

Topic-focus controversies'

Nancy Hedberg

Abstract

The topic of an utterance is typically said to be 'given' in relation to the focus (or new information) of the utterance, but other terms are often introduced (e.g., ground-focus, theme-rheme), leading to considerable terminological confusion in the literature. The purpose of this paper is to compare different researchers' attributions of these two sets of information-structure labels to different linguistic phenomena, with a view to ascertaining where attributions of the two major categories are made differently. English L+H* pitch accent marking, English clefting and Japanese/Korean morphological topic marking are considered, and it is concluded that these aspects of structure can mark either topic or focus in Gundel and Fretheim's (2004)'s relational sense. Gundel and Fretheim's notion of topic and focus is concluded to be empirically distinct from Steedman's (2000) theory of theme and rheme pertaining to L+H*, and Lambrecht's (2001)'s theory of topic and focus pertaining to clefting.

1. Introduction

While the study of information structure or information packaging has sometimes been called a 'terminological minefield' (Vallduvi and Engdahl 1996), recent years have seen the development of broad agreement on terminology. The primary distinction between 'relationally given' vs. 'relationally new' information (Gundel and Fretheim 2004) is typically termed 'topic' versus 'focus', 'theme' versus 'rheme', or 'ground' versus 'focus', depending on the researcher. What are more interesting than terminological distinctions, however, are cases where different researchers classify certain phenomena as falling into the 'relationally given' category as opposed to the 'relationally new' category. Insofar as the different researchers have

It **weighs** a ton.

L+H* L+H*LH%

While there is no explicit contrast evoked by these utterances, Pierrehumbert and Hirschberg suggest that in (1) “an invitation to dinner is implicitly related to a space of possible invitations, possible ways to spend the evening, or perhaps simply possible queries.” Similarly, in (2), ‘weighing a ton’ is “one of many possible means by which the lamp might stand up. B commits herself to this from the set of such means.”

Hedberg and Sosa (to appear) conducted a pilot study which attempted to ascertain the pitch accents and tunes correlated with different information structure categories. We were primarily interested in whether we could find support for the idea that the pitch accent L+H* marks topic in English, whereas H* marks focus. We studied 210 phrases from the McLaughlin corpus, and found L+H* distributed across five information-structure categories as shown in Table 1.

Ratified topics are those topics that have already been established as topics, and unratified topics are topics that are just being established with the utterance. These terms come from Lambrecht and Michaelis (1998). The distinction between topic and focus encoded here was intended to correspond to the distinction made by Gundel and Fretheim.

Table 1. Percentage of L+H* in different information structure types

	L+H*	% out of 42
Ratified Topic	1	2%
Unratified Topic	10	24%
Contrastive Topic	13	31%
Contrastive Focus	11	26%
Plain Focus	6	14%

Hedberg and Sosa concluded that L+H* cannot be said to be a topic accent since it is used to mark foci almost as many times as it is used to mark topics, and accented topics are most frequently marked with other pitch accents, as shown in Table 2.

The fact that the five occurrences of the L*+H pitch accent mark topics fits with Steedman’s (2000) characterization of L+H* and L*+H as serving the same information-structure function, specifically marking themes. He

LO: Yes, I do. I agree with Eleanor it's not a good tax cut, it's not a good policy; but it is an amazing accomplishment to come from where it's come from....

JM: [Actually, his **best move**] [was the **handling** of the
 H* !H* !H* L- H*
China spy plane]. (unrat. top, 4.7)
 !H* !H* !H*L-L%

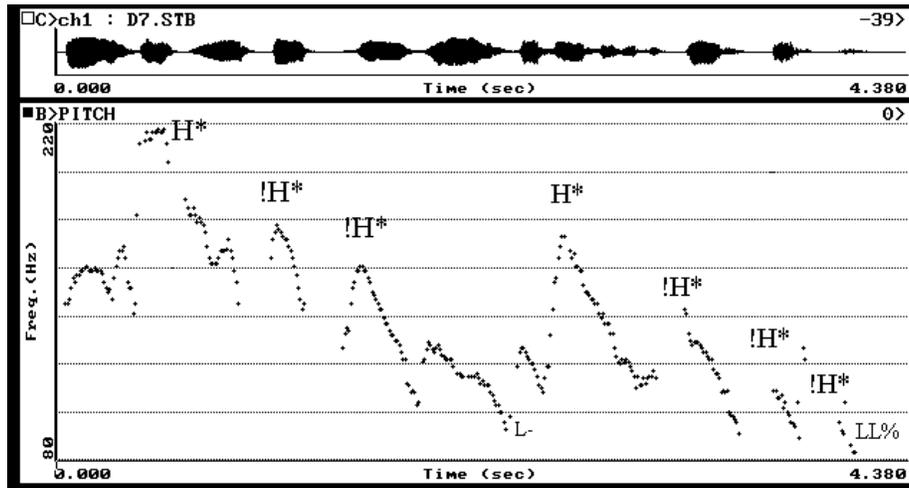


Figure 1: Actually his **best move** was the **handling** of the **China spy plane**.

H* !H* !H* L- H* !H* !H* !H*L-L%

An important methodological problem that arises in attempting to tag natural corpora for information structure categories is that the categories may be indeterminate. Gundel and Fretheim assert that “relational givenness notions like topic, ..., may be constrained or influenced by the discourse context (as all aspects of meaning are in some sense), but they are not uniquely determined by it.” The speaker’s intentions with regard to the topic-focus articulation of his utterance thus cannot necessarily be determined by the context. Perhaps they are revealed only in the prosody he chooses to put on his utterance. Thus in the Hedberg and Sosa data, all the instances of H* on what we coded as topics were perhaps really instances of all-focus sentences.

this **guy** into a **celebrity**], and I think
 L* L+H*LL%

that actually encourages more of these heinous actions.
 [plain foc., 4/20/01]

‘Celebrity’ was coded as a plain focus, and concluded to contradict the claims both that L+H* can’t mark focus and that L+H* marks contrast. Gundel and Fretheim and Pierrehumbert and Hirschberg could, however, perhaps claim that *celebrity* in (15) is implicitly contrastive, i.e. that the speaker is contrasting the proposition Timothy McVeigh is a celebrity with the previously assumed proposition that he is a criminal.

L+H* can also clearly mark contrastive topics, as for example in (7):

- (7) LK: And we need to drill oil and gas in the Rockies. And [**Jeb Bush is wrong**] [and **George Bush is right**]; we need
 L+H*
 !H* L* H-H% L+H* !H* L*L-L%
 to drill in the Gulf of Mexico. [4/20/01]

A pitch track for (7) is presented in Figure 2. Notice here that the focus is marked L*, supporting Steedman’s claim that L* is a rheme accent.

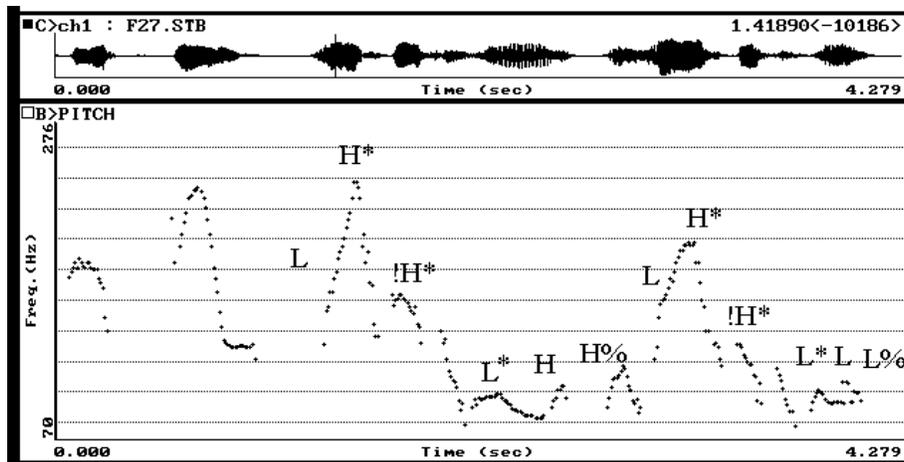


Figure 2 And **Jeb Bush is wrong** and **George Bush is right**
 L+H* !H* L* H-H% L+H* !H* L*L-L%

L+H* can also occur on seemingly clear contrastive foci, as on the word *individual's* in (8):

- (8) LK: I agree with Cardinal McCarrick of Washington. You know, [vengeance] is [**God's responsibility, not the individual's responsibility**]. (cont. foc., 4/20/01)
- L+H*L-L% H* L*+H H*
- L+H* L-H%

Because there are clear examples of L+H* marking contrastive topic and also clear examples of L+H* marking contrastive focus, and it is perhaps always possible to interpret an unratified topic or plain focus phrase as implicitly contrastive, it seems reasonable that L+H* in English marks contrast rather than topic. We can thus perhaps conclude that L+H* in English marks Vallduvi and Vilkuņa's (1998) category of 'kontrast' rather than topic or focus, and that both topic and focus constituents can be 'kontrastive'. We can thus follow Molnár (2002:160) in concluding that contrast is a "further category of information structure, superimposed on topic and focus."

We thus suggest that the English intonation data supports a two-dimensional theory of information structure along the lines of Vallduvi and Vilkuņa and Molnár as mentioned above, or of Steedman (2000) or Krifka (1991), both of whom propose that themes and rhemes or topics and comments, respectively, can themselves consist of focus-background structures. In other words, a theme or topic with a focus constitutes in my terms a contrastive topic, and a rheme or comment with a focus constitutes a contrastive focus.

3. Contrastive topic in Japanese and Korean.

Because I am going to rely on examples from Korean in subsequent sections of this paper, I will here briefly introduce the topic marker in Japanese and Korean and attempt to show that it can mark either topic or focus in the relational sense. Kuno (1973) suggests two functions for the topic marker *wa*. Thematic *wa* clearly marks topics in the relational sense. They have the familiarity property of topics claimed in Gundel (1985). Unfamiliar NPs, as in (9) and (10), cannot be marked with thematic *wa*.

- (9) ***Oozei no hito wa** party ni kimasita.
 many people party to came
 ‘*Speaking of many people, they came to the party’
- (10) ***Ame wa** hutte imasu.
 rain falling is
 ‘*Speaking of rain, it is falling’ [i.e. ‘It is raining’, without previous discussion of the rain]

However, there is a second function for *wa*, the so-called ‘contrastive *wa*’. Kuno reports that contrastive *wa* can place even non-familiar noun phrases in contrast, as shown in (11) and (12).

- (11) **Oozei no hito wa** party ni kimasita ga, **omosiroi hito wa** hitori
 many people party to came but interesting people person
 mo imasen desita
 even interesting was.not
 ‘Many people came to the party indeed, but there was none who was interesting’.
- (12) **Ame wa** hutte imasu ga, **taisita koto wa** arimasen.
 rain falling is but serious matter not.exist
 ‘It is raining, but it is not much.’

The examples in (11) and (12) could be taken to express contrastive foci rather than contrastive topics in the relational sense. Contrastive *wa* may also mark contrastive relational topics. This is perhaps the case in Kuno’s example in (13):

- (13) **John wa** sono hon o yonda ga, **Mary wa** yomanakatta.
 John the book read but Mary did.not.read.
 ‘John read the book, but Mary didn’t.’

Kuno reports that “phrases preceding the thematic *wa* do not receive prominent intonation, [while] those preceding the contrastive *wa* do.”

Lee (1999), writing now about Korean, specifically equates the Contrastive Topic⁵ marker *-nun*, in Korean, with the B accent in English. He reports that the *-nun* marker is realized with a high pitch contour just in case it marks a Contrastive as opposed to a thematic topic. He concludes that

Contrastive Topics in Korean are focussed, assuming a two-dimensional model of information structure following Krifka 1991. According to Lee, some Contrastive Topics fall within the restrictive clause part of the tripartite structure in semantics and others fall within the nuclear scope. I would suggest following Hajicova et al. (1998) that the former would be topics in the relational sense, while the latter would be relational foci.

The morphological Topic markers in these languages thus appear to be able to mark unratified topics, contrastive topics, and at least some contrastive foci in Hedberg and Sosa's (to appear) terms.^{6,7} Interestingly, example (8) above, which was marked L+H* on *individual's* and which I concluded was a contrastive focus, can be marked either with a nominative marker or a Topic marker in Korean, as (14) shows (Chung-hye Han, p. c.):

(14) pokswu-nun sin-uy chaykim-i-ci,
 vengeance-Top God-Gen responsibility-Copula-Decl,

 kyain-uy chaykim-i/**un** ani-ya
 individual-Gen responsibility-Nom/**Top** not-Decl

 'Vengeance is God's responsibility, not the individual's responsibility.'

This should be the contrastive *-nun*, since there is already a thematic *-nun* in the sentence on "Vengeance". (Kuno says there can only be one thematic *wa* per sentence—any subsequent *wa*'s are contrastive.)

Since it still isn't entirely clear that Contrastive *wa/-nun* can mark relational foci as well as relational topics, I consider them to be a second topic-focus controversy.

4. Questions

The third case of a topic-focus controversy is question words in constituent questions. Such words are widely considered to be the focus of the question. This conclusion is argued for recently in Lambrecht and Michaelis 1998. However, Steedman 2000 analyzes them as 'themes', since the question word evokes but does not restrict a presupposed alternative set. Gundel and Fretheim would presumably treat the question word as focal, since question words in information questions are never marked by Topic mark-

ers in languages such as Japanese (Kuno 1973). Thus we have a topic-focus controversy here.

Steedman predicts that the pitch accent marking ‘themes’ in English is L+H*, and it is interesting that question words do appear to frequently get marked by this pitch accent. Hedberg and Sosa (2002) found that out of the 35 wh-questions in a corpus of spontaneous speech in television political discussions, 60% had the wh-word marked with the L+H, for example the questions in (15) and (16):⁸

- (15) Mr. Duffy: [Why is it going to **take a year**] [to **put** it into
 L+H* !H* ¡H*L-L% H*+L
place?]
 H*L-L% [11/16/01, Washington Week]
- (16) JM: [When is the Afghanistan offensive **going to end**?]
 L+H* !H* !H* !H* !H* !H*L-L%
 (11/2/01)

If the question words in (15) and (16) are foci, they are counterexample to the prosodic claim that L+H* marks only topics. A pitch track of (15) is shown in Figure 3.

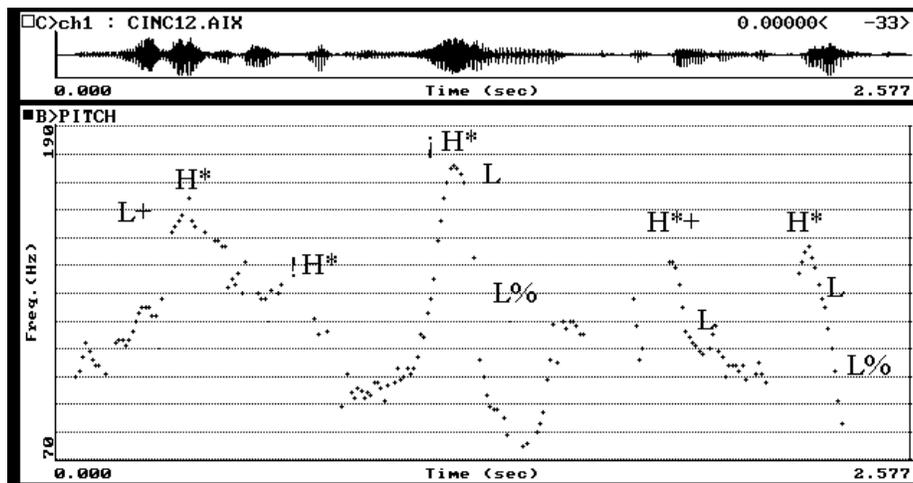


Figure 3. **Why** is it going to **take a year** to **put** it into **place**?
 L+H* !H* ¡H*L-L% H*+L H*L-L%

However, in Korean, as in Japanese, the Topic marker cannot occur on the wh-word in an ordinary information question—c.f. (17), although it can occur in a rhetorical question, as in (18) (Chung-hye Han, p.c.).

(17) *rwukwu-**nun**/ rwuk-**ka** party-ey wa-ss-ni?
 Who-Top/who-Nom party-to come-Past-Q
 ‘Who came to the party?’

(18) nwukwu-**nun** cohase kongpwuha-ni?
 who-Top like-because study-Q
 ‘Who studies because he likes to?’
 i.e., ‘Nobody studies because he likes to.’

Hedberg and Sosa (2002) also investigated yes/no questions. Here we were interested in the fronted auxiliary verb since it constitutes the “locus of interrogation” as does the wh-word in a constituent question. Positive yes/no questions turned out not to be marked with a preponderance of any given pitch accent on this element. In fact the auxiliary verb was most frequently unaccented. However, fronted negative auxiliaries in negative yes/no questions were most frequently marked with L+H* (8 out of 9 cases, or 88.9%).

An example of one of these negative cases is given in (19), with its pitch track shown in Figure 4.

(19) JM: [Isn’t **that kind of underhanded**]?
 L+H* !H* ;H* H*+L H* H-H% (11/10/01)

Romero and Han (2004) argue that fronted negative auxiliaries bear ‘verum’ focus, or focus on the polarity. Steedman would presumably claim, on the contrary, that the fronted auxiliary is the theme of the yes/no question, and thus would predict the L+H*. It may be the case that the L+H* that appears on fronted wh-words and fronted negative auxiliaries is due to the inherent contrastiveness of these phrases.

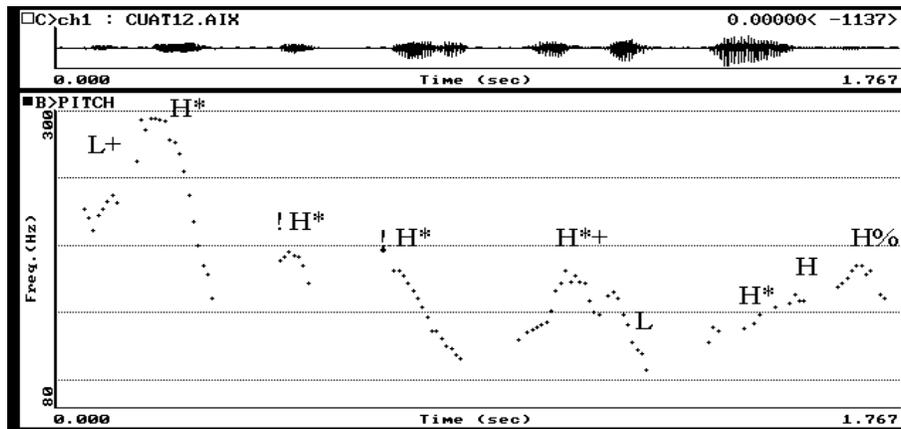


Figure 4. Isn't that kind of underhanded?
 L+H* !H* ;H* H*+L H*H-H%

Vallduví and Vilkuna (1998: 86) suggest that the *wh*-word in a *wh*-question marks contrast rather than rheme which explains why it need not receive nuclear stress in *wh*-questions. They conclude that the *wh*-word makes up only part of the structural rheme in the *wh*-question.

5. Fall-rise only sentences

Steedman (2000: 662) allows for theme-only sentences, as in (20), but most researchers would claim that every sentence has a focus because every sentence produces some change in the common ground, and thus conclude that ‘musicals’ in (20) is the focus. According to Steedman’s analysis, in sentences like (20A), the speaker is offering a new theme, “and hence a new rheme alternative set, replacing the one established by the question, without stating a rheme at all” (p. 663).

- (20) Q: Does Marcel love opera?
 A: Marcel likes **musicals**.
 L+H*L-H%

Examples like (20) were analyzed by Ward and Hirschberg (1985) as signaling a conventional ‘implicature of uncertainty’ as to the relevance of the response, and were characterized as involving an L*+HL-H% tune

rather than an L+H*L-H% tune. Steedman acknowledges Ward and Hirschberg's analysis, but claims that the two contours are difficult to distinguish, and that both serve to establish a theme-only utterance.

Hetland (2003) cites a similar sentence to that in (20), shown in (21), taken from Ladd (1980), but says about it that 'the cat' in (21A) is new in the relational sense.

- (21) Q: Did you feed the animals?
A: I fed the ^vcat.

It is interesting that (according to Hetland) in German, such sentences would be produced with two pitch accents, a fall-rise on 'cat' and a fall on 'fed', as in (22).

- (22) Q: Hast du die Tiere versorgt?
Have you the animals looked-after
- A: Die \sqrt KATze habe ich ge\FTtert.
The cat have I fed

According to Hetland, the information-structure organization of this utterance differs between English and German: In German, *die Katze* expresses a topic, whereas in English *the cat* expresses the focus. Buring (1997) also says that German doesn't permit fall-rise only sentences.

Possibly related to such sentences are sentences in Korean that contain only a topic marker, as in (23b), from Lee (1999). he concludes that this Topic marker is not a thematic topic marker but a Contrastive Topic marker, and characterizes the Contrastive Topic as falling within the nuclear scope and thus as a focus in my terms. Hetland (2003) also concludes that the subject in (23b) is actually a focus.

- (23) a. pi-ka [Nom] o-n-ta
'Rain is coming' = it's raining.
- b. pi-NUN [CT] o-n-ta
'Rain-CT is coming' [rain in contrast to snow, or other events]

the complexly strategic question actually evoked is ‘Has he done anything extraordinary’ with the word ‘hasn’t’ in the answer functioning as the focus and the phrase ‘anything extraordinary’ functioning as the contrastive topic.

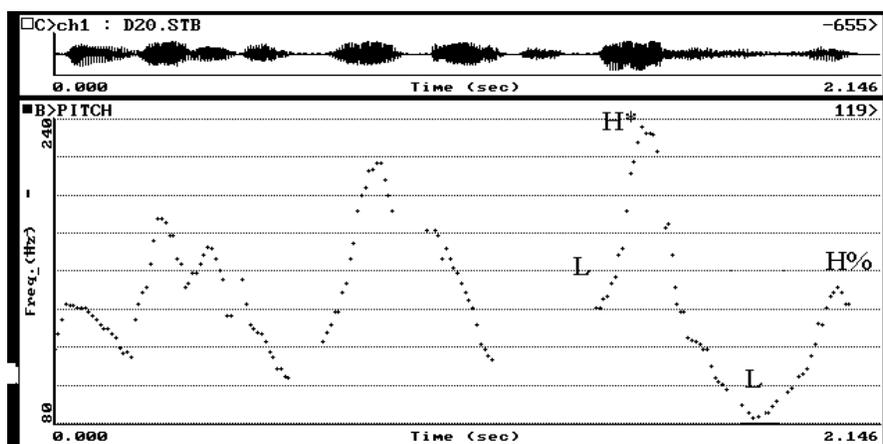


Figure 5. He **hasn't** done **anything** extraordinary.

H* L+H* L+H*L-H%

But we could also paraphrase these sentence as “As for how I find him, I don’t find him unattractive” and “As for how he’s done, he hasn’t done anything extraordinary,” which would indicate the opposite topic/focus assignment. However, because Steedman 2000 associates the L+H*LH% contour exclusively with themes, he concludes that the relevant phrases are themes.⁹

In Korean, interestingly, we do find the phrase in (24) marked with the Topic marker (Chung-hye Han, p.c.), as shown in (26):

- (26) na-nun [ku-ka mos sayngkyess-tako-**nun**] saygkakhaci anha-
 I-Top he-Nom un attractive-Comp-Top think Neg-
 yo.
 Decl
 ‘I don’t think that he is unattractive.’

However, since the *-nun* marking on the clause here is the second *nun* marker of the sentence, it is presumably an instance of Contrastive Topic,

which doesn't tell us anything about whether the clause is a topic or a focus in the relational sense.

In both examples discussed in this section the L+H*LH% seems to tie the phrase so marked back to the context, lending a particularly argumentative air to the utterance. It could be that the contrastiveness of these phrases is expressed by the L+H* pitch accent, and that this tying back to the context is lent by the H%, following Steedman's suggestion that H% marks the utterance as 'the responsibility of the hearer.' The speaker implicates a lack of commitment on his own part, which is appropriate if the speaker is contradicting the hearer.

I now turn to a quite different area of English grammar: cleft and reverse pseudocleft sentences. In my own work, I have claimed that the clefted constituents in these constructions can mark topics as well as foci, but Lambrecht (2001) disagrees, concluding that they can only mark foci. We thus have a sixth and a seventh topic-focus controversy.

7. Reverse pseudoclefts

Hedberg (1988) claimed that the cleft clause in a pseudocleft always expresses the topic of the sentence, but in both clefts and reverse pseudoclefts, the clefted constituent can express either the topic or the focus.

Lambrecht (2001) takes issue with this analysis of some reverse pseudoclefts as topic+focus constructions, claiming that the clefted constituent always expresses the focus in a reverse pseudocleft. The example in question is shown in (29):

- (29) JM: Number two, is it not true that Nancy Reagan is always right? ... This is not a bash Reagan session. I just want to know whether or not her instincts are invariably correct. I ask you.
- MK: No, they're not. I mean, **SHE was the one who wanted to keep Reagan from appearing anywhere in PUBLIC.** That was—
- JM: But she also has the concern about the man's health. She—he lived through an assassination attempt, remember that. (McLaughlin Group, 3/6/87)

Lambrecht (p. 481) acknowledges that the accent on *public* is stronger than that on *she*, which I had used to argue that the accent on *she* is a secondary, topic accent, and acknowledges that MK's entire reply "is clearly ABOUT Nancy Reagan in the sense that it is meant to answer [McLaughlin's] request for information about the First Lady." Nevertheless, he rejects the topic+focus analysis of this reverse pseudocleft. He claims that the accent on the cleft clause is an unratified topic accent, and that it is stronger than the accent on *she* because the last accent in a sentence with multiple accents always tends to be the strongest (Ladd 1996).

He states that the cleft clause is presupposed, which I also agree with. But he says that if the sentence were to receive a topic+comment interpretation that an unclefted variant would have sufficed, and that the sentence in (29) is an argument-focus sentence, not a predicate-focus sentence attributing a property to the subject. For me, a cleft or pseudocleft sentence always has a contrast-presupposition organization, with the clefted constituent representing a contrastive argument and the cleft clause presupposed. But, unlike Lambrecht, I believe that clefts and pseudoclefts also have topic-comment (focus) organization, which is independent from the contrast-presupposition organization.

As well as 'aboutness' and primary stress on the cleft clause, Hedberg (1988) argues that the possibility of the clefted constituent in reverse pseudocleft fulfilling the topic function can be seen in the fact that reverse pseudoclefts can be relativized as in (30) and the material denoted by the clefted constituent can be right-dislocated as in (31). Both of these constructions have been considered to mark topics.

(30) RC: And you have to first have an open mind, saying, "Let's start the process," **which is what PERES is saying.**
(12/26/87)

(31) PB: Gallup shut down before the Bush thing swept through.
JM: And **that's what's WE'RE going to do, SHUT DOWN.**
(12/1988)

8. Clefts

Hedberg (1990, 2000) claimed that cleft sentences can have topic+focus organization, as in the cleft in (32). This statement says about the referent

of *he* that he knew where to find the body. It also has a contrast+presupposition organization, since the referent of *he* as opposed to other people is being asserted as being the one who knew where to find the body. Again I believe that primary, focus stress would go on the cleft clause, ‘the body’ in this case.

- (32) The Member for Hertfordshire North East despite his fascist tendencies, is a notable liberal when it comes to women’s rights. But perhaps women should beware; proximity to this elegant baronet can be lethal. His first wife was killed in a car accident; he was driving. Theresa Nolan, who nursed his mother and slept in this house, killed herself after an abortion. **It was he who knew where to find the body.** [P.D. James, *A Taste for Death*, p. 21].

Lambrecht (2001) again argues that the clefted constituent in a cleft sentence always represents the focus of the sentence, never the topic, so we have our seventh and final topic-focus controversy.

Hedberg (1990) and Hedberg and Fadden (to appear) discuss a class of cleft sentences which behave differently from canonical cleft sentences and attribute the difference to a topic+focus organization. It is generally understood that only ‘exclusive’ as opposed to ‘additive’ focus particles can modify the clefted constituent in a cleft, to use the terminology of König (1991). Horn (1969) gives the examples in (33):

- (33) 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.

Kiss (1998) reiterates this claim. However, Hedberg (1990) reports on a few examples of clefted constituents that are modified by *also* or *even*, but these are only of the topic+focus type. The examples with *also* are the clearest. Examples are given in (34) and (35).

- (34) Rough location work is nothing new for Sheen. When he was young, the family traveled to location with his father, actor Martin Sheen....

It was also location work that gave Sheen his first acting break. He was nine and his dad was filming *The Execution of Private Slovik*.... (*Northwest Airlines Magazine*, July, 1990)

- (35) 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.** (M. Dowd and T. L. Friedman, 'The Fabulous Bush and Baker Boys.' *The New York Times Magazine*, 5/6/90, p. 64).

In (34) location work is continuing to be discussed, and in (35) Bush is continuing to be discussed. Thus, these are topic+focus clefts. The cleft form is chosen in order to express a contrast and presupposition.

If we turn to Korean again, we can also find some evidence that clefted constituents in reverse pseudoclefts and/or cleft sentences can have topic+focus organization. Jhang (1994) distinguishes inverted pseudoclefts as in (36) from clefts as in (37). The clefted constituent in an inverted pseudocleft takes nominative case, even though semantically it can serve as the object in the cleft clause. In the cleft sentence the clefted object takes accusative case. He analyzes the cleft as internally headed, with the clefted constituent scrambling to the beginning of the clause. The copula clause has a null expletive pro as its subject. Inverted pseudocleft clauses but not cleft clauses can also be headed by lexical nominals such as *salam* 'person'.

- (36) **John-i** [nay-ka ecey __ manna-n **kes/salam**]-i-ess-ta
 J.-NOM I-NOM yesterday meet-adn comp/person-be-pst-ind
 'John was the one that I met yesterday.'
- (37) pro [**John-ul** nay-ka ecey __ manna-n **kes/*salam**]-i-ess-ta
 J.-ACC I-NOM yesterday meet-adn comp/person-be-pst-ind
 'It was John that I met yesterday.'

The case marker can also be replaced by a topic marker as in (38) but because the case is obliterated here it is impossible to tell whether it is a reverse pseudocleft or a cleft sentence. Whichever it is, however, the clefted constituent is topic-marked.

- (38) **i say cha-nun** nay-ka __sa-n kes-i-ta
this new car-TOP I-NOM buy-adn comp-be-ind
'This new car is what I bought' OR
'It is this new car that I bought.'

Example (39) shows 'case stacking' where the topic marker is added onto the dative marker, so that this sentence is unambiguously a cleft.

- (39) pro [**Tom-eykey-nun** -John-i chayk-ul __ewu-n kes]-i-ta
T.-DAT-TOP J.-NOM book-ACC give-adn comp-be-ind
'It is Tom that John gave a book to.'

This Korean data thus shows that clefted constituents can sometimes be marked as topics in languages with morphological topic markers. Jhang didn't discuss whether these topics have the thematic interpretation or the contrastive interpretation.

9. Conclusion

To conclude, we have seen seven cases of topic-focus controversies, where different researchers classify particular phenomena as falling into the relationally given versus relationally new category of information structure. I suggest that Steedman's notion of 'theme' is broader than Gundel and Fretheim's notion of 'topic' since it includes wh-question words and possibly fronted auxiliaries in yes/no questions and also includes certain phrases in the scope of negation. For him anything marked with the L+H* pitch accent should be a theme, whereas for Gundel and Fretheim, L+H* can mark contrastive foci. Turning to cleft sentences, we saw that the notion of "topic" for Lambrecht is narrower than the notion of topic that I have applied in my work on clefts since for him clefted constituents can never be topics. Topic-comment simple sentences for Lambrecht are distinct from argument-focus cleft sentences, whereas for me, contrast-presupposition cleft sentences can be overlaid with independent topic-comment (focus) organization. I conclude that at least some topic-focus controversies are more than merely terminological.

Notes

1. This research was supported in part by a small grant from the Social Sciences and Humanities Research Council of Canada and a Discovery Park Research Grant to Nancy Hedberg and Juan M. Sosa administered by Simon Fraser University. I thank Juan M. Sosa for providing the phonological coding and the pitch tracks for the examples in this paper. I also thank Chung-hye Han and Chungmin Lee for their help with the Korean data, and I thank Jeanette Gundel, Chung-hye Han, Chungmin Lee, Mark Steedman, and two reviewers for their valuable comments related to this project.
2. Note that the H*+L pitch accent in Table 2 is not a pitch accent recognized by the ToBI standard (Beckman and Ayers-Elam 1997). It was used for a high peak followed by a rapid fall on the same syllable. In this table, we also didn't distinguish between H* and !H* (downstepped H*).
3. The reason that a single word, *Eisenhower*, receives two pitch accents in this example is that it is emphatic speech with a preponderance of pitch accents and phrase accents. The same can be said of the McLaughlin Group examples later in this paper. In addition, many of them contain multiple intermediate phrases or intonational phrases. Multiple phrases are also due to complex syntactic structures, and thus there are more prosodic phrases than would be needed just to mark information structure.
4. 'Eisenhower' was coded as a 'contrastive topic' because it was contrasted with 'Bush' in context, i.e. it referred to a member of an evoked set whose other members were excluded from the predication.
5. To minimize confusion, I capitalize the initial letters of 'Topic marker' and 'Contrastive Topic' for Korean *-(n)un* when it isn't clear that the relational topic interpretation holds.
6. Marandin, et al. (2002) report that the 'C-accent' in French, which they equate with the B-accent in English (Jackendoff 1972) and the T-accent in German (Büring 1997) can occur on either the 'ground' (i.e. topic) or the 'focus'.
7. Han (1998) argues that *-(n)un* in Korean can receive either a topic or contrastive topic reading, or else a contrastive focus reading.
8. The symbol '¡H*' is used to represent 'upstep', i.e. a pitch accent which is higher than previous H* accents in the same intonational phrase.
9. As an anonymous reviewer points out, Steedman (2000) does allow accommodation to adjust the context to fit the information structure indicated by the sentence. This flexibility in assignment of information structure categories is similar to the flexibility discussed above by Gundel and Fretheim and Hetland.

References

- Beckman, Mary F., and Gayle Ayers Elam.
1997 *Guidelines for ToBI Labelling*. Version 3. Columbus: Ohio State University, Department of Linguistics.
- Büring, Daniel
1997 *The Meaning of Topic and Focus: The 59th Street Bridge Accent*. London/New York: Routledge.
2003 On D-trees, beans, and B-accent. *Linguistics and Philosophy* 26: 511-545.
- É. Kiss, Katalin
1998 Identificational focus versus information focus. *Language* 74: 245-273.
- Féry, Caroline
1993 *German Intonational Patterns*. Tübingen: Niemeyer.
- Gundel, Jeanette K.
1974 *The Role of Topic and Comment in Linguistic Theory*. Ph.D. diss., Department of Linguistics, University of Texas at Austin.
1985 'Shared knowledge' and topicality. *Journal of Pragmatics* 9. 83-97.
- Gundel, Jeanette K., and Thorstein Fretheim
2004 Topic and focus. In *The Handbook of Pragmatic Theory*; Laurence Horn and Gregory Ward (eds.). Oxford/Cambridge, MA: Blackwell. 174-196.
- Hajicova, Eva, Barbara Partee and Petr Sgall.
1998 *Topic-Focus Articulation, Tripartite Structures, and Semantic Content*. Dordrecht: Kluwer.
- Han, Chung-hye
1998 Asymmetry in the interpretation of (n)-un- in Korean. *Japanese and Korean Linguistics* 7. Stanford: Center for the Study of Language and Information. 1-15.
- Hedberg, Nancy
1988 The discourse function of cleft sentences in spoken English. Paper presented at the Linguistics Society of America Conference, New Orleans, December 1988.
1990 *Discourse Pragmatics and Cleft Sentences in English*. Ph.D. diss., Department of Linguistics, University of Minnesota.
2000 The referential status of clefts. *Language* 76. 891-920.

Hedberg, Nancy and Lorna Fadden

- To appear The Discourse Function of It-clefts, Wh-clefts and Reverse wh-clefts in English. In *The Grammar-Pragmatics Interface: Essays in Honor of Jeanette K. Gundel*; Nancy Hedberg and Ron Zacharski (eds.). Amsterdam/Philadelphia: John Benjamins.

Hedberg, Nancy and Juan M. Sosa

- 2002 The Prosody of Questions in Natural Discourse. *Proceedings of Speech Prosody 2002*. 375-378.

- To appear The prosody of topic and focus in spontaneous English dialogue. In *Topic and Focus: Intonation and Meaning: Theoretical and Crosslinguistic Perspectives*; Daniel Büring, Matthew Gordon, and Chungmin Lee (eds.). Dordrecht: Kluwer.

Hetland, Jorunn

- 2003 Contrast, the fall-rise accent, and information focus. In *Structures of Focus and Grammatical Relations*; Jorunn Hetland and Valeria Molnár (eds.) Tübingen: Niemeyer: 1-39.

Horn, Laurence R

- 1969 A presuppositional analysis of *only* and *even*. *Chicago Linguistic Society* 5. 98-108.

Jackendoff, Ray.

- 1972 *Semantic Interpretation in Generative Grammar*. Cambridge, MA: MIT Press.

Jhang, Sea-Eun

- 1994 *Headed Nominalizations in Korean: Relative Clauses, Clefts, and Comparatives*. Ph.D. diss., Department of Linguistics, Simon Fraser University.

König, Ekkehard.

- 1991 *The Meaning of Focus Particles*. London/New York: Routledge.

Krifka, Manfred

- 1991 A compositional semantics for multiple focus constructions. In *Informationsstruktur und Grammatik*; Joachim Jacobs (ed.), 17-53. Opladen: Westdeutscher Verlag.

Kuno, Susumo

- 1973 *The Structure of the Japanese Language*. Cambridge, MA: MIT Press.

Ladd, D. Robert

- 1980 *The Structure of Intonational Meaning: Evidence from English*. Bloomington: Indiana University Press.

- 1996 *Intonational Phonology*. Cambridge: Cambridge University Press.

- Lambrecht, Knud
2001 A framework for the analysis of cleft sentences. *Linguistics* 39: 463-516.
- Lambrecht, Knud, and Laura Michaelis
1998 Sentence accent in information questions: Default and projection." *Linguistics and Philosophy* 21: 477-544.
- Lee, Chungmin
1999 Contrastive topic: A locus of the interface. Evidence from Korean and English. In *The Semantics/Pragmatics Interface from Different Points of View*; Ken Turner (ed.), 317-342. Oxford/New York: Elsevier.
- Marandin, J.M., Claire Beyssade, Elisabeth Delais-Roussarie, and A. Rilland
2002 Discourse marking in French: C accents and discourse moves. *Proceedings of Speech Prosody 2002*. 471-474.
- Molnár, Valéria
2002 Contrast — from a contrastive perspective. In *Information Structure in a Cross-Linguistic Perspective*; H. Hallelgard, Stig Johansson, Bergljot Behrens, and Cathrine Fabricius-Hansen. (eds.), 147-161. Amsterdam/New York: Rodopi.
- Pierrehumbert, Janet, and Julia Hirschberg.
1990 The Meaning of Intonational Contours in the Interpretation of Discourse. In *Intentions in Communication*, Philip R. Cohen, Jerry Morgan, & Martha E. Pollack, eds., 271-311. Cambridge, MA: MIT Press.
- Romero, Maribel, and Chung-hye Han
2004 On negative *yes/no* questions. *Linguistics and Philosophy* 27: 609-658.
- Steedman, Mark.
2000 Information structure and the syntax-phonology interface." *Linguistic Inquiry* 31: 649-689.
- Vallduvi, Enric and Elisabet Engdahl
1996 The linguistic realization of information packaging. *Linguistics* 34: 459-519.
- Vallduvi, Enric, and Maria Vilkuna
1998 On rheme and kontrast. In *The Limits of Syntax*; Peter Culicover and Louise McNally (eds.), 79-108. San Diego/New York: Academic Press.
- Ward, Gregory, and Julia Hirschberg
1985 Implicating uncertainty. *Language* 61: 747-776.