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### **TOPICALIZATION\***

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### Abstract

Chomsky (1977) argued for a dedicated topic position above the CP. I will develop this idea in several directions. First, I will show that this topic position hosts Aboutness topics uniformly across three languages: English, Japanese, and Spanish. Second, while this topic position occurs freely in matrix clauses, in complement clauses it can only occur with certain predicates identified by Hooper and Thompson (1973). Using Villalta's (2008) analysis of the subjunctive mood in Spanish, I will argue that the limitations on the occurrence of the topic position in complement clauses are due to the semantic properties of these clauses and the predicates that select them. Finally, we will see that the other two kinds of topics, Contrastive and Familiar topics, vary in their distribution across languages. I will show that this variation is predicted by the typology under Strong Uniformity (Miyagawa (2010, 2017)).

Keywords: topic, root, main clause, strong uniformity

### 1. Introduction

Many languages have a way to mark the topic in a sentence.

- (1) **This book,** I really like.
- (2) a. As for this book, I really like it.
  - b. This book, I really like it.

Example (1) is typically called the topic construction while (2) is referred to as left dislocation. In both cases some sort of topic phrase is placed at the head of the sentence.

<sup>\*</sup>I am grateful to Peter Culicover, David Hill, and Despina Oikonomou for comments on various aspects of this article. I was unable to address many questions that came up, which I hope to do in future work.

We will refer to both as topicalization. There are a number of issues to contend with in analyzing these constructions, including:

- (3) (i) What is the "meaning" of topicalization?
  - (ii) How does the topic phrase end up where it does, at the head of the clause?
  - (iii) Can topicalization occur freely, in any environment?

As it turns out, the answers to (3ii) and (3iii) vary from language to language, and within a language, the answers may differ depending on which topic "meaning" (3i) one is considering—for there are more than one. One point that is clear at the outset is that to deal with sentences like (1) and (2), one needs to incorporate into the grammar a topic position that occurs somewhere above the TP. In Chomsky (1977), it is noted that no rule could create a structure such as *as for this book* within the core sentence (CP), hence the topic position must be outside of this core portion of the structure. He proposes it to be S", which we will translate into the more modern designation TopP, which occurs above CP.

(4) 
$$TopP \rightarrow Top CP$$

Furthermore, as observed by Sag (1976), the topic construction can occur in an embedded structure.

(5) I informed everyone that [this book, they should read by tomorrow]. To accommodate this fact, Chomsky further proposes the following (again we update the labels to more modern versions).

(6) 
$$CP \rightarrow \left\{ \begin{array}{c} C TP \\ C TopP \end{array} \right\}$$

Along with accounting for embedded topics, this rule, in combination with (4), allows for topic recursion (Chomsky (1977)), of which (7) is an example.

(7) As for John, as far as this book is concerned, he will definitely have to read it.

In principle there is no upper limit on the number of topics allowed, although in practice sentential meaning and other factors intervene to restrict the number. Typically there is just one topic, but two are not impossible, as (7) shows.

In this article I will look closely at the distribution of topics across languages. As we will see, regardless of the language, one type of topic, called the *Aboutness* topic by Frascarelli and Hinterhölzl (2007), occurs at the TopP level. In contrast, the other two topics identified by Frascarelli and Hinterhölzl, *Contrastive* and *Familiar* topics, may vary in position, either at the TopP level or the TP level, depending on the language. In a language such as English, where all topics, including Contrastive and Familiar topics apparently occur in the same structural position, TopP, there is a severe restriction on the occurrence of topics in subordinate clauses (Emonds (1969), Hooper and Thompson (1973)). But in languages that allow Contrastive and Familiar topics to occur at the TP level, those topics occur freely in the complement clause of all kinds of verbs (Jiménez-Fernández and Miyagawa (2014), Miyagawa (2012, 2017)). This variation between TopP and TP topics is a function of Strong Uniformity, which is a system of language typology that designates where  $\phi$ -features and  $\delta$ -features (discourse-configurational features) of topic and focus may occur (Miyagawa (2010, 2017)).

While I adopt Chomsky's (1977) analysis of topicalization, there are alternatives. Higgins (1973) and Bowers (1976), for example, argue that the topic is in Spec,CP, not in a higher projection TopP. Our proposal is not incompatible with this approach, since the idea (as detailed in sections 2 and 3) is that, while the topic itself is in TopP, in many cases there is an operator in Spec,CP that links the topic above it to a lower position inside TP. Rochemont (1989) argues that the topic is in Spec,TP, an idea that I will pursue not for English but for languages such as Japanese and Spanish. More recent analyses postulate a topic projection, such as Rizzi's (1997) and Haegeman's (2012) cartographic analyses. The analysis in this article is compatible in spirit with these works, though not necessarily in detail. I will not assume that all topics occur in a projection dedicated to topics, as the cartographic approach assumes. Instead, I will adopt an approach in which discourse-configurational features such as topic and focus appear on C in certain languages and on T in other languages, and the position of the topic feature dictates where the topic may appear. My analysis does not exclude a special projection

for topics, since I will argue that TopP is dedicated to Aboutness topics across all languages and, in some languages, to the other topics as well. However, we will see that in other languages, Contrastive and Familiar topics may appear in a projection other than TopP.

# 2. Topics Associated and Not Associated with Movement

The English topic construction is associated with movement (Chomsky (1977)), as shown by the fact that it is sensitive to islands.

- (8) a. This book, I really like.
  - b. This book, I believe Mary will assign to all her students to read.
  - c. \*This book, I hope that Mary will see the need to assign to all her students to read.
  - d. \*This book, I wonder who will read.

In contrast, another form of topicalization, left dislocation, ignores islands.

- (9) a. This book, I hope that Mary will see the need to assign **it** to all her students to read.
  - b. This book, I wonder who will read it.
  - c. As for this book, I wonder who will read it.

It is reasonable to assume from the occurrence of the "resumptive" *it* and the insensitivity to islands that there is no movement involved in left dislocation. Presumably, the topic phrase is externally merged at Spec, TopP, and the "resumptive" *it* is interpreted as coreferential with it (or with the DP inside it, in the case of *as for* \_\_\_\_\_\_). This is not a trivial matter: *it* being a pronoun, it should be free to refer to some entity outside of the sentence instead of the sentence-internal topic, but that would lead to a topic that isn't obviously connected to the content of the sentence, making it extremely difficult if not impossible to know how to interpret it as a topic.

On the other hand, the topic construction shows properties of movement, such as having a gap and being island sensitive, as we saw. Nevertheless, Chomsky argues that the topic expression itself (*this book*) is externally merged, just as with left dislocation. The movement that occurs, according to Chomsky, is a form of *wh*-movement; the *wh*-phrase that moves to Spec,CP is subsequently deleted.

(10) [
$$_{\text{TopP}}$$
 this book [ $_{\text{CP}}$   $wh_i$  [ $_{\text{TP}}$  I really like  $t_i$ ]]]



The deletion of the *wh*-phrase leads to an open sentence, and a rule of predication applies to the interpretation of the topic construction.

Chomsky (1977) develops a theory in which movement, as an operation, is independent of any particular construction. As had been shown earlier by Ross (1967), movement is sensitive to islands regardless of the construction in which it occurs, and has other global properties, such as leaving a gap and being sensitive to bridge/non-bridge constructions. Chomsky argues specifically that the movement that occurs in a wide range of constructions—including *wh*-questions, relative clauses, clefts, comparatives, and the topic construction—is the same operation, *wh*-movement. Of these, the topic construction is exceptional in that a *wh*-phrase never actually emerges in it. While there is no doubt that some movement takes place, there is a question as to whether it is in fact *wh*-movement. If it is *wh*-movement, there is presumably a +*wh* feature at C to attract the *wh*-phrase to its specifier. This is the solution opted for by Chomsky, as in (10).

In a more modern model of *wh*-movement, such as Cable's (2010), it isn't the +*wh* feature that attracts the *wh*-phrase but what Cable calls the Q feature; the *wh*-phrase has a matching Q feature attached to it and is pied-piped along with that feature. The Q feature occurs with *wh*-phrases and, in some languages such as Japanese and Tlingit, also with indefinites; these are expressions that we would expect not to topicalize under normal circumstances.

Chomsky's (1977) goal was to show that movement was an operation independent of any construction. He happened to call the movement in question wh-movement simply because many of the constructions exhibit a wh-phrase. Today, we would unify these movements as A'-movement instead of specifically as wh-movement. A'-movement is associated with some feature on C that attracts an XP. For true wh-movement, the feature is Q. For the topic construction, I will adopt the idea from a number of works (e.g. Rizzi (1997)) that the relevant feature on C is the topic feature, a kind of  $\delta$ -feature (discourse-configurational feature), that attracts an empty topic operator to the specifier of CP.

<sup>&</sup>lt;sup>1</sup>See Koster (1978) for an alternative view that does not necessitate postulating movement for these constructions.



## 3. Topic Islands

We saw above that the topic construction is subject to island effects. Another observation made in the literature is that topicalization itself may create an island. Under normal circumstances, topicalization blocks *wh*-movement.

- (12) a. \*To whom did this book Mary give?
  - b. \*When did this book everyone read?
  - c. \*Where did this book Henry buy?

In these examples, topicalization disallows *wh*-movement across it.<sup>2</sup> Interestingly, the one exception appears to be *why*.

(13) ?Why did **this book** everyone buy at a store (instead of online)?

Presumably, *why* is not subject to the topic-island effect because it has the option of being directly merged into the Spec,CP where it takes scope (Bromberger (1987, 1992), Rizzi (1990), Ko (2005), etc.), thus it doesn't need to move from within the TP across the topic.

The same topic island can be observed in embedded environments, as in the following examples (cited in Haegeman (2012)).

This is a relative clause, a fact that may—or may not—contribute to overcoming the topic island. I will leave this issue open.

There are further exceptions noted in the literature. The following are cited in Haegeman (2012) as cases of a topic being extracted across a wh-phrase.

(ii) ?This book, to whom should we give?

(Pesetsky (1989: 13, (39b)), attributed to A.Watanabe)

(iii) ?These prices, what can anyone do about?

(Langendoen (1979: 429), Pesetsky (1989: 13, (39b)), via A. Watanabe) As shown by the question mark, speakers do not find these entirely natural. Perhaps we are dealing with a left-dislocation construction where the resumptive *it* is unpronounced. I will not attempt a more detailed analysis of these exceptions in this article.

<sup>&</sup>lt;sup>2</sup> There are counterexamples in the literature to the claim that topicalization blocks *wh*-movement; the following is from Radford (2009: 327; quoted in Haegeman (2012)).

<sup>(</sup>i) A university is the kind of place in which, that kind of behavior, we cannot tolerate.

- (14) a. \*Who did you say that **to Sue** Bill introduced? (Boeckx and Jeong (2004: 84))
  - b. \*Which company did Bill warn you (that) flights to Chicago had canceled?

(Emonds (2004: 77))

c. \*Which books did Becky say that to Aaron she will give?

(Koizumi (1995: 140))

d. \*On which table did Lee say that **these books** she will put?

(Koizumi (1995: 140))

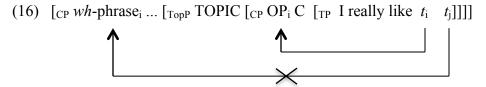
e. \*How do you think that **this problem** John solved?

(Lasnik and Saito (1992: 96))

All of these examples involve topicalization in the complement clause together with *wh*-extraction. It is important to note that, *wh*-movement aside, the complement clauses in these examples do allow topicalization (something we will see later is not always the case in English). I give examples below of topicalization with each of the predicates above (*say*, *warn*, *think*).

- (15) a. Mary said that **this book** everyone must read by the next class.
  - b. John warned everyone that **this book** they must all read by the next class.
  - c. Joe thinks that **this book** everyone should read for their own good.

How can we account for this topic-island phenomenon? The simplest solution is to consider it an instance of the violation of Relativized Minimality (Rizzi (1990)), according to which an A'-movement (topic movement) blocks another A'-movement (whmovement) from occurring across it.



To make this violation more precise, I will assume that Focus is involved in *wh*-questions (Rizzi (1997), Miyagawa (2010), etc.). In Strong Uniformity, Focus and Topic are both  $\delta$ -features, thus they may enter into competition and induce a Relativized Minimality violation.

Another environment where topicalization cannot occur is in what Haegeman (2012, etc.) calls "central adverbial clauses," which are temporal clauses that relate to the

time of the event of the main clause. The following are taken from Haegeman (2012).

- (17) Central adverbial clauses (Haegeman (2012), etc.)
  - a. When she began to write her regular column again, I thought she would be OK.
  - a'. \*When **her regular column** she began to write again, I thought she would be OK.
  - a". \*I thought she would be OK when **her regular column** she began to write again.
  - b. While I was revising this paper last week, I thought of another analysis.
  - b'. \*While **this paper** I was revising last week, I thought of another analysis.
  - b". \*I thought of another analysis while **this paper** I was revising last week.
  - c. I won't take time off until I have finished this handout.
  - c'. \*I won't take time off until **this handout** I have finished.
  - c". \*Until this handout I have finished, I won't take time off.

As shown, the central adverbial clause, regardless of where it occurs, does not permit topicalization.

I will adopt an essential component from Haegeman (2006, 2010), whose analysis is based on competition. She observes that in these adverbial clauses, operator movement (of *when*) has taken place. Though there is no obvious gap, we can see evidence that *when* has undergone movement in examples like the following, in which it has ambiguous scope.

(18) John left when Sheila said he should leave.

When here may be pointing to the time when Sheila said the quoted material (the "high" reading), or to the time when John should leave (the "low" reading). Larson (1987, 1990) proposes the following wh-movement representations for high and low construal (see also Geis (1970) and Johnson (1988), among others, for relevant discussion).

- (19) a. John left [CP] when [IP] Sheila said [CP] [IP] he should leave [IP]  $t_i$
- b. John left [ $_{CP}$  when $_{i}$  [ $_{IP}$  Sheila said [ $_{CP}$  [ $_{IP}$  he should leave  $t_{i}$ ]]]] (Larson (1987)) According to Haegeman (2006, 2010), the occurrence of the wh-operator when blocks a topic from occurring in the same position. I will make a slight adjustment to her analysis and collapse this effect with the topic-island effect we saw earlier. I assume the operator movement of when is wh-movement. As we saw earlier, wh-movement cannot take place

from within a topicalized structure due to Topic and Focus being in competition, which induces a Relativized Minimality violation.

(20) 
$$[CP \ wh\text{-phrase}_j \dots [TopP \ TOPIC \ [CP \ OP_i \ C \ [TP \ I \ really \ like \ t_i \ t_j]]]]$$

Unlike central adverbial clauses, what Haegeman (2012) calls peripheral adverbial clauses do allow topicalization. These are adjunct clauses that add a comment on the event of the main clause without directly linking to its meaning (such as temporal occurrence). Haegeman cites the following examples.

- (21) Peripheral adverbial clauses (Haegeman (2012, etc.))
  - a. I think we have more or less solved the problem for donkeys here, because **those we haven't got,** we know about. (*Guardian*, G2, February 18, 2003)
  - b. We don't look to his paintings for common place truths, though **truths** they contain none the less. (*Guardian*, G2, February 18, 2003: 8, col. 1)
  - c. His face not many admired, while **his character** still fewer felt they could praise. (Quirk et al. (1985: 1378))
  - d. While **other brilliant things** hardly anyone buys—I'd put my friend's first novel and sherry in this category. (*Observer*, December 6, 2009)
  - e. Sophie would put Len between two women who would have to bear his halitosis, while **Gillian** she buried mid-table among the also-rans.

(Sebastian Faulks 2010: 40)

f. If **some precautions** they did indeed take, many other possible measures they neglected.

Haegeman (2012) argues that peripheral adverbial clauses occur higher in the structure (CP) of the matrix clauses than central adverbial clauses (TP). From our perspective, a salient point is that peripheral adverbial clauses do not appear to involve any kind of operator movement. Thus, in the following, *while* and *if* only have high construal (with *Mary said*, not the complement clause).

- (22) John was watching TV while Mary said that he should be studying.
- (23) If Mary said that she will attend the meeting, I will also attend.

We thus would not expect any Relativized Minimality violation in the peripheral adverbial construction.

### 4. Truncation

Hooper and Thompson (1973: 485) pointed out that infinitival clauses do not allow topicalization.

- (24) a. My friends tend to support the more liberal candidates.
  - b. \*My friends tend the more liberal candidates to support.

Hooper and Thompson, followed by Haegeman (2006, 2010), suggest that the failure of the infinitival clause to host a topic is due to the fact that an infinitival clause is a reduced clause. In cartographic terms (Rizzi (1997, 2001)), such reduction would amount to the truncation of some higher levels of structure.

$$(25) ForceP > IntP > TopP > ... > Fin(ite)P$$

By way of contrast, a *wh*-phrase may occur at the left edge of an infinitival clause (see Shlonsky and Soare (2011)) and references therein; the following example is based on examples in their paper).

(26) Mary asked Bill a. who/what to serve.

b. when/how/where to serve oysters.<sup>3</sup>

Shlonsky and Soare (2011), who adopt the cartographic approach, suggest that truncation leaves the "WhP" projection as the top projection of an infinitival clause, allowing a *wh*-phrase to occur.

(27) 
$$ForceP > IntP > TopP > FocP > WhP > Fin(ite)P$$

WhP is a position that, along with FocP, can host a *wh*-phrase other than *why* (see footnote 2).

# 5. Topicalization and the Root: Truncation or Topic Island?

In the remainder of the article, I will look closely at topicalization in subordinate environments across three types of languages and three types of topics.

<sup>&</sup>lt;sup>3</sup> Shlonsky and Soare (2011) provide these examples in service of their main point: that unlike other *wh*-phrases, *why* is not allowed in the infinitival clause.

<sup>(</sup>i) ??Mary asked Bill why to serve oysters. See their article and Miyagawa (2017) for a discussion of this difference.

While Chomsky (1977) does not indicate any restrictions on the occurrence of the topic phrase, Emonds (1969) observes that topicalization is a root transformation and should therefore be limited to root environments.

## (28) Root

A root will mean either the highest S in a tree, an S immediately dominated by the highest S or the reported S in indirect discourse. (Emonds (1969: 6))

- (29) a. This book, everyone will most probably read without being told.
  - b. Because this book, everyone will most probably read without being told, you need not assign it.
  - c. John said, this book, everyone will most probably read without being told.
- d. \*I deny that this book, everyone will most probably read without being told. Sentences (29a–c) exemplify the three root environments, while (29d) does not conform to any of them, hence topicalization leads to ungrammaticality.

In the two preceding sections, we looked at two cases of incompatibility with topicalization: operator movement and truncation. First we saw that topicalization creates an island that blocks (additional) operator movement. In Miyagawa (2017), based in part on the work of Haegeman (2006, 2010, 2012), I argue that the ungrammaticality of examples such as (29d) is essentially another case of topic-island violation. As Haegeman argues, the complement clause of verbs such as *deny* contains operator movement. For her, this operator competes with the topic at Spec,CP, blocking the latter from occurring; in our analysis, topicalization creates an island that blocks the operator from raising to Spec,CP, an analysis that is empirically equivalent to that of Haegeman's.

However, I will argue below that the ungrammaticality of (29d) is due instead to truncation—specifically the absence of the TopP layer above CP. I will use the same set of data as in Jiménez-Fernández and Miyagawa (2014) and Miyagawa (2017), though in those earlier works I gave a topic-island analysis for examples like (29d).

The difference between the earlier works and the present work is that in the earlier works I focused on the differences among languages with respect to topicalization in complement clauses. The types of topics that *can* vary from language to language are Contrastive and Familiar topics, so naturally I focused on them. However, if we focus instead on Aboutness topics, which are cross-linguistically uniform in behavior, we are

led to the conclusion that the ungrammaticality of (29d) is due to truncation that deprives the structure of the TopP projection. In the case of the infinitival clause, the truncation analysis is motivated by the lack of evidence for any higher levels of structure than TP (not even CP). For complement clauses like the one in (29d), I will adopt an analysis in Villalta (2008) to motivate the absence of TopP.

## 5.1. Hooper and Thompson (1973)

Emonds (2004), in response to criticism by Hooper and Thompson (1973), which I will go over below, expands the notion of "the reported S in indirect discourse" to include what he calls "root-like indirect discourse embeddings" (or "RIDEs"), which he defines as finite complement clauses of a governing V or A. The following are examples of RIDEs from his work.

- (30) a. Bill warned us that [RIDE flights to Chicago we should try to avoid].
  - b. John said that [RIDE his mother the children often helped].

The following are examples of non-RIDEs.

- (31) a. \*Bill warned us [flights to Chicago to try to avoid].
  - b. \*Mary used another company since/until [flights to Chicago they could avoid].
  - c. \*A warning that [flights to Chicago travellers should avoid] will soon be posted.

Sentence (31a) is an example of non-finite reported speech; in (31b) the embedded clause is an adjunct, so there is no governing head; and the embedded clause in (31c) is a complement of N, not V or A.

There is some overlap between the idea of RIDEs and the cases of ungrammatical topicalization that we gave earlier. For (31a), we saw in section 4 that infinitival clauses have a truncated structure and lack the topic projection. Sentence (31b) is reminiscent of Haegeman's (2012, etc.) central adverbial clauses (section 3). As for the NP complement clause in (31c), although we have not discussed it, it has been independently shown that complex NPs do not allow topicalization in their relative clause or complement clause (Kuno (1973), etc.).

By Emonds's (1969, 2004) account of root transformations, it would seem that TopP is limited to the root environments, with the addition of RIDEs. Is this true? Hooper and Thompson (1973) demonstrate that root transformations such as topicalization occur in a wider array of constructions than Emonds originally noted, and RIDEs do not cover all of the additional cases.

Hooper and Thompson begin with the observation that all of the root transformations that Emonds listed involve emphasis of some sort; these root transformations include topicalization, left dislocation, VP preposing, preposed negative constituents, and V inversion for quotes and for directional PPs. In moving a phrase to the left edge, topicalization places some sort of an emphasis on the information expressed by it. The same can be said of the other root operations.

Based on this observation, Hooper and Thompson argue that the environments in which these operations can occur are those that are *compatible* with emphasis—namely, environments with the meaning of *assertion*. Asserted environments are those in which some expression is highlighted in order to draw attention to it. In contrast, in non-asserted environments, most typically clauses whose information is presupposed, placing emphasis on a phrase would be inappropriate, hence root transformations are incompatible with such environments. To give an example, the predicate *find out* allows its complement to have the meaning of assertion, thus root transformations such as negative-constituent preposing are allowed.

(32) I found out that **never before** had he had to borrow money.

(Hooper and Thompson (1973: (119)))

This complement clause does not fit into any of Emonds's root environments or RIDEs.

To flesh out the asserted and non-asserted environments, Hooper and Thompson propose a classification of predicates whose complement is or is not compatible with assertion.

(33) Hooper and Thompson (1973: 473–474)

Non-factive			Factive	
A	В	C	D	E
say	suppose	be (un)likely	resent	realize
report	believe	be (im)possible	regret	learn
exclaim	think	deny	be surprised	know
etc.	etc.	etc.	etc.	etc.

According to Hooper and Thompson, the complement of a class A verb may comprise the main assertion of the sentence. For class B, the main verb does not always carry the meaning of assertion, which opens the way for the complement to express the main assertion. Class C verbs have the meaning of assertion, and their complement is neither asserted nor presupposed. Class D verbs likewise express assertion, and their complement is presupposed. Finally, class E verbs are called "semi-factive" and their complement is not always presupposed. How do root transformations, including topicalization, pattern with respect to this classification? They are possible in the complement clause of the predicates whose complement can express assertion, namely, classes A, B, and E.

- (34) I exclaimed that this book, I will never read. (A)
- (35) I think that this book, he read thoroughly. (B)
- (36) I found out that this book, no one is willing to read for the assignment. (E) In contrast, classes C and D do not allow root transformations in their complement clause.
  - (37) \*It's likely that this book, everyone will read for the assignment. (C)
  - (38) \*He was surprised that this book, I had not read. (D)

Interestingly, the same pattern of predicate sensitivity for embedded topicalization shows up in Japanese (Miyagawa (2012), Jiménez-Fernández and Miyagawa (2014), Miyagawa (2017)). As has been known since Kuno (1973, 1976), the occurrence of the topic phrase marked with -wa is highly restricted. For example, it cannot occur in a relative clause. (It is important that the -wa phrase is unstressed; stressing it turns the topic into a Contrastive topic, which we will look at later.)

(39) \*[Taroo-wa katta hon]-o misete kudasai.

Taro-Top bought book-Acc show.me please

'Please show me the book that Taro bought.'

Miyagawa (2012) and Jiménez-Fernández and Miyagawa (2014) show that the distribution of the topic *-wa* on complement clauses matches Hooper and Thompson's predicate classification. Before we give the examples, one important thing to note is that in Japanese, the complementizer itself helps distinguish classes A–E (Miyagawa (2012)). The complementizer *to* is for non-factive clauses, while the complementizer *koto* (or *no*) is for factive ones (Kuno (1973), McCawley (1978)).

(40) Class A: to, koto

Class B: to, koto

Class C: *koto* 

Class D: koto

Class E: to, koto

As we can see, the predicates in classes A, B, and E—those that Hooper and Thompson argue have complements that can have the meaning of assertion—allow the non-factive complementizer *to*. These predicates also allow *koto*, so the complement of these predicates may be factive as well as non-factive, but the non-factive *to* is the more common complementizer with these predicates. In contrast, the predicates in class C and D, which do not allow their complement to have the meaning of assertion, only allow the factive complementizer *koto*.

Following are examples of embedded topicalization for each predicate class.

## Class A:

(41) Hanako-wa [sono hon-wa kodomo-ga yonda to] itta.

Hanako-Top that book-Top child-Nom read C said

'Hanako said that as for that book, her child read it.'

### Class B:

(42) Hanako-wa [sono hon-wa kodomo-ga yonda to] sinziteiru. Hanako-Top that book-Top child-Nom read C believe 'Hanako believes that as for that book, her child read it.'

### Class E:

(43) Hanako-wa [**Taroo-wa** kanozyo-ga suki da to] kizuita. Hanako-Top Taro-Top she-Nom like Cop C realized 'Hanako realized that as for Taro, he likes her.'

### Class C:

(44) \*Hanako-wa [sono hon-wa kodomo-ga yonda koto]-o hiteisita.

Hanako-Top that book-Top child-Nom read C-Acc denied

'Hanako denied that as for that book, her child read it.'

### Class D:

(45) \*Hanako-wa [sono hon-wa kodomo-ga yonda koto]-o kookaisita.

Hanako-Top that book-Top child-Nom read C-Acc regretted

'Hanako regretted that as for that book, her child read it.'

As we can see, the complements of classes A, B, and E allow the topic *-wa* phrase, while the complements of classes C and D do not. This parallels what we saw for English topicalization.

We find the same pattern in Spanish (where topicalization is marked by word order). Here is an example with the class D predicate 'regret' (Jiménez-Fernández and Miyagawa (2014)).

(46) ??Siento que **tu libro** no lo hayas terminado todavía. regret-1Sg that your book not Cl have-Subj.3Sg finished yet 'I regret that you haven't finished your book yet.'

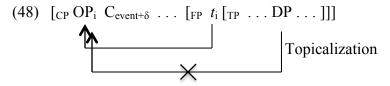
Let us interpret the observations from English, Japanese, and Spanish as follows: languages allow the topic projection for the complements of classes A, B, and E, but not for C and D. This is a truncation analysis.

(47) Topic projection

The topic projection TopP is allowed for the complement of classes A, B, and E, but not for the complement of classes C and D.

The truncation analysis may at first appear to contrast with the analysis given in Jiménez-Fernández and Miyagawa (2014) and Miyagawa (2017), which are based on Haegeman's (2006, 2010, 2012) competition analysis. In that approach, C and D complements are associated with more movement, not less structure. Haegeman (e.g.

2006), following Hooper and Thompson, observes that the class C and D predicates take complements whose meaning is presupposed, as opposed to being asserted. Presupposed environments are factive in nature, and factives have been argued to involve operator movement, from some position such as a focus position to Spec,CP (Melvold (1991), Hiraiwa (2010), Watanabe (1993, 1996), among many others; see Munsat (1986) for relevant discussion). In Haegeman's analysis, this operator occupies the position that would otherwise be occupied by the topic, thus blocking topicalization by competition.



Although I will not adopt a competition analysis, I will incorporate the idea that there is an operator in C and D complements that is focus-related. This focus operator will play a role in forcing truncation.

The main reason to believe that the impossibility of topicalization in the complement of C and D predicates has to do with truncation and not with competition is that it holds regardless of whether or not the topicalization involves movement. Recall that of the two forms of topicalization in English, the topic construction involves movement while left dislocation does not. Both are impossible in C and D complements. We already saw this for the topic construction in (37) and (38). The following are examples with left dislocation.

- (49) \*It's likely that this book, everyone will read it for the assignment. (C)
- (50) \*He was surprised that this book, I had not read it. (D)

Furthermore, the Japanese topicalization construction with *-wa* appears to be left dislocation as well, in that it is not sensitive to islands (see e.g. Kuno (1973)).

- (51) Taroo<sub>i</sub>-wa [kyonen  $e_i$   $e_j$  kaita ronbun<sub>j</sub>]-o yatto tookoosita. Taro-Top last.year wrote article-Acc finally submitted 'Taro finally submitted the article that (he) wrote last year.'
- (52) Taroo<sub>i</sub>-wa [Hanako-ga *e*<sub>i</sub> hometa kara] yorokondeiru.

  Taro-Top Hanako-Nom praised because is.happy

  'Taro is happy because Hanako praised (him).'

(53) Taroo<sub>i</sub>-wa [dare-ga  $e_i$  hometa ka] siritagatteiru.

Taro-Top who-Nom praised Q want.to.know

'Taro wants to know who praised (him).'

Thus, topic -wa, despite being left dislocation and lacking movement, shows the same predicate-sensitivity pattern ((41)–(45)) as the English topic construction ((34)–(38)), which does involve movement.

## 5.2. Focus Operator and Truncation

What causes truncation in the complement of C and D predicates? What prevents it from projecting the TopP structure? An important hint comes from Spanish, which makes a distinction between indicative and subjunctive complements.

In Spanish, A, B, and E complements, which are those that allow topicalization in English, are always in the indicative mood, while C and D complements are always in the subjunctive mood (Jiménez-Fernández and Miyagawa (2014)).

- (54) Class A: 'say', 'report', 'exclaim' (only indicative)
  Él nos informó que rechazaron/\*rechazaran el artículo.
  he us informed that rejected-Ind.3Pl/rejected-Subj.3Pl the paper
  'He told us that they rejected the paper.'
- (55) Class B: 'suppose', 'believe', 'think' (only indicative)
  Él creyó que rechazaron/\*rechazaran el artículo.
  he believed that rejected-Ind.3Pl/rejected-Subj.3Pl the paper
  'He thought that they rejected the paper.'
- (56) Class E: 'realize', 'learn', 'know' (only indicative)

  Hemos sabido que los vuelos a Chicago han/\*hayan sido have-1Pl learned that the flights to Chicago have-Ind.3Pl/have-Subj.3Pl been cancelados.

cancelled

'We have learned that the flights to Chicago have been cancelled.'

(57) Class C: 'be (un)likely', 'be (im)possible', 'deny' (only subjunctive)

Es probable que \*rechazaron/rechazaran el artículo.

is likely that rejected-Ind.3Pl/rejected-Subj.3Pl the paper

'It is likely that they rejected the paper.'

(58) Class D: 'resent', 'regret', 'be surprised' (only subjunctive)

Él siente que \*rechazaron/rechazaran el artículo.

he regrets that rejected-Ind.3Pl/rejected-Subj.3Pl the paper

'He regrets that they rejected the paper.'

Note that this is a dichotomous distribution: only indicative is acceptable with classes A, B, and E, only subjunctive with classes C and D. Below, we will associate the indicative with the presence of TopP and the subjunctive with its absence.

We saw earlier that the complementizer in Japanese varies between these two groups of predicate classes.

(59) Class A: to, koto

Class B: to, koto

Class E: to, koto

Class C: koto

Class D: koto

The complementizer *to* occurs with non-factive complements, which can have the meaning of assertion, while *koto* occurs with factive complements, which are presupposed, thus non-asserted. *To* can occur with A, B, and E—those predicates that have complements that allow topic *-wa*—while in C and D complements, only *koto* is allowed.

On the one hand, unlike with the Spanish moods, this is not a dichotomous distribution on its face: A, B, and E complements allow both complementizers, *to* and *koto*. On the other hand, with *koto*, topic *-wa* is in fact not possible, even with A, B, and E predicates, indicating that TopP is absent. I give an example with a B predicate. Class B:

(60) \*Hanako-wa [sono hon-wa kodomo-ga yonda **koto**]-o sinziteiru.

Hanako-Top that book-Top child-Nom read C-Acc believe

'Hanako believes that as for that book, her child read it.'

So it turns out on closer examination that the situation in Japanese is not unlike the situation in Spanish. Whereas in Spanish the one-to-one correspondence is between moods and predicates, in Japanese it is between the complementizer and the availability

of topicalization. In our analysis, the form of the complementizer will be determined by the actual structure of the complement clause: *to* with TopP, *koto* with non-TopP.<sup>4</sup>

Let us now turn to Villalta's (2008) analysis of the Spanish mood marking. The indicative mood is selected by the following types of predicates.

# (61) Indicative mood in Spanish

Epistemic predicates: e.g. *saber* 'know', *pensar* 'think', *creer* 'believe'

Predicates of communication: e.g. *decir* 'say', *anunciar* 'announce'

Predicates of certainty: e.g. *estar seguro* 'be sure', *estar convencido* 'be convinced'

commissives: e.g. prometer 'promise'

fiction verbs: e.g. *adivinar* 'guess', *comprender* 'understand' predicates of perception: e.g. *notar* 'notice', *ver* 'see', *escuchar* 'hear'

The subjunctive mood is selected by the following types of predicates.

# (62) Subjunctive mood in Spanish

desire predicates: e.g. *querer* 'want', *preferir* 'prefer', *temer* 'fear' emotive factive predicates: e.g. *lamentarse* 'regret', *alegrarse* 'be glad' *sorprenderse* be surprised'

modals: e.g. *es possible* 'it is possible', *es necesario* 'it is necessary' predicates expressing doubt: e.g. *dudar* 'doubt'

directives: e.g. *ordenar* 'order', *aconsejar* 'advise', *sugerir* 'suggest' causatives: e.g. *hacer* 'make', *conseguir* 'achieve'

Developing an idea starting with Heim's (1992) semantics for propositional-attitude predicates (see earlier work by Stalnaker (1984)), Villalta (2008) argues that the complement in the subjunctive mood involves a proposition with alternative semantic values.<sup>5</sup> This meaning arises from the complement being associated with a focus operator (cf. Rooth (1985)). The proposition in the subjunctive mood is compared to its contextual

<sup>&</sup>lt;sup>4</sup> There are specific predicates in Spanish that do allow both indicative and subjunctive complements (Villalta (2008)). The predicate *sentir* as an emotive factive predicate ('be sorry') selects a complement in the subjunctive mood, while as a predicate of perception ('sense'/'have the impression') it selects for an indicative complement.

<sup>&</sup>lt;sup>5</sup> See von Fintel (1999) for a view of *want* that contrasts with Heim (1992).

alternatives along a scale introduced by the matrix predicate. Let us briefly look at evidence for each of these points.<sup>6</sup>

If the subjunctive complement contains a focus operator, as Villalta argues, we would expect focus sensitivity. A predicate of desire such as 'want' takes the subjunctive in Spanish. Assuming that the same semantic effects hold for a language such as English, which does not distinguish indicative and subjunctive (except marginally), we observe the following. In a context where Victoria wants Sofia to bring a chocolate cake to the party but it is likely that Sofia will bring something else instead, (a) is felicitous while (b) is not.

- (63) a. Victoria wants Sofia to bring A CHOCOLATE CAKE.
  - b. Victoria wants SOFIA to bring a chocolate cake.

This kind of focus sensitivity parallels examples in which one sees an overt focus operator such as *only* (Rooth (1985, 1992)). In contrast, with predicates that in Spanish select for the indicative mood, such as the propositional-attitude predicates 'know' and 'believe', focus-induced meaning differences are not so clear (Boër (1979)). (I have changed the example slightly without any effect on the argument.)

- (64) a. Tom knows/believes that Bob KISSED Alice.
  - b. Tom knows/believes that Bob kissed ALICE.

Let us assume that the focus operator occurs in Spec,CP of the subjunctive complement, having been attracted there from within the TP by the Focus feature on C.

(65) 
$$\dots \left[ C_P OP_i C_{FOCUS} \left[ T_P \dots t_i \dots \right] \right]$$

There are a number of factors involved here, including the use of the adverb *categorically*, which may be helping to overcome the need for a predicate with a gradable meaning and a complement that matches it with focus-generated alternatives. I will leave this for future work.

<sup>&</sup>lt;sup>6</sup>For comments on Villalta's work, see Portner and Rubinstein (2012) and Oikonomou (2016). The semantic approach suggested here based on Villalta may hold promise for accounting for the wide range of judgments regarding topicalization in the subordinate environment. For example, in contrast to the ungrammatical example Emonds (1969) gave using *deny*, the following, pointed out to me by Peter Culicover, is more readily acceptable.

<sup>(</sup>i) I categorically deny that to Mary, the federal government will give a sizable refund.

Note that this is similar to the factive operator that Haegeman (e.g. 2006, 2010) assumed for the complements of C and D predicates. The advantage over Haegeman's analysis is that the existence of this operator does not entail factive; instead it entails focus, leading to the semantics of alternatives. As we saw from Hooper and Thompson's (1973) predicate classification, of the two classes that do not allow root transformations in the complement, C selects for a non-factive complement and D for a factive complement. This shows that the key distinction is not factive/non-factive. Finally, this focus operator is part and parcel of the meaning of the complement, hence we would expect it to occur in CP uniformly across all languages.

The second part of Villalta's proposal is that the predicates that select the subjunctive mood are gradable predicates, and the gradable property is what the alternatives generated by the focus operator in the complement is compared with. A reliable test for gradability in the literature is 'enormously' (Doetjes (1997: 122), cited in Villalta (2008)). We see that 'enormously' distinguishes, for example, a predicate of desire, which selects the subjunctive mood, from the epistemic predicate 'know', which selects the indicative mood.

- (66) a. Marcela desea enormemente que Rafael venga.
  Marcela desires enormously that Rafael come-Subj.3Sg
  'Marcela enormously wants Rafael to come.'
  - b. \*Sofia sabe enormemente que no puede venir.

    Sofia knows enormously that not can-Ind.3Sg come

    'Sofia knows enormously that she cannot come.'

We now have the assumptions necessary to motivate a truncation analysis for topicalization. The predicates in the C and D classes select a complement that contains a focus operator that generates alternatives. In languages such as Spanish, this kind of complement is overtly marked with the subjunctive mood, but even when it is not so marked, as in English, the semantics remains the same. In Japanese, we saw that such a complement is marked by *koto*, commonly said to be a factive complement, but we can now say that it is a marker of a complement containing the focus operator that generates alternatives.

The other assumption is that the predicates that select such a complement are gradable in nature. The gradable property operates over the alternatives generated by the focus operator. This means that the predicate must select for a complement with such a focus operator.

# (67) predicate<sub>GRADABLE</sub> [CP OP<sub>FOCUS</sub> . . . ]

In order for the selection to properly occur, nothing can intervene between the gradable predicate and the focus operator. Consequently, projecting TopP above the CP would lead to a selection violation.

(68) \*predicate<sub>GRADABLE</sub> [TopP . . . [CP OPFOCUS . . . ]]

This is the reason why the TopP structure cannot occur for the complement of C and D predicates, thus precluding topicalization in these complements.

This focus-operator analysis of the complements of C and D predicates has another consequence. The discussion so far has been largely driven by topicalization without movement, the so-called left dislocation (marked by -wa in Japanese and by resumptive pronouns and other devices in English), and what we have said so far accounts for this construction's distribution. It cannot occur in the complement of C and D predicates, and this led us to the idea of truncation: TopP simply cannot project. The reason we have given is the need of the C/D predicate to directly select the CP with the focus operator. But what about those topic constructions that involve the movement of a topic operator to Spec, CP? It appears there are two causes for their ungrammaticality with C and D predicates. The first cause is the same as for non-movement topicalization: a selection violation caused by TopP intervening between the predicate and the CP complement that has the focus operator. The second cause is a conflict in features, or competition in Haegeman's terms: C has the Focus feature to attract the focus operator of the subjunctive complement; the same C would need to also have the Topic feature to attract the topic operator. But Focus and Topic are in complementary distribution, hence having them both on C would be a clash of features. If the Topic feature could lower to a lower point in the structure, the conflict would be avoided. We will see cases of precisely this situation below, in languages where Topic may be inherited by T.

<sup>&</sup>lt;sup>7</sup> Thanks to Despoina Oikonomou for suggesting this idea.

# 6. Variation across Languages

Up to now, we have seen topicalization behaving similarly in English, Japanese, and Spanish. In this last section of the article, I will look at topic types, language variation, and Strong Uniformity, with an eye to accounting for language variability in the distribution of topics. So far, we have looked at "topics" without distinguishing among different types. However, once we do so, we get a more detailed distribution that tells us about the general system at play across languages vis-a-vis operations such as topicalization.

Bianchi and Frascarelli (2010), based on Frascarelli and Hinterhölzl (2007), propose three types of topics: Aboutness, Contrastive, and Familiar.

- (69) Three types of topics (Frascarelli and Hinterhölzl (2007: 87–88)).
  - (a) Aboutness topic: "what the sentence is about" (Reinhart (1981), Lambrecht (1994)); in particular a constituent that is "newly introduced, newly changed or newly returned to" (Givón (1983: 8)), a constituent which is proposed as "a matter of standing and current interest or concern" (Strawson (1964))
  - (b) Contrastive topic: an element that induces alternatives which have no impact on the focus value and creates oppositional pairs with respect to other topics (Kuno (1976), Büring (2003))
  - (c) Familiar topic: a given or accessible (cf. Chafe (1987)) constituent, which is typically destressed and realized in a pronominal form (Pesetsky (1987)); when a familiar topic is textually given and d-linked with a pre-established aboutness topic, it is defined as a continuing topic (cf. Givón (1983))

Although these distinctions are not always easy to detect in languages such as English, in Japanese, the three are clearly marked in form.

- (70) Three types of topics as seen in Japanese
  - a. Aboutness topic: -wa
    Hanako-wa piza-o tabeta.
    Hanako-Top pizza-Acc ate
    'As for Hanako, she ate pizza.'

b. Contrastive topic: -WA

Hanako-WA piza-o tabeta.

'Hanako-Top.Contr pizza-Acc ate (but not Taro).'

c. Familiar: scrambling

Piza-o Hanako-ga tabeta.

pizza-Acc Hanako-Nom ate

Aboutness topics are marked with the unstressed -wa while Contrastive topics are marked with the stressed -WA (or with stress on the entire topic phrase) (Kuno (1973)). Familiar topics are marked by being scrambled to the head of the sentence (Miyagawa (2010, 2017)).

Bianchi and Frascarelli (2010: 82) point out that the Aboutness topic is a root phenomenon, distinguishing it from the other topics. In Jiménez-Fernández and Miyagawa (2014), we argue, following Bianchi and Frascarelli, that the Aboutness topic behaves uniformly as a root phenomenon across all languages, while Contrastive and Familiar topics may vary in their distribution from language to language.

- (71) Distribution of topics
- (i) Aboutness topics uniformly occur in the C region (Bianchi and Frascarelli (2010:82)).
- (ii) The position of Contrastive topics and Familiar topics depends on the type of language (Jiménez-Fernández and Miyagawa (2014)).

We can interpret "in the C region" for Aboutness topics as the TopP projection. Aboutness topics across all languages must occur in Spec,TopP. We saw above that the TopP projection in complement clauses is restricted to A, B, and E predicates for semantic reasons. Assuming the universal nature of the semantic issues involved, we can presume that the restriction on the occurrence of the TopP is uniform across all languages unless some other factor comes into play to mediate the semantic requirements.

# 6.1. Strong Uniformity and Topicalization

What about Contrastive and Familiar topics? To attempt to understand the variability we see across languages for these two types of topics, we turn to the notion of Strong Uniformity.

# (72) Strong Uniformity (Miyagawa (2010, 2017))

Every language shares the same set of grammatical features, and every language overtly manifests these features.

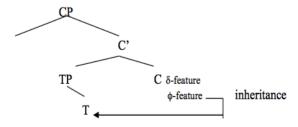
The "grammatical features" in Strong Uniformity include both  $\phi$ -features and  $\delta$ -features, what Kiss (1995) calls "discourse-configurational" features.

## (73) $\phi$ -features

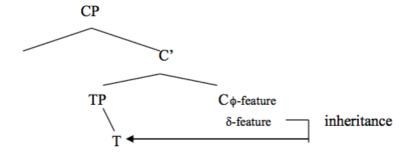
 $\delta$ -features: topic, focus

The idea is that these two types of grammatical features are computationally equivalent, both serving to trigger operations within narrow syntax across languages. Furthermore, all grammatical features are assumed to originate at a phase head—C, for our purposes (Chomsky (2008), Richards (2007), Miyagawa (2010), etc.). One or more of these features that originate at C may be inherited by T. In Miyagawa (2010), I dealt with two kinds of languages that come out of the typology of grammatical feature placement, the agreement-based language and the discourse-configurational language.

# (74) Agreement-based language



## (75) Discourse-configurational language



In Miyagawa (2017), I explore two additional types of languages, one in which both features are inherited by T and one in which neither is, thus expanding the typology into four classes.

# (77) Some languages predicted by Strong Uniformity

Category I:  $C_{\phi}$ ,  $T_{\delta}$  Japanese

Category II:  $C_{\delta}$ ,  $T_{\phi}$  English

Category III: C,  $T_{\phi/\delta}$  Spanish

Category IV:  $C_{\phi/\delta}$ , T Dinka

Setting aside Category IV (see Miyagawa (2017) for discussion of this category), we see that in Categories I and III (Japanese and Spanish), the  $\delta$ -feature is inherited by T, while in Category II (English), it stays on C.<sup>8</sup> Remember that these variations with regard to the  $\delta$ -feature of Topic pertain only to Contrastive and Familiar topics; the Aboutness topic always occurs in TopP, thus it is not affected by any variation in the location of the Topic feature.

The typology above predicts that for a Class II language such as English, Contrastive and Familiar topics occur at TopP. This in turn predicts that in English, all three types of topics will have the same distribution as the TopP projection: in complement clauses, they will only occur with A, B, and E predicates, not C and D predicates. This is precisely what we see (Jiménez-Fernández and Miyagawa (2014)). Since in English it is difficult to distinguish Familiar topics from Aboutness topics, I give two examples each for the five verb classes: a generic topic, which may be either Aboutness or Familiar, and Contrastive, which is indicated by a contrastive statement tagged on at the end of the sentence.

## Class A:

- (78) a. Mary said that those books, she will read today.
  - b. Mary said that those books, she will read, but not these.

## Class B:

- (79) a. Mary believes that those books, she could read today.
  - b. Mary believes that those books, she could read, but not these.

## Class E:

<sup>&</sup>lt;sup>8</sup> This typology has a more fine-grained version that distinguishes between the δ-features Topic and Focus. In Spanish, the Topic δ-feature is inherited by T, as shown, but the Focus δ-feature actually stays on C (see Miyagawa (2017)).

- (80) a. Mary realized that those books, she could read today.
  - b. Mary realized that those books, she could read, but not these.

## Class C:

- (81) a. ?\*Mary denied that those books, she will read today.
  - b. \*Mary denied that those books, she will read, but not these.
- (82) a. \*It is impossible that those books, John will read by the end of the week.
  - b. \*It is impossible that those books, John read, but not these.

### Class D:

- (83) a. \*Mary resents that those books, John read while on vacation.
  - b. \*Mary resents that those books, John read, but not these.
- (84) a. ?\*I regret that those books, John read without consulting me.
  - b. \*I regret that those books, John read, but not these.

Let us now turn to Japanese, which clearly distinguishes Aboutness, Contrastive, and Familiar topics. As we see below, while the Aboutness topic distribution is the same as in English, as we expect, there is a sharp contrast in the distribution of the Contrastive and Familiar topics. They are fine in the complements of all predicate classes, unlike in English (Jiménez-Fernández and Miyagawa (2014)).

### Class A:

- (85) a. Hanako-wa [sono hon-wa kodomo-ga yonda to] itta. Hanako-Top that book-Top child-Nom read C said 'Hanako said that as for that book, her child read it.'
  - b. Hanako-wa [sono hon-WA kodomo-ga yonda to] itta.

    Hanako-Top that book-Contr.Top child-Nom read C said

    'Hanako said that that book, her child read (but not this book).'
  - c. Hanako-wa [sono hon-o kodomo-ga yonda to] itta.
     Hanako-Top that book-Acc child-Nom read C said 'Hanako said that as for that book, her child read.'

### Class B:

(86) a. Hanako-wa [sono hon-wa kodomo-ga yonda to] sinziteiru. Hanako-Top that book-Top child-Nom read C believe 'Hanako believes that as for that book, her child read it.'

- b. Hanako-wa [sono hon-WA kodomo-ga yondato] sinziteiru. Hanako-Top that book-Contr.Top child-Nom read C believe 'Hanako believes that that book, her child read (but not this book).'
- c. Hanako-wa [sono hon-o kodomo-ga yonda to] sinziteiru. Hanako-Top that book-Acc child-Nom read C believe 'Hanako believes that as for that book, her child read.'

### Class E:

- (87) a. Hanako-wa [Taroo-wa kanozyo-ga suki da to] kizuita. Hanako-Top Taro-Top she-Nom like Cop C realized 'Hanako realized that as for Taro, he likes her.'
  - b. Hanako-wa [Taroo-WA kanozyo-ga suki da to] kizuita.
     Hanako-Top Taro-Contr.Top she-Nom like Cop C realized 'Hanako realized that Taro likes her (but not Jiro).'
  - c. Hanako-wa [Taroo-ga kanozyo-ga suki da to] kizuita. Hanako-Top Taro-Nom she-Nom like Cop C realized 'Hanako realized that Taro likes her.'

### Class C:

- (88) a. \*Hanako-wa [sono hon-wa kodomo-ga yonda koto]-o hiteisita.

  Hanako-Top that book-Top child-Nom read C-Acc denied

  'Hanako denied that as for that book, her child read it.'
  - b. Hanako-wa [sono hon-WA kodomo-ga yonda koto]-o hiteisita. Hanako-Top that book-Contr.Top child-Nom read C-Acc denied 'Hanako denied that that book, her child read, (but not this book).'
  - c. Hanako-wa [sono hon-o kodomo-ga yonda koto]-o hiteisita.

    Hanako-Top that book-Acc child-Nom read C-Acc denied

    'Hanako denied that that book, her child read.'

### Class D:

- (89) a. \*Hanako-wa [sono hon-wa kodomo-ga yonda koto]-o kookaisita.

  Hanako-Top that book-Top child-Nom read C-Acc regretted

  'Hanako regretted that as for that book, her child read it.'
  - b. Hanako-wa [sono hon-WA kodomo-ga yonda koto]-o kookaisita.

- Hanako-Top that book-Contr.Top child-Nom read C-Acc regretted 'Hanako regretted that that book, her child read, (but not this book).'
- c. Hanako-wa [sono hon-o kodomo-ga yonda koto]-o kookaisita. Hanako-Top that book-Acc child-Nom read C-Acc regretted 'Hanako regretted that that book, her child read.'

The grammaticality of (88b, c) and (89b, c) is precisely what we expect, since Japanese is a Category I language. In this type of language, the  $\delta$ -feature is inherited by T, so that topicalization (for these two types of topics, Contrastive and Familiar) occurs within the TP. This is why, for example, scrambling (Familiar topicalization) may overcome weak crossover and create a new binder, which are hallmarks of A-movement. Familiar topicalization is A-movement because it targets a position within the TP instead of the CP (Saito (1992), Miyagawa (2010), etc.).

Finally, Spanish, a Category III language, behaves the same as Japanese with regard to Contrastive and Familiar topics (Jiménez-Fernández and Miyagawa (2014)). This is what we expect, since the  $\delta$ -feature lowers to T in both types of languages. In the following examples, we can see that a topic, which can be interpreted as either type, may occur in the complement of C and D predicates.

- (90) a. Es probable que [sólo alguna vez haya be-Pres.3Sg probable that only some time have-Pres.3Sg conducido Juan ese coche].

  driven Juan that car
  - 'It's probable that Juan has only rarely driven that car.' (Class C)
  - b. Ángela estaba sorprendida de que [los regalos los Angela be-Past.3Sg surprised of that the presents Cl hubieran dejado los Reyes Magos debajo del árbol]. have-Past.3Pl left the Kings Magicians under of the tree 'Angela was surprised that the three Wise Men had left the present under the Christmas tree.' (Class D)

### 7. Conclusion

In this article I developed the idea that there is a dedicated position for topics across all languages. This topic position, first proposed in Chomsky (1977), occurs above the CP. It occurs freely in the matrix clause, but in the complement clause it is restricted to what Hooper and Thompson (1973) called class A, B, and E predicates. I argued that the reason why a topic cannot occur in the complement of C and D predicates is due to the semantics of these constructions: the complement is "subjunctive" and contains a focus operator that induces a semantics of alternatives, the predicates themselves are gradable in nature and must select the focus operator directly to function properly. If TopP is projected above the complement CP, this blocks selection. Turning to language variation, while the Aboutness topic occurs in the TopP region across languages, Contrastive and Familiar topics vary in their position. In English, these two types of topics occur in the TopP region, thus are restricted in their distribution in the same way as the Aboutness topic. But in Japanese and Spanish, Contrastive and Familiar topics occur within the TP. As a result they are not subject to the restriction on TopP, making it possible to occur in the complement of all predicate classes. This contrast between English on the one hand and Japanese and Spanish on the other is predicted by Strong Uniformity.

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