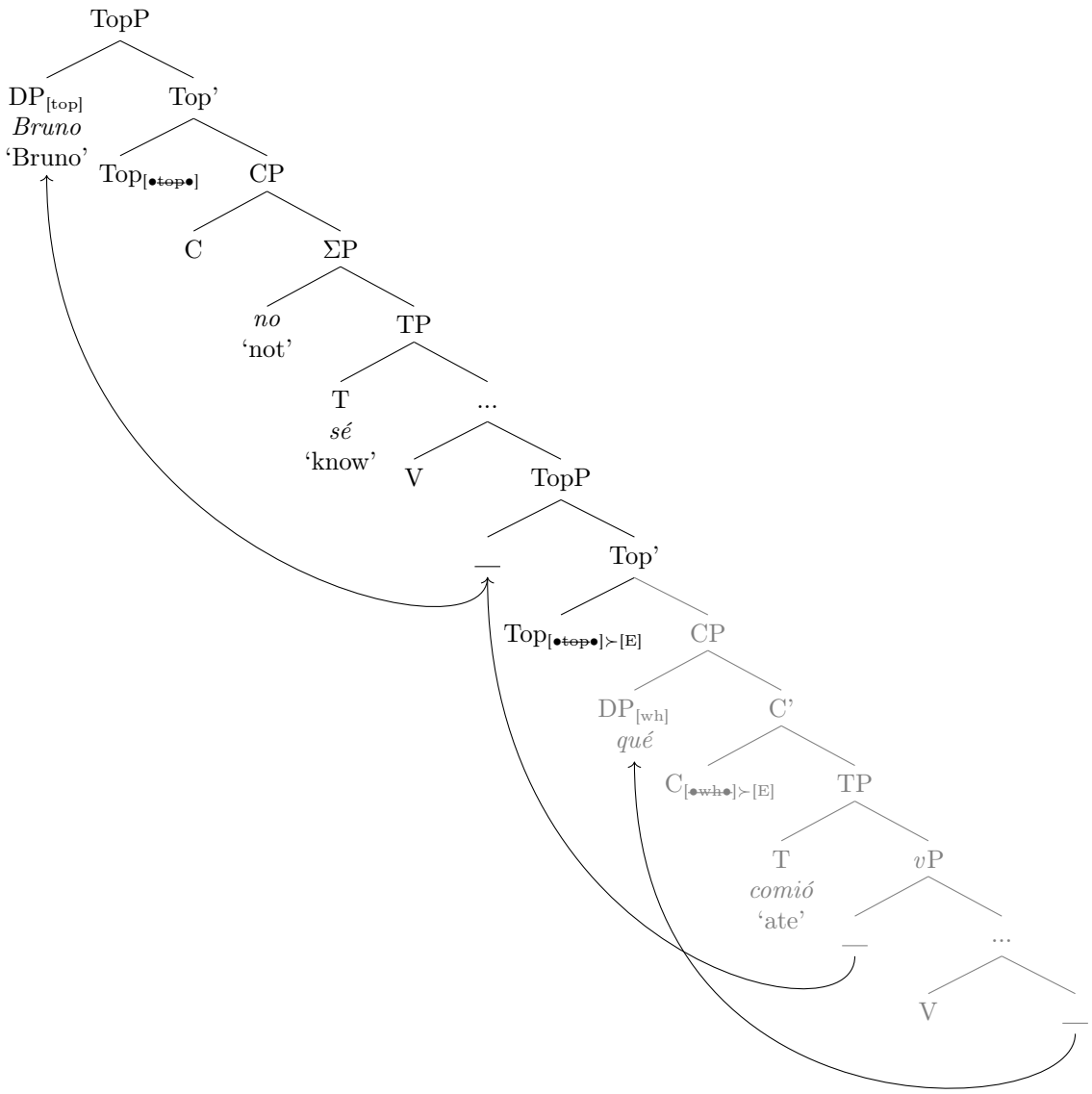
(11)



Embedded wh-TREQs are derived in a similar manner. The crucial difference between root and embedded wh-TREQS is that, in the latter, the remnant—originated inside the

embedded clause—moves to an intermediate projection within that clause. I claim that this position is the specifier of an intermediate TopP, and that ellipsis is triggered by an [E] feature on this Top head. The remnant, which is the only constituent that bears a [top] feature, moves further to the specifier of TopP in the matrix clause to check the [•top•] on its head. This is illustrated in (12):

(12)



4.2.2 Polar-TREQs

Root polar-TREQs, exemplified in speaker B's response to A in (13B) and (14B), are elliptical questions interpreted as follow-up polar (yes/no) questions, as shown by speaker A's answers to B in the examples below:

(13) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y Bruno?
and Bruno
Literal: 'And Bruno?'
Interpretation: 'What about Bruno? Did he also eat pizza?'

A: No, comió pasta.
no he.ate pasta
'No, he ate pasta.'

(14) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y pasta?
and pasta
Literal: 'And pasta?'
Interpretation: 'What about pasta? Did she also eat pasta?'

A: No, solo comió pizza.
No only she.ate pizza
'No, she only ate pizza.'

Similarly, embedded polar TREQs, exemplified in (15A) and (16A), are embedded elliptical polar (yes/no) questions that usually convey ignorance with respect to whether what has been conveyed in the Antecedent also holds with respect to the remnant. The polar-question meaning is confirmed with B's subsequent response to A's embedded polar TREQ:

(15) A: Sonia comió pizza, pero Bruno, no sé.
Sonia ate pizza but Bruno not know
Literal: 'Sonia ate pizza, but Bruno, I don't know.'
Interpretation: 'Sonia ate pizza, but I don't know whether Bruno ate pizza.'

B: Yo sí sé. No comió pizza(, comió pasta).
I yes know not ate pizza ate pasta
'I do know. He didn't eat pizza, he ate pasta.'

(16) A: Sonia comió pizza, pero pasta, no sé.
Sonia ate pizza but pasta not know
Literal: 'Sonia ate pizza, but pasta, I don't know.'
Interpretation: 'Sonia ate pizza, but I don't know whether she also ate pasta.'

B: Yo sí sé. No comió pasta(, solo comió pizza).
I yes know not ate pasta only she.ate pizza
'I do know. She didn't eat pasta, she only ate pizza.'

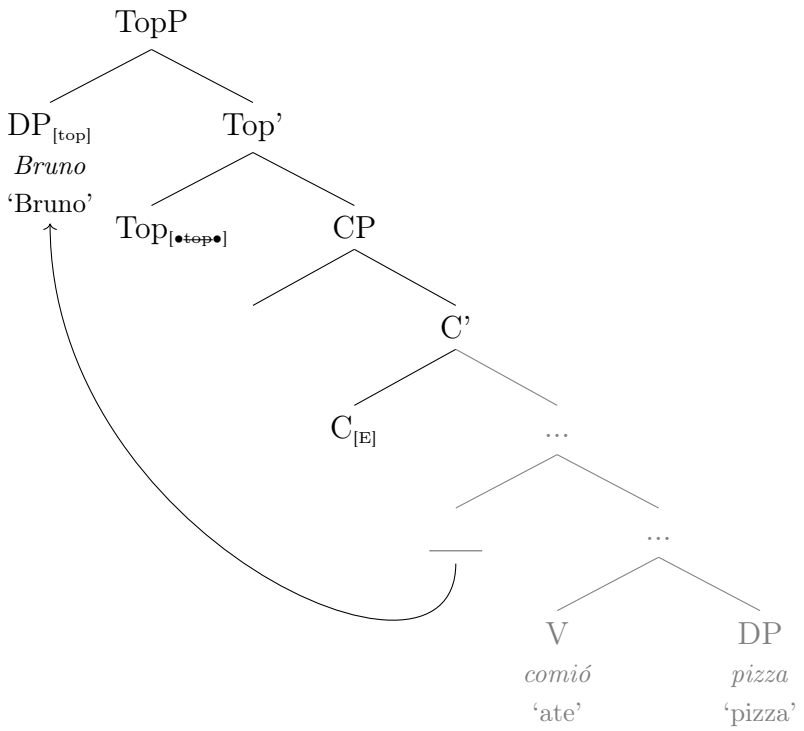
As the examples above show, polar TREQs look like wh-TREQs on the surface; the difference being their interpretation, which can be obtained from the context. Based on the interpretation of polar TREQs, I argue that both root and embedded polar TREQs require a polar (yes/no) question to go unpronounced. In this respect, I claim that polar TREQs are the result of ellipsis of an embedded polar question, from which a Topic has moved, surviving deletion, as illustrated below:

(17) B: Y [Bruno$_{top}$] $\langle_{\text{E-site}}$ __ ~~comió~~ ~~pizza~~ $\rangle$? = (13B)
and Bruno ~~ate~~ ~~pizza~~
'And Bruno ~~did he eat pizza~~?'

(18) Sonia comió pizza, pero [Bruno$_{top}$] no sé $\langle_{\text{E-site}}$ ~~si~~ ~~whether~~ __ ~~comió~~ ~~pizza~~ $\rangle$.
Sonia ate pizza but Bruno not I.know ~~he.ate~~ ~~pizza~~
'Sonia ate pizza, but Bruno, I don't know ~~whether he ate pizza~~.'

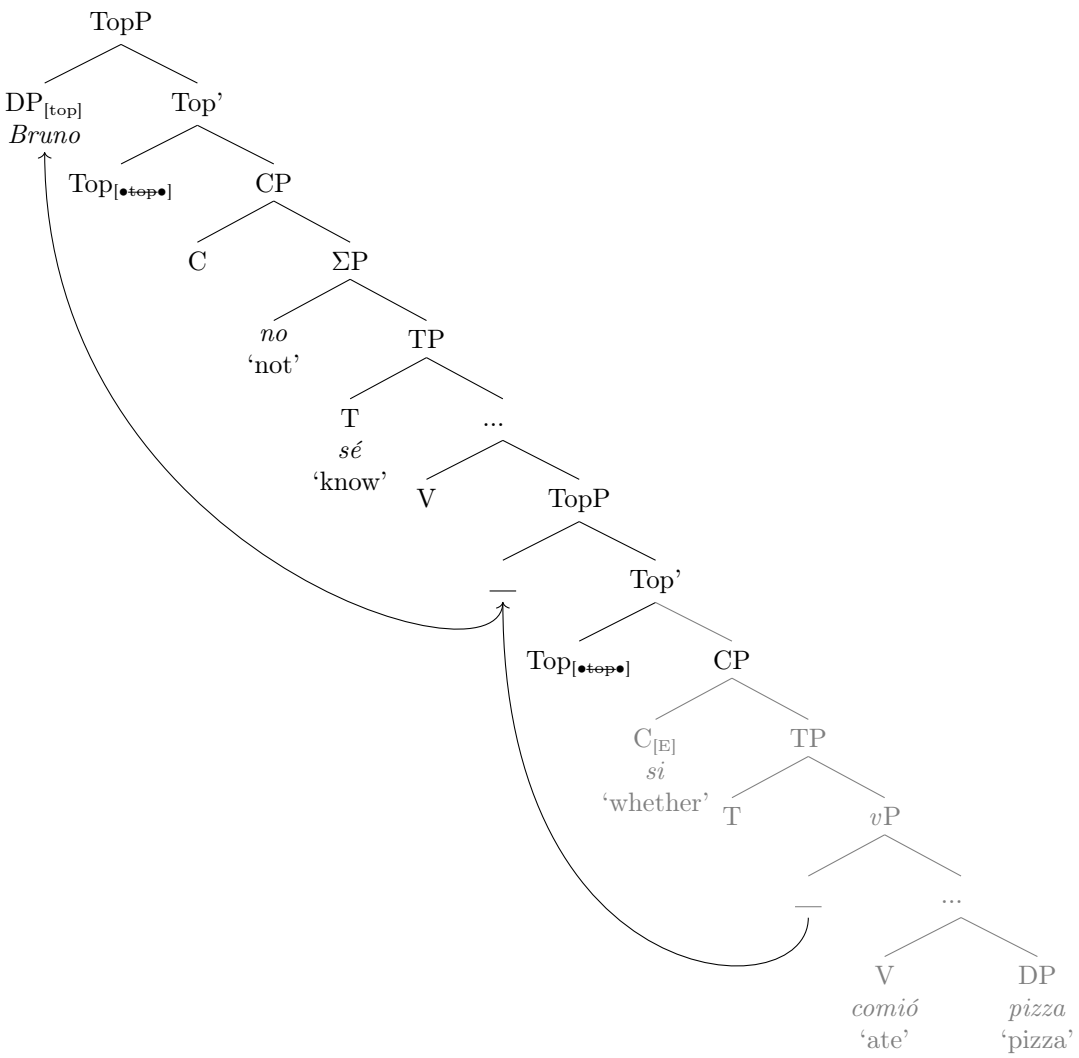
Since polar TREQs do not involve deletion of a wh-phrase, I analyze them as the result of ellipsis triggered by an [E]-feature on C, where the ellipsis site contains a polar (yes/no) question minus a topicalized DP. This analysis differs from my analysis of wh-TREQs, which also involve an [E]-feature on Top. As I will show in Chapter 7, this higher ellipsis is not necessary here. This is further illustrated in the simplified tree in (19) for example (5):

(19)



Embedded polar TREQs are derived in a similar manner. As I showed for wh-TREQS, the crucial difference between root and embedded polar TREQS is that, in the latter, the remnant—originated inside the embedded clause—moves to an intermediate projection within that clause. Here again, I claim that this position is the specifier of an intermediate TopP. Ellipsis is triggered by an [E]-feature on C, without the need to posit an [E]-feature on Top. This is illustrated in (20):

(20)



In the next section, I will provide a brief overview of previous literature that has discussed similar constructions to what I call TREQs.

4.3 Background

In this section I provide a brief overview of previous literature that discusses similar constructions to what I call TREQs. As I will show, there are important differences between the phenomena discussed in these works and TREQs in Spanish. Importantly, none of the previous literature provides a detailed and unified analysis of the phenomena under study here, which makes them unable to account for the full range of properties displayed in TREQs in Spanish, as I will show in Chapters 5 to 7.

4.3.1 Fragment Questions in Chinese and Korean

The term *Fragment Questions* has been used to refer to a construction that is somewhat similar to what I call *root polar TREQs* in Spanish. According to Wei (2013), Fragment Questions in Mandarin Chinese, like the one in (21B), are interpreted as polar/A-not-A questions:

(21) A: Zhangsan huilai le.
Zhangsan back le
'Zhangsan has already come back.'

B: Lisi ne?
Lisi Q
Interpretation: 'What about Lisi? Did she came back or not?'

(adapted from Wei 2013, ex. 3)

Wei analyzes Fragment Questions in Mandarin Chinese following Merchant's (2004) proposal for Fragment Answers in English. According to Wei, Fragment Questions in Mandarin Chinese involve focus movement of the remnant followed by TP-Ellipsis. What is more, Fragment Questions do not require syntactic identity to be licensed, but only semantic identity (for more details, see Wei 2013), despite the fact that Fragment Questions in this language display connectivity effects and are island sensitive. Wei provides a brief overview of the empirical landscape of Fragment Questions in Mandarin Chinese, pointing out that the syntactic categories that are allowed to form Fragment Questions include noun phrases, verb phrases, and temporal/locative phrases; on the other hand, frequency, manner, and sentential adverbs, and modals, cannot occur as Fragment Questions.

Wei (2018) revises the proposal in Wei (2013). This paper claims that Fragment Questions are derived via topic movement (not focus movement) and TP-Ellipsis. Wei (2018) claims that the remnant in Fragment Questions is a topic-like constituent in the Specifier of TopP, followed by a particle *ne*, which functions as a topic marker and as a constituent question particle simultaneously (for more detail on this analysis, see Wei 2018).

Li (2016) also analyzes Fragment Questions in Mandarin Chinese. However, Li's Fragment Questions differ from Wei's, as can be seen in the example in (22B2) below. The crucial difference between Wei's and Li's Fragment Questions is that the latter have an explicit wh-question as its antecedent (22A1).

(22) 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)

The author proposes that these Fragment Questions are derived from full wh-questions, and that ellipsis targets the entire question, minus the remnant, which is a contrastive topic.

Furthermore, Li shows that the interpretation of Fragment Questions depends on the context. 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. The following example shows a Fragment Question being interpreted as a polar question:

(23) 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)

Li proposes that Fragment Questions in Mandarin Chinese are an elliptical construction triggered by an [E]-feature on the Top head—realized as *ne*. According to the author, ellipsis is licensed under semantic identity, more specifically, a focus condition on ellipsis based on Rooth (1992) (for more details, see Li 2016). Although Li's argumentation revolves around the fact that the construction analyzed has an antecedent question, the author briefly mentions that Fragment Questions can occur without an antecedent question, as in (24):

(24) 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)

Importantly, these 'antecedent-less' Fragment Questions can receive different interpretations:

(25) A: Ta he-le cha.
he drink-Asp tea
'He drank tea.'

A": Ta mei he.
he not drink
'He didn't.'

A"': Ta chi-le dangao.
he eat-Asp cake
'He ate cake.'

(adapted from Li 2016, ex. 35)

Although Li doesn't provide a full account of these antecedent-less Fragment Questions, the author analyzes them as a type of Fragment Questions licensed by an implicit antecedent

question (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 root 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 following chapters.

Finally, Kim (2021) analyses Fragment Questions in Korean, exemplified in (26B). These are similar to Li's Fragment Questions in that they have a wh-question in its antecedent:

(26) A: Mimi-ka mwues-ul masi-ess-e?
Mimi-NOM what-ACC drink-PST-QUE
'What did Mimi drink?'

B: Khephi.
coffee
'Coffee.'

A: Momo-nun?
Momo-TOP
Interpretation: 'What about Momo? What did Momo drink?'

As the example above shows, these Fragment Questions induce a full sentential question meaning. Kim reviews some properties of Fragment Questions in Korean and proposes a direct interpretation (i.e. non-sententialist) approach to this construction, contra Wei (2018) and Stigliano (2021).[3] Despite the fact that Fragment Questions in Korean display connectivity effects such as case matching effects, are island sensitive, and there seems to be a correlation between those XPs that can occur as remnants in Fragment Questions and those XPs that can be topicalized, Kim still argues for a non-sententialist approach based on some apparent case mismatches and contexts of island insensitivity. Although I don't have an explanation of how these mismatches arise, I take the evidence for sententialist account to be overwhelming to even consider the alternative, non-sententialist approach viable.

3. In Stigliano (2021) I discuss Fragment Questions in Spanish, which in this dissertation I called TREQs, for the first time. This short paper provides a brief overview of the phenomenon and puts forth an analysis that was later revised in Chapter 5.

4.3.2 Countersluicing in Japanese

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, as shown in (27):

(27) 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 propose that both countersluicing and sluicing in Japanese have a copular structure as their underlying structure. Crucially, according to them, while sluicing is derived from applying argument ellipsis to FinP, countersluicing is derived from applying argument ellipsis to ForceP (for more details on this proposal, see Hiraiwa and Kobayashi 2020). It's worth mentioning that countersluicing in Japanese disallows yes/no question meaning (contra to what is found in Fragment Questions in Mandarin Chinese and TREQs Spanish). In addition, countersluicing is only limited to matrix clauses, which differs from embedded wh-TREQs.

4.3.3 Interim Summary

The phenomenon I analyze in the second part of this dissertation—TREQs in Spanish—resembles what has been analyzed as Fragment Questions (of different types) in Mandarin Chinese and Korean, and Countersluicing in Japanese. However, there are crucial differences between TREQs and the other constructions mentioned above.

In the first place, Fragment Questions with a wh-question meaning in Mandarin Chinese and Korean are usually presented with an explicit wh-question in its antecedent. The cases in which there is no antecedent wh-question are not thoroughly analyzed. 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. In addition, these analyses rely on semantic identity that allows for structural mismatches between the antecedent and the ellipsis site. As I showed in Part I of this thesis, (some type of) syntactic identity/isomorphism is indeed needed to license ellipsis. In this respect, it's important to unify this claim (and the facts that motivated it) with the empirical domain of TREQs, which seem to show that this syntactic identity requirement needs to be weakened. I will achieve this by proposing that wh-TREQs are actually the result of two ellipses, which impose different identity conditions.

In the second place, Countersluicing in Japanese is attested only with cleft sources and cannot have a polar question meaning, which differs from the Spanish facts, which allow for polar TREQs. Additionally, it's only restricted to matrix contexts, while TREQs can occur in embedded contexts. Finally, Countersluicing in Japanese is analyzed as arising from Argument Ellipsis, not available in Spanish, which points to the need for a different analysis for this construction in this language.

Finally, none of the works mentioned above analyzes embedded contexts, which, as I will argue in the following chapters, provides important insights into the syntax of TREQs and the licensing of ellipsis. What is more, none of the works summarized above analyzed this construction with all its variations and aspects, failing to provide a complete picture of it. In the remaining of this dissertation, I provide an analysis of TREQs in Spanish, and I discuss its consequences for the theory of ellipsis.

CHAPTER 5

ROOT WH-TREQS

5.1 Introduction

In this chapter I analyze *Root Topic-Remnant Elided Wh-Questions* which I will refer to as *root wh-TREQs* or *wh-TREQs* for simplicity. Root wh-TREQs, exemplified in speaker B's response to A in (1B) and (2B), are elliptical questions interpreted as follow-up wh-questions, as shown by speaker A's answers to B in the examples below:[1]

(1) 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?'

A: Pasta.
pasta
'Pasta.'

(2) 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?'

A: Bruno.
Bruno
'Bruno.'

1. Recall from the previous chapter that TREQs can also have a polar-question meaning/interpretation (i.e. polar TREQs). The specifics of polar TREQs will be analyzed in Chapter 7. For the sake of explicitness, in the glosses throughout this chapter, which only concerns wh-TREQs, I specify the relevant meaning/interpretation under analysis. To avoid making the examples unnecessarily long, from now on I won't include A's response to B's wh-TREQ, but I will only specify the intended meaning in the glosses.

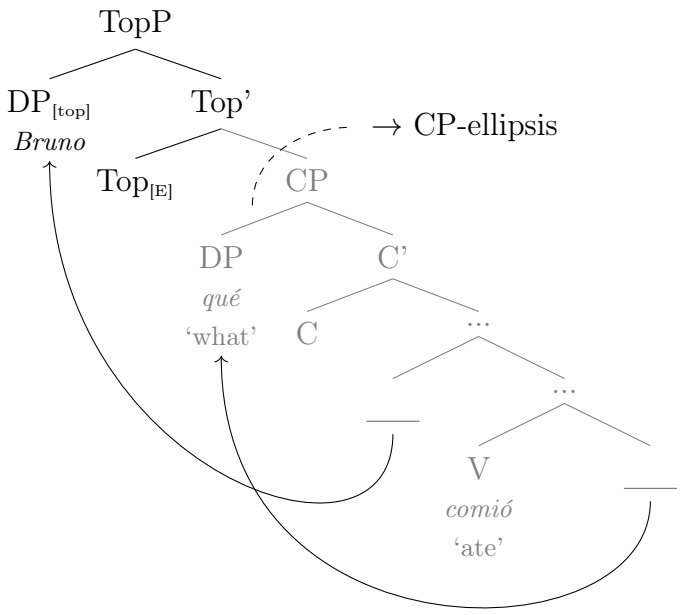
Unlike other types of sentential ellipsis that involve wh-questions, like sluicing, wh-TREQs require a wh-phrase to go unpronounced. Crucially, this occurs even though there is no explicit wh-question or wh-phrase in the antecedent. Thus, I claim that wh-TREQs in Spanish are the result of the ellipsis of a wh-question, from which a Topic has moved out, surviving deletion, as illustrated in (3) and (4):

(3) B: Y [Bruno$_{\text{top}}$] $\langle_{\text{E-site}}$ ~~qué~~$_i$ __ ~~comió~~ t$_i\rangle$? = (1B)
and Bruno ~~what~~ ~~ate~~
'And Bruno ~~what did he eat~~?'

(4) B: Y [Pasta$_{\text{top}}$] $\langle_{\text{E-site}}$ ~~quién~~ ~~comió~~ __ $\rangle$? = (2B)
and pasta ~~who~~ ~~ate~~
'And pasta ~~who ate~~?'

This is further illustrated in the simplified tree in (5) for example (3):

(5)

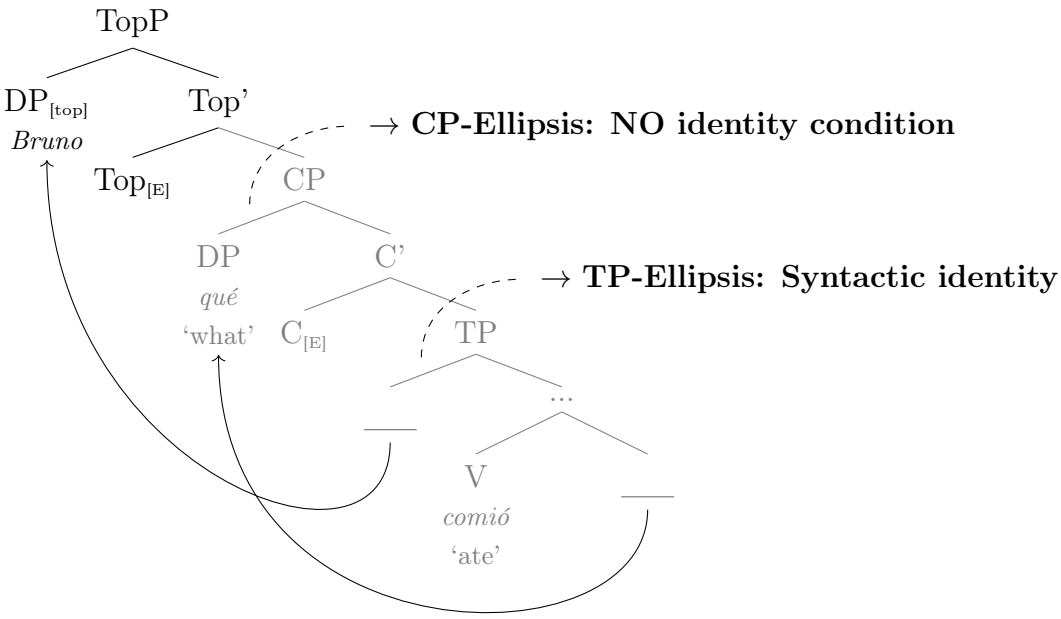


As discussed in Part I of this dissertation, I follow Merchant (2001) in that ellipsis is triggered by an [E]-feature. I claim that, in the case of wh-TREQs (and CP-ellipsis more generally), the [E] feature is located on the Top head. Likewise, ellipsis targets the complement of the head bearing the [E]-feature, that is, the entire CP (hence the name 'CP-Ellipsis'). As

illustrated above, the ellipsis site contains a wh-question minus the topicalized DP 'Bruno'. This simplified version of the analysis will be revised in Section 5.3.

In addition, I will argue that wh-TREQs provide further evidence for the need for a syntactic identity condition to license ellipsis. However, as I will show, this identity condition only applies to lower portion of the elided structure (i.e. the TP and everything below it). With respect to the upper part of the structure (i.e. material above the TP), I will show that there is in fact no need to propose a specific identity condition to license ellipsis of the elements lying between C and Top, and that only more general, pragmatic conditions on dialogue congruence, and at-issue content are at play here. Finally, I will argue that this type of construction—wh-TREQs in particular and CP-ellipsis in general—involves the presence of two [E] features, one that enforces syntactic identity and is located on C, and one that doesn't enforce any particular identity condition, and is located on Top. This is illustrated in (6):

(6)



The structure of this chapter is as follows. In Section 5.2 I provide evidence in favor of (i) an ellipsis approach (and against a non-sententialist one) of root wh-TREQs, (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 CP-ellipsis. In Section 5.3 I discuss in depth the identity condition necessary to license CP-ellipsis, and I put forth a formalization to account for this type of elliptical construction. In Section 5.4 I discuss a particular context for root wh-TREQs, namely, when the entire VP is in focus, that has interesting consequences for the theory of ellipsis. Finally, Section 5.5 concludes and summarizes the findings so far.

5.2 The syntax of root wh-TREQs

In this section I will examine evidence in favor of an ellipsis approach to wh-TREQs that involves topicalization of the remnant and wh-movement of the wh-phrase inside the ellipsis site. First, the possible remnants for a wh-TREQ in Spanish are exactly those constituents that can otherwise be topicalized out of a wh-question in this language (Section 5.2.2). Likewise, those constituents that cannot be topicalized out of a wh-question cannot occur as wh-TREQs (Section 5.2.3). These two patterns provide evidence for the claim that the remnant in wh-TREQs is a topicalized XP. Second, in Section 5.2.6 I discuss a variety of islands which provides more 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. Additionally, the fact that wh-TREQs are island sensitive means that the different strategies proposed for island repair (such as short sources or cleft/copular sources) are not possible here, which in turn contributes to my claim that there must be syntactic isomorphism between the ellipsis site and its antecedent. Finally, in Section 5.2.8, I show that wh-TREQs display connectivity effects; in particular, they do not allow P-Omission, voice mismatches or spray/load alternations, which provides further evidence for the need for (at least some type of) syntactic identity to license this construction.

5.2.1 Remnants are not Hanging Topics

Before examining possible and impossible remnants, in this short section I will provide evidence to show that remnants are not hanging topics based-generated in the left-periphery, but are topicalized out of the ellipsis site. As the following examples show, topicalizations of PPs require the preposition to be present, as shown in (6a), while hanging topics require it to be absent, as shown in (6b):

(6) a. [Con Luciano], quién habló __?
with Luciano who talked
'As for Luciano, who talked with him?'

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

Crucially, as the following wh-TREQs show, the only option available is the one in which the preposition in present (7B), whose source would be (6a) above. A remnant like the one in (6b) is unavailable in this context (7B'), even if its non-elliptical counterpart is perfectly possible (7B"):

(7) 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?'

B': *Y (con respecto a) Luciano?
and with respect to Luciano
Literal: '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 the remnants are topicalized XPs and not hanging topics. In the next two sections I provide additional evidence for this claim.

5.2.2 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 has been topicalized 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 predicted, cannot occur as wh-TREQs (see Section 5.2.3 below). In short, possible remnants include DPs (both subjects and objects), prepositional phrases (IOs, and PPs both in the verbal and nominal domains), temporal and locative phrases, frequency and manner adverbs, predicative adjectives, infinitival verb phrases, and CPs. In what follows, I provide examples of each of them.

Direct Objects

The example in (8) shows that direct objects can be topicalized out of a wh-question:

(8) [Pasta], quién comió __?
pasta who ate
'As for pasta, who ate that?'

Likewise, they can occur as remnants for wh-TREQs, as shown in (9B):

(9) 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?

Indirect Objects

Similarly, (10) shows that indirect objects can be topicalized out of a wh-question:

(10) [A Bruno], quién le dio una pizza __?
to Bruno who CL.DAT.SG gave a pizza
'As for Bruno, who gave him a pizza?'

Likewise, they can occur as remnants for wh-TREQs, as (11B) shows:

(11) A: Sonia le dio una pizza a Luciano.
Sonia CL.DAT.SG gave a 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?'

Subjects

As shown in (12), subjects can also be topicalized out of wh-questions:

(12) [Bruno], qué __ comió ?
Bruno what ate
'As for Bruno, what did he eat?'

Likewise, they can occur as remnants for wh-TREQs, as the example in (13B) shows:

(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 ate?'

Prepositional Phrases

The examples below show that PPs can be topicalized out of a wh-question. This holds for PPs in the verbal domain (14) and for PPs in the nominal domain (15):

(14) [Con Luciano], quién habló __?
with Luciano who talked
'As for Luciano, who talked with him?'

(15) [De Luciano], quién vio la foto __?
of Luciano who saw the picture
'As for Luciano, who saw his picture?'

As predicted, PPs can occur as remnants for wh-TREQs, as shown in (16B) and (17B):

(16) 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?'

(17) A: Sonia vio la foto de Bruno.
Sonia saw the picture of Bruno
'Sonia saw the picture of Bruno.'

B: Y de Luciano?
and of Luciano
Literal: 'And Luciano's?'
Interpretation: 'What about Luciano? Who saw his picture?'

Temporal and locative phrases

As for temporal and locative phrases, the examples in (18) and (19) show that they can be topicalized out of wh-questions:

(18) [El viernes], quién corrió __?
the Friday who ran
'As for Friday, who ran that day?'

(19) [En la playa], quién corrió __?
in the beach who ran
'As for the beach, who ran there?'

As expected, they can also occur as remnants for wh-TREQs, as shown in (20B) and (21B):

(20) 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 Friday? Who ran that day?'

(21) A: Sonia corrió en el parque.
Sonia ran in the park
'Sonia ran in the park.'

B: Y en la playa?
and in the beach
Literal: 'And in the beach?'
Interpretation: 'What about the beach? Who ran there?'

Adverbs

Similarly, frequency, manner, and temporal adverbs can be topicalized out of a wh-question, as shown by examples (22)-(24):

(22) [Ocasionalmente], quién corre __?
occasionally who runs
'As for occasionally, who runs occasionally?'

(23) [Rápido], quién corre __?
fast who runs
'As for fast, who runs fast?'

(24) [Después], quién corrió __?
after who ran
'As for after, who ran?'

Examples (25B), (26B), and (27B) show that they can also occur as remnants for wh-TREQs:

(25) 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?'

(26) 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?'

(27) 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?'

Predicate-argument adjectives

Predicate-argument adjectives can also be topicalized out of a wh-question, as shown in (28):

(28) [Azul], quién pintó el auto __?
blue who painted the car
'As for blue, who painted the car that color?'

Likewise, they can occur as remnants for wh-TREQs, as shown in (29B):

(29) 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?'

Infinitival Phrases

As example (30) shows, bare infinitives can be topicalized out of wh-questions:

(30) [Comer], quién quiere __?
to.eat who wants
'As for eating, who wants to do that?'

Likewise, they can occur as remnants for wh-TREQs, as shown in (31B):

(31) 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 do that?'

In addition, (32) shows that infinitival phrases can also be topicalized out of wh-questions:

(32) [Comprar un auto], quién quiere __?
to.buy a car who wants
'As for buying a car, who wants to do that?'

As predicted, they can occur as remnants for wh-TREQs, as shown in (33B):

(33) A: Sonia quiere viajar a Buenos Aires.
Sonia wants to.travel to Buenos Aires
'Sonia wants to travel to Buenos Aires.'

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 do that?'

CPs

Finally, the examples (34)-(35) shows that CPs can also be topicalized out of wh-questions:

(34) [Cuándo vio Bruno la película], quién preguntó __?
when saw Bruno the movie who asked
'As for when Bruno saw the movie, who asked that?'

(35) [Que vio la película], quién (lo) dijo __?
that saw the movie who CL said
'As for (s)he seeing the movie, who said that?'

Again, as predicted, they can occur as remnants for wh-TREQs, as in (36B) and (37):

(36) A: Sonia preguntó cuándo leyó Bruno el libro.
Sonia asked when read Bruno the book
'Sonia asked when Bruno read the book.'

B: Y cuándo vio la película?
and when saw the movie
Literal: 'And when he saw the movie?'
Interpretation: 'What about when Bruno saw the movies? Who asked that?'

(37) A: Sonia dijo que leyó el libro.
Sonia said that read the book
'Sonia said that she read the book.'

B: Y que vio la película?
and that saw the movie
Literal: 'And that (s)he saw the movie?'
Interpretation: 'What about (s)he seeing the movie? Who said that?'

5.2.3 Impossible remnants

Impossible remnants for wh-TREQs in Spanish are exactly those constituents that cannot be otherwise topicalized out of a wh-question in this language. This shows that there's indeed structure inside the ellipsis site, and that the remnant has been topicalized out of it. This argument complements what I just presented in Section 5.2.2. In short, impossible remnants include TPs, sentential adverbs, and attributive adjectives. In what follows, I provide examples of each of them.

TPs

As (38) shows, TPs cannot be topicalized out of wh-questions:

(38) *[Compró un auto], quién __?
bought a car who
Intended: 'As for buying a car, who did it?'

As predicted, they cannot occur as wh-TREQs, as shown in (39):

(39) A: Sonia viajó a Buenos Aires.
Sonia traveled to Buenos Aires
'Sonia traveled Buenos Aires.'

B: *Y compró un auto?
and bought a car
Literal: 'And bought a car?'
Intended interpretation: 'What about buying a car? Who did that?'

Sentential adverbs

Example (40) shows that sentential adverbs cannot be topicalized out of wh-questions:

(40) *[Probablemente], quién va a renunciar __?
probably who is.going to quit
Intended: 'As for probably, who is going to probably quit?'

Likewise, (41) shows that they cannot occur as a wh-TREQs:

(41) A: Seguramente va a renunciar Sonia.
surely is.going to quit Sonia
'Sonia is going to quit for sure.'

B: *Y probablemente?
and probably
Literal: 'And probably?'
Intended interpretation: 'What about probably? Who is going to probably quit?'

Adjectives

Example (42) shows that post-nominal adjectives cannot be topicalized out of wh-questions:

(42) *[Joven], quién contrató a un amigo __?
old who hired DOM an friend
Intended: 'As for young, who hired a young friend?'

As predicted, they cannot occur wh-TREQs, as shown in (43):

(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) shows that pre-nominal adjectives cannot be topicalized out of wh-questions:

(44) *[Nuevo], quién contrató a un __ amigo ?
new who hired DOM a friend
Intended: 'As for new, who hired a new friend?'

Again, as predicted, they cannot occur wh-TREQs, as shown in (45):

(45) A: Sonia contrató a un viejo amigo.
Sonia hired DOM an old friend
'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?'

5.2.4 Interim Summary

In the previous two subsections, I provided evidence to show that there is a strict correlation between those constituents that can be topicalized and those constituents that can occur as remnants in wh-TREQs. The table in (46) summarizes what I presented in Section 5.2.2 and 5.2.3. These patterns provide evidence for the claim put forth here that there's structure inside the ellipsis site and that the remnant has been topicalized out of it, escaping deletion.

(46) Summary of Sections 5.2.2 and 5.2.3

Constituent		Topicalization out of a wh-question	Remnant in wh-TREQ
Subjects		✓	✓
DOs		✓	✓
IOs		✓	✓
PPs	Verbal	✓	✓
	Nominal	✓	✓
Infinitival Phrases		✓	✓
TPs		✗	✗
CPs		✓	✓
Adjuncts	Temporal	✓	✓
	Locative	✓	✓
Adverbs	Frequency	✓	✓
	Manner	✓	✓
	Sentential	✗	✗
Adjectives	Predicative	✓	✓
	Pre-nominal	✗	✗
	Post-nominal	✗	✗

In the next section I will explore root wh-TREQs in the context of long distance dependencies. In Section 5.2.5, I show that when the antecedent involves multiple levels of embedding, the ellipsis site is interpreted as if it contained the antecedent's entire structure, and not a short source, which I take to indicate that syntactic isomorphism between the antecedent and the ellipsis site is indeed necessary. Then, in Section 5.2.6, I discuss wh-TREQs in the context of islands. As I will show, wh-TREQs that would involve topicalization or wh-movement from inside an island are banned, which provides more evidence for the need for syntactic isomorphism between the antecedent and the ellipsis site. In addition, this also provides evidence for the claim that the remnant moves (i.e. is topicalized) out of the ellipsis site, and that there is wh-movement inside the ellipsis site.

5.2.5 Long-distance dependencies

Before going into detail regarding the different islands and how they interact with wh-TREQs, in this section I discuss long-distance dependencies and I provide evidence against

short sources as a possible source for the ellipsis site. Short sources (see, e.g., Szczegielniak 2008; Merchant 2001; Fukaya 2007; among others) have been proposed as a way to address the so-called 'island repair effects', i.e. cases in which island effects do not arise in the context of ellipsis. This is illustrated below, where (47a) shows that wh-extraction out of relative clause gives rise to ungrammaticality, but the sluice in (47b) is grammatical:

(47) a. *Contrataron a alguien que habla una lengua romance, pero no
they.hired DOM someone that speaks a language Romance but not
sé [qué lengua romance]$_i$ contrataron a alguien que habla t$_i$.
I.know what language romance they.hired DOM someone who speaks
Intended: 'They hired someone that speaks a Romance language, but I don't know [which Romance language]$_i$ they hired someone who speaks t$_i$.'

b. Contrataron a alguien que habla una lengua romance, pero no
they.hired DOM someone that speaks a language Romance but not
sé qué lengua romance.
I.know what language romance
'They hired someone that speaks a Romance language, but I don't know which Romance language.'

According to a move-and-delete approach to ellipsis, the fact that (47b) is grammatical is surprising, given this type of approach would need to posit (47a) as its source, hence the need to refer to ellipsis as a 'repair' mechanism that makes (47a) a grammatical sentence under ellipsis. Various mechanisms have been proposed to account for these 'repair' effects. Some of these mechanisms involve an ungrammatical structure whose source of ungrammaticality is removed/resolved under ellipsis, and other analyses actually involve 'evasion' strategies according to which islands don't even arise in the first place. Among the latter, copular/cleft sources have been proposed, which I already showed to be inadequate for independent reasons in Part I of this dissertation. What's relevant here is that short-sources have also been proposed to explain the patterns above. According to this approach, island repair is only apparent in that lack of island effects arise actually from a non-island containing source (48):

(48) ...pero no sé cuál (lengua romance) habla.
but not I.know which language romance (s)he.speaks
'...but I don't know [which romance language]$_i$ (s)he speaks t$_i$.'

Although a short source could account for the grammaticality of (47a) above, it cannot account for cases like (49a), which involve a subjunctive verb. Crucially, in this case a short source is ungrammatical, as shown in (49b):

(49) a. Quieren contratar a alguien que hable una lengua
they.want to.hired DOM someone that speaks.SUBJUNCTIVE a language
romance, pero no sé cuál lengua romance.
Romance but not I.know which language romance
'They want to hire someone that speaks a Romance language, but I don't which Romance language.'

b. ...*pero no sé cuál (lengua romance) hable.
but not I.know which language romance (s)he.speaks.SUBJUNCTIVE
Intended: '...but I don't know which romance language (s)he speaks.'

Furthermore, as I mentioned in Part I of this dissertation, my in-situ analysis of TP-Ellipsis predicts that sentences like (47b) should be grammatical, since there is no movement of the wh-phrase, therefore, there is no 'illicit' movement out of an island structure causing the ungrammaticality. However, there was no reason, in principle, to rule out short sources. In this section, I provide evidence that short sources are not possible. Namely, in wh-TREQs, when the antecedent contains multiple levels of embeddings, the ellipsis site is interpreted as if it included the entire structure in the antecedent, and not only the most embedded one.

First, the following examples show that wh-questions (50a) and subsequent topicalization (50b) can occur out of multiple layers of embeddings:

(50) a. [Qué] dijo Sonia que destruyó el perro __?
what said Sonia that destroyed the dog
'What$_i$ did Sonia say that the dog destroyed t$_i$?'

b. [El perro], [qué] dijo Sonia que __ destruyó __?
the dog what said Sonia that destroyed
'As for [the dog]$_i$, what$_j$ did Sonia say that he$_i$ destroyed t$_j$?'

Crucially, when a wh-TREQ occurs in a context where the topicalized XP would have moved from inside the embedded clause, it is interpreted as if it included the entire structure in the

antecedent, and not only the most embedded one (i.e. a short souce). This is shown in the only possible answer by A to B's wh-TREQ below:

(51) A: Sonia dijo que el gato destruyó el sillón.
Sonia said that the cat destroyed the sofa
'Sonia said that the cat destroyed the sofa.'

B: Y el perro?
and the dog
Literal: 'And the dog?'
Interpretation: 'What about [the dog]$_i$? What did Sonia say that he$_i$ destroyed?'

A: La cama.
the bed
Literal: 'The bed.'
Interpretation: 'Sonia said that the dog destroyed the bed.'

A': #La cama, pero no sé qué dijo Sonia.
the bed but not know what said Sonia
'The bed, but I don't know what Sonia said.'

For the sake of explicitness, the following sentence shows that the same pattern is found in non-elliptical contexts:

(52) B: Y el perro, qué dijo Sonia que destruyó?
and the dog what said Sonia that destroyed
Literal: 'And as for the dog, what did Sonia say that he destroy?'
Intended: 'What about [the dog]$_i$? What did Sonia say that he$_i$ destroyed?'

A: [La cama]$_i$, dijo Sonia que (el perro) destruyó t$_i$.
the bed said Sonia that the dog destroyed
'Sonia said that the dog destroyed the bed.'

A': #La cama destruyó el perro, pero no sé qué dijo Sonia.
the bed destroyed the dog but not I.know what said Sonia
'The dog destroyed the bed, but I don't know what Sonia said.'

Crucially, a non-elliptical 'short' continuation would be perfectly possible in the context of (51A) above, as (53B) shows:

(53) A: Sonia dijo que el gato destruyó el sillón.
Sonia said that the cat destroyed the sofa
'Sonia said that the cat destroyed the sofa.'

B: Y el perro, qué destruyó?
and the dog what he.destroyed
'And as for the dog$_i$, what did he$_i$ destroy?'

The fact that the only interpretation for (51B) is *What did Sonia say that the dog destroyed?*, as shown by the possible subsequent answer by A, means that its underlying structure is (54a), which includes the entire structure in the antecedent, and not the one in (54b), which only includes the most embedded part of the antecedent:

(54) a. B: Y el perro ~~qué dijo que destruyó~~?
and the dog what said that destroyed
'And as for the dog$_i$, ~~what did Sonia say that he$_i$ destroy~~?'

b. B: Y el perro ~~qué destruyó~~?
and the dog what destroyed
'And as for the dog$_i$ ~~what did he$_i$ destroy~~?'

Another example is provided below, which again shows that long-distance movement that doesn't involve island structures is perfectly possible: (55a) is an example of wh-fronting and (55b) is an example of topicalization.

(55) a. [Quién] escuchaste que __ comió pasta?
who you.heard that ate pasta
'Who$_i$ did you hear that t$_i$ ate pasta?'

b. [Pasta] escuchaste que Sonia comió __?
Pasta you.heard that Sonia ate
'As for salad$_i$, you heard that Sonia ate that$_i$.'

(56) shows that wh-movement and topicalization can indeed occur together out of embedded clauses that don't involve island structures:

(56) [Pasta], [quién] escuchaste que __ comió __?
pasta who you.heard that ate
'As for pasta$_j$, who$_i$ did you hear that t$_i$ ate that$_j$?'

Finally, as expected, wh-TREQs that would involve wh-fronting (inside the ellipsis site) and topicalization (outside the ellipsis site), are perfectly possible, as shown in (57):

(57) A: Escuché que Sonia comió pizza.
heard that Sonia ate pizza
'I heard that Sonia ate pizza.'

B: Y pasta?
and pasta
Literal: 'And pasta?'
Interpretation: 'As for pasta, who$_i$ did you hear that they$_i$ ate that?'

As the following example shows, the source of the wh-TREQ in (57B) can only be the sentence in (56) above, and not a short source, given that the continuation in (58) is ruled out in this context:

(58) A: #Sonia, pero no recuerdo qué escuché.
Sonia but not I.remember what I.heard
Intended: 'Sonia, but I don't remember what I heard.'

5.2.6 Islands

In this section I analyze the behavior of wh-TREQs in contexts of syntactic islands. I discuss complex NP islands, adjunct islands, relative clause islands, *whether* islands and wh-islands, all shown to be islands in Spanish (Stigliano and Xiang 2021). For each island, I show that topicalizations and wh-movement out of these structures are banned, and that when the antecedent contains one of these structures, wh-TREQs are impossible. This provides 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 syntactically isomorphic to its antecedent.

Complex NP Islands

Topicalizations out of complex NPs are ungrammatical, giving rise to a complex NP island, as illustrated in (59b). For the sake of explicitness, below I show that when the topicalization doesn't involve an island, the sentence is grammatical as in (59a):

(59) a. [Pasta], Sonia escuchó que Bruno comió __. ✓
pasta Sonia heard that Bruno ate
'As for 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: 'As for 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's syntactically identical to its antecedent's, then we should expect wh-TREQs in the context of a complex NP not to be allowed. This prediction is borne out, as the following example shows:

(60) 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 source of (60B) would be the ungrammatical structure in (61):

(61) *[Pasta], quién escuchó [$_{NP}$ el rumor de que comiste __]. ✗
pasta who heard the rumor of that ate
Intended: 'As for pasta, who heard the rumor that you ate that?'

Another interesting pattern arises when material outside of the island is topicalized. As expected, this is perfectly possible, as shown in (62):

(62) [A Bruno], le contaste __ [$_{NP}$ el rumor de que comí pasta]. ✓
to Bruno to.him told the rumor of that ate pasta
'As for Bruno, you told him the rumor that I ate pasta.'

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

(63) 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 interpretation: 'What about Bruno? What$_i$ did you tell him the rumor that I ate t$_i$?'

The ungrammaticality of (63) is not due to the topicalization, since it doesn't cross an island boundary, as (62) above shows, but to the wh-movement, which gives rise to an ungrammatical sentence, as in (64):

(64) *[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$_i$?'

In other words, the source of (63B) would be the ungrammatical structure in (65), whose ungrammaticality is given by the wh-movement, and not the topicalization:

(65) *[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 provides evidence that there's indeed wh-movement inside the ellipsis site, and that the wh-phrase does not stay in-situ in this type of ellipsis.

Finally, for the sake of completeness, the following example shows that when both the topicalized XP and the wh-phrase move from inside the island, the result is ungrammatical:

(66) *[Pasta], [quién] escuchaste [$_{NP}$ el rumor de que __ comió __]?
pasta who you.heard the rumor of that ate
Intended: 'As for salad$_i$, who$_j$ did you hear the rumor that t$_j$ ate that$_i$?'

Likewise, as (67B) shows, wh-TREQs are ungrammatical in these contexts, given that the source would have been (66):

(67) 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 interpretation: 'What about pasta? Who$_i$ did you hear the rumor that they$_i$ ate that?'

To sum up, I showed that: (i) the remnant is topicalized and moves out of the ellipsis site; (ii) the ellipsis site contains a moved wh-phrase; and (iii) syntactic identity between the ellipsis site and its antecedent is necessary. In the rest of this subsection I will replicate the same argumentation for other islands such as adjunct islands, *whether* islands, wh-islands, and relative clauses islands.

Adjunct Islands

Topicalizations out of adjuncts are ungrammatical, as illustrated in (68):

(68) *[Pasta], Sonia te felicitó [$_{\text{Adjunct}}$ porque comiste __].
pasta Sonia CL.2S congratulated because you.ate
Intended: 'As for pasta, Sonia congratulated you because you ate that.'

As explained above for complex NP islands, we expect wh-TREQs that would involve a topicalization from inside the adjunct clause to be ungrammatical. This prediction is borne out, as the following example shows:

(69) A: Sonia me felicitó porque comí pizza.
Sonia CL.1S congratulated because I.ate pizza
'Sonia congratulated me because I ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Intended interpretation: 'What about pasta? Who congratulated you because you that?'

That is, the source of (69B) would be the ungrammatical structure in (70):

(70) *[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?'

Similarly to complex NPs, topicalization of material outside the island is perfectly possible, as shown in (71):

(71) [A Bruno], lo felicitaste __ [Adjunct porque comió pasta].
DOM Bruno CL.3S congratulated because he.ate pasta
'As for Bruno, you congratulated him because he ate pasta.'

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

(72) A: La felicitaste a Sonia porque comió pizza.
CL.3S congratulated 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$_i$?'

The ungrammaticality of (72) is not due to the topicalization, since it doesn't cross an island boundary, as (71) above shows, but to the wh-movement, which gives rise to an ungrammatical sentence, as in (73):

(73) *[Qué] lo felicitaste 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$_i$?'

That is, the source of (72B) would be the ungrammatical structure in (74), whose ungrammaticality is given by the wh-movement, and not the topicalization:

(74) *[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$_i$?'

I take this as providing evidence that there's indeed wh-movement inside the ellipsis site, and that the wh-phrase does not stay in-situ in this type of ellipsis.

Finally, for the sake of completeness, the following example shows that when both the topicalized XP and the wh-phrase move from inside the island, the result is also ungrammatical, as expected:

(75) *[Pasta], [quién] te enojaste [Adjunct porque __ comió __]?
pasta who CL.2SG got.mad because ate
Intended: 'As for pasta, who$_i$ did you get mad because t$_i$ ate that?'

My analysis predicts that wh-TREQs will be ungrammatical in these contexts, given that the source would have been (74) above. This prediction is borne out, as (76B) shows:

(76) A: Me enojé porque Sonia comió pizza.
CL.1SG got.angry because Sonia ate pizza
'I got angry because Sonia ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Intended interpretation: 'What about pasta? Who$_i$ did you get mad because t$_i$ ate that?'

Whether Islands

Topicalizations out of embedded polar questions (i.e. *whether* clauses, or WC in short) are ungrammatical, giving rise to a *whether* island, as illustrated in (77):

(77) *[Pasta], Sonia preguntó [WC si comiste __].
pasta Sonia asked whether you.ate
Intended: 'As for pasta, Sonia asked whether you ate that.'

As explained above for complex NP and adjunct islands, we expect wh-TREQs that would involve a topicalization from inside the *whether* clause to be ungrammatical as well, given that this would involve an island violation inside the ellipsis site. This prediction is borne out, as the following example shows:

(78) A: Sonia preguntó si comí pizza.
Sonia asked whether I.ate pizza
'Sonia asked whether I ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Intended interpretation: 'What about pasta? Who asked whether you ate that?'

In other words, the source of (78B) would be the ungrammatical structure in (79):

(79) *[Pasta], quién preguntó [$_{WC}$ si comiste __].
pasta who asked whether you.ate
Intended: 'As for pasta, who asked whether you ate that?'

Similarly to complex NPs and adjuncts, topicalization of material outside the island is perfectly possible, as shown in (80):

(80) [A Bruno], le pregunté __ [$_{WC}$ si comiste pasta].
to Bruno to.him I.asked whether you.ate pasta
'As for Bruno, I asked him whether you ate pasta.'

However, when this is tested in the context of a wh-TREQ, the result is ungrammatical, as shown in (81):

(81) A: Le pregunté a Sonia si comiste pizza.
to.her asked to Sonia whether you.ate pizza
'I asked Sonia whether you ate pizza.'

B: *Y a Bruno?
and to Bruno
Literal: 'And Bruno?'
Intended interpretation: 'What about Bruno? What$_i$ did you ask him whether I ate t$_i$?'

The ungrammaticality of (81) is not due to the topicalization, since it doesn't cross an island boundary, as (80) above shows, but to the wh-movement, which gives rise to an ungrammatical sentence, as in (82):

(82) *[Qué] le preguntaste a Bruno [$_{WC}$ si comí __]?
what to.him asked to Bruno whether you.ate
Intended: 'What$_i$ did you ask Bruno whether I ate t$_i$?'

That is, the source of (81B) would be the ungrammatical structure in (83), whose ungrammaticality is given by the wh-movement, and not the topicalization:

(83) *[A Bruno], [qué] le preguntaste __ [$_{WC}$ si comí __]?
to Bruno what to.him asked whether I.ate
Intended: 'As for Bruno, what$_i$ did you ask him whether I ate t$_i$?'

Crucially, this provides evidence that there's indeed wh-movement inside the ellipsis site, and that the wh-phrase does not stay in-situ in this type of ellipsis.

Finally, for the sake of completeness, the following example shows that when both the topicalized XP and the wh-phrase move from inside the island, the result is also ungrammatical, as expected:

(84) *[Pasta], [quién] preguntaste [$_{WC}$ si __ comió __]?
pasta who you.asked whether ate
Intended: 'As for pasta, who$_i$ did you ask whether t$_i$ ate that?'

As expected, wh-TREQs are ungrammatical in these contexts, as (85B) shows (i.e. the source would have been (83) above):

(85) A: Pregunté si Sonia comió pizza.
I.asked whether Sonia ate pizza
'I asked whether Sonia ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Int. interpretation: 'As for pasta, who$_i$ did you ask whether they$_i$ ate that?'

Interrogative (*wh*-) Islands

Topicalizations out of embedded wh-questions are ungrammatical, giving rise to a *wh*-island, as illustrated in (86):[2]

(86) *[Pasta], Sonia preguntó [$_{Wh}$ cuándo comió Bruno __].
pasta Sonia asked when ate Bruno
Intended: 'As for pasta, Sonia asked when Bruno ate that that.'

As explained above for complex NP, adjunct and *whether*-islands, we expect wh-TREQs that would involve a topicalization from inside the embedded wh-question to be ungrammatical as well, given that this would involve an island violation inside the ellipsis site. This prediction is borne out, as the following example shows:

(87) A: Sonia preguntó cuándo comí pizza.
Sonia asked whether I.ate pizza
'Sonia asked whether I ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Intended interpretation: 'What about pasta? Who asked when you ate that?'

In other words, the source of (87B) would be the ungrammatical structure in (88):

(88) *[Pasta], quién preguntó [$_{Wh}$ cuándo comiste __]?
pasta who asked when you.ate
Intended: 'As for pasta, who asked when you ate that?'

Similarly to the other islands analyzed above, topicalization of material outside the island is perfectly possible, as shown in (89):

2. Note that in the examples in this subsection the subject of the embedded clause is post-verbal, due to obligatory subject-inversion in questions in Spanish, as shown below:

(i) [Pasta], [$_{Wh}$ cuándo comió Bruno __]?
pasta when ate Bruno
Intended: 'As for pasta, when did Bruno eat that that?'

(89) [A Bruno], le pregunté __ [Wh cuándo comiste pasta].
to Bruno to.him I.asked when you.ate pasta
Intended: 'As for Bruno, I asked him when you ate pasta.'

However, when this is tested in the context of a wh-TREQ, the result is ungrammatical, as shown in (90):

(90) A: Le pregunté a Sonia 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$_w$hen I ate t$_i$?'

The ungrammaticality of (90) is not due to the topicalization, since it doesn't cross an island boundary, as (89) above shows, but to the wh-movement, which gives rise to an ungrammatical sentence, as in (91):

(91) *[Qué] le preguntaste Bruno [Wh cuándo comí __]?
what to.him asked Bruno when I.ate
Intended: 'What$_i$ did you ask Bruno when I ate t$_i$?'

That is, the source of (90B) would be the ungrammatical structure in (92), whose ungrammaticality is given by the wh-movement, and not the topicalization:

(92) *[A Bruno], [qué] le preguntaste __ [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$_i$?'

Crucially, this provides evidence that there's indeed wh-movement inside the ellipsis site, and that the wh-phrase does not stay in-situ in this type of ellipsis.

Finally, for the sake of completeness, the following example shows that when both the topicalized XP and the wh-phrase move from inside the island, the result is also ungrammatical, as expected:

(93) *[Pasta], [quién] preguntaste [$_{Wh}$ cuándo __ comió __]?
pasta who you.asked when ate
Intended: 'As for pasta, who$_i$ did you ask when t$_i$ ate that?'

As expected, wh-TREQs are ungrammatical in these contexts, as (94B) shows (i.e. the source would have been (92) above):

(94) A: Pregunté cuándo comió pizza Sonia.
I.asked when ate pizza Sonia
'I asked when Sonia ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Int. interpretation: 'What about pasta? Who$_i$ did you ask when t$_i$ ate that?'

Relative Clause Islands

Topicalizations out of embedded relative clauses are also ungrammatical, giving rise to a relative-clause island, illustrated in (95):

(95) *[Pasta], Sonia me habló sobre la persona [$_{RC}$ que comió __].
pasta Sonia talked to.me about the person that ate
Intended: 'As for pasta, Sonia talked to me about person that that.'

We expect wh-TREQs that would involve a topicalization from inside a relative clause to be ungrammatical as well, given that this would involve an island violation inside the ellipsis site. This prediction is borne out, as the following example shows:

(96) A: Sonia me habló sobre la persona que comió pizza.
Sonia talked to.me about the person that ate pizza
'Sonia talked to me about the person that ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Intended interpretation: 'What about pasta? Who talked to you about the person that ate that?'

In other words, the source of (96B) would be the ungrammatical structure in (97):

(97) *[Pasta], quién te habló sobre la persona [RC que comió __].
pasta who to.you talked about the person that ate
Intended: 'As for pasta, who talked to you about the person that ate that?'

Similarly to the other islands analyzed above, topicalization of material outside the island is perfectly possible, as shown in (98):

(98) [A Bruno], le hablaste __ sobre la persona [RC que comió pasta].
to Bruno to.him talked about the person that ate pasta
'As for Bruno, you talked to him about the person that ate pasta.'

However, when this is tested in the context of a wh-TREQ, the result is ungrammatical, as shown in (99):

(99) A: Le hablé a Sonia sobre la persona 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$_i$?'

The ungrammaticality of (99) is not due to the topicalization, since it doesn't cross an island boundary, as (98) above shows, but to the wh-movement, which gives rise to an ungrammatical sentence, as in (100):

(100) *[Qué] le hablaste a Bruno sobre la persona [RC 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$_i$?'

That is, the source of (99B) would be the ungrammatical structure in (101), whose ungrammaticality is given by the wh-movement, and not the topicalization:

(101) *[A Bruno], [qué] le hablaste __ sobre la persona [RC 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$_i$?'

Crucially, this provides evidence that there's indeed wh-movement inside the ellipsis site, and that the wh-phrase does not stay in-situ in this type of ellipsis.

5.2.7 Interim Summary

In this section, I presented evidence from five types of islands (complex NP islands, adjunct islands, *whether* islands, wh-islands and relative clause islands) that shows that: (i) the remnant is topicalized and moves out of the ellipsis site; (ii) the ellipsis site contains a moved wh-phrase; (iii) syntactic identity between the ellipsis site and its antecedent is necessary. The patterns analyzed are summarized in the Table in (102). In short, I found that wh-TREQs are impossible in those contexts in which topicalizations are impossible, or wh-movement is impossible, or both.

(102) Summary of Section 5.2.6 and 5.2.5

	topicalization	wh-movement	**wh-TREQs**
Pattern 1	✓	✓	✓
Pattern 2	✗	✓	✗
Pattern 3	✓	✗	✗
Pattern 4	✗	✗	✗

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

5.2.8 Connectivity effects

In this section I provide further evidence that syntactic identity between the ellipsis site and the antecedent is needed to license wh-TREQs. This evidence comes from various connectivity effects. In particular, I analyze Case and P-Omission patterns, voice mismatches, and spray/load-alternations. It's worth noting that, following my argumentation in Chapter 3,

the fact that P-Omission is not allowed in wh-TREQs provides further evidence that the remnant has moved out of the ellipsis site.

Case-omission

As the following example shows, case-omission is not possible in wh-TREQs, that is, DOM cannot be absent in the remnant:

(103) 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?'

As I briefly discussed at the end of Chapter 3, the impossibility of case-omission follows trivially if the ellipsis site contains an elided version of the relevant case assigner (here, the verb). Furthermore, given the nature of DOM, this case marking needs to be present even in contexts in which there is no DOM in the antecedent, as in (104):

(104) 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 DOM is assigned to the remnant, regardless of the (lack of) case marking in the correlate in the antecedent.

P-Omission

As the following example shows, P-Omission is not allowed in wh-TREQs:

(105) 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?'

In Chapter 3, I proposed and provided evidence for the following generalization:

(106) The *P-(reposition) Omission Generalization* for Spanish:

P-Omission in ellipsis in Spanish is only allowed when the following two conditions are met: (a) the remnant's correlate in the antecedent does not move, and (b) the remnant does not move.

At first sight, the wh-TREQ in (105A) could be considered a counterexample for (106), given that the remnant's correlate in the Antecedent (*con Bruno* 'with Bruno') in (105A) stays in situ. However, I take this example to be further evidence that the remnant *con Luciano* 'with Luciano' is topicalized and moves to the left-periphery, complying with (106) (similar to the cases of pseudostripping discussed in Chapter 3). That is, the ban on P-Omission in wh-TREQs comes from the ban on P-Stranding in Spanish, i.e. the PP remnant moves, and it must pied-pipe the preposition in this language:

(107) a. [Con Luciano], quién habló __?
with Luciano who talked
Literal: '[With Luciano]$_i$, who talked t$_i$?'

b. *[Luciano], quién habló con __?
Luciano who talked with
Literal: '[Luciano]$_i$, who talked with t$_i$?'

Furthermore, this pattern shows that there should be strict isomorphism between the Antecedent and the E-site, and that alternative structures (such as copular/cleft sources) cannot be the source of ellipsis. For the sake of explicitness, the following example shows that a copular/cleft structure can indeed occur as an overt continuation to A's utterance:

(108) 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 respect, if cleft/copular sources were possible sources for the ellipsis site, the availability of (108B) as an overt continuation would predict that the P-less version of (105B) above should be grammatical, contrary to fact.

Additionally, P-Omission patterns can also provide evidence of the structure inside the ellipsis site in cases of CP-Ellipsis. In particular, when the remnant of a wh-TREQ contrasts with the subject and there is a PP in the antecedent, the subsequent answer to B's elliptical question cannot omit the preposition, as shown below in A's answer to B's wh-TREQ:

(109) A: Sonia habló con Bruno.
Sonia talked with Bruno
'Sonia talked with Bruno.'

B: Y Luciano?
and Luciano
Literal: 'And Luciano?'
Interpretation: 'What about Luciano? Who did he talk with?

A: *(Con) Danilo.
with Danilo
'With Danilo.'

The ban on P-Omission in A's answer to B's wh-TREQ provides further evidence that the ellipsis site in (109B) contains a wh-question with a moved wh-phrase. That is, I propose that (110) is the source of (109B):

(110) Y [Luciano], [con quién] __ habló __?
and Luciano with who talked
'And as for Luciano, [with whom]$_i$ did he talk t$_i$?'

In other words, A's answer to B's wh-TREQ shows that the wh-phrase has moved, creating a context similar to the one in fragment answers analyzed in Chapter 3, explaining, then, the unavailability of P-Omission in A's answer to B's wh-TREQ in (109).

Voice mismatches

Another piece of evidence for an ellipsis analysis of wh-TREQs and for the need for syntactic identity between the ellipsis site and its antecedent comes from the unavailability of voice mismatches (Merchant 2013). As the following example shows, an active sentence (111B) cannot be elided if the antecedent is a passive sentence (111A). Crucially, a non-elliptical version of (111B) is possible in this context (111B').

(111) 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:

(112) 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.'

Similar to what I proposed for the patterns of P-Omission (in particular see the argumentation around example (109) above), A' answer to B's wh-TREQ in (112) shows that the ellipsis site in (112B') should contain a passive sentences, like the one in (113), which makes the preposition *por* 'by' obligatory in A's answer:

(113) Y el auto, por quién fue destruído?
and the car by who was destroyed
'What about the car? By whom was it destroyed?'

In other words, a source like the one in (114) is not possible in the context above, otherwise a P-less answer by A would be possible, contrary to fact:

(114) Y el auto, quién lo destruyó?
and the car who CL destroyed
'What about the car? Who destroyed it?'

For the sake of completeness, a passive source given an active antecedent is also banned:

(115) 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?'

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 (116):

(116) a. *with* variant:

i. Sonia loaded the truck with books.

ii. Sonia cargó el camión con libros.
Sonia loaded the truck with books
'Sonia loaded the truck with books.'

b. *onto* variant:

i. Sonia loaded books onto the truck.

ii. 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 (117) show for sluicing:[3]

(117) a. i. *Sonia loaded some truck with books, but I don't know onto which truck.

ii. *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.'

b. i. *Sonia loaded something onto the truck but I don't know with what.

ii. *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 (118):

(118) a. i. Sonia loaded some truck with books, but I don't know which truck.

ii. 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. i. Sonia loaded something onto the truck but I don't know what.

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

(i) a. i. Sonia loaded some truck with books, but I don't know onto which truck she loaded the books.
ii. 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. i. Sonia loaded something onto the truck but I don't know with what she loaded the truck.
ii. 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.'

ii. 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 pure semantic approaches.

Importantly, *spray/load* alternations are also disallowed in wh-TREQs. This is not due to some question/answer incongruence, given that the non-elliptical counterpart of B's wh-TREQ is possible, as shown in (119B') and (120B'):

(119) 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?'

(120) 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?'
Int. interpretation: '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?'

For the sake of completeness, the only possible option for wh-TREQs is the one in which there's structural matching between the antecedent and the ellipsis site:

(121) 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?'
Interpretation: '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?'

(122) 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?'
Intended Interpretation: 'What about magazines? Where did she load them?'

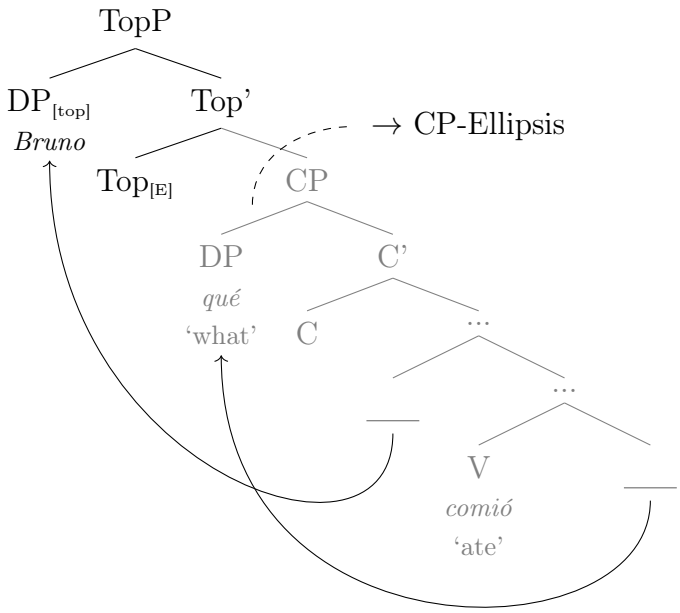
B": Y en el auto?
and in the car
Literal: 'And onto the car?'
Intended Interpretation: 'What about the cat? What did she load there?'

Again, this shows that some type of strict syntactic identity is needed in this type of ellipsis.

5.2.9 Interim summary

So far I've provided evidence to show that (i) there is structure inside the ellipsis site and wh-TREQs are the result of ellipsis, (ii) the ellipsis site contains a wh-question, (iii) the remnant is topicalized out of the ellipsis site, and (iv) some kind of syntactic identity/isomorphism is needed. My proposal is summarized below in (123). In sum, wh-TREQs are a type of CP-Ellipsis triggered by an [E]-feature on Top, which elides its entire complement (i.e. the CP, which contains a wh-question), and the remnant is a topicalized XP that moves out of the ellipsis site. 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 (123) is derived.

(123) B: Y [Bruno$_{top}$] ⟨~~qué~~$_i$ __ ~~comió~~ t$_i$⟩?
and Bruno ⟨~~what~~ ~~ate~~ ⟩
'And Bruno ~~what did he eat~~?'



5.3 Mixed-identity requirements

In this section I will put forth a possible implementation for wh-TREQs in particular, and CP-ellipsis in general. On the one hand, I argue that syntactic identity licenses ellipsis of the lower portion of the structure (i.e. the TP). Evidence for this claim comes mostly from some of the data presented in the previous section, such as connectivity effects (i.e. the unavailability of P-Omission, voice mismatches, and spray/load alternations), and the patterns discussed with respect to islands. This proposal is also in line with what I proposed in Chapter 3 with respect to the licensing condition of TP-Ellipsis. On the other hand, I argue that a strict syntactic identity condition cannot apply to the entire structure that's subject to deletion (i.e. the CP). The main reason behind this is that CP-ellipsis involves deletion of a wh-phrase, even though there is no indefinite or wh-phrase in the antecedent. This presents some challenges for an account solely based on strict syntactic identity. In particular, the problem is that *qué* 'what' gets deleted but its correlate is the NP *pizza* 'pizza'

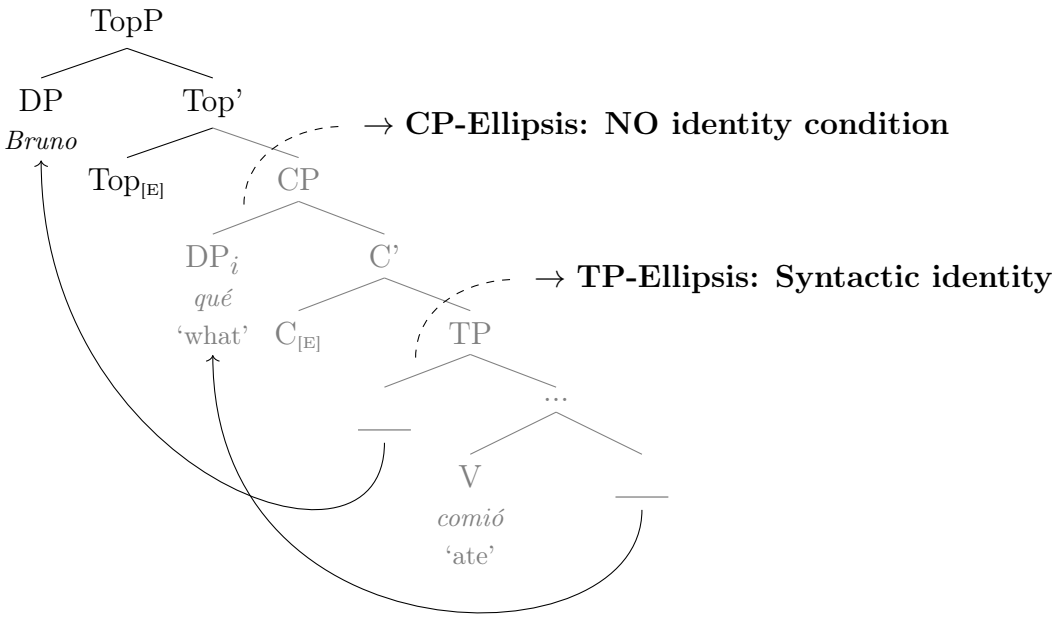
in the antecedent; crucially, *qué* 'what' and *pizza* 'pizza' are not syntactically identical:

(124) A: Sonia comió pizza
Sonia ate pizza
'Sonia ate pizza.'

B: Y [Bruno$_{\text{Top}}$] ⟨$_{\text{E-site}}$ ~~qué$_i$~~ ___ ~~comió~~ t$_i$⟩?
and Bruno ~~what~~ ~~ate~~
'And Bruno ~~what did he eat~~?'

Given that an identity condition only based on strict syntactic identity would predict that wh-TREQs are not possible, I propose that this condition only applies to the lower portion of the structure, and that only general conditions governing discourse congruence are at play to determine what can be inside the ellipsis site between the TP and the CP. In other words, there is no specific licensing condition for eliding material above the TP. Evidence for this claim is provided in Section 5.3.3. As I will further discuss below, I implement this hypothesis proposing the existence of two [E] features—one on C and one on Top—that impose two different identity conditions to their complements. This is schmatized in (125):

(125)



5.3.1 Deriving CP-Ellipsis

Two [E]-features

As I pointed out above, I claim that there are two different [E]-features that impose two different identity conditions. This idea is inspired by the proposal put forth in Aelbrecht (2010), who assumes that for each elliptical phenomenon there is a specific [E]-feature in the lexicon. In this respect, I propose the existence of (at least) two [E]-features that impose two different licensing conditions and trigger two different deletion mechanisms. I will refer to them as [E^{syn}] and [E], respectively.

Following Aelbrecht (2010), each [E]-feature is only compatible with certain heads (this is encoded by the *selectional* features of each [E]-feature, as it will be explained below). I claim that [E^{syn}] is compatible with C (not with Top), and triggers TP-Ellipsis, as proposed in Chapter 3, repeated in (125) below, with two minor modifications: (a) I replaced [E] with [E^{syn}] from the original formulation, and (b) I added [Top]-marking as another way to avoid being [†]-marked. In addition, to be able to differentiate the [†]-feature assigned by [E^{syn}] from the one assigned by [E], I added that superscript:

(125) Assignment, licensing and phonology of [†^{syn}]:

a. Assign [†^{syn}] to every head h in the complement of a head $z_{[\mathrm{E^{syn}}]}$ iff h is not dominated by an [F]-marked node or a [Top]-marked node.

b. A head $h_{[\dagger^{\mathrm{syn}}]}$ is licensed iff it has an identical correlate h' in its antecedent A.[4]

c. Delete the Q-feature on each head $h_{[\dagger^{\mathrm{syn}}]}$.

In addition, [E] is only compatible with Top (not with C), and triggers CP-ellipsis. Parallel to [†^{syn}], there's a [†]-feature assigned by [E]. As can be observed in (126), there is no identity requirement that [†] imposes:[5]

4. See the definition of *identity* in Chapter 3.

5. Additionally, this [†] can be assigned to [F]-marked constituents (contrary to what happens with [†^{syn}], as discussed above and in Chapter 2). This ensures that the moved wh-phrase—which is usually claimed to be [F]-marked—will get assigned [†] and deleted.

(126) Assignment, licensing and phonology of [†]:

a. Assign [†] to the phrase XP in the complement of a head $z_{[E]}$.

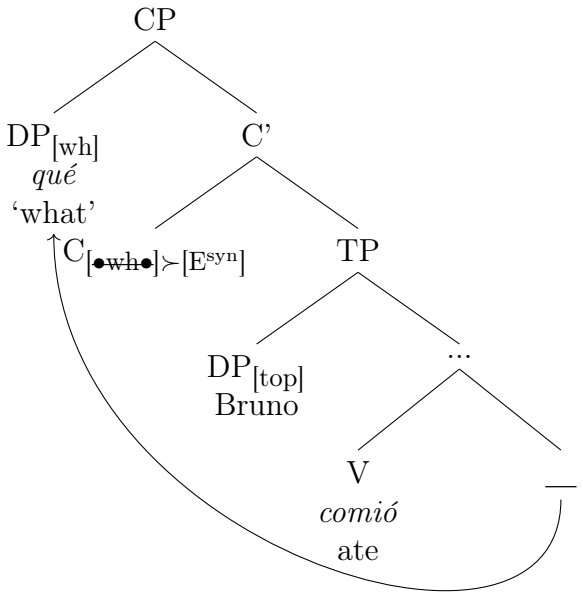
b. Delete the Q-features on all heads dominated by $XP_{[\dagger]}$.

Below I provide a step-by-step derivation of an example of CP-Ellipsis such as the one in (124) above, repeated below in (127):

(127) A: Sonia comió pizza. B: Y [Bruno$_{top}$] $\langle_{\text{E-site}}$ ~~qué~~$_i$ __ ~~comió~~ t$_i\rangle$?
Sonia ate pizza and Bruno ~~what~~ ~~ate~~
'Sonia ate pizza.' 'And Bruno ~~what did he eat~~?'

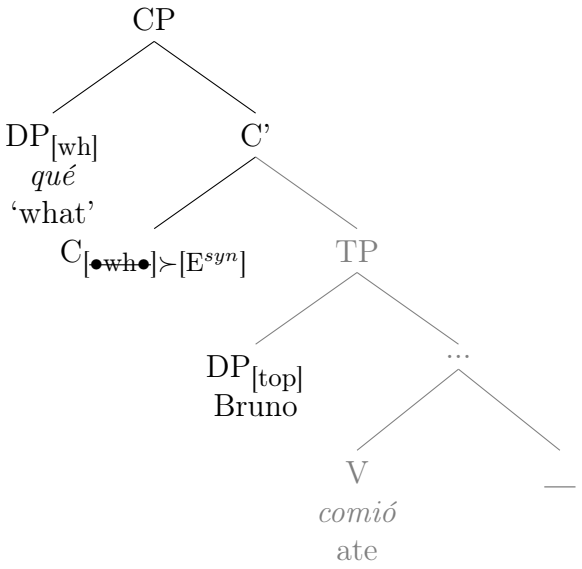
I simplify some of the derivations by not showing all the steps of the 'TP-Ellipsis' part, such as [†^{syn}]-assignment, etc. (details of this part of the derivation can be found in Chapter 3). I represent deletion (of P-features) (i.e. not pronunciation) with gray text instead. As I argued in Chapter 3, the only possible order of the features on C in Spanish is [wh]≻[E], which means that the wh-phrase will move first, as shown in (128), and then ellipsis is triggered by the [E^{syn}]-feature on C, as shown in (129). In Step 1 (128), wh-movement of *qué* 'what' is triggered by a feature [•wh•] on C:

(128) Step 1: Wh-movement



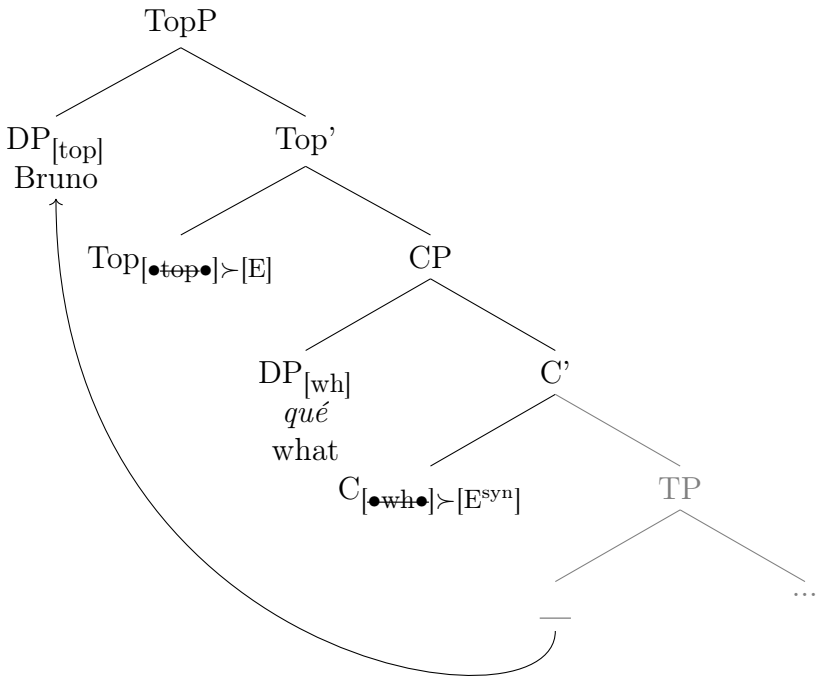
After the wh-phrase moves and the [•wh•] is satisfied, ellipsis is triggered by the [E^{syn}]-feature, as shown in Step 2 (129). This means that every head in the complement of C is assigned [†^{syn}] and must find an identical correlate in the antecedent, which they do. It's worth noticing that the subject *Bruno* is not [†^{syn}]-marked due to being [Top]-marked:

(129) Step 2: TP-Ellipsis



Once ellipsis of the TP is triggered, the Top head bearing the [E] feature is merged, as shown in Step 3 (130). This head triggers the topicalization of the subject 'Bruno':

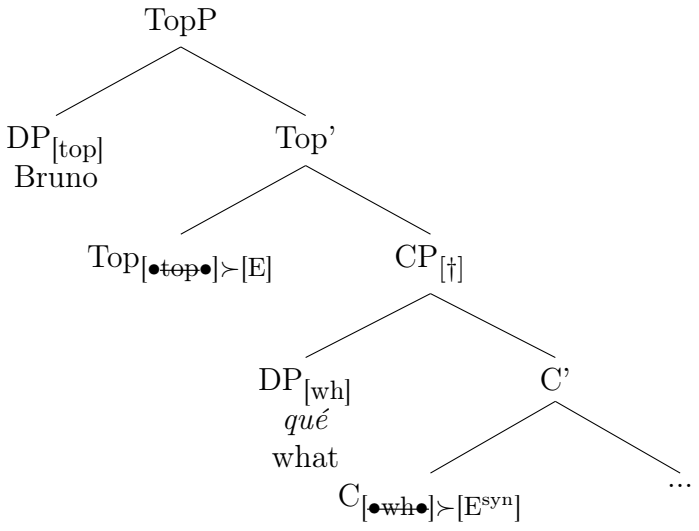
(130) Step 3: Topicalization



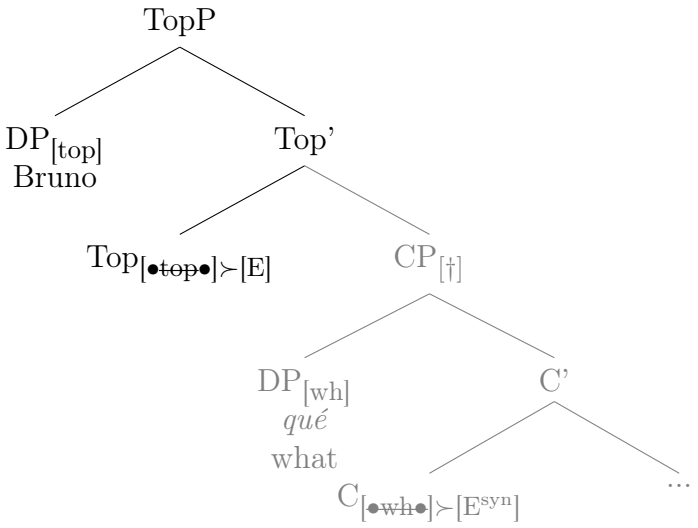
The final step is shown in (131). First, [†] is assigned to the CP in the complement of the Top head, which in turn enforces deleting the *P*-feature of all the heads that it dominates, resulting in the ellipsis of the entire CP:

(131) Step 4: CP-Ellipsis

a. Step 4.1: [†]-assignment



b. Step 4.2: CP-Ellipsis



It's worth noticing that the heads whose P-feature is being deleted in this step are those of the wh-phrase and C, given that all the other heads have already been subject to P-deletion when TP-Ellipsis took place.

The licensing of [E]

As the unavailability of P-Omission, voice mismatches and spray/load alternations show, CP-Ellipsis *requires* some kind of syntactic identity. I propose that this is obtained if CP-Ellipsis depends on TP-Ellipsis (which imposes syntactic identity) applying first. Here I formalize this idea by proposing that the [E] depends on the presence of [E^{syn}] below, and I follow Aelbrecht (2010) in that ellipsis is licensed via an Agree relation. I claim that the particulars of this Agree relation can be subject to cross-linguistic variation. For instance, based on the data shown so far, in Spanish only the [E]-feature needs to enter into an Agree relation with other features. More specifically, Aelbrecht proposes that "there is an ellipsis feature (bundle) in the lexicon for each type of elliptical construction." (2010, p. 96). With regard to the analysis developed here, this means that each [E]-feature (i.e. [E$^{\text{syn}}$] and [E]) will consist of different feature bundles. The author claims that the (different) [E] feature(s) are "only compatible with certain heads, a property that is encoded by its *selectional (sel)* features."

(2010, p. 96; emphasis mine). Furthermore, according to her, the different [E]-features also have an "*inflectional (infl)* feature that corresponds to the *category (cat)* feature of a certain head, the ellipsis licensor." (2010, p. 96; emphasis mine). This means that the [E]-features will only be licensed if they establish a checking relation with their licensor. The differences between Aelbrecht's analysis and the analysis developed here are that (i) the Agree relation holds for the standard directionality (that is, probing down, instead of proving up, as she proposes), and that (ii) an [E]-feature can also agree with another [E]-feature. This is shown in (132). I claim here that, in Spanish, [E^{syn}] doesn't have any inflectional features (i.e. it doesn't need to enter an Agree relation), but this could be subject to crosslinguistic variation.

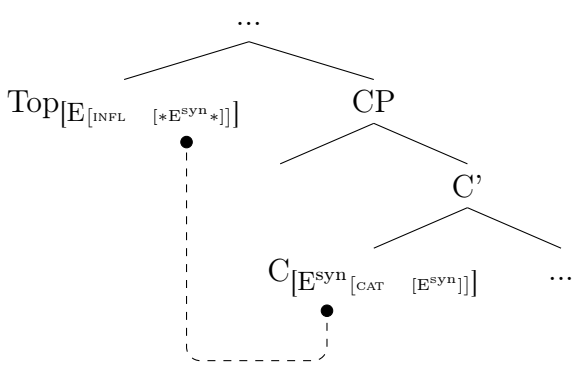
(132) Typology of [E]-features

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

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

The agreement relation established between [E] and [E^{syn}] is shown in (133), where I simplify the matrices above, including only the relevant features. It's worth mentioning that the [E^{syn}] feature on C is still accessible to further operations such as agreement with the [E]-feature on Top later in the derivation:

(133)



Before concluding this section, it's important to briefly discuss what the possibilities of crosslinguistic variation are with respect to the existence of different [E]-features, as proposed

here. The particular construction I am exploring here (i.e. TREQs) uses [E] in a very constrained way, requiring it to enter into an Agree relation with an [E^{syn}] lower down in the structure. However, some people 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 this existed, we should expect to find a language in which anything can be elided in any context. As far as I know, nobody has reported that such unconstrained ellipses exist. In this respect, my hypothesis is that a fully unconstrained [E]-feature shouldn't be possible at all. In this regard, my hypothesis is that an [E] feature should either impose (some type of) an identity requirement with a linguistic antecedent, or agree with a feature that imposes such requirements, or both. Concretely, this would mean that [E]-features must have, directly or indirectly, an antecedent.

Typology of C and Top heads

Following the ideas developed in Chapter 3, the implementation developed in this chapter puts forth a typology of Top (and C) heads. Below I summarize the different types of features on C and Top, and the structures that arise from them:

(134) Typology of C heads for Spanish[6]

C head	**Phenomenon**
$C_{[\bullet wh \bullet] \succ [E^{syn}]}$	TP-Ellipsis, no P-Omission
$C_{[E^{syn}]}$	TP-Ellipsis, P-Omission
$C_{[\bullet wh \bullet]}$	wh-questions
$C_{[E^{syn}] \succ [\bullet wh \bullet]}$	not available

6. Recall that—as I discussed in Chapter 3—a configuration like $C_{[E^{syn}] \succ [\bullet wh \bullet]}$ is available in other languages, like English.

(135) Typology of Top heads for Spanish:

Top head	**Phenomenon**
$\text{Top}_{[\bullet\text{top}\bullet]\succ[\text{E}]}$	CP-ellipsis
$\text{Top}_{[\bullet\text{top}\bullet]}$	topicalizations
$\text{Top}_{[\text{E}]\succ[\bullet\text{top}\bullet]}$	not available

5.3.2 On the 'optionality' of deleting the wh-phrase

The claim that CP-Ellipsis depends on TP-Ellipsis, but not the other way around, predicts that there should be cases similar to the ones analyzed so far, but in which only TP-Ellipsis occurs, and not CP-Ellipsis. These cases would look like sluicing with two remnants (i.e. a wh-phrase, as in regular sluicing, and a topicalized XP). This prediction is borne out, as shown in the examples below:

(136) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y Bruno qué?
and Bruno what
Literal: 'And Bruno what?'
Interpretation: 'What about Bruno? What did he eat?'

A: Pasta.
pasta
'Pasta.'

(137) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y pasta quién?
and pasta who
Literal: 'And pasta who?'
Interpretation: 'What about pasta? Who ate that?'

A: Bruno.
Bruno
'Bruno.'

Although this gives the illusion that the 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). Given that I've analyzed TP-Ellipsis in depth in Part I of this dissertation, I won't discuss them any further here.

5.3.3 On the absence of an identity condition to license CP-Ellipsis

In this section, I discuss some examples that support my claim that there doesn't need to be an additional identity condition to license ellipsis of the material above the TP in wh-TREQs. In particular, I claim that anything above the TP and below the CP can be elided, as long as other, more general, pragmatic conditions are not violated. In particular, the only conditions at play are related to dialogue congruence, which also apply to the non-elliptical counterpart as well. There's no context in which wh-TREQs are impossible but their non-elliptical counterparts are possible. Conversely, I show that some mismatches between the antecedent and the ellipsis site are indeed allowed; these are related to the type of wh-phrase involved in the wh-TREQ. Although it's strictly impossible to prove a negative, I'm not aware of any data that show that an identity condition is indeed needed to license 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. In Appendix A below I provide a brief overview of what a semantic identity condition could look like, if it was needed.

First, as the following examples show, wh-TREQs don't seem to allow sprouting. That is, each deleted constituent must have an overt syntactic correlate in the antecedent. This is shown in B's response to A in (138):

(138) A: Sonia comió.
Sonia ate
'Sonia ate.'

B: *Y pizza?
and pizza
Literal: 'And pizza?'
Intended interpretation: 'What about pizza? Who ate that?'

However, this ban on sprouting is not something particular about wh-TREQs. On the contrary, this seems to be a more general pragmatic condition related to the topic at-issue or under discussion in the conversation. This is evidenced by the fact that the non-elliptical counterpart is also disallowed:

(139) A: Sonia comió.
Sonia ate
'Sonia ate.'

B: #Y pizza, quién comió?
and pizza who ate
'And pizza, who ate?'

This contrasts with other types of ellipsis that do allow sprouting, such as sluicing (140a); crucially, in these cases, a non-elliptical counterpart is also possible, as shown in (140b):

(140) a. Sonia comió pero no sé qué.
Sonia ate but not know what
'Sonia ate but I don't know what.'

b. Sonia comió pero no sé qué comió.
Sonia ate but not know what ate
'Sonia ate but I don't know what she ate.'

The same pattern can be seen in other cases of wh-TREQs, as shown below. First, (141) shows that wh-TREQs can be interpreted as asking about the quantity (e.g. *How many pizzas did Bruno eat?*):

(141) A: Sonia comió tres pizzas.
Sonia ate three pizzas
'Sonia ate three pizzas.'

B: Y Bruno?
and Bruno
Literal: 'And Bruno?'
Intended interpretation: 'What about Bruno? How many pizzas did he eat?'

A: Dos.
two
'Two.'

However, example (142) shows that, when there is no numeral in the Antecedent (i.e. A's first utterance), B's wh-TREQ cannot be interpreted as asking for the quantity of pizzas eaten, as in the previous example. This is further evidenced by the impossibility of A's response to B's wh-TREQ:

(142) A: Sonia comió pizzas.
Sonia ate pizzas
'Sonia ate pizzas.'

B: Y Bruno?
and Bruno
Literal: 'And Bruno.'
Possible interpretation: What about Bruno? What did he eat?
Impossible interpretation: What about Bruno? How many pizzas did he eat?

A: *Dos.
two
'Two.'

Again, this is not something special about wh-TREQs. As the following example shows, a non-elliptical question that inquiries about the quantity of pizzas in the context of A's utterance is also infelicitous:

(143) A: Sonia comió pizzas.
Sonia ate pizzas
'Sonia ate pizzas.'

B: #Y Bruno cuántas (pizzas) comió?
and Bruno how.many pizzas ate
'And as for Bruno, how many pizzas did he eat?'

Something similar happens when the antecedent contains an indefinite/bare quantifier. Indefinite/bare quantifiers are also not allowed as correlates with the intended meaning:

(144) A: Sonia comió algo.
Sonia ate something
'Sonia ate something.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Intended interpretation: 'What about pasta? Who ate that?'

Crucially, a non-elliptical version is also impossible in this context:

(145) A: Sonia comió algo.
Sonia ate something
'Sonia ate something.'

B: #Y pasta quién comió?
and pasta who ate
'And as for pasta, who ate that?'

Finally, the example below seems to show that some restrictions might be in place, given that not any wh-phrase can be interpreted inside the ellipsis site in wh-TREQs:

(146) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Possible interpretation: 'What about pasta? Who ate that?'
Impossible interpretation: 'What about pasta? When did she eat that?'

A: #El martes.
the Tuesday
Intended: 'On Tuesday.'

However, here again, we observe that the non-elliptical counterpart would also be ruled out in this context:

(147) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: #Y pasta cuándo comió?
and pasta when she.ate
'And pasta, when did she eat?'

Another example providing evidence that there's no identity requirement to license material between the TP and the CP is shown below. Importantly, this illustrates the opposite pattern of what the examples above illustrate. What this example shows is that there are

some mismatches allowed between the antecedent and the ellipsis site. In particular, in (148), the wh-phrase doesn't need to match the syntactic type of the antecedent:

(148) A: Sonia sueña con Luciano.
Sonia dreams with Luciano
'Sonia dreams about Luciano.'

B: Y Bruno?
and Bruno
Literal: 'And Bruno?'
Intended interpretation: 'What about Bruno? What does he dream about?'

A: Con Buenos Aires.
with Buenos Aires
'About Buenos Aires.'

Crucially, the ellipsis site must contain *qué* 'what' and not *quién* 'who', as in (149), given that a question with *quién* 'who' would be ruled out in that context, as (150) shows:

(149) A: Sonia sueña con Luciano.
Sonia dreams with Luciano
'Sonia dreams about Luciano.'

B: Y Bruno con qué sueña?
and Bruno with what dreams
'And as for Bruno, what does he dream about?'

A: Con Buenos Aires.
with Buenos Aires
'About Buenos Aires.'

(150) A: Sonia sueña con Luciano.
Sonia dreams with Luciano
'Sonia dreams about Luciano.'

B: Y Bruno con quién sueña?
and Bruno with whom dreams
'And as for Bruno, who does he dream about?'

A: #Con Buenos Aires.
with Buenos Aires
Intended: 'About Buenos Aires.'

Finally, an example in the same line is shown below, where the ellipsis site contains a wh-phrase that doesn't exactly match that one of its antecedent:

(151) A: Todos los profesores invitaron a un estudiante. Por ejemplo, Jason invitó
all the professors invited DOM a student for example Jason invited
a Laura.
DOM Laura
'Every professor invited a student. For example, Jason invited Laura.'

B: Y Karlos?
and Karlos
Literal: 'And Karlos?'
Intended interpretation: 'What about Karlos? Who did Karlos invite?'

A: A Suzanne, pero no es estudiante.
DOM Suzanne but not is student
'Suzanne, but she is not a student.'

Crucially, the non-elliptical counterpart shows that the only possible option would be the one in (152B), with *quién* 'who' and not the one in (153B) with *qué estudiante* 'which student', given that A's answer would be odd in this context.

(152) A: Todos los profesores invitaron a un estudiante. Por ejemplo, Jason invitó
all the professors invited DOM a student for example Jason invited
a Laura.
DOM Laura
'Every professor invited a student. For example, Jason invited Laura.'

B: Y Karlos a quién invitó?
and Karlos DOM who invited
'And as for Karlos, who did he invite?'

A: A Suzanne, pero no es estudiante.
DOM Suzanne but not is student
'Suzanne, but she is not a student.'

(153) A: Todos los profesores invitaron a un estudiante. Por ejemplo, Jason invitó
all the professors invited DOM a student for example Jason invited
a Laura.
DOM Laura
'Every professor invited a student. For example, Jason invited Laura.'

B: Y Karlos a qué estudiante invitó?
and Karlos DOM which student invited
'And as for Karlos, which student did he invite?'

A: #A Suzanne, pero no es estudiante.
DOM Suzanne but not is student
'Suzanne, but she is not a student.'

To sum up, in this section I provided some examples that show that the contexts in which wh-TREQs are not allowed are the same contexts in which their non-elliptical counterparts are not allowed either, and that this is due to pragmatic reasons. As I mentioned at the beginning of this section, I'm not aware of any data that show that a stricter condition is needed, but this remains an open empirical question (see Appendix A below for a proposal based on semantic identity).

5.4 On VP focus and elided interrogative verbs

In some wh-TREQ contexts, it is the entire VP that is in focus. This is exemplified in (154) below; in particular, A's answer to B's wh-TREQ shows that it is interpreted as *What did Bruno do?*:

(154) 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 do?'

A: Bailó tango.
danced tango
'He danced tango.'

One hypothesis is that the source for the wh-TREQ in (154B) above is something like (155):

(155) B: Y Bruno ~~qué~~ ~~hizo~~?
and Bruno ~~what~~ ~~did~~
'And Bruno, ~~what did he do~~?'

However, a source like (155) for the wh-TREQ above would pose a serious problem for the strict syntactic identity I proposed in Part I, given that the verb *hizo* 'did' needs to undergo deletion, but its correlate is the verb *comió* 'ate', and these are not identical. However, in what follows, I show that (155) is not the correct analysis of the wh-TREQ in (154). I claim that what's inside the ellipsis site is not *qué hizo* 'what he.did' as in (155), but an *interrogative verb* (Hagège 2008; Lin 2012) that inquires about the entire VP.

Interrogative verbs are found in many languages, some examples are shown below in (156); all examples come from Hagège (2008):

(156) a. tətm-čep? — Comox (Salish)
do.what.PROG-2PL.S
'What are you people doing?'

b. kəðə məkəra-ŋ? — Palauan
1PL.INCL.NE do.what.1PF-CLN
'What shall we do (now)?'

c. bayi yaɽa wiyama-ɲu? — Dyirbal
CL.NOM man.NOM do.what-UT.INTR
'What was man doing?'

d. məŋapa kamu? — Indonesian
do.what 2SG
'What are you doing?'

Likewise, I propose that what's inside the ellipsis site in a wh-TREQ like the one in (154B) in Spanish is an interrogative verb (which I represent as *wh-V* and gloss as 'do.what'). However, given that there's no vocabulary entry for this verb in the Spanish vocabulary, the only way in which this can give rise to a grammatical structure is by preventing that item from undergoing Vocabulary Insertion, which only happens under ellipsis. This 'repair' strategy of ellipsis has been proposed for other wh-elements, as in Kennedy and Merchant (2000) and Abels (2019b), among others. The ellipsis site would be as in (157):

(157) B: Y Bruno ⟨wh-V⟩?
and Bruno do.what
'And what did Bruno do?'

Further evidence that (155) is not the correct hypothesis is that, in that context (i.e. when the entire VP is focalized in the antecedent), it's not possible to only spell-out a wh-phrase, that is, TP-Ellipsis is unavailable (the only available interpretation of the sentence in B below is 'What did he eat?'). Recall that, as I showed in Section 5.3.2, CP-ellipsis is 'optional' in that it's always possible to spell out the wh-phrase, as a regular case of TP-Ellipsis. On the contrary, here CP-ellipsis seems to be 'obligatory':

(158) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y Bruno qué?
and Bruno what
Literal: 'And Bruno what?'
Impossible interpretation: What about Bruno? What did he do?
Possible interpretation: What about Bruno? What did he eat?

A: #Bailó tango.
danced tango
'He danced tango.'

Likewise, sluicing doesn't allow this reading either:

(159) *Sonia comió pizza pero no sé qué más ~~hizo~~.
Sonia ate pizza but not know what else did
Intended: 'Sonia ate pizza but I don't know what else ~~she did~~.'

Finally, additional evidence that the ellipsis site does not contain a verb *hacer* 'to do' comes from the possible answers that *Qué hizo?* 'What did (s)he do?' can have in Spanish. As the following example shows, it can be answered with an infinitival:

(160) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y Bruno qué hizo?
and Bruno what he.did
'And Bruno, what did he do?'

A: Bailar tango.
to.dance tango
Literal: 'To danced tango.'
Interpretation: 'He danced tango.'

However, with the elliptical version, the infinitival answer is not longer possible:

(161) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

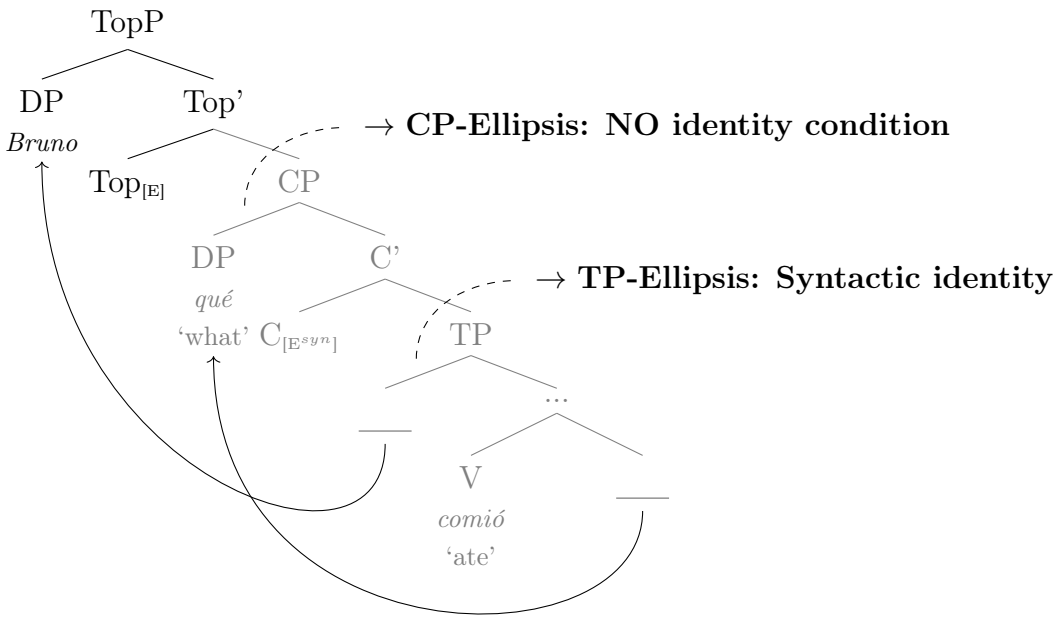
B: Y Bruno?
and Bruno
Literal: 'And Bruno?'
Intended: 'And Bruno, what did he do?'

A: *Bailar tango.
to.danced tango
Intended: 'He danced tango.'

5.5 Summary

In this chapter I discussed a new type of ellipsis in Spanish—*root wh-TREQs*—which consists of the ellipsis of a wh-question from which a Contrastive Topic has moved. I provided evidence to argue for an elliptical account of this construction. Crucially, I showed that syntactic identity is needed, but that it only applies to the lower part of the elided structure, that is, the TP. As for the material above the TP, I argued that no particular identity condition is needed. This is illustrated below:

(162) B: Y [Bruno$_{\text{top}}$] ⟨~~qué~~$_i$ __ ~~comió~~ t$_i$⟩?
and Bruno ⟨~~what~~ ~~ate~~ ⟩
'And Bruno ~~what did he eat~~?'



Before moving on to the next chapter, I want to briefly mention that the proposal I developed here is somewhat related to the proposal in Kroll and Rudin (2017) and Rudin (2019). In particular, Kroll and Rudin investigate the kinds of possible mismatches in sluicing in English, and they find that these can only occur above the vP, and up to the TP. Based on this, Rudin (2019) proposes that a syntactic identity condition in sluicing in English privileges the vP domain, which he refers to as the *eventive core*, and he claims that that mismatches are only allowed above the vP, although he does not provide any explicit account on how this is obtained.[7] It's worth noting that wh-TREQs in Spanish display a similar pattern in that there is a higher domain in which there strict syntactic identity can be 'violated', and a lower one in which it cannot, relativized to the relevant domains. Although the account developed here and the empirical domain I analyze are substantially different from Rudin's, there is something in common: in both wh-TREQs in Spanish and sluicing in English there are two independently attested ellipsis domains (TP-Ellipsis and vP-Ellipsis, respectively), one nested within the other, and it's the lower one that imposes syntactic identity. It's compelling to think that this is not an accident, and I believe that my way of understanding

7. See also Ranero (2019, 2021), where he shows, based on crosslinguistic data, that Rudin's proposal and predictions privileging the eventive core are incorrect.

the patterns found in wh-TREQs could therefore be applied to (some of) the mismatches found in sluicing in English (and, possibly, other mismatches in other languages). However, this line of research exceeds the scope of this dissertation, so I leave it for future work.

5.6 Appendix: A (possible) semantic identity condition

In this brief appendix, I put forth a proposal for a possible semantic identity condition to license the material above the TP in CP-Ellipsis. As I stated above, I don't think this is required, given that there is no data showing that an identity condition is needed to license deletion of the material above the TP. However, it might be useful to propose for a possible semantic identity condition in case new data are found. In order to do so, a few assumptions and background need to be explicitly stated. First, I assume that focused elements have a focus semantic value ($[\![\ ]\!]^f$), which denotes the set of alternatives in the model (Rooth 1992). Second, I assume that wh-words introduce alternatives (Hamblin 1976) and that they only have a focus semantic value (Beck 2006), but don't need to be [F]-marked, as illustrated in (163) and (164) for *what* and *who* respectively:

(163) a. $[\![\text{what/qué}]\!]^o$ is undefined

b. $[\![\text{what/qué}]\!]^f = \{x_e : x \notin \text{human}\}$

(164) a. $[\![\text{who/quién}]\!]^o$ is undefined

b. $[\![\text{who/quién}]\!]^f = \{x_e : x \in \text{human}\}$

Third, I follow Büring (1997, 2003) in that a topic value ($[\![\ ]\!]^{ct}$) is a 'typed up' focus value, i.e. a set of sets of propositions, or a set of questions. This is illustrated in (165):

(165) a. $[\![\text{Sonia}_{\text{CT}}\text{ ate pizza}_{\text{F}}]\!]^{ct}$ = {What did Ana eat?, What did Bruno eat?, What did Carina eat?, What did Danilo eat?, What did ... eat?}

b. $[\![\text{Sonia}_{\text{CT}}\text{ ate pizza}_{\text{F}}]\!]^{ct} = \{\{\ x \text{ ate } y \ \mid \ y \ \in \ D_e\} \mid \ x \ \in \ D_e\}$ = Who ate what?

With these assumptions in mind, I propose a semantic identity condition to license wh-TREQs in particular, and CP-Ellipsis in general. This condition is stated in (166), where TopP_{E} is meant to represent the projection of the Top head that bears an [E] feature:

(166) Ellipsis may apply to the CP dominated by TopP_{E} iff

i. TopP_{E} has a salient Antecedent, and

ii. $[\![\text{Antecedent}]\!]^{f} \in [\![\text{TopP}_{\text{E}}]\!]^{ct}$

The condition in (166i) specifies the need for having an appropriate salient antecedent, and (166ii) indicates that ellipsis is licensed only if the *focus* value of the Antecedent is a member of the *contrastive topic* value of the TopP that contains the CP that's targeted for deletion. This is illustrated in (167), where (167a) specifies the focus value of the Antecedent, (167b) specifies the contrastive topic value of the TopP that contains the CP that's undergoing deletion, and (167c) indicates that the focus value of the Antecedent is indeed a member of the focus value of TopP_{E}. English words are used for ease of exposition:

(167) a. $[\![[_{\text{Antecedent}}\ \text{Sonia ate pizza}_{\text{F}}]]\!]^{f} = \{\text{Sonia ate } y \mid y \in D_e\}$

b. $[\![[_{\text{TopP}_{\text{E}}}\ \text{Bruno}_{\text{CT}}\ \sout{\text{what ate}}]]\!]^{ct} = \{\{x \text{ ate } y \mid y \in D_e\} \mid x \in D_e\}$

c. (167a) $\in$ (167b)

CHAPTER 6

EMBEDDED WH-TREQS

6.1 Introduction

Following the analysis developed in the previous chapter, in this chapter I discuss and analyze *Embedded Topic-Remnant Elided Wh-Questions*, which I will refer as *embedded wh-TREQs* for simplicity. Embedded wh-TREQs, exemplified in (1A) and (2A), are embedded elliptical questions that usually convey ignorance with respect to the remnant. The wh-question meaning is confirmed with the subsequent B's response to A's embedded wh-TREQ:[1]

(1) A: Sonia comió pizza, pero Bruno, no sé.
Sonia ate pizza but Bruno not know
Literal: 'Sonia ate pizza, but Bruno, I don't know.'
Interpretation: 'As for Sonia, she ate pizza, but as for Bruno, I don't what he ate.'

B: Yo sí sé. Comió pasta.
I yes know he.ate pasta
'I do know. He ate pasta.'

(2) A: Pizza, comió Sonia, pero pasta, no sé.
pizza ate Sonia but pasta not know
Literal: 'Pizza, ate Sonia, but pasta, I don't know.'
Interpretation: 'As for pizza$_i$, Sonia ate that$_i$, but as for pasta$_j$, I don't know who ate that$_j$.'

B: Yo sí sé. Bruno fue el que comió pasta.
I yes know Bruno was the that ate pasta
'I do know. It was Bruno who ate pasta.'

As the intended meaning shows, and similarly to what I claimed for root wh-TREQs, embedded wh-TREQs require a wh-phrase to go unpronounced. This is possible even though

1. I remind the reader that embedded TREQs, just like matrix wh-TREQs, can have both a wh-question meaning and a polar question meaning. Following my discussion from the previous chapter, in this chapter, I will discuss and analyze embedded TREQs with a wh-question meaning. Polar TREQs (both root and embedded) will be discussed in the next chapter. For the sake of explicitness, in the glosses throughout this chapter, which only concerns wh-TREQs, I specify the relevant meaning/interpretation under analysis. To avoid making the examples unnecessarily long, from now on I won't include B's response to A's embedded wh-TREQ.

there is no explicit wh-question or wh-phrase in the antecedent. Here, again, I claim that embedded wh-TREQs are the result of ellipsis of an embedded wh-question, from which a Topic has moved out, surviving deletion, as illustrated in (3) (the specifics of how this type of CP-Ellipsis is derived will be revised and further specified in Section 6.2 below):

(3) Sonia comió pizza, pero [Bruno$_{\text{top}}$] no sé $\langle_{\text{E-site}}$ ~~qué~~$_i$ __ ~~comió~~ t$_i\rangle$. = (1)
Sonia ate pizza but Bruno not I.know ~~what~~ ~~ate~~
'Sonia ate pizza, but Bruno, I don't know ~~what he ate~~.'

Following my analysis for root wh-TREQs developed in Chapter 5, I claim that ellipsis is triggered by an [E]-feature (Merchant 2001)—which, in this case, is located on a Top head within the embedded sentence—and that ellipsis targets the complement of the head bearing the [E]-feature (i.e. the CP). As illustrated above, the ellipsis site contains a(n embedded) wh-question (minus the topicalized DP *Bruno*). Evidence in favor of (i) an ellipsis approach (and against a non-sententialist one) of this construction, and (ii) a move-and-delete analysis of the remnant is similar to the evidence presented in Chapter 5 for root wh-TREQs and comes from various sources that will be examined in the rest of this chapter.

The structure of this chapter is as follows: In Section 6.2 I put forth an analysis for embedded wh-TREQs that follows the main ideas developed in Chapter 5, but also points out and discusses some important differences between the derivation of root and embedded wh-TREQs. In Section 6.3 I briefly provide examples of different contexts in which embedded wh-TREQs can occur to show that this is a productive construction and not a crystallized form. In Section 6.4, similarly to Section 5.2 in Chapter 5, I provide evidence in favor of (i) an ellipsis approach (and against a non-sententialist one) of embedded wh-TREQs, (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 TP-ellipsis. Finally, Section 6.5 summarizes the main findings of this chapter and concludes.

6.2 An analysis for embedded wh-TREQs

In this section, I briefly discuss how embedded wh-TREQs are derived. As I will show in Section 6.4, embedded wh-TREQs require syntactic identity and involve a wh-phrase that undergoes deletion despite not having an identical correlate in the antecedent. In this respect, I claim that both root and embedded wh-TREQs are licensed by the same identity condition, and I won't discuss its details here. In short, I propose that a strict syntactic identity condition applies to the lower portion of the structure, and that only general conditions governing discourse congruence are at play to determine what can be inside the ellipsis site between the TP and the CP. In other words, there is no specific licensing condition for eliding material above the TP. I implement this by proposing the existence of two [E] features that impose two different identity conditions to their complements (for more details on the identity condition that licenses wh-TREQs, see Chapter 5, Section 5.3).

The crucial difference between root and embedded wh-TREQS is that, in the latter, the remnant—originated inside the embedded clause—moves to an intermediate projection within that clause. I claim that this position is the specifier of an intermediate TopP, and that ellipsis is triggered by an [E] feature on Top, the head of the embedded TopP. The remnant, which is the only constituent that bears a [top] feature, moves further to the specifier of TopP in the matrix clause to check the [•top•] on its head.[2] Evidence that a topicalized XP can land in this intermediate position is shown in (4).[3,4] The example in (4b) also shows

2. It has been claimed that [top] is a criterial feature, and any XP bearing it should comply with the *Criterial Freezing* condition according to which an XP shouldn't be able to move further once they land into the specifier of a head bearing [•top•] (see Rizzi 2006, 2010, among many others). However, as far I know, there is no evidence that the *Criterial Freezing* condition applies to movement from the specifier of one TopP to the specifier of another TopP, and, in particular, from the specifier of a TopP in the embedded clause to the specifier of a TopP in the matrix clause. For this reason, I will assume that it is indeed possible for the topicalized XP to move first to the specifier of the intermediate TopP, and then to the specifier of the matrix TopP. Nonetheless, I leave this question open for future research.

3. I should note that, according to my judgments and the judgments of my informants, this type of configuration is dispreferred compared the configuration in which the topic moves up to the matrix clause and is spelled-out before *no sé* 'I don't know'. The question as to why this preference arises is an interesting one, but it's out of the scope of this chapter, and I leave it for future research.

4. Note that this sentence requires a particular intonation that stresses the element being topicalized (i.e.

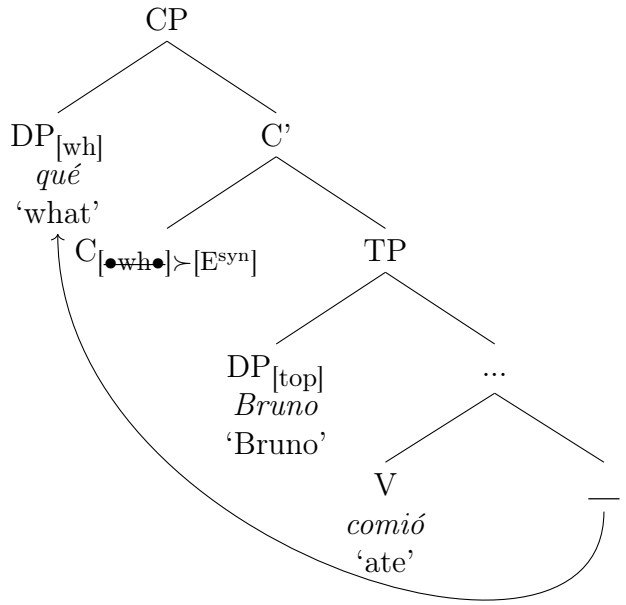
that the topicalized XP must be clitic doubled, which provides more evidence for the claim that this movement is indeed a topicalization:

(4) a. Sonia comió pizza pero no sé [Bruno]$_{top}$ qué comió.
Sonia ate pizza but not I.know Bruno what ate
'Sonia ate pizza, but I don't know what Bruno ate.'

b. La pizza, la comió Sonia, pero no sé [la pasta]$_{top}$ quién la comió.
the pizza CL ate Sonia but not I.know the pasta who ate
'As for the pizza, Sonia ate it, but as for the pasta, I don't know who ate that.'

The analysis proposed here is further illustrated in the step-by-step derivation in (5)-(9) for the sentence in (3) above. As in Chapter 5, I simplify some of the derivations by not showing all the steps that derive TP-Ellipsis (details of this can be found in Chapter 3). I represent deletion (of Q-features) (i.e. not pronunciation) with gray text instead. As I argued in Chapter 3, the only possible order of the features on C in Spanish is [•wh•]≻[E], which means that the wh-phrase will move first, as shown in (5):

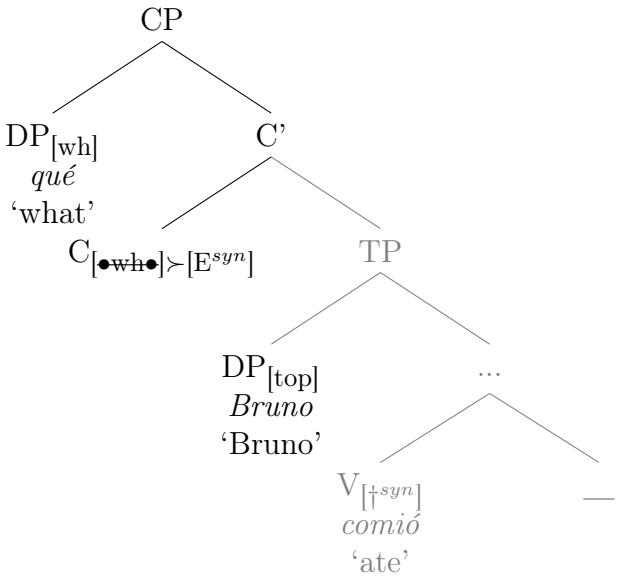
(5) Step 1: Wh-movement



Bruno), and includes a small pause before and after it. Check the following audio file for the appropriate intonation of the sentence: https://tinyurl.com/46yede9t.

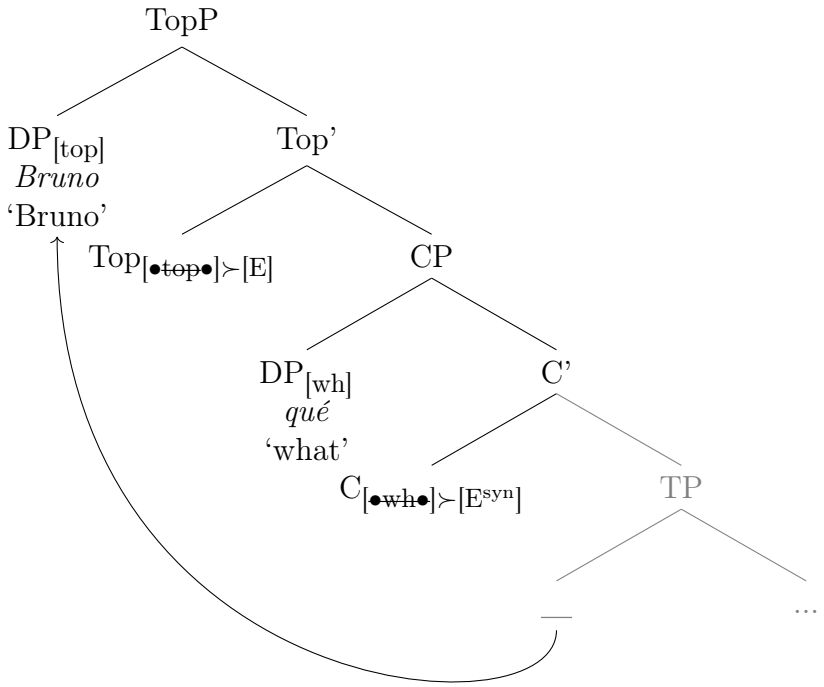
Then, ellipsis is triggered by the [E^{syn}]-feature on C, as shown in Step 2 in (6). That is, every head in the complement of C is assigned [†^{syn}] and must find an identical correlate in the antecedent, which they do. It's worth noticing that the subject *Bruno* is not [†^{syn}]-assigned due to being [top]-marked. Therefore, it does not undergo deletion:

(6) Step 2: TP-Ellipsis



Once ellipsis of the TP is triggered, the head of the embedded TopP, which bears a [•top•] feature is merged, as shown in Step 3 in (7). This head triggers movement of the subject DP *Bruno* to its specifier:

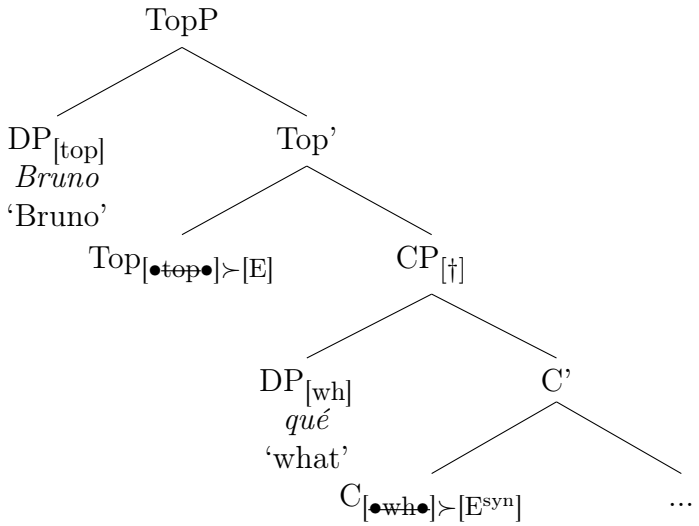
(7) Step 3: Movement of the subject to the specifier of XP



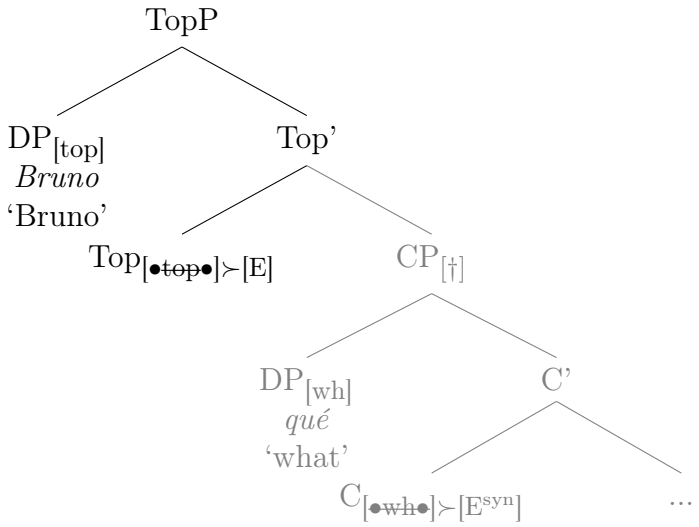
The next step is broken down in two parts, and shown in (8). First, [†] is assigned to the CP in the complement of the Top head, which is the one bearing the [E] feature (8a). This, in turn, enforces deleting the Q-feature of all the heads that the CP dominates, resulting in the ellipsis of the entire CP, as shown in (8b):

(8) Step 4: CP-Ellipsis

a. Step 4.1: [†]-assignment

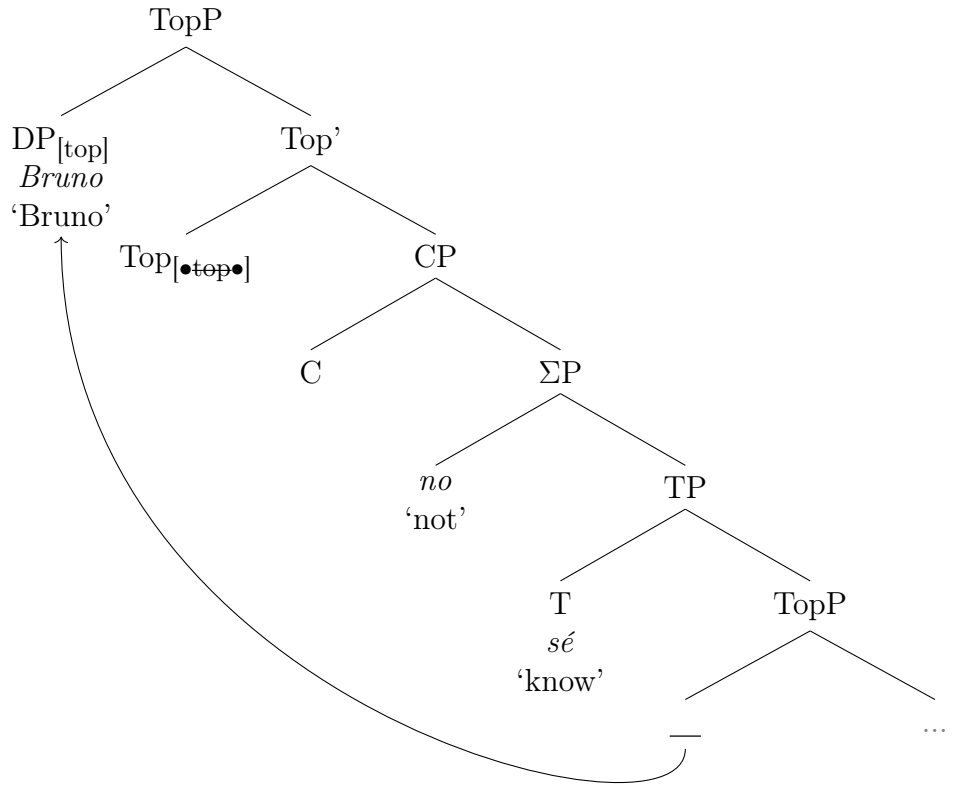


b. Step 4.2: CP-Ellipsis



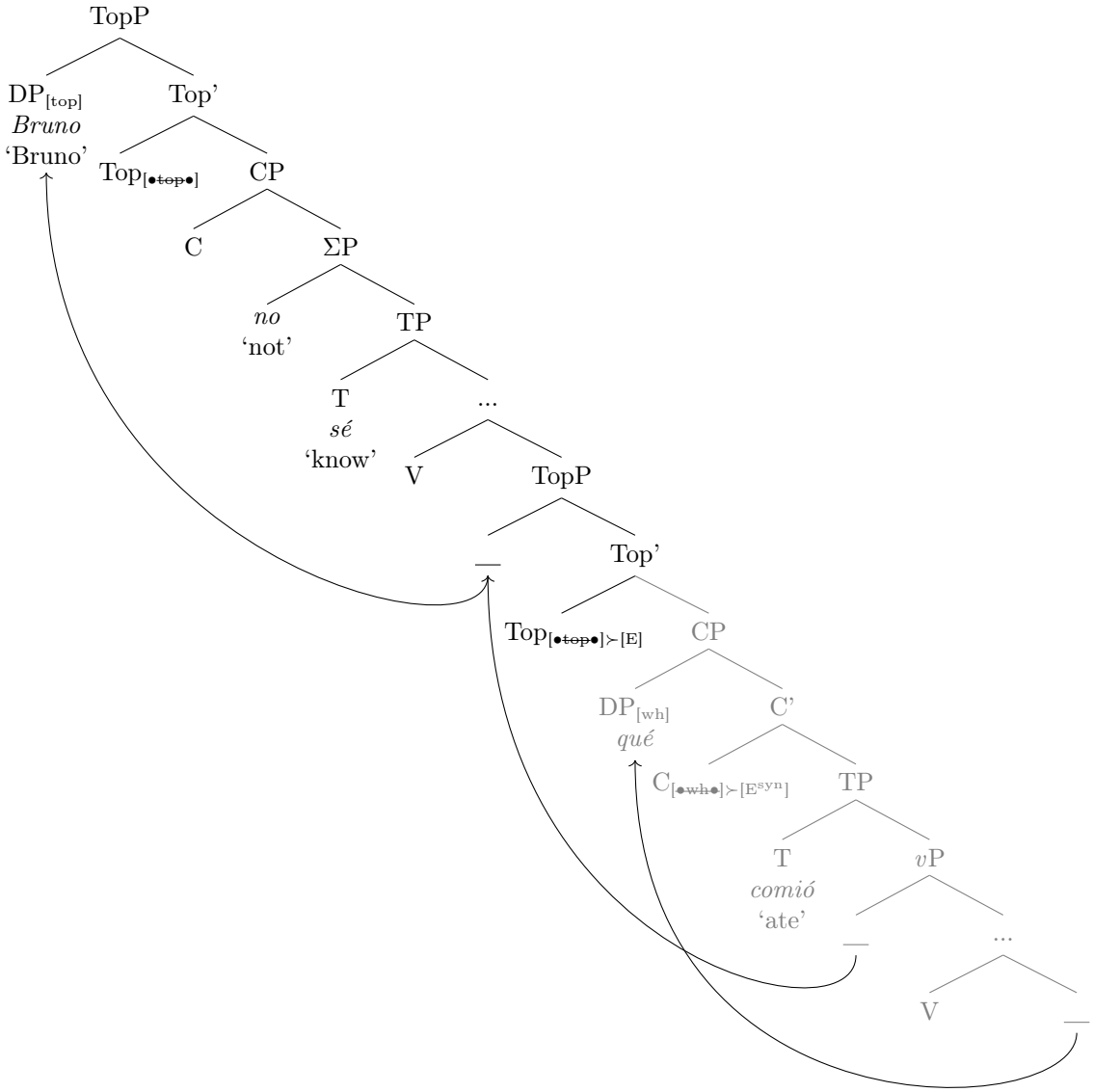
Finally, (9) shows the movement of the subject *Bruno* to the specifier of the matrix TopP, triggered by a [•top•] feature on the Top head:

(9) Step 5: Movement of the $DP_{[top]}$ to the matrix clause



For the sake of explicitness, (10) shows the full derivation:

(10) Sonia comió pizza pero Bruno no sé ⟨~~qué~~$_i$ __ ~~comió~~ t$_i$⟩.
Sonia ate pizza but Bruno not I.know ⟨~~what~~ ~~ate~~ ⟩
'Sonia ate pizza but Bruno, I don't know ~~what did he eat~~.'



This analysis makes interesting predictions with respect to what we would expect to be (im)possible in these contexts. In the first place, it predicts that the remnant can be spelled-out in the embedded clause (i.e. the specifier of TopP). This prediction is borne out, both for the non-elliptical and the elliptical versions, which I also consider to be embedded wh-TREQs:[5]

5. Note, again, that this sentences require a particular intonation. Check the following audio file for the

(11) a. Sonia comió pizza pero no sé Bruno qué comió.
Sonia ate pizza but not I.know Bruno what ate
'Sonia ate pizza, but I don't know what Bruno ate.'

b. Sonia comió pizza pero no sé Bruno.
Sonia ate pizza but not I.know Bruno
Literal: 'Sonia ate pizza, but I don't know Bruno.'
Interpretation: 'Sonia ate pizza but I don't know what Bruno ate.'

In addition, since movement and ellipsis are independent of each other, my analysis predicts that there can be movement without ellipsis. In particular, there can be (i) movement of the subject *Bruno* to the specifier of the embedded TopP first, and then to the matrix TopP; (b) movement of the wh-phrase to the specifier of the embedded CP; and (c) no ellipsis at all. Again, this prediction is borne out, as shown below:

(12) Sonia comió pizza, pero Bruno, no sé qué comió.
Sonia ate pizza but Bruno not I.know what ate
'Sonia ate pizza, but Bruno, I don't know what he ate.'

Finally, since TP-Ellipsis and CP-ellipsis are independent of each other, my analysis predicts that it should be possible for the former to occur without the latter. This is again borne out, as shown in (13):[6,7]

(13) a. Sonia comió pizza, pero Bruno, no sé qué.
Sonia ate pizza but Bruno not I.know what
Literal: 'Sonia ate pizza, but Bruno, I don't know what.'
Interpretation: 'Sonia ate pizza but I don't know what Bruno ate.'

---

appropriate intonation of these sentences: https://tinyurl.com/57yyjvvc.

6. Check the following audio file for the intonation of these sentences: https://tinyurl.com/2p8ksdab.

7. Although the sentence in (13b) doesn't sound fully grammatical to all speakers consulted, when a different wh-phrase is used, the sentence is much better:

(i) Sonia habló con Luciano, pero no sé Bruno con quién.
Sonia talked with Luciano but not I.know Bruno with who
Literal: 'Sonia talked with someone but I don't know Bruno with whom.'
Interpretation: 'Sonia talked with Luciano but I don't know who Bruno talked with.'

At the moment, I don't have an answer as for why this is the case, and I leave this issue for future research.

b. ?Sonia comió pizza, pero no sé Bruno qué.
Sonia ate pizza but not I.know Bruno what
Literal: 'Sonia ate pizza but I don't know Bruno what.'
Interpretation: 'Sonia ate pizza, but I don't know what Bruno ate.'

Before concluding this section, I will provide a few examples,[8] similar to the ones I provided in the previous chapter, to show that there doesn't need to be an additional identity condition to license ellipsis of the material between the TP and the CP in embedded wh-TREQs. As in the previous chapter, I claim that anything above the TP and below the CP can be elided, as long as other, more general, pragmatic conditions are not violated.

As the following examples show, embedded wh-TREQs don't allow sprouting (14a). However, this ban on sprouting is not something particular about embedded wh-TREQs, but seems to be a more general pragmatic condition related to the topic at-issue or under discussion. This is evidenced by the fact that the non-elliptical counterpart is also disallowed, as shown in (14b):

(14) a. *Sonia comió, pero pizza, no sé.
Sonia ate but pizza not I.know
Intended: 'Sonia ate, but I don't know who ate pizza.'

b. #Sonia comió, pero pizza, no sé quién comió.
Sonia ate but pizza not I.know who ate
Intended: 'Sonia ate, but I don't know who ate pizza.'

Something similar happens when the antecedent contains an indefinite/bare quantifier. Indefinite/bare quantifiers like *algo* 'something' are not allowed as correlates when contrasting with a non-indefinite like *pizza* 'pizza', as shown in (15a). Crucially, a non-elliptical version is also impossible in this context, as shown in (15b):

(15) a. *Sonia comió algo, pero pizza, no sé.
Sonia ate something but pizza not I.know
Intended: 'Sonia ate something, but I don't know who ate pizza.'

8. I refer the reader to Chapter 5, Section 5.3.3 for a more complete empirical picture

b. #Sonia comió algo pero pizza, no sé quién comió.
Sonia ate something but pizza not I.know who ate
Intended: 'Sonia ate something, but I don't know who ate pizza.'

Finally, although the example in (16aA) seems to show that some restrictions might be in place, given that not any wh-phrase can be interpreted inside the ellipsis site in embedded wh-TREQs, (16b) shows that the non-elliptical counterpart would also be ruled out due to an incongruence:

(16) a. A: Sonia comió pizza, pero pasta, no sé.
Sonia ate pizza but pasta no I.know
Possible interpretation: 'Sonia ate pizza, but I don't know who ate pasta.'
Impossible interpretation: 'Sonia ate pizza, but I don't know when she ate pasta.'

B: #Yo sí sé. El martes comió pasta.
I yes know the Tuesday she.ate pasta
'I do know. She ate pasta on Tuesday.'

b. #Sonia comió pizza, pero pasta, no sé cuándo comió.
Sonia ate pizza but pasta no I.know when she.ate
'Sonia ate pizza, but I don't know when she ate pasta.'

To sum up, in this section I extended the analysis proposed in Chapter 5 for root wh-TREQs. Crucially, I claim that both types of wh-TREQs are derived in a similar manner and are subject to the same identity conditions. The only difference between these two types of CP-ellipsis is that, while root wh-TREQs involve one clause, and hence, topicalization to the matrix specifier of the TopP, embedded wh-TREQs involve an embedded clause and an intermediate topicalization to the specifier of the embedded TopP. In what follows, I discuss and describe the empirical landscape of embedded wh-TREQs in more detail.

6.3 Embedded wh-TREQs in other contexts

In this short section, I provide data that show that embedded wh-TREQs are not a crystallized construction but a productive elliptical process that can occur in the context of

different embedded verbs, besides *saber* 'to know'. For instance, they are possible with *recordar* 'remember', as shown in (17):

(17) Sonia comió pizza, pero Bruno, no recuerdo.
Sonia ate pizza but Bruno not I.remember
Literal: 'Sonia ate pizza, but Bruno, I don't remember.'
Interpretation: 'Sonia ate pizza, but I don't remember what Bruno ate.'

In addition, embedded wh-TREQs are possible with verbs like *decir* 'to say', as in (18):

(18) a. Dijiste que Sonia comió pizza, pero Bruno, no dijiste.
you.said that Sonia ate pizza but Bruno not you.said
Literal: 'You said that Sonia ate pizza, but Bruno, you didn't say.'
Intended:'You said that Sonia ate pizza, but you didn't say what Bruno ate.'

b. (Me dijeron que) Sonia comió pizza, pero Bruno, no me dijeron.
to.me they.told that Sonia ate pizza, but Bruno not ME.DAT they.said
Literal: '(They told me that) Sonia ate pizza, but Bruno, they didn't tell.'
Interpretation: '(They told me that) Sonia ate pizza, but they didn't tell me what Bruno ate.'

As (19) shows, *estar seguro/a* 'to be sure' also allows embedded wh-TREQs:

(19) Sé que Sonia comió pizza, pero Bruno, no estoy segura.
I.know that Sonia ate pizza but Bruno not I.am sure
Literal: 'I know that Sonia ate pizza, but Bruno, I'm not sure.'
Interpretation: 'I know that Sonia ate pizza, but I'm not sure what Bruno ate.'

Another context is given in (20), which shows that embedded wh-TREQs can occur with *averiguar* 'to find out':

(20) Averigüé que Sonia comió pizza, pero Bruno, no averigüé todavía.
I.found.out that Sonia ate pizza but Bruno not I.found.out yet
Literal: 'I found out that Sonia ate pizza, but Bruno, I didn't found out yet.'
Interpretation: 'I found out that Sonia ate pizza, but I didn't found out what Bruno ate.'

As the reader might have noticed, all the examples in this section (and more generally, in this chapter) involve negation in the second clause (i.e. *no sé* 'I don't know', *no recuerdo* 'I don't remember', *no dijiste* 'you didn't tell', *no me dijeron* 'they didn't tell me', *no estoy*

segura 'I'm not sure', *no averigüé* 'I didn't find out'). Crucially, examples that don't involve negation are not possible:

(21) a. *Dijiste que Sonia comió pizza, y Bruno, también dijiste. cf. (18a)
you.said that Sonia ate pizza and Bruno also you.said
Literal: 'You said that Sonia ate pizza, and Bruno, you also said.'
Intended interpretation: 'You said that Sonia ate pizza, and you also said what Bruno ate.'

b. *No dijiste que Sonia comió pizza, pero Bruno, sí dijiste.
not you.said that Sonia ate pizza but Bruno yes you.said
Literal: 'You didn't say that Sonia ate pizza, but Bruno you did say.'
Intended interpretation:'You didn't say that Sonia ate pizza, but you did say what Bruno ate.'

However, the non-elliptical counterparts are also ruled out given that they're pragmatically odd—the matrix clause and the embedded clause seem to be addressing different topics/answering different questions under discussion—which would explain the judgments of the examples in (21):

(22) a. #Dijiste que Sonia comió pizza, y Bruno, también dijiste qué comió.
you.said that Sonia ate pizza and Bruno also you.said what he.ate
Intended: 'You said that Sonia ate pizza, and you also said what Bruno ate.'

b. #No dijiste que Sonia comió pizza, pero Bruno, sí dijiste qué comió.
not you.said that Sonia ate pizza but Bruno yes you.said what he.ate
Intended: 'You didn't say that Sonia ate pizza, but you did say what Bruno ate.'

Therefore, the impossibility of the examples in (21) follows from the status of (22).

6.4 The syntax of embedded wh-TREQs

Following the ideas and the argumentation presented in the previous chapter, in this section I will examine evidence in favor of an ellipsis approach to embedded wh-TREQs that involves topicalization of the remnant outside the ellipsis site, and wh-movement of the wh-phrase inside the ellipsis site. First, the possible remnants for an embedded wh-TREQ in Spanish are exactly those constituents that can otherwise be topicalized out of a wh-question in this

language (Section 6.4.1). Likewise, those constituents that cannot be topicalized out of a wh-question cannot occur as wh-TREQs (Section 6.4.2). These two patterns provide evidence for the claim that the remnant in wh-TREQs is a topicalized XP. Second, in Section 6.4.3 I discuss a variety of islands; this provides more evidence for the claim that (i) there is wh-movement inside the ellipsis site, (ii) the remnant is a topicalized XP that moves out of the ellipsis site, and (iii) some kind of syntactic isomorphism between the antecedent and the ellipsis site is indeed needed. Finally, in Section 6.4.4 I show that embedded wh-TREQs display connectivity effects; in particular, they do not allow P-Omission, voice mismatches and spray/load alternations; this provides further evidence for the need for a syntactic identity condition to license this construction.

6.4.1 Possible remnants

Possible remnants for embedded wh-TREQs in Spanish are exactly those constituents that can otherwise be topicalized out of an embedded wh-question in this language. This shows that there's structure inside the ellipsis site, and that the remnant has been topicalized out of it. This argument will be complemented with the analysis of those constituents that cannot be topicalized out of embedded wh-questions and that, as predicted, cannot occur as embedded wh-TREQs (see Section 6.4.2). Possible remnants include DPs (both subjects and objects), prepositional phrases (IOs, and PPs both in the verbal and nominal domains), temporal and locative phrases, frequency and manner adverbs, predicative adjectives, infinitival verb phrases, and CPs. In what follows, I provide examples of each of them.

Direct Objects

The example in (23) shows that direct objects can be topicalized out of an embedded wh-question:

(23) [Pasta], no sé quién comió __.
pasta not know who ate
'As for pasta, I don't know who ate that.'

Likewise, they can occur as remnants for embedded wh-TREQs, as shown in (24):

(24) Pizza, comió Sonia, pero pasta, no sé.
pizza ate Sonia but pasta not know
Literal: 'Pizza, ate Sonia, but pasta, I don't know.'
Interpretation: 'As for pizza$_i$, Sonia ate that$_i$, but as for pasta$_j$, I don't know who ate that$_j$.'

That is, I claim that the source for (24) would be the sentence in (23). It's worth noticing that in these cases, parallelism between the correlate in the antecedent and the remnant is not necessary, that is, the antecedent doesn't need to have a topicalized object for embedded wh-TREQs to be licensed, as shown in (25):

(25) Sonia comió pizza, pero pasta, no sé.
Sonia ate pizza but pasta not know
Literal: 'Sonia ate pizza, but pasta, I don't know.'
Interpretation: 'Sonia ate pizza, but I don't know who ate pasta.'

Indirect Objects

As (26) shows, indirect objects can also be topicalized out of an embedded wh-question:

(26) [A Bruno], no sé quién le dio una pizza __.
to Bruno not know who CL.DAT.SG gave a pizza
'As for Bruno, I don't know who gave him a pizza.'

Likewise, they can occur as remnants for embedded wh-TREQs, as (27) shows:

(27) A Luciano, le dio una pizza Sonia, pero a Bruno, no sé.
to Luciano CL.DAT gave a pizza Sonia but to Bruno not know
Literal: 'To Luciano, Sonia gave him a pizza, but to Bruno, I don't know.'
Interpretation: 'As for Luciano, it was Sonia who gave him a pizza, but I don't know who gave a pizza to Bruno.'

In other words, the source for (27) would be the sentence in (26). Interestingly, if the object is the one focalized, instead of the subject, the ellipsis site is interpreted as asking about it, and not the subject, as the following example shows:

(28) A Luciano, Sonia le dio una pizza, pero a Bruno, no sé.
to Luciano CL.DAT Sonia gave a pizza but to Bruno not know
Literal: 'To Luciano, Sonia gave him a pizza, but to Bruno, I don't know.'
Interpretation: 'As for Luciano, Sonia gave him a pizza, but I don't know what she gave to Bruno.'

In consequence, I claim that the source for (28) would be the sentence in (29):

(29) [A Bruno], no sé qué le dio Sonia __.
to Bruno not know what CL.DAT.SG gave Sonia
'As for Bruno, I don't know what Sonia gave him.'

Finally, as I showed for direct objects above, indirect objects do not need to be topicalized in the antecedent for embedded wh-TREQs to be licensed, as shown in (30). In this case, the source of the ellipsis site would also be the sentence in (26) above:

(30) Sonia le dio una pizza a Luciano, pero a Bruno, no sé.
Sonia CL.DAT gave a pizza to Luciano but to Bruno not know
Literal: 'Sonia gave a pizza to Luciano, but to Bruno, I don't know.'
Interpretation: 'Sonia gave a pizza to Luciano, but I don't know who gave a pizza to Bruno.'

Subjects

As shown in (31), subjects can also be topicalized out of embedded wh-questions:

(31) [Bruno], no sé qué __ comió.
Bruno not know what ate
'As for Bruno, I don't know what he ate.'

Likewise, they can occur as remnants for embedded wh-TREQs, as (32) shows. According to my proposal, the source for (32) would be (31).

(32) Sonia comió pizza, pero Bruno, no sé.
Sonia ate pizza but Bruno not know
Literal: 'Sonia ate pizza, but Bruno, I don't know.'
Interpretation: 'Sonia ate pizza, but I don't know what Bruno ate.'

Prepositional Phrases

The examples below show that PPs can be topicalized out of an embedded wh-question. This holds for PPs in the verbal domain (33) and for PPs in the nominal domain (34):

(33) [Con Luciano], no sé quién habló __.
with Luciano not know who talked
'As for Luciano, I don't know who talked with him.'

(34) [De Luciano], no sé quién vio la foto __.
of Luciano not know who saw the picture
'As for Luciano, I don't know who saw his picture.'

As predicted, PPs can occur as remnants for embedded wh-TREQs, regardless of whether the PP has been topicalized in the antecedent, as shown in (35)-(36):

(35) a. Sonia habló con Bruno, pero con Luciano, no sé.
Sonia talked with Bruno but with Luciano not know
Literal: 'Sonia talked with Bruno but, with Luciano, I don't know.'
Interpretation: 'Sonia talked with Bruno but I don't know who talked with Luciano.'

b. Con Bruno, habló Sonia, pero con Luciano, no sé.
with Bruno talked Sonia but with Luciano not know
Literal: 'With Bruno, talked Sonia but, with Luciano, I don't know.'
Interpretation: 'As for Bruno$_i$, Sonia talked with him$_i$ but I don't know who talked with Luciano.'

(36) a. Sonia vio la foto de Bruno, pero de Luciano, no sé.
Sonia saw the picture of Bruno but of Luciano not know
Literal: 'Sonia saw the picture of Bruno, but of Luciano, I don't know.'
Interpretation: 'Sonia saw the picture of Bruno, but I don't know who saw the picture of Luciano.'

b. De Bruno vio la foto Sonia, pero de Luciano, no sé.
of Bruno saw the picture Sonia but of Luciano not I.know
Literal: 'Of Bruno, Sonia saw the picture, but of Luciano, I don't know.'
Interpretation: 'As for Bruno$_i$, Sonia saw his$_i$ picture, but I don't know who saw the picture of Luciano.'

Similarly to the examples analyzed so far, I claim that the sentences in (33)-(34) are the source for the ellipsis sites above.

Temporal and locative phrases

As for temporal and locative phrases, the examples in (37) and (38) show that they can be topicalized out of embedded wh-questions:

(37) [El viernes], no sé quién corrió __.
the Friday not I.know who run
'As for Friday, I don't know who run that day.'

(38) [En la playa], no sé quién corrió __.
in the beach not know who ran
'As for the beach, I don't know who ran there.'

As expected, they can also occur as remnants for embedded wh-TREQs (39)-(40), regardless of whether the temporal and locative phrases have been topicalized in the antecedent:

(39) a. Sonia corrió el sábado, pero el viernes, no sé.
Sonia ran the Saturday but the Friday not know
Literal: 'Sonia ran on Saturday, but on Friday, I don't know.'
Interpretation: 'Sonia ran on Saturday, but I don't know who ran on Friday.'

b. El sábado, corrió Sonia, pero el viernes, no sé.
the Saturday, ran Sonia, but the Friday not know
Literal: 'On Saturday, Sonia ran, but on Friday, I don't know.'
Interpretation: 'As for Saturday, it was Sonia who ran that day, but I don't know who ran on Friday.'

(40) a. Sonia corrió en el parque, pero en la playa, no sé.
Sonia ran in the park but in the beach not know
Literal: 'Sonia ran in the park, but in the beach, I don't know.'
Interpretation: 'Sonia ran in the park, but I don't know who ran in the beach.'

b. En el parque, corrió Sonia, pero en la playa, no sé.
in the park ran Sonia but in the beach not know
Literal: 'In the park, ran Sonia, but in the beach, I don't know.'
Interpretation: 'As for the park$_i$, Sonia ran there$_i$, but, as for the beach$_j$, I don't know who ran there$_j$.'

Adverbs

Similarly, frequency and manner adverbs can be topicalized out of an embedded wh-question, as shown by examples (41) and (42):

(41) [Ocasionalmente], no sé quién corre __.
occasionally not know who runs
'I don't know who runs occasionally'

(42) [Rápido], no sé quién corre __.
fast not know who runs
'I don't know who runs fast.'

Examples (43) and (44) show that they can also occur as remnants for embedded wh-TREQs:

(43) Sonia corre frecuentemente, pero ocasionalmente, no sé.
Sonia runs often but occasionally not know
Literal: 'Sonia runs often, but, occasionally, I don't know.'
Interpretation: 'Sonia runs often, but I don't know who runs occasionally.'

(44) Sonia corre lento, pero rápido, no sé.
Sonia runs slow but fast not know
Literal: 'Sonia runs slowly, but, fast, I don't know.'
Interpretation: 'Sonia runs slowly, but I don't know who runs fast.'

As I argued for other constituents in this section, I analyze the ellipsis sites in (43) and (44) as arising from (41) and (42) respectively.

Predicate-argument adjectives

Predicate-argument adjectives can also be topicalized out of an embedded wh-question (45):

(45) [Azul], no sé quién pintó el auto __.
blue not know who painted the car
'I don't know who painted the car blue.'

Likewise, they can occur as remnants for embedded wh-TREQs, regardless of whether the adjective has been topicalized in the antecedent, as shown in (46):

(46) a. Rojo, pintó el auto Sonia, pero azul, no sé.
red painted the car Sonia but blue not I.know
Literal: 'Red, Sonia painted the car, but blue, I don't know.'
Interpretation: 'As for red, Sonia painted the car with that color, but as for blue, I don't know who painted the car with that color.'

b. Sonia pintó el auto rojo, pero azul, no sé.
Sonia painted the car red but blue not know
Literal: 'Sonia painted the car red, but blue, I don't know.'
Interpretation: 'Sonia painted the car red, but I don't know who painted the car blue.'

Infinitivals and Infinitival Phrases

As example (47) shows, bare infinitives can be topicalized out of embedded wh-questions:

(47) [Comer], no sé quién quiere __.
to.eat not know who wants
'As for eating, I don't know who wants to do that.'

Likewise, they can occur as remnants for embedded wh-TREQs, as shown in (48):

(48) Sonia quiere cocinar, pero comer, no sé.
Sonia wants to.cook but to.eat not know
Literal: 'Sonia wants to cook, but to eat, I don't know.'
Interpretation: 'Sonia wants to cook, but I don't know who wants to eat.'

In addition, (49) shows that shows that infinitival phrases can also be topicalized out embedded wh-questions:

(49) [Comprar un auto], no sé quién quiere __.
to.buy a car not know who wants
'As for buying a car, I don't know who wants that.'

As predicted, they can occur as remnants for embedded wh-TREQs, as shown in (50):

(50) Sonia quiere viajar a Buenos Aires, pero comprar un auto, no sé.
Sonia wants to.travel to Buenos Aires but to.buy a car not know
Literal: 'Sonia wants to travel to Buenos Aires, but to buy a car, I don't know.'
Interpretation: 'Sonia wants to travel to Buenos Aires, but I don't know who wants to buy a car.'

CPs

Examples (51)-(52) show that CPs can also be topicalized out of embedded wh-questions:[9]

9. It should be noted that not all speakers agree on considering (51) grammatical. However, as expected, those speakers that don't accept (51) also reject (53).

(51) [Cuándo viste la película], no sé quién preguntó __.
when saw the movie not know who asked
'As for when you saw the movie, I don't know who asked that.'

(52) [Que vio la película], no sé quién (lo) dijo __.
that saw the movie not know who CL said
'As for seeing the movie, I don't know who said that they did it.'

Again, as predicted, they can occur as remnants for embedded wh-TREQs, as in (53)-(54):

(53) Sonia preguntó cuándo leíste el libro, pero cuándo viste la película, no sé.
Sonia asked when read the book but when watch the movie not know
Literal: 'Sonia asked when you read the book, but when you watched the movie, I don't know.'
Interpretation: 'Sonia asked when you read the book, but I don't know who asked when you watched the movie.'

(54) Sonia dijo que leiste el libro, pero que viste la película, no sé.
Sonia said that you.read the book but that you.watch the movie not know
Literal: 'Sonia said that you read the book, but that you watched the movie, I don't know.'
Interpretation: 'Sonia said that you read the book, but I don't know who said that you watched the movie.'

6.4.2 Impossible remnants

Impossible remnants for embedded wh-TREQs in Spanish are exactly those constituents that cannot be otherwise topicalized out of an embedded wh-question in this language. This shows that there's indeed structure inside the ellipsis site, and that the remnant has been topicalized out of it. This argument complements what I just presented in Section 6.4.1. In short, impossible remnants include TPs, sentential adverbs, and attributive adjectives. In what follows, I provide examples of each of them.

TPs

As (55) shows, TPs cannot be topicalized out of embedded wh-questions:

(55) *[Compró un auto], no sé quién __.
bought a car not I.know who
Intended: 'As for buying a car, I don't know who did it.'

As predicted, they cannot occur as embedded wh-TREQs, as shown in (56):

(56) *Sonia viajó a Buenos Aires, pero compró un auto, no sé.
Sonia traveled to Buenos Aires but bought a car not I.know
Literal: 'Sonia traveled to Buenos Aires, but bought a car, I don't know.'
Intended: 'Sonia traveled to Buenos Aires, but I don't know who bought a car.'

Sentential adverbs

(57) shows that sentential adverbs cannot be topicalized out of embedded wh-questions:

(57) *[Probablemente], no sé quién __ va a renunciar.
probably not I.know who is.going to quit
Intended: 'I don't know who is probably going to quit.'

Likewise, (58) shows that they cannot occur as a embedded wh-TREQs:

(58) *Seguramente va a renunciar Sonia, pero probablemente no sé.
surely is.going to quit Sonia but probably not I.know
Literal: 'Sonia is going to quit for sure, but probably, I don't know.'
Intended: 'Sonia is going to quit for sure, but I don't know who is probably going to quit.'

Adjectives

(59) shows that post-nominal adjectives cannot be topicalized out of embedded wh-questions:

(59) *[Joven], no sé quién contrató a un amigo __.
old not I.know who hired DOM an friend
Intended: 'I don't know who hired a young friend.'

As predicted, they cannot occur in embedded wh-TREQs, as shown in (60):

(60) *Sonia contrató a un amigo viejo, pero joven, no sé.
Sonia hired DOM a friend old but young not I.know
Literal: 'Sonia hired an elderly friend, but young, I don't know.'
Intended: 'Sonia hired an elderly friend, but I don't know who hired a young one.'

(61) shows that pre-nominal adjectives cannot be topicalized out of embedded wh-questions:

(61) *[Nuevo], no sé quién contrató a un __ amigo.
new not I.know who hired DOM a friend
Intended: 'I don't know who hired a nee friend.'

Again, as predicted, they cannot occur embedded wh-TREQs, as shown in (62):

(62) *Sonia contrató a un viejo amigo, pero nuevo, no sé.
Sonia hired DOM an old friend but new not I.know.
Literal: 'Sonia hired a long-time friend, but a new one, I don't know.'
Intended: 'Sonia hired a long-time friend, I don't know who hired a new friend.'

6.4.3 Islands

In this section I analyze the behavior of embedded wh-TREQs in contexts of syntactic islands. I discuss complex NP islands, adjunct islands, relative clause islands, *whether* islands and wh-islands. Given that embedded wh-TREQs are already embedded structures headed by *no sé* 'I don't know', all the baseline examples will include an embedded question:

(63) No sé quién comió pasta.
not I.know who ate pasta
'I don't know who ate pasta.'

In addition, for each island I show that topicalizations out of these structures are banned, and that when the antecedent contains one of these structures, wh-TREQs are impossible. This provides evidence for the claim that wh-TREQs involve a topicalization out of the ellipsis site, and that the ellipsis site must be isomorphic to its antecedent. In addition, I show that when topicalizations occur from outside the island but the wh-word needs to be extracted from inside the island, embedded wh-TREQs are also ungrammatical. This shows that the wh-phrase moves inside the ellipsis site, violating the island.

As a baseline, the example in (64) shows that wh-movement and topicalization can indeed occur together out of embedded clauses:

(64) [Pasta], no sé [quién] dijiste que __ comió __.
pasta not I.know who you.said that ate
'As for pasta$_j$, I don't know who$_i$ did you say that t$_i$ ate that$_j$.'

As expected, embedded wh-TREQs that would involve wh-movement (inside the ellipsis site) and topicalization (outside the ellipsis site), are perfectly possible, as shown in (65). In other words, the source of the ellipsis site in (65) would be the sentence in (64) above.

(65) Dijiste que Sonia comió pizza, pero pasta, no sé.
you.said that Sonia ate pizza but pasta not I.know
Literal: 'You said that Sonia ate pizza, but pasta, I don't know.'
Interpretation: 'You said that Sonia ate pizza, but I don't know who$_i$ you said that t$_i$ ate pasta.'

In the rest of this section, I provide evidence from various types of islands to show that embedded wh-TREQs are not allowed in these contexts, that is, embedded wh-TREQs are island sensitive, just like root wh-TREQs, analyzed in Chapter 5.

Complex NP Islands

Topicalizations out of complex NPs such as *el rumor de que* 'the rumor that' are ungrammatical, giving rise to a complex NP island, as illustrated in (66c). For the sake of explicitness, below I show that when the topicalization doesn't involve an island, the sentence is grammatical as in (66a), and when there is an island structure but there is no movement out of it, the sentence is also grammatical, as in (66b):

(66) a. [Pasta], no sé quién te contó que comí __. ✓
pasta not I.know who to.you told that I.ate
'As for pasta$_i$, I don't know who told you that I ate that$_i$.'

b. No sé quién te contó [$_{NP}$ el rumor de que comí pasta].
not I.know who to.you told the rumor of that I.ate pasta
'I don't know who told you the rumor that I ate pasta.'

c. *[Pasta], no sé quién te contó [$_{NP}$ el rumor de que comí __]. ✗
pasta not I.know who to.you told the rumor of that I.ate
Intended: 'As for pasta$_i$, I don't know who heard the rumor that I ate that$_i$.'

If, as proposed here, remnants of embedded wh-TREQs are topicalized out of the ellipsis site and the ellipsis site contains a structure that's syntactically isomorphic the one of it's antecedent, then we should expect wh-TREQs in the context of a complex NP not to be allowed. This prediction is borne out:

(67) *Sonia te contó el rumor de que comí pizza, pero pasta, no sé.
Sonia to.you told the rumor of that I.ate pizza but pasta, not I.know
Intended: 'Sonia told you the rumor that I ate pizza, but I don't know who told you the rumor that I ate pasta.'

In other words, the source of (67) would be the ungrammatical structure in (66c) above.

Another interesting pattern arises when material outside of the island is topicalized. As expected, this is perfectly possible, as shown in (68):

(68) [A Bruno], no sé quién le contó __ [$_{NP}$ el rumor de que comí pasta].
to Bruno not I.know who to.him told the rumor of that ate pasta
'As for Bruno$_i$, I don't know who told him$_i$ the rumor that I ate pasta.'

However, when this is tested in the context of an embedded wh-TREQ, the result is ungrammatical, as the following example shows:

(69) *A Sonia le contaste el rumor de que comí pizza, pero a Bruno, no sé.
to Sonia to.her you.told the rumor of that I.ate pizza but to Bruno not I.know
Intended: 'You told Sonia the rumor that I ate pizza, but I don't know what$_i$ you told Bruno the rumor that I ate t$_i$.'[10]

The ungrammaticality of (69) is not due to the topicalization, since it doesn't cross an island boundary—as (68) above shows—but to the wh-movement of the wh-object *qué* 'what', which in this case does cross an island boundary, as shown in (70):

(70) *No sé [qué] le contaste a Bruno [$_{NP}$ el rumor de que comí __].
not I.know what to.him told to Bruno the rumor of that ate
Intended: 'I don't know what$_i$ you told Bruno the rumor that I ate t$_i$.'

10. Note that this sentence is ungrammatical under the interpretation provided in the example, which involves an island violation. Under other interpretations such as 'You told Sonia the rumor that I ate pizza, but I don't know what you told Bruno' or 'You told Sonia the rumor that I ate pizza, but I don't know whether you told Bruno the rumor that I ate pizza', the sentence would be grammatical. Crucially, these readings wouldn't involve an island violation. The same facts hold for the other islands analyzed in this section.

In other words, the source of (69) would be the ungrammatical structure in (71), whose ungrammaticality is due to the wh-movement, and not the topicalization:

(71) *[A Bruno], no sé [qué] le contaste __ [NP el rumor de que comí __].
to Bruno not I.know what to.him you.told the rumor of that ate
Intended: 'As for Bruno$_i$, I don't know what$_j$ you told him$_i$ the rumor that I ate t$_j$.'

This provides evidence that there's indeed wh-movement inside the ellipsis site, and that the wh-phrase does not stay in-situ in this type of ellipsis.

Finally, for the sake of completeness, the following example shows that when both the topicalized XP and the wh-phrase move from inside the island, the result is ungrammatical:

(72) *[Pasta], no recuerdo [quién] me contaste [NP el rumor de que __ comió __].
pasta not remember who me told the rumor of that ate
Intended: 'As for pasta$_i$, I don't remember who$_j$ you told me the rumor that t$_j$ ate that$_i$?'

Likewise, as shown in (73), wh-TREQs are ungrammatical in these contexts, given that the source would have been (72):

(73) *Me contaste el rumor de que Sonia comió pizza, pero pasta, no recuerdo.
to.me you.told the rumor of that Sonia ate pizza but pasta not I.remember
Intended: 'You told me the rumor that Sonia ate pizza, but I don't remember who$_i$ you told me the rumor that t$_i$ ate pasta.'

To sum up, I showed that: (i) the remnant is topicalized and moves out of the ellipsis site; (ii) the ellipsis site contains a moved wh-phrase; and (iii) syntactic identity between the ellipsis site and its antecedent is necessary. In the rest of this subsection I will replicate the same argumentation for other islands such as adjunct islands, *whether* islands, wh-islands, and relative clauses islands.

Adjunct Islands

Topicalizations out of adjuncts are ungrammatical, giving rise to an adjunct island, as illustrated in (74b). As (74a) shows, when there is an island structure but there is no movement out of it, the sentence is grammatical:

(74) a. No sé quién se enojó [Adjunct porque comí pasta].
not I.know who CL.3SG got.mad because I.ate pasta
'I don't know who got mad because I ate pasta.'

b. *[Pasta], no sé quién se enojó [Adjunct porque comí __].
pasta not I.know who CL.3SG got.mad because I.ate
Intended: 'As for pasta$_i$, I don't know who got mad because I ate that$_i$.'

As explained above for complex NP islands, we expect embedded wh-TREQs that would involve a topicalization from inside the adjunct clause to be ungrammatical. This prediction is borne out, as the following example shows:

(75) *Sonia se enojó porque comí pizza, pero pasta, no sé.
Sonia CL.3SG got.mad because I.ate pizza but pasta not I.know
Intended: 'Sonia got mad because I ate pizza, but I don't know who got mad because I ate pasta.'

That is, the source of (75) would be the ungrammatical structure in (74b).

Similarly to complex NPs, topicalization of material outside the island is perfectly possible, as shown in (76):

(76) [A Bruno], no sé quién le contó __ que me enojé
to Bruno not I.know who to.him told that CL.1SG I.got.mad
[Adjunct porque comiste pasta].
because you.ate pasta
'As for Bruno$_i$, I don't know who told him$_i$ that I got mad because you ate pasta.'

However, when this is tested in the context of an embedded wh-TREQ, the result is ungrammatical, as the following example shows:

(77) *A Sonia, le contaste que me enojé porque comiste pizza, pero a
to Sonia to.her you.told that CL.1SG I.got.mad because you.ate pizza but to
Bruno, no sé.
Bruno not I.know
Intended: 'You told Sonia that I got mad because you ate pizza, but I don't know what$_i$ you told Bruno that I got mad because you ate t$_i$.'

The ungrammaticality of (77) is not due to the topicalization, since it doesn't cross an island boundary, as (76) above shows, but to the wh-movement, which gives rise to an ungrammatical sentence, as in (78):

(78) *No sé [qué] le contaste a Bruno que me enojé [porque comiste __].
not know what to.him you.told to Bruno that CL.1SG got.mad because you.ate
Intended: 'I don't know what$_i$ you told Bruno that I got mad because you ate t$_i$.'

That is, the source of (78) would be the ungrammatical structure in (79), whose ungrammaticality is given by the wh-movement, and not the topicalization:

(79) *[A Bruno], no sé [qué] le contaste __ que me enojé [Adj. porque comiste __].
to Bruno not know what to.him you.told that CL.1SG got.mad because you.ate
Intended: 'As for Bruno$_i$, I don't know what$_j$ you told him$_i$ that I got mad because you ate t$_j$.'

I take this as providing evidence that there's indeed wh-movement inside the ellipsis site, and that the wh-phrase does not stay in-situ in this type of ellipsis.

Finally, for the sake of completeness, the following example shows that when both the topicalized XP and the wh-phrase move from inside the island, the result is also ungrammatical, as expected:

(80) *[Pasta], no sé [quién] te enojaste [Adjunct porque __ comió __].
pasta not I.know who CL.2SG you.got.mad because (s)he.ate
Intended: 'As for pasta$_i$, I don't know who$_j$ you got mad because t$_j$ ate t$_j$.'

As expected, wh-TREQs are ungrammatical in these contexts, as (81B) shows, given that the source would have been (74) above:

(81) *Te enojaste porque Sonia comió pizza, pero pasta, no sé.
CL.2SG you.got.angry because Sonia ate pizza but pasta not I.know
Intended: 'You got angry because Sonia ate pizza, but I don't know who$_i$ you got mad because t$_i$ ate pasta.'

Whether Islands

Topicalizations out of embedded polar questions (i.e. *whether*-clauses—WC in short) are ungrammatical, giving rise to a *whether* island, as illustrated in (82b). As (82b) shows, when there is an island structure but there is no movement out of it, the sentence is grammatical:

(82) a. No sé quién preguntó [$_{WC}$ si comiste pasta].
not I.know who asked whether you.ate pasta
'I don't know who asked whether you ate pasta.'

b. *[Pasta], no sé quién preguntó [$_{WC}$ si comiste __].
pasta not I.know who asked whether you.ate
Intended: 'As for pasta$_i$, I don't know who asked whether you ate that$_i$.'

As explained above for complex NP and adjunct islands, we expect wh-TREQs that would involve a topicalization from inside the *whether* clause to be ungrammatical as well, given that this would involve an island violation inside the ellipsis site. This prediction is borne out, as the following example shows:

(83) *Sonia preguntó si comiste pizza, pero pasta, no sé.
Sonia asked whether you.ate pizza but pasta not I.know
Intended: 'Sonia asked whether you ate pizza, but I don't know who asked whether you ate pasta.'

In other words, the source of (83) would be the ungrammatical structure in (82b) above.

Again, similarly to complex NPs and adjuncts, topicalization of material outside the island is perfectly possible, as shown in (84):

(84) [A Bruno], no sé quién le preguntó __ [$_{WC}$ si comí pasta].
to Bruno not I.know who to.him asked whether I.ate pasta
'As for Bruno$_i$, I don't know who asked him whether I ate pasta.'

However, when this is tested in the context of a wh-TREQ, the result is ungrammatical, as shown in (85):

(85) *A Sonia le preguntaste si comí pasta, pero a Bruno, no sé.
to Sonia to.her you.asked whether I.ate pasta but to Bruno not I.know
Intended: 'You asked Sonia whether I ate pasta, but I don't know what$_i$ you asked Bruno whether I ate t$_i$.'

The ungrammaticality of (85) is not due to the topicalization, since it doesn't cross an island boundary, as (84) above shows, but to the movement of the wh-object *qué* 'what', which gives rise to an ungrammatical sentence, as in (86):

(86) *No sé [qué] le preguntaste a Bruno [$_{WC}$ si comí __].
not I.know what to.him asked to Bruno whether I.ate
Intended: 'I don't know what$_i$ you asked Bruno whether I ate t$_i$.'

That is, the source of (85) would be the ungrammatical structure in (87), whose ungrammaticality is given by the wh-movement, and not the topicalization:

(87) *[A Bruno], no sé [qué] le preguntaste __ [$_{WC}$ si comí __].
to Bruno not I.know what to.him asked whether I.ate
Int.: 'As for Bruno$_i$, I don't know what$_j$ you asked him$_i$ whether I ate t$_j$.'

Crucially, this provides evidence that there's indeed wh-movement inside the ellipsis site, and that the wh-phrase does not stay in-situ in this type of ellipsis.

Finally, for the sake of completeness, the following example shows that when both the topicalized XP and the wh-phrase move from inside the island, the result is also ungrammatical, as expected:

(88) *[Pasta], no sé [quién] preguntaste [$_{WC}$ si __ comió __].
pasta not I.know who you.asked whether ate
Intended: 'As for pasta$_i$, I don't know who$_j$ you asked whether t$_j$ ate t$_j$.'

As expected, wh-TREQs are ungrammatical in these contexts, as (89) shows; that is, the source would be the ungrammatical sentence in (88):

(89) *Preguntaste si Sonia comió pizza, pero pasta, no sé.
you.asked whether Sonia ate pizza but pasta not I.know
Intended: 'You asked whether Sonia ate pizza, but I don't know who$_i$ you asked whether t$_i$ ate pasta.'

Interrogative (Wh-) Islands

Topicalizations out of embedded wh-questions (WhQ, in short) are ungrammatical, giving rise to a *wh*-island, as illustrated in (90b). As (90a) shows, when there is an island structure but there is no movement out of it, the sentence is grammatical:[11]

11. Note that in the examples in this subsection the subject of the embedded clause is post-verbal, due to obligatory subject-inversion in questions in Spanish, as shown below:

(90) a. No sé quién preguntó [$_{\text{WhQ}}$ cuándo comió Bruno pasta].
not I.know who asked when ate Bruno pasta
'I don't know who asked when Bruno ate that pasta.'

b. *[Pasta], no sé quién preguntó [$_{\text{WhQ}}$ cuándo comió Bruno __].
pasta not I.know who asked when ate Bruno
Intended: 'As for pasta$_i$, I don't know who asked when Bruno ate that that$_i$.'

As explained above for complex NP, adjunct and *whether*-islands, we expect wh-TREQs that would involve a topicalization from inside the embedded wh-question to be ungrammatical as well, given that this would involve an island violation inside the ellipsis site. This prediction is borne out, as the following example shows:

(91) *Sonia preguntó cuándo comí pizza, pero pasta, no sé.
Sonia asked whether I.ate pizza but pasta not I.know
Int.: 'Sonia asked when I ate pizza, but I don't know who asked when I ate pasta.'

In other words, the source of (91) would be the ungrammatical structure in (92):

(92) *[Pasta], no sé quién preguntó [$_{\text{WhQ}}$ cuándo comí __].
pasta not I.know who asked when I.ate
Intended: 'As for pasta$_i$, I don't know who asked when I ate that$_i$.'

Similarly to the other islands analyzed above, topicalization of material outside the island is perfectly possible, as shown in (93):

(93) [A Bruno], no sé quién le preguntó __ [$_{\text{WhQ}}$ cuándo comí pasta].
to Bruno not I.know who to.him I.asked when I.ate pasta
'As for Bruno$_i$, I don't know who asked him$_i$ that I ate pasta.'

However, when this is tested in the context of a wh-TREQ, the result is ungrammatical (94):

(i) a. No sé cuándo comió Bruno pasta.
not I.know when ate Bruno pasta
'I don't know when Bruno ate pasta.'

b. ??No sé cuándo Bruno comió pasta.
not I.know when Bruno ate pasta
Intended: 'I don't know when Bruno ate pasta.'

(94) *Le preguntaste a Sonia cuándo comí pizza, pero a Bruno, no sé.
to.her asked to Sonia when you.ate pizza but to Bruno not I.know
Intended: 'I asked Sonia when you ate pizza, but I don't know what$_i$ I asked Bruno when you ate t$_i$.'

The ungrammaticality of (94) is not due to the topicalization, since it doesn't cross an island boundary, as (93) above shows, but to the wh-movement, which gives rise to an ungrammatical sentence, as in (95):

(95) *No sé [qué] le pregunté a Bruno [$_{WhQ}$ cuándo comí __].
not I.know what to.him asked to Bruno when I.ate
Intended: 'I don't know what$_i$ you asked Bruno when I ate t$_i$.'

That is, the source of (94) would be the ungrammatical structure in (96), whose ungrammaticality is given by the wh-movement, and not the topicalization:

(96) *[A Bruno], [qué] le preguntaste __ [$_{WhQ}$ cuándo comí __].
to Bruno what to.him asked when I.ate
Intended: 'As for Bruno$_i$, what$_j$ did you ask him$_i$ when I ate t$_j$?'

Crucially, this provides evidence that there's indeed wh-movement inside the ellipsis site, and that the wh-phrase does not stay in-situ in this type of ellipsis.

Finally, for the sake of completeness, the following example shows that when both the topicalized XP and the wh-phrase move from inside the island, the result is also ungrammatical, as expected:

(97) *[Pasta], no sé [quién] preguntaste [$_{WhQ}$ cuándo __ comió __].
pasta not I.know who you.asked when ate
Intended: 'As for salad$_i$, I don't know who$_j$ you asked when t$_j$ ate t$_j$.'

As expected, wh-TREQs are ungrammatical in these contexts, as (98) shows (i.e. the source would have been (96) above):

(98) *Preguntaste cuándo comió pizza Sonia, pero pasta, no sé.
you.asked when ate pizza Sonia but pasta not I.know
Intended: 'You asked when Sonia ate pizza, but I don't know who$_i$ you asked when he$_i$ ate pasta.'

Relative Clause Islands

Topicalizations out of embedded relative clauses are also ungrammatical, giving rise to a relative-clause (RC) island, illustrated in (99b). As (99a) shows, when there is an island structure but there is no movement out of it, the sentence is ungrammatical:

(99) a. No sé quién habló con la persona [$_{RC}$ que comió pasta].
not I.know who talked with the person that ate pasta
1I don't know who talked with the person that ate pasta.'

b. *[Pasta], no sé quién habló con la persona [$_{RC}$ que comió __].
pasta not I.know who talked with the person that ate
Int.: 'As for pasta$_i$, I don't know who talked with the person that ate that$_i$.'

We expect wh-TREQs that would involve a topicalization from inside a relative clause to be ungrammatical as well, given that this would involve an island violation inside the ellipsis site. This prediction is borne out, as the following example shows:

(100) *Sonia habló con la persona que comió pizza, pero pasta, no sé.
Sonia talked with the person that ate pizza but pasta not I.know
Intended: 'Sonia talked with the person that ate pizza, but I don't know who talked with the person that ate pasta.'

Similarly to the other islands analyzed above, topicalization of material outside the island is perfectly possible, as shown in (101):

(101) [A Bruno], le hablaste __ de la persona [$_{RC}$ que comió pasta].
to Bruno to.him you.talked about the person that ate pasta
'As for Bruno, you talked to him about the person that ate pasta.'

However, when this is tested in the context of a wh-TREQ, the result is ungrammatical, as shown in (102):

(102) *Le hablaste a Sonia de la persona que comió pizza, pero a Bruno no sé.
to.her you.talked to Sonia about the person that ate pizza but to Bruno not I.know
Intended: 'You talked to Sonia about the person that ate pizza, but I don't know what$_i$ you talked to Bruno about person that ate t$_i$.'

The ungrammaticality of (102) is not due to the topicalization, since it doesn't cross an island boundary, as (101) above shows, but to the wh-movement, which gives rise to an ungrammatical sentence, as in (103):

(103) *No sé [qué] le hablaste a Bruno de la persona [$_{RC}$ que comió __].
not I.know what to.him talked to Bruno about the person that ate
Intended: 'I don't know what$_i$ you talked to Bruno about the person that ate t$_i$.'

That is, the source of (102) would be the ungrammatical structure in (104), whose ungrammaticality is given by the wh-movement, and not the topicalization:

(104) *[A Bruno], no sé [qué] le hablaste __ sobre la persona [$_{RC}$ que comió __].
to Bruno not I.know what to.him you.talked about the person that ate
Intended: 'As for Bruno$_i$, I don't know what$_j$ you talked to him$_i$ about the person that ate t$_j$.'

Crucially, this provides evidence that there's indeed wh-movement inside the ellipsis site, and that the wh-phrase does not stay in-situ in this type of ellipsis.

Interim Summary

I presented evidence from five island types (complex NP islands, adjunct islands, *whether* islands, wh-islands and relative clause islands) that shows that: (i) the remnant is topicalized and moves out of the ellipsis site; (ii) the ellipsis site contains a moved wh-phrase; (iii) syntactic identity between the ellipsis site and its antecedent is necessary. In the next section, I'll discuss multiple embeddings that don't involve island violations to provide further evidence against evasion/repair strategies.

6.4.4 Connectivity effects

In this section I provide further evidence that syntactic identity between the ellipsis site and the antecedent is needed to license wh-TREQs. This evidence comes from various connectivity effects. In particular, I analyze Case and P-Omission, voices mismatches, and spray/load-alternations. Following my argumentation in Chapters 2 and 3, I take the fact

that P-Omission is not allowed in wh-TREQs as providing further evidence that the remnant has moved out of the ellipsis site.

Case-omission

As the following example shows, case omission is not possible in embedded wh-TREQs, that is, DOM cannot be absent in the remnant:

(105) Sonia escondió a Bruno, pero *(a) Luciano, no sé.
Sonia hid DOM Bruno but DOM Luciano not I.know
Literal: 'Sonia hid Bruno, but Luciano, I don't know.'
Interpretation: Sonia hid Bruno, but I don't know who hid Luciano.'

As I briefly discussed in the previous chapter and at the end of Chapter 3, the impossibility of case-omission follows trivially if the ellipsis site contains an elided version of the relevant case assigner (i.e., the verb). As in cases of root wh-TREQs, DOM needs to be present even in contexts in which there is no DOM in the antecedent, as in (106):

(106) Sonia escondió el tesoro, pero *(a)l tesorero, no sé.
Sonia hid the treasure but DOM.the treasurer not I.know
Literal: 'Sonia hid the treasure, but the treasurer, I don't know.'
Interpretation: 'Sonia hid the treasure, but I don't know who hid the treasurer.'

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 DOM is assigned to the remnant, regardless of the (lack of) case marking in the correlate in the antecedent.

P-Omission

As the following example shows, P-Omission is not allowed in embedded wh-TREQs:

(107) Sonia habló con Bruno, pero *(con) Luciano, no sé.
Sonia talked with Bruno but with Luciano not I.know
Literal: 'Sonia talked with Bruno, but with Luciano, I don't know.'
Interpretation: 'Sonia talked with Bruno, but I don't know who talked with Luciano.'

In Chapters 2 and 3, I proposed and provided evidence for the following generalization:

(108) The *P-(reposition) Omission Generalization* for Spanish:
P-Omission in ellipsis in Spanish is only allowed when the following two conditions are met: (a) the remnant's correlate in the antecedent does not move, and (b) the remnant does not move.

At first sight, the embedded wh-TREQ in (107) could be considered a counterexample for (108), given that the remnant's correlate in the Antecedent (*con Bruno* 'with Bruno') in (107) stays in situ. However, I take this example to be further evidence that the remnant *con Luciano* 'with Luciano' is topicalized and moves to the left-periphery, complying with (108) (similar to the cases of pseudostripping discussed in Chapter 3). That is, the ban on P-Omission in embedded wh-TREQs comes from the ban on P-Stranding in Spanish, i.e. the PP remnant moves, and it must pied-pipe the preposition in this language:

(109) a. [Con Luciano], no sé quién habló __. ✓
with Luciano not I.know who talked
Literal: '[With Luciano]$_i$, I don't know who talked t$_i$.'

b. *[Luciano], no sé quién habló con __. ✗
Luciano not I.know who talked with
Literal: '[Luciano]$_i$, I don't know who talked with t$_i$.'

Additionally, P-Omission patterns can also provide evidence of the structure inside the ellipsis site in cases of CP-Ellipsis, as I showed for root wh-TREQs in Chapter 5. In particular, when the remnant of an embedded wh-TREQ contrasts with the subject and there is a PP in the antecedent, the subsequent follow-up answer to A's embedded wh-TREQ cannot omit the preposition, as shown below:

(110) A: Sonia habló con Bruno, pero Luciano, no sé.
Sonia talked with Bruno but Luciano, not I.know
Literal: 'Sonia talked with Bruno, but Luciano, I don't know.'
Intended: 'Sonia talked with Bruno, but I don't know who Luciano talked with.'

B: Yo sí sé. *(Con) Danilo.
I yes know with Danilo
Literal: 'I do know. With Danilo.'
Interpretation: 'I do know. Luciano talked with Danilo.'

The ban on P-Omission in B's answer provides further evidence that the ellipsis site in (110A) contains a wh-question with a moved wh-phrase. That is, (111) is the source for the embedded wh-TREQ in (110A):

(111) ...pero [Luciano], no sé [con quién] __ habló __?
but Luciano not I.know with who talked
Literal: '...but Luciano$_j$, I don't know [with who]$_i$ he$_j$ talked t$_i$?'

In other words, B's answer to A's embedded wh-TREQ shows that the wh-phrase inside the ellipsis site has moved, creating a configuration similar to the one in fragment answers analyzed in Chapters 2 and 3, explaining, then, the unavailability of P-Omission.

Voice mismatches

Another piece of evidence for an ellipsis analysis of wh-TREQs and for the need for syntactic identity between the ellipsis site and its antecedent comes from the unavailability of voice mismatches (Merchant 2013). As the example in (112a) shows, an active sentence cannot be elided if the antecedent is a passive sentence. Crucially, a non-elliptical version of (112a) is possible in this context, as shown in (112b).

(112) La casa fue destruida por Sonia...
the house was destroyed by Sonia
'The house was destroyed by Sonia...'

a. *...pero Bruno, no sé ~~qué~~ ~~destruyó~~.
but Bruno not I.know ~~what~~ ~~he.destroyed~~
Literal: '...but Bruno, I don't know.'
Intended: '...but Bruno, I don't know what he destroyed.'

b. ...pero Bruno no sé qué destruyó.
but Bruno not I.know what he.destroyed
'...but Bruno, I don't know what he destroyed.'

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

(113) A: La casa fue destruida por Sonia, pero el auto, no sé.
the house was destroyed by Sonia but the car not I.know
'The house was destroyed by Sonia, but the car, I don't know.'

B: Yo sí sé. *(Por) Bruno.
I yes know by Bruno
'I do know. By Bruno.'

Similar to what I proposed for the patterns of P-Omission (in particular see the argumentation around example (110) above), (113) shows that the ellipsis site should contain a passive sentence, like the one in (114), which makes the preposition obligatory in B's answer:

(114) ...pero el auto, no sé por quién fue destruido.
but the car not I.know by who was destroyed
'...but I don't know by whom was the car destroyed.'

In other words, a sentence like the one in (115) is not a possible source for the ellipsis site (despite being perfectly possible as an overt continuation), otherwise a P-less answer would be grammatical, contrary to fact:

(115) ...pero el auto, no sé quién lo destruyó.
but the car not I.know who CL destroyed
'...but I don't know who destroyed the car.'

For the sake of completeness, a passive source given an active antecedent is also banned:

(116) *Sonia destruyó la casa, pero por Bruno, no sé.
Sonia destroyed the house but by Bruno not I.know
Literal: 'Sonia destroyed the house, but by Bruno, I don't know.'
Intended: 'Sonia destroyed the house, but I don't know what was destroyed by Bruno.'

However, this might be due to independent reasons. As the following example shows, topicalizing a 'by-phrase' seems to be independently ruled out:

(117) ?*...pero [por Bruno] no sé qué fue destruido __.
but by Bruno not I.know what was destroyed
Intended: '...but I don't know what was destroyed by Bruno.'

Spray/load alternations

As I explained in the previous chapter, the so-called *spray/load* alternation is disallowed under ellipsis, which is usually taken to be strong evidence for the need for syntactic identity and against pure semantic approaches. *Spray/load* alternations are also disallowed in embedded wh-TREQs. This is not due to some question/answer incongruence, given that the non-elliptical counterparts of the elliptical sentences (118a) and (119a) below are possible, as shown in (118b) and (119b):

(118) Sonia cargó el camión con libros...
Sonia loaded the truck with books
'Sonia loaded the truck with books...'

a. *...pero en el auto, no sé.
but in the car not I.know
Literal: '...but in the car, I don't know.'
Intended: '...but I don't know what she loaded in the car.'

b. ...pero en el auto, no sé qué cargó.
but in the car not I.know what she.loaded
'...but I don't know what she loaded in the car.'

(119) Sonia cargó libros en el camión...
Sonia loaded books in the truck
'Sonia loaded books in the truck...'

a. *...pero con revistas, no sé
but with magazines not I.know
Literal: '...but with magazines, I don't know.'
Intended: '...but I don't know what she loaded with magazines.'

b. ...pero con revistas, no sé qué cargó.
but with magazines not I.know what she.loaded
'...but I don't know what she loaded with magazines.'

For the sake of completeness, the only possible option for wh-TREQs is the one in which there's structural matching between the antecedent and the ellipsis site:

(120) Sonia cargó el camión con libros...
Sonia loaded the truck with books
'Sonia loaded the truck with books...'

a. ...pero con revistas, no sé.
but with magazines not I.know
Literal: '...but with magazines, I don't know.'
Interpretation: '...but I don't know what she loaded with magazines.'

b. ...pero el auto, no sé.
but the car not I.know
Literal: '...but the car, I don't know.'
Interpretation: '...but I don't know what she loaded the car with.'

(121) Sonia cargó libros en el camión...
Sonia loaded books in the truck
'Sonia loaded books in the truck...'

a. ...pero revistas, no sé.
but magazines not I.know
Literal: '...but magazines, I don't know.'
Interpretation: '...but I don't know what she loaded magazines onto.'

b. ...pero en el auto, no sé.
but in the car not I.know
Literal: '...but onto the car, I don't know'
Interpretation: '...but I don't know what she loaded onto the car.'

Again, this shows that some type of strict syntactic identity is needed in this type of ellipsis.

Interim summary

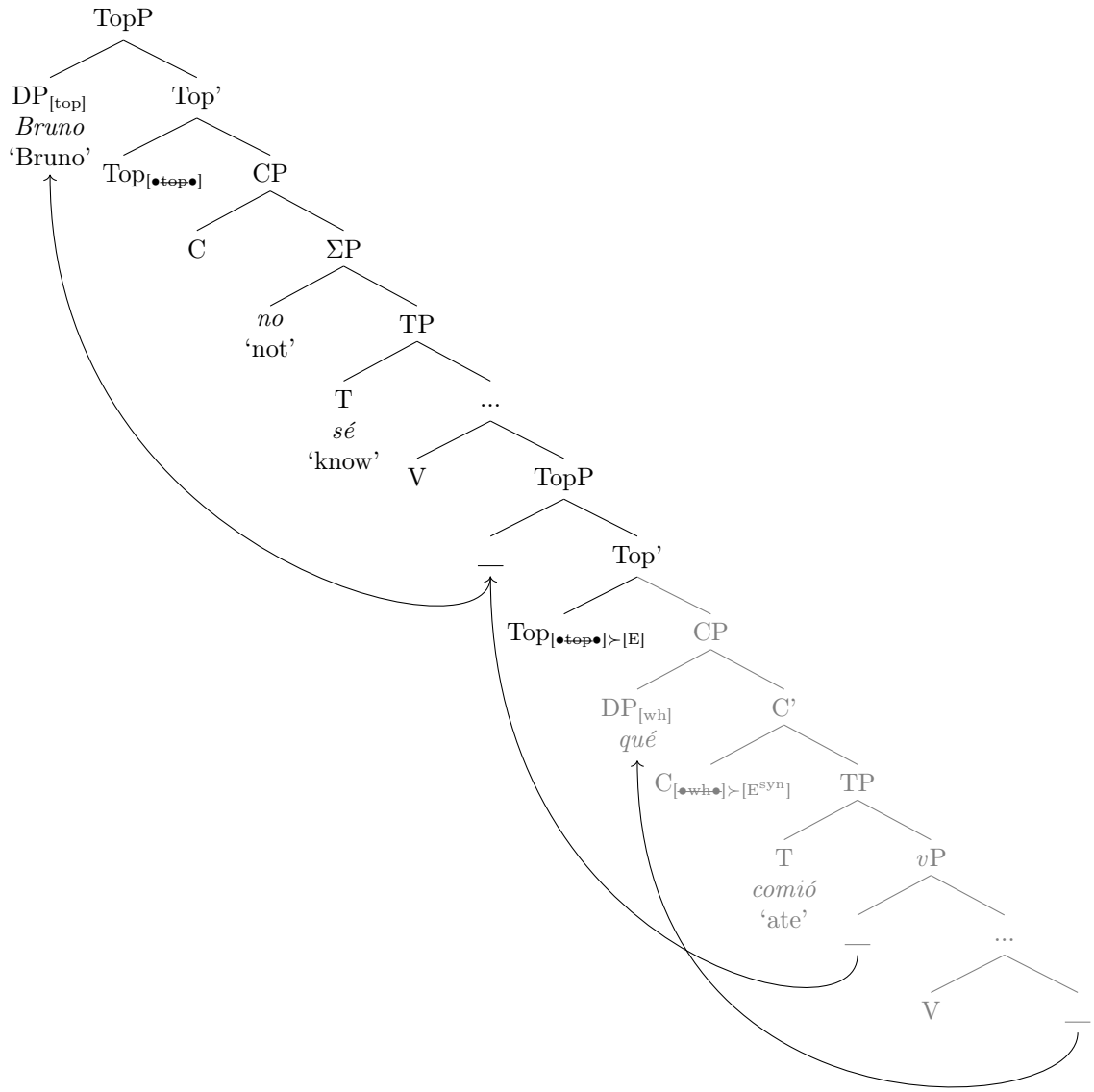
In this section, I've provided evidence to show that (i) there is structure inside the ellipsis site and embedded wh-TREQs are the result of ellipsis, (ii) the ellipsis site contains a wh-question, (iii) the remnant is topicalized out of the ellipsis site, and (iv) some kind of syntactic identity/isomorphism is needed to license this construction.

6.5 Summary and Conclusions

In this chapter, I extended my discussion on Topic-Remnant Elided Wh-Questions from the previous chapter by discussing *embedded wh-TREQs* in Spanish. The overall proposal is shown in (122). In brief, I claim that in this type of wh-TREQ the remnant first moves to

an intermediate TopP within the embedded clause. It can stay there or it can further move to matrix TopP. Following my argumentation form Chapter 5, I also provided evidence to argue for an elliptical account of this construction.

(122) Sonia comió pizza pero [Bruno$_{\text{top}}$] no sé ⟨~~qué~~$_i$ ~~comió~~ t$_i$⟩.
Sonia ate pizza but Bruno not I.know ⟨~~what~~ ~~ate~~ ⟩
'Sonia ate pizza but Bruno, I don't know ~~what did he eat~~.'



CHAPTER 7

POLAR TREQS

7.1 Introduction

In this chapter I analyze root and embedded *Topic-Remnant Elided Polar Questions*, which I will refer to as *polar TREQs* for simplicity. Root polar TREQs, exemplified in speaker B's response to A in (1B) and (2B), are elliptical questions interpreted as follow-up polar (yes/no) questions, as shown by speaker A's answers to B in the examples below:

(1) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y Bruno?
and Bruno
Literal: 'And Bruno?'
Interpretation: 'What about Bruno? Did he also eat pizza?'

A: No, comió pasta.
no he.ate pasta
'No, he ate pasta.'

(2) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y pasta?
and pasta
Literal: 'And pasta?'
Interpretation: 'What about pasta? Did she also eat pasta?'

A: No, solo comió pizza.
No only she.ate pizza
'No, she only ate pizza.'

Embedded polar TREQs, exemplified in (3A) and (4A), are elliptical polar (yes/no) questions that usually convey ignorance with respect to whether what has been conveyed in the antecedent also holds with respect to the remnant (see Section 7.4 for a more nuanced

view on the interpretation of these constructions). The polar meaning is confirmed with B's subsequent response to A's embedded polar TREQ:

(3) A: Sonia comió pizza, pero Bruno, no sé.
Sonia ate pizza but Bruno not know
Literal: 'Sonia ate pizza, but Bruno, I don't know.'
Interpretation: 'Sonia ate pizza, but I don't know whether Bruno ate pizza.'

B: Yo sí sé. No comió pizza(, comió pasta).
I yes know not ate pizza ate pasta
'I do know. He didn't eat pizza, he ate pasta.'

(4) A: Sonia comió pizza, pero pasta, no sé.
Sonia ate pizza but pasta not know
Literal: 'Sonia ate pizza, but pasta, I don't know.'
Interpretation: 'Sonia ate pizza, but I don't know whether she also ate pasta.'

B: Yo sí sé. No comió pasta, solo pizza.
I yes know not ate pasta only pizza
'I do know. She didn't eat pasta, she only ate pizza.'

As the examples above show, polar TREQs look like wh-TREQs on the surface; the difference being their interpretation. For the sake of explicitness, in the glosses throughout this chapter I specify the relevant interpretation under analysis (i.e. polar (matrix and embedded) questions). Based on their interpretation, in this chapter I argue that both root and embedded polar TREQs require a polar (yes/no) question to go unpronounced.[1] In this respect, I claim that polar TREQs are the result of ellipsis of an embedded polar question, from which a Topic has moved, surviving deletion, as illustrated in (5) and (6):

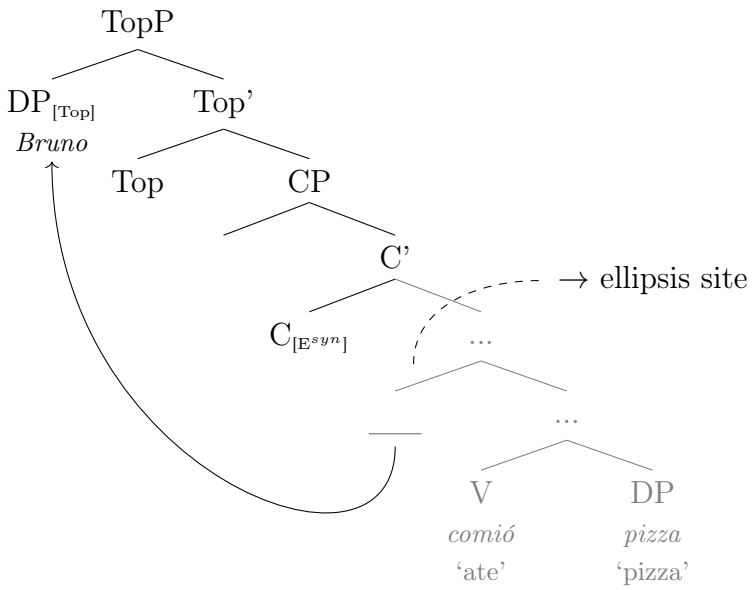
(5) B: Y [Bruno$_{\text{top}}$] ⟨$_{\text{E-site}}$ __ ~~comió~~ ~~pizza~~ ⟩?
and Bruno ~~ate~~ ~~pizza~~
'And Bruno ~~did he eat pizza~~?'

(6) Sonia comió pizza, pero [Bruno$_{\text{Top}}$] no sé ⟨$_{\text{E-site}}$ ~~si~~ __ ~~comió~~ ~~pizza~~ ⟩.
Sonia ate pizza but Bruno not I.know ~~whether~~ ~~he.ate~~ ~~pizza~~
'Sonia ate pizza, but Bruno, I don't know ~~whether he ate pizza~~.'

1. To avoid making the examples unnecessarily long, from now on I won't include A's response to B's root polar TREQ, nor B's response to A's embedded polar TREQ.

This is further illustrated in the simplified tree in (7) for example (5), where gray text represents elided material:

(7)



In other words, I analyze polar TREQs as the result of ellipsis triggered by an [E^{syn}]-feature on C, and the ellipsis site contains a polar (yes/no) question minus the topicalized DP *Bruno*. This analysis differs from my analysis of wh-TREQs in Chapters 5 and 6, which also involved an [E]-feature on Top. As I will show in the rest of this chapter, I claim here that this higher ellipsis is not necessary here. The specifics of this analysis will be revised in Section 7.3.

The structure of this chapter is as follows: Section 7.2 examines possible and impossible polar TREQs, and polar TREQs in the context of islands, which provides evidence for (i) an ellipsis approach of root and embedded polar TREQs, and (ii) the claim that the remnant is moved out the ellipsis site. In Section 7.3 I put forth an analysis for root and embedded polar TREQs, and I claim that these are a type of TP-Ellipsis, and not CP-Ellipsis (like wh-TREQs). In Section 7.4 I briefly provide examples of different contexts in which embedded polar TREQs can occur to show that this is a productive construction and not a crystallized form. Finally, Section 7.5 summarizes the main points of the chapter and concludes it.

7.2 The syntax of polar TREQs

As I did for root and embedded wh-TREQs in the previous chapters, in this section I will examine evidence in favor of an ellipsis approach to polar TREQs that involves topicalization of the remnant and deletion of the remaining material. First, the possible remnants for polar TREQs in Spanish are exactly those constituents that can otherwise be topicalized out of a polar question in this language (Section 7.2.1). Likewise, those constituents that cannot be topicalized out of a polar question cannot occur as polar TREQs (Section 7.2.2). These two patterns provide evidence for the claim that the remnant in polar TREQs is a topicalized XP. Second, in Section 7.2.3 I discuss a variety of islands which provides more evidence for the claim that the remnant is a topicalized XP that moves out of the ellipsis site. Additionally, the fact that polar TREQs are island sensitive means that some strategies proposed for island repair, such as short sources or cleft/copular sources, are not possible here, which in turn contributes to my claim that there must be syntactic isomorphism between the ellipsis site and its antecedent. Finally, in Section 7.2.4 I show that polar TREQs display connectivity effects; in particular, they do not allow P-Omission, voice mismatches or spray/load alternations, which provides further evidence for the need for (at least some type of) syntactic identity to license this construction.

7.2.1 Possible remnants

Possible remnants for polar TREQs in Spanish are exactly those constituents that can otherwise be topicalized out of a polar (yes/no) question in this language. This shows that there's indeed structure inside the ellipsis site, and that the remnant has been topicalized out of it. This argument will be complemented with the analysis of those constituents that cannot be topicalized out of polar questions and that, as predicted, cannot occur as polar TREQs (see Section 7.2.2 below). In short, possible remnants include DPs (both subjects and objects), prepositional phrases (IOs, and PPs both in the verbal and nominal domains), temporal and

locative phrases, adverbs, predicative adjectives, infinitival verbs and phrases, and CPs. In what follows, I provide examples of each of them.

Direct Objects

The examples below show that direct objects can be topicalized out of a polar (yes/no) question, both matrix (8a) and embedded (8b):

(8) a. [Pasta], comió Sonia __?
pasta ate Sonia
'As for pasta, did Sonia eat that?'

b. [Pasta], no sé si comió __.
pasta not know whether she.ate
'As for pasta, I don't know whether she ate that.'

Likewise, they can occur as remnants for polar TREQs, as shown in (9aB) and (9b):

(9) a. A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y pasta?
and pasta
Literal: 'And pasta?'
Interpretation: What about pasta? Did she also eat that?

b. Sonia comió pizza, pero pasta, no sé.
Sonia ate pizza but pasta not know
Literal: 'Sonia ate pizza, but pasta, I don't know.'
Interpretation: 'Sonia ate pizza, but I don't whether she also ate pasta.'

Indirect Objects

Similarly, the examples in (10) show that indirect objects can topicalized out of matrix and embedded polar questions:

(10) a. [A Bruno], le dio una pizza Sonia __?
to Bruno CL.DAT.SG gave a pizza Sonia
'As for Bruno, did Sonia give him a pizza?'

b. [A Bruno], no sé si (Sonia) le dio una pizza __.
to Bruno not know whether Sonia CL.DAT.SG she.gave a pizza
'As for Bruno, I don't know whether Sonia gave him a pizza.'

Likewise, they can occur as remnants for polar TREQs, as (11aB) and (11b) show:

(11) a. A: Sonia le dio una pizza a Luciano.
Sonia CL.DAT.SG gave a pizza to Luciano
'Sonia gave a pizza to Luciano.'

B: Y a Bruno?
and to Bruno
Literal: 'And Bruno?'
Interpretation: 'What about Bruno? Did she also give him a pizza?'

b. Sonia le dio una pizza a Luciano, pero a Bruno, no sé.
Sonia CL.DAT gave a pizza to Luciano but to Bruno not know
Literal: 'Sonia gave a pizza to Luciano, but to Bruno, I don't know.'
Interpretation: 'Sonia gave a pizza to Luciano, but I don't know whether she also gave a pizza to Bruno.'

Subjects

As shown in (12), subjects can also be topicalized out of polar questions:

(12) a. [Bruno], __ comió pizza?
Bruno ate pizza
'As for Bruno, did he eat pizza?'

b. [Bruno], no sé si __ comió pizza.
Bruno not know whether he.ate pizza
'As for Bruno, I don't know whether he ate pizza.'

Likewise, they can occur as remnants for polar TREQs, as the examples in (13) show:

(13) a. A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y Bruno?
and Bruno
Literal: 'And Bruno?'
Interpretation: 'What about Bruno? Did he also eat pizza?'

b. Sonia comió pizza, pero Bruno, no sé.
Sonia ate pizza but Bruno not know
Literal: 'Sonia ate pizza, but Bruno, I don't know.'
Intended: 'Sonia ate pizza, but I don't know whether Bruno also ate pizza.'

Prepositional Phrases

The examples below show that PPs can be topicalized out of polar questions. This holds for PPs in the verbal domain (14), and for PPs in the nominal domain (15):

(14) a. [Con Luciano], habló Sonia __?
with Luciano talked Sonia
'As for Luciano, did Sonia talk with him?'

b. [Con Luciano], no sé si habló __.
with Luciano not know whether she.talked
'As for Luciano, I don't know whether she talked with him.'

(15) a. [De Luciano], vio la foto __?
of Luciano saw the picture
'As for Luciano, did she see the picture?'

b. [De Luciano], no sé si vio la foto __.
of Luciano not know whether she.saw the picture
'As for Luciano, I don't know whether she saw his picture.'

As predicted, PPs can occur as remnants for polar TREQs, as shown in the examples below:

(16) a. 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? Did she also talk with him?'

b. Sonia habló con Bruno, pero con Luciano, no sé.
Sonia talked with Bruno but with Luciano not know
Literal: 'Sonia talked with Bruno but, with Luciano, I don't know.'
Interpretation: 'Sonia talked with Bruno but I don't know whether she also talked with Luciano.'

(17) a. A: Sonia vio la foto de Bruno.
Sonia saw the picture of Bruno
'Sonia saw the picture of Bruno.'

B: Y de Luciano?
and of Luciano
Literal: 'And Luciano's?'
Interpretation: 'What about Luciano? Did she also see Luciano's picture?'

b. Sonia vio la foto de Bruno, pero de Luciano, no sé.
Sonia saw the picture of Bruno but of Luciano not know
Literal: 'Sonia saw the picture of Bruno, but of Luciano, I don't know.'
Interpretation: 'Sonia saw the picture of Bruno, but I don't know whether she saw the picture of Luciano.'

Temporal and locative phrases

As for temporal and locative phrases, the examples in (18) and (19) show that they can be topicalized out of matrix and embedded polar questions:

(18) a. [El viernes], corrió Sonia __?
the Friday ran Sonia
'As for Friday, did Sonia run that day?'

b. [El viernes], no sé si corrió __.
the Friday not I.know whether she.ran
'As for Friday, I don't know whether she ran that day.'

(19) a. [En la playa], corrió Sonia __?
in the beach ran Sonia
'As for the beach, did Sonia run there?'

b. [En la playa], no sé si corrió __.
in the beach not I.know whether she.ran
'As for the beach, I don't know whether she ran there.'

As expected, temporal and locative phrases can also occur as remnants for root and embedded polar TREQs, as shown in (20) and (21):

(20) a. A: Sonia corrió el martes.
Sonia run the Tuesday
'Sonia run on Tuesday.'

B: Y el viernes?
and the Friday
Literal: 'And on Friday?'
Interpretation: 'What about Friday? Did she also run that day?'

b. Sonia corrió el sábado, pero el viernes, no sé.
Sonia ran the Saturday but the Friday not know
Literal: 'Sonia ran on Saturday, but on Friday, I don't know.'
Interpretation: 'Sonia ran on Saturday, but I don't know whether she ran on Friday.'

(21) a. A: Sonia corrió en el parque.
Sonia run in the park
'Sonia run in the park.'

B: Y en la playa?
and in the beach
Literal: 'And in the beach?'
Interpretation: 'What about the beach? Who run there?'

b. Sonia corrió en el parque, pero en la playa, no sé.
Sonia ran in the park but in the beach not know
Literal: 'Sonia ran in the park, but in the beach, I don't know.'
Interpretation: 'Sonia ran in the park, but I don't know whether she ran in the beach.'

Adverbs

Similarly, adverbs like manner (22) and temporal (23) adverbs can be topicalized out of matrix and embedded polar questions:

(22) a. [Rápidamente], escribe Sonia __?
fast writes Sonia
'As for fast, does Sonia write fast?'

b. [Rápidamente], no sé si escribe __.
fast not I.know whether she.writes
'As for fast, I don't know whether she writes fast.'

(23) a. [Después], comió Sonia __?
after ate Sonia
'As for after, did Sonia ate then?'

b. [Después], no sé si comió __.
fast not I.know whether she.ate
'As for after, I don't know whether she ate then.'

Examples below show that they can also occur as remnants for polar TREQs:

(24) a. A: Sonia escribe cuidadosamente.
Sonia writes carefully
'Sonia writes carefully.'

B: Y rápidamente?
and fast
Literal: 'And fast?'
Interpretation: 'What about fast? Does she also write fast?'

b. Sonia escribe cuidadosamente, pero rápidamente, no sé.
Sonia writes carefully but fast not I.know
Literal: 'Sonia writes carefully, but, fast, I don't know.'
Interpretation: 'Sonia writes carefully, but I don't know whether she writes fast.'

(25) a. A: Sonia comió antes (de la clase).
Sonia ate before of the class
'Sonia ate before the class.'

B: Y después?
and after
Literal: 'And after?'
Interpretation: 'What about after? Did she also eat after (the class)?'

b. Sonia comió antes (de la clase), pero después, no sé.
Sonia ate before of the class but after not I.know
Literal: 'Sonia ate before the class, but after, I don't know.'
Interpretation: 'Sonia ate before the class, but I don't know whether she also ate after (the class).'

It's worth noting that some adverbs, like frequency adverbs can be topicalized out of polar questions (26), but they can't occur as polar TREQs (27):

(26) a. [Ocasionalmente], corre Sonia __?
occasionally runs Sonia
'As for occasionally, does Sonia run occasionally?'

b. [Ocasionalmente], no sé si corre __.
occasionally not know whether she.runs
'I don't know whether she runs occasionally.'

(27) a. A: Sonia corre siempre.
Sonia runs always
'Sonia always runs.'

B: #Y ocasionalmente?
and occasionally
Literal: 'And occasionally?'
Intended interpretation: 'What about occasionally? Does she also run occasionally?'

b. #Sonia corre siempre, pero ocasionalmente, no sé.
Sonia runs always but occasionally not know
Literal: 'Sonia always runs, but, occasionally, I don't know.'
Intended interpretation: 'Sonia always runs, but I don't know whether she also runs occasionally.'

Crucially, their non-elliptical counterparts are also impossible in these context due to a dialogue incongruence. This is because B's utterance in (28a) and the embedded clause in (28b) raise a question that has already been answered in the previous discourse:

(28) a. A: Sonia corre siempre.
Sonia runs always
'Sonia always runs.'

B: #Y ocasionalmente corre?
and occasionally she.runs
'Does she also run occasionally?'

b. #Sonia corre siempre, pero ocasionalmente, no sé si corre.
Sonia runs always but occasionally not know whether she.runs
'Sonia always runs, but I don't know whether she also runs occasionally.'

Predicate-argument adjectives

Predicate-argument adjectives can be topicalized out of polar questions, as shown in the examples below:[2]

2. It's worth noting that in Spanish, a sentence like (i) can have two interpretations:

(i) Sonia pintó el auto azul.
Sonia painted the car gray
Interpretation #1: 'Sonia painted the blue car.'
Interpretation #2: 'Sonia painted the car blue.'

(29) a. [Azul], pintó Sonia el auto __?
blue painted Sonia the car
'As for blue, did Sonia paint the car with that color?'

b. [Azul], no sé si pintó el auto __.
blue not know whether painted the car
'As for blue, I don't know whether she painted the car that color.'

As expected, polar TREQs are allowed in these contexts:[3]

(30) a. 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? Did she also paint the car blue?'

b. Sonia pintó el auto rojo, pero azul, no sé.
Sonia painted the car red but blue not know
Literal: 'Sonia painted the car red, but blue, I don't know.'
Interpretation: 'Sonia painted the car red, but I don't know whether she also painted the car blue.'

Infinitival Phrases

As examples in (31) show, bare infinitives can be topicalized out of polar questions:

(31) a. [Comer], quiere __ Sonia?
to.eat wants Sonia
'As for eating, does Sonia want to do that?'

b. [Comer], no sé si quiere __.
to.eat not know whether she.wants
'As for eating, I don't know whether she wants to do that.'

Likewise, they can occur as remnants for polar TREQs, as shown in (32aB) and (32b):

In other words, the post-nominal adjective 'azul' *blue* can either be interpreted as an attributive adjective or as predicative adjective. In this subsection, I'm only focusing on the latter. I will discuss the former in Section 7.2.2.

3. These can only be accepted in a context in which she painted the car with more than one color.

(32) a. 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? Does she also want to do that?'

b. Sonia quiere cocinar, pero comer, no sé.
Sonia wants to.cook but to.eat not know
Literal: 'Sonia wants to cook, but to eat, I don't know.'
Interpretation: 'Sonia wants to cook, but I don't know whether she also wants to eat.'

In addition, examples in (33) show that infinitival phrases can also be topicalized out of polar questions:

(33) a. [Comprar un auto], quiere __ Sonia?
to.buy a car wants Sonia
'As for buying a car, does Sonia want to do that?'

b. [Comprar un auto], no sé si quiere __.
to.buy a car not know whether she.wants
'As for buying a car, I don't know whether she wants to do that.'

As predicted, they can occur as remnants for polar TREQs, as shown in (34):

(34) a. A: Sonia quiere viajar a Buenos Aires.
Sonia wants to.travel to Buenos Aires
'Sonia wants to travel to Buenos Aires.'

B: Y comprar un auto?
and to.buy a car
Literal: 'And to buy a car?'
Interpretation: 'What about buying a car? Does she want to do that?'

b. Sonia quiere viajar a Buenos Aires, pero comprar un auto, no sé.
Sonia wants to.travel to Buenos Aires but to.buy a car not know
Literal: 'Sonia wants to travel to Buenos Aires, but to buy a car, I don't know.'
Interpretation: 'Sonia wants to travel to Buenos Aires, but I don't know whether she wants to buy a car.'

CPs

The examples below show that interrogative CPs can be topicalized out of polar questions:

(35) a. [Cuándo vio Bruno la película], preguntó Sonia __?
when saw Bruno the movie asked Sonia
'As for when Bruno saw the movie, Sonia asked that?'

b. [Cuándo vio Bruno la película], no sé si preguntó __.
when saw Bruno the movie not know whether she.asked
'As for when Bruno saw the movie, I don't know whether she asked that.'

As predicted, they can occur as remnants for polar TREQs:

(36) a. A: Sonia preguntó cuándo leyó Bruno el libro.
Sonia asked when read Bruno the book
'Sonia asked when Bruno read the book.'

B: Y cuándo vio la película?
and when saw the movie
Literal: 'And when he saw the movie?'
Interpretation: 'What about when Bruno saw the movie? Did she also ask that?'

b. Sonia preguntó cuándo leí el libro, pero cuándo vi la película, no sé.
Sonia asked when I.read the book but when I.watch the movie not know
Literal: 'Sonia asked when I read the book, but when I watched the movie, I don't know.'
Interpretation: 'Sonia asked when I read the book, but I don't know whether she asked when I watched the movie.'

Finally, the examples below show that declarative CPs can also be topicalized out of polar questions:

(37) a. [Que vi la película], dijo Sonia __?
that I.saw the movie said Sonia
'That I saw the movie, did Sonia say that?'

b. [Que viste la película], no sé si (lo) dijo __.
that you.saw the movie not know whether CL she.said
'That you saw the movie, I don't know whether she said that.'

As predicted, they can also occur as remnants for polar TREQs:

(38) a. A: Sonia dijo que leiste el libro.
Sonia said that you.read the book
'Sonia said that you read the book.'

B: Y que vi la película?
and that I.saw the movie
Literal: 'And that I saw the movie?'
Interpretation: 'What about that I saw the movie? Did she also say that?'

b. Sonia dijo que leiste el libro, pero que viste la película, no sé.
Sonia said that you.read the book but that you.watch the movie not know
Literal: 'Sonia said that you read the book, but that you watched the movie, I don't know.'
Interpretation: 'Sonia said that you read the book, but I don't know whether she said that you watched the movie.'

7.2.2 Impossible remnants

Impossible remnants for polar TREQs in Spanish are those constituents that cannot be topicalized out of a polar question in this language. This shows that there's indeed structure inside the ellipsis site, and that the remnant has been topicalized out of it. This argument complements what I just presented in Section 7.2.1. The landscape of impossible remnants is smaller for polar TREQs (compared to wh-TREQs), and only includes attributive adjectives.

Adjectives

Post-nominal adjectives cannot be topicalized out of (root or embedded) polar questions, as shown in the examples in (39):

(39) a. *[Joven], contrató Sonia a un amigo __?
young hired Sonia DOM an friend
Intended: 'As for young, did Sonia hire a young friend?'

b. *[Joven], no sé si contrató a un amigo __.
old not I.know whether she.hired DOM an friend
Intended: 'As for young, I don't know whether she hired a young friend.'

As predicted, they cannot occur as polar TREQs, as shown in (40):

(40) a. 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: 'What about young? Did she also hire a young friend?'

b. *Sonia contrató a un amigo viejo, pero joven, no sé.
Sonia hired DOM a friend old but young not I.know
Literal: 'Sonia hired an elderly friend, but young, I don't know.'
Intended: 'Sonia hired an elderly friend, but I don't know whether she also hired a young one.'

Similarly, (41) shows that pre-nominal adjectives cannot be topicalized out of polar questions:

(41) a. *[Nuevo], contrató Sonia a un __ amigo ?
new hired Sonia DOM a friend
Intended: 'As for new, did Sonia hire a new friend?'

b. *[Nuevo], no sé si contrató a un __ amigo.
new not I.know whether she.hired DOM a friend
Intended: 'As for new, I don't know whether she hired a new friend.'

Again, as predicted, they cannot occur polar TREQs, as shown in (42):

(42) a. A: Sonia contrató a un viejo amigo.
Sonia hired DOM an old friend
'Sonia hired an old friend (= long-time friend).'

B: *Y nuevo?
and new
Literal: 'And new?'
Intended: 'What about new? Did she also hire a new friend?'

b. *Sonia contrató a un viejo amigo, pero nuevo, no sé.
Sonia hired DOM an old friend but new not I.know.
Literal: 'Sonia hired a long-time friend, but a new one, I don't know.'
Intended: 'Sonia hired a long-time friend, I don't know whether she also hired a new friend.'

Interim Summary

In the previous two subsections I provided evidence to show that there is a strict correlation between those constituents that can be topicalized and those constituents that can occur as remnants in polar TREQs. In Section 7.2.1 I showed that those contexts that allow topicalization out of root or embedded polar questions also allow polar TREQs. Additionally, in Section 7.2.2 I showed that those contexts that do not allow topicalizations out of polar questions do not allow polar TREQs either. These patterns provide evidence for the claim put forth here that there's structure inside the ellipsis site and that the remnant has been topicalized out of it, escaping deletion. In the next section, I discuss polar TREQs in the context of islands. As I will show, polar TREQs that would involve topicalizations from inside an island are banned, which provides more evidence for the need for syntactic isomorphism between the antecedent and the ellipsis site.

7.2.3 Polar TREQs and Islands

As I did in the previous two chapters, in this section I analyze the behavior of root and embedded polar TREQs in contexts of syntactic islands. I discuss complex NP islands, adjunct islands, and relative clause islands. As a baseline, the examples in (43) show that topicalization can indeed occur out of multiple embedded clauses:

(43) a. [Pasta], dijo Sonia si Bruno comió __?
pasta said Sonia whether Bruno ate
'As for pasta, did Sonia say whether Bruno ate that?'

b. [Pasta], no sé si Sonia dijo que Bruno comió __.
pasta not I.know whether Sonia said that Bruno ate
'As for pasta, I don't know whether Sonia said that Bruno ate that.'

As expected, embedded polar TREQs that would involve topicalizations out of an embedded clause are perfectly possible, as shown in (44).

(44) a. A: Sonia dijo que Bruno comió pizza.
Sonia said that Bruno ate pizza
'Sonia said that Bruno ate pizza.'

B: Y pasta?
and pasta
Literal: 'And pasta?'
Interpretation: 'As for pasta, did Sonia said that Bruno ate that?'

b. Sonia dijo que Bruno comió pizza, pero pasta, no sé.
Sonia said that Bruno ate pizza but pasta not I.know
Literal: 'Sonia said that Bruno ate pizza, but pasta, I don't know.'
Interpretation: 'Sonia said that Bruno ate pizza, but I don't know whether she said that he ate pasta.'

In other words, the source of the ellipsis site in (44a) and (44b) would be the sentences in (43a) and (43b), respectively.

In the rest of this section I will provide evidence from various types of islands to show that root and embedded polar TREQs are not possible in these contexts, that is, polar TREQs are island sensitive, similar to wh-TREQs, analyzed at-length in Chapters 5 and 6. Crucially, there is an important difference between wh-TREQs and polar TREQs: while the former involves wh-extraction out of an island, the latter doesn't. This means that the some contexts that made wh-TREQs ungrammatical due to wh-extractions out of islands inside the ellipsis site, won't make polar TREQs ungrammatical, given that there won't be any illegal movement to begin with. These will be cases with topicalizations from outside the island, as I will show in the rest of this section.

Complex NP Islands

As illustrated in previous chapters, topicalizations out of complex NPs such as *el rumor de que* 'the rumor that' are ungrammatical, giving rise to a complex NP island. This is shown in (45) for a matrix polar question:

(45) *[Pasta], escuchó Sonia [$_{NP}$ el rumor de que comí __]?
pasta heard Sonia the rumor of that I.ate
Intended: 'As for pasta, did Sonia hear the rumor that I ate that.'

The same occurs in embedded contexts, as shown below:

(46) *[Pasta], no sé si escuchó [NP el rumor de que comí __].
pasta not I.know whether she.heard the rumor of that I.ate
Intended: 'As for pasta, I don't know whether she heard the rumor that I ate that.'

If, as proposed here, remnants of polar TREQs are topicalized out of the ellipsis site, and the ellipsis site contains a structure that's syntactically identical to its antecedent's, then we should expect polar TREQs in the context of a complex NP to be banned. This prediction is borne out, as the following examples show for root (47a) and embedded (47b) polar TREQs:

(47) a. A: Sonia escuchó el rumor de que comiste pizza.
Sonia heard the rumor of that you.ate pizza
'Sonia heard the rumor that you ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Intended: 'What about pasta? Did Sonia hear the rumor that I ate that?'

b. *Sonia escuchó el rumor de que comí pizza, pero pasta, no sé.
Sonia heard the rumor of that I.ate pizza but pasta, not I.know
Intended: 'Sonia heard the rumor that I ate pizza, but I don't know whether she heard the rumor that I ate pasta.'

In other words, the source of (47aB) would be the ungrammatical structure in (45), and the source of (47b) would be (46).

Importantly, when only material outside of the island is topicalized, the sentence is grammatical, as shown in the examples in (48):

(48) a. [A Bruno], le contaste __ [NP el rumor de que comí pasta]?
to Bruno to.him told the rumor of that ate pasta
'As for Bruno, did you tell him the rumor that I ate pasta?'

b. [A Bruno], no sé si le contaste __ [NP el rumor de que comí pasta].
to Bruno not I.know whether to.him you.told the rumor of that ate pasta
'As for Bruno$_i$, I don't know whether you told him$_i$ the rumor that I ate pasta.'

Furthermore, when this is tested in the context of a polar TREQs, the result is grammatical, as shown for the matrix polar TREQ in (49). Importantly, this contrasts with wh-TREQs, which involve wh-movement from an island inside the ellipsis site (see Chapters 5 and 6). Given that topicalization is from outside the island, wh-movement is what would make wh-TREQs ungrammatical in contexts similar to these; since polar TREQs don't involve wh-movement, they're available in these contexts. Recall that I claim that TREQs are in general ambiguous between a wh-question interpretation and a polar (yes/no) question interpretation. Throughout the previous chapters, I provided the relevant interpretation to simplify the argumentation. Nevertheless, here the TREQ in (49) is not ambiguous, given that the wh-question interpretation is ungrammatical. Only the polar question interpretation is possible (the same is true for the other islands analyzed in this section). For the sake of explicitness, I provide A's possible answer to B's polar TREQs to show the appropriate structure under consideration:

(49) 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?'
Possible interpretation (polar TREQ, no island): 'What about Bruno? Did you tell him the rumor that I ate pizza?'
Impossible interpretation (wh-TREQ, island): 'What about Bruno? What$_i$ did you tell him the rumor that I ate t$_i$?'

A: También. → Answer to polar TREQ
also
Literal: 'Also.'
Interpretation: 'I also told Bruno the rumor that you ate pizza.'

A': #Pasta. → Answer to wh-TREQ
pasta
Literal: 'Pasta.'
Intended interpretation: 'I told Bruno the rumor that you ate pasta.'

The same is found for embedded polar TREQs, as shown below:

(50) A Sonia le contaste el rumor de que comí pizza, pero a Bruno, no sé.
to Sonia to.her you.told the rumor of that I.ate pizza but to Bruno not I.know
Possible interpretation (polar TREQ, no island): 'You told Sonia the rumor that I ate pizza, but I don't know whether you told Bruno the rumor that I ate pizza.'
Impossible interpretation (polar wh-REQ, island): 'You told Sonia the rumor that I ate pizza, but I don't know what$_i$ you told Bruno the rumor that I ate t$_i$.'

In other words, the source of (49B) would be the grammatical structure in (48a), and the source of (50) would be (48b).

To sum up, here I provided further evidence to show that the remnant is topicalized and moves out of the ellipsis site; and that some kind of syntactic isomorphism between the ellipsis site and its antecedent is necessary. In the rest of this section I will replicate the same argumentation for other islands such as adjunct islands, interrogative (wh-)islands, and relative clause islands.

Adjunct Islands

Topicalizations out of adjuncts like *porque...* 'because...' are ungrammatical, giving rise to an adjunct island, as illustrated in (51) for a matrix polar question:

(51) *[Pasta], te felicitó Sonia [$_{\text{Adjunct}}$ porque comiste __]?
pasta you congratulated Sonia because you.ate
Intended: 'As for pasta$_i$, did Sonia congratulate you because you ate that$_i$.'

The same is found in embedded contexts, as shown below:

(52) *[Pasta], no sé si me felicitó [$_{\text{Adjunct}}$ porque comí __].
pasta not I.know whether me she.congratulated because I.ate
Intended interpretation: 'As for pasta$_i$, I don't know whether she congratulated me because I ate that$_i$.'

If remnants of polar TREQs are topicalized out of the ellipsis site, and if the ellipsis site contains a structure that's syntactically isomorphic to its antecedent's, as proposed here, then we predict polar TREQs in the context of adjunct islands to be ungrammatical. This prediction is borne out, as the following examples show for both root (53a) and embedded (53b) polar TREQs:

(53) a. A: Sonia me felicitó porque comí pizza.
Sonia CL.1S congratulated because I.ate pizza
'Sonia congratulated me because I ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Intended interpretation: 'What about pasta? Did she congratulate you because you that?'

b. *Sonia me felicitó porque comí pizza, pero pasta, no sé.
Sonia me congratulated because I.ate pizza but pasta not I.know
Intended: 'Sonia congratulated me because I ate pizza, but I don't know whether she also congratulated me because I ate pasta .'

In other words, the source of (53a) would be the ungrammatical structure in (51), and the source of (53b) would be (52).

As I shown for complex NP islands, when only material outside of the island is topicalized, the sentence is grammatical:

(54) a. [A Bruno], lo felicitaste ✓ __ [Adjunct porque comió pasta]?
DOM Bruno him congratulated because he.ate pasta
'As for Bruno$_i$, did you congratulate him$_i$ because he ate pasta?'

b. [A Bruno], no sé si lo felicitaste ✓ __ [Adjunct porque comió pizza].
to Bruno not I.know whether him you.congratulate because he.ate pizza
'As for Bruno$_i$, I don't whether you congratulated him$_i$ because he$_i$ ate pizza.'

Furthermore, contrary to what we found in wh-TREQs—as I discussed above for complex NPs—, when polar TREQs are tested in these contexts, the result is grammatical as shown in the examples in (55):

(55) a. A: La felicitaste a Sonia porque comió pizza.
CL.3S congratulated Sonia because she.ate pizza
'You congratulated Sonia because she ate pizza.'

B: Y a Bruno?
and to Bruno
Literal: 'And Bruno?'
Interpretation: 'What about Bruno? Did you congratulate him because he ate pizza?'

b. A Sonia, la felicitaste porque comió pizza, pero a Bruno, no sé.
to Sonia her you.congratulate because she.ate pizza but to Bruno not I.know
Interpretation: 'You congratulated Sonia because she ate pizza, but I don't know whether you also congratulated Bruno because he ate pizza.'

In other words, the source of (55a) would be the grammatical sentence (54a), and the source of (55b) would be (54b).

Relative clause islands

Topicalizations out of relative clauses are ungrammatical, giving rise to a relative clause island, as (56) shows for a matrix polar question:

(56) *[Pasta], te habló Sonia sobre la persona [$_{RC}$ que comió __]?
pasta you talked Sonia about the person that ate
Intended: 'As for pasta, did Sonia talk to you about the person that that.'

The same occurs in embedded contexts, as shown below:

(57) *[Pasta], no sé si habló con la persona [$_{RC}$ que comió __].
pasta not I.know whether she.talked with the person that ate
Intended: 'As for pasta$_i$, I don't know whether she talked with the person that ate that$_i$.'

If, as proposed here, remnants of polar TREQs are topicalized out of the ellipsis site, and the ellipsis site contains a structure that's (partially) syntactically identical to its antecedent's, then we should expect polar TREQs that would involve extractions out of a relative clause to be banned. This prediction is borne out, as the following examples show for root (58a) and embedded (58b) polar TREQs:

(58) a. A: Sonia me habló sobre la persona que comió pizza.
Sonia talked to.me about the person that ate pizza
'Sonia talked to me about the person that ate pizza.'

B: *Y pasta?
and pasta
Literal: 'And pasta?'
Intended interpretation: 'What about pasta? Did she talk to you about the person that ate that?'

b. *Sonia habló con la persona que comió pizza, pero pasta, no sé.
Sonia talked with the person that ate pizza but pasta not I.know
Intended interpretation: 'Sonia talked with the person that ate pizza, but I don't know whether she talked with the person that ate pasta.'

In other words, the source of (58aB) would be the ungrammatical structure in (56), and the source of (58b) would be (57).

Importantly, when only material outside of the island is topicalized, the sentence is grammatical, as shown in the examples in (59):

(59) a. [A Bruno], le hablaste __ sobre la persona [$_{RC}$ que comió pizza]?
to Bruno to.him talked about the person that ate pizza
'As for Bruno, did you talk to him about the person that ate pizza?'

b. [A Bruno], no sé si le hablaste __ sobre la persona [$_{RC}$
to Bruno not I.know whether to.him you.talked about the person
que comió pizza].
that ate pizza
'As for Bruno, I don't know whether you talked to him about the person that ate pizza.'

Furthermore, contrary to what happens in wh-TREQs, when this is tested in the context of a polar TREQs, the result is grammatical, as shown in (60):

(60) a. A: Le hablé a Sonia sobre la persona 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?'
Interpretation: 'What about Bruno? Did you also talk to him about the person that ate pizza?'

b. Le hablaste a Sonia de la persona que comió pizza, pero a Bruno
to.her you.talked to Sonia about the person that ate pizza but to Bruno
no sé.
not I.know
Interpretation: 'You talked to Sonia about the person that ate pizza, but I don't whether you also talked to Bruno about the person that ate pizza.'

That is, the source of (60aB) would be the grammatical structure in (59), and the source of (60b) would be (59b).

Interim Summary

I presented evidence from different island types (complex NP islands, adjunct islands, and relative clause islands) that shows that: (a) the remnant is topicalized and moves out of the ellipsis site; and (b) some syntactic isomorphism between the ellipsis site and its antecedent is necessary. In the next section I'll discuss connectivity effects such as P-Omission, voices mismatches and spray/load alternations.

7.2.4 Connectivity effects

In this section I provide further evidence that syntactic identity between the ellipsis site and the antecedent is needed to license polar TREQs. This evidence comes from various connectivity effects. As I did for wh-TREQs, I analyze case and P-Omission, voice mismatches, and spray/load-alternations. Crucially, following my argumentation from previous chapters, the fact that P-Omission is not allowed in polar TREQs provides further evidence that the remnant has moved out of the ellipsis site.

Case-omission

As the following examples show, and similarly to wh-TREQs, case omission is not possible in polar TREQs, that is, DOM cannot be absent in the remnant:

(61) a. 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? Did she hide him?'

b. Sonia escondió a Bruno, pero *(a) Luciano, no sé.
Sonia hid DOM Bruno but DOM Luciano not I.know
Literal: 'Sonia hid Bruno, but Luciano, I don't know.'
Interpretation: Sonia hid Bruno, but I don't know whether she hid Luciano.'

As I discussed in previous chapters, the impossibility of case-omission follows trivially if the ellipsis site contains an elided version of the relevant case assigner. As in cases of wh-TREQs, DOM needs to be present even in contexts in which there is no DOM in the antecedent, as in the examples in (62b):

(62) a. 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? Did she hide him?'

b. Sonia escondió el tesoro, pero *(a)l tesorero, no sé.
Sonia hid the treasure but DOM.the treasurer not I.know
Literal: 'Sonia hid the treasure, but the treasurer, I don't know.'
Interpretation: 'Sonia hid the treasure, but I don't know whether she hide the treasurer.'

P-Omission

As the following examples show, P-Omission is not allowed in polar TREQs:

(63) a. 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? Did she also talk with him?'

b. Sonia habló con Bruno, pero *(con) Luciano, no sé.
Sonia talked with Bruno but with Luciano not I.know
Literal: 'Sonia talked with Bruno, but with Luciano, I don't know.'
Interpretation: 'Sonia talked with Bruno, but I don't know whether she talked with Luciano.'

Following my argumentation in Chapters 5 and 6, I take this example to be further evidence that the remnant *con Luciano* 'with Luciano' is topicalized and moves to the left-periphery, complying with the *P-Omission Generalization* I proposed in Part I of this dissertation. In other words, the ban on P-Omission in polar TREQs comes from the ban on P-Stranding in Spanish. Furthermore, this pattern shows that there should be strict isomorphism between the Antecedent and the E-site, that the remnant is topicalized out of the ellipsis site, and that alternative structures, such as hanging topics, cannot be the source of the ellipsis site. For the sake of explicitness, the following example shows that a structure containing a hanging topic can indeed occur as an overt continuation to A's utterance:

(64) A: Sonia habló con Bruno.
Sonia talked with Bruno
'Sonia talked with Bruno.'

B: Y Luciano, habló Sonia (también) con él?
and Luciano talked Sonia also with him
'And Luciano, did Sonia also talk with him?'

In this respect, if the remnant was a hanging topic (and not a regular topic, base-generated in the embedded clause and moved to the matrix clause, as I argue here), the availability of (64B) as an overt continuation would predict that the P-less version of (63aB) above should be grammatical, contrary to fact.

Voice mismatches

Another piece of evidence for an ellipsis analysis of polar TREQs and for the need for syntactic identity between the ellipsis site and its antecedent comes from the unavailability of voice mismatches (Merchant 2013). As the following example shows for root polar TREQs, an active sentence (65B) cannot be elided if the antecedent is a passive sentence (65A). Crucially, a non-elliptical version of (65B) is possible in this context (65B'):

(65) 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? Did he also destroy the house?'[4]

B': Y Bruno, (también) destruyó la casa?
and Bruno also destroyed the house
'And as for Bruno, did he also destroy the house?'

The same pattern is found in embedded polar TREQs:

(66) La casa fue destruida por Sonia...
the house was destroyed by Sonia
'The house was destroyed by Sonia...'

a. *...pero Bruno, no sé.
but Bruno not I.know
Literal: '...but Bruno, I don't know.'
Intended: '...but Bruno, I don't know whether he also destroyed the house.'[5]

b. *...pero Bruno no sé si (también) destruyó la casa.
but Bruno not I.know whether he also destroyed the house
'...but, as for Bruno, I don't know whether he also destroyed the house.'

4. It's worth noting that this polar TREQs would be possible under the interpretation in which B is asking whether Bruno was also destroyed by Sonia.

5. Here again, this polar TREQs would be possible if it's intended to convey that the speaker doesn't know whether Bruno was also destroyed by Sonia.

Spray/load alternations

As I pointed out in previous chapters, the so-called *spray/load* alternation is disallowed under ellipsis, which is usually taken to be strong evidence for the need for syntactic identity and against pure semantic approaches. *Spray/load* alternations are also disallowed in both embedded polar TREQs. This is not due to some question/answer incongruence, given that the non-elliptical counterparts of the elliptical sentences (67a) and (68a) below are possible, as shown in (67b) and (68b):

(67) Sonia cargó el camión con libros...
Sonia loaded the truck with books
'Sonia loaded the truck with books...'

a. *...pero en el auto, no sé.
but in the car not I.know
Literal: '...but in the car, I don't know.'
Intended: '...but I don't know whether she also loaded books in the car.'

b. ...pero en el auto, no sé si cargó libros.
but in the car not I.know whether she.loaded books
'...but I don't know whether she loaded books in the car.'

(68) Sonia cargó libros en el camión...
Sonia loaded books in the truck
'Sonia loaded books in the truck...'

a. *...pero con revistas, no sé
but with magazines not I.know
Literal: '...but with magazines, I don't know.'
Intended: '...but I don't know what she loaded with magazines.'

b. ...pero con revistas, no sé si lo cargó.
but with magazines not I.know whether it she.loaded
'...but I don't know whether she loaded it with magazines.'

The same pattern is found for root polar TREQs:

(69) A: Sonia cargó el camión con libros.
Sonia loaded the truck with books
'Sonia loaded the truck with books.'

B: *Y en el auto (también)?
and in the car also
Literal: 'And in the car?'
Intended interpretation: 'What about the car? Did she also load books in the car?'

B': Y en el auto (también) cargó libros?
and in the car what loaded
'What about the car? Did she also load books in the car?'

(70) A: Sonia cargó libros en el camión.
Sonia loaded books in the truck
'Sonia loaded books in the truck.'

B: *Y con revistas (también)?
and with magazines also
Literal: 'And with magazines?'
Intended interpretation: 'What about magazines? Did she also load the truck with magazines?'

B': Y con revistas también cargó el camión?
and with magazines also loaded the truck
'What about magazines? Did she also load the truck with magazines?'

For the sake of completeness, the only possible option for polar TREQs is the one in which there's structural matching between the antecedent and the ellipsis site:

(71) Sonia cargó el camión con libros...
Sonia loaded the truck with books
'Sonia loaded the truck with books...'

a. ...pero con revistas, no sé.
but with magazines not I.know
Literal: '...but with magazines, I don't know.'
Interpretation: '...but I don't know whether she also loaded it with magazines.'

b. ...pero el auto, no sé.
but the car not I.know
Literal: '...but the car, I don't know.'
Interpretation: '...but I don't know whether she loaded the car with magazines.'

(72) Sonia cargó libros en el camión...
Sonia loaded books in the truck
'Sonia loaded books in the truck...'

a. ...pero revistas, no sé.
but magazines not I.know
Literal: '...but magazines, I don't know.'
Interpretation: '...but I don't know whether she also loaded magazines onto it.'

b. ...pero en el auto, no sé.
but in the car not I.know
Literal: '...but onto the car, I don't know'
Interpretation: '...but I don't know whether she also loaded books onto the car.'

(73) 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?'
Interpretation: 'What about magazines? Did she also load the truck with them?'

B": Y el auto?
and the car
Literal: 'And the car?'
Interpretation: 'What about the car? Did she also she load it with books?'

(74) 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? Did she also load them onto the car?'

B": Y en el auto?
and in the car
Literal: 'And onto the car?'
Interpretation: 'What about the cat? Did she also load books onto it?'

Again, this shows that some type of strict syntactic identity is needed in this type of ellipsis.

Interim Summary

In this section, I've provided evidence to show that (i) there is structure inside the ellipsis site and embedded polar TREQs are the result of ellipsis, (ii) the remnant is topicalized out

of the ellipsis site, and (iii) some kind of syntactic identity/isomorphism is needed to license this construction. In the following section I provide an analysis for both root and embedded polar TREQs.

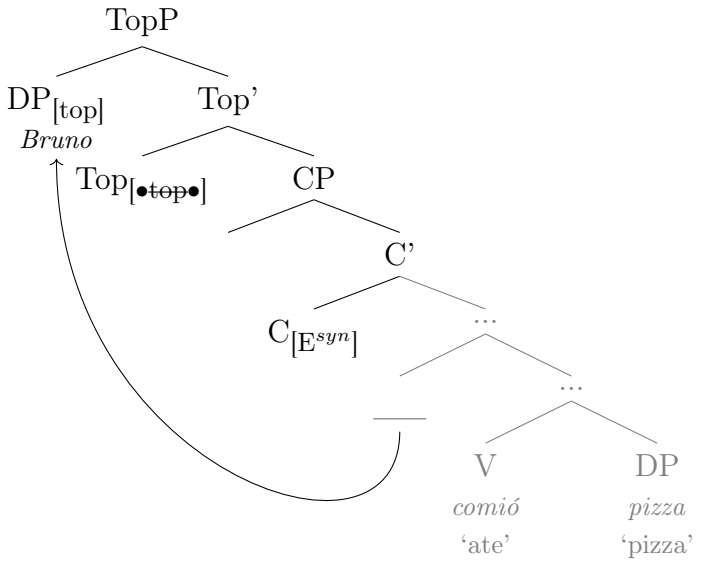
7.3 An analysis for root and embedded polar TREQs

In this section I provide an analysis for both embedded and root polar TREQs. I claim that polar TREQs, unlike wh-TREQs, only involve TP-Ellipsis, and not CP-ellipsis. That is, polar TREQs are the result of ellipsis triggered by an [E]-feature on C. Given that polar TREQs don't involve the deletion of any material in the specifier of the CP, they can be accounted for with just one [E$^{\text{syn}}$]-feature on C. The way root polar TREQs is derived is straightforward and is shown in the tree in (76) for the example in (75B):

(75) A: Sonia comió pizza.
Sonia ate pizza
'Sonia ate pizza.'

B: Y Bruno, ⟨$_{\text{E-site}}$ ~~comió pizza~~ ⟩?
and Bruno ate pizza
Literal: 'And Bruno?'
Interpretation: 'What about Bruno? Did he also eat pizza?'

(76)



As the tree above shows, ellipsis is triggered by an [E^{syn}] feature on C, which imposes strict syntactic identity (evidence that this condition is necessary in polar TREQs was presented in the previous section and comes from various facts such as connectivity effects and island sensitivity). The remnant avoids undergoing deletion due to being [top]-marked (i.e. it's not assigned [†], according to my implementation from previous chapters). Then, it is further moved to the specifier of the Top head to satisfy its [•top•]-feature.

With respect to embedded polar TREQs, recall that the proposed source for these constructions involve a *whether*-clause, as shown in (77):

(77) Sonia comió pizza, pero [Bruno$_{\text{Top}}$] no sé $\langle_{\text{E-site}}$ ~~si~~ __ ~~comió~~ ~~pizza~~ $\rangle$.
Sonia ate pizza but Bruno not I.know ~~whether~~ ~~he.ate~~ ~~pizza~~
'Sonia ate pizza, but Bruno, I don't know ~~whether he ate pizza~~.'

This means that not only the embedded TP, but the complementizer *si* 'whether' on C must go unpronounced in this type of TREQ. Crucially, the complementizer cannot be overt (78a), which contrasts with what happens with wh-phrases in embedded wh-TREQs (78b) (see Chapter 6, Section 6.2):

(78) a. *Sonia comió pizza, pero Bruno no sé si.
Sonia ate pizza but Bruno not I.know whether
Literal: 'Sonia ate pizza but Bruno, I don't know whether.'

b. Sonia comió pizza, pero Bruno no sé qué.
Sonia ate pizza but Bruno not I.know what
Literal: 'Sonia ate pizza but Bruno, I don't know what.'

If embedded polar TREQs are the result of TP-ellipsis, and there is no CP-Ellipsis involved, then there should be strict syntactic identity between the antecedent and the ellipsis site. However, the complementizer goes unpronounced despite the fact that it cannot be assigned a [†] given that the head that assigns it's C itself, and it only assigns [†] to its complement. Even if [†]-assignment was modified and C could be [†]-assigned, it wouldn't have an identical correlate in the antecedent, which would be a violation to the Identity Condition proposed in Part I of this dissertation. Hence, I claim here that embedded polar-

TREQs provide evidence for Merchant's (2001) *Sluicing-COMP Generalization*. In (79) I adapted Merchant's generalization to the terminology used in this dissertation:

(79) *TP-Ellipsis-COMP Generalization*:
In TP-Ellipsis, no non-operator material may appear in C.
(adapted from Merchant 2001)

The embedded polar TREQs analyzed above would be a case of the second type of elements Merchant analyze—i.e. based-generated COMP-Internal Elements—, given that *si* 'whether' would be a realization of the C head.

Crucially, as noted by Merchant (2001) for Hungarian, there are a some exceptions to this generalization (for other exceptions to the Sluicing-COMP Generalization see Marušič et al. (2015) for Slovenian, Martinovic (2015) for Wolof, and Mendes and Kandybowicz (2021) for Nupe, among others). Although it's not my goal here to provide an account for why (79) holds, I do want to point to an interesting pattern. In Hungarian, as Merchant notes, the complementizer can be overt in the context of sluicing, as shown in (80):

(80) A gyerekek találkoztak valakivel de nem emlékszem, (hogy) kivel.
the children met someone.with but not I.remember that who.with
'The kids met someone, but I don't remember who.'

Merchant accounts for (79) by proposing a condition according to which a C head with phonetic exponence cannot be followed by a prosodic constituent with no phonetic exponence. In this respect, Hungarian facts are explained given that the wh-phrase follows the C head. Something similar happens in Spanish: when the remnant in embedded polar TREQs stays low in the clause clause, the complementizer must be overt:[6]

6. To have a complete empirical picture, the non-elliptical counterparts are also grammatical:

(i) a. Sonia comió pizza, pero no sé si Bruno (también) comió pizza (también).
Sonia ate pizza but not I.know whether Bruno also ate pizza also
'Sonia ate pizza but I don't know whether Bruno also ate pizza.'

b. Sonia comió pizza, pero no sé si pasta (también) comió (también).
Sonia ate pizza but not I.know whether pasta also she.ate also
'Sonia ate pizza but I don't know whether she also ate pasta.'

(81) a. Sonia comió pizza, pero no sé si Bruno también.
Sonia ate pizza but not I.know whether Bruno also
Literal: 'Sonia ate pizza but I don't know whether Bruno also.'
Interpretation: 'Sonia ate pizza but I don't know whether Bruno also ate pizza.'

b. Sonia comió pizza, pero no sé si pasta también.
Sonia ate pizza but not I.know whether pasta also
Literal: 'Sonia ate pizza but I don't know whether pasta also.'
Interpretation: 'Sonia ate pizza but I don't know whether she also ate pasta.'

What is more, even without a remnant, just the presence of también 'also', improves the acceptability of the sentence with an overt complementizer:

(82) a. *Sonia comió pizza, pero Bruno no sé si. =(78a)
Sonia ate pizza but Bruno not I.know whether
Literal: 'Sonia ate pizza but Bruno, I don't know whether.'

b. ??Sonia comió pizza, pero Bruno no sé si también.
Sonia ate pizza but Bruno not I.know whether also
Literal: 'Sonia ate pizza but Bruno, I don't know whether also.'
Interpretation: 'Sonia ate pizza, but I don't know whether Bruno also ate pizza.'

Additionally, a second remnant also makes the complementizer overt:

(83) Sonia le dio una pizza a Luciano pero Bruno no sé si a Danilo.
Sonia him gave a pizza to Luciano but Bruno not I.know whether to Danilo
'Sonia gave Luciano a pizza, but I don't know whether Bruno gave Danilo a pizza.'

Importantly, the remnant can occur before the complementizer in non-elliptical contexts:[7]

(84) a. Sonia comió pizza, pero no sé Bruno si comió pizza.
Sonia ate pizza but not I.know Bruno whether ate pizza
'Sonia ate pizza but I don't know whether Bruno also ate pizza.'

b. Sonia comió pizza, pero no sé pasta si comió.
Sonia ate pizza but not I.know whether pasta ate
'Sonia ate pizza but I don't know whether she also ate pasta.'

As the following examples show, the elliptical versions are also possible. Crucially, following the generalization in (79), the complementizer cannot be spelled-out in these contexts.

7. Note that these sentences also require a particular intonation, which involves deaccenting after the topic. Check the following audio file for the appropriate intonation of the sentence:

(85) a. Sonia comió pizza, pero no sé Bruno.
Sonia ate pizza but not I.know Bruno whether also
Interpretation: 'Sonia ate pizza but I don't know whether Bruno also ate pizza.'

b. ?Sonia comió pizza, pero no sé pasta.
Sonia ate pizza but not I.know whether pasta also
Literal: 'Sonia ate pizza but I don't know whether pasta also.'
Interpretation: 'Sonia ate pizza but I don't know whether she also ate pasta.'

To sum up, Spanish falls under Merchant's TP-Ellipsis-COMP generalization in that a C head with phonetic exponence cannot be followed by a prosodic constituent with no phonetic exponence. Spanish differs from Hungarian in that, when some constituent with phonetic exponence follows the C head, the C head must have phonetic exponence (i.e. there's no optionality as in Hungarian). The fact that the remnant can occur after or before the complementizer *si* 'whether', as shown above, provides evidence that there should be a landing site for it in both positions. In consequence, I assume there is a landing site both before and after the complementizer *si* 'whether', which I claim is the specifier of a TopP, as schematically shown in (86):

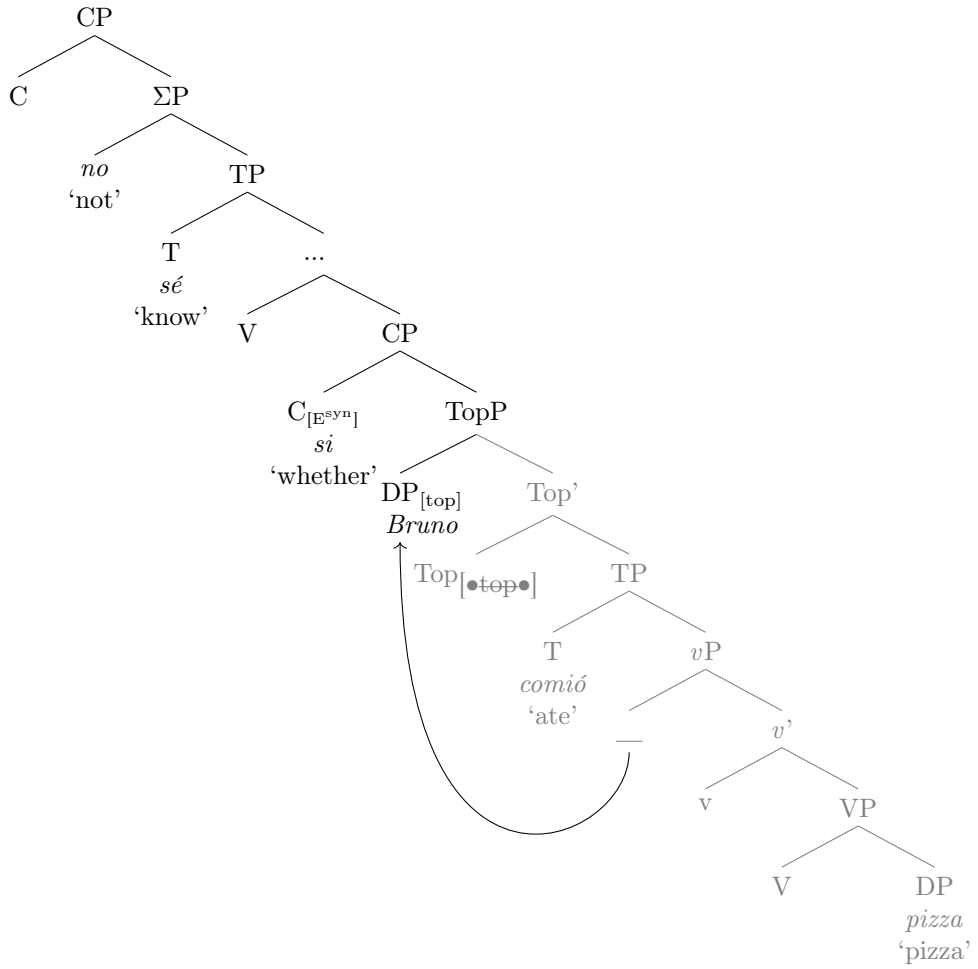
(86) ... $[_{(\text{TopP})}$ $[_{\text{CP}}$ $[_{(\text{TopP})}$ $[_{\text{TP}}$ ...

Further evidence that the intermediate landing sites are TopPs comes from the fact that the moved element must be clitic doubled in non-elliptical contexts:

(87) Sonia comió la pizza, pero no sé la ensalada si *(la) comió.
Sonia ate the pizza but not I.know the salad whether CL ate
'Sonia ate the pizza, but I don't know whether she ate the salad.'

The proposed structures for embedded TREQs are shown below. First, in (88) I show a case in which the remnant occurs below the C head, after the complementizer *si* 'whether':

(88) ...pero no sé si Bruno. =(81a)
but not I.know whether Bruno
'(Sonia ate pizza) but I don't know whether Bruno also ate pizza.'

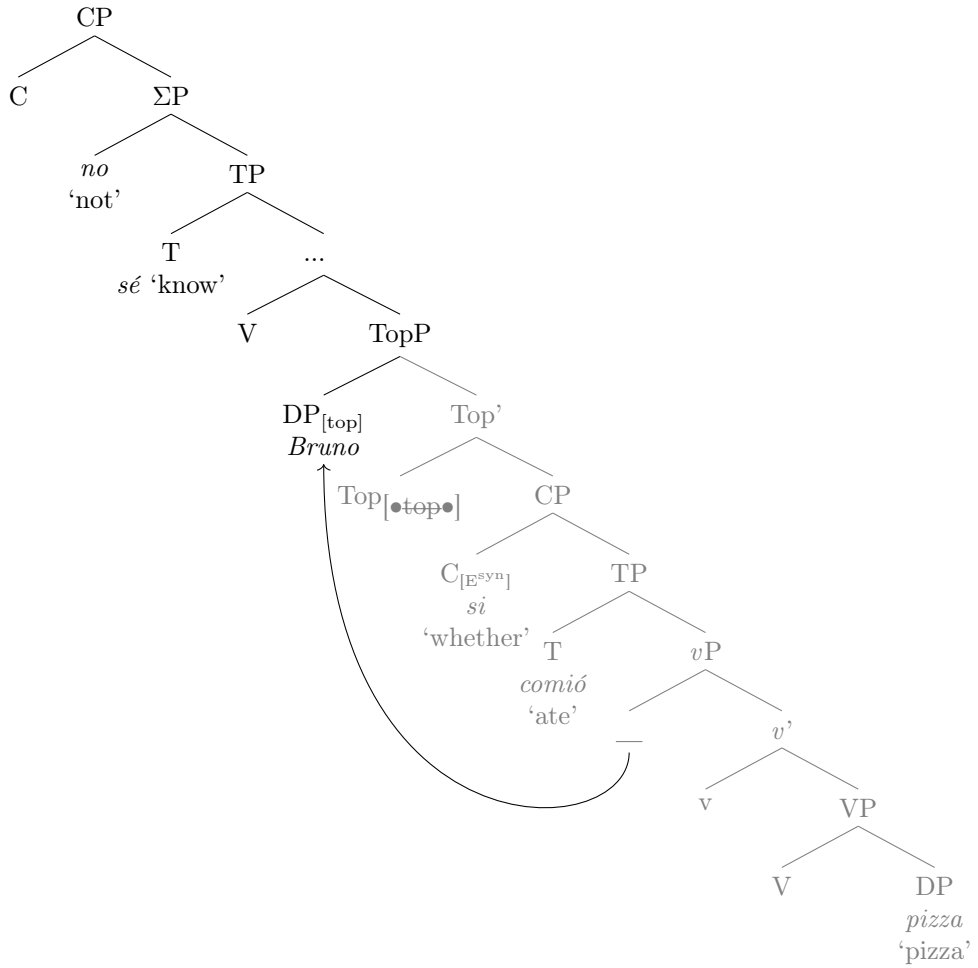


As the tree above shows, the remnant *Bruno* moves to the specifier of a TopP below the CP, which derives the order *si Bruno* 'whether Bruno'. As in any other case of TP-Ellipsis, ellipsis is triggered by [E^{syn}] on C. The remnant doesn't undergo deletion due to being [top]-marked. Further evidence that the remnant moves comes from P-Omission facts. That is, P-Omission is impossible in these contexts, which, according to my proposal from Part I, means that the remnant must have moved:

(89) Sonia habló con Luciano, pero no sé si *(con) Bruno también.
Sonia talked with Luciano but not I.know whether with Bruno also
'Sonia talked with Luciano, but I don't know whether she also talked with Bruno.'

Second, I show a case in which the remnant occurs before the C head (90):

(90) ...pero no sé Bruno. =(85)
but not I.know Bruno
'(Sonia ate pizza) but I don't know whether Bruno also ate pizza.'

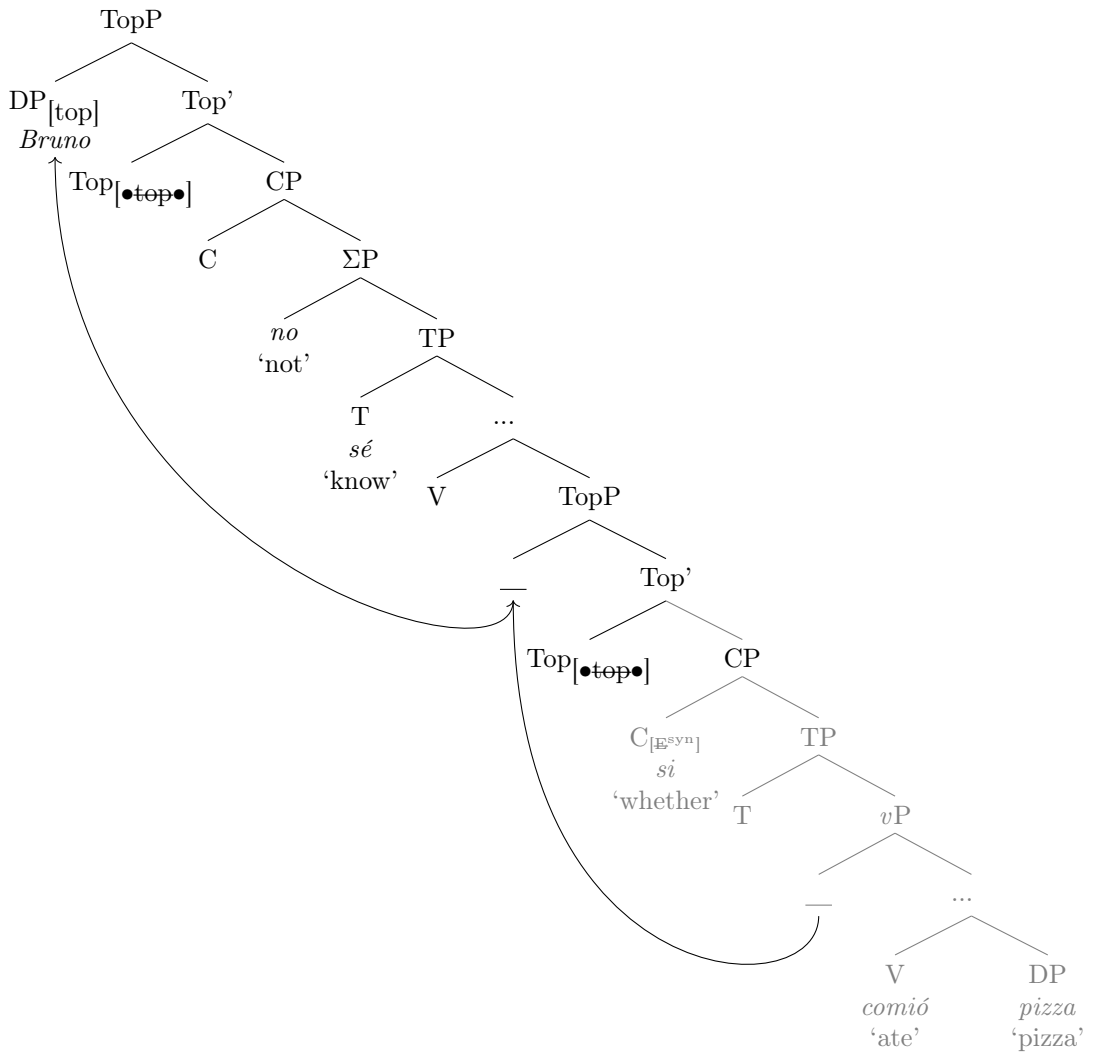


As the tree above shows, the remnant *Bruno* moves to the specifier of a TopP above the CP. Given that the complementizer would be followed by a constituent with no phonetic exponence, it cannot have phonetic exponence itself. Here again, as in any other case of TP-Ellipsis, ellipsis is triggered by [E^{syn}] on C. Although ellipsis is triggered before the remnant is moved out of the ellipsis site, the remnant doesn't undergo deletion due to being [top]-marked. An alternative analysis could involve an [E] feature on the Top head, as wh-TREQs. This [E]-feature could also be responsible for deleting the complementizer *si* 'whether'. For the moment, I leave this option open since I don't think there's any evidence that would

tease apart these two analyses.

Finally, I show a case in which the remnant occurs in the matrix clause:

(91) ...pero Bruno no sé.
but Bruno not I.know
'(Sonia ate pizza) but I don't know whether Bruno also ate pizza.'



As the tree above shows, the remnant *Bruno* moves, first, to the specifier of the embedded TopP (it could be either the higher or lower TopP), and then moves again to the specifier of the matrix TopP, which also explains the word order *Bruno no sé* 'Bruno I don't know'. As in the previous cases, the remnant survives deletion because it cannot be assigned [†] due to being [top]-marked.

To sum up, in this section I provided an analysis for both root and embedded polar

TREQs. I claim that both types are a case of TP-Ellipsis, that is, ellipsis triggered by an [E^{syn}]-feature on C. In addition, I provided evidence for the claim that, in embedded polar TREQs, the remnant moves to an intermediate position in the specifier of a TopP in the embedded clause. This TopP can be located above or below the CP.

7.4 Embedded wh-TREQs in other contexts

Before concluding this chapter, as I did for embedded wh-TREQS, in this short section I provide data to show that embedded polar TREQs are not a crystallized construction but a productive elliptical process that can occur in the context of different embedded verbs, besides *saber* 'to know'. For instance, they are possible with *recordar* 'remember', as shown in (92):

(92) Sonia comió pizza, pero Bruno, no recuerdo.
Sonia ate pizza but Bruno not I.remember
Literal: 'Sonia ate pizza, but Bruno, I don't remember.'
Interpretation: 'Sonia ate pizza, but I don't remember whether Bruno ate pizza.'

In addition, embedded wh-TREQs are possible with verbs like *decir* 'to say', as in (93):

(93) a. Dijiste que Sonia comió pizza, pero Bruno, no dijiste.
you.said that Sonia ate pizza but Bruno not you.said
Literal: 'You said that Sonia ate pizza, but Bruno, you didn't say.'
Interpretation: 'You said that Sonia ate pizza, but you didn't say whether Bruno ate pizza.'

b. (Me dijeron que) Sonia comió pizza, pero Bruno, no me dijeron.
to.me they.told that Sonia ate pizza, but Bruno not ME.DAT they.said
Literal: '(They told me that) Sonia ate pizza, but Bruno, they didn't tell.'
Intended: '(They told me that) Sonia ate pizza, but they didn't tell me whether Bruno ate pizza.'

As (94) shows, *estar seguro/a* 'to be sure' also allows embedded wh-TREQs:

(94) Sé que Sonia comió pizza, pero Bruno, no estoy segura.
I.know that Sonia ate pizza but Bruno not I.am sure
Literal: 'I know that Sonia ate pizza, but Bruno, I'm not sure.'
Interpretation: 'I know that Sonia ate pizza, but I'm not sure whether Bruno also ate pizza.'

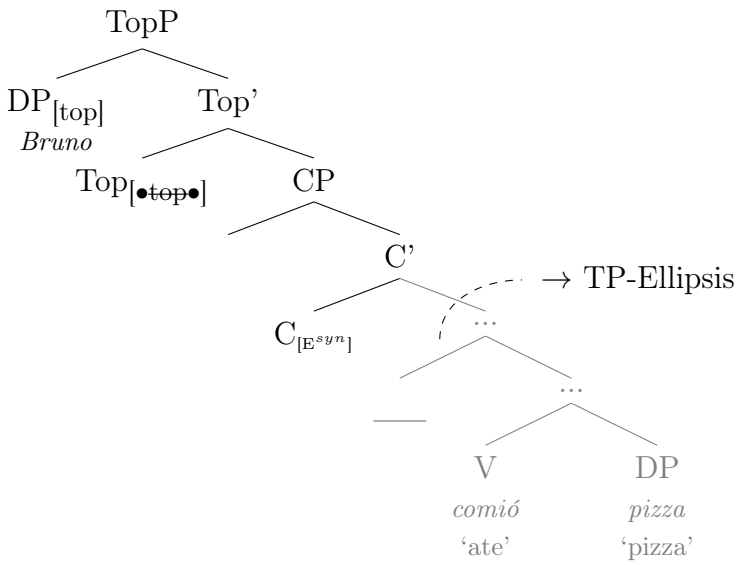
Finally, another context is given in (95), which shows that embedded wh-TREQs can occur with *averiguar* 'to find out':

(95) Averigüé que Sonia comió pizza, pero Bruno, no averigüé todavía.
I.found.out that Sonia ate pizza but Bruno not I.found.out yet
Literal: 'I found out that Sonia ate pizza, but Bruno, I didn't found out yet.'
Intended: 'I found out that Sonia ate pizza, but I didn't found out whether Bruno also ate pizza.'

7.5 Summary and Conclusions

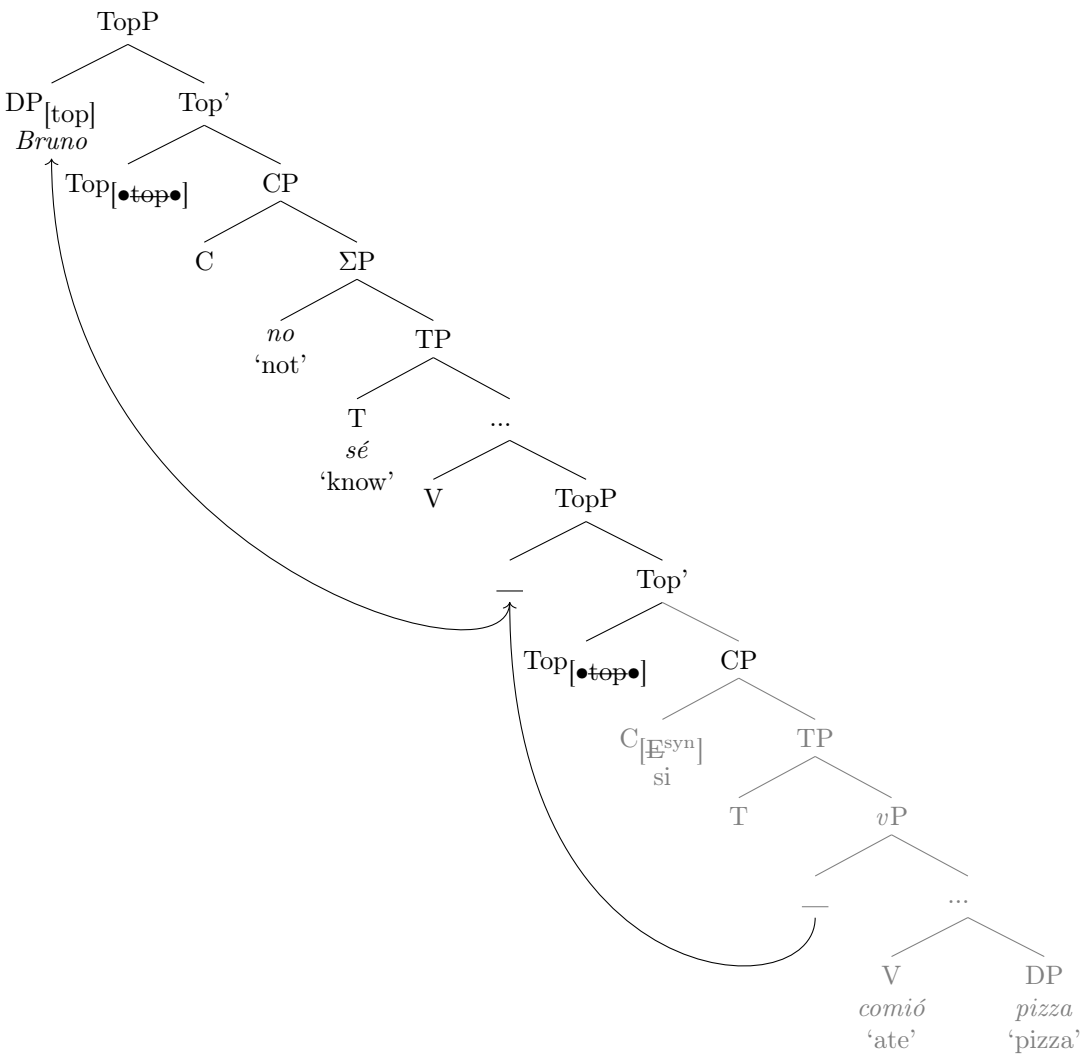
In this chapter I extended my discussion on Topic-Remnant Elided Questions from the previous chapter by discussing *root and embedded polar TREQs* in Spanish. In brief, I propose that polar TREQs are a type of TP-Ellipsis, that is, ellipsis triggered by an [E^{syn}]-feature on C. As for root polar-TREQs, the derivation is relatively straightforward and is repeated in (96) below.

(96)



With respect to embedded polar TREQs, I claim that the remnant first moves to an intermediate position within the embedded clause, and then is further topicalized and moves to matrix TopP, as shown in (97):

(97)



Following my argumentation from Chapter 5, I provided evidence to argue for an elliptical account of this construction, and for the need for syntactic identity to license ellipsis. In the next, and final, Chapter, I summarize all the findings so far.

CHAPTER 8

CONCLUSIONS

Altogether, this dissertation aimed to provide answers for the *identity* and the *licensing* questions in order to contribute to our understanding of ellipsis in natural language. I claim that some types of ellipsis require a strict syntactic identity condition to be licensed while others are subject to 'mixed-identity' requirements that impose a strict syntactic identity requirement on a portion of the structure, and no identity requirements at all on a different portion of the structure. This main claim was supported by the detailed examination of two empirical domains in ellipsis in Spanish: (i) P-Omission facts in various types of TP-Ellipsis (such as sluicing, fragment answers, stripping and pseudostripping, and split questions, among others) and (ii) an understudied elliptical construction that I dub *Topic-Remnant Elided Questions* (or TREQs, in short). In this final chapter, I summarize the empirical and theoretical contributions, and introduce some open questions.

8.1 Contributions of this dissertation

With regards to P-Omission and TP-Ellipsis, I rejected the hypothesis that non-isomorphic sources (such as cleft/copular sentences) are a possible source for the ellipsis site and that ellipsis doesn't need syntactic identity to be licensed. On the contrary, I proposed that the P-Omission facts in Spanish actually show that TP-Ellipsis requires strict syntactic identity between the antecedent and the ellipsis site, that this identity condition is calculated head-by-head in the Syntax (before Spell-Out), and that remnants do not need to move to escape deletion. This specific syntactic identity condition, combined with the lack of exceptional movement under ellipsis, allowed me to account for the original puzzle of why P-Omission is allowed in sluicing but not in fragment answers in a simple, straightforward way, also predicting the patterns found in all the other types of TP-Ellipsis in Spanish.

Once it was established that syntactic identity is needed to license TP-Ellipsis in Spanish,

I examined another type of ellipsis in this language: TREQs, a type of elliptical question that can be interpreted as a follow-up question. Although TREQs have never been explored in depth before, they provide important insights into the study of ellipsis more generally. I first showed that syntactic identity is needed here as well by providing evidence from voice mismatches, spray-load alternations, and island sensitivity, among others. However, I also showed that a syntactic identity condition seems to be too strict and would predict that this elliptical construction shouldn't be possible at all. In this respect, to account for these seemingly contradictory identity requirements, I argued that TREQs arise as the result of two ellipses: one triggered by an [E^{syn}]-feature on C, which imposes syntactic identity, and one triggered by an [E]-feature on Top, which doesn't impose any identity requirements at all, but must enter into an Agree relation with an [E^{syn}] lower down in the structure.

In brief, the analysis of these empirical domains led me to propose a theory of ellipsis licensing based on (i) a typology of [E]-features, and (ii) an ellipsis operation that can impose a syntactic identity requirement, which is calculated head-by-head in the Syntax. Concretely, each [E]-feature triggers certain operations (like [†]-assignment), is licensed in particular syntactic configurations (depending on its agreement requirements) and can occur only with specific heads (C or Top). This proposal accounts for the different patterns found in the empirical domains under consideration here, without the need to propose construction-specific analyses or exceptional mechanisms.

Finally, the proposal developed in this dissertation makes important contributions regarding the locus of crosslinguistic variation in ellipsis. Overall, I claim that crosslinguistic variation can be found with respect to three different aspects/dimensions:

(1) Locus of crosslinguistic variation:

   a. The featural make-up of heads,

   b. the typology of [E]-features, and

   c. the patterns of [F]-marking.

First, crosslinguistic variation can be found with respect to the featural make-up of the different heads involved in the licensing of ellipsis. On the one hand, it is possible to find variation in the order of the different features in a given head. As I argued in Chapter 2, the ordering of the ellipsis-triggering features and the movement-triggering features (i.e. whether it is [E] $\succ$ [M] or [M] $\succ$ [E]) will (partially) determine which patterns of P-Omission we find. On the other hand, whether a given head can bear only an [E]-feature or it must bear other features (such as movement-triggering features) will also be important in determining the (un)availability of P-Omission. For instance, if we found a language that is just like Spanish, but that doesn't allow for C to only bear an [E]-feature (i.e. it must also bear a movement-triggering feature), we predict that P-Omission won't be possible in that language.

Second, crosslinguistic variation can be found with respect to the typology of [E]-features and their featural make-up. Although I proposed [E^{syn}] and [E] for Spanish, I'm not claiming that these are the only ellipsis-triggering features that exist, either in this language or in others. On the contrary, my proposal leaves open the possibility of the existence of other [E]-features that impose different identity requirements. For instance, there could be an [E]-feature that imposes semantic identity (i.e. [E^{sem}], as I proposed in the Appendix to Chapter 5), or an [E]-feature that imposes a different type of syntactic identity, among others. Additionally, crosslinguistic variation can also be found with respect to the heads that can select for these [E]-features. I claim that, in Spanish, C can bear an [E^{syn}] and Top can bear an [E]-feature, but it could be possible that, in other languages, other heads are the ones that bear (these or other) [E]-features, giving rise to different patterns of ellipsis.

Third, crosslinguistic variation can be found in the different possibilities regarding [F]-marking and focus projection. In Part I of this dissertation I claimed that, in Spanish, the entire PP or only the DP inside it can be [F]-marked. However, it could be possible to find a language that always requires for the entire PP to be [F]-marked (that is, a language that doesn't allow [F]-marking only on the DP inside it). If this were the case, we would expect not to find P-Omission at all.

How all these pieces fit together and interact with each other (and with other properties of a given language) will be crucial to determine what types of ellipsis are possible in that language, and what they will look like.

8.2 Open Questions

Although many questions have been answered throughout the preceding pages, many other questions remain open and should be investigated in future research. In what follows, I provide a (non-exhaustive) list of open questions.

In the first place, an immediate question that arises from the proposal I developed in this dissertation concerns other types of ellipsis and what type of [E]-feature licenses them. That is, what are the differences between the [E]-feature that gives rise to NP-Ellipsis, *v*P-Ellipsis, gapping, TP-Ellipsis, and CP-Ellipsis, among many others? How do these different [E]-features interact with each other and with other features? Furthermore, I claimed that there is one [E]-feature that imposes syntactic identity and one [E]-feature that doesn't impose any identity requirements at all, and I suggested that there could be an [E]-feature (in Spanish or in other languages) that impose semantic identity or an [E]-feature that imposes a different (e.g., maybe weaker) type of syntactic identity. If this is true, what would these identity conditions look like? How would these identity conditions interact with other identity conditions present in a given derivation?

In the second place, it would be important to study some of the empirical domains I analyzed here in other languages to understand better what the generalizations would be and how the different types of ellipsis interact with each other. That is, what [E]-features do we find in a given language? What are the crosslinguistic differences with regards to the identity conditions imposed by the different [E]-features? Furthermore, how do the different ellipsis mechanisms proposed here to license ellipsis interact with other properties of a language? And more specifically, which heads can bear [E]-features in each language and what types of ellipsis can be derived from them?

Overall, this project challenged some ideas and previous proposals about the identity condition that licenses ellipsis, the particular mechanisms that give rise to ellipsis, and the status of previous examples and data that served as evidence for these ideas. This was achieved by analyzing two elliptical phenomena—TP-Ellipsis and TREQs—in depth in Spanish, which allowed me to provide a complete empirical picture of the phenomena under examination. In doing so, this thesis developed an original theory of ellipsis that makes correct predictions regarding the patterns found in ellipsis in Spanish, and provides the basis for the analysis of other types of ellipsis in other languages.

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