

Contrastive Focus, Givenness and the Unmarked Status of “Discourse-New”*

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New evidence is provided for a grammatical principle that singles out contrastive focus (Rooth 1996; Truckenbrodt 1995) and distinguishes it from discourse-new “informational” focus. Since the prosody of discourse-given constituents may also be distinguished from discourse-new, a three-way distinction in representation is motivated. It is assumed that an F-feature marks just contrastive focus (Jackendoff 1972, Rooth 1992), and that a G-feature marks discourse-given constituents (Féry and Samek-Lodovici 2006), while discourse-new is unmarked. A crucial argument for G-marking comes from second occurrence focus (SOF) prosody, which arguably derives from a syntactic representation where SOF is both F-marked and G-marked. This analysis relies on a new G-Marking Condition specifying that a contrastive focus may be G-marked only if the focus semantic value of its scope is discourse-given, i.e. only if the contrast itself is given.

Keywords: contrastive focus, givenness, second occurrence focus, F-marking, G-marking, prosody

1 Introduction

This note addresses two related controversies concerning the grammar of focus.¹ One concerns the phonology of contrastive focus. The other concerns the question whether the syntactic representation of contrastive focus overlaps in

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¹ The present paper consists of sections of a longer paper “Contrastive focus, givenness and phrase stress” (Selkirk 2006b). As the title suggests, the issue of phrase stress is treated in more detail in the longer paper.

any way with the syntactic representation of discourse-newness/discourse-givenness, which is sometimes referred to as informational focus.

The term “contrastive focus” will be used here to designate the status of a constituent in sentences like *I gave one to Sarah, not to Caitlin*, or *I only gave one to Sarah* where the meaning of the sentence includes a specification that there exist alternatives to the proposition expressed by the sentence which are identical to that proposition except for different substitutions for the contrastively focused constituent.² The alternatives set here would include {I gave one to Sarah, I gave one to Caitlin, I gave one to Stella, ...}. This type of focus has a direct role in determining the semantic interpretation of the sentence, affecting truth conditions and conversational implicatures. There are widely different views about whether in English contrastive focus constituents are fundamentally any different in their prosodic prominence from noncontrastive constituents, and about whether, in cases where a difference might appear, this is a consequence of a different grammatical representation or rather the effect of some optional paralinguistic emphasis for contrastive focus. In the last decade or so, certain scholars of the focus-prosody interface have articulated the view that principles of grammar do not assign contrastive focus any distinctive prominence (Ladd 1996, Gussenhoven 2004), while others have proposed that contrastive focus is subject to a special grammatical principle for the assignment of phrase stress which can lead to a grammatically represented prominence distinction between contrastive focus and noncontrastive constituents (Truckenbrodt 1995, Rooth 1996b, Selkirk 2002, 2006, in submission, Féry and Samek-Lodovici 2006, Büring 2006).

² This type of focus is referred to variously as contrastive focus, identificational focus, alternatives focus, or simply focus (Jackendoff 1972; Jacobs 1988; Krifka 1992; Rooth 1992; Rooth 1996a, Kiss 1998, Kratzer 2004).

2 The Nature of Contrastive Focus Prosody

The assumption that contrastive focus prosody is not phonologically distinct is found in the early contention by Chomsky (1971) and Jackendoff (1972) that main sentence stress (sometimes called “nuclear stress”) appears on constituents that may vary in their focus status. They claimed that a sentence like (1), where capitalization is used to indicate main stress,

(1) [Geach [is married [to the woman [with the [TIE]]]]]

may be appropriately used as an answer to a *wh*-question asking ‘Which woman is Geach married to?’, or as a correction to an assertion that Geach is married to the woman with the scarf, for example. In these cases, *tie* or *with the tie* would count as contrastive focus constituents. But main sentence stress was also assumed to be present on *tie* when it is merely new in the discourse, as when (1) is a response to the question ‘What happened?’, or a sentence uttered out of the blue. An identity of prominence for contrastive focus and noncontrastive constituents is thus implied by this early examination of the focus-prosody relation.

Later approaches which saw the relation between focus and sentence prosody as a relation between contrastive focus and/or discourse-newness on the one hand and tonal pitch accents on the other (e.g. Gussenhoven 1983, Selkirk 1984, 1995, Schwarzschild 1999) contributed to the view that contrastive focus prominence is indistinguishable from the prominence of noncontrastive elements. In a sentence like (1) a pitch accent is present on *tie* whether it is a contrastive focus or simply new in the discourse.

But it turns out that the facts do not support the view that the grammar treats contrastive focus and noncontrastive constituents as systematically identical in their prominence. Indeed, a broad range of facts—some new, some

known—favor a theory which posits a representation for contrastive focus in the syntax that is distinct from that of noncontrastive constituents and with it a syntax-phonology interface principle that is specific to contrastive focus. A grammatical treatment of this kind is provided by the Rooth (1992, 1996a) theory of the syntactic representation and semantic interpretation of contrastive focus together with what is dubbed here the Contrastive Focus Prominence Rule (CFPR). The CFPR is a principle for the phonological interpretation of contrastive focus, independently proposed by Truckenbrodt (1995) and Rooth (1996b).

(2) Contrastive Focus Prominence Rule (Truckenbrodt 1995, Rooth 1996b)

Within the scope of a focus interpretation operator, the corresponding F-marked [contrastive focus] constituent is the most metrically prominent.

The CFPR, completely simple in its formulation, makes a complex array of predictions about contrastive focus prosody which have not yet been examined in a sufficiently broad range of cases. Still, the data available suggests that the predictions of the CFPR are confirmed to a quite remarkable degree.

The CFPR predicts that the level of phrase stress found on an F-marked, contrastive focus constituent will be greater than that of any other constituent that is within the scope of the focus operator associated with the contrastive focus. This means that the level of a contrastive focus phrase stress is a function of the level of stress on the other elements within that scope. Since the level of phrase stress on those other elements may vary, for independent reasons, it is predicted that the level of the contrastive focus stress will vary accordingly. Indeed, in satisfaction of the CFPR a contrastive focus may bear the lowest possible level of phrase stress—just above the level of word stress—in one case, while it may bear the highest possible level of stress—intonational phrase-level

main stress—in another. An example of intonational phrase-level stress is provided by sentences containing both a contrastive focus and other discourse-new major phrase-stressed constituents within the same focus scope, as in (3) and (4), where the scope coincides with the VP.³ The subscripting indicates the contrastive focus DP (noted here with underlining) with which the focusing adverb *only* is associated.

- (3) Wittgenstein only_i [brought a glass of wine over to Ánscombe_i].
(I was surprised until I found out that Geach, who was standing with her, was on the wagon.)
- (4) Wittgenstein only_i [brought a glass of wine_i over to Ánscombe].
(She was impatient until the appetizers were brought around by waiters.)

Results of a phonetic experiment by Katz and Selkirk (2005/6) show that when the prosody of such sentences is compared with that of a noncontrastive all-new sentence like (5), the phonetic prominence of the contrastive focus (measured in terms of duration and pitch boost and noted here with underlining) is significantly greater than that of a noncontrastive constituent in the same position.

- (5) Wittgenstein brought a glásss of wine over to Ánscombe.

Since all the DPs of the sentences in (3–5) appear with major phrase-level stress, the distinctively greater prominence of contrastive focus must be represented with the higher-level intonational phrase prominence.

Contrastive focus may also bear the lowest possible degree of phrase stress; this is found with what has been referred to as second occurrence focus.

³ The fact that, when discourse-new, both the contrastive focus complement to the verb and the noncontrastive one bear pitch accents, as shown in (3) and (4), is sometimes overlooked, but cf. Katz and Selkirk (2005/6).

In classic cases of second occurrence focus (SOF), there is a repetition in the discourse of a construction containing a focus sensitive particle like *only* and the contrastive focus constituent with which it is associated, as in (6B) and (7B):

- (6) A: Wittgenstein only_i [brought a glásss of wíne over to Ánscombe_{Fi}].
 B: Also_k Géach_{Fk} only_i [brought a glass of wine over to Ánscombe_{SOFi}].
- (7) A: Wittgenstein only_i [brought a glásss of wíne_{Fi} over to Ánscombe].
 B: Also_k Géach_{Fk} only_i [brought a glass of wine_{SOFi} over to Ánscombe].

The A sentences introduce a particular contrastive focus construction. In the B sentences that construction appears in a second occurrence. In the SOF cases seen in (6B, 7B), the sentence contains an additional contrastive focus, call it the primary focus. (Though, as the examples to be examined below in (20) show, the presence of another, primary, contrastive focus is not a necessary property of SOF sentences.) It has been established that a SOF typically bears no pitch accent in sentences like those in (6B, 7B), where it appears following the primary focus. Yet, there is evidence that SOF in that position does indeed bear some degree of phonetic prominence, even if not a pitch accent.⁴ Beaver et al. (2004/to appear), for example, show experimentally for English that there is greater phonetic duration and intensity on SOF constituents in sentences like those in (6B) or (7B)—indicated by the underlining—than on a given but noncontrastive constituent in an analogous sentence position, as in a sentence like (8B):

- (8) A: Wittgenstein brought a glass of wíne over to Ánscombe.
 B: Géach_i [brought a glass of wine over to Ánscombe], too_i.

⁴ Rooth (1996b), Bartels (1995, 2004), Beaver et al. (2004/to appear), Féry and Ishihara (2006).

In the discourse in (8), there is no contrastive focus in the A sentence and thus no second occurrence focus in the B sentence. (By definition a second occurrence focus is a contrastive focus that has already been introduced in the discourse.) The elements of the VP in (8B) are simply given in the discourse. It's the CFPR that explains the greater phonetic duration found with the SOF constituents in sentences like (6B) and (7B) as contrasted to the analogous noncontrastive discourse-given constituent in (8B). The degree of phrase stress on SOF in these cases is the lowest attested; it is below the level of phrase stress at which a pitch accent appears. It does not need to be any higher, since the other constituents in the same focus scope in (6B) and (7B) have only word-level stress, due to their given status (cf. Selkirk in submission).

In between these extremes of stress, there are contexts in which the CFPR predicts a level of phrase stress on a contrastive focus that is the same as that predicted for noncontrastive constituents by the default phrase stress principles of the language. Such a neutralization of prominence on contrastive and noncontrastive constituents is predicted by the CFPR to be possible in a sentence with the structure of (1), for example, and doubtless has fed the erroneous assumption that there is no grammatically-driven distinction in prosody between contrastive and noncontrastive constituents in English. The cases of absence of neutralization of stress prominence level between contrastive focus and noncontrastive constituents mentioned above clearly are crucial in establishing that the grammar does distinguish a category of contrastive focus.

3 Distinguishing Contrastive Focus, Discourse-New and Discourse-Given

The second controversy addressed in this note concerns the syntactic marking for contrastive focus and for the property of discourse-newness and/or givenness. The data on the phonology of contrastive focus alluded to above

suggests that there cannot be a unitary F-marking in the syntax for both contrastive focus and a putative informational, discourse-new, focus, precisely because the phonology relies on the syntactic representation to identify which are contrastive focus constituents and which not. F-marking should be restricted to contrastive focus, as has been the case in many works on focus, including Jackendoff (1972) and Rooth (1992 et seq.). But discourse-newness or givenness of constituents cannot go unmarked in the syntax. Both semantic/pragmatic interpretation and phonological interpretation rely on some indication in the syntax of the status of a constituent on the given-new dimension. Noncontrastive discourse-given constituents are distinguished in their prosody from noncontrastive discourse-new constituents in English. This is shown by the accentless status of given constituents in the response to the *wh*-question in (8). It is shown as well by the rendition of the sentence *Wittgenstein brought a glass of wine over to Anscombe* in (9), where a discourse-given constituent follows what is an otherwise all-new sequence of constituents which moreover contains no contrastive focus.

- (9) A: *Anscombe* has been féuding with her cólleagueues.
 B: *Wittgenstein* brought a glass of *wíne* over to *Anscombe*. *Perháps* they have made *úp*.

In the B response to A, there is no pitch accent (or phrase stress) on *Anscombe*, which has been used in the previous sentence in the discourse. If a pitch accent were present on *Anscombe* in (9B), it would render the sentence pragmatically infelicitous—but not false—in this discourse.⁵ This inability of a discourse-given constituent to bear a pitch accent or phrase stress in English, at least in certain contexts, has been widely observed.

⁵ Either that or the sentence would have to be interpreted as one where the speaker put a contrastive focus on *Anscombe*.

So how are we to represent a difference between contrastive focus and discourse-newness on the one hand, and between these and discourse-givenness on the other? As mentioned above, a unitary F-marking for contrastive focus and informational focus (assumed by Gussenhoven 1983, Selkirk 1984, 1995 and Schwarzschild 1999 among others) cannot be adopted. Such approaches do distinguish discourse-given constituents—by their absence of F-marking—but the predicted conflation of contrastive focus and discourse-newness in the phonology is not systematically attested. A three-way distinction between contrastive focus, discourse-new and discourse-given is needed. The question is how to represent it.

Early approaches to the intonation of given/new have all treated given constituents as unmarked in the syntax. A three-way distinction in the syntax which retained this unmarked status for given constituents could posit two different types of focus-marking, e.g. cF-marking for contrastive focus and iF-marking for informational focus.⁶ But the evidence suggests instead that it is discourse-givenness that is marked in the syntax, and that discourse-newness should not be marked at all. Féry and Samek-Lodovici (2006) (hereafter FSL) propose that the grammar includes a constraint *Destress Given* which calls for absence of phrase stress on a discourse-given constituent.

(10) *Destress Given* (Féry and Samek-Lodovici 2006)

A given phrase is prosodically nonprominent.

In the syntax, they suggest, a discourse-given constituent is G-marked and thereby identifiable by *Destress Given*. As for discourse-newness, though FSL

⁶ Selkirk (2002, 2006a) and Selkirk and Kratzer (2004/2005) use the notation FOCUS (“big focus”) vs. F (“small focus”) to give syntactic representation to a contrastive focus vs. discourse-newness focus. Katz and Selkirk (2005/6) use the notation cF vs. iF.

do not take a position on whether or not it is syntactically represented, they do argue that the prosody of discourse-new constituents can be essentially derived by default phrase stress principles.

In this note, we propose adopting the three-way distinction in focus-marking implied in the FSL account: F-marking for contrastive focus, G-marking for discourse-given, and no marking for discourse-new. There is positive evidence for representing givenness with G-marking rather than no marking at all; the argument is based on the analysis of second occurrence focus. The extremely low degree of stress on second occurrence focus constituents in sentences like (6B) and (7B) can be understood to be simply the consequence of their G-marked status and the effect of Destress Given, while the fact that there is any degree of phrase stress at all on SOF (as compared to the other given elements that surround it) is understood to be the consequence of their F-marking and the CFPR. Without a grammatical representation of G-marking, such a simultaneous representation of both contrastive focus status and givenness in the case of second occurrence focus would not be possible.

4 G-Marking as Part of a Solution to the Problem of Second Occurrence Focus

The notion that there is a G-marking for given constituents and no marking for discourse-new constituents is consistent with the Schwarzschild (1999) theory of the semantics/pragmatics of the given-new dimension, which is a theory of the meaning of givenness. That theory can be reconstrued as providing an interpretation of G-marking rather than an interpretation of the absence of F-

marking. The suggestion here, then, is that the Rooth theory of contrastive focus and the Schwarzschild theory of givenness co-exist in the grammar.⁷

An outstanding issue is the fact that, except in cases of second occurrence focus, contrastive focus constituents that are discourse-given are not destressed and instead bear the pitch-accenting and phrase stress of discourse-new contrastive focus. This is seen in example (11):

- (11) A: Ánscombe has been féuding with her cólleagues.
B: Wíttgenstein brought a glass of wíne over to Ánscombe. But nó to the óthers. Presúmably as an áct of reconciliátion.

Our proposal is that, except for second occurrence focus, contrastive focus constituents are never G-marked. This follows from a G-Marking Condition to be proposed here which crucially relies on the semantics of focus constituents proposed in Rooth (1992).

The current theory does not fully embrace the theory of givenness put forward by Schwarzschild (1999), which is designed to subsume all aspects of the interpretation of focus. The intent of the Schwarzschild givenness theory is to supplant theories of contrastive focus like that proposed by Rooth (1992, 1996) and provide a unified account of contrastive focus, informational focus, focus in questions and focus in answers. But as we have seen, alongside a phonology of givenness, we need a phonology of contrastive focus. There is a distinct phonology for contrastive focus which requires both contrastive focus marking and a representation of the scope of contrastive focus operators in the syntax. The proposal here is that there is a separate semantics for contrastive focus and for givenness as well, the first provided by Rooth (1992, 1996), the second by Schwarzschild (1999). An advantage of assuming that both these

⁷ This position was taken in joint class lectures by Angelika Kratzer and Lisa Selkirk (Selkirk and Kratzer 2004/2005).

theories are part of the grammar is that the Rooth theory of contrastive focus semantics provides the means to properly characterize what aspects of meaning must be entailed by the prior discourse in order that a constituent counts as G-marked. It enables us to understand why the phonology treats second occurrence (contrastive) focus and noncontrastive discourse-given constituents as a natural class, specified by G-marking, but does not treat a non-SOF discourse-given contrastive focus as G-marked.

Rooth (1992, 1996) is a multidimensional theory of meaning according to which every expression γ has an ordinary semantic value $[[\gamma]]^o$ and a focus semantic value $[[\gamma]]^f$. Any type of constituent has an ordinary semantic value. A focus semantic value is defined for a phrase φ which contains an F-marked constituent and is the scope of the focus \sim operator corresponding to that F-marked constituent. We propose to make use of these two sorts of meaning in defining the circumstances under which a constituent may be G-marked.

Standard contrastive focus involves constituents which may or may not have antecedents in the discourse. In (12) the contrastive focus in the B sentence has no discourse-antecedent, but in (13), it does.

- (12) A: Mrs. Dalloway invited many people to the party.
 B: But she only [_{VP}[introduced Ánabel to [William]_F]_{VP} \sim].
- (13) A: Mrs. Dalloway invited William and a group of his friends to her party.
 B: But she only [_{VP}[introduced Ánabel to [William]_F]_{VP} \sim].

The phonology of both versions of the contrastive focus sentence is identical, with pitch accent and greatest prominence on the F-marked [William]_F (cf. Katz and Selkirk 2005/6). But, in view of its prior mention, why is [William]_F in (13B) not G-marked and destressed?

Consider the case of second occurrence focus in (14), where the SOF instance of *William* in (14B) lacks a pitch accent and is only marginally more prominent than the accentless discourse-given *Anabel*. A theory that treats the SOF as G-marked will allow an account of the difference between (13B) and (14B).

- (14) A: Mrs. Dáalloway only [_{VP}[introduced *Anabel* to [*William*]_F]_{VP} ~].
 B: [Even [*her husband*]_F only [_{VP}[introduced *Anabel* to [*William*]_{SOF}]_{VP} ~] ~]

The alternatives set which constitutes the focus semantic value of the verb phrase scope of all these instances of contrastive focus in the B sentences might consist of the following:

- (15) {introduce *Anabel* to *William*, introduce *Anabel* to *Charles*, introduce *Anabel* to *Margaret*, introduce *Anabel* to *Diana*, introduce *Anabel* to *Harry*, ...}

In the case of the discourse consisting of the sentences in (14), this alternatives set—this focus semantic value of the VP—is introduced by the contrastive focus operator in sentence (14A). This means that in (14B), the VP is discourse-given with respect to both its ordinary semantic value and with respect to its focus semantic value. The same is not true of the VP in (13B), where there is no discourse antecedent for either the ordinary semantic value or the focus semantic value of the VP. We suggest that this difference in the givenness of the focus semantic value for the phrasal scope that corresponds to an F-marked constituent, namely the givenness of the alternatives set which constitutes the focus semantic value, has consequences for defining the G-marked status of the F-marked constituent itself.

With this in mind we propose the following condition on G-marking:

(16) The G-Marking Condition

- (i) An F-marked constituent α will be G-marked iff the phrasal scope φ of the focus \sim operator corresponding to it has an antecedent in the discourse for its focus semantic value $[[\varphi]]^f$.
- (ii) Otherwise, a constituent α will be G-marked if it has an antecedent in the discourse for its ordinary semantic value $[[\alpha]]^o$.

The two different clauses of the G-Marking Condition amount to a proposal that givenness is defined differently for constituents that have only an ordinary semantic value from constituents that are F-marked and have both an ordinary and a focus semantic value. The intuition that clause (i) of the G-Marking Condition gives expression to is that a second occurrence contrastive focus is given *as a contrast* in the discourse. An F-marked constituent counts as given only with respect to the alternatives set—the focus semantic value—defined by the focus operator with which it is associated. According to (16), the givenness of the ordinary semantic value of an F-marked constituent is irrelevant. Only in the case of a non-F-marked constituent will G-marking be licensed based on the discourse-givenness of the ordinary semantic meaning of the constituent.

For the SOF sentence (14B), the G-Marking Condition predicts the G-marking seen in (17), in which the SOF *William* is both F-marked and G-marked:

(17) [Even [her husband]_F only [φ [introduced_G Anabel_G to [William]_{F,G}] φ \sim] \sim]

William is F-marked, as is any element in association with *only*. It is G-marked too, in accordance with (16i), because the focus semantic value of the VP of the sentence, which is the phrasal scope of the \sim operator corresponding to [*William*]_F, has an antecedent in the discourse. The relevant focus semantic value of the VP in (17)/(14B) is the alternatives set in (15), and this has already

been introduced in the discourse as the focus semantic value of the same VP in (14A), which is also the phrasal scope of the \sim operator.

By contrast, the G-Marking Condition predicts no G-marking in the representation of the contrastive focus *William* in (13B), even though its ordinary semantic meaning has a discourse antecedent in sentence (13A). The representation of (13B) would be (18):

(18) But she only [_{VP}[introduced *Ánabel* to [William]_F] _φ \sim].

In (18)/(13B), the F-marked constituent *William* is part of a newly established contrast; there is no antecedent for the alternatives set defined by its \sim operator. By clause (i) of the G-Marking Condition, the F-marked constituent [*William*]_F can therefore not be G-marked. So it will not undergo Destress Given, and will emerge with the same contrastive focus prominence as any entirely discourse-new standard contrastive focus, as in (12B). A standard, non-second-occurrence, contrastive focus will never qualify as given, on this theory, and will never have the prosody of a discourse-given entity.

To sum up, the proposed G-marking condition in (16) makes possible the cross-classification of focus features in syntactic representation shown in (19):

(19)	Standard contrastive focus:	F-marked
	Second occurrence contrastive focus:	F-marked, G-marked
	Given, non-contrastive:	G-marked
	Non-given, non-contrastive: (“informational focus”)	-----

These feature combinations are seen by the spellout principles for F-marking (CFPR) and G-marking (Destress Given), and together with the default stress

principle,⁸ and an appropriate ranking amongst all the constraints, give precisely the patterns of prominence required. The case of erstwhile informational focus, the last one listed, is different in that no spellout principle directly affects its phonological interpretation. Its phonological behavior is predicted by its lack of focus features, as is its semantic/pragmatic interpretation.

That the puzzle of second occurrence focus should be solved by invoking the givenness of the focus semantic value in the case of SOF is already anticipated by Rooth (1996b). Rooth speculates that an appeal to the antecedent for the focus semantic value should be built into the CFPR, thereby restricting the CFPR to cases of SOF. This is the wrong move, since the CFPR is entirely general, applying in all cases of contrastive focus, as we have seen above. Büring (2006), for his part, denies that givenness has anything to do with the distinctive prosody of SOF. He seeks to derive it entirely from the general formulation of the CFPR that has been assumed in this paper, given in (2). For Büring, what's special about SOF and what distinguishes it from other instances of contrastive focus is its (putative) defining status as the unique instance of focus embedded within the domain of another focus.⁹ In such a case, by the CFPR, there would be less stress prominence on the SOF than on the focus with the higher domain, but greater prominence on the SOF than anything else in the focus domain of the SOF. From this lesser stress prominence, Büring proposes, the characteristic patterns of pitch accenting of SOF would follow. At issue here is the question of whether the lesser stress prominence of SOF can indeed be

⁸ Selkirk (2006bc), Selkirk and Kratzer (2006).

⁹ At this point in the exposition I am using the simple term “focus” to refer to “contrastive focus” as defined in the second paragraph of this paper, as involving Roothian alternatives. This should not be confused with the use of the term “focus” to indicate newness in the discourse, a use which this paper argues should not be made.

ascribed simply to the CFPR.¹⁰ Is the focus domain of the SOF always embedded in the domain of some yet higher focus? It seems not.

The understanding of the prosody of SOF in the literature, and of what it implies for theories of focus representation, has been clouded by the assumption, implicit or otherwise, that instances of SOF occur in the first place only when embedded within the scope of some higher focus, as in the examples of (6B, 7B, 14B). But this is simply an oversight. Cases of SOF also occur in sentences that lack further instances of (contrastive) focus, as the B sentences in (20) show. Moreover, a full understanding of the grammar of SOF also requires us to compare the prosody of SOF constituents with that of discourse-given constituents which are not F-marked at all, like those seen in the C examples below.

- (20) a. A: Only [Eleanor]_F was introduced to Franklin by his mother.
 B: And his whole life, he loved only [Eleanor]_{F,G}.
 C: And his whole life, he loved [Eleanor]_G.
- b. A: The New York Times gives only [newspaper subscriptions]_F to the city's poor.
 B: I don't think they can live on only [newspaper subscriptions]_{F,G}.
 C: I don't think they can live on [newspaper subscriptions]_G.
- c. A: We were ordered to only think [good thoughts]_F.
 B: But we were bored by only thinking [good thoughts]_{F,G}.
 C: But we were bored by thinking [good thoughts]_G.

As the B examples show, there is an absence of pitch accent on the SOF in the cases where it follows another stress/pitch accent in the sentence. This is the pattern widely observed (see discussion of (6B, 7B)). The generalization that emerges on the basis of the facts in (20) is that the stress/pitch accenting patterns

¹⁰ That an appropriate representation of the stress prominence of SOF can account for its pitch accenting properties is not in dispute (see Selkirk 2006b).

of SOF depend in no way on the embeddedness of the focus domain of SOF within a higher focus domain. SOF that are *not* nested within the domain of another (contrastive) focus, like these in (20), have the same stress/pitch accenting patterns as SOF that *are* in nested-focus domain contexts, like those in (6B), (7B) and (14B)/(17).¹¹ More telling still, the pitch accenting of a SOF constituent is identical to that of a discourse-given constituent that is *not* F-marked, as the comparison of the B and C sentences in (20) shows. These generalizations would have to be regarded as accidental by a theory which held that the prosody of SOF derives from its presence in an embedded focus domain. But they follow from a theory which derives the prosody of a SOF constituent from its discourse-given, G-marked status.

5 Summary

In summary, this note has argued for a three way distinction in the syntactic marking of “focus” and its phonological and semantic interpretation. Only contrastive (alternatives) focus (Rooth 1992, 1996) is given an F-marking in the syntax, and this is interpreted by both the phonology and the semantics. In addition, a G-marking is posited here for both discourse-given constituents and second occurrence focus constituents; it is phonologically interpreted as proposed by Féry and Samek-Lodovici (2006). These two cases of G-marking fall out from the G-Marking Condition proposed here (and in Selkirk in submission), which relies on elements of both the alternatives semantics of Rooth (1992) and the Schwarzschild (1999) theory of givenness. Discourse-new constituents are not marked in the syntax; they are not considered to be a species of focus; they are not F-marked. Their semantics is accordingly predicted to be

¹¹ Büring (2006) assumes that the focus domain for the primary focus to the left of the SOF in the cases like (6B), (7B) and (17) is the entire sentence and hence that the SOF focus domain is embedded within it.

“neutral”, and their prosody is as well, the latter being produced by default principles of phrase stress (cf. Selkirk in submission, Selkirk and Kratzer 2007).

Reference

- Bartels, Christine. (1995). Second occurrence test. Manuscript, University of Massachusetts Amherst.
- Bartels, Christine. (2004). Acoustic correlates of ‘second occurrence’ focus: Towards an experimental investigation. In *Context-dependence in the Analysis of Linguistic Meaning*, H. Kamp and B. Partee (eds.). Amsterdam: Elsevier, 354–361.
- Beaver, David, Brady Clark, Edward Flemming, Florian Jaeger, Maria Wolters. (2004/to appear). When semantics meets phonetics: Acoustical studies of Second Occurrence Focus. Manuscript, Stanford University. To appear in *Language*.
- Büring, Daniel. (2006). Been there, marked that—A tentative theory of second occurrence focus. Manuscript, UCLA.
- Chomsky, Noam. (1971). Deep structure, surface structure and semantic interpretation. In *Semantics*, D. Steinberg and L. Jakobovits (eds.). Cambridge: Cambridge University Press, 183–216.
- Féry, Caroline and Shinichiro Ishihara. (2006). Interpreting Second Occurrence Focus. In *Proceedings of NELS 36*, C. Davis, A. R. Deal, Y. Zabbal (eds.). Amherst, Mass.: GLSA, 371–384.
- Féry, Caroline and Vieri Samek-Lodovici. (2006). Focus projection and prosodic prominence in nested foci. *Language* 82(1):131–150
- Gussenhoven, Carlos. (1983). Focus, mode, and the nucleus. *Journal of Linguistics* 19: 377–417.
- Gussenhoven, Carlos. (2004). *The Phonology of Tone and Intonation*. Cambridge: Cambridge University Press.
- Jackendoff, Ray S. (1972). *Semantic Interpretation in Generative Grammar*. Cambridge, Mass.: MIT Press.

- Jacobs, Joachim. (1988). Fokus-Hintergrund-Gliederung und Grammatik. In *Intonationsforschungen*, H. Altmann (ed.). Tübingen: Niemeyer, 89–134.
- Katz, Jonah and Elisabeth Selkirk. (2005/6). Pitch and duration scaling for contrastive focus: a phrase stress analysis. Manuscript, University of Massachusetts Amherst.
- É. Kiss, Katalin (1998). Identificational focus versus information focus. *Language* 74(2):245–273.
- Kratzer, Angelika. (2004). Interpreting focus: Presupposed or expressive meanings? *Theoretical Linguistics* 30(1)(Special issue on Interpreting Focus):123–136.
- Krifka, Manfred. (1992). A compositional semantics for multiple focus constructions, In *Informationsstruktur und Grammatik, Sonderheft der Linguistischen Berichte* 4, J. Jacobs (ed.). Opladen/Wiesbaden: Westdeutscher Verlag, 17–54.
- Ladd, D. Robert. (1996). *Intonational Phonology*. Cambridge: Cambridge University Press.
- Rooth, Mats. (1992). A theory of focus interpretation. *Natural Language Semantics* 1: 75–116.
- Rooth, Mats. (1996a). Focus. In *The handbook of contemporary semantic theory*, Shalom Lappin (ed.). London: Blackwell, 271–297.
- Rooth, Mats. (1996b). On the interface principles for intonational focus. In *Proceedings of SALT VI*, T. Galloway and J. Spence (eds.). Ithaca, NY: CLC, 202–226.
- Schwarzschild, Roger. (1999). Givenness, Avoid F, and other constraints on the placement of accent. *Natural Language Semantics* 7: 141–177.
- Selkirk, Elisabeth. (1984). *Phonology and Syntax: The Relation between Sound and Structure*. Cambridge MA: MIT Press.
- Selkirk, Elisabeth. (1995). Sentence prosody: intonation, stress and phrasing. In *The Handbook of Phonological Theory*, J. Goldsmith (ed.). London: Blackwell, 550–569.
- Selkirk, Elisabeth. (2002). Contrastive *FOCUS* vs. presentational *focus*: Prosodic Evidence from Right Node Raising in English. In *Speech Prosody*

2002: *Proceedings of the First International Speech Prosody Conference*, B. Bel and I. Marlin (eds.). Aix-en-Provence: Laboratoire Parole et Langage, 643–646.

Selkirk, Elisabeth. (2006). Bengali intonation revisited: An optimality theoretic analysis in which FOCUS stress prominence drives FOCUS phrasing. In *Topic and Focus: Cross-linguistic Perspectives on Meaning and Intonation*, C. Lee, M. Gordon and D. Büring (eds.). Dordrecht: Springer, 215–244.

Selkirk, Elisabeth. (in submission). Contrastive focus, givenness and phrase stress. Manuscript. University of Massachusetts Amherst.

Selkirk, Elisabeth and Angelika Kratzer. (2004/2005). Focuses, phases and phrase stress. Class lectures, Seminar on Intonational Meaning, Spring 2004, UMass Amherst. Also presented at the Mediterranean Syntax Meeting, Rhodes, June 23, 2005.

Elisabeth Selkirk and Angelika Kratzer. (2007). Default phrase stress, prosodic phrasing and the spellout edge: The case of verbs. To appear in 2007 in a special issue of *Linguistic Review* on Prosodic Phrasing, S. Frota and P. Prieto (eds.).

Truckenbrodt, Hubert. (1995). Phonological phrases: their relation to syntax, focus and prominence. Ph.D. dissertation, MIT.

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