

INFORMATION STRUCTURE AND ITS SYNTACTIC MANIFESTATION IN SPANISH: FACTS AND PROPOSALS*

Antonio Fábregas
UiT-Norges Arktiske Universitet

ABSTRACT. This article presents the main facts about how information structure is syntactically codified in Spanish, with particular attention to the syntax of topics and foci. These facts will be used to assess whether cartographic and minimalist approaches can, in their pure version, account precisely for this set of facts in a predictive way. We discuss the taxonomy of topics and foci, the evidence for their syntactic position, their A'-movement properties, the asymmetries between left- and right-dislocated elements, and the availability of information structure inside subordinate clauses.

Keywords. topic; focus; information structure; embedded contexts; dislocation; root clause

RESUMEN. Este artículo presenta los principales datos acerca de la codificación sintáctica de la estructura informativa en español, con especial atención a la sintaxis de tópicos y focos. Estos hechos serán utilizados para evaluar si, en su forma más pura, las teorías cartográficas o minimistas pueden explicar estos hechos de una forma predictiva. El trabajo discute la taxonomía de tópicos y focos, qué datos hay para identificar su posición sintáctica, sus propiedades de movimiento A', las asimetrías entre elementos dislocados a izquierda y derecha, y la posibilidad de introducir estructura informativa marcada en el interior de las oraciones subordinadas.

Palabras clave: tópico; foco; estructura informativa; contextos subordinados; dislocación; oración principal

1. Introduction and overview

The goal of this article is to provide an overview of the main properties of complementisers in Spanish, with particular attention to information structure: what the empirical facts are, and what are the analyses that have dealt with these facts. In a nutshell, it is current practice to ascribe the following three sets of roles to complementisers.

a) Complementisers define the type of clause in terms of their formal properties: whether the clause is finite or non finite, whether it displays indicative or subjunctive and, even, whether the subject of the matrix clause is coreferential to an argument of a subordinating predicate or not. These aspects refer to contrasts such as those exhibited in (1) and (2).

* The research underlying this article has been partially financed with projects FFI2013-41509-P and FFI2014-56968-C4-2-P, both of the Spanish Ministry of Economy and Competitiveness. I am grateful to Carlos Rubio Alcalá, Javier Fernández Sánchez, Pablo Rico, Ángel Jiménez-Fernández and Julia Villa-García for comments, fruitful discussion and observations. All disclaimers apply.



- | | | |
|-----|--|------------|
| (1) | a. Juan cree que tiene suficiente dinero.
Juan believes that has enough money
'Juan believes that he has enough money' | Finite |
| | b. Juan cree tener suficiente dinero.
Juan believes to.have enough money
'Juan believes that he has enough money' | Non-finite |
| (2) | a. Juan quiere que salga de casa.
Juan wants that go.out.sbj from house
'Juan wants that someone leaves home' | |
| | b. Juan quiere salir de casa.
Juan wants to.go.out from home
'Juan wants to leave home' | |

b) Complementisers head or introduce projections that are used by syntax to define information structure, particularly notions such as topic and focus. Even in theories where information structure can be defined above other categories, such as vP (Poletto 2006) and DP (Aboh 2004), complementisers have a privileged role in introducing or licensing these notions.

- | | | |
|-----|---|----------------|
| (3) | a. Juan ha decorado la habitación.
Juan has decorated the room | Neutral order |
| | b. La habitación, Juan la ha decorado.
the room, Juan it.acc has decorated | Topicalised DO |
| | c. LA HABITACIÓN ha decorado Juan.
the room has decorated Juan | Focalised DO |

c) Finally, complementisers are associated to utterances in several ways, as they define the illocutionary force of the clause, defining contrasts such as those in (4), and are the locus of utterance-, speaker- and addressee-oriented adverbs (5).

- | | | |
|-----|---|--|
| (4) | a. Juan ha olvidado el libro.
Juan has forgotten the book | |
| | b. ¿Ha olvidado Juan el libro?
has forgotten Juan the book? | |
| | c. ¡Vaya libro ha olvidado Juan!
what.a book has forgotten Juan! | |
| (5) | {Lamentablemente / Francamente}, me había olvidado de eso.
regretfully frankly me had forgotten of that
'{Unfortunately / Frankly}, I had forgotten that' | |

What we see in this list is that complementisers are the main objects that syntacticians use to account for the properties of the clause that lie at the interface between syntax and pragmatics: the management of the flow of information, manifested through word order, the definition of speech acts and the introduction of speaker and hearer attitude towards the utterance or the act of uttering it. Additionally, properties that are not clearly pragmatically oriented, such as finiteness, tend to be viewed also as determined, or strongly influenced, by complementisers; as we will see, this has prompted some researchers to divide complementisers in at least two areas.

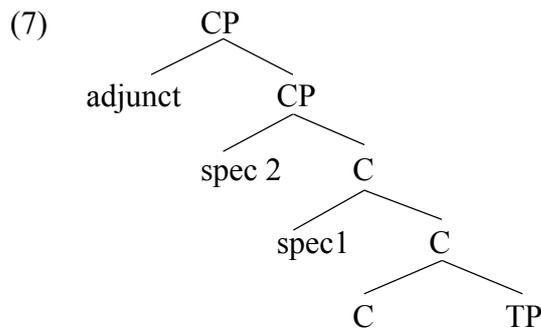
The three roles that we have just highlighted are clearly connected in some phenomena. For instance, some subordinate clauses in subjunctive (role (a) above) tend to reject fronted foci (role (b))¹ and speaker-oriented adverbs (role (c)); we will overview these facts below in §8.

- (6) Juan quiere que (??LA HABITACIÓN) (*francamente) decore yo.
 Juan wants that the room frankly it.acc decorate.sbj I
 Intended: *‘Juan wants that, THE ROOM, frankly, I decorate it’

In this article, we will mainly discuss the first and the second role, while we will leave a systematic overview of the third role for further work. However, whenever the definition of illocutionary force becomes relevant for word order, information structure and the formal properties of the clause, we will make reference to this third role.

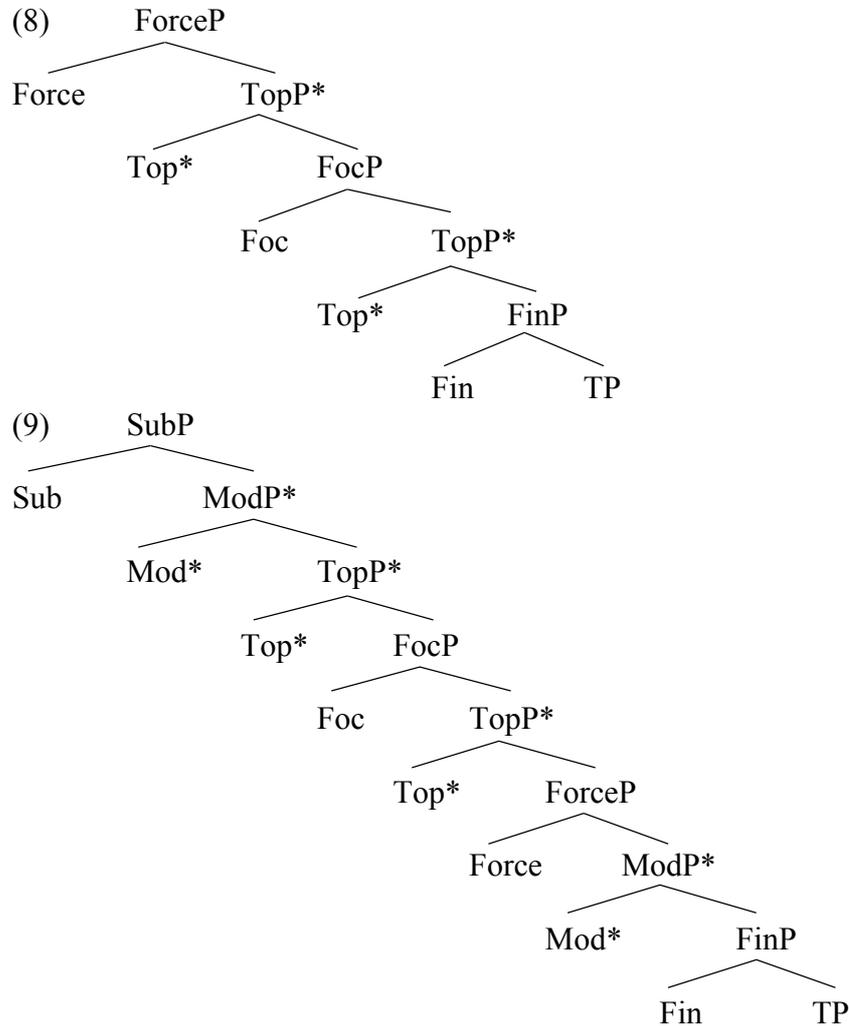
In the sections that follow we will elaborate on these topics, concentrating on the properties that Spanish exhibits with respect to them. Through the discussion, there will be one question that will always be in the background, and against whose predictions we will contrast the facts: are there heads called ‘complementisers’ (Cs) or should we talk of a ‘complementiser area’ where several heads, each one of them specialised for a particular task, are ordered in a strict way? These two alternatives illustrate what is probably one of the most active current debates in linguistics.

In the first option, which tends to be adopted by researchers working in the Minimalist framework (Chomsky 1995), there is one head C that performs directly or indirectly the three families of tasks highlighted before. The structure of the clause is parsimonious, and when there is more than one dislocated element, these can be treated as multiple specifiers of the same head, or adjuncts.



The second option is generally associated to cartographic frameworks, where there is a proliferation of heads that are, in principle, rigidly (and universally) ordered. The main proponent of this view for complementiser phenomena is Rizzi (1997), and has been developed in a number of proposals, some of them by Rizzi himself (cf. Rizzi 2004, for instance), some by others (Haegeman 2011). (8) represents the proposal in Rizzi (1997), while (9) represents the proposal of Haegeman (2006).

¹ As we will see throughout the article, judgements with respect to whether non-root sentences allow clitic left dislocations or not considerably vary across speakers. Judgments involving foci seem, in general, to be more stable across speakers. I have no explanation for this difference, and I don't know of any proposal that predicts it.



Fin(iteness) is the head responsible for determining whether the clause is finite or non-finite, as well as some properties of subjunctive and the coreference of subjects (Giorgi 2009). ModP, which can appear twice in the sequence, is devoted to hosting clausal modifiers that are not displaced from a lower position. Force defines the illocutionary force of the sentence, such as interrogative or exclamative. Top(ic), obviously, hosts this type of constituent, and can appear in two distinct positions, each one being iterable. Foc(us) is the head devoted to introducing foci, and Sub(ordination) is the head where the clause becomes an argument that can be selected by main verbs, or where some conjunctions are introduced.

There are several arguments for and against each one of these approaches, which are the theoretical background which we will confront with the Spanish facts. The minimalist view, with only one head, is forced to ascribe all the different roles of complementisers to the same element, and runs into problems when there is more than one morpheme, for instance, to spell out subordination and finiteness separately. The ordering facts that we will review in §2 and §3 cannot be explained through a hierarchy of heads, as any element displaced to the left periphery of the clause would be a specifier of the same head. As we will see, such facts must be explained in this theory as relativised minimality effects where one element acts as an intervener that prevents a second element crossing above it (cf. Chomsky 2008, Abels 2012).

The cartographic view has its own problems. First, if the hierarchy is fixed rigidly, it is bizarre that some projections can be iterated; that means that their position is not

fixed after all, unless differences between each instantiation of the head that suggest that they are not the same element are identified (as we will see, this solution has been adopted in some works). Second, the hierarchy is stipulated, rather than derived: the proposal that heads are ordered as in (9) comes from careful cross-linguistic work, out of which the proposal that the sequences is as it comes, but in principle nothing would have prevented the hierarchy to be organised in a different way. Cartography assumes that the universal ordering is determined by Universal Grammar, which in this context makes it unnecessary within the approach to justify the ordering; Universal Grammar could have been different, and then the order would also be different. Third, the question is what happens when a sentence does not contain, for instance, a focalised element: is FocP absent, in which case the sequence is not so rigid, or is it present but unused, for instance because it has a negative value? If so, what does 'negative' mean in this context?

There is another relevant fact, to which we will not devote much space in this article but which must be taken into account: it has been claimed that information structure should not be considered a purely left-periphery phenomenon, as other domains, such as DPs or vPs, seem to be able to define notions such as focus (eg., Aboh 2004, Poletto 2006). These facts, which are still understudied, could be problematic for cartographic approaches, to the extent that these categories correspond to well-established phases or closed syntactic domains, something that would suggest that information structure is defined at the edge of any phase once argument structure and other relations have been satisfied. On the other hand, if the nature of those foci or topics can be shown to be different from those defined at the complementiser level and labeled in (8) and (9), the facts could argue for an even more fine grained functional sequence where there are, along the whole clause, designated distinct projections.

This article is structured as follows. In §2 we will discuss some preliminar notions that are crucial for understanding the following sections: what topics and foci are, how they are distinguished in principle, what subclasses of each can be identified and the main ways in which the fact that some constituent acts as topic/focus has been interpreted in the literature. In §3 we concentrate on topics, and review in a more fine-grained fashion their properties in Spanish, with particular attention to the issue of whether they are base generated in a peripheral position or arrive there as the result of movement. §4 is dedicated to the further properties of foci in Spanish, with particular attention to whether focus can be defined in vP-peripheral elements and whether there are focus markers in Spanish. In §5 we specifically discuss one case in the grammar of Spanish where there is a debate with respect to whether a constituent should be identified as a topic –thus, an informationally marked construction– or as an ordinary argument: preverbal subjects. In §6, we address what we call the ‘left-right asymmetry’, namely a set of facts that show that dislocation (in a wide sense) to the left is less restricted than dislocation to the right in Spanish; we also discuss what this set of facts tells us about the analysis of right-dislocated constituents. §7 explores the interaction between information structure and a number of subordinate contexts, in what has been known as Main Clause Phenomena. §8 concludes the article with an evaluation of what these facts mean for the architecture of grammar.

Let us, then, begin.

2. Topics and foci: definitions and classes

Let us start this overview with a presentation of what the two main ingredients in information structure are: topics and foci. In this section, we will give definitions and

criteria to identify them, and we will look a bit inside their typology. The claims in this section are not restricted to Spanish. A first commentary is however necessary: there is an intuitive notion in which ‘topics’ and ‘foci’ are identified cross-linguistically, but zeroing in the specific property that defines them is in actuality a very difficult task. Intuitively, topics are constituents which denote the entities that ‘the sentence is about’, but this notion of aboutness has proven to be difficult to establish categorically when different constructions and languages are compared. For this reason, an increasing number of researchers have argued that ‘topics’ and ‘foci’ should not be considered to be universal, strictly defined linguistic objects. There is rather a set of cognitively established principles about how information is transmitted, but the way –if any– in which these notions become codified by grammar is not universal. If that is the case, then, the task that should be done is to identify the types of ‘topic-related’ and ‘focus-related’ constructions available in each language, and understand them. This other task will be undertaken in §3 and §4 for the case of Spanish, while here we will try to focus on the problem of identifying topics and foci as information-structure notions that might not correspond to a natural class of grammatical constructions.

2.1. *What is a topic*

It is customary to trace back the origin of the notion of ‘that which the sentence is about’ to the work of Weil (1879), which was followed by representatives of the Prague School of linguistics (Mathesius 1942, Firbas 1964). Intuitively, the notion is related to ‘that of which the clause says something’, a notion further emphasised by the division of clauses into topic and commentary, where the commentary would be that which is said of the topic. The first definition of ‘topic’ as the element of which the clause talks is due to Hockett (1958), while historically the first authors used the terms ‘theme’ for the element that the sentence is about, and ‘rheme’ for what was said about it.

In the relevant literature, there have been many proposals about the properties that a topic should have. For Chomsky (1971) and Jackendoff (1972), the main property is prosodic (‘topics are unstressed’); Gundel (1974) –and to a lesser extent, Strawson (1964)– equates topics with subjects, a proposal that can be extended only with difficulty to pro-drop languages. There are three specific notions that have been highlighted in what is taken to be, loosely, a topic, although not every author gives equal importance to the three of them.

- i. Givenness
- ii. Aboutness
- iii. Initial position

These notions try to be more precise than the traditional characterisation of topics as informationally-old elements, which is what lies behind the initial characterisations given by Firbas (1964) (for ‘theme’), Hockett (1958), Clark & Clark (1977) and others after them. For instance, Strawson (1964) associated topichood to ‘knowledge assumed to be already in the audience’s possession’. As we will see, for most researchers being a topic does not imply being old information, even though the two properties are typically correlated. Let us see more in detail each one of these notions.

Note that out of these three properties, one is clearly syntactic while the other two are more pragmatically –or even more specifically, informationally–based. This is one of the main difficulties in our understanding of information structure, both in the case

of topics and foci (and I am grateful to Carlos Rubio Alcalá for making me see how serious the problem has become). In the study of information structure, pragmatic and syntactic criteria are typically mixed. This is of course understandable given the 'interfacial' nature of the phenomenon, which is essentially the formal encoding of notions whose relevance for pragmatics is not disputed, but at the same time it complicates the description of the phenomena in a very serious way. Mixing criteria is never a good outcome in science; a pragmatic definition of what a topic or a focus is puts together elements whose syntactic nature is very different. We will see this in the case of topics (for instance, when we discuss the differences between clitic left- and clitic right-dislocations), and also in the case of foci. At the same time, a purely syntactic definition of topic and focus is going to leave outside the definition some entities that, from a pragmatic perspective, will have the same information structure role –for instance, think of focus-in-situ and all-focus sentences, both discussed in the relevant sections–. However, this is the situation one finds when reviewing the literature, and it is not exclusive of information structure, but characteristic of many other interface phenomena.

The fact that most approaches have mixed pragmatic and syntactic criteria in identifying topics and foci has given rise to several theoretical alternatives, that overlap with the distinction between minimalist and cartographic approaches that we have already introduced.

a) For some authors, this mixture means that 'topic' and 'focus' should be taken as non-syntactic notions. This translates (for instance in López 2009) in the claim that there should not be features like [topic] and [focus] in our syntactic component; given this, one precisely expects that what pragmatics interprets as a topic or a focus is not a natural class in syntax.

b) Other authors still argue that topics and focus should be characterisable in syntactic terms, but this implies excluding some 'traditional' syntactic characteristics from their characterisation. To give one example, Samek Lodovici (2015) has argued that foci are syntactically characterisable, but if one assumes that movement is never part of their syntactic nature: they can be subject to movement or not, without affecting their nature as foci.

c) Other authors have argued that informative notions should be plainly treated as an interface phenomenon, meaning that syntax should not play a direct role in how they are treated. One example of this is Reinhart (2006), who argues that what defines something as a focus is a particular use of prosody that is then interpreted, but without any syntactic feature involved in this operation.

2.1.1. Givenness

According to this criterion, a topic is that which is given in discourse (the givenness criterion), that which refers back to some referent that has been previously introduced in the discourse. A sentence that contains a topic is a sentence about an active discourse referent, where 'active' means that it has been taken from long-term memory and made salient in the context of the discourse (Lambrecht 1994). According to this criterion, virtually any pronominal form would count as a topic, which is precisely what Lambrecht claims, even those they are not in initial sentence position:

- (10) a. Yo no puedo vivir allí.
I not can.1sg live there
'I cannot live there'.
b. A mi madre no le puedo decir eso.
to my mother not her can say that
'To my mother I cannot say that'
c. Con él no se puede hablar.
with him not SE can talk
'With him one cannot talk'

There are several consequences of this: first, one sentence can have more than one topic, as illustrated by (10b). Second, the position of a topic is much freer than usually taken in syntactic work: any position that a pronominal expression can occupy is a position where topics can be hosted. Third, by virtue of defining topics through givenness, the claim is that non-referring expressions cannot act as topics. Thus, the underlined constituents in (11) cannot be topical; take (11b) in the non-specific reading.

- (11) a. Nadie sabe nada de esto.
nobody knows nothing of this
'Nobody knows anything of this'
b. Un hombre que tenga tres mujeres no puede ser Papa.
a man that has three wives not can be Pope
'A man with three wives cannot be the Pope'

This seems to be right according to some criteria, such as the fact that such referents do not allow the famous Clitic Left Dislocation (CLLD, Cinque 1990):

- (12) a. *A nadie lo he visto.
to nobody him.acc have.1sg seen
b. *A un hombre que tenga tres mujeres no lo he visto.
to a man that has three wives not him.acc have.1sg seen

But note that intuitively, the sentence in (11b) makes a claim –that is, says something– about a hypothetical man with three wives, while (11a), pace negative concord, says that the statement 'to know something about this' applies to nobody.

We must immediately note that being 'given' in the discourse cannot be equated with being informationally old (Vallduví 1990). Lambrecht (1994: 326) gives one example where there are topical elements that can be new, provided they are given by association with an activated referent. In (13), once the referent 'a student' is activated in discourse, by association the underlined constituent becomes also given, even though they are new.

- (13) There was a student of mine. Her husband had a heart attack.

It might be relevant at this point to introduce a distinction that is originally due to Lambrecht (1994) within his givenness-theory of topics. Lambrecht differentiates, according to their referentiality, two main classes of elements:

- (14) a. Unidentifiable
b. Identifiable

This division has to do with whether the ‘referent’ is shared by speaker and addressee or not. The identifiable referents are those whose referents are represented in the mind of speaker and addressee when the utterance is produced. The unidentifiable referents are those whose referent is just present in the mind of the speaker. To some extent, this distinction is similar to the one between ‘specific’ and ‘definite’ DPs, where specific DPs are those that in the mind of the speaker have a referent, and definite DPs are those that the addressee is also able to referentially identify (cf. Leonetti 1999 for an overview). Unidentifiable referents are further divided in two classes:

- (15) a. Anchored
b. Unanchored

An unidentifiable referent is anchored if it can be linked to another discourse entity in the discourse. For instance, a relevant example would be (16).

- (16) Un amigo de mi primo me ha contado esto.
a friend of my cousin me has told this
‘A friend of my cousin told me this’

An instance of an unanchored DP would be (17), in an out of the blue context.

- (17) Sería una buena cosa tener una máquina del tiempo.
it.would.be a good thing to.have a machine of time
‘It would be great to have a time machine’

As for identifiable referents, Lambrecht (1994) differentiates three classes.

- (18) a. Inactive.
b. Accessible
c. Active

While the three classes involve having mental representations in the mind of both speaker and addressee, a referent is inactive when it has not been mentioned in the discourse at a particular time. The representation is stored in the long-term memory, but it has not been activated. Its opposite, an active referent, is one which has been activated in speech and, in fact, is salient at that particular point of the communicative act. In contrast, accessible referents are those that, within a conversation, have been active, but are not activated at that particular point, or are directly related to a currently active referent or to the contextual situation.

Thus, assuming that the reader of these pages is familiar with the classic names in information structure analysis, at this precise moment in the text, an inactive referent is Reinhart, at least until you read her name and got the mental representation of this linguistic activated in your mind. Now Reinhart has been made active, while another inactive referent, until you see the name mentioned, would be Rooth. At this point, Lambrecht is an accessible referent, because we were talking about him but we had stopped referring to him; an equally accessible referent at this point would be ‘the

following section’, by virtue of the contextual situation –where you and me both share the knowledge that this article has separate sections, and you have them in your context–. The works of Rooth and Reinhart also became accessible once I mentioned these names, because of the association between referents. Until precisely now, Frascarelli has been inactive.

Thus, as we see from this typology, nothing in the definition of givenness involves that a referent might be old information. You might be unaware that a famous study on topichood was published in 1981 by Reinhart until I mentioned it now, but the DP I just produced introducing it counts as a topic according to the givenness theory.

2.1.2. Aboutness

According to this criterion, a topic is that of which the utterance is about (aboutness-criterion). According to this criteria, the underlined elements in the following set of examples count as topics, because the rest of the clause –the non-underlined material– could be an answer to the question *¿Qué pasa con X?* ‘What’s up with X?’.

- (19) a. Las manzanas las ha traído Juan.
 the apples them.acc has brought Juan
 ‘The apples Juan brought’
 b. Juan, no se puede ir al cine con él.
 Juan not SE can go to.the movies with him
 ‘Juan, it is impossible to go to the movies with him’
 c. En esa ciudad hubo un terremoto que destruyó todas las casas.
 in that city there.was an earthquake that destroyed all the houses
 ‘In that city there was an earthquake that destroyed all the houses’

One problem is that according to this criterion there could not be indefinite topics, as they fail the ‘what’s up’-test.

- (20) A algunas personas no las puedo aguantar.
 to some people not them.acc can.1sg endure
 ‘Some people I cannot endure’
 (21) #¿Qué pasa con algunas personas?
 what happens with some people?
 ‘What’s up with some people?’

There are also other tests that are assumed to diagnose aboutness, and which do not always give the same results as the ‘what’s up’-test (Vallduví 1990). The ‘as for’-test involves glossing the sentence by peripherally introducing the possible topic with an expression like *en cuanto a* ‘as for’ (22). Note that, immediately, this test is not identical in its result to (21).

- (22) a. En cuanto a las manzanas, las ha traído María.
 in about to the apples, them.acc has brought María
 ‘As for the apples, María has brought them’
 b. En cuanto a Luis, no se puede ir al cine con él.
 in about to Luis, not SE can go to.the movies with him
 ‘As for Luis, it is impossible to go to the movies with him’

- (23) ?En cuanto a algunas personas, no las puedo aguantar.
in about to some people, not them.acc can.1sg endure
‘As for some people, I cannot endure them’

Another peculiarity of this test is that, given the syntactic shape of the expression used to diagnose topichood, it cannot be used to test if a non-nominal category is a topic, even though some of them can be argued to be topics –for instance, in (24b) it is clear that we are making a claim about the property of ‘beauty’.

- (24) a. (*En cuanto a) en Madrid, no puedo vivir allí.
in about to in Madrid, not can.1sg live there
Intended: ‘As for Madrid, I cannot live there’.
b. (*En cuanto a) guapa, María lo es.
in about to pretty, María so is
Intended: ‘Pretty María is’

Finally, aboutness can also be diagnosed through the construction ‘What the speaker said about X[topic] was Y[comment]’. Again, this forces just nominal constituents to be diagnosed as topics.

- (25) a. Lo que Juan dijo sobre las manzanas es que María las había traído.
that which J said about the apples is that María them had brought
‘What Juan said about the apples is that María had brought them’
b. *Lo que Juan dijo sobre guapa es que María lo es.
that which J said about pretty is that María it is.

The aboutness theory is related to Reinhart’s (1981) proposal that topics are devices used to structure the context set at a given point in communication. The context set (Reinhart 1981: 78) is borrowed as a notion from Stalnaker (1978), for whom the context set is defined as (26).

- (26) The context set of a given discourse at a given time is the set of propositions which we accept to be true at this point.

The effect of each new assertion inside the discourse is to modify the context set by adding the proposition expressed in the assertion to the context set. Now, as the context set contains an in principle unbounded set of propositions, and in any normal communication it would be extremely complex and rich, Reinhart argues, it becomes necessary to find devices to structure it internally. This is how topics come into play: topics are the way in which the propositions in the context set are organised, making the whole more structured, easier to remember and better fit to undergo the kind of critical assessment that is required to decide if a new proposition is admitted inside it or is rejected. Topics are used, like the procedure of arranging books alphabetically in a library catalogue, as devices that allow speakers to quickly and efficiently access all the information stored about something: they act as entries under which the different propositions are stored. Thus, if we are discussing which theory of topichood fits better our knowledge of grammar, and we have until now made claims with respect to authors such as Frascarelli, Lambrecht and Reinhart, we can take these three to be topics under which we store the propositions that describe their theory; we will presumably have also entries (topics) for ‘topic’, ‘aboutness’, ‘givenness’ and many

other notions discussed already here, and marking something as topic in a sentence is an instruction about where the speaker thinks that the proposition should be stored in the current context set.

The immediate consequence of this theory is that the notion of aboutness is made much more precise than in pragmatically or functionally oriented studies such as van Dijk (1979): aboutness refers to how the context set is organised, and under which entry a proposition is stored.

The theory makes an immediate prediction: the maximal number of topics allowed in a single proposition is one. The reason is that the entry system allows us, by definition, to store the proposition only under one single entry in the context set. Otherwise, topics would lose their usefulness as organisers to quickly access each one of the propositions. However, as we will see, some syntactic structures that have been considered to codify topichood allow for more than one constituent to be the topic, even without coordination. A relevant example, to which we will come back later on, is (27).

- (27) A María, las respuestas del examen, no se las di yo.
to María, the answers of.the exam, not her.dat them.acc gave.1sg I
'To María I did not give the answers to the exam'

This deficiency seems to put Reinhart's theory behind for instance Lambrecht's, who in principle accepts that there is more than one topic per clause.

2.1.3. Sentence initial position

Some analyses argue that topics should have the property of appearing in sentence-initial position, or at least displaced as much as possible to the left edge of the sentence. This syntactic criterion, however, runs into trouble quicker than the two previously mentioned criteria.

Part of the reason to expect that topics occupy this position is allegedly cognitively-based: it is more natural to start an assertion with the old information that both the speaker and her audience share. This ingredient is crucial in, for instance, Halliday (1967), for whom any material at the left of a sentence should be defined, by default, as its topic. However, we have already seen that being old information is not a reliable way of defining topics, so the claim only makes sense within a specific analysis where topics are assumed to occupy a grammatical position in particular.

The first problem for this proposal, that being at the left of the clause is a criterion for topichood, is that some material at the left edge of the clause cannot possibly be a topic. We have seen this, for instance, with non-referential pronouns.

- (28) Nadie sabe nada.
nobody knows nothing
'Nobody knows anything'

But it could be that (28) lacks a topic; (28) might be telling us that being at the left edge is not a sufficient condition for topichood, but it is necessary that a topic is at the left edge. However, this can also be easily falsified.

- (29) No las he traído, las manzanas.
not them.acc have.1sg brought, the apples
'I didn't bring them, the apples'

Here, the bona fide topic (defined as such in terms of aboutness and givenness) is in fact at the right edge of the clause. We will see (§6) that right-dislocated topics are more restricted in Spanish than left-dislocated ones, but still, (29) contains a topic that occupies a right peripheral position.

A different claim, as we will see also in §6, is that topics must occupy a structural position which normally involves a left-peripheral projection –a high projection c-commanding the rest of the clause–. This claim is compatible with the restricted existence of right-dislocated topics, which could just involve a situation where the rest of the clause has moved to an even higher position, leaving the topic now at the right edge of the sentence after linearisation (30).

- (30) a. [TopP [the apples] Top [CP I brought them]]
 b. [XP [CP I brought them] X [TopP [the apples] Top [CP I brought them]]]

2.1.4. Other issues and preliminary conclusions

An additional question that emerges is whether there can be sentences that lack a topic. This is related to the famous distinction between categorial andthetic judgements posed in Kuno (1972). The first proposal is that there could be sentences without any topic, that is, that we have two types of propositions depending on whether they can be divided in a topic-comment structure or not. Kuno (1972) and Reinhart (1981) are proponents of this theory, according to which categorial propositions can be divided following a question like ‘What’s up with X?’, where X is the topic.

- (31) A: ¿Qué pasa con Juan?
 what happens with Juan?
 ‘What’s up with Juan?’
 B: (Juan) no ha llegado a tiempo.
 (Juan) not has arrived in time
 ‘Juan has not arrived in time’

In contrast with these, thetic propositions are ‘all rheme’ sentences or (sometimes) all focus sentences which can answer the question ‘What happened?’.

- (32) A: ¿Qué ha pasado?
 what has happened?
 B: Que #(Juan) no ha llegado a tiempo.
 that Juan not has arrived in time
 ‘That Juan has not arrived in time’

Note that in categorial propositions the theme can easily be elided in Spanish, while there is a tendency to include the complementiser *que* ‘that’ in the answer to introduce an all-rheme sentence. These are prima facie arguments to say that not all sentences act in the same way with respect to whether topics are present or not. However, there is another series of proposals, among which Reinhart (1976), van Dijk (1979) and Fodor (1979) who argue that even in apparently all-rheme sentences there is a hidden topic which roughly corresponds to ‘the situation’, which is being described by the overt material. We will not get into this distinction here, noting however that the two proposals might be talking about two sides of the same phenomenon: while the categorial/thetic proposal refers to the linguistic material

present in a structure and its grammatical and linguistic status, where there are relevant differences, the ‘no-utterance-lacks-topic’ proposal discusses more the flow of information from a cognitive perspective, highlighting the fact that nobody talks about things in the vacuum, but at the very least with an utterance tries to say something about the world as it is conceived in his or her mind at that point.

This takes us again to one of the main claims in this article: the informative notions of topic and focus might have some reality as cognitive objects managing the flow of information, but there is no universal procedure, and therefore systematic criteria, to identify them cross-linguistically. We have seen that out of the different ways of defining topics, the one that seems to adapt better to Spanish is the givenness criterion, which defines topics by their referentiality and does not restrict them to one-per-sentence or forces them to appear in sentence-initial position, unlike the other two approaches. Moreover, this criterion allows for the existence of indefinite and definite topics, and brings up a fine-grained taxonomy that provides useful tools to analyse the variety of constructions in Spanish.

The potential shortcoming of this approach, however, is that it restricts topichood to referential elements. In the standard definition of referentiality, this should exclude all kinds of non specific nominals from being topics. However, Casielles Suárez (2004) notes that there are reasons to argue that some bare NPs are topics, rather than subjects, in Spanish. One relevant example is (33):

- (33) Niños no vinieron (pero padres, todos).
children not came (but parents, all-of-them'
‘As for children, none came’

As Javier Fernández (p.c.) notes, the availability of a bare noun expression seems to be associated to a contrastive reading.

Note that this passes at least some tests for topichood, such as the ‘as for’-test:

- (34) En cuanto a niños, no vino ninguno.
in about to children, not came none
‘As for children, none came’

Casielles Suárez (2004) furthermore notes that unless we treat the bare NP as a topic, we have no explanation for the fact that normally bare NPs are rejected as preverbal subjects. Contrast (33) with (35), where as we will see a topic is impossible (§7):

- (35) (María duda de que) *niños no vinieran.
María doubts of that children not came.sbj
Intended: ‘María doubts that, as for children, none came’

Moreover, the bare NP cannot be taken as a focus: (33) is compatible with a presuppositional interpretation of the existence of children in the context of discourse. It seems, thus, that bare NPs can be topics, which is the conclusion reached by Casielles Suárez, and the question is in which sense they can be referential. We could speculate that perhaps a bare NP can become referential to the extent that it makes reference to a kind, not an individual, so the givenness theory of topics can be perhaps saved, but this is at the very least a property that requires further exploration within the system.

2.2. *What is a focus*

Just like the notion of topic, there is no strict consensus with respect to what the criteria should be to define something as a focus. Intuitively, a focus is a constituent that is highlighted or assigned prominence inside a bigger constituent. The notion of focus has as its opposite the notions of ‘ground’, ‘background’ or ‘presupposition’, as reflected for instance in Vallduví (1990), Vallduví & Engdahl (1995), Zubizarreta (1998), or López (2009), among many others. Again, this definition is too vague and can be interpreted, and grammaticalised, in several distinct ways. The criteria to determine that something is the focus inside a structure include the following:

- i. Prominence
- ii. What fills an open position in a structure
- iii. Contrastiveness
- iv. Final position of the clause

In §2.1 we pointed out that the criteria to define topics mix pragmatic and syntactic properties. This is also true of foci, but here there is an inherent contradiction that highlights how difficult it is to match the syntactic and the pragmatic description. In the case of criterion (iv), which is the only syntactic criterion, this should mean that foci are never fronted, but it is well-known that this is not true. At least what one counts as a focus according to criteria (i), (ii) and (iii) –the three of them semantic and pragmatic in nature– is often found in a fronted position inside the clause, as we will see. Again, this might suggest that ‘foci’ should be deconstructed in syntax, with movement not being a necessary or sufficient property to characterise them.

Be it as it may, let us see these notions more in detail now.

2.2.1. Prominence

The first criterion that is used, and the most intuitive of all, is also the vaguest of them all: a focus is the prominent, or highlighted part, inside a unit conveying information. Halliday (1967) argued that information is packaged in discourse in ‘information units’, which he defines phonologically: they correspond to tone groups which contain as a compulsory part of them a segment that carries stress, as a tonic segment. In his view, the focus within an information group is precisely the element that carries that stress. Speakers can choose to highlight one element inside each information group, and they do it by marking it prosodically. In the following examples, as is standard practice, the focused element is marked in capital letters.

- (36)
- a. JOHN visited Susan yesterday.
 - b. John visited SUSAN yesterday.
 - c. John visited Susan YESTERDAY.
 - d. John VISITED Susan yesterday.

The criterion to define focus is, then, mainly prosodic. As can be seen, there is no necessary displacement of focalised elements, or any correlation between the position in the clause and being a focus, in this particular notion of focus. This has consequences, one of which is that according to Halliday (see also Jackendoff 2002) a segment within a word can also carry focus, by getting the prosodic prominence assigned to it. So, for instance, if someone mistakes the name of someone called Engelbert and takes it to be Engelhart, a possible correction would be (37):

(37) Not Engelhrt, EngelBERT.

The relation between stress and focus has been kept in different works, although it has been noted repeatedly that carrying additional prominence is not a necessary condition for being a focus. Take for instance the following exchange, where the communicative context –answer to a question– makes it clear that the final DP is the one that is given informative prominence. It is not necessary, however, that this DP carries any form of emphatic stress, although it has been argued that it does carry the main stress within the prosodic constituent, by virtue of being in the final position (Cinque 1993; see also Krämer 2009 for some critiques to this approach).

- (38) A: -¿Qué cocinó María para la fiesta?
 what cooked María for the party?
 ‘What did María cook for the party?’
 B: María cocinó paella.
 María cooked paella
 ‘María cocinó paella’

It seems that two procedures need to be differentiated, at least for languages like Spanish. On the one hand, constituents can be interpreted as foci by their position, particularly at the right edge of a constituent; here they do not require any kind of additional phonological prominence, but are assigned main stress in approaches such as Cinque (1993). On the other hand, constituents, irrespectively of their position within the clause, can be interpreted as foci if they are assigned a particular stress prominence. In that case, the focus might not correspond, even, to a syntactic constituent, but rather corresponds to a phonological sequence, as in our example (37). It has been claimed (eg., Zubizarreta 1998) that these two distinct procedures partially correspond to two types of focus, respectively wide and narrow focus; we will get back to this in §2.5.

We refer the reader, finally, to Irurtzun (2007) for a detailed overview of the prosodic properties of foci in Spanish.

2.2.2. Open propositions

Perhaps the most standard definition of focus in the current literature comes from Chomsky (1971) and Jackendoff (1972): the focus is the non presupposed part of the sentence. Let us take as an illustration, again, an exchange such as the one in (38), repeated here for convenience:

- (39) A: -¿Qué cocinó María para la fiesta?
 what cooked María for the party?
 ‘What did María cook for the party?’
 B: María cocinó paella.
 María cooked paella
 ‘María cocinó paella’

In the answer, *paella* is the focus of the clause. Within that clause, the information corresponding to ‘María cooked something’ is already presupposed: both the person making the question and the one answering it share the knowledge that there was something that María cooked. The problem is that the second person ignores what that

- (44) Pedro le ha regalado FLORES a María, no bombones.
 Pedro her has given flowers to María, not chocolates
 ‘Pedro has given FLOWERS to María, not chocolates’

The theory, of course, makes predictions about what material can be focal in which configurations. We will get back to it in §2.3, but here we must immediately note that the proposal is very difficult to apply to all instances of focalisation involving prosodic prominence. Remember that focus by prosodic prominence can be assigned to non-constituents, as a part of a word not even corresponding to a morpheme:

- (45) Me llamo AIONSO, no AIBERTO.
 me call.1sg AIONSO, not AIBERTO
 ‘My name is AIONSO, not AIBERTO’

If this type of focus is assigned to non-constituents, it is extremely difficult to see how an operator-variable structure could be obtained by movement, as non-constituents cannot move independently. Again, what we see here is that at least two different notions are being conflated under the label ‘focus’.

2.2.3. Contrastiveness and alternatives

If the previous criterion takes the focus to be the constituent that provides a resolution to the open position in a clause, the contrastiveness theory of focus claims that the effect of assigning focus to a particular segment is to trigger in the mind of the addressee the presupposition that there are other potential alternatives, and the focal element is the one that is picked among the set of alternatives. Consider as an illustration (46), a standard question where the *wh*-element has been described as focus, with its answer.

- (46) A: ¿Qué ha comido Juan?
 what has eaten Juan?
 ‘What has Juan eaten?’
 B: (Juan ha comido) arroz.
 Juan has eaten rice
 ‘Juan has eaten rice’

In the theory where focus is seen as the resolution of the open value, *arroz* ‘rice’ is the focus because it binds the open position in the proposition ‘Juan has eaten *x*’. In the alternatives-view, it constitutes the focus because it is the value picked from a set of alternatives in the mind of the speaker (47) that were the potential values for *x*.

- (47) Juan has eaten *x*, where *x* is {rice, pasta, salad, broccoli...}

The alternatives-view of focus, with its prominent role to contrastiveness, is associated to the work of Mats Rooth, and specifically to Rooth (1992), where he develops an integrated theory of focus interpretations. (48) reproduces Rooth’s (1992: 86) first version of the focus interpretation principle, which will do for our purposes.

- (48) In interpreting focus at the level of a phrase α , add a constraint that:
 (contrasting set) $\Gamma \subseteq [\alpha]^f$, or
 (contrasting individual) $\gamma \in [\alpha]^f$

Γ is a variable with the type of a set of objects matching α in [semantic] type, and γ is a variable matching α in type.

The idea is that whenever a constituent is assigned focus, the speaker has to interpret it imposing the condition that the set or individual that receives focus contrasts with other potential values that belong to a set of common alternatives that in principle speaker and addressee share.

While contrast is characteristic of several types of focus, this view has been criticised in several respects (see for instance López 2009, who argues that contrast is not a property of foci per se, but of a particular position where foci can move within the clausal architecture). While it is easy to find cases where the focus is interpreted as involving a set of alternatives, a focus can be an element that could not have been present in the set of alternatives. Consider for example the following exchange: John comes into the house and sees that the kitchen is burnt.

- (49) A: ¿Qué ha pasado?
 what has happened?
 B: Un meteorito ha entrado por la ventana y ha explotado.
 a meteorite has come through the window and has exploded

It is very unlikely that John had in his set of alternatives to the open value of the question the proposition ‘A meteorite has come through the window and has exploded’. Thus, the set of alternatives that should be considered in assessing foci cannot be predetermined: we do not need to be contemplating the right answer when we ask something.

Second, there are topics which are contrastive and involve alternatives, so being contrastive cannot imply that one is a focus. Consider a situation where we have been talking about three friends, Ringo, Paul and John. Assume that we have mentioned the three of them in the previous discourse, and that we are talking about where we are going to take each for lunch. Here, clearly a Clitic Left Dislocation Structure can be used, and note that we are strongly suggesting that the only person that we can take to McDonalds is John, out of the group of alternatives.

- (50) A John lo podemos llevar al McDonalds, pero no a los otros.
 to John him can.1pl take to.the McDonalds, but not to the others
 ‘John we can take to McDonalds, but not the others’

López (2009) has in fact used this kind of facts to argue that topics and foci are not primitive objects, or even useful categories of analysis, and proposes to deconstruct them in a system of features that we will revisit in §2.6. He acknowledges that foci can be contrastive, but this is only forced (in the absence of designated adverbial markers, such as *only*) when they appear dislocated to a left-peripheral position. In other words, who says (51) is implying that the speaker had in mind other alternatives for the question of what he ate, but (52) does not necessarily imply this.

- (51) PAELLA comí ayer.
 PAELLA ate.1sg yesterday
 ‘PAELLA I ate yesterday’

- (52) Ayer comí paella.
yesterday ate.1sg paella

Samek-Lodovici (2015) has a slightly different position which, however, still argues against positing [focus] features. In his view, (contrastive) foci appear in situ, and the reading is partially triggered by prosody; when the focus appears fronted, this is the result of an independent operation that is not required by what a focus is.

In §2.5. we will go back to the distinction between contrastive and non-contrastive foci, which lies behind some of these differences.

2.2.4. Clause-finality

We come now to what is the only clear syntactic criterion that has been offered in the literature to identify something as the focus. Rochemont (1986) argued that if some material is focal, it will always be able to appear in the final position of the clause, which for him is the unmarked position. Leaving aside the possibility of assigning phonological emphasis to any segment, we have already seen that in this position the constituent will, by default, get stress assigned within the prosodic group.

It is easy to show that the final position of the clause is privileged for focal elements, at least in a language like Spanish that allows a relatively free word order. Taking as a given that the constituent that answers a question is the focus in the answer, consider the following contrasts:

- (53) A: ¿Qué le ha regalado Juan a María?
what her has given Juan to María?
‘What has Juan given to María?’
B: a. Juan le ha regalado a María unas flores.
Juan her has given to María some flowers
b. #Juan le ha regalado unas flores a María.
c. #Le ha regalado unas flores a María Juan.
- (54) A: ¿A quién le ha regalado unas flores Juan?
to whom her has given some flowers Juan?
‘Whom did Juan give some flowers to?’
B: a. #Juan le ha regalado a María unas flores.
b. Juan le ha regalado unas flores a María.
c. #Le ha regalado unas flores a María Juan.
- (55) A: ¿Quién le ha regalado unas flores a María?
who her has given some flowers to María?
‘Who has given some flowers to María?’
B: a. #Juan le ha regalado a María unas flores.
b. #Juan le ha regalado unas flores a María.
c. Le ha regalado unas flores a María Juan.

The generalisation is that the focal material, a single constituent in each one of these controlled examples, appears in final position. Without prominence stress beyond the one assigned by default, then, foci appear to the right.

However, Rochemont does not say that this position has to correlate with focus necessarily. First, in languages without free word order, foci can appear in many other positions provided that they receive the emphatic stress that we represent with capital letters, as we have seen. This might be a different type of stress, and it is partially

correlated with distinct properties (§2.5), but it still means that foci cannot be diagnosed by their position.

Second, even in Spanish, there is at least one case of focus that appears, without prominence stress, towards the left edge of the clause: the *wh*-element that in a question represents the open position of the clause.

- (56) ¿A quién le ha dado flores Juan?
to whom her has given flowers Juan?
‘Whom did Juan give flowers to?’

Third, there are at least two constructions where foci can or must appear at the left edge of the clause: focalisation, which displaces the focal element to the left boundary of the sentence, and (pseudo-)cleft structures:

- (57) MATEMATICAS estudio, no biología.
MATHEMATICS study.1sg, not biology
‘MATHEMATICS I study, not biology’
- (58) Matemáticas es lo que estudio.
mathematics is that which study.1sg
‘Mathematics is what I study’

2.2.5. Preliminary conclusions

What we have seen from this characterisation is that the view of foci as the resolution of open values in a proposition seems to be the one that fares better with the available range of interpretations and conditions imposed to foci. However, as in the case of topics, it seems that foci should be viewed as cognitive categories whose linguistic reflection is not direct. Specifically, we have seen that there are at least two ways to mark something as focus: a prosodic prominence device, which is not sensitive to constituenthood (because it can be assigned to non constituents) and a set of more syntactic devices that correlate focus with a particular position inside the clause, particularly in the case of a language like Spanish, and is sensitive to constituenthood. Both devices can overlap, as in the case of focalisation, where a syntactic constituent receives prominence stress and is displaced to a particular syntactic position; we have seen that this kind of focus is related to contrastiveness, which otherwise does not seem to be a necessary or sufficient condition for being focal.

2.3. Subclasses of topics

When it comes to the different classes of topics noted in the literature, distinct criteria have been used to tease them apart. Some of the distinctions attend to the syntactic properties of topics, while others concentrate on their discourse role or their intonation in particular languages. In this section we will overview the main classifications.

Let us start with a distinction that takes into account the way in which the topic is syntactically instantiated, and particularly with two criteria: whether the topic is recovered in the clause with a clitic pronoun or with a strong pronoun, and whether there are connectivity effects in the topic constituent –that is, whether its case marking or other formal properties have to match those assigned to the element that recovers it in the base position–. According to this criterion, three constructions are distinguished: clitic dislocation (right or left; cf. §6), hanging topic and linking-theme

topic (*tópico de tema vinculante*) (among many others, cf. Vallduví 1990, Casielles Suárez 2004, Bosque & Gutiérrez Rexach 2009).

- (59) a. A Juan no lo he visto.
to Juan not him have.1sg seen
'Juan I have not seen'
b. Juan, no lo he visto (a él).
Juan, not him have seen to him
'Juan, I have not seen him'
c. {En cuanto a / Hablando de} Juan, no lo he visto (a él).
in about to speaking of Juan, not him have seen to him
'As for Juan, I have not seen him'

In the clitic dislocation construction, the topicalised element must carry the formal marking that is expected from its base position, such as the accusative DOM marker in (59a); correlatively, this topic has to be recovered by a clitic, if the language has one available. In contrast, in the hanging topic construction the topicalised element carries no formal marking, and a strong pronoun can appear in the base position. Due to parochial properties of the pronominal system of Spanish, the clitic is necessary in both cases when the topicalised element is a direct object, but note that the strong pronominal form *a él* can only be added if the dislocated element lacks accusative marking:

- (60) *A Juan no lo he visto a él.
to Juan not it have.1sg seen to him

This suggests to many researchers that clitic dislocation does involve movement between the base position, which is then not available for a strong pronominal form, and the high peripheral landing site.

Notice next that the difference between the linking-theme topic and the hanging topic is, on the surface, whether the topic appears unmarked or is accompanied by an expression that cannot possibly have originated in the landing site. They also differ in their informational function: linking-theme topics are used to change the topic of the discourse, in the sense that we can use (61), but not (62), if we were talking about Juan before and the speaker now wished to discuss Luis.

- (61) En cuanto a Luis, ¿qué hacemos con él?
in about to Luis, what do.1pl with him?
'As for Luis, what do we do with him?'
(62) Luis, ¿qué hacemos con él?
Luis, what do.1pl with him?
'Luis, what do we do with him?'

This, the linking-theme topic is used to introduce as topics –that is, to make active– entities that were not topics at that point in the discourse, while the hanging topic cannot redirect the direction of the discourse by changing the topic. Hanging topics have to be already topics. So the following exchange is possible, because in the second sentence Juan is already the topic.

- (63) A: En cuanto a Juan, ¿qué hacemos con él?
in about to Juan, what do.1pl with him?
‘As for Juan, what do we do with him?’
B: Juan, no estoy seguro de que se pueda trabajar con él.
Juan, not am certain of that SE can work with him
‘Juan, I am not sure that one can work with him’

Contrast this with (64):

- (64) A: Juan, ¿qué hacemos con él?
Juan, what do.1pl with him?
‘Juan, what do we do with him?’
#B: En cuanto a Juan, no estoy seguro de que se pueda trabajar con él.
In about to Juan, not am certain of that SE can work with him
‘As for Juan, I am not sure that one can work with him’

In the literature, the term ‘topicalisation’, without additional qualifications, is sometimes used to refer to a construction, available in English, where a non-prosodically prominent constituent is displaced to the left periphery of the clause without any pronominal expression in the base position.

- (65) John I have seen.

On the surface, it seems that Spanish might have this construction as well (66), but this has been disputed (see especially Casielles Suárez 2004).

- (66) Dinero no tengo.
money not have.1sg
‘Money I don’t have’

Casielles Suárez proposes that what actually happens here is that we have an instance of (clitic) dislocation, with the particularity that, having a displaced bare nominal, there is no overt clitic in the pronominal repertoire of Spanish. However, languages with partitive clitics, like Catalan, Italian or French, would use it in this construction. In favour of the proposal, this author shows that English topicalisation is restricted to a maximum of one displaced constituent (67), while the Spanish structure suspicious of being an instance of the same operation allows for additional displaced topics (68).

- (67) a. *Money, to Mary, I didn’t give.
b. Dinero, a María, no le di.
money to María not her gave

It seems, therefore, that Spanish lacks the English type of topicalisation (see also Haegeman 2006). In the rest of this article, when necessary we will refer to this English type of topicalisation as ‘bare topicalisation’; when we use ‘topicalisation’ in what follows we refer simply to the displacement of topic constituents to a peripheral position in the clause.

Next to this classification, which is based on the syntactic properties of topicalisation, there are other distinctions that are only partially overlapping and that

refer to the interpretation of the topics. Frascarelli & Hinterhölzl (2007) have proposed that, by their semantic function (and prosodic properties), three types of topics must be differentiated: familiarity, contrastive and aboutness topics.

Familiarity topics are those that simply pick referents that are active or accessible in the previous discourse; they are the most basic type of topics, and do not involve contrast of any kind. Consider a context where we are discussing what to do with the apples, and someone answers:

- (68) Las manzanas, las podemos usar para hacer mermelada.
 the apples, them can.1pl use to make marmelade
 ‘The apples, we can use them to make marmelade’

Next, contrastive topics are those which select one of the accessible referents in the discourse and oppose it to another one. A clear example of this is a context where we have bought apples and oranges and we are discussing what to do with them, and someone says:

- (69) Las manzanas, las podemos usar para mermelada; las naranjas, las podemos
 the apples them can.1pl use for marmelade; the oranges, them can.1sg
 usar para hacer zumo.
 use to make juice
 ‘The apples, we can use them to make marmelade; the oranges we can use to
 make juice’

Finally, aboutness-topics are those that introduce new topics in the discourse, or at least propose a topic-shift with respect to the previous discourse. Imagine that we had bought just oranges and apples, but up to that moment we had only been discussing what to do with the oranges; at that point we could say:

- (70) En cuanto a las manzanas, las podemos usar para hacer mermelada.
 in about to the apples, them can.1sg use to make marmelade

Note that the linking-theme topic construction is perfectly fit to act as an aboutness topic, as expected. However, note that the construction can also be used to introduce contrastive topics in Spanish. If we had been talking about apples and oranges, we can still say:

- (71) En cuanto a las manzanas, las podemos usar para mermelada; en cuanto a las
 in about to the apples, them can.1pl use for marmelade; in about to the
 naranjas, las podemos usar para hacer zumo.
 oranges, them can.1pl use to make juice

The construction cannot be used, however, for pure familiarity topics, because it is specialised in introducing a topic shift.

The hanging topic construction seems fit for familiarity topics, and contrastive topics, but not for aboutness topics, as expected from the previous description.

- (72) Vitoria, no quiero saber más de esa ciudad. Familiarity
 Vitoria, not want.1sg know more of that city
 ‘Vitoria, I don’t want to know more about that city’

- (73) Vitoria, no he estado allí; Bilbao, sí he vivido allí. Contrastive
 Vitoria, not have been there; Bilbao yes have lived there
 ‘Vitoria, I have not been there; Bilbao, I did live there’
- (74) #Vitoria, hablemos ahora de esta ciudad. Aboutness
 Vitoria, talk.1pl now of that city
 Intended: ‘Vitoria, let’s now talk about that city’

Part of Frascarelli & Hinterhölzl’s (2007) contribution is the claim that these three semantic interpretations of topics are ordered hierarchically. In other words: against the initial stages of the cartographic study of the left periphery, where topic was an iterable position (Rizzi 1997), F&H claim that indeed there is more than one position for topics, but each one of them corresponds to distinct heads in the functional sequence, in accordance with the cartographic idea that each head has only one place where it can appear due to its specialised semantics. Their proposal is that the order is Aboutness > Contrastive > Familiarity. The following example might be a bit awkward, but it is grammatical in a context where we decide to start talking about the apples we collected from the garden, and we decide that our two interested friends should be treated differently: María can pay for them, but Luis has been very nice to us and he deserves to get them as a present. Finally, the particular day when the transaction can take place has also been discussed before in the discourse.

- (75) En cuanto a las manzanas^{About}, a María^{Cont}, ese día^{Fam} se las podemos vender;
 in about to the apples to María that day SE them can.1pl sell
 en cambio, a Luis ese mismo día se las podemos regalar.
 however, to Luis that same day SE them can give
 ‘As for the apples, to María, that day, we can give them to her; however, to Luis the same day we could give them as a present’

Note that other orderings are much less natural:

- (76) a. #A María^{Cont}, en cuanto a las manzanas^{About}, ese día^{Fam} se las podemos...
 b. #En cuanto a las manzanas^{About}, ese día^{Fam}, a María^{Cont}...
 c. #Ese día^{Fam}, a María^{Cont}, en cuanto a las manzanas^{About}...

Moreover, aboutness topics and contrastive topics are outside interrogative clauses, while familiarity topics are inside:

- (78) a. En cuanto a María, ¿se las diste?
 in about to María, her them gave
 ‘As for María, did you give them to her?’
 b. A María, ¿se las diste? Y a Pedro, ¿se las vendiste?
 to María her them gave? and to Pedro, him them sold?
 c. ¿Las manzanas las vendiste?
 the apples them sold?
 ‘The apples, did you sell them?’

This reinforces the idea that each one of these topics is placed in a different structural position. Note that the Minimalist account, where in principle all topics should be specifiers of the same head (presumably C) would not be able to account for this difference.

Let us now move to a discussion of the types of foci that have been proposed in the literature.

2.4. Subclasses of foci

We noted in §2.2.1 that there is a basic distinction between focus that is assigned via prosodic prominence and the one that is not, and we noted that these two strategies partially correspond to two different classes of focus: wide and narrow focus. In order to understand the difference, let us start with a simple example.

- (79) A: ¿Qué ha hecho María?
 what has done María?
 ‘What has María done?’
 B: María ha vendido su coche.
 María has sold her car
 ‘María has sold her car’

Here, as noted in §2.2.1, the constituent that would receive the main stress within the prosodic group corresponding to the VP is the DP *su coche* ‘her car’. If no additional prosodic prominence is assigned to it, note that, being a good answer to the question ‘What has María done?’, it cannot be taken to be the sole focus of the answer. The open proposition is something along the lines of ‘María has done something’, and what fills the open position is the VP *vender su coche* ‘sell her car’. Thus focus is not restricted to the very last single constituent in the sentence, ‘her car’, but extends to the phrase that contains it, the VP *vender su coche*. That is: the focus that by default falls in the last constituent of the clause can extend to the bigger constituent where it is contained. Consider now, in contrast, the following answer, where the final DP receives additional prosodic prominence, marked with the capital notation.

- (80) María ha vendido SU COCHE.
 María has sold her car

Now, it is clear that this would not be a felicitous answer to the question ‘What has María done?’: now clearly the verb cannot be included in the focal material.

The observation that in some cases material that is not assigned stress, or is strictly at the right edge of the clause, can be interpreted as part of the focus goes back to Selkirk (1984), and has triggered a distinction between two types of focus which takes as the defining factor whether the identification of focus can be extended to prosodically non-prominent material or not: wide and narrow focus. Wide focus is the situation where, even though the relative prominence inside a prosodic group falls within the final constituent, any bigger constituent containing it can be part of the focus. When we have a sentence that can be interpreted as wide focus, we expect that it can be used as a felicitous answer to the question ‘What happened?’. Note that this is the case with our previous example, where there is no additional prominence assigned to the final constituent.

- (81) A: -¿Qué ha pasado?
 what has happened?
 ‘What has happened?’

- B: María ha vendido su coche.
 María has sold her car
 ‘María has sold her car’

Here, the final constituent receives its prosodic prominence through a productive phonological rule, described by Selkirk (1995: 563) –for English, although as we will see it can be extended to Spanish– as follows:

- (82) Nuclear stress rule
 The most prominent syllable of the rightmost constituent in a phrase P is the most prominent syllable of P.

This, by default, assigns nuclear stress to *su coche* ‘her car’, but the whole clause, the whole VP or, in general, any constituent containing *su coche* can be interpreted as focal material (Zubizarreta 1998). Technically, when focus is restricted to *su coche* – as in the answer to ‘What has Mary sold?’– we would be talking about narrow focus, that is, the situation where the only focal material is the one assigned prosodic prominence; however, this configuration is a potential wide focus configuration where focus can be extended beyond the DP, to any constituent that contains it. Literally, however, the term ‘wide focus’ is properly used only when it is the whole clause that is focal, although in practice people use the term ‘wide focus’ also if the whole VP is at focus.

While prominence assigned by position through the nuclear stress rule is in principle compatible with both narrow and wide focus, purely prosodic prominence through an emphatic intonation forcefully must correspond to narrow focus, and is restricted to the segment that receives the extra prominence. Thus, we have the following contrasts, where each one of the sentences can only correspond to one single open proposition:

- (83) A: ¿Quién ha vendido su coche?
 who has sold her car?
 ‘Who has sold her car?’
 B: a. MARIA ha vendido su coche.
 MARIA has sold her car
 b. #María HA VENDIDO su coche.
 c. #María ha vendido SU COCHE.
- (84) A: ¿Qué ha hecho María con su coche?
 what has done María with her car?
 B: a. #MARIA ha vendido su coche.
 b. María HA VENDIDO su coche.
 c. #María ha vendido SU COCHE.
- (85) A: ¿Qué ha vendido María?
 what has sold María?
 B: a. #MARIA ha vendido su coche.
 b. #María HA VENDIDO su coche.
 c. María ha vendido SU COCHE.

While the previous distinction refers to how focal material is restricted in the clause, other divisions of types of focus refer rather to how the focal material is interpreted. These are those that we will review here, but we should start with a

disclaimer: the number of different focus-types that has emerged in the literature is too extensive, and sometimes too parochial, to overview it here. Instead of trying to be exhaustive –a task that greatly exceeds our capacities– we will concentrate on what we consider to be the main types of foci highlighted in the literature, and those that have been adopted in a more general way: informational, contrastive, identificational, mirative and verum focus.

Let us start with the distinction between information and contrastive focus. The information focus simply involves non-presupposed information in the clause; as for contrastive focus, it involves picking a set (possibly a singleton) and opposing it to another set. The claim is that focalisation, the operation that dislocates a focal element to the left of the clause, is associated to contrastive focus (Rizzi 1997, Belletti 2001, López 2009), in the sense that a focalised element must be contrastive, while a non-focalised element may, but does not need to, be contrastive.

Answers to questions are informational foci. They cannot appear in a left dislocated position (although see Jiménez-Fernández 2015 for data showing that Southern Peninsular Spanish speakers do accept it), and they do not need to be contrastive in the sense that the speaker does not need to have that value in a set of alternatives.

- (86) A: ¿Quién vino a la fiesta?
 who came to the party?
 B: a. A la fiesta vino Juan.
 to the party came Juan
 b. #JUAN vino a la fiesta.
 Juan came to the party

Contrastive foci can appear in focalisation, but they can also appear in situ, something typical of corrective statements where the speaker opposes a value to the one given by someone else previously in the discourse.

- (87) a. JUAN vino a la fiesta, no Pedro.
 JUAN came to the party, not Pedro
 b. A la fiesta vino Juan, no Pedro.
 to the party came Juan, not Pedro

Contrastive focus can carry additional prominence, represented in capital letters. In fact, Chomsky (1971) associated contrastiveness to the additional prosodic prominence so strongly that he referred to it as ‘contrastive stress’. Informational focus, in contrast, cannot, even if it is left in the rightmost position of the clause.

- (88) A: ¿Quién vino a la fiesta?
 who came to the party?
 B: #A la fiesta vino JUAN.
 to the party came JUAN
 (89) A la fiesta vino JUAN, no Pedro.
 to the party came JUAN, not Pedro

Connecting these facts to the debate between Minimalism and Cartography that was advanced in §1, note that the fact that the high focus position is associated to a contrastive reading is an argument in favour of the cartographic view. The existence

of both left-dislocated foci and foci placed as the rightmost constituent of the clause could in principle be problematic for the cartographic approach, because it would suggest that in principle the focus reading can be obtained in different positions, and should not be explained through a designated projection FocP. However, if the readings obtained in the two positions are at least different in principle, we could be dealing with a situation where there are two FocP projections, each one with different properties, in the clause. But for this, we note, it is necessary to propose that the low focus position is underspecified with respect to the type of focus that it hosts, or else that there is a number of movement operations, so that right-most contrastive foci are actually placed in the same head as informational foci with the rest of the clause displacing even higher. The observation made by Jiménez-Fernández (2015) that informational focus is accepted by some Spanish speakers in fronted position is a further complication.

Note that contrastive focus does not need to be exhaustive, that is, that by assigning contrastive focus to a constituent we are not making the claim that necessarily the other alternatives in the set considered are not possible values for the open position in the proposition. Consider the adverb *solo* ‘only’; as noted in many works (eg., Rooth 1992, Kiss 1998), it imposes an exhaustive interpretation to the constituent: it introduces as part of the truth conditions of the clause that within the set of alternatives considered no other alternative can satisfy the open position.

- (90) Solo Juan vino a la fiesta.
only Juan came to the party

In contrast, the adverb *también* ‘also’ makes the opposite presupposition: there is more than one alternative in the set that can truthfully give value to the variable. Note that contrastive focus, for instance in a corrective environment, can be accompanied by this second adverb, which shows that contrastive focus does not need to be exhaustive.

- (91) A la fiesta vino también JUAN, no solo Pedro.
to the party came also Juan, not only Pedro

In left-dislocated position, the adverb is also available.

- (92) TAMBIÉN JUAN vino a la fiesta.
also JUAN came to the party

Identificational focus (Kiss 1998), however, adds to the notion of contrast that of exhaustivity, so it can be viewed as a contrastive exhaustive focus. Kiss discusses Hungarian, where identificational focus has a designated position in the clausal architecture. However, she herself argues that there does not seem to be an equivalent clausal projection in languages like Italian where identificational foci are placed. In order to obtain the identificational focus reading in Spanish, we must either include an adverb like *solo* ‘only’ –which does not seem to have a fixed position in the clause– or we need to use a (pseudo-)cleft structure, as in the following example:

- (93) Fue Juan el que vino a la fiesta.
was Juan that who came to the party
‘It was Juan that came to the party’

It is clear here that the interpretation assigned to *Juan* is exhaustive, in addition to being contrastive. For starters, the constituent cannot be accompanied by *también* ‘also’.

- (94) *Fue también Juan el que vino a la fiesta.
was also Juan that who came to the party

Kiss (1998) claims that identificational foci have other properties. To begin with, they are always narrow foci, a fact difficult to test in Spanish. Second, DPs containing universal quantifiers cannot be identificational foci, essentially because there are no alternatives left to license exhaustivity.

- (95) *Fueron todos mis amigos los que vinieron a la fiesta.
were all my friends those that came to the party

Note that contrastive focus, per se, does not reject this kind of DPs.

- (96) Vinieron a la fiesta TODOS MIS AMIGOS, no solo algunos.
came to the party all my friends not only some
‘ALL MY FRIENDS came to the party, not just some of them’

Let us now move to verum focus. Verum Focus (Höhle 1992) is a non-contrastive focus operation that takes the polarity of the sentence as the open value, and emphasises its truth. The construction was first identified for German, where Höhle placed the focal operator in C (assuming V2 movement). In Spanish it is manifested, among other devices, through the overt polarity marker *sí* ‘yes’.

- (97) María sí vino a la fiesta.
María yes came to the party
‘María DID come to the party’

Leonetti & Escandell (2009) have argued that sentences like the following, where a quantified element is fronted, are instances of verum focus.

- (98) a. Algo debes saber.
something must.2sg know
‘You must certainly know something’
b. Poco te puedo dar.
little you can.1sg give
‘I can give you very little, really’

The peculiarity of verum focus is that in Spanish, when it involves fronting, it can only target indefinites, and it does not lead to a partition of the overt material along the lines of the other kinds of focus. Specifically, the speaker is not saying in the previous sentence that there is a presupposition that the addressee knows *x*, and that *x* is filled by ‘something’, which is non-sensical. The displaced constituent does not receive a focus reading, but the truth value of the clause is: what is emphasised here is that the sentence must be certainly true. Note that, moreover, the displaced element does not necessarily carry additional prosodic prominence, as it is non-contrastive.

Note also that *verum focus* competes with pure polarity focus with overt emphatic *sí* (Hernanz & Batllori 2013): *¿?Algo sí debes saber* (??‘Something you DO have to know’).

Finally, consider mirative focus. In mirative focus, no contrast is necessary (it is not necessary that there are other alternatives in the set of elements considered for the open value). The speaker merely asserts that the element carrying focus is unexpected in this context, as a value for the variable.

- (99) UN PLATO DE SOPA trajo para comer al parque.
 A DISH OF SOUP brought.3sg to eat to.the park
 ‘A BOWL OF SOUP he brought to eat at the park’

Mirative interpretations come associated always to extra prosodic prominence, but do not need to appear in first position of the clause.

- (100) Se vino al parque CON JUAN, nada menos.
 SE came to.the park WITH JUAN, nothing less
 ‘He came to the park WITH JUAN, no less’

With this, we finish our presentation of different focus types.

2.5. How to differentiate topics from foci

The goal of this subsection is to provide some grammatical criteria to differentiate between constituents acting as foci and those acting as topics. As the notions seem not to have a systematic manifestation cross-linguistically, these tests refer –unless otherwise noted– to Spanish in particular.

Let us start with a criterion that provides a partial test to differentiate between the two classes, and which is particularly important in some works, such as López (2009): anaphoricity. The idea is that topics must always be anaphoric, in the sense that they corefer to entities that are already active or accessible in the discourse at the point where they are uttered, while foci can be anaphoric or not. Notice that it is not possible to treat as topic something that has not at least been made accessible –in Lambrecht’s (1994) sense– in the speech. If we are talking about modern painting, and assuming that in the context of utterance there is no sign that makes the speaker assume that there is a salient set of beers present (such as a classroom), the following sentence is bizarre.

- (101) #En cuanto a las cervezas, las compro siempre en la licorería.
 in about to the beers, them.acc buy.1sg always in the liquor.store
 ‘As for beer, I always buy it in the liquor store’

However, foci can be anaphoric or non-anaphoric –meaning, as we have pointed out repeatedly, that foci do not need to introduce new information–. Informational focus is, generally, non-anaphoric, as it is adding information that the interlocutor was lacking.

- (102) A: ¿Qué tienes en el bolsillo?
 what have.2sg in the pocket?
 ‘What do you have in the pocket?’

B: En el bolsillo tengo las llaves.
 in the pocket have.1sg the keys
 ‘In the pocket I have the keys’

However, informational focus can also be anaphoric. Consider a context where we have been talking about several of our friends, say Quentin, Alfred and Steven. In that discourse, the three of them have been mentioned. Now, a speaker can ask who was the person that bought the house next to mine. It is not necessary that the speaker assumes that one of the three friends that we have been discussing is the buyer. In that context, I could answer:

(103) Pues precisamente la ha comprado Quentin.
 so precisely it has bought Quentin
 ‘Oh, Quentin has bought it.’

Note that Quentin is an anaphoric element here, because we have been discussing him; what the speaker lacks as information is not that Quentin exists, and Quentin is accessible at that point in the discourse; what is ‘new information’ is that Quentin satisfies the open position in ‘Someone has bought the house next to this one’, but there is nothing new about mentioning Quentin in that context.

Contrastive foci can be anaphoric or not, as we saw, but corrective foci typically involve an anaphoric element, which is the one that someone (wrongly) mentioned in a particular context in discourse.

(104) Juan no vive en Madrid, sino en Bilbao.
 Juan not lives in Madrid, but in Bilbao
 ‘Juan does not live in Madrid, but in Bilbao’

Here, necessarily, Madrid must be anaphoric, because in that speech someone must have made it salient, presumably through a sentence along the lines of ‘Juan lives in Madrid’.

Finally, note that pronouns, which must be anaphoric in the sense discussed, can be foci, particularly in contrastive contexts:

(105) ÉL la dejó a ELLA.
 he her left to her
 ‘HE left HER’

The previous utterance is felicitous in a context where, for instance, we want to say that it was him, not her, who broke a relationship. Clearly, the referents of both pronouns must be salient in the discourse, or otherwise they would not be felicitous expressions.

Thus, while we can guarantee that a non-anaphoric expression cannot be a topic, being anaphoric is compatible with both topics and foci. We clearly need additional tests.

Some useful tests are implicit in the previous discussion, altogether with some critiques about them: (informational) foci can be the expression that answers a previous question, while topics can never be that; topics can be paraphrased frequently with expressions such as *en cuanto a* ‘as for’. Instead of repeating these tests here, we will add additional ones.

One first test is that foci must always carry some kind of prosodic prominence, either because they receive the nuclear stress (by their final position) or because they carry the emphatic stress that is represented by capital letters. In contrast, topics tend to be de-stressed. Consider, therefore, the following contrast, where the first member is a focus and the second is a topic.

- (106) a. CON ESO no puedes venir.
 WITH THAT not can.2sg come
 ‘WITH THAT you cannot come’
 b. Con eso no puedes venir.
 with that not can.2sg come

The first utterance is felicitous in a context where we want to convey that the thing that the addressee brings contrasts with other things he could have brought in being something that is not appropriate; we could also be surprised by what he brought. In the second case, however, it is necessary that the speaker has mentioned (or somehow made salient in discourse) that object, of which we make a claim, that he cannot come with it. Along the same lines, note that carrying emphatic stress is enough to define any pronominal expression (that allows emphatic stress, of course) as a focus.

Second, note that if the topic is dislocated, there must be a clitic expression that recovers it in the clause. This is not the case with foci, which cannot co-occur with clitic expressions that corefer to them. The two categories seem to be in perfect complementary distribution with respect to this property.

- (107) a. A JUAN he visto.
 to Juan have.1sg seen
 ‘JUAN I have seen’
 b. *A JUAN lo he visto.
 to Juan him have.1sg seen
 (108) a. A Juan lo he visto.
 to Juan him have.1sg seen
 ‘Juan, I have seen him’
 b. *A Juan he visto.
 to Juan have.1sg seen
 *‘Juan, I have seen’

Third, there is often an intonational break between a dislocated topic and the rest of the utterance, orthographically represented as a comma; foci do not allow this.

- (109) a. *A JUAN, no he visto.
 TO JUAN not have.1sg seen
 *‘JUAN, I have not seen’
 b. A Juan, no lo he visto.
 to Juan, not him have seen
 ‘Juan, I have not seen him’

In Spanish, when a focus is dislocated to the left, there is inversion between the subject and the verb. This is not compulsory with topics.

- (110) a. MATEMÁTICAS estudio yo.
 MATHEMATICS study.1sg I
 ‘MATHEMATICS I study’
 b. *MATEMÁTICAS yo estudio.
 MATHEMATICS I study.1sg
- (111) Las matemáticas, yo las estudio.
 the mathematics, I them study.1sg
 ‘Mathematics I study’

This inversion is characteristic of other A’-movements, like those in interrogatives and relative clauses, although they do not apply with identical force in all constructions assumed to involve A’-movement.

- (112) a. ¿Qué trajiste tú?
 what brought.2sg you?
 b. el libro que trajiste tú
 the book that brought.2sg you
 ‘the book that you brought’

VP-constituents cannot be foci, but they can be topics (Bosque & Gutiérrez Rexach 2009):²

- (113) a. Hablar en público no puedo.
 to.speak in public not can.1sg
 ‘As for speaking in public, I cannot’
- b. *HABLAR EN PÚBLICO no puedo.
 TO.SPEAK IN PUBLIC not can.1sg
 *‘SPEAK IN PUBLIC I cannot’

Some types of topicalisation (cf. §3) are recursive, that is, more than one constituent can be topicalised. However, it is impossible to focalise more than one constituent, although –remember– emphatic stress can be assigned to more than one constituent.

² Note that there are some apparent counterexamples, such as (i) (I am grateful to Carlos Rubio Alcalá for the example).

- (i) HABLAR EN PÚBLICO no quiero, pero charlar en privado no es problema.
 SPEAK IN PUBLIC not want.1sg, but talking in private not is problem

It seems, however, that the infinitival structure here corresponds to a constituent bigger than VP (in contrast to the previous example, where the infinitive depends on a root modal, by assumption relatively low in the structure). Notice that with *querer* ‘want’ it is possible to add a temporal modifier to the infinitive that is not coextensive to the tense of the main predicate; this suggests that the infinitive in (i) has at least some temporoaspectual structure.

- (ii) Hoy no quiero hablar en público mañana.
 today not want to.speak in public tomorrow
 ‘Today I don’t want to talk in public tomorrow’

- (114) A María, las manzanas, no se las voy a dar.
to María, the apples, not her them go.1sg to give
‘The apples I am not going to give to María’
- (115) *A MARÍA LAS MANZANAS no voy a dar.
TO MARIA THE APPLES not go.1sg to give
- (116) ÉL la dejó a ELLA.
HE her left to HER
‘HE left HER’

Topicalisation is compatible with wh-movement, while focalisation is not compatible with it if it has moved.

- (117) a. Las manzanas, ¿quién las ha traído?
the apples, who them has brought?
‘As for the apples, who brought them?’
- b. *LAS MANZANAS ¿quién ha traído?
THE APPLES who has brought?

Note that in-situ focalisation is acceptable with wh-movement in some contexts, in contrast. A sentence like *¿Qué profesor ha suspendido AL DOCTORANDO (no al licenciado)?* ‘Which professor has failed the PhD student (, not the undergraduate student)?’ is deemed acceptable by most speakers. What seems to be crucial in the ungrammaticality of the above example, then, is that focus has undergone overt A'-movement, not the presence of a focus interpretation per se. See Samek-Lodovici (2005) (I am grateful to Javier Fernández for pointing this reference to me).

This property seems to be consistent with the characterisation of foci as involving A'-movement: assuming that one A'-movement blocks another, by intervention, the pattern follows if wh-movement is (as standardly believed) an instance of A'-movement. This would seem to imply that topicalisation is not an instance of A'-movement, but as we will see in §3.1., this position is disputed.

Focalisation seems to be incompatible with all overt polarity markers conveying affirmative or negative clausal status (Arregi 2003), although judgements vary among speakers with respect to the negative adverb *no* ‘not’.

- (118) a. *LAS MANZANAS también he traído.
THE APPLES also have.1sg brought
*‘THE APPLES, I also brought’
- b. *LAS MANZANAS tampoco he traído.
THE APPLES neither have.1sg brought
*‘THE APPLES I didn’t bring either’
- c. *LAS MANZANAS sí he traído.
THE APPLES yes have.1sg brought
*‘THE APPLES I did bring’
- d. %LAS MANZANAS no he traído.
THE APPLES not have.1sg brought
‘THE APPLES I didn’t bring’

Topics do allow for instance expressions such as *sí* ‘yes’ and *sí que* ‘yes that’ to follow them:

- (119) Las manzanas, sí (que) las he traído.
 the apples yes that them have.1sg brought
 ‘As for the apples, I did bring them’

This suggests that polarity interacts with focalisation in some structural way, perhaps because at some point in the derivation foci have to land in the phrase defining polarity, or perhaps because polarity and foci share some features that produce an intervention effect. Note that there is nothing wrong in having a focus in situ in a clause marked with polarity, so the problem seems to be movement.

- (120) Ella también lo criticó A ÉL.
 she also him criticised to HIM
 ‘She also criticised HIM’

Topics, under restricted conditions that we review in §6, can appear right-dislocated. In terms of dislocation, however, foci cannot appear to the right.

- (121) Las he traído, las manzanas.
 them have.1sg brought, the apples.
 ‘I brought them, the apples’
 (122) *He traído, LAS MANZANAS.
 have.1sg brought, THE APPLES

Finally, and this has been one strong argument to support a movement approach to focalisation, focalised elements cannot correspond to constituents that are contained within syntactic islands, such as indirect interrogatives, conditionals and relative clauses.

- (123) *A JUAN no sé [si has visto ____].
 to JUAN not know.1sg if have.2sg seen
 Intended: ‘JUAN, I don’t know if you have seen him’.
 (124) *LAS MANZANAS me pongo malo [si como ____].
 THE APPLES me get.1sg sick if eat.1sg
 Intended: ‘THE APPLES, I get sick if I eat them’
 (125) *CON JUAN conozco [al chico que vive ____].
 WITH JUAN know.1sg the boy that lives
 Intended: ‘Juan, I know the boy that lives with him’

This does not mean that all kinds of topicalisation can be associated to positions within syntactic islands. Clitic Left Dislocation topics seem to be partially possible in those contexts: with a weak island such as the interrogative one, it is allowed. With strong islands, there are additional constraints that are imposed by the position of the island with respect to the main clause, and that we will review in §3.1., but they are partially possible.

- (126) A Juan, no sé si lo has visto.
 to Juan, not know.1sg if him have.2sg seen
 ‘Juan, I don’t know if you have seen him’

- (127) Las manzanas, si las como, me pongo malo.
 the apples, if them eat.1sg, me get.1sg sick
 ‘The apples, if I eat them, I get sick’
- (128) *A Juan, conozco al chico que lo vio.
 to Juan, know.1sg the boy that him saw
 Intended: ‘Juan, I know the boy that saw him’

Hanging topics seem able to be associated to positions inside all these constituents, but note that in them there is always a strong pronoun in the position where they are associated, and they do not carry the case marking that is expected if they originated in their base position. The same applies to the linking-theme topic. What this suggests to many researchers is that foci involve movement, while hanging topics and linking-theme topics do not. However, the situation is not so clear when it comes to clitic dislocations.

- (129) Juan, conozco al chico que vive con él.
 Juan, know.1sg the boy that lives with him
 ‘Juan, I know the boy that lives with him’
- (130) En cuanto a Juan, conozco al chico que vive con él.
 in about to Juan, know.1sg the boy that lives with him
 ‘As for Juan, I know the boy that lives with him’

Here we end our presentation of the differences between foci and topics, with particular attention to Spanish. As we see, there is little doubt that focalisation is an instance of A'-movement, but matters are much more complicated with whether topics involve movement or not. We will revisit this question at several points in the discussion.

2.6. *The debate on the grammatical encoding of topic and focus*

Before moving to the discussion of the strategies and specific properties of topic and focus constructions in Spanish, we must refer to a debate that connects with many of the facts noted before, which ultimately relate to whether ‘topic’ and ‘focus’ are useful notions for grammatical description or should just be taken to be cognitive categories related to how humans process information, independently of whether that information is codified linguistically or not.

There are two related problems that emerge in this theoretical debate (see particularly López 2009) for a summary:

- i. Are there features such as [topic] and [focus] in language?
- ii. If there are no such features, how can we codify the correlation between phonological and syntactic properties in our model of grammar?

Let us start from the first intuitive possibility: imagine that constituents that are assigned focus properties in a sentence are marked by a feature [F] (as, for instance, Zubizarreta 1998 assumes); we could assume a similar feature [T] for topics. The way in which this assignment can take place is open for discussion. We could imagine that these information-related features are optionally assigned to abstract matrixes of features before they are introduced in the syntactic tree.

(131) [DP] + [F]

We could also assume that there is an unselective head F that can take as its complement any kind of (focalisable) constituent.

(132)

```

      FP
     /  \
    F    DP / NP / PP...
  
```

Even though that would be extremely uneconomical, we could also say that the abstract lexicon duplicates (or triplicates) each head, having versions which are informationally unmarked, next to versions endowed with F or T.

(133) a. [D]
 b. [D, F]
 c. [D, T]

Either way, a proposal with [F] and [T] features would work as follows: the feature is introduced with the lexical item. In syntax, it might trigger a movement operation – eg., it might force the item carrying it to A'-move-. In semantics, this would be interpreted in a particular way, related to givenness, anaphoricity, alternatives, etc. In phonology, it might imply assigning emphatic stress to the constituent. There is no problem here, because the feature is present before the syntactic computation takes place, and thus before the derivation splits into semantics and phonology.

López (2009) has extensively argued, however, that these features do not exist. His reasoning is that if [F] or [T] existed, we would expect topics and foci to have a systematic behaviour, that is, all items marked as foci should act as a natural class, and the same applies to topics. However, in the previous two sections we have seen that foci and topics are not expressed with a stable set of grammatical properties: their position varies, as well as aspects of their interpretation and intonation. There are topics that are sensitive to islands, and topics that are not; there are foci in situ and foci that move.

At this point, two options invite themselves. The first one is undertaken by López (2009) himself: to deconstruct the notions of topic and focus by proposing that they are emergent interpretations that are produced by a combination of two binary valued features:

(134) a. [+a]
 b. [+c]

The [a] feature stands for anaphoricity. The idea is that an item is anaphoric if it has to be linked to a previous referent in discourse. Topics contain [+a] while plain focus is [-a]. The [c] feature stands for contrastiveness, taken by López (following Vallduví & Vikuna 1998) as referring to items that open up domains of quantification. Items that are marked as [+c] move to the left periphery, while items marked as [-a] are dislocated (but can be right dislocated, that is, not in the left periphery). Like this, he proposes a system where four values are differentiated: Clitic Left Dislocations are anaphoric and contrastive: [+a, +c]; Clitic Right Dislocations are anaphoric but not contrastive: [+a, -c]; focalised constituents are non anaphoric but contrastive [-a, +c], and finally, rheme by default (or focus in situ, without a special prosodic emphasis) is defined by the negative value of both, which López, following McNally (1998), takes

to be a conceptual advantage, being the unmarked situation in language: [-a, -c]. No dislocation and no left-peripheral position are necessary. Wh-items are also marked as [+c], so they also move to the left periphery.

Note that this approach would still have the advantage of explaining why syntax, semantics and prosody are associated in defining information structure: through these abstract features, the syntactic computation would be forced to perform some operations that would then be read at the two interfaces.

The other alternative is to dispense with focus and topic features altogether (see Szendrői 2001, Reinhart 2006 for this view). This has one potential complication: if focus is not a feature, we must find some way of ensuring that an element that is marked prosodically with emphatic stress is interpreted in the semantics in some way. The problem is that in the standard set of assumptions, PF and LF are not directly related, and syntax is there precisely to connect the two. How can, then, a PF operation be read by semantics, or a semantic operation be read by phonology?

Solutions have been proposed, though. Reinhart emphasises that ‘focus’ cannot be viewed as a property of a node, but should be taken to be rather as a relational notion that defines the relative prominence of a constituent within a sentence, that is, it is a relation between an expression (*sic*) and a sentence (2006: 137). Her proposal is that ‘focus’ is read directly from the PF representation of a sentence. Instead of codifying focus as a feature, what takes place in grammar is that –against standard assumptions– the phonological form can also contribute to the direct codification of the message as speakers try to decodify what a linguistic utterance means. She proposes (2006: 139) the following interpretation principle to define focus:

- (135) Focus set
The focus set of a derivation D includes all and only the constituents that contain the main stress of D.

Nuclear stress would be assigned to a particular constituent given the syntactic configuration, but Reinhart furthermore assumes that this default assignment of stress –which as we saw allows for wide focus (Zubizarreta 1994, 1998)– can be superseded by further PF operations (destressing and main stress-shift) which are also associated to specific interpretations:

- (136) Destressing
A DP is destressed if and only if it is D-linked to an accessible discourse entity.

The advantage of this PF approach to focus is that it allows to account for cases where the focal element is a non-constituent from a syntactic perspective. As no feature has been added, and the operation is essentially phonological, the right locality conditions involve a phonological segment rather than a syntactic constituent. The focal material in (137) is not a syntactic constituent, but it is a phonological segment. Such cases are addressed as problematic by López (2009), who discusses potential solutions.

- (137) My name is EngelHARDT, not EngelBERT.

It could be alternatively assumed that focus fronting is not triggered by a feature, but rather emerges by comparing alternative computations, which is a claim that

Reinhart (2006) does not explicitly make but that we believe can be easily extended within her framework. Reinhart (2006) has a framework where movement operations are legitimate provided that they imply a difference in interpretation at the interfaces with respect to a computation that does not involve that movement. Movement that is interpreted as information structure would involve situations where there are two convergent derivations for the same set of items, and where one of them has an extra movement operation than the other: this second derivation, where an additional movement operation that still produces a convergent derivation but was not necessary for convergence, would be a derivation where a marked information structure has been defined. Thus, if moving an element is compulsory for a given set of features, no information structure interpretation emerges, because any set of computations that the interfaces would receive would equally involve that movement. An example of this approach to information structure that dispenses with features altogether can be found in Fábregas, Jiménez-Fernández and Tubino (in press).

Before finishing this section and moving to the properties of topics and foci in Spanish, we should note that the Cartographic approach is essentially committed to the existence of at least some form of the [F] and [T] features. In their view, it is not only that there are designated positions for topics and foci, but there is a fine-grained typology of both where for instance Aboutness topics are different in position from Contrastive topics. If one must ensure that a constituent ends up in the right phrase, it seems that specific features would have to be defined for them, and the underspecification view of López (2009), where the actual features are more abstract, would not suffice: they would allow [+c] topics and wh-items to move to the same position, which is clearly not acceptable in a cartographic framework. Thus, while the distinct properties of subclasses of topics and foci seem to be an argument for cartographic approaches, the difficulty of proposing specific [focus] and [topic] features seems to argue against the framework.

3. Further properties of topics in Spanish

Remember that we have highlighted three different topic constructions with respect to their syntactic behaviour.

- (138) Clitic Dislocation
- | | |
|---|--------------------------|
| a. Las manzanas, las he traído yo. | Clitic Left Dislocation |
| the apples them have.1sg brought I | |
| b. Las he traído yo, las manzanas. | Clitic Right Dislocation |
| them have.1sg brought I, the apples | |
- (139) Hanging topic
- Juan, yo no puedo trabajar con él.
 Juan, I not can.1sg work with him
 ‘Juan, I cannot work with him’
- (140) Linking-theme topic
- En cuanto a Juan, yo no puedo trabajar con él.
 in about to Juan, I not can work with him

There are differences between clitic left dislocation and clitic right dislocation, which we will review in §6. For the time being our claims are restricted to the clitic left dislocation (henceforth CLLD), which is much more common and natural in Spanish.

Let us start this section with a further exploration of the differences between these three structures. Let us consider first recursivity. CLLDs can be iterated in Spanish, as we saw.

- (141) A Luisa, el dinero, no se lo he dado.
to Luisa, the money, not her it have.1sg given
'To Luisa I didn't give the money'

In contrast, hanging topics cannot be iterated. Contrast (142) with (143). Notice that the absence of marking in front of the dislocated nominal shows that both must be hanging topics.

- (142) Juan, no le he dado el dinero a él.
Juan, not him have.1sg given the money to him
'Juan, I have not given the money to him'
(143) *Juan, dinero, no le he dado eso a él.
Juan, money, not him have.1sg given that to him

Similarly, linking-theme topics cannot be iterated, a property that can plausibly be explained by their pragmatic role: they propose a reorientation of the topic of the discourse. If the first topic reorients it towards one referent, it is impossible to propose a second reorientation before any comment has been made about the first.

- (144) En cuanto a Juan, no puedo darle el dinero.
in about to Juan, not can.1sg give.him the money
'As for Juan, I cannot give him the money'
(145) *En cuanto a Juan, en cuanto al dinero, no puedo dárselo a él.
in about to Juan, in about to.the money, not can.1sg give.him.it to him

Secondly, remember that there is a distinction between CLLD, on the one hand, and hanging and linking-theme topics, on the other, with respect to the nature of the pronominal form that relates to them in the clause. In the case of CLLDs, it is a clitic, while in the case of the other two it can be a strong pronominal form. The distinction can only be seen clearly if we topicalise direct objects in Spanish, as subjects lack an overt clitic and indirect objects can always appear with a clitic double.

- (146) A Juan le di el dinero (*a él). CLLD
to Juan him give.1sg the money to him
(147) (En cuanto a) Juan, le di el dinero (a él) Hanging / Linking-theme
in about to Juan, him gave the money to him
'(As for) Juan, I gave him the money'

This distinction correlates with how strictly the pronominal form has to match the gender and number features of the dislocated element. In Spanish, CLLDs, which always involve a clitic, do not allow any kind of mismatch (which however seem to be documented in other languages, like German). Consider the case of (148): here we have a noun which is feminine singular, but on the assumption that the couple is formed by at least one man, semantically it denotes a group that should be masculine and plural. This concordatio ad sensum is impossible in CLLDs.

- (148) A la pareja los amigos no quieren invitar-la.
to the couple the friends not want invite-them.f.sg
'That couple friends do not want to invite'
- (149) *A la pareja los amigos no quieren invitar-los.
to the couple the friends not want invite-them.m.pl

Similarly, assuming varieties that keep a case-based pronominal system, there cannot be any mismatches between the grammatical case of the dislocated nominal and the pronoun that links to it:

- (150) A Juan no quiero ver- $\{lo / \%le\}$.
to Juan not want see-him.acc / him.dat
- (151) A Juan no quiero darl- $\{le / \%lo\}$ eso.
to Juan not want give-him.dat / him.acc that

Hanging topics and linking-theme topics, that allow strong pronouns, also allow concordatio ad sensum.

- (152) La pareja, los amigos no quieren invitar-los a ellos.
the couple, the friends not want invite-them.m.pl to them
- (153) En cuanto a la pareja, los amigos no quieren invitar-los a ellos.
in about to the couple, the friends not want invite-them.m.pl to them

In fact, hanging topics and linking-theme topics allow for other possibilities when defining the linking relation between the dislocated element and the pronominal. It is possible to have the dislocated element refer to a set of entities, and the pronominal be a quantifier that refers to a (non-)proper subset of them (possibly, the null set).

- (155) Mis amigos, he conseguido hablar con alguno.
my friends have.1sg managed speak with some
'My friends, I have managed to talk to some of them'
- (156) Mis amigos, he conseguido hablar con varios.
my friends, have.1sg managed speak with several
'My friends, I have managed to talk to several of them'
- (157) Mis amigos, no he conseguido hablar con ninguno.
my friends, not have.1sg managed to talk with any
'My friends, I have managed to talk to none of them'

With respect to the range of grammatical categories that can take part in each one of these topicalisations, we must start by pointing out that it is unclear how the distinction between pronominal clitics and strong pronominal forms applies to non-nominal categories like verbs and others. Thus, before testing whether for instance a VP can be a hanging topic, we need to remind the reader of the discourse distinctions between the three constructions.

We have seen that the linking-theme topic is specialised to propose a topic-shift in the discourse, meaning that linking-theme topics can define as topical an element that, up to that point, was not topical. This, however, needs some refinement. There are a number of expressions that can mark linking-theme topics in Spanish (see for instance NGLE 2009: §40.2f):

- (158)
- a. a propósito de
a propos of
'As for'
 - b. en cuanto a
in about to
'As for'
 - c. en lo relativo a
in the relative to
'With respect to'
 - d. en lo que respecta a
in the that concerns to
'With respect to'
 - e. en relación con
in relation with
'In relation to'
 - f. hablando de
speaking of
'Speaking of'
 - g. por lo que se refiere a
by that which SE refers to
'With respect to'
 - h. respecto a
respective to
'With respect to'

Out of these, only a subset actually can introduce a new topic that was not mentioned at all at that point in discourse. In a context where we have been discussing one of our students, John, and we want to discuss now another student, Mary, the following expressions would fit.

- (159)
- a. En cuanto a María...
 - b. En lo relativo a María...
 - c. En lo que respecta a María...
 - d. En relación con María...
 - e. Por lo que se refiere a María...
 - f. Respecto a María...

In contrast, *a propósito de* 'a propos' and *hablando de* 'speaking of' act differently. We cannot be talking of Juan and use either of these two expressions to start talking about María out of the blue. However, they are topic-shift expressions because, provided María has already been mentioned, but not as topic, we can pick that referent and define it as such. So if we just said that Juan has been performing better now because María helps him with physics, either of the two expressions is felicitous to now start discussing María.

- (160)
- a. A propósito de María...
 - b. Hablando de María...

With this clarification in place, remember that hanging topics are unable to introduce new referents in the discourse. So in the context where we were discussing Juan, among our students, and María had not been mentioned, (161) is not felicitous.

- (161) María, Juan estudia con ella.
María, Juan studies with her

Can we use hanging topics in a context where we have just mentioned María as part of the rheme and we want now to make her the new topic in what follows? It seems at least marginally possible in Spanish. Consider the following exchange:

- (162) A: Juan ha mejorado porque estudia con María.
Juan has improved because studies with María
'Juan has improved because he studies with María'
B: ?María, no he hablado todavía con ella.
María, not have.1sg spoken yet with her
'María, I have not spoken with her yet'

Thus the precise discourse difference between hanging topics and linking-theme topics is that the second can be used to introduce, out of the blue, new topics if the right expression is used, while the second can only marginally introduce referents that have already been mentioned in the discourse and define them as topics. Hanging topics are unmarked only when they pick the element that was already a topic in the previous speech.

Consider next CLLD. Like hanging topics they are able to define as topic something that we had just mentioned as part of the rheme.

- (163) A: Juan ha mejorado porque estudia con María.
Juan has improved because studies with María
'Juan has improved because he studies with María'
B: A María no la he visto todavía.
to María not her have.1sg seen yet
'María I haven't seen yet'

Also like hanging topics, they seem unable to introduce new, out of the blue topics. In the following exchange, assuming that María has not been mentioned before, the B utterance is clearly infelicitous.

- (164) A: Juan ha mejorado porque estudia con Carlos.
Juan has improved because studies with Carlos
'Juan has improved because he studies with Carlos'
B: #A María no la he visto todavía.
to María not her have.1sg seen yet
'María I haven't seen yet'

With these observations in place, let us now move to determining the grammatical categories that can take part in each one of the constructions, using the discourse difference as a tool.

The three topic constructions allow DPs, definite or indefinite.

- (165) a. A un chico de esa clase no lo he conocido nunca.
to a boy of that kind not him have.1sg met ever
'A boy of that kind I have never met'
- b. Un chico de esa clase, no lo he conocido nunca.
a boy of that kind, not him have.1sg met ever
'A boy of that class, I never met one'
- c. En cuanto a un chico de esa clase, no lo he conocido nunca.
in about to a boy of that class, not him have met ever
'As for a boy of that kind, I never met one'

As repeatedly noted in the literature (Cinque 1990), negative existentials and other indefinite quantifiers cannot take part in any topic construction.

- (166) a. *A nadie lo he visto.
to nobody him have seen
- b. *Pocos libros, viajo siempre con ellos.
few books travel.1sg always with them
- c. *En cuanto a unos estudiantes, los he visto.
in about to some students, them have.1sg seen

Linking-theme topics are restricted to nominal constituents and pronouns, and reject even some nominal subordinate clauses, which are allowed in CLLDs and hanging topic constructions.³

- (167) a. Que vengas no lo quiero.
that come.2sg not it want
'That you come I don't want'
- b. Que vengas, no quiero eso.
that come.2sg not want that
'That you come, I don't want that'
- c. *En cuanto a que vengas, no quiero eso.
in about to that come.2sg not want that
* 'As for that you come, I don't want that'

Notice that as soon as the subordinate clause is introduced by a nominal, the linking-theme construction is perfect:

- (168) En cuanto a la propuesta de que vengas, no quiero eso.
in about to the proposal of that come.2sg not want.1sg that
'As for the proposal that you come, I don't want that'

³ However, nominal subordinate clauses are more natural if they are presuppositional in some sense. Contrast the example above with (i), where the subordinate is associated to a factive verb:

- (i) ?En cuanto a que estés enfermo, no lo lamento.
in about to that are.2sg sick, not it regret
'As for you being sick, I don't regret it'

It seems that if the context licenses a reading where the propositional content of the topicalised clause is backgrounded, the construction is more acceptable, independently of whether the main predicate is factive or not. I am grateful to Javier Fernández (p.c.) for pointing to me that such examples are documented.

Consider now adjectives. Replaced by the pro-form *lo* ‘it’, clitic left dislocations are perfect.

- (169) Guapa María lo es.
pretty María it is
‘Pretty María is’

Linking-theme topics, as noticed, do not allow adjectives, but the question is whether hanging topic constructions accept adjectives. The answer is not immediate because of the absence of tests, but we will argue that it is impossible. Consider the following contrast, showing two ways of pronominalising the adjective.

- (170) a. María lo es.
María it is
‘María is so’
b. María es así.
María is like.that
‘María is like that’

While (170a) clearly contains a clitic, the manner adverb *así* seems to act as a strong pronoun that refers to the same set of properties. Note that it allows focalisation, which the clitic lacks.

- (171) a. María es ASÍ.
María is like.that
b. *María LO es.
María IT is

If we can take *así* to be the strong pronominal form that substitutes adjectives (and other quality-denoting phrases), (172) strongly suggests that adjectives cannot be hanging topics.

- (172) *Guapa, María es así.
pretty, María is like.that

We have seen that, in contrast to CLLDs, hanging topics do not need to carry the formal marking that the position where they are interpreted in the clause should be related to. Nominals that are hanging topics do not carry overt case markers, for instance.⁴ The obvious equivalent of this in adjectives should be agreement: the hanging topic should allow either for mismatches in agreement when there is the possibility of having concordatio ad sensum or should be able to appear in the unmarked form that is homophonous with masculine singular. Neither of the following two sentences seems to be natural, however.

- (172) *Guapos, la pareja no (lo) es.
handsome.m.pl the couple not it is

⁴ See, however, Schütze (2001) for the claim that they receive (default) case. I am grateful to Carlos Rubio Alcalá for pointing this reference to me.

- (173) *Guapo, María no (lo) es.
pretty.m.sg María not it is

Finally, there is a (perhaps marginal) difference between hanging topics and CLLDs in how natural they are when defining as topic something that was previously mentioned as part of the rheme. Note that with the clitic *lo* we can use (174) in a context where we are not discussing María's beauty, but María:

- (174) Guapa María no lo es.
pretty María not it is
'Pretty, María is not'

To the extent that it is even acceptable, (175) could not be used in a context unless we were already discussing María's degree of beauty.

- (175) #Guapa, María no es así.
pretty, María not is like.that

We conclude that all points out to adjectives not being able to act as hanging topics.

Let us move now to verbal phrases. There is a construction that clearly topicalises a verbal phrase, and it can be used in a context where the verb was previously part of the theme: under auxiliaries like *poder* 'can', which have been argued to introduce short VP-infinitives (Wurmbrand 2007).

- (176) A: Me gustaría que cantes en la fiesta.
me would.please that sing.2sg in the party
B: Cantar no puedo.
sing not can.1sg
'Sing, I can't'

If a VP is topicalised, it always must appear in the infinitival form; gerunds and participles are out in Spanish.

- (177) Cantar, no lo hicimos.
sing not it did.1pl
'Sing, we didn't'
(178) *Cantando, llevo una hora haciéndolo.
singing I.have.been one hour doing-it
(179) *Cantado, no lo hemos hecho.
sung, not it have done

Linking-theme topics can introduce infinitives, presumably because these, as nominals, can be selected by prepositions.

- (180) En cuanto a cantar, no hicimos eso.
in about to sing, not did that

Note the pro-form *hacer-lo* 'do-it', which is linking the infinitive in some of these constructions. It contains a clitic, which suggests that it should be related to CLLDs rather than to hanging topics. The construction *hacer eso* 'do that' contains a full

pronominal form, which suggests in turn that it should relate to hanging topics. If this is in the right track, it should mean that (181) is an instance of a CLLD, while (182) is a hanging topic construction, despite the fact that in both cases the verb appears in the infinitival form.

- (181) Cantar, no lo hicimos.
 sing not it did.1pl
 ‘Sing we didn’t’
- (182) Cantar, no hicimos eso.
 sing , not did.1pl that
 ‘Singing, we didn’t do that’

Imagine a context where we know that there was some singing in the hotel rooms during the night, and we are discussing that singing, implying that we want to know who was singing. In this context, both (181) and (182) seem to be equally fine as utterances when we want to say that, as for singing, we didn’t do it. However, in a context where we are talking about a party, and as part of the rheme we say that in that party people must have sung, danced, drunk, etc., it seems that (181) is much better suited than (182). This difference would match the general observation that hanging topics are not natural to promote part of the rheme to topic.

Let us now move to one of the central questions in the grammar of topics in Spanish: are topics base generated in a left-peripheral position or do they arrive there as a result of a movement operation? The question has been answered in a variety of ways, but again, it seems that the three constructions under consideration should not be treated alike, in principle.

With respect to linking-theme topics, there are at least three facts that make a movement analysis extremely doubtful:

- a) Their alleged base position can be occupied by a strong pronominal form; formal identity (gender, number, case) is not necessary between the topic and the pronominal form. Remember the concordatio ad sensum cases discussed before: they show that the relation between the pronoun and the topic is of coreference, not of agreement.
- b) The topicalised element does not show the case and other formal marks expected if it had been generated in the base position. In fact, expressions such as *con respecto a* ‘with respect to’, that typically introduce them, cannot possibly occupy any argument position.
- c) Finally, as we saw already in §2.3, linking-theme topics can be associated to positions inside syntactic islands, both strong and weak. If they were generated by movement, this would be surprising, as they would be an exception to the generalisation that constituents cannot be extracted from strong islands.

As for hanging topics, the same three reasons make a movement analysis doubtful. However, the situation with CLLDs is much less clear. There has been for some time a debate with respect to whether CLLDs are generated by movement or are simply base generated in a high peripheral position. If movement is involved, the next question is what kind of movement operation it is: we should in principle expect it to be A’-movement, as it is not related to case licensing or agreement, but rather to a

discourse function, but not all expected properties of A'-movement are identified in CLLDs. In the next subsections, we will concentrate on this particular problem.

3.1. Movement or base generation for CLLDs

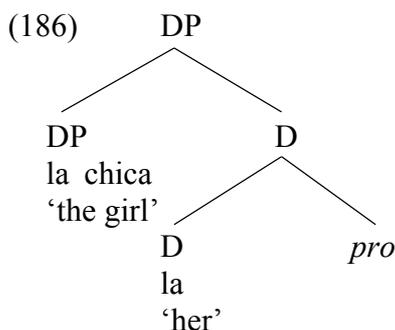
Before we move to particular proposals, let us present some of the arguments in favour of each one of the general approaches.

There are several facts in favour of treating CLLDs as instances of movement (see, for Spanish, Villalba 2000, López 2003, Valmala 2011, Rubio Alcalá 2014, 2016; see also Sportiche 1983, Dobrovie-Sorin 1990, Kayne 1994). The first one of them is the fact that case marking and prepositional marking have to match those that the item should have received in its base position. If the CLLD topic had been base generated in its surface position, it would be a completely mysterious fact that from that peripheral position it should be sensitive, or even have access to, the preposition selected by a particular verb (183) or the case marking associated to the grammatical function of the clitic (184).

(183) De cuatro capítulos consta también este libro.
of four chapters consists also this book
‘Of four chapters this book also consists’

(184) A Luisa no la saludó.
to Luisa not her greeted
‘Luisa she didn’t greet’

The second argument is that the clitic and the topic must be in a formal agreement relationship, not a semantic coreference one, as we saw before. Identity in gender, number and case is compulsory between the topic and the clitic. It is unclear how it would be possible to formalise an agreement operation between a clitic which was generated low in the structure and a peripheral element that is base generated there. In contrast, there are approaches where the clitic and the topic can be base generated as one single constituent in the base position, such as Uriagereka’s (1995) big DP-proposal. Roughly, leaving irrelevant technical details aside, one could propose that the clitic starts as part of the big DP.



There is agreement between the clitic in the head D^0 and the DP sitting in its specifier, and case is assigned to the whole constituent, with the result that they would also match in case. Later on, the clitic would head move to form a complex head with the verb, and in a topicalisation environment, the DP specifier would move to an even higher position. Thus, the relation between clitic and topic is local at some point, and thus agreement takes place between them.

The third argument is that CLLDs are sensitive to at least some forms of islandhood. The following list is as exhaustive as we could manage (taken from Den Dikken & Szabolcsi 1999, Szabolcsi 2006).

- (187) Relative clauses
 *A la chica conozco al chico que la conoce.
 to the girl I.know the boy that her knows
 Intended: ‘The girl, I know the boy that knows her’
- (188) Adjuncts 1: Conditional clauses
 *A la chica me enfado si no la saludas.
 to the girl me get.angry if not her greet
 Intended: ‘The girl, I get angry if you don’t greet her’
- (189) Adjuncts 2: Causal clauses
 *A la chica me enfadé porque no la saludaste.
 to the girl me got.angry because not her greeted.2sg
 Intended: ‘The girl, I got angry because you did not greet her’
- (190) Adjuncts 3: Final clauses
 *A la chica he venido para saludar-la.
 to the girl have.1sg come to greet-her
 Intended: ‘The girl, I came to greet her’
- (191) Adjuncts 4: Temporal clauses
 *A la chica me mareé cuando la saludé.
 to the girl me got.dizzy when her greeted
 Intended: ‘The girl, I got dizzy when I greeted her’
- (192) Subject islands
 *A la chica, despedir-la es necesario.
 to the girl, fire-her is necessary
 Intended: ‘The girl, firing her is necessary’
- (193) Complements of complex NPs
 *A la chica, oí el rumor de que la has saludado.
 to the girl, heard.1sg the rumour of that her have.2sg greeted
 Intended: ‘The girl, I heard the rumour that you have greeted her’
- (194) Coordinate structures
 *A la chica, les has dado dinero ____ y al chico.
 to the girl, them have.2sg given money and to.the boy
 Intended: ‘The girl, you gave money to her and the boy’

But we will shortly see that there are exceptions to this generalisation, discussed at length in Rubio Alcalá (2014, 2016), so there are complications.

The fourth argument is the existence of reconstruction effects, which can be viewed in a number of cases. In a movement approach, the topic occupies at least two positions during the derivation, a low one and a high one; when the interpretation lets us see that it is interpreted in the low one, we must assume that the topic originated there, the argument goes. Consider (195), where we can see that the possessive in the topicalised item receives a bound reading: its reference varies according to the reference of the QP *cada padre* ‘each father’. This means that the topic must, at some point, be c-commanded by the subordinate QP subject, supporting a movement analysis.

- (195) A su_i hijo, pienso que cada padre_i le dio dinero para la comida.
to his son, think.1sg that each father him gave money for the food
'To his son, I think that each father gave money for lunch'

Anaphoric expressions can also be in a CLLD position. In (196) the antecedent that must c-command it is in the subject position, below the surface site of the topic.

- (196) A sí misma, María no se criticaría nunca.
to her-self María not SE criticise ever
'Herself, María would never criticise'

There are also principle C violations involving topics containing a referential expression and a pronoun. Notice that in (197), the surface ordering should not give a principle C infraction, because the subject pronoun should not c-command the topic; however, if the topic is base-generated in the complement position, we expect the principle C violation.

- (197) *[La propuesta de Luis_i], pro_i sabe que no es realista.
the proposal of Luis he knows that not is realistic
*'Luis_i' proposal, he_i knows that it is not realistic'

However, there are also arguments that seem to support a base generation analysis for clitics (for instance, see Hernanz & Brucart 1987 –concentrating on Hanging Topics, however–, Contreras 1991, Zagona 2002). One first argument, put forth by Cinque (1990), Iatridou (1995), Anagnostopoulou (1997), NGLE (2009: 40.3i) and others, is that if CLLDs involve movement, we would expect it to be an instance of A'-movement. This A'-movement should interact, then, with other types of A'-movement, or with items known to act as interveners for A'-movement. The prediction is not obviously borne out. CLLDs are insensitive to weak islands of all types (again, we try to be as exhaustive as possible, following the compilation in Szabolcsi 2006).

- (198) Wh-islands with *si* 'whether'
A la chica, no sé si la has saludado.
to the girl, not know.1sg if her have.2sg greeted
'The girl, I don't know if you have greeted her'
- (199) Wh-islands with a wh-pronoun or adverb
A la chica, no sé quién la saludó.
to the girl, not know who her greeted
'The girl, I don't know who greeted her'
- (200) Negation
A la chica, nadie la saludó.
to the girl, nobody her greeted
'The girl nobody greeted'
- (201) Other affective operators (Rizzi 1990)
A la chica, pocos la saludaron.
to the girl few her greeted
'The girl few greeted'
- (202) Factive predicates
A la chica, lamento que la saludaras.

- to the girl regret.1sg that her greeted.2sg
 ‘The girl, I regret that you greeted her’
 (203) Response-stance predicates
 A la chica, confirmo que la saludaste.
 to the girl, confirm.1sg that her greeted.2sg
 ‘The girl, I confirm that you greeted her’
 (204) Extraposition islands (Cinque 1990)
 A la chica, es importante que la saludes.
 to the girl, is important that her greet.2sg
 ‘The girl, it is important that you greet her’
 (205) Quantifier islands
 A la chica, todo el mundo tiene que saludar-la.
 to the girl, all the world has to greet-her
 ‘The girl, everybody must greet’
 (206) Imperatives
 A la chica salúda-la.
 to the girl greet-her
 ‘The girl, greet her’

There are several ways in which these counterexamples can be answered by those proposing a movement analysis. First, they could argue that CLLD is not a perfect type of A'-movement, so the intervention effect would not be triggered. In fact, CLLDs lack most of the properties of A'-movement (see §3.2 below). Another possible answer is that the intervention is not granted just because we have two types of A'-operations. Weak islands are also called ‘selective islands’ in the sense that they let some types of objects to leave them, and are quite specific about the elements that they do not allow extracting. An intervention account that is fine-grained enough and differentiates between classes of features may explain why CLLDs are not blocked in these contexts, even though foci are blocked (below illustrated for some of the relevant cases).

- (207) *A JUAN ¿quién no saludó?
 TO JUAN who not greeted?
 Intended: *‘THE GIRL, who didn’t greet?’
 (208) *A LA CHICA saluda tú.
 TO THE GIRL greet.imp you
 Intended: *‘THE GIRL greet’

A second argument for a base generation analysis is the observation (put forth by Cinque 1981, Hernanz & Brucart 1987, Cinque 1990) that a well-established case of A'-movement, like wh-movement, is not compatible with a coreferential clitic in its base position, while CLLD is.

- (209) *¿A quién no lo viste?
 to who not him saw.2sg?
 *‘Who didn’t you see him?’
 (210) A Juan no lo vi.
 to Juan not him saw.1sg
 ‘Juan I did not see’

Again, proponents of a movement analysis for CLLDs point out that this constitutes evidence for an analysis of CLLDs that is different from the analysis of *wh*-elements and foci, but they do not immediately falsify an analysis in terms of movement.

Another fact that has been argued to constitute an argument in favour of a base-generation analysis of CLLDs is that, in fact, there are instances where the CLLD seems to escape a strong island. Here are some cases adapted from Rubio Alcalá (2014).

- (211) Subject island
 De política, hablar _____ es fácil.
 of politics, speak _____ is easy
- (212) Relative clause island
 A Pedro, el médico que lo vio _____ le dijo que volviera.
 to Pedro, the doctor that him saw _____ him said that come.back
- (213) Conditional islands
 A María, si le cuentas esa historia, Juan se enfadará.
 to María, if her tell.2sg that story, Juan se will.get.angry
 ‘To María, if you tell that story, Juan will get angry’

Those that argue for a movement analysis acknowledge that an explanation is necessary for these cases, but note that they should not support a base-generation analysis automatically. The reason is that a base-generation analysis does not explain all the cases where the topic cannot be associated to a position inside a strong island.

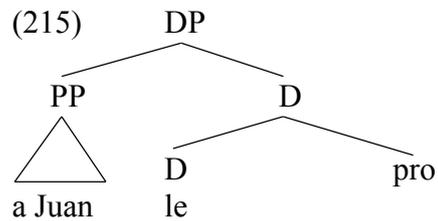
As the reader notices, the arguments seem to support a movement analysis rather than a base generation analysis, but there are two open problems for the movement analysis:

- a) Why do CLLDs act differently from *wh*-elements and foci in terms of weak island violations and coreference to a clitic?
- b) What happens when topics are extractable from strong islands?

We take now the decision to follow Rubio Alcalá (2014) in how he specifically deals with these problems, as we consider this work to be the most exhaustive, wide ranging (and recent) dealing with these issues in the grammar of Spanish. Let us take the very same sentence that he uses to illustrate his theory:

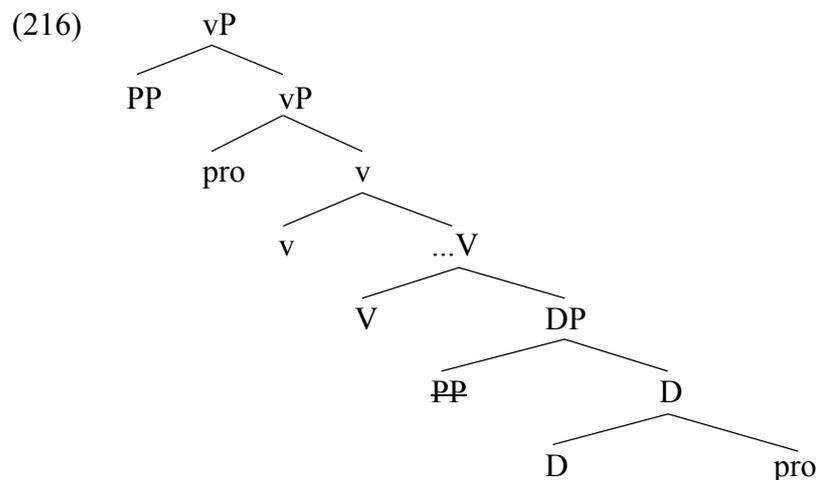
- (214) A Juan me han dicho que le regalaron un coche.
 to Juan me have told that him gave a car
 ‘Juan, I was told that someone gave him a car’

Rubio Alcalá argues that what makes CLLDs topics special in contrast with *wh*-elements and foci is that they are base generated as a big DP, in terms of Uriagereka (1995) (see also Postal 1966, Boeckx 2003). Parting ways with Boeckx (2003), Rubio Alcalá suggests the following configuration as a starting point –to avoid anti-locality violating movement of the PP from the complement to the specifier of DP, and following Postal’s original idea that items spell out as pronouns if their complement is null.

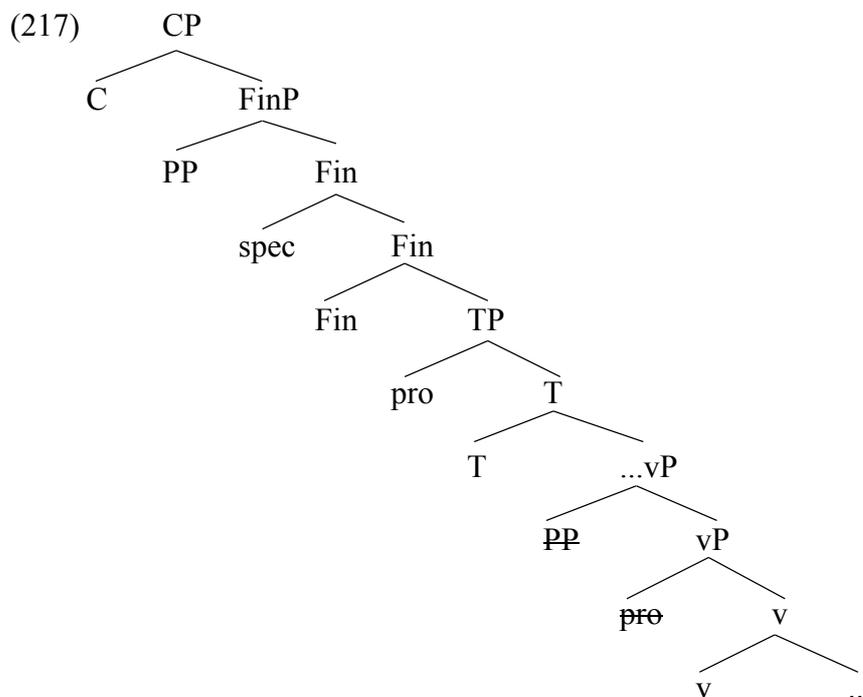


This complex nature of a CLLD topic is what makes them different from wh-elements and foci. Rubio Alcalá (2014) follows Boeckx (2003) in the claim that what makes some instances of movement impossible is that movement produces a single chain that has more than one strong position –a position where an EPP feature is checked, or one where case is checked–. However, as the item is complex, by stranding part of it behind and moving the other part to a further position, (215) can form two chains, one where the case checking position is included, and one which includes the EPP position where the topic eventually lands.

When the big DP is merged with the verb, the whole checks its case. Now a strong position has been defined, and the assumption is that this checking freezes the clitic, but the associate, the specifier PP, continues moving to a vP peripheral position.



Then, the TP layer is built, and the subject moves there. This is followed by a (moderate) split CP layer, where FinP is distinct from CP. C is spelled out by *que*, and the Fin head remains null, carrying the topic in its specifier. The topic could stay here, but it can also move up.



Note that the topic, in a sense, has checked two strong positions: it received case inside the verbal complex and it checked an EPP feature in FinP. It should be banned as a chain, because it has two strong positions, but it is not because the clitic and the specifier have split, allowing the interfaces to interpret two chains: one which includes the case checking position and one that includes the EPP positions. For this reason CLLDs are compatible with clitics: they are the items that allow them to both get case and check an EPP position without triggering an uninterpretable chain. Wh-elements and foci lack this possibility.

What about weak island violations? Rizzi (2004) had proposed that topics escape them because they carry features that wh-items and foci do not carry. In the case of foci and wh-items, there is an intervention effect between the constituent that defines the island and these elements because they share features of the same class, but topics play in a different league: they are [-argumental], [-quantificational], [-modifier]. The presence of a negative feature blocks a wh-movement or a focus movement because they contain features of the same family. Rizzi proposes the following classification of features, where those of the same family (that can trigger intervention effects among them) are put together:

- (218)
- a. Argumental: person, number, gender, case
 - b. Quantificational: wh, neg, measure, focus...
 - c. Modifier: evaluative, epistemic, neg, frequentative, celerative...
 - d. Topic

Rubio Alcalá suggests (2014: 34-35) that the feature approach can successfully explain why foci and wh-elements behave as they do. This is partially problematic in the context of the discussion in §2.6, where we saw that [focus] is a doubtful feature, but nothing prevents Rubio Alcalá from adopting a system of features like López (2009), where foci, wh-elements and negation shared for instance a [+quantificational] feature that explained the weak island effects, while the notions of ‘focus’ and ‘wh-element’ would be derived by combining the [+q] feature with others.

He however explicitly denies that a [topic] feature is useful, or even acceptable, in the present framework.

Consider now why the CLLD construction can escape some strong islands. Rubio Alcalá proposes a strictly derivational account where constituents are not strong islands per se, but they become islands or not depending on the sequence of steps in the syntactic derivation. Starting with subject-island violations he notices the following generalisation: when CLLDs can escape them, those subjects can always be generated in a complement position, as the main verb is either copulative or unaccusative:

- (219) *De política, hablar _____ causa problemas.
of politics, speak _____ causes problems
- (220) De política, hablar _____ es fácil.
of politics, speak _____ is easy

In (219), the subject is generated in spec, vP, while in (220) the subject is base generated in a complement position. What is problematic is extracting something from a specifier. From here, the analysis is simple: the topic, leaving the clitic behind, escapes the complement of VP, adjoining to vP. At a second stage, the complement remnant-moves to the subject position. At this point, the subject has become a specifier, but the topic is not inside it, and it is free to continue moving up to the left peripheral position.

Why cannot wh-items or foci escape? Because they need to be attracted by the relevant feature, so they cannot adjoin to vP directly. They have to wait until the CP layer –with the relevant feature– is built, but by then the TP phrase has been built and the subject is in the specifier position, making the wh-item inside it unable to escape. From here it follows that topic movement is not feature-driven: movement of topics is optional always (remember Lambrecht’s 1994 claim that pronouns are in a sense topics, independently of their position), so there is no need to have features license it.

In the case of relative clauses, Rubio Alcalá proposes that the explanation should be semantic: there is a real violation of syntactic principles with the extraction here, but the violation is repaired by having a clitic in a legitimate position be coreferential with the clitic associated to the CLLD in the illegitimate position. Hence, (221) is fine because the dative clitic is coreferential with the accusative clitic in the strong island. (222) is out because there is no coreferentiality.

- (221) A Juan_i, el médico que lo_i vio le_i dijo que volviera.
to Juan the doctor that him saw him told that come.back
‘Juan, the doctor that saw him, told him to come back’
- (222) *A Juan, el médico que lo vio es italiano.
to Juan the doctor that him saw is Italian

Thus, this kind of construction is of a different nature, and the repair is semantic, related to Kayne’s (1983) notion of connectedness, only that formulated in semantic terms.

With respect to conditional islands, the crucial observation (among three others, that we will leave aside for the sake of the exposition) is that CLLDs can be extracted only if the conditional clause is itself preposed, and therefore, if the clause is itself a topic.

- (223) A María, si le cuentas eso, me enfadaré.
to María, if her tell.2sg that, me will.get.angry
‘María, if you tell her that, I will get angry’
- (224) *A María, me enfadaré si le cuentas eso.
to María me will.get.angry if her tell.2sg that
‘María, I will get angry if you tell her that’

Rubio Alcalá proposes that by virtue of being defined as a topic, the adjunct becomes a weaker island that allows extraction (see also Rubio Alcalá 2016 for an extension to other kinds of adjuncts). This is consistent with the proposal that topics are feature-deficient, and is confirmed by the observation that topics can be extracted out of topics –although they are restricted to one, because of Kayne’s (1994) LCA, Rubio Alcalá argues–.

- (225) A María, que le digas eso, no me parece bien.
to María that her tell.2sg that, not me seems fine
‘María, that you tell her that, is not ok for me’

Note, however, than an alternative analysis of this example is that the topic moves to a specifier internal to the topicalised constituent, not one associated to the matrix clause.⁵

We refer the reader to Rubio Alcalá (2014, 2016) for further details, and leave the discussion here. What is crucial is that the evidence in Spanish seems to favour a movement analysis of CLLDs, with differences between them and foci and wh-elements following from the internal structure of each item and the present or absent features in each case.

3.2. *A-movement vs. A’-movement*

If CLLDs are instances of movement, the following question is what kind of movement they are. The expectation is that they should be instances of A’-movement (see for instance Fernández-Sánchez in press), but as we shall see the facts are a bit more complex, as CLLDs seem to display some properties of A-movement in addition to others that are characteristic of A’-movement operations.

Let us start with some arguments that CLLDs involve A’-movement. The first trivial observation is that A-movement is assumed to happen for agreement and case checking purposes, which limits its distribution to elements that can in fact get case, that is, nominal elements. However, as we have seen at the beginning of this section,

⁵ Which alternative is better ultimately depends on how acceptable a sentence like (i) is, where intermediate material between the topicalised element and the constituent argued to be extracted from it is present.

- (i) A María, ya te he dicho muchas veces que que le digas eso no está bien.
to María, already you have said many times that that her tell that not is fine
‘As for María, I have already told you several times that you telling her that is not acceptable’

If (i) is acceptable, we know that the constituent has moved to a topic-external position. If not, the topic in the relevant example must occupy the specifier position of the first topicalised element. Judgements are not clear here; some speakers find it ungrammatical, while others (among those, the author of this article) accept it. I thank Javier Fernández (p.c.) for pointing out how crucial such examples are for determining which analysis is to be preferred.

any grammatical category can take part in a CLLD construction –as far as it can be checked–. This is what one expects from A'-movement.

A second observation is that CLLD is not clause bound, which is a property of A'-movement. A-movement is restricted to one single syntactic domain, but A'-movement can cross over several CP nodes provided that none of them is defined as an island.

- (226) ¿Quién cree María que Luis piensa que Juan dijo que ____ vendría?
 who thinks María that Luis thinks that Juan said that ____ would.come?
 'Who does María believe that Luis thinks that Juan said would come?'
 (227) Las manzanas, Luis piensa que María dijo que Carlos las iba a traer.
 the apples Luis thinks that María said that Carlos them went to bring
 'The apples, Luis thinks that María said that Carlos was going to bring them'

A third observation is that a CLLD placed in preverbal position does not trigger agreement with the verb, as in the example (228).

- (228) Las manzanas parece que ____ están malas.
 the apples seem that ____ are rotten
 'The apples, it seems that they are rotten'

There is some debate with respect to this construction in Spanish. Fernández Salgueiro (2008) has argued that they constitute a case of hyperraising where the dislocated element is in an A-position, but does not trigger agreement with the verb because of the timing of movement and agree operations. In contrast, Fernández Sánchez (in press) provides a number of arguments that they involve subject CLLDs and therefore A'-movement. One of his arguments is that dative experiencers block raising to the subject position (229), but in the non-agreeing construction they do not (230); in his proposal, this is simply because (230) does not involve A-movement, but A'-movement. We refer the reader to Fernández Sánchez' original paper for further discussion.

- (229) *Los chicos me parecen estar enfermos.
 the boys me seem.3pl be sick
 Intended: 'The children seem to me to be sick'
 (230) Las manzanas me parece que ____ están malas.
 the apples me seem that ____ are rotten

However, there are some properties expected of A'-movement that are not obviously displayed by CLLDs (see for instance Bleam 1996). One known property of A'-movement is that it licenses parasitic gaps, that is, empty argument positions within adjuncts, which seem to get a null spell out (Engdahl 1986).

- (231) *John filed three books without reading ____.
 (232) Which three books did John file without reading ____?

Wh-movement does license parasitic gaps in Spanish –marginally, for some speakers–, but CLLDs do not.

- (233) ¿Qué tres libros archivó María sin leer ____?
 which 3 books filed María without read ____?
 (234) ??¿Los tres libros María los archivó sin leer ____?
 the three books María them filed without read ____.

Also, A'-movement triggers Weak Crossover and Strong Crossover effects, where a coreferential expression intervenes between the A'-moved item and its base position.

- (234) *Which students_i did their_i mother punish _____i?

Interrogatives trigger WCO effects in Spanish, but again CLLDs fail to trigger them.

- (235) ??¿A qué chicos_i ha castigado su_i madre _____i?
 to which children has punished their mother?
 (236) A los chicos_i su_i madre los ha castigado _____i.
 to the children their mother them has punished.
 'The children, their mother has punished them'

To this one should add all the cases of weak islands that block instances of wh- and focus-movement, two clear instances of A'-movement, but which CLLDs escape. It could be tempting to argue that what happens in these cases is, as Rubio Alcalá (2014) suggested, that topics lack the relevant quantifier-like features of wh-elements and foci. Thus, the consequences of this proposal under the light of these facts would be:

- a) What triggers WCO effects and licenses parasitic gaps are the quantifier features, and not A'-movement itself.
- b) A'-movement, then, can be triggered in the absence of quantifier features.

Clearly, a complete and adequate answer to this problem is still to be provided and requires further research. What we seem to have evidence for is the claim that CLLDs involve movement, while hanging topics and linking-theme topics should be subject to a base-generation analysis. What it means to say that topics lack some features that are otherwise characteristic of A'-movement operations is an open question, but note that, if it is confirmed that topics are feature-deficient in a sense that wh-elements and foci are not, the proposal that there are designated topic positions in the left periphery of the clause becomes less plausible, and a minimalist account where topics are adjuncts or specifiers of underspecified heads seems to score one point.

4. Properties of foci in Spanish

Moving now to foci, it is uncontroversial in the literature that they display A'-movement properties. First, they are sensitive to selective weak islands: wh-movement in main clauses (237), indirect interrogatives (238), negation (239), although there are speakers that do accept it), among others.

- (237) *LAS MANZANAS ¿quién trajo?
 THE APPLES, who brought?

- (238) *LAS MANZANAS no sabe Juan quién trajo.
 THE APPLES not knows Juan who brought
- (239) %LAS MANZANAS no trajo Juan.
 THE APPLES not brought Juan

Of course, focus movement is sensitive to strong islands, and no exceptions like those noted for topics have been proposed in the literature.

- (240) *LAS MANZANAS me pondré triste [si traes ____].
 THE APPLES me will.get sad if bring.2sg
 ‘I will get sad if you bring THE APPLES’

Focus movement produces Weak Cross Over violations (241), as expected from A'-movement.

- (241) *A JUAN_i trajo su_i madre.
 TO JUAN brought his mother

It also can license parasitic gaps, to the extent that they are allowed in Spanish.

- (242) TRES LIBROS vendió Juan sin leer ____.
 THREE BOOKS sold Juan without read
 ‘THREE BOOKS Juan sold without reading’

Focus movement is not clause-bound.

- (243) TRES LIBROS cree Juan que María dijo que Luis había comprado.
 THREE BOOKS think Juan that María said that Luis had bought

Focus movement reconstructs in the way expected from A'-movement, which explains the Principle C violation of the following example:

- (244) *A LA HERMANA DE JUAN_i pro_i no puede soportar.
 TO THE SISTER OF JUAN not can endure

The debate refers rather to whether focus-in-situ, marked with emphatic stress, undergoes covert movement in LF or not. Here the evidence is not conclusive, and we might be in front of two different processes, marked in the same way prosodically, but with distinct syntactic properties. Remember, first, that a non-constituent can be focalised in this way, which is incompatible with a movement analysis. At least this kind of focus should be out of a movement analysis.

Second, focus-in-situ does not trigger weak island infractions in the three contexts examined above. (245) is one case where the focus is inside a main wh-sentence; (246) is a focus inside a subordinate wh-sentence; (247) is inside a negative sentence. In all these cases one can clearly use the highlighted element as contrastive focus, as showed by the corrective continuation ‘not the pears’ that can successfully be appended to all the three sentences.

- (245) ¿A quién dio LAS MANZANAS Juan, (no las peras)?
 to whom gave THE APPLES Juan, not the pears?
- (246) María no sabe quién le dio LAS MANZANAS a Pedro, (no las peras).

- María not knows who him gave THE APPLES to Pedro, not the pears
 (247) No le di LAS MANZANAS a Juan, (no las peras).
 not him gave THE APPLES to Juan, not the pears

These facts seem to indicate that focus-in-situ should not involve movement, but a second set of phenomena suggest that it does, as expected if focus-in-situ also involves an operator-variable structure at LF, which must be obtained through movement. In (248), as the ungrammaticality of the corrective coda shows, the focus-in-situ cannot be inside a strong island, such as a conditional. The configuration in (249) produces a Weak Crossover Effect, as expected if there is movement, and finally the parasitic gap is marginally licensed in (250), contra the equivalent sentence (251) without focus.

- (248) *Si no traes LAS MANZANAS me pondré triste (no las peras).
 if not bring.2sg THE APPLES, me will get sad, not the pears
 (249) *Su_i madre trajo A LOS NIÑOS_i.
 their mother brought TO THE CHILDREN
 (250) ?Juan vendió TRES LIBROS sin leer ____.
 Juan sold THREE BOOKS without read
 (251) *Juan vendió tres libros sin leer ____.
 Juan sold three books without read

It is difficult to evaluate this contradictory evidence. Examples (248)-(251) show that there is evidence for covert movement even in focus-in-situ, but this is not compatible with the existence of focus contexts where the emphatic stress is contrastively assigned to non-constituents. That focus-in-situ involves some form of covert movement is furthermore confirmed by embedded context facts that will be revised in §7.1, where focus movement and focus-in-situ display essentially the same distribution.

Moreover, weak island violations do not seem to exist in such cases. One could think that the infractions that weak islands produce are not relevant at LF; perhaps they involve locality-checking configurations where, if the focus moves overtly, the relation between the wh- or the negative is broken, but where covert movement does not produce such a result because it takes place after the checking has been produced (as Camacho 2013 has proposed for some cases of incompatibility between negative items and topics, see §5). This notwithstanding, it still seems that a different procedure must be allowed for the case of focalisation of non-constituents.

4.1. Word order in Spanish and potential multiple focus positions

There are several proposals where foci can be defined in the periphery of categories distinct from CPs. One source of evidence for this is the fact that Spanish allows distinct word orders, not all of which can be attributed to movements to CP-positions. The goal of this section is to revise some word order facts in Spanish and see in what way they might support the proposal that foci can be defined in vP- and DP-peripheral positions.

The informationally unmarked word order in Spanish (see Zubizarreta 1999, Olarrea 2012 for overviews) is normally SV(O), with some exceptions where postverbal subjects are the norm. Olarrea (2012) explains that the contexts where an V(O)S order can be all-focus –that is, answer a question like ‘What happened?’– can be defined syntactically. They include cases where the subject is a bare noun in

combination with an unaccusative predicate (252a), subjects of infinitival constructions (252b), directive statements marked with *que* ‘that’ (252c), se-passive and middle constructions (252d) and dative-experiencer psychological verbs (252e).

- (252) a. Han llegado camiones.
 have arrived trucks
 ‘Some trucks have arrived’
 b. Al salir el sol...
 to.the come the sun...
 ‘When the sun rose...’
 c. Que lo diga Juan.
 that it says Juan
 ‘Let Juan say it’
 d. Se venden pisos.
 SE sell apartments
 ‘Apartments are sold’
 e. Me gustan los libros.
 me like the books
 ‘I like books’

In constructions that do not match this description, the order V(O)S is informationally marked, and defines the subject as (neutral) focus (Zubizarreta 1999).

- (253) A: a. #¿Qué ha pasado?
 what has happened?
 b. ¿Quién ha vendido la casa?
 who has sold the house?
 B: Ha vendido la casa Juan.
 has sold the house Juan
 ‘JUAN has sold the house’

It is clear that this ordering is derived. Zubizarreta (1998, 1999) proposes that this order can be obtained from two different sources:

- (254) a. SVO, with reordering of VO in front of S
 b. VSO, with reordering of O in front of S and after V

In either case, she proposes that the reordering is prosodic –that is, caused by the need to have the nuclear stress fall on the subject, which then must be in clause final position–, not syntactic.

There is some evidence that in such cases the subject is not in the usual TP position, though, and that it might be in a lower position. Consider for instance the following contrast: in preverbal position, the adverb *siempre* ‘always’ easily intervenes between the subject and the verb.

- (255) Juan siempre dice esta clase de cosas.
 Juan always says this class of things

This suggests that the adverb can be in a high position adjoined to TP or a head associated to it, as its semantic interpretation (temporal or situational) also suggests. Now, (256), with a VOS order, is ungrammatical.

- (256) *Dice estas clase de cosas Juan siempre.
 says this class of things Juan always

Crucially, we should expect (256) to be grammatical provided that the focus is in the adverb. The generalisation is that the VOS order implies that the subject must be in the neutral focus position, a property that is not clearly captured if the reordering is just prosodic. Moreover, the ordering in (257) is allowed.

- (257) Dice esta clase de cosas siempre Juan.
 says this class of things always Juan

This pattern of data suggests that the subject is in a lower position than usual, and that position seems to be peripheral to the vP phrase, in order to allow the constituent containing verb and object to move in the absence of the subject (at that point, an external argument).

That position seems to be designated for foci. Otherwise, the ungrammaticality of (256) is mysterious: if subjects in postverbal position received a focus reading just by their final position, then (256) should be allowed, and also (258), as the same rule that assigns neutral focus to the subject should now assign it to the adverb or indirect object.

- (258) ??Dice esta clase de cosas Juan a María.
 says this class of things Juan to María

That (256) and (258) are out suggests that the peripheral position, lower than T, to which the postverbal subject moves is designated for foci. In such case, we would have vP-peripheral positions for foci, against one of the initial predictions of cartographic approaches. Remember that in cartographic approaches the proposal is that there is a single Functional Sequence where each head has only one place to be. If foci are placed in the CP area, we do not expect focus positions in the vP or TP area, unless –and this is crucial– the interpretation that they receive is different from the one of the focus position in the CP area. To the best of our knowledge, however, contrastive interpretations are allowed both in this possible focus position and in the high position of the clause.

The proposal that there are vP-related focus positions is also made by Poletto (2006) for preposing of constituents to participial constructions in varieties of Italian. Once we have a vP-peripheral focus position in Spanish, it is tempting to relate it to the distinct ordering between a prepositional complement and the direct object within the verbal complex, following the usual rule that the final element receives a focus interpretation –remember that in all these cases, Zubizarreta would still propose a prosodic reordering–.

- | | | |
|-------|---|---------------------------|
| (259) | a. Juan puso en la mesa los libros.
Juan left on the table the books | Focus on DO |
| | b. Juan puso los libros en la mesa.
Juan left the books on the table | Wide Focus or Focus on PP |

Note that the ordering in (259a) competes with an ordering where the subject is final, supporting an account where both should be placed in the same focus-related position:

- (260) a. Puso los libros en la mesa Juan.
left the books on the table Juan
b. *Puso en la mesa los libros Juan.
left on the table the books Juan

There is another informationally-neutral order involving subjects in Spanish. Spanish allows (but not Catalan, Italian or French) an order VSO which can be assigned wide focus (Zubizarreta 1998, Ordóñez 2007, Leonetti 2014). Data are taken from Leonetti (2014), but adapted.

- (261) ¡Va a creer la gente que somos novios!
goes to believe the people that are couple
'People will believe that we are a couple!'
(262) Tiene Juan una casa con patio.
has Juan a house with patio
'Juan has a house with a patio'

The generalisation is that this order does not give special prominence to the subject. V, S and O can be mapped into the same package, without dividing it internally in a way that only one element carries focus. Zubizarreta (1998) and Ordóñez (2007) have argued that the VSO order is due to the presence of a low subject-licensing position that Spanish has, but Catalan or Italian lack. This position cannot be informationally marked, unlike the one that allows the VOS order where the subject is in focus. Leonetti (2014), in contrast, rather than proposing that there is one extra syntactic position for subjects in Spanish –something that he does not deny– argues that there is a parameter in how information structure is read from the constituent ordering, where Spanish and Catalan differ.

This very short overview of some word order facts in Spanish shows that there is at least some evidence that the vP-periphery could be endowed with focus positions. With respect to DPs, there are also DP-internal word order differences that have been associated to information structure distinctions, although here the tests are more difficult to run. Consider for instance the following contrasts.

- | | | |
|-------|--|-----------------------|
| (263) | a. la destrucción de la ciudad por parte de las tropas
the destruction of the city by part of the troops
'the destruction of the city by the troops' | Neutral |
| | b. la destrucción por parte de las tropas de la ciudad
the destruction by part of the troops of the city
'the destruction, by the troops, of the city' | Focus on <i>PPde</i> |
| (264) | a. una conversación con Juan en el patio
a conversation with Juan in the patio
'a dialogue with Juan on the patio' | Neutral |
| | b. una conversación en el patio con Juan
a conversation in the patio with Juan
'a dialogue, on the patio, with Juan' | Focus on <i>PPcon</i> |

Again, the feeling that the final element in the DP is the one that carries prominence focus in the marked order is clear. In a system like Zubizarreta's (1998), as the final order is obtained through prosodic reordering (which might well be the case in these cases), these facts are not informative about the existence of DP-associated positions for focus. However, if this is not the case, then we could have support for some DP-related positions to define also focus (as Aboh 2004 has proposed for other languages).

4.2. *The (pseudo-)cleft construction and emphatic be*

This section will concentrate on the construction that we highlighted as the specialised way in Spanish of expressing identificational, exhaustive focus. In the literature (see for instance, Moreno Cabrera 1999, Bosque & Gutiérrez Rexach 2009, NGLE 2009) it is traditional to differentiate between two subtypes by the nature of the subordinator used in the structure. Pseudo-cleft sentences, which are the most frequent in Spanish, contain a free relative clause (267); cleft sentences never use a *wh*-element to subordinate and exhibit, instead, the complementiser *que* 'that', in what is known in traditional Spanish grammar as '*que galicado*' (268). Thus, starting from the informationally unmarked sentence in (266), we can build several (pseudo)-cleft sentences.

- (266) Juan le dio el libro a María ayer.
 Juan her gave the book to María yesterday
- (267) a. Juan fue quien le dio el libro a María ayer.
 Juan was who her gave the book to María yesterday
 b. El libro fue lo que Juan le dio a María ayer.
 the book was that which Juan her gave to María yesterday
 c. A María fue a quien Juan le dio el libro ayer.
 to María was to whom Juan her gave the book yesterday
 d. Ayer fue cuando Juan le dio el libro a María.
 yesterday was when Juan her gave the book to María
 e. Dar el libro a María fue lo que hizo Juan ayer.
 give the book to María was that which did Juan yesterday
- (268) a. El libro fue que Juan le dio a María ayer.
 the book was that Juan her gave to María yesterday
 b. A María fue que Juan le dio el libro ayer.
 to María was that Juan her gave the book yesterday
 c. Ayer fue que Juan le dio el libro a María.
 yesterday was that Juan her gave the book to María
 d. *Juan fue que le dio el libro a María ayer.
 Juan was that her gave the book to María yesterday
 e. *Dar el libro a María fue que Juan hizo ayer.
 give the book to María was that Juan did yesterday

As we can see, the cleft construction is more restricted than the pseudo-cleft in that it does not allow subjects or VPs as their focus. This is not the only sense in which cleft structures are more restricted than pseudo-clefts. Pseudo-clefts admit three orderings for the focus:

- (269) a. Fue Juan quien le dio el libro a María ayer. Cop+Foc+Background
 wass Juan who her gave the book to María yesterday

- b. Juan fue quien le dio el libro a María ayer. Foc+Cop+Background
 Juan was who her gave the book to María yesterday
- c. Quien le dio el libro a María ayer fue Juan. Background+Cop+Foc
 who her gave the book to María yesterday was Juan

In contrast, cleft sentences only admit the first two of these ordering, rejecting the one where the sentence introduced by *que* is in first position.

- (270) a. Fue ayer que Juan le dio el libro a María. Cop+Foc+Background
 was yesterday that Juan her gave the book to María
- b. Ayer fue que Juan le dio el libro a María. Foc+Cop+Background
 yesterday was that Juan her gave the book to María
- c. *Que Juan le dio el libro a María fue ayer. *Background+Cop+Foc
 that Juan her gave the book to María was yesterday

Both reject the ordering Cop+Background+Foc:

- (271) *Fue {lo que / que} le dio Juan a María ayer el libro.
 was which / that her gave Juan to María yesterday the book

The focus is related to the background by case marking and other connectivity effects; it is impossible to have in the subordinate clause an element that occupies the position to which the focus is associated, not even a clitic.

- (272) *El libro fue {lo que / que} Juan se lo dio a María.
 the book was which that Juan her it gave to María

The focus can come from an embedded sentence, but this is more natural with pseudo-clefts than with clefts:

- (273) El libro fue lo que Luis cree que Juan le dio a María.
 the book was which Luis thinks that Juan her gave to María
 ‘The book is what Luis thinks that Juan gave to María’
- (274) ?El libro fue que Luis cree que Juan le dio a María.
 the book was that Luis thinks that Juan her gave to María
 ‘The book was that Luis thinks that Juan gave to María’

The cleft structure allows that the focal element is a *wh*-expression, but the pseudo-cleft does not accept this pattern (NGLE §40.12e).

- (275) a. ¿Cuándo fue que ocurrió esto?
 when was that happened this?
 ‘When was it that this happened?’
- b. ??¿Cuándo fue cuando ocurrió esto?
 when was when happened this?
 *‘When was it when this happened?’

These facts suggest a movement analysis for pseudo-clefts, and perhaps also clefts. (275) can be understood as a relativised minimality effect whereby the focus cannot be extracted from the subordinate expression, itself headed by another A'-element, the relative pronoun; as the cleft does not include a relative, the intervention effect does

not emerge. However, this analysis is controversial (see Den Dikken 2006 for a very exhaustive overview). Among the facts that complicate a movement analysis we find that (276) is grammatical (Akmajian 1979):

- (276) Lo que había en el coche era tu sombrero.
 that which there.was in the car was your hat
 ‘What there was in the car was your hat’

In a movement analysis, the grammaticality of (276) is not explained by the fact that (277), from where it should be generated, is out.

- (277) *En el coche había tu sombrero.
 in the car there.was your hat

The alternative analysis come in two forms: deletion or base generation. In the deletion account one starts with (278a) and deletes the identical elements (278b).

- (278) a. [Lo que Juan trajo] fue [Juan trajo un libro].
 that which Juan brought was Juan brought a book
 b. [Lo que Juan trajo] fue [~~Juan trajo~~ un libro]

Note however that this has to start from a surface-ungrammatical structure, which might be the reason why deletion is necessary. In the base generation analysis, no transformation is necessary, and the structure is essentially a copulative sentence.

- (279) Lo que Juan tiene es un libro.
 that which Juan has is a book

The problem with this account is that it does not explain why the focus must display the case marking and other formal properties that it would receive in the expected position inside the background. The issue is still debated, and we refer the reader to Den Dikken (2006) for a discussion that also applies to the Spanish facts.

Spanish also has focal structures involving conditional sentences, such as (280).

- (280) Si Juan le dio algo a María, fue un libro.
 if Juan her gave something to María, was a book
 ‘If Juan gave something to María, that was a book’

This construction has its own properties. Note, first, that the position to which the focal element is associated must be filled by an indefinite pronoun.

- (281) *Si Juan le dio a María, fue un libro.
 if Juan her gave to María, was a book

Second, this structure only allows the ordering ‘background + cop + foc’:

- (282) a. #Fue un libro, si Juan le dio algo a María.
 was a book, if Juan her gave something to María
 b. *Un libro fue, si Juan algo le dio a María.
 a book was, if Juan something her gave to María

Let us now move to a widely discussed problem in Spanish grammar: whether some varieties accept the reduction of the pseudo-cleft structure, removing the wh-element, or the copulative verb *ser* can be used as a focus marker. The following construction is documented in Venezuela, Colombia, Ecuador and Panamá.

- (283) Juan compró fue UN LIBRO.
 Juan bought was A BOOK
 ‘A BOOK Juan bought’

Toribio (1992) proposes that these structures start from pseudo-cleft versions where the wh-element is left unpronounced.

- (284) ~~Lo que~~ Juan compró fue UN LIBRO.

However, Bosque (1999) criticises this account with a long list of problems. We will highlight a few of them here: first, Toribio’s account has to block in some way (285), where the focal element is a VP, as the structure resulting from leaving the wh-element unpronounced would not be accepted in any variety:

- (285) a. Lo que Luis hizo fue COMPRAR.
 that which Luis did was BUY
 b. *Luis hizo fue COMPRAR.

The copula accepts a negative form in the pseudo-cleft, but not in this other construction:

- (286) a. Lo que tengo no es un coche.
 the which have.1sg not is a car
 ‘What I have is not a car’
 b. *Tengo no es UN COCHE.

Bosque (1999) proposes, then, that (283) involves a grammaticalised use of the copulative verb as a focus marker. This focus marker can only appear in VP-internal position and lacks temporal deixis.

- (287) [VP *tener* [FocP Foc *es* [DP *un coche*]]]

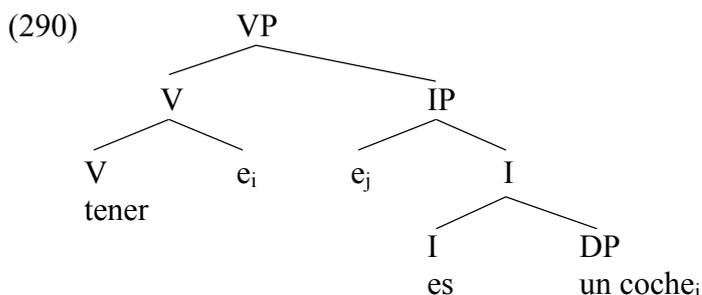
Camacho (2006), however, notes that the prediction of Bosque’s analysis should be that then the DP could move under some conditions, leaving the FocP behind. This is not borne out.

- (288) *¿Qué tienes es _____?
 what have.2sg is

Also, Bosque predicts that the focalised element could be followed by other constituents: the position occupied by the focalised element in Bosque’s analysis is its base-generated position. However, this is not true.

- (289) *Juan le dio fue UN LIBRO a María.
 Juan her gave was A BOOK to María

Camacho instead proposes a structure where the copulative verbs is an equative that takes one constituent, the focalised element, as its predicate. Its subject is null, and the whole equative clause is merged as an adjunct to the verb. The position that the focal element should occupy inside the main clause is also occupied by an empty category.



In this way, as the copulative clause is an adjunct, extraction out of it is out (288), and as copulative verbs can only take one constituent as predicate, (289), where two constituents should play this role, is also expected to be out. However, this would be the only case in Spanish where a copulative sentence without a conjunction is able to adjoin to another one, and a further problem is why not more than one IP can adjoin to the VP. It is fair to conclude that this problem is not solved yet in Spanish; see also Sáez del Álamo (2015) for a proposal involving amalgams.

With this we finish our overview of focus properties in Spanish and move to a specific analytical problem: the nature of preverbal subjects.

5. The debate on the nature of preverbal subjects

There is one important issue with respect to the identification of topics in the grammar of Spanish: whether preverbal subjects are topics or not. The origin of the problem is very simple. Compare the English sentence with the Spanish sentence above.

- (291) a. We left.
 b. Nosotros nos fuimos.
 we us left

The issue is that word-by-word translation does not produce a sentence that can be used in the same discourse contexts in Spanish and English. As is well-known, preverbal subjects are compulsory in English, so the first sentence can be informationally neutral. However, in Spanish, where preverbal subjects are not compulsory, an overt pronominal subject is interpreted as contrastive: a Spanish sentence like *Nosotros nos fuimos* involves an implicit contrast between the set of individuals that left and other sets of individuals that did not left. It is appropriate in a context like the following one, where we want to imply that we do not have that information, because we left, but other people in the party stayed and they might know.

- (292) A: ¿Se emborrachó Juan en la fiesta?
 SE got.drunk Juan at the party?
 ‘Did Juan get drunk at the party?’
 B: No sé; nosotros nos fuimos.
 not know.1sg we us left.1pl
 ‘I don’t know. WE left’

As implied in the last gloss, if a pronominal subject in English has to be contrastive, emphatic stress needs to be assigned to it, as an in-situ contrastive focus.

- (293) WE left.

This has prompted a debate where three positions have become apparent: some authors claim that the preverbal subject in Spanish is actually a (contrastive) topic, and is therefore in an A’-position (Contreras 1976, 1991, Ordóñez & Treviño 1999); for them, the subject position is either occupied by the verbal agreement, which is pronominal (Alexiadou & Anagnostopoulou 1998) or the subject position is occupied by *pro*. The second position is that overt preverbal pronouns are indeed subjects, in an A-position (Goodall 1999, Suñer 2003). The third position is that preverbal subjects can be either in A-positions or in A’-positions (Camacho 2013). Let us review these approaches now, following closely Camacho’s (2013: 191 and folls) presentation of the state of the art.

There are five facts that have been used to argue for the status of preverbal subjects as dislocated topics, and specifically, as CLLDs. First, Alexiadou & Anagnostopoulou (1998) have argued that (existential) preverbal subjects in Spanish (and Greek) always take wide scope with respect to negation, modals and other quantifiers. According to them, the following sentence should mean that there was one particular actor that married all the actresses in the company, even though this is pragmatically odd.

- (294) Un actor se casó con todas las actrices.
 an actor SE married with all the actresses
 ‘An actor married all the actresses’

Remember that topics are odd if they are non specific; this fact relates to this. Similarly, the following two sentences should mean, respectively, that there was one specific student that did not come and that a particular student must live in the university.

- (295) Un estudiante no vino a clase.
 a student not came to class
 (296) Un estudiante tiene que vivir en el campus.
 a student has to live in the campus

The interpretation of the last sentence, however, does not seem to be necessarily that in which we state of a particular student that she has to live on campus: we can use it to say that it is compulsory that students live on campus. Moreover, Suñer (2003) and Sheehan (2007) have found cases where preverbal subjects have narrow scope, as in the following sentence:

- (297) En mi universidad, un estudiante ha denunciado a cada profesor.
 in my university, a student has reported to each professor
 ‘In my university, a student has reported every professor’

What seems to be necessary to obtain the narrow reading, as we see, is that there is a topicalised element in the first position, before the subject. Camacho (2013) interprets these facts as evidence that subjects pass through spec, TP, but do not get frozen there and could, if necessary, continue to a higher scope position. He further points out that CLLDs are not uniform in their scope taking possibilities, as datives and accusatives pattern differently. Thus, this argument does not seem conclusive.⁶

The second argument for a topic analysis is the extraction possibilities (Ordóñez & Treviño 1999): they argue that both wh-subjects and wh-CLLDs prevent extraction of an interrogative if they are preverbal, but not if they are postverbal. The observation that wh-subjects prevent extraction of an interrogative from a preverbal, but not postverbal, position goes back to Jaeggli (1987).

- (298) a. ¿Qué piensas que dijo quién en la reunión? Postverbal wh-subject
 what think.2sg that said who in the meeting?
 ‘What do you think said who at the meeting?’
 b. *¿Qué piensas que quién dijo en la reunión? Preverbal wh-subject
 what think.2sg that who said in the meeting?’
 ‘What do you think said who at the meeting?’

They claim that the dative wh-element is a CLLD in both cases, and the distinction applies.

- (299) a. ¿Quién crees que le va a dar eso a quién? Postverbal wh-dative
 who think.2sg that him go to give that to who?
 ‘Who do you think is going to give that to who?’
 b. *¿Quién crees que a quién le va a dar eso? Preverbal wh-dative
 who think.2sg that to who him go to give that?
 ‘Who do you think is going to give that to who?’

Thus, in the ungrammatical examples they claim that what goes on is that we have CLLDs in both cases. Camacho answers (2013: 197) that the problem is due to other causes: wh-words cannot appear in Spanish in embedded positions with verbs not selecting wh-questions, so the effect happens also in the absence of a second interrogative.

- (300) *¿Pedro dijo que quién compró una casa?
 Pedro said that who bought a house
 (301) ¿Pedro dijo que compró una casa quién?
 Pedro said that bought a house who

A third argument is that in French (where the subject is clearly in the A-position identified as spec, TP) and adverb can intervene between subject and verb (Alexiadou

⁶ Carlos Rubio Alcalá (p. c.) mentions one potential alternative: the subject attempts to target the Topic position only if it’s not occupied in the first place, somehow competing for that landing site with other potential candidates. If there is already a phrase in the Topic position, then the subject cannot rise there and is limited to the narrow scope reading.

& Anagnostopoulou 1998), but in Spanish this is possible. Thus, they contend, preverbal subjects must be higher than spec, TP in Spanish.

- (302) Juan ya se ha ido.
 Juan already se has gone
 ‘Juan has already left’
- (303) *Jean déjà est parti.
 Jean already is gone
 ‘Jean has already gone’

But this, as Sheehan (2007) argued, could just reflect that the verb moves to a higher position in French than in Spanish. Furthermore, Camacho (2013) notes, not every adverb can intervene, and the referential nature of the subject seems to play a role, as the following contrast shows.

- (304) Juan casi pudo entrar.
 Juan almost could come.in
 ‘Juan almost managed to come in.’
- (305) *Nadie casi pudo entrar.
 nobody almost could come.in
 ‘Nobody managed to almost come in’

Thus, it cannot be claimed that all subjects are placed in the same position; Camacho takes this as evidence for a more fine-grained analysis of the position of preverbal subjects.

A fourth argument, this one provided by Ordóñez & Treviño (1999) is based on the observation that preposed negative quantifiers must be structurally adjacent to inflection:

- (306) Nada me debes.
 nothing me owe.2sg
 ‘You owe me nothing’

These authors note that overt subjects block the relation, but implicit subjects do not. This is unexpected if in both cases we have a nominal form occupying the spec, TP position (the overt subject and pro), but follows if two distinct positions are involved.

- (307) a. *Nada Juan me debe.
 nothing Juan me owes
 ‘Juan owes me nothing’
- b. Nada me debe.
 nothing me owes
 ‘He owes me nothing’

A final argument provided in the literature is that bare NPs cannot be either CLLDs or preverbal subjects.

- (308) a. *Niños no vinieron.
 boys not came.3pl
 ‘Boys didn’t come’
 b. *Niños, no los he visto.
 children, not them have.1sg seen
 ‘Children, I have not seen any’

However, we have already seen that there are reasons to think that the problem is not that bare NPs cannot be topicalised, but rather that Spanish lacks overt clitics to mark them (Casielles Suárez 2004; see also Goodall 1999). Thus, this fact could actually be a counterexample to the analysis of preverbal subjects as CLLDs, given that bare NPs are only allowed in the second. But note (as Carlos Rubio Alcalá points to us) that the lack of clitic forms does not prevent prepositional constituents from topicalising, in contrast to NPs.

The evidence that preverbal subjects in Spanish are CLLDs is, then, not very strong. Researchers have pointed out, additionally, some phenomena where subjects clearly contrast with CLLDs. A first one is the fact (Rizzi 1986, Cinque 1990) that negative quantifiers can be preverbal subjects, but not CLLDs.

- (309) *A nadie no lo he visto.
 to nobody not him have.1sg seen
 ‘I have seen nobody’
 (310) Nadie ha venido.
 nobody has come
 ‘Nobody has come’

The answer of those that propose a unification between preverbal subjects and CLLDs is that the problem could be in the referential possibilities of accusative clitics in Spanish, specifically that *lo* cannot corefer to a negative quantifier. In contrast, with datives, there is no problem:

- (311) A nadie le hemos dado esto.
 to nobody him have given that
 ‘We gave this to nobody’

However, this explanation is less strong if we take into account that the bare topicalisation in English, without clitic, is also degraded with negative quantifiers.

- (312) ??Nothing I have done.

Another problem for the unification is that a sentence with a preverbal subject can be an answer to an all-focus question, but not one with a CLLD (Sheehan 2007).

- (313) A: ¿Qué ha pasado?
 what has happened?
 ‘What has happened?’
 B: María ha comprado una casa.
 María has bought a house

B': #Esa casa, María la ha comprado.
 that house, María it has bought
 'That house María has bought'

Another observation repeated in the literature (eg., NGLE 2009) is that the prosody of CLLDs and preverbal subjects is not identical. All things being equal, there is no pause between the subject and the verb of a clause, while this is always possible between a CLLD and the rest of the clause:

- (314) a. *Juan, no ha venido.
 Juan, not has come
 b. A Juan, no lo he visto.
 to Juan, not him have.1sg seen
 'Juan, I have not seen'

Camacho (2013) also points out that the type of antecedent allowed by subjects and dislocated elements is different. Building on Cardinaletti (1997), he shows that in Spanish a CLLD is contrastive, but a preverbal subject is not necessarily so. In the following contrast, we see that if we are talking just about one film director, a distinct DP can refer to that single director if it is a subject, but not if it is a dislocated CLLD, because –Camacho argues– that induces a contrastive reading.

- (315) Ayer le dieron un premio a Wim Wenders_i.
 yesterday him gave a prize to Wim Wenders
 'Yesterday, they awarded a prize to Win Wenders' ...
- | | |
|--|---------|
| a. ... El director _i recogió el premio en persona. | Subject |
| the director collected the prize in person | |
| b. ... El director* _i , el premio, lo recogió en persona. | CLLD |
| the director, the prize, it collected in person | |

A final argument against the unification comes from Suñer (2003): she provides evidence that the subject position is an A-position, while the CLLD position is an A'-position. Her argument is that a well-known property of A'-movement reconstructs, while A-movement does not. A-movement, then, can save a Principle C violation, but A'-movement cannot. Notice, next, that subjects do not produce Principle C violations if they are preverbal, while CLLDs do.

- (316) [La hermana de María_i] la_i ____ vio en la calle.
 the sister of María her saw in the street
 'María's sister saw her in the street'
- (317) *[A la hermana de María_i] pro_i no la quiere ni ver.
 to the sister of María not her wants not see
 Intended: 'María does not even want to see her sister'

However, note that an approach where preverbal subjects always occupy an A-position cannot explain the contrast we started the section with, namely that overt preverbal pronouns in Spanish have a contrastive meaning. Camacho (2013), for this reason, provides a mixed account where preverbal subjects in Spanish do not occupy always the same position. He explicitly rejects the proposal that the role of subject is

performed in Spanish by the agreement inflection of the verb (contra Alexiadou & Anagnostopoulou 1998), and proposes that three options are possible:

- (318) a. [pro Infl]
 b. [DP Infl]
 c. [DP [pro Infl]]

In the first case, we have a non-overt subject in the A-position; Camacho assumes that in this situation, the pronoun must be discourse-linked by a topic. In the second case, the DP is in an A-position, and there is no null pronoun. In the third case, the A-position is occupied by the null pronoun, and the overt DP that can be interpreted as subject is in an A'-position that is however distinct from the one occupied by CLLDs. This theory can provide an explanation of the mixed behaviour of overt preverbal subjects in Spanish, as they can occupy both A- and A'-positions, and furthermore, can explain why an overt pronoun must be contrastive: the relation with Infl is different in each case, so the conditions that allow for the licensing of the empty category through agreement are not met unless the pronoun is placed in the A-position.

6. The left-right asymmetry in Spanish

Up to now we have concentrated on elements dislocated from their base position to the left, but Spanish also allows –in a much more restricted way– right dislocations. The goal of this section is double: to describe the left-right asymmetry in Spanish, namely the fact that many of the possibilities available for left-dislocated constituents are not available for right-dislocated ones, and to discuss the different approaches to right dislocation that have been stated in the literature.

Consider first the fact that foci can never be dislocated to the right.

- (319) LAS MANZANAS Juan no ha traído.
 THE APPLES Juan not has brought
 (320) *Juan no ha traído, LAS MANZANAS.
 Juan not has brought, THE APPLES

In justice, the fact is that foci are not actually dislocated from the main clause at least in the sense that there is no pause (represented by commas) between the moved element and the rest of the clause.

Hanging topics cannot be dislocated to the right, but they can appear to the left.

- (321) a. Juan, fuimos con él al cine.
 Juan, went.1pl with him to.the movies
 'Juan, we went with him to the movies'
 b.*Fuimos con él al cine, Juan.
 went.1pl with hum to.the movies, Juan

Linking-theme topics cannot appear dislocated to the right either. This can be viewed as a plausible consequence of the property of proposing new discourse topics: it is pragmatically weird to introduce the comment about a new topic before that new topic has been introduced.

- (322) *No puedo trabajar con él, en cuanto a Juan.
 not can.1sg work with him, in about to Juan
 Intended: *‘I cannot work with him, as for Juan’

Thus, we are left with clitic dislocations. Even restricted to this class, the properties of clitic right dislocations (CLRDs) are more constrained than those of CLLDs. One first fact is that CLRDs cannot be iterated in Spanish (although Catalan and Italian do allow it: cf. Villalba 2000, López 2009, Samek Lodovici 2015).

- (333) a. María, dinero, a Juan, no le ha dado.
 María, money, to Juan, not him has given
 ‘María has not given money to Juan’
 b. *No le ha dado, María, dinero, a Juan.
 not him has given, María, money, to Juan
- (334) La Maria les hi ha donat, les tovalloles, a la seva mare. Catalan
 the Maria them LOC has given, the towels, to the her mother
 ‘María has given the towels to her mother’

Second, CLRDs can be used to pick accessible referents in the discourse and make them salient (Ziv 1994), but they cannot be used to make active referents not mentioned in the discourse, which we saw CLLDs allow. In a context where we have introduced the table as part of the rheme or the table is present in the discourse, the following sentence is felicitous. However, it is not if none of the previous conditions have been met.

- (335) Tendré que volver a pintar-la, la mesa.
 will.must.1sg to come to paint-it, the table
 ‘I’ll have to paint it again, the table’

CLLDs can refer to accessible referents that have been made accessible by virtue of associating to an expression mentioned before (for instance, the door if we have mentioned the house). This is not natural with CLRDs (Villalba 2000).

- (336) Vamos a pasar el fin de semana en la nueva casa.
 will.1pl to pass the end of week in the new house
 ‘We will spend the weekend at the new house’.
- a. La puerta, planeo pintar-la.
 the door, plan.1sg paint-it
 ‘The door, I plan to paint’
- b. #Planeo pintar-la, la puerta.
 plan.1sg paint-it, the door

Third, CLLDs can be contrastive (must be, for López 2009), while CLRDs cannot be so. Imagine we are talking about the two things we bought, apples and oranges. As we saw in §2, CLLDs can be used to introduce contrastively what we shall do with each; this is impossible with CLRDs.

- (337) *Las usaremos para hacer mermelada, las manzanas; las usaremos para
 them will.use.1pl to make marmelade, the apples; them will.use.1pl to
 hacer zumo, las naranjas.
 make juice, the oranges

López (2009) further notices that CLLDs can be used, when talking about a wider class of objects, to differentiate between their subclasses, but CLRDS cannot. For instance, in a context where we ask a friend what he did with the furniture, an answer that highlights the chairs can be provided only with a CLLD.

- (338) a. Las sillas las he dejado en el salón.
 the chairs them have left in the living.room
 ‘The chairs I have left in the living room’
 b. #Las he dejado en el salón, las sillas.
 them have left in the living.room, the chairs
 Intended: ‘I left them in the living room, the chairs’

Finally, it has also been noted (Villalba 2011) that, in language use, CLRDS is much less frequent in Spanish than CLLDs, while Catalan uses CLRDS much more productively: in his corpus, the author found 1 case of CLRDS in Spanish for roughly every 23 cases in Catalan.

6.1. The analysis of CLRDS

The existing analysis of CLRDS differs from the one of CLLDs with respect to two properties: some authors propose that CLLDs are generated through movement, while CLRDS are base generated (for instance, Frascarelli 2004 for Italian); second, some of the authors that propose that CLRDS are generated through movement argue that their landing position is lower than in the case of CLLDs (for instance, Villalba 2000, López 2009). In addition to these two potential analytical differences, that we will review here in some detail, the third question is why Spanish CLRDS should be restricted to only one element, while other languages allow iteration of CLRDS, such as Italian and Catalan.

Let us start with the problem of whether CLRDS involves movement or not, as the evidence that settles this issue seems to be much clearer than the one that refers to the position that they occupy in Spanish. Here we have three options:

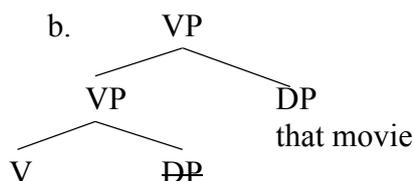
- CLRDS are base-generated in a vP external position
- CLRDS are moved to a vP external position (above or below TP)
- CLRDS do not move in syntax

The first position is easy to refute by the presence of connectivity effects of the kind that were used in the case of CLLDs: CLRDS, as CLLDs, are associated to clitics that must match with them in case, gender and number. They get their case from the verb, and their prepositional marking is lexically determined by the verb; they are also sensitive to strong islands. In this respect, their properties are identical to CLLDs, so the arguments are equally strong for them.

One has, then, to address the two remaining options: either they stay in their base position or they move to a higher position from there. The proposal that CLRDS do not move from their base position is due to Kayne (1994: 78-83), who wanted to block an analysis where right dislocation involved a right-adjunction, something

explicitly forbidden by his Lexical Correspondence Axiom, where non c-commanded constituents, like adjuncts, emerge always to the left. Thus, the configuration that Kayne wants to block is the following:

- (339) a. Ya la he visto, esa película.
 already it have.1sg seen, that movie
 ‘I saw it already, that movie’



Kayne’s proposal is that the sentence is a case of clitic doubling where the constituent that seems to be dislocated is in fact in its base position in syntax. The DP is endowed with a feature that forces a covert movement operation whereby it rises above vP, but this is not reflected in the overt syntax. The feature, however, is read by PF, which assigns it a particular intonational profile that gives the surface impression of dislocation.

This analysis has been heavily criticised in Samek Lodovici (2015) and Fernández-Sánchez (in preparation), both for conceptual reasons and empirical problems. One problem is that French or Spanish varieties that do not accept clitic doubling with direct objects accept CLRDs with the same constituents. Kayne is aware of this problem, and stipulates that what makes wrong clitic doubling in those varieties is that the clitic cannot c-command the antecedent at LF; the covert movement that CLRDs undergo save the constraint, in his view. However, the operation seems to be too parochial. The view also forces a view of the syntax-phonology interface where features, and not configurations, are responsible for prosody.

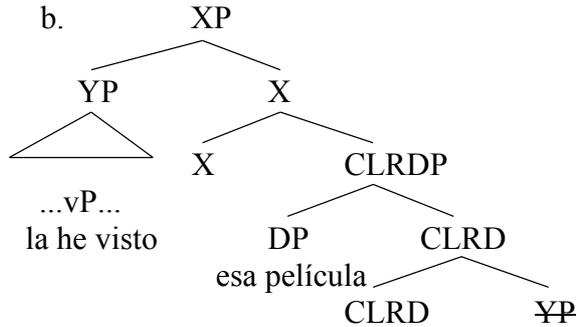
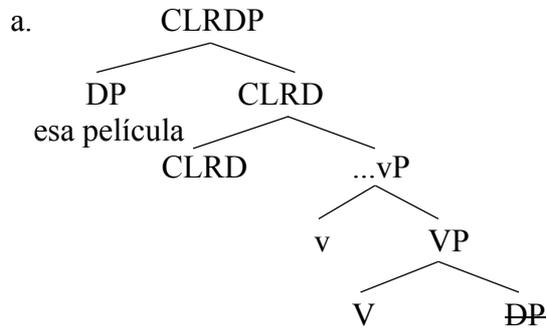
Empirically, Samek-Lodovici (2015) notes that if the items stayed in their base position in CLRDs, languages that allow more than one CLRD should only allow the order that reflects the base generation possibilities of the items involved, but this is not right. See the following Italian example, where the internal argument precedes the external one:

- (340) Non li ha regalati a nessuno, i fiori, Marco.
 not him has given to nobody, the flowers, Marco
 ‘The flowers, Marco has not given to anyone’

We refer the reader to Fernández-Sánchez (in preparation) for a wider critique of Kayne’s (1994) analysis.

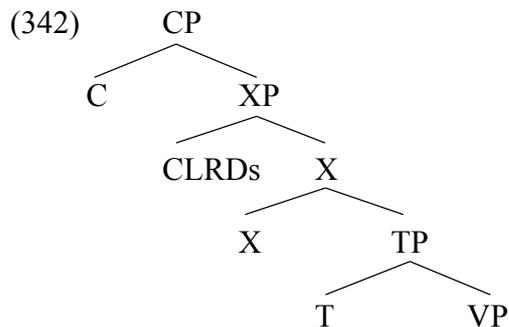
In fact, Cecchetto (1999) attributes to Kayne himself, during lectures in 1995, the proposal that CLRDs involve movement to a position higher than vP, followed by remnant movement of the verbal complex.

- (341) La he visto, esa película.
 it have seen, that movie
 ‘I have seen it, that movie’

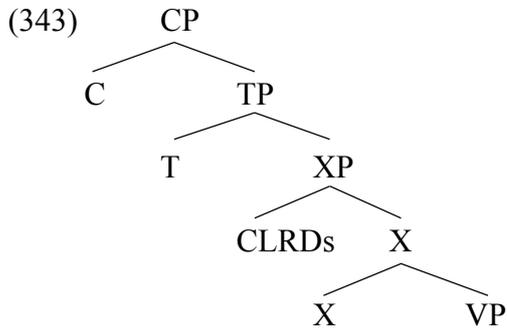


With the exception of those that propose that topic movement is obtained by conjoining sentences and applying ellipsis to the identical material (cf. Ott 2011, 2014, 2016, Fernández-Sánchez in preparation; see Ortega-Santos 2016 for yet another view, where items displaced can land in a right branch), it is fair to say that the general consensus at this point is that CLRDPs involve movement to a relatively high position, followed by remnant movement of a constituent containing the verbal complex. The issue that is most debated right now is the nature of the position to which CLRDPs move, and specifically whether it is below or above TP.

Let us now move, then, to the evidence for or against placing CLRDPs above or below TP. The first family of analyses, to which Frascarelli (2004), Fernández-Sánchez (2013) and Samek Lodovici (2015) belong, is that CLRDPs are placed above TP, although in a position that is distinct (lower) from the one that hosts CLLDs, in order to account for their information structure differences.



The second option is to place CLRDPs below TP, in a position belonging to the clausal middle field where it is assumed that German scrambling takes place. This view is supported among others by Villalba (2000) and López (2009).



Samek Lodovici (2015) proposes a number of arguments in favour of the view that CLRDs are in a position above TP (at least in Italian). One first argument (for Italian) that can be extended to Spanish is that not all varieties of Spanish allow accusative clitic doubling if the associate DP is placed within the clause; in contrast, they allow it if the associate is outside TP, as in the case of CLLDs. The fact that CLRDs allow clitic doubling supports the view that CLRDs, as CLLDs, are placed above TP.

- (344) %Las vi a las chicas.
 them saw to the girls
- (345) A las chicas las vi.
 to the girls them saw
- (346) Las vi, a las chicas.
 them saw, to the girls

A second argument that can be applied to Spanish is that negative polarity items must be licensed by overt negation whenever they appear lower than TP, and negation cannot surface whenever they appear above TP. Samek Lodovici notes that a CLRD including a negative polarity item is not compatible with overt negation in Italian, a fact that also applies to Spanish. Note that here the element that is a topic is not the negative itself, but a constituent containing the negative.

- (347) *No lo quiero, comer nada.
 not it want to.eat nothing
 ‘I don’t want to eat anything’

Third, the Lebeaux Effect is taken as a further argument for Samek Lodovici (2015). The Lebeaux Effect (1988) is the observation that relative clauses (that are adjuncts) might fail to trigger Principle C violations, because the adjunct can be introduced not in the base position, but in the surface position.

- (348) a. *¿[Qué ejemplo [de que Juan_i es alcohólico]] pro_i denunció ____?
 what example of that Juan is alcoholic reported?
 ‘What example of Juan being an alcoholic did he report?’
- b. ¿[Qué ejemplo [que Juan_i escuchó]] pro_i denunció ____?
 what example that Juan heard reported?
 ‘What example that Juan heard did he report?’

In the first sentence there is always a Principle C violation, because the complement clause that contains ‘Juan’ must be present at the point where pro c-commands it. In the second sentence, the Principle C violation is avoided because the

relative clause is an adjunct, and it can be introduced in the surface position of the *wh*-element, where it is not *c*-commanded by the subject. Following this logic, Samek Lodovici reasons that if the CLRDs were merged in a TP-internal position, there would always be a Principle C violation with relative clauses, because their surface position would be *c*-commanded by the subject. If their surface position is external to TP, then no Principle-C violation would emerge.

- (349) *pro*_i la denunció, la historia que Juan_i escuchó.
 it reported, the story that Juan heard
 ‘He reported it, the story that Juan heard’

Coreference seems possible in Spanish (and Italian), which would argue for a TP-external analysis, so that the subject does not *c*-command the CLRD in its surface position.

The theoretical importance of this proposal, that CLRDs are located in the CP domain, albeit in a position distinct from CLLDs, is that they can be used to argue in favour of an architecture of grammar where there is only one designated area for information structure, namely the CP domain (see also Grohmann 2003). The alternative, that CLRDs are below TP, forces a theory where there are distinct clausal positions for topics in different areas. This has been explicitly formulated by Villalba (1998, 2000) as the Split-Topic position. Villalba, however, does not simply state that topics can either be placed in one or the other position: each topic position in this split model is associated to distinct properties, which is what in his view explains the contrasts between CLRD and CLLD. Let us review some of these contrasts; the reader is referred to Fernández-Sánchez (in preparation) for a critique of the analysis of these properties.

The first contrast that argues for the distinct character of the two operations is the observation (Villalba 1998) that one can left-dislocate out of a right-dislocated element, but not right-dislocate out of a left-dislocated one (examples translated from Catalan and adapted from the original).

- (350) De mi abuelo_j, me las han explicado ya, todas las historias _____j.
 of my grampa me them have explained yet, all the stories
 (351) *Todas las historias _____j, me las han explicado ya, de mi abuelo_j.
 all the stories me them have explained already, of my grampa

This supports a view where a constituent first occupies a right-dislocated position and then one of its subconstituents can be extracted to further rise to a left-dislocated position. The opposite operation is impossible, as it would involve lowering of something from the left-dislocated position to the right-dislocated one.

A second contrast (due to Constantini 2005 in Italian) is that the obviation effect – that prevents the subordinate subject of the complement of verbs like *expect* to be coreferential with the main verb’s subject when finite– is suspended sometimes if CLLDs are present, but it is never saved by CLRD. However, the difference is subtle.

- (352) *María_i espera que *pro*_i reciba el premio en el concurso.
 María expects that receives the prize in the competition
 Intended: ‘María expects to receive the prize in the competition’
 (353) ?María_i espera que, en el concurso, *pro*_i reciba el premio.
 María expects that, in the competition, receives the prize

- (354) *María_i espera que pro_i reciba el premio, en el concurso.
 María expects that receives the prize, in the competition

If the contrast is real, which is unclear, this would support a view where CLLDs are in the C domain and make it impossible for the subjunctive clause to extend its binding domain (Luján 1999), while CLRDs would be placed below CP and would not prevent the same extension.

A third contrast refers to negative polarity licensing: on the assumption that negation is an operator placed in a phrase above TP (Laka 1990), we expect CLLDs to be unlicensed by overt negation if they are placed in CP –either they are outside the c-command domain of negation, because they are base generated, or negation is impossible because they have moved above TP and preverbal negative polarity items are incompatible with overt negation in Spanish–. Villalba (2000) shows this to be the case (examples adapted to Spanish).

- (355) *Responsable de nadie, María no lo es.
 responsible of nobody, María not it is
 ‘Mary is not responsible of anyone’

If CLRDs are inside TPs, then overt negation should license it. The Spanish sentence is much less natural with CLRD than the Catalan counterpart, but it is clearly better than the example with CLLD.

- (356) ?María no lo es, responsable de nadie.
 María not it is, responsible of nobody
 ‘María is not responsible of anyone’

Finally, López (2009) shows that a quantifier placed inside a CLRD can bind postverbal, but not preverbal material, which he takes to be a strong argument in favour of CLRDs being below TP. Contrast the following two sentences, adapted again to Spanish:

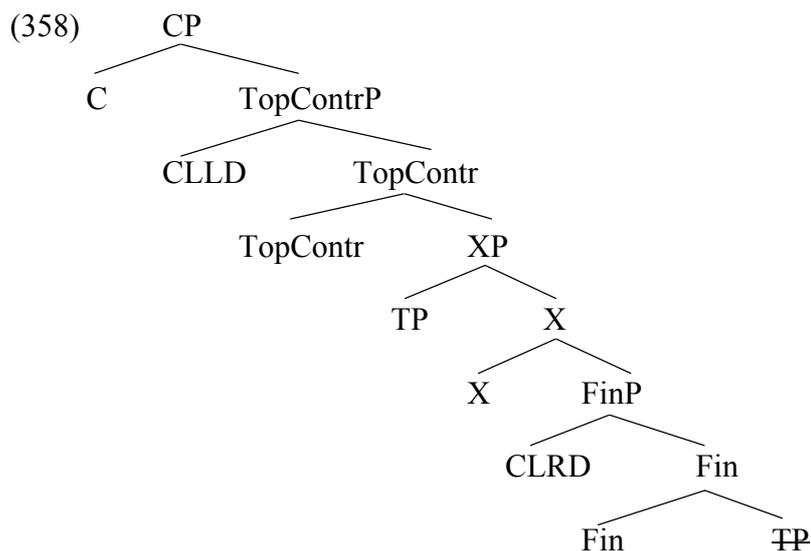
- (357) a. *Su_i madre puede acompañar-lo, a cada_i niño.
 his mother can accompany-him, to each child
 b. Puede acompañar-lo su_i madre, a cada_i niño.
 can accompany-him his mother, to each child
 Intended: ‘His_i mother can accompany each_i child’

The evidence, as we see, is not conclusive, and many of the facts are difficult to test, as the judgements are very subtle. Even though some of the strongest tests argue in favour of a CP-position for CLRDs, there are still some facts that do not cleanly fit with this approach, among those the ones that Villalba (2000) mentioned for Catalan, and that can be extended to Spanish. This might suggest that CLRD is not a homogeneous phenomenon, and might in fact involve at least two subclasses targeting distinct positions.

What seems clear is that even if CLRDs are placed in the CP-domain, their position must be different from the one that CLLDs occupy: their information structure is not identical, and hanging topics are not allowed there. That position should, then, be one where items merged cannot receive default case, so that hanging topics –which appear without any case marking– are not allowed. It is a position, also,

where contrast is not defined, and it has to be lower than CLLDs, so that extraction from CLRDs to CLLDs is allowed.

Part of the properties match what we have seen in previous sections. Frascarelli & Hinterhölzl (2007) proposed that contrastive topics are higher than familiarity topics. On the assumption that default-case marked items are only allowed in very external positions, this family of facts match. We could imagine a situation where CLRDs are placed where familiarity topics land, in a head that is close to TP, but right above it (perhaps FinP, as Rubio Alcalá 2014 assumes). The clause could optionally move to a head immediately dominating that position, so that the landing site of contrastive topics is higher.



It would not be surprising that FinP, due to its nature, is not a position where default-marked items can be hosted. However, there are still some properties that are mysterious: significantly, why cannot CLRD iterate in Spanish, while Catalan and Italian allow it? We could think that the iteration of topics is just apparent, and that when more than one topic appear each one of them is in a distinct position inside Frascarelli & Hinterhölzl's (2007) hierarchy. CLRDs would occupy the lowest position inside the hierarchy, and that is why only one item emerges. However, this would not be enough, because the iteration of topics cannot be reduced to Frascarelli & Hinterhölzl's positions. First, we can have more than three CLLDs, but their system identifies only three positions:

- (359) *María, en la mesa, los apuntes, a Juan, se los dejó.*
 María, on the table, the notes, to Juan, him them left.
 'María left the notes for Juan on the table'

Second, when we have more than one CLLD it is not true that the highest one must be contrastive. According to López (2009) both are contrastive in the weak sense that the speaker can expect a continuation where something different is commented of another entity, but López himself acknowledges that, to be fair, that is easy to accommodate if there is no continuation; also, that 'weak' notion of contrast affects all CLLDs, not just the highest one.

- (360) A: ¿Qué hizo María con los apuntes para Juan?
 what did María with the notes for Juan?
 ‘What did María do with the notes for Juan?’
 B: Los apuntes, a Juan, se los dejó en la mesa.
 the notes, to Juan, him them left on the table
 ‘The notes she left on the table for Juan’

Thus, it is almost inescapable to say that the topic position can be iterated, which is incidentally an argument against a purely cartographic system.

A second problem of the proposal we just sketched is that still we would need to explain why Catalan and Spanish contrast in how many CLRDs are allowed per sentence. It is always possible to stipulate that Catalan has more topic positions than Spanish, but it seems dubious that this gives us a better understanding of how the structure of the clause functions in each one of the two languages.

So what, then? One potential way of addressing the phenomenon is through parametric properties defined at the interfaces, for instance in terms of how the prosodic structure is licensed in these languages. One significant property of CLRDs is that, when they linearise, they emerge to the right of the focal element that receives the nuclear stress. CLRDs are, then, surface infractions of the principle that the final element of the clause gets the nuclear stress. Part of the reason why they can be iterated only in some languages might be that Spanish does not favour de-stressed prosodic constituents in final position, while Italian and Catalan might have phonological strategies that solve this issue.

- (361) *Juan se las dejó a Pedro, las notas, en la mesa.
 nuclear de-stressed + destressed
 stress phrase phrase

Here we will not attempt to provide a full analysis; our goal was just to show the problem that the non iterability of CLRDs pose for a purely syntactic analysis.

7. Main clause phenomena in Spanish

Main Clause Phenomena (MCP, Hooper & Thompson 1973, Green 1976), also known as Root Transformations (Emonds 1971) or Highest Island Phenomena (Ross 1973) makes reference to a number of properties or processes associated to the CP-layer that are available in main clauses, but not on several kinds of subordinate clauses. The type of process and property that is not available in some subordinate contexts generally refers to the non-availability of movement operations related to information structure, formal markings related to some kinds of foci, modality and modification of the speaker / addressee attitude towards the utterance.

These properties and processes can be summarised as follows, altogether with an illustrative example.

- a) Movement operations involving topicalisation of different kinds, such as the anticipation of a VP-phrase.
- (362) a. Participar en el concurso no lo logramos.
 take part in the competition not it managed
 ‘To take part in the competition we did not manage’

- b. *Lamento que participar en el concurso no lo lográramos.
 regret.1sg that take.part in the competition not it managed
 Intended: *‘I regret that to take part in the competition we did not manage’

Notice, in contrast, that topics defined in the wide-sense, as items anaphoric to a previous discourse antecedent, are not out from subordinate clauses.

- b) Movement operations involving focalisation of different kinds:

- (363) a. A JUAN vi en la fiesta.
 TO JUAN saw in the party
 ‘JUAN I saw in the party’

- b. *Quiero que A JUAN veas en la fiesta.
 want.1sg that TO JUAN see.2sg in the party
 Intended: *‘I want you JUAN to see in the party’

Again, the emphatic focalisation that is not accompanied by movement is possible in such contexts (as it is, of course, the focus-by-default assigned by the Nuclear Stress Rule).

- (364) Quiero que veas en la fiesta A JUAN.
 want.1sg that see.2sg in the party TO JUAN
 ‘I want you to see JUAN at the party’

- c) Utterance-oriented adverbs, that make explicit the evaluation of the propositional content by the speaker, are less natural in some subordinate clauses than in main clauses.

- (365) a. Lamentablemente, Juan está enfermo.
 regretfully Juan is sick
 b. ??Me entristece que, lamentablemente, Juan esté enfermo.
 me makes.sad that, regretfully Juan is sick

- d) Speaker- and addressee-oriented adverbs are also less natural in some subordinate contexts than in main clauses.

- (366) a. Francamente, me importa un bledo.
 frankly me matters a tumbleweed
 ‘Frankly, I don’t give a damn’
 b. *Siento que, francamente, no me importe un bledo.
 regret.1sg that frankly not me matters a tumbleweed
 *‘I regret that, frankly, I don’t give a damn’

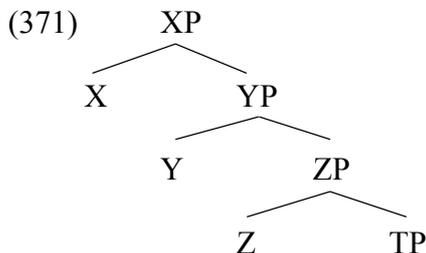
- e) Finally, the formal marking of modality –imperative, interrogative and exclamative– is not always present in subordinate clauses. While interrogative clauses can productively appear in subordinate contexts, with obligatory inversion in Spanish if there is a wh-element, imperatives are never formally present in subordinate context.

- (367) No sé si Juan ha venido.
not know if Juan has come
'I don't know whether Juan has come'
- (368) No sé qué (*Juan) ha traído (Juan).
not know what Juan has brought Juan
'I don't know what Juan has brought'
- (369) a. Dá-me-lo.
give-me-it
'Give it to me'
b. *Te ordeno que dá-me-lo.
you order.1sg that give-me-it
Intended: 'I order you to give it to me'
c. Te ordeno que me lo des.
you order.1sg that me it give
'I order you to give it to me'

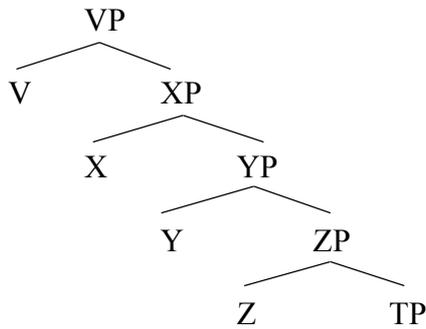
There is a debate with respect to whether exclamative clauses can appear in subordinate contexts (Grimshaw 1979, Zanuttini & Portner 2003, Abels 2010): while Grimshaw (1979) has argued that the following sentence contains an indirect exclamative, Abels (2010) proposes that it is syntactically an indirect interrogative that gets interpreted as an exclamative due to the factive component imposed by the main predicate. We will not elaborate on this debate here.

- (370) Me sorprende qué libros lees.
me surprises which books read.2sg
'I'm surprised about the books you read'

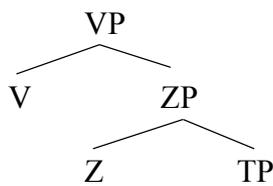
Two main approaches exist with respect to the interpretation of MCPs. The cartographic way of looking at these phenomena is that the left-periphery of the clause is projected in full only in main clauses; subordinate clauses generally project a truncated Fseq, which can be more or less truncated depending on the type of subordinate clause that we have in each case. In the best case scenario, different classes of main predicates force this truncation by simply selecting for intermediate heads in the Fseq. Assuming, say, that the left periphery projects up to XP, a predicate that selects XP allows a full projection of the subordinate left periphery, but a predicate that selects for ZP would force truncation of the X and Y layers, resulting in a less rich left-periphery in the subordinate environment.



(372) a. Predicate A (no truncation)



b. Predicate B (truncation)



In contrast, a pure Minimalist approach where only CP is assumed would explain the asymmetries in relation to the strength of C in terms of feature endowment. In main clauses, C would be always maximally strong, allowing thus all kinds of operations and values of modality, etc. In subordinate contexts, some Cs would be much weaker, and consequently would not be able to define or license MCPs. The approach would expect, in the best case scenario, a relation between the strength of C and the finiteness of the clause –for reasons that we will make explicit in §7.4 and which relate to the proposal that the features of T are provided by C, when merged above TP– and also relations between the strength of C and the possibility of extracting from the subordinate clause –on the assumption (Chomsky 2000) that a strong CP layer defines the clause as a closed domain for extraction, a Phase in technical terms–.

There are three factors that have been argued to explain the distribution of MCPs across distinct types of subordinate clauses, and we will explore each one of them in turn for Spanish:

- The nature of the subordinating predicate, and specifically whether it is assertive in a particular sense or not (§7.1)
- The finite or non-finite nature of the subordinate clause (§7.2)
- The peripheral or non-peripheral nature of the subordinate clause (§7.3)

Note that Hooper and Thompson (1973) in fact merged the first two (via the proposal that reduced clauses are never assertive). For each one of these classes, we will distinguish between the classes of topics and foci that we have singled out in the previous paragraphs, as a way to see if implicational relations can be stated for different types of subordinate clauses. We will be as exhaustive as possible in this enterprise, exploring as many contrasts as we are aware of. In §7.4 we will evaluate whether the found facts support a cartographic approach, a minimalist approach or a mixture of both.

7.1. *Assertion*

One first factor that influences the distribution of MCPs is whether the main predicate can be used by the speaker to make an assertion. The definition of assertion is quite complex (see Pagin 2015), but it is understood roughly as Frege (1918) defined it: an assertion is an outward sign of a judgement. That is, an assertive statement presents something that the speaker takes to be true and to correspond to the beliefs held by the speaker at the moment. A complication is of a pragmatic nature: in order for a sentence to be truly assertive, it cannot be presupposed at the point of discourse that it is uttered, that is, the speaker cannot be assuming that the addressee also has that knowledge in his or her representation of the world. Thus, although acknowledging that the notion of assertiveness is much more complex than this, we can simplify it as the intersection of two conditions, one semantic and the other pragmatic:

- a) the content of the proposition must be believed to be true by the speaker
- b) the speaker must have the intention of introducing new information in the discourse by the utterance

The notion of assertion allows a division of predicates in five classes (Kiparsky & Kiparsky 1971, Hooper & Thompson 1973). The first one are strongly assertive predicates, that include verbs of communication, among other classes which convey that both what the speaker says is taken to be true and that the intention is to communicate that content.

- (373) anunciar ‘announce’, asegurar ‘state’, explicar ‘explain’, estar seguro de ‘to be certain of’, contar ‘tell’...

The second class are verbs that are also assertive, but in a weaker sense, as the speaker is not completely certain of the truth, although he or she still believes that there are good reasons to treat the content as real in the current world:

- (374) creer ‘believe’, pensar ‘think’, opinar ‘consider’, suponer ‘suppose’...

The third class are verbs that are non-assertive, that is, the speaker uses them to explicitly deny that he believes something to be true, or to present the propositional content as doubtful, lacking the necessary evidence; desideratives and directives, to the extent that with them the speaker presents states of affairs that could or should happen but have not actually happened, are also non-assertive. Note that in all these cases we have clauses in subjunctive in Spanish (Jiménez-Fernández & Ambar 2014).

- (375) no creer ‘not believe’, dudar ‘doubt’, querer ‘want’, esperar ‘expect’, ordenar ‘order’, pedir ‘beg’, no estar seguro ‘not to be sure’, ser posible ‘to be possible’

In the fourth class we have so-called factive predicates, which generally involve an evaluation of the propositional content of its complement. Factive predicates presuppose that the content of the subordinate clause is true, but precisely because of this they are not assertive: the speaker does not use these predicates to introduce the subordinate clause as new information, as he or she assumes that that information is

already established as true in the context of discourse. They take, in Spanish, complements in subjunctive, if they are used in this particular way.

- (376) lamentar ‘regret’, sentir ‘regret’, alegrarse de ‘to get happy for’, entristecerse por ‘to get sad for’, dar asco ‘to produce disgust’, ser maravilloso ‘to be wonderful’

The fifth class is probably the most difficult to define: semi-factives (Karttunen 1971). These verbs generally refer to the very process of acquiring, losing or simply managing information that the speaker takes to be true. In contrast to factive predicates, which keep the presupposition that the subordinate is true intact under negation and in interrogatives, some semi-factive predicates lose the presupposition in questions.

- (377) a. ¿Lamentas que Juan esté enfermo? Factive
 regret.2sg that Juan is sick?
 ‘Do you regret that Juan is sick?’ => It must be the case that Juan is sick.
- b. ¿Has descubierto que Juan está enfermo? Semifactive
 have.2sg discovered that Juan is sick?
 ‘Have you discovered that Juan is sick?’
 [Juan might not be sick after all]

Also, they can be used to introduce new information: if we want to tell someone that John got married, we can use the second, but not the first.

- (378) a. Me alegro de que Juan se haya casado.
 me cheer.1sg that Juan SE got married
 ‘I’m happy that Juan has got married’
 b. He descubierto que Juan se ha casado.
 have.1sg discovered that Juan SE got married
 ‘I have discovered that Juan got married’

Note that these predicates, unlike the class of factives, do take indicative in their complements. As we will see, with respect to MCPs they tend to pattern with assertive predicates also, which might suggest that syntactically these verbs belong to this class, while semantically they have their own set of properties.

- (379) saber ‘know’, descubrir ‘discover’, olvidar ‘forget’, recordar ‘remember’, notar ‘notice’, darse cuenta de ‘to become aware of’

With this taxonomy in place, let us analyse how it influences the distribution of MCPs: we will see that, in general, the more assertive a predicate is, the more it allows MCPs in its complement.

Consider first strongly assertive predicates. What we can see below is that, with respect to topic and focus movement, and the availability of adverbs oriented to the utterance and the speaker / addressee, they act as main clauses. Let’s start with topicalisation, where we see that CLLD, CLRD, hanging topics and linking-theme topics are allowed. Notice also that those topics can be pure familiarity topics or contrastive topics.

- (380) a. Juan me cuenta que las manzanas, las ha traído Luis. CLLD
 Juan me tells that the apples, them has brought Luis
 ‘Juan tells me that the apples Luis has brought’
 b. ?Juan me cuenta que, Luis, no se puede trabajar con él. Hanging
 Juan me tells that, Luis, not SE can work with him
 ‘Juan tells me that, Luis, it is impossible to work with him’
 c. Juan me cuenta que, en cuanto a Luis, no sabe dónde está. Linking-theme
 Juan me tells that, in about to Luis, not knows where is
 ‘Juan tells me that, as for Luis, he does not know where he is’
 d. Juan me cuenta que las ha traído Luis, las manzanas. CLRD
 Juan me tells that them has brought Luis, the apples
 e. Juan me cuenta que las manzanas, las trae Luis, y que las naranjas, las trae él.
 Juan me tells that the apples, brings Luis, and that the oranges, brings he
 ‘Juan tells me that the apples Luis shall bring, and the oranges he shall bring’

Notice also that focus is allowed; they admit in their subordinate complements focus movement, polarity focus and the focalisation through emphatic means of a non-final, but not displaced, constituent.

- (381) a. Juan me cuenta que LAS MANZANAS ha traído Luis.
 Juan me tells that THE APPLES has brought Luis
 ‘Juan tells me that THE APPLES Luis has brought’
 b. Juan me cuenta que sí que ha traído las manzanas.
 Juan me tells that yes that has brought the apples
 ‘Juan tells me that he did bring the apples’
 c. Juan me cuenta que LUIS ha traído las manzanas.
 Juan me tells that LUIS has brought the apples
 ‘Juan tells me that LUIS has brought the apples’

Adverbs oriented to the utterance and the speaker/addressee are also allowed.

- (382) a. Juan me cuenta que, lamentablemente, Pedro está enfermo.
 Juan me tells that, regretfully, Pedro is sick
 ‘Juan tells me that, regretfully, Pedro is sick’
 b. Juan me cuenta que, francamente, no le parece bien.
 Juan me tells that, frankly, not him seems fine
 ‘Juan tells me that, frankly, that is not fine for him’

A relevant fact in this context is that it is possible to provide a reply with a strongly assertive predicate where the subordinate clause is actually the answer to the question. This has been interpreted as the subordinate clause of these predicates being able to be defined as the Main Point of Utterance (Bentzen et al. 2008).

- (383) A: ¿Quién ha traído las manzanas?
 who has brought the apples?
 B: Juan me cuenta que las manzanas, las ha traído Luis.
 Juan me tells that the apples, them has brought Luis
 ‘Juan tells me that the apples Luis has brought’

In a sense, then, this shows that the complement of strongly assertive verbs can be informationally equivalent to a main clause.

Let us now move to the weakly assertive predicates, like *creer* ‘believe’. What we shall see is that there are some MCPs that are not fully natural in their complements. Consider first topicalisations: hanging and linking-theme topics are marked, but the others seem natural.

- (384) a. Juan cree que las manzanas, las ha traído Luis. CLLD
 Juan believes that the apples, them has brought Luis
 ‘Juan believes that the apples Luis has brought’
 b. ??Juan cree que, Luis, no se puede trabajar con él. Hanging
 Juan believes that, Luis, not SE can work with him
 ‘Juan believes that, Luis, it is impossible to work with him’
 c. ??Juan cree que, en cuanto a Luis, no sabe dónde está. Linking-theme
 Juan believes that, in about to Luis, not knows where is
 ‘Juan believes that, as for Luis, he does not know where he is’
 d. Juan cree que las ha traído Luis, las manzanas. CLRD
 Juan believes that them has brought Luis, the apples
 e. Juan cree que las manzanas, las trae Luis, y que las naranjas, las trae él.
 Juan believes that the apples, brings Luis, and that the oranges, brings he
 ‘Juan believes that the apples Luis shall bring, and the oranges he shall bring’

In terms of focalisation, the three cases we have highlighted are possible.

- (385) a. Juan cree que LAS MANZANAS ha traído Luis.
 Juan believes that THE APPLES has brought Luis
 ‘Juan believes that THE APPLES Luis has brought’
 b. Juan cree que sí que ha traído las manzanas.
 Juan believes that yes that has brought the apples
 ‘Juan cree that he did bring the apples’
 c. Juan cree que LUIS ha traído las manzanas.
 Juan believes that LUIS has brought the apples
 ‘Juan believes that LUIS has brought the apples’

With respect to adverbs, we find an asymmetry between utterance-oriented and speaker-oriented adverbs, where the first is natural, but not clearly the second.

- (386) a. Juan cree que, lamentablemente, Pedro está enfermo.
 Juan believes that, regretfully, Pedro is sick
 ‘Juan tells me that, regretfully, Pedro is sick’
 b. ??Juan cree que, francamente, va a salir mal.
 Juan believes that, frankly, goes to come.out bad
 ‘Juan believes that, frankly, it will come out wrong’

It is also possible to answer a question with the subordinate complement of weakly assertive predicates.

- (387) A: ¿Quién ha traído las manzanas?
 who has brought the apples?

B: Juan cree que las manzanas, las ha traído Luis.
 Juan believes that the apples, them has brought Luis
 ‘Juan believes that the apples Luis has brought’

Moving now to semi-factive predicates, we will see that their behaviour is syntactically identical to that of weakly assertive predicates, as they reject exactly what weakly assertive predicates reject. Notice first topics:

- (388) a. Juan sabe que las manzanas, las ha traído Luis. CLLD
 Juan knows that the apples, them has brought Luis
 ‘Juan knows that the apples Luis has brought’
 b. ?Juan sabe que, Luis, no se puede trabajar con él. Hanging
 Juan knows that, Luis, not SE can work with him
 ‘Juan knows that, Luis, it is impossible to work with him’
 c. ??Juan sabe que, en cuanto a Luis, no lo vimos. Linking-theme
 Juan knows that, in about to Luis, not him saw.1pl
 ‘Juan knows that, as for Luis, we did not see him’
 d. Juan sabe que las ha traído Luis, las manzanas. CLRD
 Juan knows that them has brought Luis, the apples
 e. Juan sabe que las manzanas, las trae Luis, y que las naranjas, las trae él.
 Juan knows that the apples, brings Luis, and that the oranges, brings he
 ‘Juan knows that the apples Luis shall bring, and the oranges he shall bring’

Focalisation is totally natural.

- (389) a. Juan sabe que LAS MANZANAS ha traído Luis.
 Juan knows that THE APPLES has brought Luis
 ‘Juan knows that THE APPLES Luis has brought’
 b. Juan sabe que sí que ha traído las manzanas.
 Juan knows that yes that has brought the apples
 ‘Juan knows that he did bring the apples’
 c. Juan sabe que LUIS ha traído las manzanas.
 Juan knows that LUIS has brought the apples
 ‘Juan knows that LUIS has brought the apples’

Only utterance oriented adverbs are natural:

- (390) a. Juan sabe que, lamentablemente, Pedro está enfermo.
 Juan knows that, regretfully, Pedro is sick
 ‘Juan knows that, regretfully, Pedro is sick’
 b. ??Juan sabe que, francamente, no te parece bien.
 Juan knows that, frankly, not you seems fine
 ‘Juan knows that, frankly, that is not fine for you’

Some semifactive predicates can be used in contexts where the intended main point of utterance is the subordinate clause, but not all of them:

- (391) A: ¿Quién ha traído las manzanas?
 who has brought the apples?

- B: Juan ha descubierto que las manzanas, las ha traído Luis.
 Juan has discovered that the apples, them has brought Luis
 ‘Juan has discovered that the apples Luis has brought’
- (392) A: ¿Quién ha traído las manzanas?
 who has brought the apples?
- B: #Juan ha olvidado que las manzanas, las ha traído Luis.
 Juan has forgotten that the apples, them has brought Luis
 ‘Juan has forgotten that the apples Luis has brought’

We move now to cases where the subordinate clause is in subjunctive, and we shall see that in these cases the range of MCPs allowed is much more restricted. Starting with topicalisations inside the complement of factive predicates, we notice immediately that none of the operations is completely natural, although CLLD and CLRD are marginally acceptable by the speakers we consulted (and myself).

- (393) a. ??Juan lamenta que las manzanas, las haya traído Luis. CLLD
 Juan regrets that the apples, them has brought Luis
 ‘Juan regrets that the apples Luis has brought’
- b. *Juan lamenta que, Luis, no se pueda trabajar con él. Hanging
 Juan regrets that, Luis, not SE can work with him
 ‘Juan regrets that, Luis, it is impossible to work with him’
- c. ??Juan lamenta que, en cuanto a Luis, no se sepa dónde está. Linking-theme
 Juan regrets that, in about to Luis, not SE knows where is
 ‘Juan regrets that, as for Luis, it is not known where he is’
- d. ??Juan lamenta que las haya traído Luis, las manzanas. CLRD
 Juan regrets that them has brought Luis, the apples
- e. ??Juan lamenta que las manzanas, las traiga Luis, y que las naranjas, las traiga él.
 he
 ‘Juan regrets that the apples Luis shall bring, and the oranges he shall bring’

Jiménez-Fernández & Miyagawa (2014) find for Spanish CLLDs acceptable, and note that English does not allow its kind of bare topicalisation in these contexts. Their proposal is that Spanish can displace topics to TP, which has inherited the information-related features from C. We refer the reader to the original paper for details. However, note that CLLDs are not as perfect in factive predicates as they are in strongly assertive ones.

None of the focalisation cases we discussed, involving movement or not, is allowed; see below for an exception.

- (394) a. ??Juan lamenta que LAS MANZANAS haya traído Luis.
 Juan regrets that THE APPLES has brought Luis
 ‘Juan regrets that THE APPLES Luis has brought’
- b. ??Juan lamenta que sí que haya traído las manzanas.
 Juan regrets that yes that has brought the apples
 ‘Juan regrets that he did bring the apples’
- c. ??Juan lamenta que LUIS haya traído las manzanas.
 Juan regrets that LUIS has brought the apples
 ‘Juan regrets that LUIS has brought the apples’

Utterance and speaker/addressee oriented adverbs are out.

- (395) a. ??Juan siente que, lamentablemente, Pedro esté enfermo.
 Juan regrets that, regretfully, Pedro is sick
 ‘Juan tells me that, regretfully, Pedro is sick’
 b. *Juan lamenta que, francamente, no te parezca bien.
 Juan regrets that, frankly, not you seems fine
 *‘Juan regrets that, frankly, that is not fine for you’

Finally, consider non-assertive predicates, whose complement also requires subjunctive. Their behaviour is similar to that of factive predicates with respect to the three classes of phenomena.

- (396) a. ??Juan duda que las manzanas, las haya traído Luis. CLLD
 Juan doubts that the apples, them has brought Luis
 ‘Juan doubts that the apples Luis has brought’
 b. *Juan duda que, Luis, no se pueda trabajar con él. Hanging
 Juan doubts that, Luis, not SE can work with him
 ‘Juan doubts that, Luis, it is impossible to work with him’
 c. ??Juan duda que, en cuanto a Luis, no se sepa dónde está. Linking-theme
 Juan doubts that, in about to Luis, not SE knows where is
 ‘Juan doubts that, as for Luis, it is not known where he is’
 d. ??Juan duda que las haya traído Luis, las manzanas. CLRD
 Juan doubts that them has brought Luis, the apples
 e. ??Juan duda que las manzanas, las traiga Luis, y que las naranjas, las traiga
 Juan doubts that the apples, them brings Luis, and that the oranges, brings
 él.
 he
 ‘Juan doubts that the apples Luis shall bring, and the oranges he shall bring’

- (397) a. ??Juan duda que LAS MANZANAS haya traído Luis.
 Juan doubts that THE APPLES has brought Luis
 ‘Juan doubts that THE APPLES Luis has brought’
 b. * Juan duda que sí que haya traído las manzanas.
 Juan doubts that yes that has brought the apples
 ‘Juan doubts that he did bring the apples’
 c. ??Juan duda que LUIS haya traído las manzanas.
 Juan doubts that LUIS has brought the apples
 ‘Juan doubts that LUIS has brought the apples’

- (398) a. ??Juan duda que, lamentablemente, Pedro esté enfermo.
 Juan doubts that, regretfully, Pedro is sick
 ‘Juan doubts me that, regretfully, Pedro is sick’
 b. *Juan duda que, francamente, no te parezca bien.
 Juan doubts that, frankly, not you seems fine
 *‘Juan doubts that, frankly, that is not fine for you’

However, we must immediately point out that Jiménez-Fernández & Ambar (2014) have noticed that focalisation is possible within Spanish subjunctive clauses provided

that the focalised element is in sentence-final position. The previous set of sentences contrasts thus with the following one:

- (399) Juan quiere que Luis le dé el libro A MARÍA.
 Juan wants that Luis her gives the book TO MARÍA.
 ‘Juan wants that Luis gives the book TO MARIA’

In their proposal, what happens in subjunctive clauses is not that focalisation is impossible, but that a lower position for foci is targetted, which triggers this low focus ordering. We refer the reader for details to their original paper.

All in all, what this pattern of data suggests is the following:

- a) The C domain of clauses selected by strongly assertive predicates is as strong (or fully projected) as that of main clauses.
- b) Weakly assertive predicates and semifactives, which select indicative clauses, combine with a slightly impoverished or weakened C domain. The topic positions that seem to be more external, such as linking-theme topics and hanging topics, are not allowed. Speaker and addressee oriented modifiers are not allowed, but utterance oriented modifiers are, suggesting that the first are merged higher than the later.
- c) Subjunctive clauses do not allow MCPs, but there is some evidence that at least focalisation is possible if it targets a position that eventually gets linearised in a final position.

Note that if we wanted to unify these facts in one single functional sequence, we would run into a (perhaps not unsolvable) problem: two areas seem to be distinguished here, one referring to focus and topic movement, the other to host adverbs modifying the utterance or the utterer. No matter how we order them as two units, we need to say that the two areas are impoverished in parallel: part of the area of topic and focus movement can be impoverished without the whole area of utterance modification disappearing: hanging topics are unavailable in cases where utterance oriented adverbs are allowed. Conversely, the modifier area is partially impoverished in cases where there are still some focus and topic movement operations that are allowed. So we seem to be talking about two chunks:

- (400) a. Area for information-structure related movement
 b. Area for utterance-oriented modification

A purely cartographic approach would not account for this immediately: it seems that the Fseq is not truncated from one point onwards, but that at particular points in the sequence the higher heads can be missing without affecting the lower heads that dominate them. This kind of intermediate truncation supports, in principle, an approach where we have distinct areas and impoverishment applies internally to each one of them (along the lines of Wiltschko 2014):

- (401) a. Area A: truncation of the higher layers within that area (intermediate).
 b. Area B: truncation of the higher layers within that area (highest).

There is, however, a correlation between the truncation in both areas: in our sample, when one is impoverished, so is the other.

The data are similarly problematic for an approach where everything is defined as multiple specifiers of C. The question then would be why hanging topics disappear at the same time as speaker oriented adverbs without affecting utterance oriented adverbs: unless they form a natural class, which does not seem to be the case, it is unclear how both things would be unallowed as specifiers at the same time.

Note furthermore that more than the semantic and pragmatic conditions, the behaviour of predicates seems to follow a formal-based divide: semifactive verbs pattern like weakly assertive predicates, both marked in indicative, not like factive verbs, both being at least partially presuppositional. Non-assertive and factive pattern alike and both carry clauses in subjunctive.

However, Hooper & Thompson (1973; cf. also Larson & Sawada 2012) did argue that some of the contrasts are purely semantically or pragmatically based. Specifically, they argued that in adverbial subordination, temporal clauses with *when*, *before* and *after* resist MCP because their content is presupposed, while *because*-clauses accept it because their content is asserted (not presupposed). This contrast seems real in Spanish.

- (402) *Cuando las manzanas, las trajo María, empezamos la tarta.
 when the apples, them brought María, started.1pl the cake
 ‘When María brought the apples, we started the cake’
- (403) Empezamos la tarta entonces porque las manzanas las trajo María.
 started.1pl the cake then because the apples them brought María
 ‘We started the cake then because the apples María brought’

In fact, with *como* ‘as’, the interpretation of the subordinate clause tends to be presuppositional –it is not used to give the speaker information that he or she was expected to lack before–, and topicalisation there is much more marked.

- (404) ??Como las manzanas, las trajo María, empezamos la tarta entonces.
 as the apples them brought María, started.1pl the cake then

However, Haegeman (2011) has argued that again the distinction is syntactic and not pragmatic: what happens with the ‘presuppositional’ cases is that they involve movement of an operator, because they share properties with relative clauses, and that is what makes topic or focus movement marked, in contrast with the because-clause, that is not a relative.

7.2. Finiteness

A second factor that has been highlighted is the finiteness of the clause. Sabel (2015) for instance has discussed the properties of infinitives in terms of whether they license or not relative and wh-movement. In general, if these movement operations target the CP layer and the CP layer is either responsible for the strength of the features of the TP node (as in Minimalist approaches) or contains a specific position Finiteness, one expects that if a clause is non-finite the range of MCPs that it allows should be notably impoverished. This is confirmed (see Hernanz 2011).

As is well-known, unlike German, Spanish allows wh-infinitives and relative clauses.

- (405) Juan ha decidido a quién visitar.
 Juan has decided to who visit
 ‘Juan has decided who to visit’
- (406) No tengo un lugar al cual ir.
 not have.1sg a place to which go
 ‘I don’t have a place to go to’

Thus, in principle, infinitives must be able to have a CP layer and that CP layer must be able to do something –at least under normal assumptions about relative- and wh-movement–. The problem is that there is not much that the C layer of infinitives seems able to do.

Let us start from this first sentence, which crucially displays an infinitive selected by a strongly assertive predicate, and whose interpretation is strongly assertive.

- (407) Afirмо haberle dado las flores a María.
 assure.1sg have-her given the flowers to María
 ‘I state having given the flowers to María’

One first fact that makes us see that the CP layer cannot be fully operative in this non-finite context is that the infinitival clause cannot be the main point of assertion:

- (408) A: ¿Qué hiciste con las flores para María?
 what did.2sg with the flowers for María?
 ‘What did you do with the flowers for María?’
- B: # Afirмо haberle dado las flores a María.
 assure.1sg have-her given the flowers to María
 ‘I state having given the flowers to María’

Topic-related operations seem excluded, with the only exception of CLRDS, which are accepted, although not all speakers allow them to the same extent. Remember from the discussion in §6 that CLRDS are presumably in a position lower than CLLDs. This suggests that the C domain of infinitives, even those selected by strongly assertive predicates, is severely impoverished.⁷

- (409) a. *Afirмо, las flores, habérselas dado a María.
 assure.1sg the flowers having-her-them given to María
- b. *Afirмо, María, haberle dado las flores a ella.
 assure.1sg María, having-her given the flowers to her
- c. *Afirмо, en cuanto a las flores, habérselas dado a María.
 assure.1sg, as for the flowers, having-her-them given to María
- d. ?Afirмо habérselas dado a María, las flores.
 assure.1sg having-her-them given to María, the flowers

⁷ There seems to be some variation here with respect to the judgements. See Fernández (this volume) for different judgements. Pablo Rico (p.c.) also notes that some of these examples are not as ungrammatical as I annotate them. In this case, both speakers that accept similar examples involving CLLDs and infinitives are Catalan-Spanish bilinguals. It might be the case that the different judgements could be due to a microparametric distinction on how topics act in each language, also given the radical availability distinction between Catalan and Spanish in what refers to CLRDS. Further research is required here.

With respect to focalisation, in situ focalisation through emphatic stress is marginally allowed, and as Jiménez-Fernández & Ambar (2014) noted for subjunctive clauses, it is allowed if the focus occupies the final position.

- (410) a. *Afirmo, LAS FLORES haberle dado a María.
 assure.1sg THE FLOWERS having-her given to María
 b. *Afirmo sí que haberle dado las flores a María.
 assure.1sg yes that having-her given the flowers to María
 c. ??Afirmo haberle dado LAS FLORES a María.
 assure.1sg having-her given THE FLOWERS to María
 d. Afirmo haberle dado a María LAS FLORES.
 assure.1sg having-her given to María THE FLOWERS

Both utterance- and speaker/addressee-oriented adverbs are unavailable in this context, if they are interpreted as referring to the subordinate infinitive, not the main predicate.

- (411) a. *Afirmo [, lamentablemente, haberle dado las flores a María].
 assure.1sg regretfully having-her given the flowers to María
 b. *Afirmo [, sinceramente, considerar que esto está mal].
 assure.1sg frankly consider that this is wrong

Thus, infinitives have a severely impoverished C-domain that prevents them from being the main point of utterance, projecting any kind of topic except for CLRDS, any kind of focus except for sentence-final ones, and any kind of utterance modification. Their right boundary is available for some information structure, but not the left one. This suggests that movement of the infinitival clause to a relatively high position in a structure where the higher layers are unavailable, impoverished or not projected could be a plausible analysis for these facts.

7.3. *Peripheral or central nature*

Haegeman (2011) finds a third factor that she claims is crucial in how much MCPs are allowed inside (specifically) adverbial clauses, which she analyses, for the relevant cases, as relative clauses. Her claim is that when an adverbial clause is integrated within the main clause, under the scope of its temporal layer, it is defined as a Central Subordinate Clause and allows less MCPs than when it is generated clause-externally, outside the TP domain; in this second case it is peripheral and allows a wider range of MCPs. Consider for instance the contrast between the two following temporal sentences with *while*.

- (412) a. John was sick while his father celebrated his birthday. Central
 b. John stayed home, while his father celebrated his birthday. Peripheral

In the first one, the subordinate clause defines the temporal interval during which John was sick; in the second one, it does not interact with the definition of temporal relations and the clause is just used to define an opposition between what applies to John and to his father. Haegeman notes that the central one rejects MCPs, while the peripheral one allows them.

The distinction also applies to Spanish, here illustrated for one case of each one of the three main domains where MCPs apply:

- (413) Topicalisation
 a. *Juan estaba enfermo mientras el cumpleaños su padre lo celebraba.
 Juan was sick while the birthday his father it celebrated
 b. Mientras que el cumpleaños, su padre lo celebraba, Juan se quedó en casa.
 while that the birthday, his father it celebrated, Juan SE stayed at home
- (414) Focalisation
 a. *Juan estaba enfermo mientras EL CUMPLEAÑOS su padre celebraba.
 Juan was sick while THE BIRTHDAY his father celebrated
 b. Mientras que EL CUMPLEAÑOS su padre celebraba, Juan se quedó en casa.
 while that THE BIRTHDAY his father celebrated, Juan SE stayed at home
- (415) Utterance-oriented adverbs
 a. *Juan estaba enfermo mientras lamentablemente su padre celebraba el cumpleaños.
 Juan was sick while regretfully his father celebrated the birthday
 b. Mientras que, lamentablemente, su padre celebraba el cumpleaños, Juan se quedó en casa.
 while that, regretfully, his father celebrated the birthday, Juan SE stayed at home

Similar contrasts can be replicated for conditional clauses, for instance.

- (416) a. Si tiene sed, Juan bebe agua. Central
 if has thirst, Juan drinks water
 ‘If Juan is thirsty, he drinks water’
 b. Si tienes sed, hay agua en la nevera. Peripheral
 if have.2sg thirst, there.is water in the fridge
 ‘If you are thirsty, there is water in the fridge’
- (417) a. *Si las manzanas no las traes, no haremos tarta. Central
 if the apples not them bring.2sg, not make.1pl cake
 ‘If you don’t bring the apples, we will not make a cake’
 b. Si a Juan no lo has saludado, está en el salón. Peripheral
 if to Juan not him have greeted, is in the living.room
 ‘If Juan you didn’t greet, he is in the living room’

Haegeman (2011), who advocates for a cartographic approach, proposes that peripheral subordinate clauses project a full CP area, where all positions that are needed for information structure are available. Peripheral clauses can have their own illocutionary force, while central clauses display an impoverished CP area.

7.4. Conclusions

To summarise, the distribution of MCPs shows that subordinate clauses behave in one way or the other depending on two facts: the formal properties of their inflection and the nature of the level at which they are introduced in the main clause.

Specifically, we have seen that there is an implicational hierarchy in terms of formal marking along the lines of (418):

(418) indicatives > subjunctives > infinitives

Some indicatives behave as main clauses, while infinitives, even under optimal assertion conditions, have a radically impoverished C layer. Second, we have seen that clauses introduced at a level higher than TP –peripheral– project a richer C domain than those introduced clause-internally.

Finally, the way in which the C layer impoverishes is problematic for both cartographic approaches –because the elements that become unavailable are not adjacent to each other in a plausible functional sequence– and strictly minimalist approaches with just one C layer, because it is unclear that the elements that become unavailable in subordinate and non finite contexts are of the same type.

8. Conclusions and future prospects

It is now time to wrap up this discussion. We have seen that both cartographic approaches and minimalist approaches face challenges when accounting for information structure.

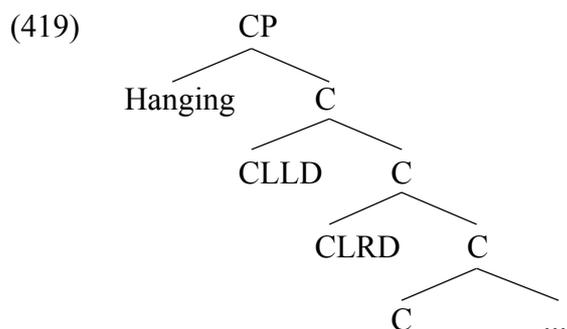
Cartographic approaches make two claims about information structure. First, there are designated positions for topics and foci. Second, these positions are phrases which are strictly ordered inside a Functional Sequence, where there is a place for everything and everything has a place. This view is problematic for the following reasons, that depending of the reader's proclivities can be interpreted as problems that need to be addressed or as counterexamples for the model.

- i. Topics can both precede and follow foci and wh-phrases, which means that topic positions can appear in multiple places inside the hierarchy. Frascarelli & Hinterhölzl (2007) argue that these positions are distinct in their interpretation, but still the same class of topics can be iterated.
- ii. Positing specific [topic] and [focus] features is problematic for a variety of reasons, which makes implausible an approach where each information structure type is obtained by attracting a constituent to a very specific designated head
- iii. There is some evidence in favour of focus-related movement to positions below C, and even inside DPs. This is unexpected for a cartographic model unless those focus positions have interpretations that are distinct from those associated to C.
- iv. It is unclear why CLRDs in Spanish cannot be iterated.
- v. Embedded contexts do not seem to truncate the functional sequence in a completely incremental fashion; distinct projections seem to be absent in parallel.

The minimalist approach is not problem-free either. This approach is not committed to the existence of specific [topic] and [focus] features. A parsimonious structure is proposed, and information structure is obtained by interpretative procedures by moving a constituent to the edge of a category, typically CP, where several elements might be simultaneously allowed as multiple specifiers. The problems of this approach are:

- i. There is no principled account of why there is a strict ordering relation between distinct types of topics when they co-occur.
- ii. The distinct properties of CLLD and CLRD do not clearly follow from any principle, as both should be the result of adjoining items to the same head.
- iii. The nature of information structure-related movement is unclear, and in the absence of designated features, the correlations between form and meaning cannot be explained in a standard fashion within the model, forcing the introduction of prosodic reordering operations or models where the PF representation can directly feed the semantic component without the intermediation of syntax.
- iv. The items that become unavailable in embedded contexts do not seem to form a natural class.

Let us concentrate on one aspect of the problem to see clearly what issues the minimalist account faces. We have seen that CLRDs are lower than CLLDs and both are lower than hanging topics. A cartographic approach could propose a sequence of heads, although it would still be necessary to discuss why heads are ordered precisely in this way. In contrast, minimalist accounts would have to propose something along the lines, in their strict version: three specifiers or adjuncts of the same CP projection.



One first problem –that we will ignore– is how the CLRD order is obtained; perhaps some form of prosodic reordering could be at play here, or (against the evidence discussed in §6), CLRDs could actually be located below TP. Even if we restrict ourselves to the ordering between Hanging Topics and CLLDs, the question is how being distinct specifiers or adjuncts of the same head explains their distinctive properties.

There are three options, as far as we know, to approach these issues.

One of them is to propose that the ordering restriction does not follow from any kind of syntactic principle, but is a requirement of the semantic component, for interpretability reasons. This is the approach undertaken by Fortuny (2008) for the area of T, but its philosophy could easily be extended to the C area. The different specifiers get interpreted in different ways because at each point the objects generated in syntax “must constitute only useful elements for the particular level of interpretation when it attains that level of interpretation” (Fortuny 2008: 116). The challenge is to explain in a principled way these ordering restrictions in detail, but that is an open avenue for minimalism.

The second involves following the approach in Wiltschko (2014) and Ramchand & Svenonius (2014): the clausal architecture is divided in distinct areas, such as the T area (for situations or anchoring, depending on the approach), the C area (for

propositions or linking), the V area (for events or for classification), etc. One could imagine that these areas are abstract, as Wiltschko does, and that they can be replicated in nominal constituents, for instance, opening the door to the existence of focus positions outside from CPs. The big areas are ordered by semantic principles (eg., as Ramchand & Svenonius 2014 do, the C-T-V order is motivated by propositions containing situations that contain events), but within each area the order could be freer, or be subject to interpretability conditions specific of each one of the areas. When one area is weak, its complement might also be similarly weak: for instance, an impoverishment in the C area might be accompanied by an impoverishment of the higher area where the speaker and addressee perspective is defined, explaining the distribution of MCPs that we have pointed out several times in the course of this article. The ordering between CLRDs and CLLDs should follow from independent principles still to be explored, as they would still be contained within what is presumably the same area (given the evidence that they are both in the C area), but this is one way in which cartographic approaches might be able to face their problems.

The third possibility is the one that is at least implicitly adopted in works such as López (2009) and Rubio Alcalá (2014): to adopt an intermediate position where the clausal architecture is richer than C-T-V but still the positions where topics and foci appear are not explicitly designated for them, but used for independent purposes that allow significant connections between sets of properties: for instance, Rubio Alcalá (2014) argues that CLLDs are placed inside FinP, but CP is an independent projection within that system as well. It seems that in order to fully develop this approach a dialogue between cartographers and minimalists seems the best line of action, to see which ingredients of each account explain in a more principled fashion all the complex aspects of the syntax of information structure.

One of the areas where a lot of useful information to further understand the nature of these elements, and of the way in which information structure is grammaticalised in language, is the correlation between the inflectional marking of the clause and the availability of information structure positions. Works like Fortuny (2008) have argued that the features in C replicate the features in T; this could suggest that information structure is licensed or at least has to be parallel to the types of features that are available in the T domain. It might even suggest that the same features that are used for T are used to license information structure, meaning that in both cases we are talking about the same ‘features’, that get distinct interpretations in each area, T vs. C. However, these speculations greatly exceed the boundaries that we had set in this article, and will be left for further research, ours or by someone else.

Antonio Fábregas
UiT-Norges Arktiske Universitet
HSL-Fakultet, Institutt for Språk og Kultur
N-9037, Tromsø
Norway
antonio.fabregas@uit.no

References

- Abels, K. (2010). Factivity in exclamatives is a presupposition. *Studia Linguistica* 64, pp. 141-157. <http://dx.doi.org/10.1111/j.1467-9582.2010.01164.x>
- Abels, K. (2012). The Italian left periphery: a view from locality. *Linguistic Inquiry* 43, pp. 229-254. http://dx.doi.org/10.1162/LING_a_00084

- Aboh, E. (2004). Topic and focus within D. *Linguistics in the Netherlands* 2004, pp. 1-12.
- Akmajian, A. (1979). *Aspects of the grammar of focus in English*. New York, Garland.
- Alexiadou, A. & E. Anagnostopoulou (1998). Parametrizing AGR: word order, V-movement and EPP. *Natural Language and Linguistic Theory* 16, pp. 491-539. <http://dx.doi.org/10.1023/A:1006090432389>
- Anagnostopoulou, E. (1997). Clitic left dislocation and contrastive left dislocation. In E. Anagnostopoulou et al. (eds.), *Materials on Left Dislocation*. Amsterdam, John Benjamins, pp. 151-192. <http://dx.doi.org/10.1075/la.14.11ana>
- Arregi, K. (2003). Clitic left dislocation in contrastive topicalisation. In E. Kaiser & S. Arunachalam (eds.), *Proceedings of the 26th Annual Penn Linguistics Colloquium*. Pennsylvania, UPenn, pp. 31-44.
- Batllori, M. & M. L. Hernanz (2013). Emphatic polarity particles in Spanish and Catalan. *Lingua* 128, pp. 9-30. <http://dx.doi.org/10.1016/j.lingua.2012.11.010>
- Belletti, A. (2001). Inversion as focalisation. In A. C. J. Hulk & J.-Y. Pollock (eds.), *Subject inversion in Romance and the theory of universal grammar*. Oxford, Oxford University Press, pp. 60-90.
- Bentzen, K. et al. (2008). A cross-linguistic survey of epistemic modality in embedded clauses. *NORMS workshop*, 19-20th of May 2008, Tromsø.
- Bleam, T. (1996). *Clitic left-dislocation, quantification and quirky A-bar movement*. Talk, Universitat Autònoma de Barcelona.
- Boeckx, C. (2003). *Islands and chains*. Amsterdam, John Benjamins. <http://dx.doi.org/10.1075/la.63>
- Bosque, I. & J. Gutiérrez Rexach (2009). *Fundamentos de sintaxis formal*. Madrid, Akal.
- Bosque, I. (1999). On focus vs. wh-movement. The case of Caribbean Spanish. *Sophia Linguistica* 44/45, pp. 1-32.
- Camacho, J. (2006). In situ focus in Caribbean Spanish: towards a unified account of focus. In N. Sagarra & A. J. Toribio (eds.), *Selected Proceedings of the 9th HLS*. Sommerville, Cascadilla Press, pp. 13-23.
- Camacho, J. (2013). *Null subjects*. Cambridge, Cambridge University Press. <http://dx.doi.org/10.1017/CBO9781139524407>
- Cardinaletti, A. (1997). Subjects and clause structure. In L. Haegeman (ed.), *The New Comparative syntax*. London, Longman, pp. 33-63.
- Casielles Suárez, E. (2004). *The syntax-information structure interface*. London, Routledge.
- Cecchetto, C. (1999). A comparative analysis of left and right dislocation in Romance. *Studia Linguistica* 53, pp. 40-67. <http://dx.doi.org/10.1111/1467-9582.00039>
- Chomsky, N. (1971). Deep structure, surface structure and semantic interpretation. In D. Steinberg & L. Jakobovits (eds.), *Semantics*. Cambridge, Cambridge University Press, pp. 183-216.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge (Mass.), MIT Press.
- Chomsky, N. (2000). Minimalist inquiries: the framework. In R. Martin et al. (eds.), *Step by step*. Cambridge (Mass.), MIT Press, pp. 89-156.
- Chomsky, N. (2008). On Phases. In Robert Freidin et al. (eds.), *Foundational Issues in Linguistic Theory*. Oxford, Oxford University Press. <http://dx.doi.org/10.7551/mitpress/9780262062787.003.0007>

- Cinque, G. (1981). Su alcune costruzioni a prolessi in italiano. *Annali della Facoltà di Lingue e Letterature Straniere di Cà Foscari* 20, pp. 11-34.
- Cinque, G. (1990). *Types of A'-dependencies*. Cambridge (Mass.), MIT Press.
- Cinque, G. (1993). A null theory of phrase and compound stress. *Linguistic Inquiry* 24, pp. 239-297.
- Clark, H. & E. Clark (1977). *Psychology and Language*. New York, Harcourt, Brace.
- Constantini, F. (2005). *Subjunctive obviation: an interface perspective*. Ph. D. dissertation, Università Ca' Foscari Venezia.
- Contreras, H. (1976). *A theory of word order with special reference to Spanish*. Amsterdam, North Holland.
- Contreras, H. (1991). On the position of subjects. In S. Rothstein (ed.), *Perspectives on phrase structure, heads and licensing*. San Diego, Academic Press, pp. 63-79.
- Den Dikken, M. & A. Szabolcsi (1999). Islands. *GLOT International* 4, pp. 3-8.
- Den Dikken, M. (2006). Specificational copular sentences and pseudoclefts. In H. van Riemsdijk et al. (eds.), *The Blackwell companion to syntax*. Oxford, Blackwell, pp. 292-409. <http://dx.doi.org/10.1002/9780470996591.ch61>
- Dobrovie-Sorin, C. (1990). Clitic doubling, wh-movement and quantification in Romanian. *Linguistic Inquiry* 21, pp. 351-397.
- Emonds, J. E. (1971). *Root and structure-preserving transformations*. Indiana, Indiana Linguistics Club.
- Engdahl, E. (1986). *Constituent questions*. Dordrecht, D. Reidel Publishing.
- Fábregas, A., Á. Jiménez-Fernández & M. Tubino (In press). What's up with dative experiencers. *Proceedings of LSRL 45*.
- Fernández Salgueiro, G. (2008). The case-F valuation parameter in Romance. Theresa Biberauer (ed.) *The limits of syntactic variation*. Amsterdam, John Benjamins, pp. 295-310.
- Fernández-Sánchez, J. (In preparation). *Right dislocation as a biclausal phenomenon. Evidence from Romance languages*. Ph.D. dissertation, Universitat Autònoma de Barcelona.
- Fernández-Sánchez, J. (In press). An (only apparent) case of hyper raising in Spanish. *Iberia*.
- Firbas, J. (1964). On defining the theme in functional sentence perspective. *Travaux Linguistiques de Prague* 1, pp. 267-280.
- Fodor, J. (1979). In defense of the truth gap. In C. K. Oh & D. A. Dinneen (eds.), *Presupposition: syntax and semantics*. New York, Academic Press.
- Fortuny, J. (2008). *The emergence of order in syntax*. Amsterdam, John Benjamins. <http://dx.doi.org/10.1075/la.119>
- Frascarelli, M. & R. Hinterhölzl (2007). Types of topics in German and Italian. In K. Schwabe & S. Winkler (eds.), *On information structure, meaning and form*. Amsterdam, John Benjamins, pp. 87-116. <http://dx.doi.org/10.1075/la.100.07fra>
- Frascarelli, M. (2004). Dislocation, clitic resumption and minimality. In R. Bok-Bennema et al. (eds.), *Romance languages and linguistic theory 2002*. Amsterdam, John Benjamins, pp. 99-118. <http://dx.doi.org/10.1075/cilt.256.07fra>
- Frege, G. (1918). Der Gedanke. *Beiträge Zur Philosophie Des Deutschen Idealismus* 100, pp. 25-50
- Giorgi, A. (2009). *About the speaker*. Oxford, Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780199571895.001.0001>

- Goodall, G. (1999). On preverbal subjects in Spanish. In T. Satterfield et al. (eds.), *Current Issues in Romance Languages*. Amsterdam, John Benjamins, pp. 95-110.
- Green, Georgia M. (1976). Main clause phenomena in subordinate clauses. *Language* 52, pp. 382-397. <http://dx.doi.org/10.2307/412566>
- Grimshaw, J. (1979). Complement selection and the lexicon. *Linguistic Inquiry* 10, pp. 279-326.
- Gundel, J. (1974). *The role of topic and comment in linguistic theory*. New York, Garland.
- Haegeman, L. (2006). Conditionals, factives and the left periphery. *Lingua* 116, pp. 1651-1669. <http://dx.doi.org/10.1016/j.lingua.2005.03.014>
- Haegeman, L. (2011). *Adverbial clauses, main clause phenomena and the composition of the left periphery*. Oxford, Oxford University Press.
- Halliday, M. A. K. (1967). Notes on transitivity and theme in English. *Journal of Linguistics* 3, pp. 37-81 and 311-321.
- Hernanz, M. Ll. & J. M. Brucart (1987). *La sintaxis*. Barcelona, Crítica.
- Hernanz, M. Ll. (2011). Sobre la periferia de los infinitivos. In M. V. Escandell Vidal et al. (eds.), *60 problemas de gramática*. Madrid, Akal, pp. 263-271.
- Hockett, C. F. (1958). *A course in modern linguistics*. New York, MacMillan.
- Höhle, T. N. (1992). Über Verum-Fokus im Deutschen. In J. Jacobs (ed.), *Informationstruktur und Grammatik*. Opladen, Westdeutscher Verlag, pp. 112-141. http://dx.doi.org/10.1007/978-3-663-12176-3_5
- Hooper, J. B. & S. Thompson (1973). On the applicability of root transformations. *Linguistic Inquiry* 4, pp. 465-497.
- Iatridou, S. (1995). Clitics and island effects In R. Izvorski & V. Tredinnick (eds.), *UPenn WPL* 2, pp. 11-30.
- Irurtzun, A. (2007). *The grammar of focus at the interfaces*. Ph.D. dissertation. University of the Basque Country.
- Jackendoff, R. (1972). *Semantic interpretation in generative grammar*. Cambridge (Mass.), MIT Press.
- Jackendoff, R. (2002). *Foundations of language*. Oxford, Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780198270126.001.0001>
- Jaeggli, O. (1987). ECP effects at LF in Spanish. In D. Birdsong et al. (eds.), *Advances in Romance Linguistics*. Dordrecht, Foris, pp. 113-151.
- Jiménez-Fernández, Á. & M. Ambar (2015). Subjunctives: how much left-periphery do you need? *Proceedings of the Olomouc Linguistic Colloquium* 2014, pp. 45-67.
- Jiménez-Fernández, Á. L. & S. Miyagawa (2014). A feature inheritance approach to root phenomena and syntactic variation. *Lingua* 145, pp. 276-302. <http://dx.doi.org/10.1016/j.lingua.2014.04.008>
- Jiménez-Fernández, Á. L. (2013). Microvariation at the IS-syntax interface: the case of focus fronting. Paper presented at the *I International Workshop on the Syntactic Variation of Spanish and Catalan dialects*, Barcelona.
- Jiménez-Fernández, Á. L. (2015). When focus goes wild: an empirical study of two syntactic positions for information focus. *Linguistics beyond and within* 1, pp. 119-133.
- Karttunen, L. (1971). Some observations on factivity. *Papers in Linguistics* 4, pp. 55-69. <http://dx.doi.org/10.1080/08351817109370248>
- Kayne, R. (1983). Connectedness. *Linguistic Inquiry* 14, pp. 223-249.
- Kayne, R. (1994). *The antisymmetry of syntax*. Cambridge (Mass.), MIT Press.

- Kiparsky, P. & C. Kiparsky (1971). Fact. In M. Bierwisch & K. Heidolph (eds.), *Progress in Linguistics*. The Hague, Mouton and Co.
- Kiss, E. (1998). Identificational focus versus information focus. *Language* 74, pp. 245-273. <http://dx.doi.org/10.1353/lan.1998.0211>
- Krämer, M. (2009). *The phonology of Italian*. Oxford, Oxford University Press.
- Kuno, S. (1972). Functional sentence perspective: a case study from Japanese and English. *Linguistic Inquiry* 3, pp. 269-320.
- Laka, I. (1990). *Negation in syntax. On the nature of functional categories and projections*. Doctoral dissertation, MIT.
- Lambrecht, K. (1994). *Information structure and sentence form*. Cambridge, Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511620607>
- Larson, R. & M. Sawada (2012). Root transformations and quantificational structure. In L. Aelbrecht et al. (eds.), *Main Clause Phenomena: New Horizons*. Amsterdam, John Benjamins, pp. 47-79. <http://dx.doi.org/10.1075/la.190.03lar>
- Lebeaux, D. (1988). *Language acquisition and the form of the grammar*. Doctoral dissertation, University of Massachusetts, Amherst.
- Leonetti, M. & V. Escandell (2009). Fronting and verum focus in Spanish. In A. Dufter & D. Jacob (eds.), *Focus and background in Romance languages*. Amsterdam, John Benjamins, pp. 155-204. <http://dx.doi.org/10.1075/slcs.112.07leo>
- Leonetti, M. (1999). El artículo. In I. Bosque & V. Demonte (dirs.), *Gramática descriptiva de la lengua española*. Madrid, Espasa, pp. 787-890.
- Leonetti, M. (2014). Spanish VSX. In K. Lahousse & S. Marzo (eds.), *Romance Languages and Linguistic Theory 2012*. Amsterdam, John Benjamins, pp. 37-63. <http://dx.doi.org/10.1075/rllt.6.02leo>
- López, L. (2003). Steps for a well-adjusted dislocation. *Studia Linguistica* 57, pp 193-231. <http://dx.doi.org/10.1111/j.0039-3193.2003.00104.x>
- López, L. (2009). *A derivational syntax for information structure*. Oxford, Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780199557400.001.0001>
- Luján, M. (1999). A unified approach to control and obviation. In J. Franco et al. (eds.), *Grammatical analyses in Basque and Romance Linguistics*. Amsterdam, John Benjamins, pp. 105-130. <http://dx.doi.org/10.1075/cilt.187.07luj>
- Mathesius, V. (1942). Language and style. *Cteni o Jazyce a Poezii*, 13-102.
- McNally, L. (1998). On the linguistic encoding of information packaging instructions. In P. Culicover & L. McNally (eds.), *The limits of syntax*. New York, Academic Press, pp. 161-184.
- Moreno Cabrera, J. C. (1999). Las funciones informativas: las perífrasis de relativo y otras construcciones perifrásticas. In I. Bosque & V. Demonte (dirs.), *Gramática Descriptiva de la Lengua Española*. Madrid, Espasa, pp. 4245-4302.
- NGLE. RAE & ASALE (2009). *Nueva Gramática de la Lengua Española*. Madrid, Espasa.
- Olarrea, A. (2012). Word order and information structure. In J. I. Hualde et al. (eds.), *The Handbook of Hispanic Linguistics*. Malden, Blackwell, pp. 603-629. <http://dx.doi.org/10.1002/9781118228098.ch28>
- Ordóñez, F. & E. Treviño (1999). Left-dislocated subjects and the pro-drop parameter. *Lingua* 108, pp. 39-68. [http://dx.doi.org/10.1016/S0024-3841\(98\)00020-5](http://dx.doi.org/10.1016/S0024-3841(98)00020-5)

- Ordóñez, F. (2007). Cartography of postverbal subjects in Spanish and Catalan. In S. Baaúw et al. (eds.), *Romance Languages and Linguistic Theory 2005*. Amsterdam, John Benjamins, pp. 259-280. <http://dx.doi.org/10.1075/cilt.291.17ord>
- Ortega-Santos, I. (2016). *Focus-related operations at the right edge in Spanish*. Amsterdam, John Benjamins. <http://dx.doi.org/10.1075/ihll.7>
- Ott, D. (2011). *Local instability: the syntax of split topics*. Ph.D. dissertation, Harvard University. <http://dx.doi.org/10.1075/lv.15.2.04ott>
- Ott, D. (2014). An ellipsis approach to contrastive left-dislocation. *Linguistic Inquiry* 45, pp. 269-303.
- Ott, D. (2016). Connectivity in left-dislocation and the composition of the left periphery. *Linguistic Variation* 15, pp. 225-290.
- Pagin, P. (2015). Assertion. In E. N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*. <<http://plato.stanford.edu/archives/spr2015/entries/assertion/>>.
- Partee, B. H., A. ter Meulen & R. Ward (1990). *Mathematical methods in linguistics*. Dordrecht, Kluwer.
- Poletto, C. (2006). Old Italian scrambling: the low left periphery of the clause. In P. T. Brandt & E. Fuss (eds.), *Form, structure and grammar*. Berlin, Akademie Verlag, pp. 209-229. <http://dx.doi.org/10.1524/9783050085555.209>
- Postal, P. (1966). On so-called pronouns in English. *Monograph series on language and linguistics* 19, pp. 177-206.
- Ramchand, G. & P. Svenonius (2014). Deriving the functional hierarchy. *Language Sciences* 46, pp. 152-174. <http://dx.doi.org/10.1016/j.langsci.2014.06.013>
- Reinhart, T. (1976). *The syntactic domain of anaphora*. Ph.D. dissertation, MIT.
- Reinhart, T. (1981). Pragmatics and linguistics: an analysis of sentence topics. *Philosophica* 27, pp. 53-94.
- Reinhart, T. (2006). *Interface strategies*. Cambridge (Mass.), MIT Press.
- Rizzi, L. (1986). On the status of subject clitics in Romance. In O. Jaeggli et al. (eds.), *Studies in Romance Syntax*. Dordrecht, Foris, pp. 391-419.
- Rizzi, L. (1997). The fine-structure of the left periphery. In L. Haegeman (ed.), *Elements of Grammar*. Dordrecht, Kluwer, pp. 281-337. http://dx.doi.org/10.1007/978-94-011-5420-8_7
- Rizzi, L. (2004). Locality and left-periphery. In A. Belletti (ed.), *Structures and beyond*. Oxford, Oxford University Press, pp. 223-251.
- Rochemont, M. (1986). *Focus in generative grammar*. Amsterdam, John Benjamins. <http://dx.doi.org/10.1075/sigla.4>
- Rooth, M. (1992). A theory of focus interpretation. *Natural Language Semantics* 1, pp. 75-116. <http://dx.doi.org/10.1007/BF02342617>
- Ross, J. R. (1973). The Penthouse Principle and the order of constituents. In C. T. Corm et al. (eds.), *You take the high node and I'll take the low node*. Chicago, CLS, pp. 397-422.
- Rubio Alcalá, C. (2014). *Syntactic constraints of topicalisation phenomena*. Ph.D. dissertation, Universitat Autònoma de Barcelona.
- Rubio Alcalá, C. (2016). Topic extraction from adverbial clauses. *Borealis* 5 (1), pp. 1-30. <http://dx.doi.org/10.7557/1.5.1.3744>
- Sáez del Álamo, L. Á. (2015). About the copula of certain Caribbean Spanish focus constructions. Talk at the *Workshop on Copulas*, University of Greenwich, June 2015.

- Samek Lodovici, V. (2005). Prosody-syntax interaction in the expression of focus. *Natural Language and Linguistic Theory* 23, pp. 687-755. <https://doi.org/10.1007/s11049-004-2874-7>
- Samek Lodovici, V. (2015). *The interaction of focus, givenness and prosody*. Oxford, Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780198737926.001.0001>
- Schütze, C. T. (2001). On the nature of default case. *Syntax* 4, pp. 205-238. <https://doi.org/10.1111/1467-9612.00044>
- Selkirk, E. (1984). *Phonology and syntax. The relation between sound and structure*. Cambridge (Mass.), MIT Press.
- Selkirk, E. (1995). Sentence prosody: intonation, stress and phrasing. In J. Goldsmith (ed.), *The Handbook of Phonological Theory*. Oxford, Blackwell.
- Sheehan, M. (2007). *The EPP and null subjects in Romance*. Ph. D. dissertation, Newcastle University.
- Sportiche, D. (1983). *Structural invariance and symmetry in syntax*. Ph. D. dissertation, MIT.
- Stalnaker, R. (1978). Assertion. In P. Cole (ed.), *Pragmatics, syntax and semantics* 9. New York, Academic Press, pp. 315-332.
- Strawson, P. F. (1964). Identifying reference and truth values. *Theoria* 3, pp. 96-118. <http://dx.doi.org/10.1111/j.1755-2567.1964.tb00404.x>
- Suñer, M. (2003). The lexical preverbal subject in a Romance null subject language. In R. Núñez-Cedeño et al. (eds.), *Language knowledge and use*. Amsterdam, John Benjamins, pp. 341-357.
- Szabolcsi, A. (2006). Weak vs. Strong Islands. In H. van Riemsdijk et al. (eds.), *The Blackwell Companion to Syntax*. Oxford, Blackwell, pp. 479-532. <http://dx.doi.org/10.1002/9780470996591.ch64>
- Szendrői, K. (2001). *Focus and the syntax-phonology interface*. Doctoral dissertation, University College London.
- Toribio, A. J. (1992). Proper government in Spanish subject relativisation. *Probus* 4, pp. 291-304. <http://dx.doi.org/10.1515/prbs.1992.4.3.291>
- Uriagereka, J. (1995). Aspects of the syntax of clitic placement om Western Romance. *Linguistic Inquiry* 26, pp. 79-123.
- Vallduví, E. & E. Engdahl (1995). Information packaging in HPSG. In M. Hovav & A. Mittwoch (eds.), *IATL 2: Proceedings of the Tenth Annual Conference of the Israeli Association for Theoretical Linguistics and the Workshop on the Syntax-Semantics Interface*. Jerusalem, Israeli Association for Theoretical Linguistics, pp. 22-50.
- Vallduví, E. & M. Vikuna (1998). On rheme and kontrast. In P. Culicover & L. McNally (eds.), *The limits of syntax*. New York, Academic Press, pp. 161-184.
- Vallduví, E. (1990). *The informational component*. Doctoral dissertation, University of Pannsylvania, Philadelphia.
- Valmala, V. (2011). *On Spanish Clitic Left Dislocation and the Proference of Move over Bind*. GLIF Seminar, Universitat Pompeu Fabra.
- Van Dijk, T. (1979). *Text and context*. London, Longman.
- Villalba, X. (1998). Right dislocation is not right dislocation. In O. Fullana & F. Roca (eds.), *Studies on the syntax of Central Romance Languages*. Girona, Universitat de Girona, pp. 227-241.
- Villalba, X. (2000). *The syntax of sentence periphery*. Doctoral dissertation, Universitat Autònoma de Barcelona.
- Ward, G. (1988). *The semantics and pragmatics of preposing*. New York, Garland.

- Weil, H. (1879). *De l'ordre des mots dans les langues anciennes comparées aux langues modernes*. Paris, Joubert.
- Wiltschko, M. (2014). *The universal structure of categories*. Cambridge, Cambridge University Press. <http://dx.doi.org/10.1017/CBO9781139833899>
- Wurmbrand, S. (2007). Infinitives are tenseless. *UPenn WPL* 13, pp. 407-420.
- Zagona, K. (2002). *The syntax of Spanish*. Cambridge, Cambridge University Press.
- Zanuttini, R. & H. P. Portner (2003). Exclamative clauses: at the syntax-semantics interface. *Language* 79, pp. 39-81. <http://dx.doi.org/10.1353/lan.2003.0105>
- Zubizarreta, M. L. (1994). Grammatical representation of topic and focus: implications for the structure of the clause. *Cuadernos de Lingüística* 2, pp. 181-208.
- Zubizarreta, M. L. (1998). *Word order, prosody and focus*. Cambridge (Mass.), MIT Press.
- Zubizarreta, M. L. (1999). Las funciones informativas: tema y foco. In I. Boque & V. Demonte (dirs.), *Gramática descriptiva de la lengua española*. Madrid, Espasa, pp. 4215-4244.