

# Multiple Focus and Cleft Sentences

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## Abstract

The information structure of English cleft sentences is discussed. A cleft sentence divides a proposition into two parts, which are interpreted as an exhaustive focus and a pragmatic presupposition. These two semantic components can be flexibly mapped onto the information structure categories of topic and comment to arrive at comment-topic ('stressed focus') clefts and topic-comment ('informative presupposition') clefts. Clefts thus introduce a cleft focus or even a pair of foci constructionally. They also exhibit an assertive (comment) focus, which may or may not correspond to the cleft focus. While only exclusive focus particles can associate with the cleft focus, additive and scalar focus particles can associate with the assertive focus in the cleft clause, thus giving rise to additional cleft sentences containing multiple instances of focus.

**Keywords:** cleft, focus, presupposition, topic

## 1. Introduction

Cleft sentences have traditionally been viewed as divided into two parts, whereby the clefted constituent expresses a focus and the cleft clause expresses a presupposition. Prince (1978), in fact, uses the terms 'focus' and 'presupposition' to identify these two parts of a cleft sentence. An example illustrating a typical use of a cleft sentence is shown in (1).

- (1) 'Then,' went on Evelyn with a subdued bitterness that grew more intense with every word, 'when I had done all they asked, and he had come to depend on me—as might have been expected—they decided that this would never do, either. Or rather **it was Ursula who decided**, and she talked Jim into it...' [Mary Fitt, *Death and the Pleasant Voices*, 1946/1984, p. 60]

In this section, I will argue that the structural meaning of a cleft sentence is precisely to express these two components: the clefted constituent inherently expresses a particular type of focus, namely an 'exhaustive' focus, and the cleft clause inherently expresses a pragmatic presupposition. In section 2, I argue that these two syntactic and semantic parts of a cleft can map onto topic/comment structure in a flexible way, so that the cleft sentence as a whole can have a topic-comment as well as a comment-topic organization,

with the consequence that the cleft clause as well as the clefted constituent can contain a prosodic focus when spoken aloud. In section 3, I argue that it is fruitful to view each of these prosodic foci as expressing a semantic focus in the sense defined immediately below as expressing the presence of alternatives. This allows cleft sentences with more than one prosodic focus to be viewed as multiple focus constructions semantically, which in turn allows several interesting subtypes of cleft usage to be explicated. In section 4, I briefly conclude.

### *1.1 Clefted constituent expresses an exhaustive focus*

For 'focus', it is useful to adopt the definition given in (2) from Krifka (2007), which is based on the view of focus taken in Alternative Semantics (Rooth 1985, 1992).

- (2) *Focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions.*

Krifka (2007) (p. 7) goes on to say,

It might well be that different ways of focus marking signal different ways of how alternatives are exploited; e.g. focus marking by cleft sentences often signals an exhaustive interpretation that in-situ focus lacks. We can then talk about subtypes of focus, such as cleft focus and in-situ-focus, that may employ the alternatives in more specific ways.

It is clear that in (1), the speaker exhaustively picks out Ursula as the one who decided, excluding the alternative that it was Jim or, in particular, both Ursula and Jim. Focus can be used pragmatically to answer a question, to correct information, or to confirm information (Krifka 2007, p. 12). In (1), we have an example of the corrective use of cleft focus, as the speaker is correcting herself.

É. Kiss (1998) presents a test for the exhaustivity of cleft focus, which she attributes to Donka Farkas. Notice the contrast between the felicity of (3aB) adding to a cleft focus and the infelicity of (3bB) adding to an in situ focus:

- (3) a. A: It was a HAT that Mary picked for herself.  
B: No, she picked a COAT, too.  
b. A: Mary picked a HAT for herself.  
B: # No, she picked a COAT, too.<sup>1</sup>

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<sup>1</sup> Wedgwood (2007) points out that this dialogue is felicitous in some exhaustive in situ contexts, such as that in (i):

Hedberg (1990, 2000) argues that the cleft clause forms a discontinuous definite description with the cleft pronoun acting as a definite determiner, and this definite description being equated with the referent of the clefted constituent via the copula. Implementing this analysis formally in Tree-Adjoining Grammar, Han & Hedberg (2008) assign the semantics in (4b) to the ‘equative’ cleft in (4a). (4b) entails the Russellian predicate logic formula in (4c), which contains the exhaustive meaning associated with the clefted constituent.

- (4) a. It was Ohno who won.  
 b.  $\text{THE}_z [\text{won}(z)] [z = \text{Ohno}]$   
 c.  $\exists z [\text{won}(z) \wedge \forall y [\text{won}(y) \rightarrow y = z] \wedge z = \text{Ohno}]$

As Wedgwood (2007) argues, however, the cleft cannot be said to assert an exhaustive focus, with the semantics in (5) because, as Horn (1981) pointed out, it is infelicitous to use an otherwise unmodified cleft sentence to directly assert that this exhaustive meaning holds. Thus, (6a) is infelicitous. To assert exhaustiveness, a focus particle must be used, as in (6b).

- (5)  $\lambda x [\lambda P [P(x) \wedge \forall y [P(y) \rightarrow y=x]]]$
- (6) a. # I know Mary ate a pizza but I've just discovered it was a pizza that she ate.  
 b. I know Mary ate a pizza but I've just discovered it was only a pizza that she ate.

Instead of encoding an exhaustive focus as part of the assertion, it is compatible with the data in (6) to analyze the cleft as encoding an identificational focus, with the semantics in (7), whereby the exhaustive meaning is conveyed as a presupposition.<sup>2</sup>

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- (i) C: I see that Jane picked herself a coat, a scarf and a pair of gloves.  
 A: Whereas Mary picked herself a HAT.  
 B: No, she picked a COAT, too.

<sup>2</sup> Horn (1981) further argues that the exhaustiveness condition may in fact be a generalized conversational implicature, instead of an entailment or presupposition, because it can be cancelled, as in the examples in (i).

- (i) a. It was in that article, among other places, that Bork expressed his support for California's anti-open-housing referendum and his belief that it was only 'political speech' which deserved First Amendment protection. [David S. Broder, 'The need to be sure on Bork', Minneapolis Star and Tribune, 9/20/87]

$$(7) \quad \lambda x[\lambda P[x = \iota y[P(y)]]]$$

The syntax of the cleft transparently reflects this semantics, as Wedgwood further points out, if the cleft is given the syntactic and semantic analysis argued for in Hedberg (1990, 2000). The formal analysis in Han & Hedberg (2008) is compatible with this if the semantic account is elaborated to specify the exhaustiveness condition just discussed as well as the existential condition next to be discussed as presuppositions.

### 1.2 Cleft clause expresses a pragmatic presupposition

In addition to the exhaustiveness condition associated with the clefted constituent, the second part of the cleft, the cleft clause, expresses an existential presupposition, as can be seen by the fact that the corresponding existentially quantified proposition survives under negation, questioning, and in the antecedent of a conditional (Chierchia & McConnell-Ginet 1990). Thus a speaker of (8a-d) would normally believe (8e) and assume that the addressee shares this belief.

- (8) a. It was Ursula who decided.  
b. It wasn't Ursula who decided.  
c. Was it Ursula who decided?  
d. If it was Ursula who decided, then Jim is off the hook.  
e. Someone decided.

The relevant notion of pragmatic presupposition was defined by Stalnaker (1974: 200) as shown in (9).

- (9) *A proposition P is a pragmatic presupposition of a speaker in a given context just in case the speaker assumes or believes that P, assumes or believes that his addressee assumes or believes that P, and assumes or believes that his addressee recognizes that he is making these assumptions or has these beliefs.*

Dryer (1996) gives a number of examples supporting the thesis that the information expressed by the cleft clause is pragmatically presupposed, as shown in (10). In (a), B would be uttering a cleft sentence without believing the presupposition that someone saw John. In (b) and (c), B would

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b. It's the ideas that count, not just the way we write them. [Richard Smaby, lecture; example provided by Ellen Prince and discussed in Horn 1981]

For more discussion and additional examples, see Horn (1981) and Hedberg (1990).

be uttering a cleft sentence in a context where it is clear that it is not the case that A believes the presupposition. Since a presupposition must be mutually believed, the clefts in all three cases are infelicitous.

- (10) a. A: Who saw John?  
B: #It was NOBODY that saw John.  
b. A: Who if anyone saw John?  
B: #It was MARY that saw John.  
c. A: Did anyone see John?  
B: #It was MARY that saw John.

Crucially, Dryer shows that the non-focus information in a non-cleft sentence containing only a prosodic focus is not pragmatically presupposed. The simple sentence counterparts of the clefts in (10) are perfectly felicitous in (11).

- (11) a. A: Who saw John?  
B: NOBODY saw John.  
b. A: Who if anyone saw John?  
B: MARY saw John.  
c. A: Did anyone see John?  
B: MARY saw John.

Dryer argues that the non-focus in simple sentences is activated instead of presupposed, where activation is a cognitive notion meaning that the material conveyed is represented in short-term or working memory<sup>3</sup>. The main thesis of his paper is that a distinction needs to be drawn between pragmatic presupposition and activation. While some linguistic phenomena, like cleft clauses, involve true pragmatic presupposition (shared belief), others, like the non-focus of simple sentences, involve activation (presence in consciousness). The two notions are distinct: there can be presupposed propositions that are not activated, and activated propositions that are not presupposed.<sup>4</sup>

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<sup>3</sup> Dryer deliberately does not attempt to formalize his notion of 'activation' because the nature of activation is an empirical matter under investigation by psychologists. Chafe (1974) perhaps was the first to introduce the psychological notion of activation (or 'consciousness') into linguistics, and 'activated' is the term used in Gundel, Hedberg & Zacharski (1993) for one of their cognitive statuses. An element is activated for a subject whenever it is represented in short-term or working memory, whether it was linguistically introduced, introduced in the physical context, arrived at by inference, or retrieved from long-term memory. It is thus a broader notion than some similar notions that linguists have formally defined, such as Rochemont's (1986) notion of 'c-construable' or Schwarzschild's (1999) notion of 'Givenness'.

<sup>4</sup> An anonymous reviewer points out that Rooth's theory correctly predicts in a formal way that the background to a simple sentence with prosodic focus does not require existential

As a further argument against the idea that prosodically non-focused material and presupposition should be equated, Dryer shows that presupposed material can be prosodically focused. He illustrates with the example from Halliday (1967) in (12) in which prosodic focus occurs on a cleft clause:

- (12) A: Have you told John that the window got broken?  
B: It was John that BROKE the window.

This example shows that cleft focus and prosodic focus can diverge in a cleft sentence. The example also shows that cleft clause material need not always be activated, although in the examples in (1) the cleft clause material was both presupposed and activated. In (13B), it doesn't seem necessary to assume that A is necessarily consciously contemplating the proposition that someone or something broke the window, although this is something that he presumably believes.

A cleft presupposition can also be denied or suspended like other pragmatic presuppositions, as in the examples in (13) and (14):

- (13) You believe that Mary kissed someone in this room. But *it wasn't Joe that she kissed*, and it wasn't Rita, and clearly it wasn't Bill, and there hasn't been anyone else here. Therefore, Mary didn't kiss anybody in this room. [Halvorsen 1978, variants in Keenan 1971, Gazdar 1979, Levinson 1983]
- (14) If *it wasn't an apple that John ate*, then John ate nothing. [Delahunty 1982]

To sum up, a cleft sentence packages a proposition in such a way that the two principal semantic parts of a cleft—an exhaustive focus and a pragmatic presupposition—are mapped transparently onto two syntactic constituents—a clefted constituent and a cleft clause—and are equated with each other via a copula. In the following section, I examine clefts where the prosodic focus falls on the clefted constituent and those where the prosodic focus falls on the cleft clause, and discuss the extent to which such clefts can be analyzed as differing in the mapping between the different parts of the cleft and the information structural distinction between topic and comment. In section 3, I present an analysis of clefts in which the primary sentence accent falls on the cleft clause as multiple focus structures.

## 2. Cleft Sentences and the Topic/Comment Mapping

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closure. Thus Rooth (1992) uses a  $\sim$  operator to indicate that the background of the focus is anaphorically linked to an antecedent in the context.

In this section, I argue that the mapping of the two primary parts of a cleft sentence onto the information structure categories of topic and comment is flexible, so that cleft sentences can exhibit either comment-topic or topic-comment organization. These two organizations correspond to the distinction that Prince (1978) drew between ‘stressed focus’ and ‘informative presupposition’ it-clefts.

### 2.1 *Comment-topic clefts*

In prototypical clefts, like that in (1), the cleft clause expresses an activated presupposition and the clefted constituent, which does or at least could receive the primary sentence accent, expresses a focus that is used to make a correction as in (1), to answer a question or to present a contrast.

Example (15) shows a ‘truncated’ cleft that answers an indirect question, and where the content of the question is so strongly activated that it can be elided in the cleft. It is difficult to find examples of clefts directly answering a wh-question, probably because wh-questions are usually directly answered using a sentence fragment instead of a whole sentence.

- (15) Haven't you been wondering who the dickens put them in that watermelon? Of course you have; but you might have known **it was Janet**, because no one else would have done it. [Rex Stout, *The Hand in the Glove*, 1936, p. 271]

Example (16) shows a cleft used to make a contrast. The material expressed by the cleft clause represents an inference by the speaker and could probably be pronounced with no accent on the cleft clause.

- (16) 'His inheritance? Was he the eldest son, then?'  
'No, Barnabas was the eldest, but he was killed at Waterloo and left no family.  
Then there was a second son, Roger, but he died of smallpox as a child. Simon was the third son.'  
**'Then it was the fourth son who took the estate'**  
'Yes, Frederick. He was Henry Dawson's father. They tried, of course, to find out what became of Simon, but in those days it was very difficult, you understand, to get information from foreign places, and Simon had quite disappeared. So they had to pass him over.' [Dorothy Sayers, *Unnatural Death*, 1927, p. 127]

It is quite common for material in the cleft clause to be inferred instead of directly activated linguistically. Another example is shown in (17), which would most likely be pronounced with primary sentence accent on the

clefted constituent, and again the cleft clause can be expressed with no accent.

- (17) Beginning at the top of the list, I went along the landing and tapped at Ruskin's door. When it was opened, **it was Webber who stood there**. We stared at each other for a moment, both of us taken aback. [Lucille Kallen, *The Piano Bird*, 1984, p. 95]

In all of these cases, the clefted constituent expresses an exhaustive focus and the cleft clause expresses an activated proposition or one that is easily inferable from activated information. Primary sentence accent falls on the clefted constituent and the cleft clause is or can be left unaccented or even not expressed at all. Prince (1978) calls such clefts 'stressed focus clefts'.

Following Gundel (1985), such clefts were analyzed as comment-topic (termed 'topic-clause') clefts in Hedberg (1990) because the cleft clause can be seen as expressing the topic of the utterance and predication of the clefted constituent as expressing the comment. The evidence is that primary sentence accent falls on the clefted constituent rather than the cleft clause, and that the cleft clause material passes topic tests better than the clefted constituent does. Thus, (18a) illustrates the 'question test' (Sgall et al. 1973, Gundel 1974, Reinhart 1982), whereby elements in the question eliciting a sentence are concluded to be part of the topic. Likewise, (18b) illustrates the '*as for* test' (Kuno 1972, Gundel 1974), and (18c) illustrates the '*said-about* test' (Reinhart 1982). According to both of these tests, elements singled out by 'as for' or 'said about' are concluded to be topics.

- (18) a. Who decided? Actually, it was Ursula.  
#What about Ursula? Actually, she decided.  
b. Or rather, as for who decided, it was Ursula.  
#Or rather, as for Ursula, she decided.  
c. Then, Evelyn said about who decided that it was Ursula.  
??Then Evelyn said about Ursula that she decided.

The cleft clause material in (15)-(17) also passes the topic tests, as (19) shows:<sup>5</sup>

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<sup>5</sup> These tests have sometimes been misunderstood as substitution tests, and rejected on that basis. However, the claim is not, for example, that an 'as-for' phrase can always be appended to the front of the sentence containing the purported topic, with the modified sentence then being felicitously substitutable for the original sentence in the original discourse context. Other adjustments almost always need to be made to the discourse. Thus, a discourse showing that (19c) is felicitous would be one like that shown in (i):

- (i) I went along the landing and tapped at Ruskin's door. The door opened.  
[Pause.] As for who stood there, it was Webber.



- (19) a. As for who put them in the watermelon, it was Janet.  
 b. As for who took the estate, was it the fourth son?  
 c. As for who stood there, it was Webber.

A potential problem with taking cleft clause material to be topical is that it may not be immediately clear how a clause can denote an entity. Hedberg (1990) followed Gundel's (1988) definition of 'topic', given in (20). This is very similar to Krifka's (2007) definition of topic, given in (21), which is based on Reinhart's (1982) definition. In addition to containing a set of propositions, the Common Ground here is understood as containing a set of entities.

(20) *An entity, E, is the topic of a sentence, S, iff, in using S, the speaker intends to increase the addressee's knowledge about, request information about or otherwise get the addressee to act with respect to E.*

(21) *The topic constituent identifies the entity or set of entities under which the information expressed in the comment constituent should be stored in the CG [Common Ground] content.*

Gundel (1985) assumes that a cleft clause can express an entity in the same way that a free relative can. In this way the topic of (1) would be [the person(s)] who decided, and then this entity would be identified as Ursula by the cleft utterance. Such an analysis is made explicitly in the account of clefts of Hedberg (1990, 2000) and Han & Hedberg (2008), where (specificational) clefts are treated as equative constructions equating an entity or set of entities with the denotation of a discontinuous definite description.

Krifka's definition makes it clear that a topic constituent needs to identify a location for the information expressed in the comment constituent to be stored. With regard to the cleft in (1), we could perhaps assume that there is a temporary storage place, or file card, corresponding to the question, 'who decided?' In a mystery novel, for example, the detective can be seen as creating a set of cards sorted by questions, which are filled in when they are answered, and then the information on those cards is transferred to the cards corresponding to the entities referred to in the question and the answer. When the hearer of the utterance in (1) processes the cleft, perhaps he first accommodates a new card corresponding to the question 'who decided?', then completes it with the answer, Ursula. He then transfers the information that Ursula decided to the Ursula card, and deletes the information from the

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Similarly, the context for (18a) would have to be one that modifies the discourse in (1) into a dialogue, and then pronounces the question in (18a) as an echo question.

Ursula and Jim card that they decided, or perhaps more precisely deletes from the Ursula card the information that she decided with Jim and from the Jim card that he decided with Ursula.

Alternatively, following Dahl (1974), we could posit two information structure distinctions: Topic/Comment, to be used when the topic constituent denotes an entity; and Focus/Background, to be used when there is a focus+presupposition structure to the sentence, as in the case of stressed focus clefts.<sup>6</sup> However, this still leaves open the question as to where the information would be stored. Presumably, after processing the sentence, the information would be stored on the cards corresponding to the entities denoted by the DPs in the sentence. I don't know of any substantive way to decide between these alternative approaches, and I will continue to use the Gundel-based terminology.<sup>7</sup>

## 2.2 Topic-comment clefts

Clefts with primary accent on the cleft clause were first discussed systematically by Prince (1978). She contrasted the previously more commonly discussed type of cleft, which she called a 'stressed focus' cleft, in which the clefted constituent presents contrastive information and the clause presents information that is given in the discourse, with clefts in which the information in the cleft clause is new and thus can appear discourse initially. One of her examples of such 'informative presupposition clefts' is shown in (22), where the writer does not seem to be expecting that readers already know that Henry Ford was responsible for introducing the weekend.

(22) [BEGINNING OF A NEWSPAPER ARTICLE]

*It was just about 50 years ago that Henry Ford gave us the weekend.* On September 25, 1926, in a somewhat shocking move for that time, he decided to establish a 40-hour work week, giving his employees two days off instead of one. [Philadelphia Bulletin, 1/3/76, p. 3L, cited in Prince 1978, p. 898]

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<sup>6</sup> Alternatively, we could follow Vallduvi (1990) and identify a tripartite information structure, where 'focus' is opposed to 'background' and the latter is divided into two subparts. Vallduvi (1990) would oppose 'link' to 'focus' in the case of initial, entity-level topics, and 'tail' to 'focus' in the case of unaccented cleft clauses.

<sup>7</sup> Huber (2006) objects to Hedberg's use of the term 'topic' in her 'topic-clause clefts' because for him a topic cannot follow a focus. However, a topic can follow a focus in Gundel's system if it is an 'activated topic'. Thus postverbal object pronouns often express the topic of an utterance, as do right-dislocated constituents. 'Topic' for Gundel (1985, 1988) really corresponds to Vallduvi's 'background' and thus topics can come in two flavors: that of Vallduvi's 'link' and that of his 'tail'.

According to Prince (1978, p. 899), informative presupposition clefts “mark a piece of information as fact, known to some people although not yet known to the intended hearer.” Delin (1992, p. 302) characterizes such a presupposition as “non-negotiable in the discourse at the time at which it appears.” In such uses of clefts, the speaker intends to convey information that is new to the hearer and thus not in fact already in the common ground. However, because the information is presented as a known fact, it is presented as easily accommodatable into the common ground (Lewis 1979). With this use, then, the speaker exploits the presuppositional structure of a cleft as a rhetorical device in order to effect a change in the common ground.<sup>8</sup> Such clefts thus can be used even discourse initially to begin a newspaper article, as in example (22) or to dramatically begin a novel as in example (23).

(23) [BEGINNING OF A MYSTERY NOVEL]

*It was jealousy that kept David from sleeping, drove him from a tousel bed out of the dark and silent boardinghouse to walk the streets. He had so long lived with his jealousy, however, that the usual images and words, with their direct and obvious impact on the heart, no longer came to the surface of his mind. It was now just the Situation. [Patricia Highsmith, This Sweet Sickness, 1961, p. 1]*

As Hedberg (1990) points out, clefts with primary accent on the cleft clause can have familiar as well as informative presuppositions, as in (24). Such presuppositions are ‘discourse new’ but ‘hearer old’ in the terms introduced in Prince (1992), and thus are not actually informative to the hearer.

- (24) '...And of course, we've only got his version of the niece and the nurse—and he obviously had what the Scotch call ta'en a scunner at the nurse. We musn't lose sight of her, by the way. She was the last person to be with the old lady before her death, and **it was she who administered that injection.**'  
'Yes, yes—but the injection had nothing to do with it. If anything's clear that is'. [Dorothy Sayers, Unnatural Death, 1927, p. 17]

It was argued in Hedberg (1990) that clefts such as (24) map onto information structure in such a way that the clefted constituent expresses the

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<sup>8</sup> Consistent with this analysis, Ball (1992) argues that the English informative presupposition cleft is historically newer than the stressed focus cleft, having emerged during the Late Middle English period (1300-1500), whereas stressed focus clefts were attested in the Old English period.

topic and the cleft clause expresses the comment. Evidence in support of this analysis comes from the results of the topic tests shown in (25).

- (25) a. As for the nurse, it was she who administered that injection.  
b. A: What about the nurse?  
B: It was she who administered that injection.  
c. He said about the nurse that it was she who administered that injection.

Other pieces of evidence that the clefted constituent expresses the topic are that the material denoted by the clefted constituent is activated in the discourse and more activated than the material in the cleft clause, which is merely familiar; and that the main prosodic accent in the sentence falls on the cleft clause. Finally, Prince (1978) observes that the clefted constituent in informative presupposition clefts perhaps always represents the subject of the cleft clause proposition or a sentence adverbial. Such constituents are also widely believed to be the most typical sentence topics.

It is widely believed that topics in English are marked with a fall-rise prosodic accent, and it can be seen from the examples in (26) and (27), from Geluykens 1984, that the clefted constituent in clefts with two accents is at least sometimes marked with a fall-rise accent, while the cleft clause is marked with a falling accent. This accent pattern is consistent with such clefts having a topic-comment organization.<sup>9</sup>

- (26) Well she must have known about it # and . it was "[[SHE<sub>FR</sub> who at'tempted to 'burn the BOOKS<sub>F</sub> #and de||stroy the EVIDENCE<sub>F</sub>. [Geluykens 1984, C19].

- (27) It was "JOHNNY<sub>FR</sub> that 'stole her MONEY<sub>F</sub> while we were away in France, I think, wasn't it? [Geluykens 1984, C41]

Other examples from Geluykens' corpus exhibit a falling accent on the cleft clause and an unaccented clefted constituent:

- (28) a. Did you meet Fuller?  
b. Yes, # it was || he who INVITED<sub>F</sub> me #- and it was a very pleasant day. [Geluykens 1984, C22]

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<sup>9</sup> For discussion and references on fall-rise accents as marking topics, see Hedberg and Sosa (2007). In that article we argue that the L+H\* pitch accent can mark comments as easily as it can mark topics in English, but we concede that the entire fall rise tune (L+)H\*LH% probably does have the function of marking 'contrastive topics' in the sense that has been recently developed in formal semantics, e.g. Büring (2003), Steedman (2007).

- (29) ... though Sir Garnet was marvelous that he'd done it all you see. So this was a mysterious phrase which I knew perfectly well what it meant, it meant that everything was tidy you see # but it was || he who EXPLAINED<sub>F</sub> #what it "MEANT<sub>F</sub>#. [Geluykens, 1984, C12]

Despite the plausibility of this topic-comment analysis, one might equally well conclude that the cleft construction is used precisely to mark subjects and sentence adverbials as non-topics. Lambrecht (2001) criticizes Hedberg's analysis of some subject-extracted reverse pseudoclefts as topic-comment structures on the grounds that if the clefted constituent is a topic, why would a cleft construction be used at all when a non-clefted subject-predicate structure directly expressing a topic-comment structure could have been chosen for that function? I would say in response that the cleft, unlike a non-clefted sentence, allows the subject to be marked as an exhaustive focus and the material in the predicate to be marked as presupposed.

At this point I would like to leave this debate about whether or not the clefted constituent can express the topic of a cleft utterance, and concentrate on discussing some interesting types of clefts that contain a primary accent on the cleft clause. The definition of focus given above in (2), which says simply that foci present alternatives, is conveniently neutral with regard to whether the items so marked are topics or not. Clefts which are prosodically prominent on both subparts can then be seen as sentences containing multiple foci. In the next section, I hope to show that examining them from this perspective can shed light on the meaning and use of the cleft construction.

### 3. Multiple Focus Clefts

In this section, I examine three subtypes of clefts that contain prosodic prominence on both the clefted constituent and the cleft clause, and explore the consequences of viewing such clefts as multiple focus constructions in the sense of Krifka (1992, 2007).

#### 3.1 *Vice-versa clefts*

Ball & Prince (1978) discuss the cleft example in (30). They point out that such clefts constitute an exception to the generalization that cleft clauses express presupposed information.

- (30) *It's not John that shot Mary. It's Mary that shot John.*

The presupposition in the first cleft in (30) is not that 'someone shot Mary' (because the speaker does not believe this—the speaker is here most likely

objecting to the addressee's assertion that John shot Mary) and in the second it-cleft the presupposition is not that 'someone shot John' (because the addressee does not believe this—the addressee just asserted that John shot Mary). Rather the background presupposition that is shared by speaker and addressee is that 'someone shot someone'.

Carlson (1983, p. 234) also mentions such clefts and concludes that the question eliciting such a cleft as its answer is a “double question with a unique pair presupposition, who has lost (and) what?”. He gives the example in (31):

- (31) It is not I who have lost the Athenians but the Athenians who have lost me. [Anaxagoras]

Two more recently attested examples are shown in (32) and (33). In (32), Robert assumes that Anna is taking it for granted that he called her. Thus it is not presupposed that someone called Robert. What is actually shared background knowledge is that someone called someone. In (34), it is established that Russell was with someone, and that someone else followed. The cleft sentences give two possible ways of pairing the two unknowns, and they are the reverse of each other.

- (32) Anna: So, what's the case you're working on?  
Robert: Nothing I need bother you with now. It's YOU who called ME, remember? [General Hospital, ABC, 6/21/89]

- (33) 'He didn't go down to the river alone that night, did he?' In fact Lauren had every reason to suppose that Russell had gone down to the river with Sandy Grayson.  
'No I don't think he did,' said Tracy.  
'And someone else was following?' Laura suggested.  
'Yes, perhaps,' said Tracy noncommittally.  
*Was it Tracy who followed Russell and Sandy? Or was it Sandy who followed Russell and Tracy? And how did Dora Carpenter fit in?* [Victoria Silver, *Death of a Harvard Freshman*, 1984, p.99]

Krifka (1992, 2007) discusses cases of ‘complex focus’ like the reading of the example in (34), where “the only pair of persons such that John introduced the first to the second is Bill and Sue.” There are two foci related to one focus operator.

- (34) John only introduced BILL to SUE.

Vice-versa clefts are a type of complex focus construction since there is one focus operator (the exhaustive focus operator associated structurally with the cleft) and two foci, one expressed in the clefted constituent and one in the cleft clause. Following Krifka, a schematic representation of this focus structure is shown in (35).

- (35) It's not CLEFT<sub>1</sub> [JOHN]<sub>F1</sub> that shot [MARY]<sub>F1</sub>. It's CLEFT<sub>2</sub> [MARY]<sub>F2</sub> that shot [JOHN]<sub>F2</sub>.

Although according to Han and Hedberg's (2008) analysis of cleft structures, the cleft clause and the cleft pronoun are semantically composed together, as represented in the TAG derivation tree, the negation particle and the exhaustive operator can be seen as syntactically c-commanding both prosodic foci in the derived structure, in which the clefted constituent and the cleft clause form a constituent as elements of a functional projection (FP) that serves as the complement of the copula. The c-command requirement of focus operators with their focused associates, discussed in Krifka (1992), is thus met.

Krifka contrasts cases of complex focus with cases of multiple focus, where there are multiple foci but also multiple focus operators. In the next two subsections, I give examples of clefts exhibiting multiple foci.

### 3.2 *Emphatic repetition clefts*

Hedberg (1990) discusses a use of clefts that she calls 'emphatic repetition clefts'. Some examples are given in (36) and (37). These are typical 'informative presupposition' clefts in that the clefted constituent expresses either the subject of the cleft proposition as in (36) or a sentence adverbial, as in (37).

- (36) The little woman in the blue trouser suit came into the restaurant car and hesitated for a moment before making for the table where the two married couples sat. The barrister jumped up and pulled out a chair for her. And then Wexford understood it was she he had seen. *It was she who had been coming down the corridor when he turned away from the window, she who, while his eyes were closed, had vanished into her own compartment. She too was a small slight creature, she too was dressed in a dark-coloured pair of trousers and a jacket, and though her feet had certainly never been subjected to binding, they were not much bigger than a child's and they too were encased in the black Chinese slippers on sale everywhere.... [Ruth Rendall, Speaker of Mandarin, 1983]*

(37) Just what is Canada?

It is a question that each traveler brings to this nation, and it is a question that has no single answer. Canada is a delightful labyrinth of cultures and customs, of peaceful coexistence and political squabbles....

*It is here where the hearty French established a settlement along the frothy St. Lawrence River and survived the first relentless winter. It is here that the first bewildered European immigrants wondered how they would ever be able to thrive in such an unruly land; here where the British Loyalists fled from American revolutionaries; here where provinces separated by great distances and differences joined to form one nation.*  
[Insight Guide to Canada, 1988, p. 15]

Such clefts can be seen as multiple focus constructions if an ASSERT operator is posited to bind the comment focus given in the cleft clause, as Krifka (1992) discusses, following Jacobs (1984). A schematic representation of the resulting focus structure is given in (38). Here the CLEFT focus operator binds the focus presented in the clefted constituent, and the ASSERT focus operator binds the focus presented in the cleft clause.

(38) ASSERT<sub>1</sub> It was CLEFT<sub>2</sub> [SHE]<sub>F2</sub> [who had been coming down the corridor when he turned away from the WINDOW]<sub>F1</sub>

It is consistent with Krifka's framework, for a focus to also function as a topic in a different dimension, and the examples in (36) and (37) can be seen as expressing continuing topics in the clefted constituent. Contrastive topics are also possible, as in the example in (39) and (40).

(39) The women who went were almost all married. But *it was husbands who were captured by the glowing descriptions of the West, wives who were skeptical. Husbands who thought of what could be gained; wives who thought of what would be lost.*  
[Ellen Goodman, 'the uprooted II', in Goodman 1985, p. 231]

(40) Not every community, courtroom, or jury today accepts this simple standard of justice. But ten years ago, five years ago, even three years ago, these women might not have pressed charges.

*It was the change of climate which enabled, even encouraged, the women to come forward. It was the change of attitude which framed the arguments in the courtroom. It was the change of consciousness that infiltrated the jury chambers.* [Ellen Goodman, 'If she says no', in Goodman 1985, p. 326]



I suggest that such examples can be given the semantic analysis sketched in (41) for (39). These examples differ from the cases exemplified in (38) only insofar as the clefted constituent expresses a contrastive topic as well as an alternative focus. Again the CLEFT focus operators binds the focus presented in the clefted constituent and the ASSERT focus operator binds the focus presented in the cleft clause.

- (41) ASSERT<sub>1</sub> It was CLEFT<sub>2</sub> [ [HUSBANDS]<sub>F2</sub> ]<sub>CT</sub> [who were captured by the glowing description of the WEST]<sub>F1</sub>

### 3.3 Also and even clefts

The last subtype of cleft that I will discuss involves an additional focus operator binding a focus expressed in one of the two parts of a cleft sentence. If we continue to posit an ASSERT and a CLEFT focus operator in such sentences, then the additional focus particle contributes a second focus operator binding an already bound focus, so such examples represent an even more complex type of multiple focus construction, whereby there are multiple focus operators binding a single prosodic focus (see Krifka 2007 for noncleft examples of this situation).

Krifka (1999) gives the relatively informal formulations of the meaning of the three major focus particles of English, *only*, *also*, and *even*, shown in (42). He labels these focus particles ‘exclusive’, ‘additive’ and ‘scalar’, respectively, and the logical formulas show the assertions and presuppositions of these three types of focus particles.

- (42) [EXCL<sub>1</sub> [...F<sub>1</sub>...]]:  $\neg\exists F' \neq F [\dots F' \dots]$  ([...F...])  
 [ADD<sub>1</sub> [...F<sub>1</sub>...]]: [...F...] ( $\exists F' \neq F [\dots F' \dots]$ )  
 [SCAL<sub>1</sub> [...F<sub>1</sub>...]]: [...F...] ( $\neg\exists F \neq F [\dots F \dots] <_{\text{likely}} [\dots F' \dots]$ )

It was argued above that the clefted constituent in a cleft inherently expresses exhaustiveness. It has often been pointed out that this exhaustive semantics is compatible with the exclusive focus adverb *only* but not with additive focus particles like *also* or scalar focus particles like *even*. Thus, Horn (1969, p. 106) makes the claim that “clefting, like *only*, specifies uniqueness, while *even* and *also* presuppose non-uniqueness and thus cannot be clefted”, and gives the examples shown in (43).

- (43) a. It’s only Muriel who voted for Hubert.  
 b. \*It’s also Muriel who voted for Hubert.  
 c. \*It’s even Muriel who voted for Hubert.

In arguing that clefted constituents in it-clefts constitute identificational foci, É. Kiss (1998) reiterates this claim but points out that there are exceptional contexts that allow a clefted constituent to be modified by *also*, citing the example in (44):

- (44) A: Bill danced with Mary.  
B: No, it was Sam that danced with Mary.  
C: **It was also John that danced with her.**

She says (p. 252), “A cleft *also*-phrase appears to be acceptable precisely in a context where it can be understood to identify a member of a relevant set in addition to one or more members identified previously as such for which the predicate holds, with the rest of the set still excluded.”<sup>10</sup> Note that the example in (44C) is a comment-topic cleft, since it can be paraphrased as shown in (45):

- (45) As far as who danced with her is concerned, that was also John.

Nonetheless, it was pointed out in Hedberg (1990, 2000, 2006) and Hedberg and Fadden (2007) that attested exhaustive examples with *also* apparently syntactically adjoined to the clefted constituent in clefts can occasionally be found, for example the clefts in (46)-(48). Such examples do not fit the formula proposed by É. Kiss. In these examples, *also* apparently associates with a focus in the cleft clause, and this association of *also* does not lead to a contradiction to the meaning of the cleft.<sup>11</sup>

- (46) It was the President, in a rare departure from the diplomacy of caution, who initiated the successful Panama invasion. *It was also Bush who came up with the ideas of having an early, informal Malta summit with Gorbachev and a second round of troop cuts in Europe after the fall of the Berlin wall.* But it was Baker who subtly turned the Malta summit from the informal, ‘putting our feet up’ chat initially envisaged by the President into a platform for the United States to demonstrate through a

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<sup>10</sup> An attested example of Kiss's scenario is shown in (i). The focus particle *also* does not occur here, but it could:

- (i) A: What is it about literature that you find so attractive?  
B: Because literature is in some cases the product of the imagination isn't it and of men's minds, and it is the imagination and the mind of man that I'm interested in. I think one must know the mind of man...[5 intonation units]... Yes but it's not just imagination, it's the character of men and the actions of men that I'm interested in. [Geluykens 1983, C45]

<sup>11</sup> I thank an anonymous reviewer for clarifying the introduction to these examples.

16-point initiative that it was prepared to help Gorbachev. [M. Dowd and T.L. Friedman, 'The Fabulous Bush and Baker Boys', The New York Times Magazine, 5/6/90, p. 64].

- (47) The rate of fatal heart attacks among middle-aged men increased steadily until the late 1960's, at which point it leveled off and soon began to decline. Not coincidentally, it was about that time that large numbers of men wised up to the harmfulness of cigarettes. *It was also in the late 60's that more healthful foods—specifically, foods low in cholesterol and saturated fat—began to invade American kitchens.* Since then, the average cholesterol level of adult males has fallen.... [Jane E. Brody, 'America's Health: An Assessment,' the New York Times Magazine, 10/8/89, p. 42]
- (48) [12] These are the men who are hidden reefs in your love feasts when they feast with you without fear, caring for themselves; clouds without water, carried along by winds; autumn trees without fruit, doubly dead, uprooted; [13] wild waves of the sea, casting up their own shame like foam; wandering stars, for whom the black darkness has been reserved forever. [14] *It was also about these men that Enoch, in the seventh generation from Adam, prophesied,* saying, «Behold, the Lord came with many thousands of His holy ones, [15] to execute judgment upon all, and to convict all the ungodly of all their ungodly deeds which they have done in an ungodly way, and of all the harsh things which ungodly sinners have spoken against Him. [New American Standard Bible, the Epistle of St. Jude, chapter 1]

Crucially, in such clefts, the primary sentence accent falls on the cleft clause, and I suggest that it is this prosodic focus that the additive focus particle associates with.

The clefted constituent seems to express the topic of the cleft sentence. The clefted constituent has just been mentioned and is relatively unstressed. Additional evidence for this conclusion comes from the 'speaking of' variant of the classical 'as for' topic test shown in (49).

- (49) a. Speaking of the President, it was also Bush who came up with the ideas of having an early, informal Malta summit with Gorbachev...
- b. Speaking of the late 1960's, it was also in the late 1960's that more healthful foods began to invade American kitchens.
- c. Speaking of these men, it was also these men that Enoch prophesied about.

A schematic example illustrating the type of discourse context in which *also* clefts can be found is given in (50). Replacing *also* with *even*, as in (51), also results in a felicitous cleft.

- (50) A: Why do you think that John is the murderer?  
 B: It was John who had the motive. It was John who had the opportunity. *It was also JOHN who found the BODY.*
- (51) A: Why do you think that John is the murderer?  
 B: It was John who had the motive. It was John who had the opportunity. *It was even JOHN who found the BODY.*

*Also-* and *even-*marked clefts still exhibit exhaustiveness, as can be seen from the fact that the clefts in (50) and (51) can be paraphrased as shown in (52), where an exclusive focus particle *only* is added to bind the focus expressed in the clefted constituent:

- (52) a. It was only John who had the motive. It was only John who had the opportunity. *It was also only JOHN who found the BODY.*  
 b. It was only John who had the motive. It was only John who had the opportunity. *It was even only JOHN who found the BODY.*

A Krifka-style schematic representation of the focus structure of the *also* cleft in (50) is shown in (53), and the more complicated example in (52a) is shown in (54). In the latter, both prosodic foci are bound by two focus operators.

- (53) ASSERT<sub>1</sub> It was ALSO<sub>2</sub> CLEFT<sub>3</sub> [JOHN]<sub>F3</sub> [who found the BODY]<sub>F1, F2</sub>
- (54) ASSERT<sub>1</sub> It was ALSO<sub>2</sub> ONLY<sub>3</sub> CLEFT<sub>4</sub> [JOHN]<sub>F3, F4</sub> [who found the BODY]<sub>F1, F2</sub>

My only attested example of an *even* cleft is shown in (55). Here *even* seems to have scope over the whole cleft proposition, as paraphrased in (56). ‘Wexford’ is activated information, although the cleft in this case does not seem to be ‘about’ Wexford in the sense of ‘topic’ defined above, which would mean that the information in the cleft would be intended to be stored in the common ground under the heading ‘Wexford’.

- (55) Wexford and Mr. Sung looked through the wooden grille at the great deep rectangular burial shaft and Mr. Sung quoted almost

verbatim a considerable chunk from *Fodor's Guide to the People's Republic of China*. He had a retentive memory and seemed to believe that Wexford, because he couldn't decipher ideographs, was unable to read his own language. It was even Wexford's *Fodor's* he was quoting from, artlessly borrowed the night before. Wexford didn't listen. [Ruth Rendall, *Speaker of Mandarin*, 1983, p. 4]

- (56) It was even the case that it was Wexford's *Fodor's* he was quoting from.

It seems that in this example, the *Fodor's* guide that Mr. Sung was quoting from is being said to have belonged to Wexford. This state of affairs is a very unlikely one, given that Mr. Sung thought Wexford couldn't read in his own language—but why would Wexford have brought the book to China if he couldn't read it? The proposition expressed in the cleft as a whole is thus at the low end of a scale of plausibility, so the scalar focus particle is appropriate. The schematic focus structure that seems to be involved is sketched in (57). Here the EVEN focus particle binds the entire cleft proposition.<sup>12</sup>

- (57) ASSERT<sub>1</sub> It was EVEN<sub>2</sub> [CLEFT<sub>3</sub> [WEXFORD's]<sub>F3</sub> Fodor's he was QUOTING from]<sub>F1,F2</sub>

Finally, we can consider the relative degree of prosodic prominence on the multiple foci that can occur in cleft sentences. In the examples given in this subsection, the highest degree of prominence falls on the focus in the cleft clause, which is bound by the ASSERT operator. The focus associated with the CLEFT operator and focus particle exhibits a lesser degree of prominence and even seems to lack prosodic prominence altogether. I suggest that rules of relative prosodic prominence associated with instances of second-occurrence focus, as detailed in Féry & Ishihara (2009), may apply in the clefts discussed here. One such rule is that 'focus boosts prominence', and this would apply to both foci. In the examples discussed in this subsection, I would suggest that the primary accent falls on the focus that takes the widest scope, which in the examples given here is the focus associated with the ASSERT operator, which again is the focus in the cleft clause.<sup>13</sup> A second rule is that 'givenness weakens prominence', and this would apply to the focus in the clefted constituent in the examples in §3.3

<sup>12</sup> In the Hedberg (1990, 2000) and Han & Hedberg (2008) syntactic analysis of clefts, the clefted constituent and the cleft clause together form a syntactic constituent, which is thus available to be the syntactic scope of a focus operator.

<sup>13</sup> The prominence associated with a comment may also be inherently more prominent than a prominence associated with a topic. The comment would be the constituent in the scope of the ASSERT operator.

and most of the examples in §3.2. The end result would then be that the primary prominence falls on the focus in the cleft clause in those examples, and the focus in the clefted constituent is deaccented due to marking given information.<sup>14</sup> In the complex-focus, vice-versa clefts of §3.1, both foci apparently appear with equal prominence (and both would be associated with the same ASSERT operator), although perhaps the second focus receives a greater prominence than the first one, possibly due to a rule of end prominence.

#### 4. Conclusion

In this paper I have argued that English cleft sentences divide a proposition into two parts both syntactically and semantically. The clefted constituent expresses an exhaustive focus, and the cleft clause expresses a pragmatic presupposition. This core semantic structure of the cleft construction can be exploited rhetorically to allow cleft presuppositions to be informative to the hearer. Both parts of the cleft can contain a prosodic focus. I argued that clefts can map variously onto topic/comment structure, so that the cleft as a whole can have topic-comment organization as well as comment-topic organization. Hedberg (1990, 2000) also argues that English clefts can have all-comment organization.<sup>15</sup>

What is most innovative about this paper is that I have argued that it is fruitful to view the prosodic foci that can be associated with the two parts of the cleft as both presenting a focus in the sense of Krifka (2007), who defines a focus as indicating the presence of alternatives. This allows us to view certain interesting subtypes of clefts as complex or multiple focus constructions. In this way, a focus on the clefted constituent can be seen as always associating with the structural CLEFT exhaustive focus operator and can associate in addition with an exclusive focus particle, ONLY, since ONLY and CLEFT focus have compatible semantics. A focus on the cleft clause in some examples associates with an ASSERT focus operator and thereby expresses the comment of the sentence, and can in addition associate with an additive focus particle ALSO or a scalar focus particle EVEN. A focus corresponding to the entire cleft proposition can also associate with a focus particle, and possibly with the ASSERT operator. With this analysis, I hope to have explicated some interesting subtypes of clefts as well to have contributed to an integration of discourse-pragmatic

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<sup>14</sup> Possibly, the prominence on the clefted constituent in these examples is further reduced due to a prosodic prominence needing to appear on the focus particle itself. A reversal of weak and strong beats in a metrical structure, may thus take place, along the lines discussed by Ladd (1980) in his account at that time of deaccenting and default accent.

<sup>15</sup> This is also consistent with the conclusions of Huber (2006) concerning the information structure of clefts in English, German and Swedish.

approaches and formal semantic approaches to focus, topic and cleft sentences.

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