

Finnish Contrastive Topics Get Passports to the Left Periphery

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Abstract

In this paper two recent accounts are examined which (among other things) attempt to explain the distribution of Contrastive Topics (henceforth, CT's): Bianchi and Frascarelli (2010) and Haegeman (2010). These approaches differ significantly, in that the former settles on a semantic basis while the latter employs a movement-based explanation. Both accounts, however, converge in predicting the ungrammaticality of Contrastive Topics in Central Adverbial Clauses. While this is true in English and Italian, this common prediction is shown to be mistaken as it is not borne out in Finnish. Furthermore, it is demonstrated that Haegeman's (2010) approach, which utilises an irrealis operator (Bhatt and Pancheva 2002, 2006), may account for the data if we take into account Starke's (2001) feature tree, whereby the assumption of two classes of features allows us to capture the contrast between the Finnish case on the one hand and the English/Italian data on the other. This paper proposes that it is the featurally more complex morphology which adds features to Finnish CT's, allowing them to avoid intervention effects.

Keywords: *adverbial clauses, contrastive topics, Finnish, information structure, Italian*

1. Introduction

This paper aims to disprove Bianchi and Frascarelli's (2010) account of Contrastive Topics (CT's) and provides evidence from Finnish to this end. Furthermore, it finds support for Haegeman's (2010) syntactic account of CT's using a more refined version of Relativised Minimality (RM), in the vein of Starke's (2001) feature tree, which builds on previous work by Rizzi (1997, 2004).

The paper is organised in the following fashion. After a brief introduction to the Finnish Left Periphery (LP) in Section 2, Bianchi and Frascarelli's (2010) semantic approach is outlined in Section 3 and Haegeman's (2010) syntactic approach is outlined in Section 4. The paper then shows in Section 5 how Finnish data contradicts Bianchi and Frascarelli's (2010) account and how Haegeman's (2010) account can be refined to account for the difference between Finnish on the one hand and English and Italian on the other. Section 6 concludes the paper.

2. Information structure in Finnish

Unlike languages such as English, which exhibit a relatively rigid word order, Finnish shows more flexibility in the ordering of the constituents of a sentence. This, however, affects the

interpretation of the sentence, particularly in terms of Information Structure. (1)¹ gives examples of these differences in interpretation. In (1a-b), the sentences may be uttered with no special emphasis, but (1c-d) require stress on the first constituent in order to sound natural².

- (1) a. *Matti osti auton.* → Matti bought a/the car.
 Matti bought car-ACC
 S V O
- b. *Auton osti Matti.* → The car was bought by Matti.
 car-ACC bought Matti
 O V S
- c. ***Auton*** *Matti osti.* → i. It's a car that Matti bought. (And not something else)
 car-ACC Matti bought ii. *The car* Matti bought. (*The bike*, he only borrowed.)
 O S V
- d. ***Matti*** *auton osti.* → i. It's Matti who bought the car. (Not someone else)
 Matti car-ACC bought ii. *Matti* purchased the car. (*Jari* borrowed it.)
 S O V

Vilkuna (1995) shows that Finnish has (at least) two distinct positions in the left periphery, one hosting contrastive constituents, the other hosting topics (as well as other non-topic constituents, more on which later): the K-position and the T-position. Rightward of these two positions is what she calls the V-Field³. The different permutations in Finnish are realised using these three areas.

(2)	K	T	V-field
SVO		Anna	sai kukkia
		Anna	got flowers-PAR
SOV	Anna	kukkia	sai
OSV	Kukkia	Anna	sai
OVS		Kukkia	sai Anna
VSO	Sai	Anna	kukkia
VOS	Sai	kukkia	Anna

(Vilkuna 1995: 245)

Though preverbal elements may be contrastive or non-contrastive, fronted *contrastive* elements must precede the topic⁴. This is also the case with an expletive topic or a null pronoun. The first constituents of sentences (3a-b) must be contrastive. A sentence such as (3c), where a fronted contrastive element is preceded by a fronted topic, is ungrammatical.

¹ Abbreviations used in examples: ABL – ablative; ACC – accusative; ADE – adessive; ALL – allative; AUX – auxiliary; CL – clitic; DO – direct object; ELA – elative; EXP – expletive; F – focus; GEN – genitive; GER – gerund; INE – inessive; INF – infinitive; IO – indirect object; NEG – negation; O – object; PAR – partitive; PART – past participle; PL – plural; S – subject; SG – singular; V – verb.

² Nominative case is generally unmarked in Finnish, so the glosses will not indicate this case.

³ It should be noted that even though these terms derive from the concepts of Contrast, Topic and Verb, Vilkuna makes it explicit that they should not be equated with these.

⁴ In-situ contrastive elements are permitted.

- (3) a. **Matin** näin torilla.
Matti-ACC see-PAST-1SG market-ADE
'Matti, I saw at the market.'
- b. **Marjalle** annoimme kirjan.
Marja-ALL give-PAST-1PL book-ACC
'To Marja, we gave a book.'
- c. **Kirjan* **Marjalle** annoimme.
book-ACC Marja-ALL give-PAST-1PL

This is accounted for by Vilkuna's (1995) proposed structure of the Finnish Left Periphery (henceforth, LP) if 1st and 2nd null pronouns occupy the T-position. This is not possible with 3rd person pronouns, since (Standard) Finnish is a partial null-subject language. The table in (4) below compares the Finnish paradigm with that of Italian, a fully null-subject language.

(4)	FINNISH		ITALIAN	
	SINGULAR	PLURAL	SINGULAR	PLURAL
1	Ø juoksen (I) run	Ø juoksemme (we) run	Ø corro (I) run	Ø corriamo (we) run
2	Ø juokset (you.sg) run	Ø juoksette (you.pl) run	Ø corri (you.sg) run	Ø correte (you.pl) run
3	<i>hän</i> /*Ø juoksee he/she runs	<i>he</i> /*Ø juoksevat they run	Ø corre (he/she) runs	Ø corrono (they) run

The Finnish K-position also hosts morphology which may appear on constituents only when in that position⁵: question particle *-kO*; "tone" particles *-hAn*, *-pA* and *-s*; conjunction particle *-kA*⁶.

(5)	PARTICLE	EXAMPLE
	<i>-kO</i>	<i>Jo-ko ruoka loppu-i?</i> already-KO food finish-PAST-3SG 'Has the food run out so soon?'
	<i>-hAn</i>	<i>Yritä-hän rauhoittu-a.</i> try-HAN calm.down-INF 'Try to calm down.'

⁵ There is an exception with the question particle *-kO*, which may appear, albeit marginally, at the end of a sentence in so-called "confirmation questions" (*tarkistuskysymykset*). Hakulinen et al. (2008: §133) give the following examples from Colloquial Finnish:

- (i) *Mitä se sano sitte et [ei me haluta luopua saavutetuista eduista]ko*
What did he say then, that [we don't want to give up the advantages we've earned]-kO?
- (ii) *[Eikä muuta kauppaä kyläs olluk]-kO?*
So there was nothing else at the shop in town?

⁶ The capitalised A's and O's stand for phonemes which are realised as [a]/[ä] and [o]/[ö] depending on the stem, following the rules of Finnish Vowel Harmony.

-pA	<i>Kulkee-pa se kova-a.</i> go-PA it hard-PAR 'It sure is going fast.'
-s	<i>Missä-s ruoka viipy-y?</i> where-s food remain-3SG 'Where's the food gotten to?'
-kA	<i>E-t-kä tule!</i> NEG-2SG-kA come '(And) you're not coming!'

(Adapted from Hakulinen et al. 2008: §126)

These particles never appear with constituents when interpreted as CT's. The conjunction particle *-kA*, in particular, appears to attach only to negative auxiliaries (e.g. *etkä*, 'and you won't/don't', *äläkä* 'and don't (you)'), which cannot be CT's. The elements attached to the question particle *-kO* also cannot be CT's, as they mark the questioned constituent. The particles *-pA* and *-hAn* attach to a greater variety of constituents, but are ungrammatical as CT's⁷. Lastly, the *-s* particle attaches only to imperatives, *wh*-elements and the particles *-pA* and *-kO*.

- (6) **Matti-pa/han oli sairaalassa kaksi viikkoa. Marja oli siellä vain päivän.*
Matti-PA/-HAN was hospital-INE two week-PAR Marja was there only day-GEN
'Matti was in hospital for two weeks. Marja stayed there for just a day.'

In (6) above, *-pA/-hAn* make a CT interpretation of Matti impossible.

The second position mentioned, Vilku's (1995) T-position, is not as strict a Topic position as that found in Hungarian⁸. While referential (7a) and quasi-referential (7b) subjects may be null in Finnish, non-referential null-subjects are not possible (7c), (Holmberg and Nikanne 2002).

- (7) a. *Olen väsynyt.*
be-1SG tired
'I'm tired.'
- b. *Sataa (vettä).*
rains (water)
- c. **Leikkii lapsia kadulla.*
play children in-street

(Holmberg and Nikanne 2002: 1)

⁷ Palomäki (2013) points out that a constituent marked by *-hAn* does not always attract stress, which can apply to the verb in SVO orders, where the *-hAn* marked constituent is actually old information, a kind of topic. The non-*-hAn*-marked, stressed verb is then new information. The difference between a *S-hAn V O* and a *V-hAn S O* order is that, in the latter case, the contrast is polar, unlike in the former scenario. In the non-polar case, for example, it might be unknown or uncertain whether *p* took place, while in the polar case, it may have been asserted that *p* did not take place. Palomäki claims this is evidence that *-hAn* may appear in positions other than the K-position proposed by Vilku (1995).

⁸ It should be pointed out that Hungarian topics can never follow contrastive focus (É. Kiss 2002).

Holmberg and Nikanne give the following repairs for (7c): an expletive pronoun (8a) or moving one of the other constituents to the front (8b-c).

- (8) a. *Sitä leikkii lapsia kadulla.*
 EXP play children in-street
 b. *Kadulla leikkii lapsia.*
 in-street play children
 c. *Lapsia leikkii kadulla.*
 children play in-street

(Holmberg and Nikanne 2002: 1-2)

With the caveat that the expletive pronoun in (8a) is used exclusively in Colloquial Finnish, which is *not* a null-subject variety of Finnish, it is due to this possibility of having these topic (and not subject) external arguments, that Holmberg and Nikanne (2002) claim that Finnish is a topic prominent language. In É. Kiss's (1995, 1997) view, topic prominent languages reflect the topic-comment structure in their syntax and, thus, only externalise arguments if they are sentence topics.⁹

After having examined some of the properties of Contrastive Topics in Finnish, we will now look at how CT's have been treated in two approaches with very different starting points: that in Bianchi and Frascarelli (2010) and that in Haegeman (2010).

3. Contrastive Topics restricted semantically

Bianchi and Frascarelli's (2010) approach builds on the topic typology established in Frascarelli and Hinterhölzl (2007, henceforth F&H), of which a brief sketch follows before discussing Bianchi and Frascarelli's (2010) account. Based on Italian and German data, F&H link various intonational patterns with different types of topics: Aboutness(-Shift) Topics (A-Topics); Contrastive Topics (C-Topics); Familiar/Given Topics (G-Topics). These are all realised in Italian with Clitic Left-Dislocated structures (CLLDs), where one or more arguments are dislocated to the Left Periphery and a clitic is realised (when available). For example, in (9), all three arguments of the verb *dare* ('to give'), i.e., *Gianni*, *il libro* and *a Maria*, are realised in the left periphery, with two clitics relating to the indirect and the direct objects. Note that although Standard Italian subjects have no clitics, they can still be dislocated, but when arguments do have corresponding clitics, they must be realised¹⁰.

- (9) *Gianni, il libro, a Maria, gliel' ha dato.*
 Gianni the book to Maria IO.CL-DO.CL has given
 'Gianni gave the book to Mary.'

⁹ É. Kiss (1995, 1997) further states that, in these languages, it is semantics which triggers the externalisation of arguments, not Case or formal EPP. Holmberg and Nikanne (2002) use the Finnish expletive pronoun *sitä* to argue that the situation is more complicated, as the prediction that no obligatory expletive pronouns should be found in topic-prominent languages is not borne out in Finnish.

¹⁰ Another type of left dislocation does not make use of clitics, but these arguments are then interpreted as focused and the entire utterance has a different intonation.

F&H identify their A-Topics with Reinhart's (1981) Sentence Topics, standing for the discourse entities that the rest of the sentence is about. Reinhart's Sentence Topic can be illustrated with the contrast between (10b) and (10c). While both statements are *about* (10a), only (10b) is retraceable to a linguistic expression in (10a): thus, it is a Sentence Topic. (10c), on the other hand, albeit true, refers to a more abstract referent which may be active in the discourse but is not represented in the sentence in question. This approach is akin to the distinction made by van Dyke (1977), where the former type of Topic was dubbed a Sentence Topic and the latter a Discourse Topic (cf. Lambrecht 1994 for a more in-depth comparison of these two concepts of Topic).

- (10) a. *Mr Morgan is a careful researcher and a knowledgeable semiticist, but his originality leaves something to be desired.*
 b. (a) is about Mr Morgan.
 c. (a) is about Mr Morgan's scholarly ability.

(Reinhart 1981: 54)

A key difference between Reinhart's Sentence Topics and F&H's A-Topics is that while the former are described in terms of pragmatic "aboutness", F&H's A-Topics always involve a "shift" in aboutness, a change in topic. Hence, crucially, A-Topics would be licensed when referring to a new topic or returning to the one used earlier in the discourse: they may therefore be either new or old with respect to the discourse. Below is an example of an A-Topic in context, from F&H's corpus, where the DP *l'ultima unit* 'the last unit' is analysed as being discourse new and bearing an L*+H accent, which they associate with A-Topics.

- (11) *Il materiale era tantissimo quindi all'inizio l'ho fatto tutto di corsa cercando di impiegarci il tempo che dicevate voi magari facendolo un po' superficialmente pur di prendere tutto – **l'ultima unit** la sto facendo l'ho lasciata un po' da parte perché ho ricominciato il ripasso...*
 'The material was quite a lot, so at the beginning I did it in a rush, trying to do it all in the time that you had fixed, maybe a little superficially, so as to do everything – I'm doing the last unit now, I put it aside before because I had started to go through the program again...'

L'ultima unit_i la_i sto facendo.
 the last unit it-CL be-1SG do-GER
 'I'm working on the last unit.'

(Frascarelli and Hinterhölzl 2007: 4)

Bianchi and Frascarelli (henceforth, B&F) adopt an update semantics approach (Stalnaker 1978; Heim 1982; Roberts 1996, 2004), where a hypothetical conversational space, the Common Ground, hosts presuppositions and other information shared by the participants of a given conversation. In this framework, topics give instructions to participants on how to update the Common Ground. The ban on multiple A-Topics per sentence is attributed to their function of indicating what a sentence is about. In particular, they instruct participants to "file" a given proposition under a certain "file card", representing the discourse entity denoted by the topic expression. Providing multiple instructions is taken to be ungrammatical.

G-Topics, on the other hand, must be given (B&F use Schwarzschild's 1999 definition of givenness). Only this type of topic may recur in a sentence. B&F locate these below the

position for focus fronting. Clitic Right Dislocated (CLRD) “topics” are also G-Topics, according to B&F, but with an “afterthought” function, which they did not clearly define. Unlike A-Topics, G-Topics provide no instructions on which discourse entity should be updated, thereby avoiding the ban on co-occurrence. In (12) below, *inglese* ‘English’ is analysed by F&H as being a G-Topic, given its repeated mention in the preceding context, and bearing an L* tone, which they associate with G-Topics.

- (12) *Era tutto molto nuovo nel senso che comunque la lingua inglese attraverso i programmi sul computer diciamo [...] comunque l'inglese risultava anche facendolo da solo più interessante [...] io, inglese non-premetto non l'avevo mai fatto.*

‘Everything was very new to me in the sense that I had never studied English through computer programs [...] and through self-learning English appeared more interesting to me [...] I must say that I had never studied English before.’

Io l'inglese_i [...] non l'_i avevo mai fatto.

I English not it-CL have-PAST-1SG never done

‘I must say that I had never studied English before.’

(Frascarelli and Hinterhölzl 2007: 7)

C-Topics, finally, follow Buring (2003). In (14) below, *francese* ‘French’ and *con l'inglese* ‘in English’ are analysed as having an H* tone contour, which F&H associate with discourse new elements.

- (13) A: *come mai hai fatto due lingue, cioè, inglese e francese?*
 B: ***francese** l'ho fatto alle medie per tre anni con una professoressa con cui mi sono trovata benissimo [...] – **con l'inglese** mi sono trovata sempre a disagio.*
 A: ‘Why did you study two languages, namely English and French?’
 B: ‘French, I have studied at school for three years with a professor that I liked a lot [...] (while) **with English, I never felt at ease.**’

francese_k l'_k ho fatto alle medie per tre anni
 French it-CL have-1SG done at-the school for three years

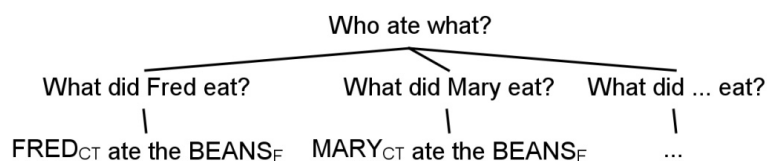
con l' inglese_i mi sono trovata sempre a disagio
 with the English me-CL be-1SG found-F always uneasy

‘French I have studied at school for three years [...] with English I never felt at ease.’

(Bianchi and Frascarelli 2010: 57)

These topics have a contrastive interpretation. In Buring’s (2003) analysis, they inform conversation participants that the asserted proposition fits in a certain way within a strategy of inquiry, building on Roberts (1996), where a given strategy of inquiry may be represented by a superquestion. Essentially, in order to obtain the superquestion that a sentence with a CT-marked element communicates, given a sentence such as (14), the focused constituent is replaced with a *wh*-element to form a question; the CT-marked element is raised to a higher “type” to indicate the point of variation for a given set of questions, all of which are entailed by the superquestion. The strategy of inquiry need not be discourse given and can be accommodated for if it is new.

- (14) [FRED]
- _{CT}
- ate [the BEANS]
- _F
- .



(Büring 2003: 520)

While, in Italian, all three types of topics are realised by CLLD, English uses Left Dislocation (LD) and Topicalisation (TOP) for A-Topics and C-Topics, respectively (cf. Rodman 1974 for aboutness shift with LD and Prince 1998 on Topicalisation), and appears to lack a fronting mechanism for the realisation of G-Topics (which are destressed in situ, cf. Neeleman and Reinhart 1998, Schwarzschild 1999). Examples of A-Topics and C-Topics in English are given in (15).

- (15) a. *This book, Mary loves it.* A-Topic realised by LD
 b. *This book, Mary loves.* C-Topic realised by TOP

What is the syntactic realisation of these different topics? F&H identified them with positions previously described in cartographic approaches, as in (16). Evidence for these positions is given by their instances of co-occurrence in Italian and English.

- (16) [
- _{ShiftP}
- A-Topic [
- _{ContrP}
- C-Topic [
- _{FocP}
- [
- _{FamP*}
- G-Topic [
- _{FinP}
- [
- _{IP}

(Bianchi and Frascarelli 2010: 59)

There are restrictions on the distribution of these topics, however. LD and TOP must occur in root clauses and subordinate clauses with root-like properties (Emonds 1970, 1976, 2004; Haegeman 2002; Heycock 2006; Maki et al. 1999). Italian G-Topics, however, are not subject to this root restriction.

- (17) *L' unica persona che, a Gianni, non gli ha mai fatto un favore...*
 the only person that to Gianni not to-him-CL have-3SG ever done a favour
 'The only person who never helped Gianni.'

(Cinque 1990: 58)

The type of subordinate clause has an effect on the realisation of A-Topics and C-Topics. C-Topics are licensed in some types of adverbial clauses, which Haegeman (2004) categorised as peripheral adverbial clauses, as in (18).

- (18)
- If these problems we cannot solve, there are many others that we can tackle immediately.*

(Haegeman 2004: 160)

Some adverbial clauses, however, pattern differently, cf. (19). These were dubbed central adverbial clauses (CAC's) by Haegeman (2004), contrasting with peripheral adverbial clauses (PAC's).

- (19)
- *If these exams you don't pass, you won't get the degree.*

(Haegeman 2004: 159)

The difference between CAC's and PAC's can be described in terms of the way in which they bear on the main clause. CAC's describe the conditions under which the proposition in the main clause holds. PAC's, instead, are more loosely connected: they provide privileged discourse backgrounds used to enhance the relevance of the matrix clause associated with it. One way of distinguishing *if* CAC's from *if* PAC's is to use a simple entailment test which allows us to verify whether a sentence entails its matrix clause minus the subordinate clause. While peripheral *if*-clauses entail their matrix clause (18'), central *if*-clauses do not (19').

(18') *If we cannot solve these problems, there are many others that we can tackle immediately.*
entails: There are many others that we can tackle immediately.

(19') *If you don't pass these exams, you won't get the degree.*
does not entail: You won't get the degree.

Some temporal PAC's and CAC's may look similar due to their use of *while* (in fact, other expressions such as *at the same time* may also be used), but it is only in CAC's that they refer to time: in PAC's they have a concessive use and have no temporal link. In fact, time-related expressions which make explicit this temporal non-identity can only be used with PAC's, as shown in (20) and (21).

(20) *While he had trouble with division, John **later** became a proficient mathematician.*

(21) *While he was running the race, John [***later**] felt dizzy.*

B&F cite a prediction by Portner and Yabushita (1998) and Büring (2003) that topics should only be interpretable with wide scope, namely, with root scope. B&F argue that this does not apply to C-Topics, as universal quantifiers attached to embedded C-Topics fail to scope over existential quantifiers in the matrix clause.

According to B&F, C-Topics appear below the assertion operator, as they are licensed in "non-assertive" clauses. This is because English topicalisation is permitted in clauses which have no illocutive force (identified by Meinunger 2004), as shown in (22)¹¹.

- (22) FACTIVE CLAUSES: (12/15)
a. *I am glad that this unrewarding job, she has finally decided to give _ up.*
- COMPLEMENTS OF NEGATIVE PREDICATES: (13/15)
b. *He tried to conceal from his parents that the maths exam he had not passed _ and the biology exam he had not even taken _.*
- BRIDGE COMPLEMENTS UNDER MATRIX NEGATION: (8/15)
c. *Mary didn't tell us that Bill she had fired _ and John she had decided to promote _.*
- ANTI-FACTIVE VOLITIONAL COMPLEMENTS: (13/15)
d. *I hope that the past he will forget _ and the future he will face _ bravely.*

(Bianchi and Frascarelli 2010: 69)

¹¹ The numbers in parentheses indicate how many informants found the sentences grammatical compared to the total number of informants asked for their judgment.

Furthermore, the judgments that B&F provide suggest that contrastive topics do not survive extraction out of their host clause, which would mean that they are interpreted within the embedded clause.

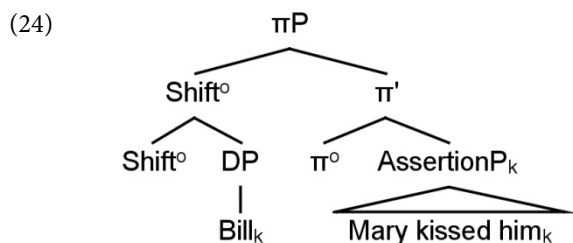
- (23) a. *He held back when I told him that the staff, I myself would choose _ (and the office, he would choose).*
 (27/35)
- b. *?He held back when the staff, I told him that I myself would choose _ (# and the office, he would choose).*
 (2/35)
- c. *??The staff, he held back when I told him that I myself would choose _ (# and the office, he would choose).*
 (0/7)
- (Bianchi and Frascarelli 2010: 70)

If C-Topics can be realised in non-assertive contexts, which have no illocutive force or root-like properties, they are not restricted to root contexts (contra Büring 2003), unlike A-Topics. In order to capture the distribution of C-Topics, B&F propose that it is not dependent on illocutive force, but something slightly lower down: propositions. In this way, they hope to retain an explanation for C-Topics’ wider distribution with respect to G-Topics. The reason why C-Topics cannot appear in CAC’s would therefore be because these clauses are not propositional, but rather event modifiers.

B&F propose, on the other hand, that C-Topics do not make use of higher-type CT-values as described by Büring (2003). The clause containing the marked element remains at the propositional level. The marking of the C-Topic tells the hearer that its denotation is a member of a contextually salient set and that the proposition expressed is entailed by a larger superproposition. Crucially, C-Topics should be unacceptable in any clause denoting anything smaller than a proposition.

Yet C-Topics appear to affect Common Ground management. B&F propose that the semantic contribution of this type of topic and the illocutive force of the higher clause interact to produce this. They fall back on Roberts’ (1996) claim, that any assertion (other than “out of the blue” assertions) may be interpreted as an answer to an implicit or explicit Question Under Discussion. Thus, C-Topics affect conversational dynamics, as hearers will attempt to retrace any assertion to a strategy of inquiry, accommodating for one if required.

In B&F’s view, A-Topics are a separate speech act (following Krifka 2001) which is in a conjunction relation with its associated clause by way of an appositive operator, as shown in (24).



This should account for the fact that these kinds of topics are only possible in root-like clauses. This “extra-sentential” analysis is motivated by their apparent independence from illocutive force, as shown in (25), as opposed to C-Topics (26), and their violation of the complex NP constraint (Chomsky 1977), which is illustrated in (27).

- (25) a. *This book, leave it on the table!* (imperative)
 b. *Those petunias, did John plant them?* (interrogative)
 c. *Those petunias, when did John plant them?*
 (Bianchi and Frascarelli 2010: 77)
- (26) a. * *This book, leave on the table!* (imperative)
 b. * *Those petunias, did John plant?* (interrogative)
 c. * *Those petunias, when did John plant?*
 (Bianchi and Frascarelli 2010: 77)
- (27) a. *This book, I accept the argument that John should read *(it).*
 b. *This book, I wonder who read *(it).*
 (Bianchi and Frascarelli 2010: 77)

The table below shows a summary of the properties of the three types of topics discussed.

(28)	A-Topics	C-Topics	G-Topics
Separate Speech Act	✓	×	×
OK in non-assertive clauses	×	✓	✓
OK in non-propositional clauses	×	×	✓
Uniqueness	✓	✓	×
“Aboutness” property	✓	✓?	×
Must be Given	×	×	✓
Realisable by CLLD	✓	✓	✓
Realisable by English LD	✓	×	×
Realisable by Topicalisation	×	✓	×

Note that A-Topics and G-Topics have nothing in common except for their realisability by CLLD in Italian. C-Topics are still problematic, because they seem to pattern like A-Topics in some ways but behave like G-Topics elsewhere. Like A-Topics, they have a uniqueness restriction, need not be given and they denote what a clause is about. B&F also provide sentences which show that they are infelicitous in non-propositional clauses. On the other hand, however, they are similar to G-Topics in that they are felicitous in non-assertive contexts and cannot constitute a separate speech act.

The theory for the syntactic operation of CLLDs now appears to be problematic, as no account is proposed to explain what elements they can target, given that there is no one property shared by all three types of “topics”.

4. The movement approach

An alternative, movement-based account is proposed by Haegeman (2010), building on the work of Bhatt and Pancheva (2002, 2006) and Arsenijević (2009). Haegeman’s account predicts that high modals (cf. Cinque 1999) and low construals (e.g. those found in some temporal clauses) are impossible in CAC’s.

Movement accounts of temporal adverbial clauses have been around for a long time (Geis 1970, 1975; Enç 1987: 655; Larson 1987, 1990; Dubinsky and Williams 1995; Declerck 1997; Demirdache and Uribe-Etxebarria 2004: 165-170; Lecarme 2008), involving the *wh*-movement of temporal operator to the LP.

The main argument for a movement approach is that *when* clauses such as the one in (29) are ambiguous between a high and a low construal: the temporal clause either describes the time when the claim was made or the time of departure.

- (29) *I saw Mary in New York when* [_{IP} *she claimed* [_{CP} *that* [_{IP} *she would leave*]]].
 (i) high construal: at the time that she made that claim;
 (ii) low construal: at the time of her presumed departure.
 (based on Haegeman's 2009: 389 discussion of Larson 1990: 170-171)

- (30) a. *I saw Mary in New York* [_{CP} *when*_i [_{IP} *she claimed* [_{CP} *that* [_{IP} *she would leave*]] *t*_i]].
 b. *I saw Mary in New York* [_{CP} *when*_i [_{IP} *she claimed* [_{CP} *t*_i *that* [_{IP} *she would leave* *t*_i]]]].
 (Larson 1990: 170-171)

In (30), a possible account, from Larson (1987, 1990) is shown. The low construal is possible if the operator is extracted from the clause concerning departure, as seen in (30b), i.e., the complement clause of *claimed*, (Geis 1970, 1975; Larson 1990: 170). This can be blocked, however, by embedding the clause (31) concerning the departure in a noun phrase, since the extraction of the operator would violate the Complex Noun Phrase Constraint, making the sentence ungrammatical under that interpretation (cf. Johnson 1988; Demirdache and Uribe-Etxebarria 2004: 165-176).

- (31) *I saw Mary in New York when she made* [*the claim that she would leave*].

Haegeman (2007, 2009) provides evidence supporting the movement analysis of temporal adverbial clauses giving rise to the prediction that Main Clause Phenomena would be ungrammatical in these clauses assuming a theory of locality on movement. A clause without Main Clause Phenomena would not allow, for example, argument fronting (see Hooper and Thompson 1973). Basically, the fronted argument blocks operator movement. In (32a) and (32b), the arguments *this column* and *this song* are barriers to movement for the temporal operator. Fronting adjuncts, however, is acceptable, as can be seen in (32c).

- (32) a. * *When this column she started to write last year, I thought she would be fine.*
 b. * *When this song I heard, I remembered my first love.*
 c. *When last year she started to write this column, I thought she would be fine.*

The asymmetrical behaviour of argument and adjunct fronting has previously been independently argued in relation to operator movement (Rizzi 1990, 1997; Browning 1996).

Bhatt and Pancheva (2006) propose that A'-movement takes place in both temporal and conditional clauses. This parallelism is also supported by the observed isomorphism in the conjunctions introducing them, e.g. *wenn* in German, *oa* in West Flemish.

- (33) a. *Wenn Steffi gewinnt, wird gefeiert.*
 if Steffi win-3SG AUX-PASSIVE-3SG celebrate-PART
 'If Steffi wins, there is a celebration.'

- b. *Wenn Steffi kommt, fangen wir an zu spielen.*
 when Steffi arrive-3SG begin-1PL we to play
 ‘When Steffi arrives, we begin to play.’

(Haegeman 2010: 10, based on Bhatt and Pancheva 2006: 642)

Furthermore, conditional clauses and yes/no questions make use of similar mechanisms for their realisation: I-to-C movement is employed both for root yes/no questions, and for conditional clauses (cf. Bhatt and Pancheva 2006).

- (34) a. *I asked him if he had said that he would leave.*
 b. *If he had said that he would leave,...*
 c. *Had he said that he would leave?*
 d. *Had he said that he would leave,...*

It could be the case that I-to-C movement shows a checking relation between the I head-feature and an operator in LP, both in yes/no questions and conditional clauses. If this were to be the case and one assumed there to be a non-overt interrogative operator in yes/no questions in German, we could scrap the V2 exception for yes/no questions. In the Dutch examples in (35), an operator could be located in the LP of both root yes/no questions (a) and conditional clauses (c).

- (35) a. *Had hij gezegd dat hij zou vertrekken?*
 have-PAST-3SG he said that he will-PAST-3SG leave
 ‘Had he said that he would leave?’
 b. [CP Op [_{Vfin} had] [_{TP} Subject ... t_{op}]]
 c. *Had hij gezegd dat hij zou vertrekken, ik zou...*
 have-PAST-3SG he said that he will-PAST-3SG leave, I will-PAST-1SG
 ‘Had he told me he was leaving, I would...’

One could assume the same to be the case in an English embedded yes/no question (no argument fronting) and a parallel case could be found with English conditional clauses introduced by *if*, as in (36).

- (36) a. *I wonder if he said he would leave.*
 b. [CP Op if [he said he would leave t_{op}]]

Based on the parallelisms between yes/no questions and conditional clauses, Arsenijević (2009) proposes that conditional clauses are a relative variant of yes/no questions.

The lack of low construals in conditionals, on Haegeman’s account, is due to the fact that the irrealis operator originates in the specifier of Mood_{irrealis}. This is the lowest high modal position, situated at the bottom edge of the high modal field. Yes/no questions would be derived by a leftward movement of this operator, predicting an incompatibility with high modal markers due to an intervention effect (McDowell 1987; Barbiers 2006).

- (37) a. * *Must he have a lot of money?*
 b. * *Will he probably win the race?*

Cinque (1999) proposes that adverbials are merged in the specifier position of functional projections. The heads of the modal projections host modal auxiliaries.

- (38) MoodP_{speech act} > MoodP_{evaluative} > MoodP_{evidential} > ModP_{epistemic} > TP(Past) > TP(Future) > **MoodP_{irrealis}** > ModP_{alethic} > AspP_{habitual} > AspP_{repetitive} > AspP_{frequentative} > ModP_{volitional} > AspP_{celerative} > TP(Anterior) > AspP_{terminative} > AspP_{continuative} > AspP_{retrospective} > AspP_{proximative} > AspP_{durative} > AspP_{generic/progressive} > AspP_{prospective} > ModP_{obligation} > ModP_{permission/ability} > AspP_{completive} > VoiceP > AspP_{celerative} > AspP_{repetitive} > AspP_{frequentative}
 (Cinque 2004: 133)

The intervention effects occur when the operator in Spec-MoodP_{irrealis} attempts to cross the higher adverbs. Circumstantial adverbs cause no intervention effects because they belong to a different class (cf. Rizzi 2004) and are featurally distinct.

- (39) Y is in a Minimal Configuration with X iff there is no Z such that
 (i) Z is of the same structural type as X, and
 (ii) Z intervenes between X and Y.
 (Rizzi 2004: 310)

5. Back to Finnish

Both B&F's and Haegeman's approaches predict that Contrastive Topics should be banned from Central Conditional Clauses in the sense of Haegeman (2004). In Finnish, however, this prediction fails.

- (40) a. * *If these exams you don't pass, you won't get the degree.*
 b. # *Se gli esami finali non li superi, non otterrai il diploma.*
 if the exams final not them-CL pass-2SG not obtain-FUT-2SG the degree
 'If you don't pass the final exams, you won't get the degree.'
 c. *Jos näitä tenttejä et läpäise, (niin) saat vain suorituserkinnän.*
 if these-PART exams-PART neg-2SG pass then get-2SG only passing-grade-ACC
 (Jos noita et läpäise, et saa merkintää ollenkaan.)
 if those-PART neg-2SG pass neg-2SG get-1INF grade-PART at-all
 'If you don't pass *these exams*, (then) you will still get a passing grade. If you don't pass *those*, you won't get a grade at all.'

The English example in (40a) is ungrammatical and the Italian one in (40b) is incompatible with a contrastive reading, but the Finnish sentence in (40c) shows the object of the verb *läpäise* 'pass' being fronted within a conditional clause, resulting in a Contrastive Topic. In fact, a neutral reading is impossible due to the obligatory contrastiveness of constituents preceding a null-subject second or first-person finite verb, as can be seen in (41). An interpretation of the dative object *Marjalle* as a "vanilla" topic (where English would express it as the subject of a passive verb) fails.

- (41) *Marjalle kerroin totuuden.*
 Marja-ADE tell-PAST-1SG truth-ACC
 'To Marja, I told the truth.'/*'Marja was told the truth (by me).'

In B&F's approach, a CT in a CAC is unexpected because of their purported non-propositionality. In Haegeman's approach, an intervention effect caused by the presence of the irrealis operator should have caused the sentence to be ungrammatical. Crucially, I assume CAC's to be semantically equivalent from language to language (where these are expressed with a tensed clause, at least).

It is noteworthy that Finnish conditional clauses also allow the fronting of an element interpreted as contrastive focus (40d), which bears a different intonation: a sharp falling tone. The rest of the sentence is then de-stressed.

- (40) d. *Jos näitä tenttejä et läpäise, (niin) et saa tutkintoa.*
 if these-PART exams-PART NEG-3SG pass-3SG then NEG-3SG get-1INF degree-PART
(Noilla toisilla ei ole väliä.)
 those-ADE other-PL-ADE NEG-3SG be importance-PART
 'If you don't pass **these exams**, (then) you won't get the degree. (Those others don't matter.)'

Furthermore, Finnish also allows contrastive arguments to be fronted in temporal clauses, as in (42), where *tuon kirjan* is a CT:

- (42) *Kun tuon kirjan Matti osti niin halvalla,*
 when that-ACC book-ACC Matti buy-PAST-3SG so cheap-ADE
huomasin että minäkin halusin sen.
 realise-PAST-1SG that I-too want-PAST-1SG it-ACC
 'When *that book* Matthew bought so cheaply, I realised that I wanted it too.'

Haegeman (2010) cites previous work (Ernst 2007; Nilsen 2004; Declerck and Depraetere 1995; Palmer 1990) showing that high modal adverbs, such as evaluative, evidential or speech act adverbials are ungrammatical or at least very unnatural in temporal or conditional adverbial clauses (thus, in Central Adverbial Clauses).

- (43) a. ??* *If frankly he's unable to cope, we'll have to replace him.*
 b. * *If they luckily /unfortunately arrived on time, we will be saved.*
 (Ernst 2007: 1027; Nilsen 2004)
 c. * *If the students apparently can't follow the discussion in the third chapter, we'll do the second chapter.*
 d. * *If George probably comes, the party will be a disaster.*
 e. * *John will do it if he may/must have time.*
 (Declerck and Depraetere 1995: 278; Palmer 1990: 121, 182)

(Haegeman 2010: 15)

She links this to a Relativised Minimality (henceforth, RM) intervention effect owing to a shared feature set. There is a more fine-grained version of Relativised Minimality, however, developed by Starke (2001), which refines RM in order to account for extraction from Weak Islands. In Starke's new approach, the standard approach, where an element Q (which may be a quantificational adverb, a *wh*-word, a negation or a focus) blocks movement across it on the part of similar elements, as shown in (44), is modified in such a way that a distinction may be drawn between members of a given class C and members of a subclass of that class, SC.

- (44) * $Q_1 \dots Q_2 \dots \langle Q_1 \rangle$

Starke shows that members belonging to SC as well as C will not be blocked by elements which are only members of C. In contrast, elements which are only members of C cannot successfully cross a member which is a member of C and SC (or even simply C). This is illustrated in (45), where α is a member of C only and $\alpha\beta$ is a member of both C and SC.

- (45) a. * $\alpha \dots \alpha\beta \dots \alpha$
 b. $\alpha\beta \dots \alpha \dots \alpha\beta$

(Starke 2001: 8)

Following Starke's (2001) elaboration of RM, this means that the irrealis operator must not contain any features in addition to those shared with the high modal adverbs, or else the structure would be unproblematic. Contrastive Topics, on the other hand, are felicitous with the same high modal adverbs, which are most naturally produced between the CT and the rest of the sentence.

- (46) a. *John, he probably likes.*
 b. *This discussion, the students apparently can't follow.*

There are reasons for not dismissing these adverbs as being a "parenthetical" realisation. Firstly, the adverb appears to be part of the same phonological phrase, without any breaks or the necessity for a change in pitch. Secondly, when adverbs are realised parenthetically, their scope gets upgraded to a higher level, e.g. to the level of the utterance or, at least, to the propositional level. Crucially, a change in their interpretation occurs. With high modal adverbs, however, there is no scope for an upgrade or a change in interpretation.

If the same operator causes intervention effects with CT's, we might expect high modals to clash with contrastive topicalisation as well. This is not the case, however, in English, Italian or Finnish, as we can see in the examples in (47). The position of the moved constituent in front of the modal adverb suggests that it has indeed moved past the high modal adverb field proposed by Cinque (1999).

- (47) a. *You, John probably likes.*
 b. *Tu, probabilmente, a Gianni piaci.*
 you probably to Gianni like-3SG
 'You, Gianni probably likes.'
 c. *Sinusta Juhana todennäköisesti tykkää.*
 you-ELA Juhana probably like-3SG
 'You, Juhana probably likes.'

If the CT can move past these adverbs with no interference but, as Haegeman shows with English, cannot move up within If-Clauses, it follows that there must be more features in CT's than in the high modal adverb. This is the case in all of the languages discussed so far. The locus for variation with respect to the presence of interference or the lack thereof may be due to a difference in the feature content of one of these elements.

Given that high modal adverbials block the irrealis operator, we can assume the latter to have a set of features that is equal to or fewer in number than high modal adverbials. CT's, co-occur and move past high modal adverbs, which suggests that they have more features than

high modal adverbs. This would give us the following hierarchy, in terms of richness of features.

$$(48) \quad CT > Adv_{\text{high modal}} \geq Op_{\text{irrealis}}$$

This hierarchy seems unproblematic for Finnish, but fails to capture the English or the Italian facts. In these languages, CT's should have an equal or lower number of features than the irrealis operator, because they are blocked by it, but a greater number of features than the high modal adverbs because these do not obstruct its movement, but this gives rise to a contradiction, as illustrated in (49).

$$(49) \quad CT > Adv_{\text{high modal}} \geq Op_{\text{irrealis}} \geq CT$$

Let us consider the following possibility: Contrastive Topics and high modal adverbs do not interact, so perhaps they do not share any features. Adopting Starke's (2001) feature tree, we can hypothesise that the features in CT's and high modal adverbs belong to different classes. Suppose that high modal adverbs have a feature [a] and CT's do not. The irrealis operator also has the feature [a] and does not have a richer feature set than high modal adverbs, thus is continually blocked by it. In order to describe the variation in interaction between CT's and the irrealis operator, we could assume that a feature belonging to a different class than [a], say [α], is involved. In English, CT's are blocked by the [α] feature in the irrealis operator. In Finnish, CT's may have an additional feature that is active, say [β], which allows it to avoid intervention effects. Another option along these lines is for CT's to have only the feature [α] with the lexical items realising the irrealis operator possessing or lacking the same feature.

(50)	$Adv_{\text{high modal}}$	Op_{irrealis}	CT
a.	[a]	[a], [α]	[α , (β)]
b.	[a]	[a], ($[\alpha]$)	[α]

The feature shared by high modal adverbs and the irrealis operator is, of course, quantifying over words. The question is, what feature could be shared by the Contrastive Topic and the irrealis operator. One possibility is that the contrastiveness feature may somehow be present in the irrealis operator. Etymologically speaking, *jos* 'if' and *kun* 'when' are thought to be lative cases of the relative head *joka* and the interrogative pronoun *kuka* 'who'. Thus, morphologically, it is difficult to find a link. It would be difficult to show that the English *if*, given its similar function, could be featurally more complex than the Finnish *jos*, so one would rather scrap the hypothesis of different sized irrealis operators. Instead, it may be that the Finnish CT's are featurally more complex than English and Italian CT's. The most obvious difference is that Finnish has a complex morphological case. We would, therefore, expect languages with a complex morphological case to behave like Finnish, rather than English or Italian, and allow CT's to appear in CAC's.

6. Conclusion

Finnish supports a movement-based account of the distribution of Contrastive Topics, building on the syntactic approach developed by Haegeman (2010). In contrast, it is difficult to reconcile Bianchi and Frascarelli's (2010) account, where CT's depend on full propositions, with the data. Adopting Starke's (2001) feature tree, it is claimed that CT's share no features with high modal adverbs, but share some with the irrealis operator, which, on the other hand, does share features with high modal adverbs. If Finnish CT's can move past the irrealis operator in CAC's by virtue of their more complex morphology, it is predicted that languages with similarly complex morphological case should behave in a similar way.

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