

TOWARDS A TYPOLOGY OF FOCUS
AND FOCUS CONSTRUCTIONS

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Abstract

Departing from the assumption that focus is non-uniform (Kiss 1998) this paper takes preliminary steps towards a typology of focus and focus constructions. Focus is taken to be a syntactic feature assigned freely to word level categories at Numeration licensed either by integration into a wider domain (presentational focus) or by overt/covert movement to a functional projection headed by a polarity formative (contrastive/exhaustive focus). Crosslinguistic variation in the target position of focus movement (sentence-peripheral vs. verb-adjacent) support the stipulation of two polarity projections, one in COMP and one in INFL, with different effects on interpretation. The evidence of the WH/focus relationship, on the other hand, suggests that question and answer instantiate a distinct type of focus-background partition (completive focus) independent from and orthogonal to primary information structure. Analyzing clefts as another type of completive focus constructions solves a serious problem confronting the movement analysis of narrow focus: in a number of languages showing striking parallels between focus and relative constructions (Schachter 1973) sentence-peripheral foci bind resumptive pronouns without WCO or island effect. This paper investigates a cleft analysis for this type of focus constructions and discusses its typological implications.

0. Introduction

In the following discussion I propose a typology of focus and focus constructions which attempts to account for a substantial part of the known crosslinguistic variation in this domain. The typological approach underlying this proposal was developed in the course of a comparative investigation into focus and information

structure, in which I tried to take the rather scanty typologically relevant literature into account, as well as numerous studies on focus in a wide range of individual languages.¹ The theoretical background of my discussion is a particular account of focus which I cannot defend or justify in sufficient detail here, but which has been presented more explicitly elsewhere.² The most important aspect of this approach is a reinterpretation of the role of focus in question and answer as well as in cleft constructions.

1. Focus in Question and Answer

A persistent topic in the linguistic debate on information structure is the alleged relationship between focus and questions, in particular constituent (or WH-) questions. The evidence in favor of such a relationship is compelling. It manifests itself in two distinct but related properties of the information structure of Question/Answer (Q/A) pairs, both firmly supported by crosslinguistic evidence:

1. A WH-question always requires a focussed answer.

The constituent corresponding to the WH-phrase of an interrogative sentence is necessarily focussed. The answer may be either a focus or a constituent containing a focus, or else a sentence that contains the focussed constituent and is a redundant echo (or near echo) of the question. If the answering term is a focus, it may just fill in a blank; if it contains a focus, it presupposes a more highly structured multiple choice context and excludes alternatives (Kuno 1982). Since there are languages in which term answers have a distinct syntactic form, I will assume that WH-questions induce focussed term answers and that sentential replies are redundant elaborations of term answers (I use capitals for focus wherever appropriate).

(1) Q : Who came in?

A₁: LAURI (came in)

A₂: The FINNISH student (came in)

In the case of a global question targeting the entire event, the entire sentence constituting the answering term must be focussed. Interestingly, in this case, too, the context may give rise to a multiple choice structure.

(2) Q₁: What happened?

Q₂: Why are you surprised?

A₁: LAURI came in

A₂: The FINNISH student came in

Since a question appears to have a focussing effect on its answer, it has become standard practice among students of information structure to use Q/A pairs as a test for focus background structures.

In languages with a purely prosodic manifestation of focus, the focussing effect of a Q/A pair could be seen as a trivial consequence of the fact that the answer to a WH-question, often a subsentential constituent, must be able to stand on its own as an independent utterance, which requires a prosodic peak. There are, however, many languages with morphosyntactic focus structures that have been claimed to be independent of prosodic prominence. Akan, a Kwa language spoken in Ghana, has a focus construction in which the focussed constituent obligatorily occurs in a left-peripheral position and is followed by the focus-marking particle na. A WH-question answered by such a sentence displays the same structure: The WH-phrase appears in initial position and is accompanied by the focus marker.³ In answers, two such particles may occur: The focus marker na occurs only in a sentential reply, the focus marker a only with a term answer:

- (3) Q: Hena na Ama rehwehwe?
 who FOC Ama is-looking-for?
 'Who is it that Ama is looking for?'
- A₁: Kofi na *(Ama rehwehwe)
 Kofi FOC Ama is-looking-for
- A₂: Kofi a (*Ama rehwehwe)
 Kofi FOC
 '(It is) KOFI (that Ama is looking for)'

The question in (3) may also serve to illustrate the second aspect of the relationship between focus constructions and constituent questions:

2. In a language with WH ex situ the WH-phrase usually appears in focus position.

As repeatedly noted in typological work (Croft 1990; Givón 1990) and demonstrated in numerous language particular studies, this generalization comes close to being a universal trait of natural language. The best evidence comes from languages in which focus is obligatorily displaced to a specified syntactic position. Hungarian and Basque are among the most often quoted representatives of this type of language, which Kiss (1995b, 1998a) calls discourse configurational.

As is well known, in Hungarian and Basque foci and WH-phrases occur in a preverbal position. This is undoubtedly one of the most common types of focus position and can be observed in many of the languages documented in Kiss (1995a, 1998a). Similarly frequent are languages like Akan, where focus occurs in initial position, as in the sentential answer in (3). A small number of Bantu and Chadic languages have focus in postverbal position (cf. Watters 1979; Tuller

1992; among others), but it has been argued that the focus constructions found in such languages are derivationally related to preverbal focus. Much less common are languages with focus in final position, such as Tangale and Ngizim (both Chadic; cf. Tuller 1992) and American Sign Language (Petronio 1993). At any rate, obligatory or optional displacement of focus is very frequently encountered in the world's languages and it has been speculated that this may very well be a universal phenomenon (Mallinson and Blake 1981: 152).

The important point is that in the majority of such languages the displacement of the WH-phrase appears to target the same position as focus movement. This becomes particularly clear in languages which have WH in situ as an optional alternative, such as Akan. A question with WH in situ is (4). As (5) shows, a focus construction may also have WH in situ, but only with an echo interpretation.

(4) Ama rehwehwe hena?

Ama is-looking-for who?

'Who is Ama looking for?'

(5) Ama na rehwehwe hena?

Ama FOC is-looking-for who?

'Who is Ama looking for?'

(5) seems to suggest that focus and WH compete for the same syntactic position. Similar effects can be observed in a number of African languages. In Duala (a Bantu language, spoken in Cameroon; cf. Epée 1975, 1976) object focus fronting is optional, and the focus marker nde follows the focus when it is fronted but precedes the focus when it occurs in situ after the verb. Focussed WH occurs without the focus particle, but focussing may be indicated by WH-fronting. In indirect questions, however, WH-fronting is obligatory. WH in situ may occur in

a focussed main clause, but then it can only have an echo reading (Epée 1975: 222). This is similar to what we find in Akan.

- (6) Kuo nde a-andi nje kiele
Kuo FOC he.bought what yesterday
'It was Kuo that bought WHAT yesterday?'

Such examples suggest that WH-questions and focus constructions are structurally related. Following Horvath (1986), it has become standard practice in generative accounts of focus to postulate that WH-phrases, in analogy to foci, bear a focus feature that enables them to target the same position as other focussed constituents. Earlier suggestions in this direction can be found in Rochemont (1978) and Culicover and Rochemont (1983). More specifically, Rochemont (1986) proposes that the focus status of WH-phrases should be derived from the function of WH-questions in discourse and suggests that "the WH phrase may be informally viewed as a kind of vacuous operator, binding an open position in a proposition for which the speaker intends the audience to provide an appropriate value - the focus, or new information" (p. 19).

Another line of tradition in which WH-phrases are considered foci has arisen in semantics, especially in the semantic analysis of questions originally inspired by Hamblin (1973), who proposed a unified account of declarative and interrogative sentences. Hamblin's account is centered around the notion of a denotation set, which is very similar to the set of alternatives that Rooth (1985) proposes in his semantics for focus. Going one step further, Hong (1995) develops a compositional semantics for WH-questions in the framework of M. Krifka's structured-meaning approach in which WH-phrases are interpreted as semantic foci and the Q-morpheme is defined as a focus-sensitive operator, similar to focus

particles such as only or even, with which WH-phrases are associated. Other illocutionary operators are also assumed to have focus-binding properties.

A number of linguists, however, among them Erteschik-Shir (1986), reject the interpretation of WH-phrases as semantic foci. Erteschik-Shir argues a WH-question may have a focus structure of its own, which is independent of the presence of a WH-operator and corresponds to the assertion that results when question and term answer combine to form a proposition.⁴ Earlier on Hajičová (1976, 1983) had already pointed out that in prosodically marking languages, such as English, WH-phrases can be focussed by means of prosodic emphasis, a process which affects the information structure, thereby changing its answer potential. Thus, a negative answer, as in (8), appears to be less acceptable when the WH-phrase is focussed than when it is not (Hajičová 1976: 32; 1983: 88ff.).

(7) a. Who came to the MEETING?

b. WHO came to the meeting? (=Who was it who came to the meeting?)

(8) Nobody

As Hajičová observes, the focal accent on the WH-phrase in (7) b. induces a presuppositional effect on the question, which is absent in the case of (7) a., its neutral counterpart. Furthermore, Hajičová points out that the shift of focal accent to the subject in (9) b. has an effect comparable to focus on the WH-phrase: It "strengthens" the presupposition. Again, this effect is absent in (9) a., where accent falls within the VP.

(9) a. Why did John marry JOAN?

b. Why did JOHN marry Joan?

Examples like (9) support the by now uncontroversial assumption that principles of focus projection (Selkirk 1984, 1995) that determine focus in declaratives also apply to interrogatives (as argued in Rosengren 1991): (9) a. is ambiguous and has a neutral wide focus reading projected by the focus on the internal argument (Why did they marry?) and a narrow focus reading (Why was it Joan that John married?), while (9) b. can only be interpreted as a sentence with a narrow focus on the external argument (Why was it John that married Joan?). Both interpretations presuppose that the focus of (9) a. and b. is not the WH-phrase, but a prosodically prominent category in the rest of the sentence. The conclusions drawn by Erteschik-Shir (1986) and Rosengren (1991), in particular, are incompatible with the approach in Rochemont (1986). Rochemont (1986) discusses sentences that are similar to (9) a. and b. and interprets them as conclusive evidence that prosodic prominence is neither a sufficient nor a necessary condition for focus. According to him, this is true even in languages like English, whose focus marking system has been claimed to exclusively depend on prosodic prominence, in particular pitch accents (Selkirk 1984, 1995).

On the other hand, however, the evidence of languages in which focus is marked in specific morphosyntactic constructions seems to lend support to Rochemont's claim that the WH-phrase is the focus in an interrogative sentence, since WH-phrases occurring in sentences with a syntactically specified lexical focus can only have an echo interpretation in Akan and Duala. This restriction is very common and seems to hold in the majority of such languages. But here, too, we find exceptions. One such case is Babine-Witsuwit'en, a Northern Athabaskan language spoken in British Columbia, which, like other Athabaskan languages, appears to have optional WH-movement, as Denham (1997) persuasively argues. Babine-Witsuwit'en also has focus markers which occur on objects preceding the

subject: ën (for human singular), ëni (for human plural), and 'iy (for nonhumans).

These forms are also said to occur as personal pronouns. A focus construction of this type can only mark a single focus per clause (Denham 1997: 64).

- (10) Dus 'iy George yunkët
cat FOC George 3s.bought.3s
'It's a cat that George bought' (not a dog)

In addition to a fronted focus, a sentence may also contain a fronted WH-phrase without the focus particle.

- (11) Hoo', lhès 'iy nts'ë Lillian yunkët
no bread FOC where Lillian 3s.bought.3s
'No, where did Lillian buy the BREAD?' (not the fish)

According to Denham, the evidence shows that WH-fronting and focus fronting in this language target different syntactic positions, which she identifies as SpecCP and SpecFP (Focus Phrase), respectively.

Obviously we are now faced with a conflict: On the one hand, there is the evidence of languages with morphosyntactic focus constructions, which strongly suggests that WH-phrases syntactically pattern with focus. On the other hand, we have seen that WH-phrases in English may occur with or without prosodic prominence, which shows that they may either be neutral or focussed in some sense. In addition, WH-questions in English may have focus in another position. Rosengren's German data, in particular, support the conclusion that an interrogative has an information structure essentially parallel to that found in its declarative or imperative counterpart, independent of and logically prior to

whatever focussing effects its interrogative structure induces, with or without the intervention of contextual factors.

In the following I will address myself to the relationship between focus and question and suggest an analysis that resolves the apparent conflict and accounts for the information structural properties of Q/A pairs discussed in 1. and 2. above. The core idea is simple and some of its underlying assumptions have been repeatedly hinted at in the literature.⁵ I will try to show that certain types of sentences, in particular questions, simultaneously occur with two distinct types of focus structure, one orthogonal to the other. One type is primary and corresponds to the commonly accepted notion of information structure, which determines the context-change potential of a given sentence. This type of information structure is independent of force and sentence type and therefore necessarily present in all types of sentences. The contextual effect may be either strictly incremental (presentational or information focus) or more complex, affecting antecedently given sets of alternatives in various ways (contrastive or exhaustive-listing focus).

The second type of focus structure, which I will refer to as "completive focus" for want of a better term, is a matter of variable/value assignment and is therefore restricted to certain types of WH-constructions. Value assignment may either be a function of linguistic interaction, as in Q/A configurations, or self-provided, as in the various types of cleft constructions, all of which I interpret as sorts of self-answered questions, following Carlson (1983). In completive focus constructions the value that substitutes for the variable in an open sentence is necessarily focussed, as shown by the focus effect on term answers and cleft foci, but this must be seen as a temporary highlighting of locally relevant information. Completive focus on term answers, for example, highlights constituents without

affecting their interpretation, which is determined by the primary information structure associated with the questions they answer. Building on this insight and drawing from the evidence presented in the literature on focus and a number of language particular studies, I will then sketch a possible typology of focus constructions.

I will proceed as follows: In 2., I outline the approach to focus and information structure I presuppose and briefly discuss presentational, contrastive and exhaustive-listing focus from a typological perspective. In 3., I introduce completive focus constructions, concentrating on some aspects of WH-questions. In 4., the range is extended to include cleft constructions, the other important type of completive focus construction. I discuss a frequently occurring type of contrastive focus construction with a number of conspicuous properties and try to show that these properties are a natural consequence of the fact that such focus constructions originate in cleft constructions. A conclusion and an outlook are offered in 5.

2. Focus and Focus Constructions

2.1 Presentational Focus

There is a growing consensus among syntacticians studying information structure that presentational and contrastive/exhaustive focus are two universal types of information structure with different semantic and syntactic representations (cf. Kiss 1998b; Kenesei 1996; Drubig 1994; Winkler 1997; and others). In spite of compelling evidence, the distinction is not universally accepted and is, in fact, often neglected as Kiss (1998b) correctly points out.⁶ In what follows I will assume without argument that this distinction is crucial and has to be accounted

for in syntax, a position for which I have argued elsewhere in some detail (Drubig 1992, 1994, 1997, 1998). In addition, it is also fundamental to any typology of focus, as I hope to demonstrate.

2.1.1 Presentational Focus and the Externalization of Internal Arguments

In previous works I have tried to show that presentational focus, with the exception of answers to WH-questions, a problem discussed in 3. below, is wide or sentential, whereas contrastive focus, at least in the standard case, is narrow or subsentential.⁷ The motivation for the assumption of unmarked wide presentational focus derives from the observation that syntactic defocussing may crosslinguistically be characterized as a syntactically marked externalization strategy removing defocussed categories from VP, the category that defines the domain of presentational focus (Drubig 1992). This claim closely corresponds to Diesing's (1992) Mapping Hypothesis, which stipulates a strict correspondence between syntactic form and semantic interpretation. Diesing's point of departure are from observations about scrambling in languages like Dutch and German and, following Heim (1982), Diesing assumes tripartite quantificational structures for sentences containing generalized quantifiers, as shown in (12).

(12) Quantifier [Restrictive Clause] [Nuclear Scope]

The syntactic positions of arguments are predictable from their semantics under Diesing's Mapping Hypothesis:

(13) Mapping Hypothesis (Diesing 1992: 10)

Material from VP is mapped into the nuclear scope.

Material from IP is mapped into a restrictive clause.

The semantic correlate of scrambling in German is shown in the following sentences (Diesing 1992: 107f.):

- (14) a. daß Otto immer Bücher über WOMBATS liest
 that Otto always books about wombats reads
 '...that Otto always reads books about WOMBATS'
- b. [_{CP} daß [_{IP} Otto immer [_{VP} Bücher über WOMBATS liest]]]
- c. Always_t [t is a time] \exists_x x is a book about wombats \wedge Otto reads x at t
- (15) a. daß Otto Bücher über Wombats immer Liest
 that Otto books about wombats always reads
 '...that Otto always READS books about wombats'
- b. [_{CP} daß [_{IP} Otto Bücher über Wombats immer [_{VP} Liest]]]
- c. Always_x [x is a book about wombats] Otto reads x

In (14) the object following the quantificational adverb is inside VP, the domain of existential closure, and serves as the exponent of presentational focus, whose domain coincides with VP. In (15) the object is scrambled outside the VP and forms a restriction on the quantificational adverb. The exponent of presentational focus is then the head of VP. With reference to the scrambling effect Diesing merely says that "the presuppositions induced by the quantifier are somehow incorporated into the restrictive clause" (p. 62). I take this to mean that a generalized quantifier must be associated with a "range topic," i.e. a contextually specified (discourse-linked) set over which it quantifies.

There can be no doubt that (13) offers a significant generalization about the syntax-semantics mapping.⁸ Particularly interesting in the context of our discussion is the fact that it predicts a markedness asymmetry between presentationally focussed and given portions of the sentence: Presentationally

focussed material is predicted to occur in situ and to be incorporated into the wider, sentential domain of nuclear scope, whereas given or presupposed material is predicted to require additional coding. Crosslinguistic comparison of givenness marking has revealed that there is a wide range of coding devices, such as overt displacement in scrambling languages, local deaccentuation in English, clitic doubling in Romance languages, Modern Greek and many other languages (Gierling 1996, 1997; Alexiadou and Anagnostopoulou 1997; Anagnostopoulou 1999), special case morphology and various types of agreement markers (cf. Meinunger 1998b; Hyman and Katamba 1993), case drop phenomena in East Asian languages (Masunaga 1987, 1988) and numerous others, all of which have been claimed to mark givenness, referentiality or specificity. I assume that these different coding devices form a natural class of operations marking the externalization of arguments that cannot have an incremental effect on the context from the domain of presentational focus. In addition, (13) predicts the absence of any specific morphosyntactic marking about presentational focus, a natural consequence when presentational focus is licensed by integration in situ without further syntactic operations.⁹

While (13) seems to make essentially correct predictions, the principle as such is a stipulation and one may well wonder whether the fact that the domain of unmarked presentational focus is wide and does not require any specific licensing operations can be derived from independent conditions, making a stipulation unnecessary. A possible point of departure is Vallduví's (1992) information packaging approach to the interpretation of presentational focus, one of the few theories of information structure in which the unmarked status of "all focus sentences" is at least recognized (Vallduví 1992: 70).¹⁰ Departing from Vallduví, McNally (1998) argues that the integration of an information packaging approach

into a dynamic model of semantic interpretation suggests an association between presentational focus and the default instruction "Add information," and that this association allows us to derive the generalization stipulated in Diesing's approach and much recent work inspired by it. McNally attempts to work out further predictions on the crosslinguistic encoding of instruction types, not only for the representation of presentational focus, but also for contrastive focus structures. I will argue that a syntactic account of focus structure is more promising from a typological perspective because it makes stronger predictions about possible articulations of information structure. In particular, I will assume the following:

1. Assign F(ocus) is free, but restricted to categories with a referential role (Eventuality for V, Referent for N, Degree for A, Space for P; cf. Zwart 1992) in the propositional core of the sentence (Brody 1990). Similar to [α WH], [α F] is assigned to word level categories at Numeration.

2. A provision must be made for the phenomenon of "focus projection" (von Stechow and Uhmman 1986: 296) shown in (18), which answers all questions in (19), whereas (16) answers only (17). In addition, (20) answers (21).

(16) [_F JOHN] invited the nurse

(17) Who invited the nurse?

(18) [_F John [_F invited [_F the NURSE]]]

(19) a. Who did John invite?

b. What did John do?

c. What happened?

(20) John [_F INVITED the nurse]

(21) What did John do?

The most widely discussed principles of focus projection are those of Selkirk (1984, 1995), which derive the focus structures in (16), (18) and (20) as an effect of pitch accent placement and argument structure.¹¹

(22) F-Projection (Selkirk 1995)

- a. F-marking of the head of a phrase licenses the F-marking of the phrase.
- b. F-marking of the internal argument of a head licenses the F-marking of the head.

Additional rules are necessary for adjuncts (cf. Winkler 1997). According to Selkirk's rules, F percolates bottom-up; others, such as Jacobs (1991) and Rosengren (1993), argue that F-Projection operates in a top-down fashion. Von Stechow and Uhmman (1986) and many others interpret representations such as (18) as focus ambiguities with each F-marking representing a particular reading that the sentence may have in the context of an appropriate WH-question. This is not the interpretation of Selkirk, who argues that focus may be contained in focus as a result of a recursive application of (22). The approach represented here is closer to Selkirk's view. While certain contexts may indeed induce narrow focus readings, in the standard presentational focus structure this is clearly not the case. Furthermore, each lexical head in argument structure has an independent status in a presentational focus structure and is integrated into the category containing it, forming a hierarchy of successively wider domains up to the level of VP, the natural domain of unmarked presentational focus. A further consequence of my approach is that a presentational focus on a term answer cannot be narrow. This follows from the fact that a WH-question has a fully articulated focus structure, which is equivalent to its declarative counterpart (Rosengren 1991). When a WH-

phrase occurs in a sentence with a presentational focus structure, the term answer, too, is a presentational focus which, as I will show in 3., is licensed by integration into the interrogative clause at a post-LF level.

In the framework presented here there is no room for such a concept as "focus projection," and the question of top-down or bottom-up application does not arise, because licensing of F is not directional. There is no flow of features up or down a phrase marker, because each category comes with a focus feature of its own, which is licensed by integration. Following Rochemont (1986) and others, I distinguish between F and "prominence" and assume that the interpretation of prominence may vary from language to language. The following principle replaces rules like (22).

(23) Head Prominence (Drubig 1994)

A [+F] head is prominent if and only if its internal argument is not prominent.

(23) determines the presence of a pitch accent on the verb in (20) and its absence on the verb in (18). Note that (23) reflects a coding strategy that ensures maximal economy in F-marking: It spells out a condition under which prominence on the most deeply embedded [+F] argument suffices to mark focus on successively wider phrases up to the level of "maximal projection."

3. Following a suggestion by Holmberg (1999), I assume that the feature that undergoes checking is [-F]. [-F] checking induces overt movement in scrambling languages, Object Shift in Scandinavian and perhaps also clitic doubling¹² and other language specific instantiations of argument externalization. Holmberg's suggestion that [-F] is the relevant feature is supported by the observation that it can be checked by expletives. Checking by expletives is incompatible with a

feature involving referentiality or specificity, such as the feature [+topic], proposed in Meinunger (1996). Holmberg observes that Object Shift operates on the expletive (or "quasi-argumental") subjects of certain small clauses in Swedish, as in frozen expressions like ta det lugnt 'take it easy' (p. 23):

(24) Han tar det_i mycket sällan [_{sc} t_i lugnt]
he takes it very seldom easy

Holmberg's observation is also supported by scrambling data from German and other languages. This shows that specificity or referentiality is not a necessary, but a contingent condition for scrambling, Object Shift, etc. As Holmberg (1999: 25, n. 23) points out, the assumption of a negative trigger is decisive, because it suggests the possibility of reconstructing scrambling, Object Shift and perhaps other types of argument externalization within the framework of Chomsky's (1995) theory of feature checking. A [-F] category could be said to be "interpretable" in the sense that it fails to meet a semantic requirement imposed upon the position in which it is generated: It cannot have an incremental effect on the context and must therefore be excluded from the focus domain.

4. Within a split-INFL framework, it is usually assumed that the target category of scrambling and related types of displacement is AgrP. If the idea of [-F] checking is on the right track, then AgrP is a purely functional category that has no semantic effect on its host, contrary to what some authors (among them Adger 1994 and Anagnostopoulou and Giannakidou 1995) have proposed.¹³

The points I have been trying to make can be summarized as follows: Without being able to present a more articulated proposal here, I have tried to show why information focus tends to be unmarked and why prosodic and morphosyntactic representation favors defocussing. The results of packaging instructions

approaches to the interpretation of information structure allow us to understand why this is so and why the Mapping Hypothesis, in spite of many problems of detail, seems to make essentially correct predictions about the linguistic division of labor.

From this we derive a typologically relevant prediction: We may expect little or no crosslinguistic variation in the representation of presentational focus, but much variation in defocussing strategies. Scrambling, Object Shift, clitic doubling and other forms of argument externalization seem to form a natural class of displacement operations with the essential purpose of evacuating the focus domain from informationally inert material.

2.1.2 Presentational Focus and the Internalization of External Arguments

In a particularly interesting typological study Lambrecht and Polinsky (1997) discuss the focus properties of subject prominence inthetic sentences, which they call Sentence Focus (SF) constructions. This category is defined in (25).

(25) SENTENCE FOCUS CONSTRUCTION (Lambrecht and Polinsky 1997:

190)

Sentence construction formally marked as expressing a pragmatically structured proposition in which both the subject and the predicate are in focus. The focus domain is the sentence, minus any topical non-subject arguments.

SF constructions are distinguished from two other types of focus constructions, which they call ARGUMENT FOCUS and PREDICATE FOCUS. Examples are given in (26) a.- c. In all three cases the context in which the focus construction occurs is the question in (26) d.

- (26) a. ARGUMENT FOCUS: Her SON is responsible
 b. PREDICATE FOCUS: Her son had an ACCIDENT
 c. SENTENCE FOCUS: Her SON is sick
 d. Why didn't she come to work today?

Lambrecht and Polinsky investigate the various coding devices that mark thetic subjects in typologically diverse languages. The properties of such subjects they interpret as evidence for a particular detopicalization strategy, which affects the coding of thetic subjects and formally assimilates them to internal arguments. This effect on the external argument, they claim, can be implemented in two different ways, one of which amounts to a reduction or alternation of coding properties that are typically associated with topic status (the "weak strategy"), the other amounting to a strengthening of coding properties that are associated with focus status (the "strong strategy"). By focus they obviously mean the carrier of prominence in a presentational focus domain.

Lambrecht and Polinsky propose the following two principles:

- (27) THE PRINCIPLE OF SUBJECT-OBJECT NEUTRALIZATION: in a SF sentence, the subject is grammatically coded with some or all of the prosodic and/or morphosyntactic properties associated with the object in a corresponding PF sentence.
- (28) THE PRINCIPLE OF TOPIC CANCELLATION: in a SF sentence, the subject cannot be grammatically coded with prosodic and/or morphosyntactic properties UNAMBIGUOUSLY associated with the topic in the corresponding PF sentence.

In their study the authors eventually find that (27) is crosslinguistically more clearly supported than (28). They discuss the following coding properties:

(29) PROPERTIES OF FOCAL OBJECTS ACROSS LANGUAGES:

- (i) prosodic prominence;
- (ii) specific linear position;
- (iii) nonnominative case marking;
- (iv) lack of grammatical agreement.

(29) (i)-(iv) are the major types of theticity markers already discussed in Sasse (1987). In all cases listed in (29), the thetic subject assumes properties that reflect either its actual or virtual integration into VP, the focus domain, such as incorporation into the head of VP, syntactic movement into VP (inversion), subject prominence (or "prosodic inversion"), or case morphology indicating a loss of independence as an external argument. I refer the reader to Lambrecht and Polinsky's paper for details. Their results are significant in the context of my discussion, because they suggest that the marking of thetic subjects follows a strategy which is the exact opposite of the one discussed in 2.1.1: Instead of externalizing internal arguments, this strategy internalizes external arguments.

Although I cannot enter into a discussion of theticity here, I would like to underline two points. First, we should note that in contrast to the externalization strategies mentioned in 2.1.1, all of which affect the prosodic or morphosyntactic form of internal arguments in various specific ways, (27) amounts to a mere neutralization. In contrast to externalization, internalization does not bring any specific coding elements into play. Second, if we could show that thetic subjects have the status of internal arguments, then the effects documented by the authors would turn out to be the default case. As a matter of fact, the properties of thetic sentences give us reason to believe that this is the right conclusion. Setting aside generic sentences, we may observe that prototypical thetic sentences are situation-

specific: They can only be used with reference to a specific situation, either defined by the speech event or built up in a narrative report. Furthermore, the predicate of a thetic sentence is either an episodic verb with the argument structure of an unaccusative (Drubig 1992) or a predicate (AP, PP) expressing a stage-level property (Kratzer 1988). For all predicates occurring in sentences with a thetic interpretation we must assume that they have, in addition to a participant argument, a spatio-temporal argument, which is called "l(ocation)" in Kratzer (1988) and "stage" in Erteschik-Shir (1997). The situation-specific, or event-reporting, interpretation of thetic sentences suggests that the spatio-temporal argument is the topic of the thetic sentence. According to this view, a thetic sentence is about the contextually specified space/time at which the reported event takes place. Hence every thetic sentence has a silent "stage topic," its true external argument.¹⁴

We may conclude our discussion by saying that the marking properties of thetic subjects are unsurprising: The subjects of thetic judgements lack the status of proper external arguments, or topics, and are therefore predicted to participate in the coding privileges of internal arguments. This shows once more that the representation of presentational focus constructions is in essential agreement with the predictions of the Mapping Hypothesis: Every category that goes into the restrictor, the locus of givenness, is marked and subject to some specific form of externalization, everything that remains in the nuclear scope is unmarked. There seems to be no compelling evidence for any marking strategies pointing in the opposite direction.

2.2 Narrow Focus and Focus Operator Constructions

2.2.1 Focus and Topic Fronting

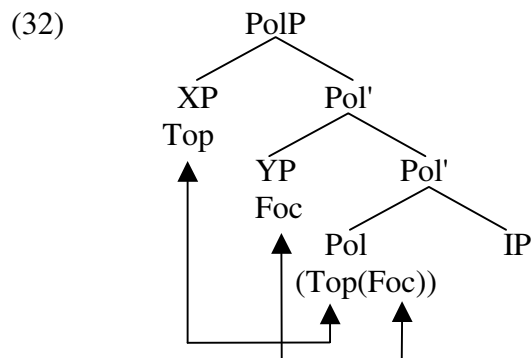
Gundel (1983) was one of the first to point out that English has optional focus and topic fronting constructions. Gundel calls these two constructions Focus Topicalization (30) and Topic Topicalization (31) and notes that the specific interpretations associated with the two fronted constituents can also be obtained in situ.

(30) THE CABBAGE she put on the table

(31) THE CABBAGE she put ON THE TABLE

The form and interpretation of both constructions have been intensively investigated. Both constructions have been shown to link variables in salient open propositions to contextually given sets of alternative values (cf. Birner and Ward 1998 for discussion and references), and both have traditionally been analyzed as adjunctions to IP (Lasnik and Saito 1992). More recently, however, it has been proposed that the target of Topic Topicalization is SpecTop(ic)P (Müller and Sternefeld 1993; Müller 1995: 343ff.) and the target of Focus Topicalization SpecPol(arity)P, alias SpecF(ocus)P (Culicover 1991; Drubig 1994). According to Rizzi (1997), CP must be subjected to a split-COMP analysis, in which TopP and FP cooccur, "sandwiched" between a component projection of COMP which expresses illocutionary force and another layer of COMP-projections hosting mood and finiteness. Reinterpreting the syntactic evidence, Koizumi (1994, 1995) suggests a layered specifier analysis of functional projections, which I will adopt. In Koizumi's framework, fronted topic and focus constituents are specifiers of a single functional head, which Koizumi suggests is Pol^o, following a proposal by

Culicover (1991); however, they target distinct landing sites and check different features in configuration with the same head:



Top in (32) stands for the topic constituent, Foc for a class of constituent types which I will call polarity constituents, all of which share a polarity feature and are focussed. The membership of this class will be determined in 2.2.2.

This syntactic implementation is in accordance with the contextual effects of the use of the topicalization construction on the context, which were originally discussed in Prince (1981) and Ward (1985). According to these authors, Focus Topicalization is a focus-presupposition construction in the sense of Chomsky (1972). The occurrence of (30) gives rise to the inference that the speaker is taking an open proposition, Mary put X on the table, as an item of salient mutual knowledge. Salient mutual knowledge is knowledge that the speaker and hearer not only share, but are actually thinking of at the time when the sentence referring to it is communicated. The fronted focus constituent that binds the trace representing the variable contrasts with a contextually restricted set of alternatives, such as other things that Mary just brought home from a particular shopping trip. Spontaneous examples discussed in the literature usually have a reclamatory character and suggest a background in which it has been already claimed, or at least intimated or assumed, that an alternative value assignment might result in a true sentence.

Topic Topicalization, on the other hand, combines the focus effect with a particular aboutness reading induced by topic displacement. A topic constituent that is displaced and binds a trace is felicitous only when 1) it stands in an anaphoric relation to a set (possibly a singleton set) of already established entities in the discourse model (strong topic effect), and 2) the substitution of a variable for the focally stressed constituent in the remainder of the sentence produces a salient open proposition (narrow focus effect). If this interpretation is correct, then (31) may not only contrast the cabbage with other items Mary bought, but also the table with other places where she put those things. It should be noted that this analysis amounts to the claim that focus in situ gives rise to an unambiguously contrastive reading when combined with Topic Topicalization, whereas in other contexts focus in situ is ambiguous and can be either contrastive or presentational.

In a multiple specifier analysis this means that fronted topics and foci necessarily share a feature, because they address the same functional head, but target different specifiers in order to check other features in which they contrast. The second specifier, however, cannot be projected until the first specifier-head agreement has been implemented, either by feature movement (in situ) or by pied piping the constituent carrying the feature (ex situ). In English, sentences in which both Topic and Focus Topicalization apply overtly are not even marginally acceptable:

- (33) a. HIS CHILDREN_i he gave t_i A PRESENT
 b. ?*HIS CHILDREN_i A PRESENT_j he gave t_i t_j

Since (33) b. is unacceptable, the contrastive focus on the object in (33) must be checked with the PF exponent in situ. In 2.2.3 I will show that although in cases like (33) a. the contrastive focus feature can be checked in situ, the construction shows locality effects, which I interpret as evidence for covert movement. I

conclude that overt focus fronting is optional in English, but disfavored when it results in the doubly fronted configuration in (33) b.

2.2.2 Focus and Polarity

In this section I will try to justify the assumption that the head of the functional projection hosting narrow foci is Pol° , as shown in (32). In doing this I will put forth two different claims: 1) narrow foci belong to a natural class of polarity constituents which check both a polarity and a focus feature in the specifier of PolP; 2) there are two distinct PolPs, one in the COMP, the other in the INFL range of clausal structure. Both are related to focus. The sets of polarity morphemes that may occur in the two instantiations of Pol° are identical and their semantic interpretations are the same, but they have different scope and the foci they are associated with have different readings: When Pol° occurs in INFL, its associate has an exhaustive reading; when Pol° occurs in COMP, its associate is contrastive. The two claims taken together amount to a relational theory of focus in which a narrow focus is licensed by association with a particular operator. The alleged operator status of narrow focus can only go back to the polarity element it is associated with.

Culicover (1991) and independently also Drubig (1994) propose accounts in which Focus Topicalization turns out to be a special case of a general preposing construction. The constituents that are fronted have a special relationship to polarity, besides being focussed. This implies that focussed phrases move to SpecPolP because they have some property that makes them function as polarity constituents. In order to show that this is appropriate, I will briefly look at the

elements that undergo preposing to SpecPolP in English. An incomplete, but representative list of such constituents is the following:

1. Negative quantifiers:

(34) With NO job is John satisfied

2. Only-phrases:

(35) Only HER FRIENDS did Mary invite to any party

Negative fronting, alias Affective Inversion, which is shown in (34), is possible only with focus on the negative particle, as Rochemont (1978) first pointed out. (35) is another instance of Affective Inversion. Only is regularly associated with a focussed constituent.

3. Replacive negation:

A similar focus effect also occurs on the first constituent in the fronted counterpart of the contrastive negation construction discussed in McCawley (1991).

(36) a. Not HER MOTHER did she invite (but HER FATHER)

b. Not HER MOTHER, but HER FATHER did she invite

4. SO/NEITHER:

(37) John is happy and SO is his family

(37) shows fronted so, the focussed affirmative counterpart of neither, hence a polarity morpheme.

5. WH-phrases:

(38) Who will Mary invite?

All fronted elements listed so far are focussed and are obligatorily accompanied by a verb second effect (Subject Auxiliary Inversion). With the exception of WH-phrases, they are clearly related to sentential polarity. In regard to WH-phrases I will follow Culicover's example and assume that one of the functional heads occurring in Pol° is an abstract element WH, whose specific relationship to focus structure I will discuss in 3. below.

Finally, Culicover also lists Focus Topicalization among the polarity-related constructions, suggesting that preposed foci are licensed by another abstract polarity element which he calls focus and whose semantic content he leaves unspecified.

6. Focus:

(39) JOHN she invited

With the exception of foci, all fronted elements induce verb second effects.

Like Topic Topicalization, the constructions in (34)-(37) also occur more or less comfortably after that in complement clauses, which shows that PolP is embedded into CP (or ForceP, in Rizzi's (1997) split-COMP analysis), the category selected by the governing verb. As pointed out by Koizumi (1994: 259), the front-shifted focus can be preceded by a topic in this position, but such sentences are marginal at best:

(40) Mary said that only with great difficulty can she carry these books

(41) [?]Mary said that these books, only with great difficulty can she carry

With respect to the distribution and interpretation of Pol° two points have to be made. First, preposing in all cases discussed so far seems to be optional. The focus effect characteristic of preposing apparently also occurs in situ with the

same interpretive consequences. The important point is that preposing serves to disambiguate information structure. The interpretive effect associated with preposing can be seen in (42) a. and b.

- (42) a. She bought only CABBAGE
b. She only bought CABBAGE
c. Only CABBAGE did she buy

Only must be analyzed as a quantifier-like element operating over a set of alternatives. (42) a. and b. may occur in contexts where such a sentence is interpreted as a neutral report on a trip to the grocery. In this case only operates on the rather unrestricted and not sharply delineated set of possible acquisitions supplied by a shopping scenario and excludes everything except cabbage. (42) c., however, is more likely to occur in a situation where a closed set of alternatives is "under debate." Only then operates on a contextually salient set and the sentence in which it occurs could be followed by an enumeration of the excluded items. Only always requires a set of alternatives, but preposing has the effect of unambiguously narrowing its range down to a closed set of contextually specified choices. In other words, the focus associated with it has a contrastive reading when it is preposed. Similar observations can be made about the other elements occurring in Pol°, such as replacive negation and negative quantifiers.

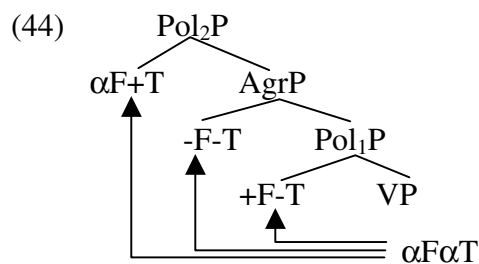
Second, the analysis sketched above has the important consequence that the category Pol° must be operative in two different positions in the sentence (cf. also Culicover 1991: 27): In addition to the COMP category targeted by the displacement of contrastively focussed phrases, there must be a second functional projection within INFL, whose head (only, even, not, etc.) may be overtly represented, as shown in (42) b. This category corresponds to the category

SigmaP for sentential negation and affirmation proposed by Laka (1990), which I will also call PolP in order to bring out the close correspondence between the two categories.

We now have two PolPs in the functional structure of a sentence: Pol₁P, alias SigmaP, is located in INFL and selects VP or TP, the nuclear domain of presentational focus, while Pol₂P is located in COMP and selects IP. Pol₂P hosts the wide scope position to which contrastively focussed phrases optionally move in English:

(43) [Pol₂P SpecPol₂ ... [Pol₁P SpecPol₁ ... VP

In the discussion below I will assume that the abstract polarity head focus can be identified with the silent affirmative counterpart of replacive negation, or perhaps with an abstract exhaustivity operator, a silent affirmative counterpart of only, as suggested by Lasnik and Stowell (1991: 715). This is an important step in my analysis which suggests a natural explanation for the fact that so-called "free focus" has the characteristics of an operator with an exhaustive or contrastive reading: The silent polarity head is responsible for the fact that narrow focus is an operator; the difference in interpretation is due to the fact that focus has different interpretive effects in COMP and INFL. I will take the configuration in (44) as my point of departure and assume that two features must be checked in the syntax of focus structure, $\alpha F(\text{ocus})$ and $\alpha T(\text{opic})$.



The [+F-T] category may be passively licensed, i.e. by integration within VP, provided that it is governed by a head bearing the same features. If this condition is not fulfilled, it must be actively licensed and overtly/covertly moves to SpecPol₁P, where its features are checked in a specifier-head configuration. This amounts to association of focus with a polarity head, whether abstract or not. A [-F-T] category is subject to "givenness marking" and undergoes overt/covert movement to an appropriate functional category, perhaps an agreement projection, for the purpose of [-F] checking. A [+T] category must move to Pol₂P. I assume that the topicalization feature [+T] is responsible for the context-dependent, contrastive reading of focus. [+F+T] is checked in the internal specifier of Pol₂P (Focus Topicalization), and [-F+T] in the external specifier of Pol₂P (Topic Topicalization). Furthermore, I tentatively suggest that SpecPol₂P is the landing site targeted by contrastive focus in all those languages which isolate narrow focus in the sentential periphery, such as Modern Greek or Romanian. SpecPol₁P is the landing site of narrow focus with an exhaustive reading, i.e. the landing site targeted by focus in languages with verb-adjacent focus, such as Hungarian and Basque. The approach defended here can be characterized as a syntactic articulation of the relational focus theory first proposed in Jacobs (1984) and later modified in Moser (1992).

2.2.3 Focus in situ as Covert Movement

Under the relational account proposed in 2.2.2, narrow focus moves to a syntactically specified position in order to enter into a Spec-head relationship with a polarity head for the purpose of feature checking. As in any other type of operator-variable dependency, we expect this relationship to be subject to locality

restrictions and other constraints imposed upon syntactic movement configurations. In a relational framework we can establish that focus-background structures are quantificational by showing that Association with Focus (AWF) is subject to all relevant conditions. From here, the argument can be extended to "bare focus" constructions under the assumption that focus is always associated with an appropriate operator, as is assumed in relational focus theory. In Drubig (1994) I argue this point in more detail. Similar observations are presented in Steedman (1991). Here I will limit myself to a brief outline of the main issue. At the end of this section I will sketch a syntactic solution to the problem at hand.

Any attempt to show that focus in situ must be analyzed in terms of covert movement is faced with the difficulty that most of the usual criteria for operator-variable dependencies, such as Reconstruction effects, ATB application, the licensing of parasitic gaps, and also island constraints, do not seem to apply when the alleged operator is in situ. An exception has been claimed for the Weak Crossover (WCO) effect. As is well known, Chomsky (1977: 292) observes that the pronoun in sentences such as (45) a. cannot be read as a bound variable, which he interprets as an indication that the focus in this sentence has a status similar to that of the quantifier in (45) b. He suggests that focus undergoes Quantifier Raising at LF, as shown in (46).

- (45) a. His_{*i/j} mother loves JOHN_i
 b. His_{*i/j} mother loves everybody_i

- (46) [FOCUS_i] IP[...t_i...]

Going one step further, Lasnik and Stowell (1991) assume that the WCO effect actually indicates the presence of an operator associated with focus, a type of silent only, similar to what I proposed in 2.2.2. Other authors have tried to show

that the evidence of (45) is inconclusive and does not justify a quantificational interpretation of focus (cf. Vallduví 1992: 119ff.; more recently Williams 1994: 234ff.). It is Rooth (1985) in particular, who effectively argues against a movement-based account of focus and demonstrates that in languages with a primarily prosodic manifestation of focus, such as English, focus can be interpreted in situ. Since then, it has been the majority opinion not only among semanticists, but also among syntacticians, that focus in situ cannot be accounted for in terms of syntactic movement.¹⁵

Furthermore, AWF constructions have also been claimed to show that focus is generally insensitive to syntactic locality restrictions. Typical examples are sentences like (47), an example from Rooth (1985), which is also discussed by Kratzer (1991). Kratzer argues on semantic grounds that pronouns with focussed antecedents must have bound variable readings, but claims that AWF can cross syntactic islands, as shown in (47), without causing a violation.

(47) They only investigated [the question of whether you know the woman who chaired [_Fthe ZONING BOARD]]

Steedman (1991) calls the evidence for this claim into question and tries to show that the semantic interpretation of sentences like (47) shows that AWF respects locality constraints. Further evidence to this effect is independently presented in Drubig (1994), where it is shown that in (47) the focus particle can only be associated with the definite NP functioning as the object of the main verb, contrasting it with a set of other objects of investigation presupposed in the context. In other words, when a focussed constituent is embedded in an island, the constituent that undergoes association is the syntactic island, not the focus embedded in it.

This assumption is strongly supported by the evidence of languages with overt focus movement, such as Hungarian. In Hungarian, the phrase associated with only has to move into the preverbal focus position at PF. As (48) shows, the extraction of the most deeply embedded NP carrying the focus feature constitutes an island violation.¹⁶ As is well known, Hungarian focus movement is subject to the same constraints as WH-movement.

- (48) *Ök [csak [_F a Zoning Szövetséget]]_i vizsgálták meg a kérdést,
 they only the Zoning Board investigated PERF the question
 hogy ismered-e a nőt aki vezette t_i
 whether you know the woman who chaired
 'They only investigated the question of whether you know the woman who chaired the ZONING BOARD'

In Drubig (1994) I have claimed that the focus particle in cases like (47) is not associated with the prosodically marked focus, but with a specified constituent I call the Focus Phrase (FocP).¹⁷ FocP is a phrase containing a focus, but if this focus is embedded in more than one island, as in (47), FocP is the topmost island c-commanded by the focus particle. Focused adjuncts are always restricted to the NP in which they occur, as (49) shows.

- (49) He only invited [_{FocP} ex-convicts [with [_F RED] shirts]]

In a focus moving language like Hungarian, FocP is the category that moves to the focus position.¹⁸

- (50) a. Ö csak [_{FP} PIROS]inges volt foglyokat hívott meg
 he only red-shirt-with ex convicts.ACC invited-he PERF
 b. *Ö csak [[_F PIROS]inges] hívott meg volt foglyokat
 he only red-shirt-with invited-he PERF ex convicts.ACC

The argument that the focus operator in complex cases is FocP and not the focus embedded in it is supported by the observation that FocP is also the category that induces a WCO effect.

(51) *The woman he_i loved betrayed [the man who was wearing a RED hat]_i

(52) *John sent his_i son to [the man who was wearing a RED hat]_i

All this shows that AWF in English as well as in Hungarian is an island sensitive syntactic process, in contrast to what has frequently been assumed. Even more telling evidence for the locality sensitivity of AWF in English comes from the contrastive negation construction. In this construction the focussed constituent associated with negation is clearly identified by its alternative, which occurs in the replacive but-phrase. In (53) "focus projection" predicts the range of possible associates for contrastive negation.

(53) John doesn't [write [books [about SYNTAX]]]

1. but [PHONOLOGY]
2. but [papers about PHONOLOGY]
3. but [studies uncommonly taught LANGUAGES]

When focus is embedded in one or more islands, however, the choice of alternatives is immediately reduced to one, namely, the external island. This island functions as FocP and must undergo association. AWF with a subconstituent of FocP is excluded. This effect can be observed with all relevant types of syntactic islands. There appear to be no clear differences between strong and weak islands.

1. Complex NP Constraint:

(54) He didn't interrogate the man who invited the ex-convict with the RED shirt, but

1. *the BLUE shirt
2. *with the BLUE shirt
3. * the ex-convict with the BLUE shirt
4. the man who invited the ex-convict with the BLUE shirt

As we would expect, the Hungarian example corresponding to (54) shows exactly the same restrictions. Under normal circumstances, the replacive conjunct is associated with the phrase occupying the preverbal focus position in this language. In (55) FocP is discontinuous due to obligatory extraposition.

(55) Nem azt a férfit vizsgálták meg, aki a
not that the man.ACC investigated-they PERF who the
PIROSinges volt foglyot hívta meg,
red-shirt-with ex convict.ACC invited-he PERF

1. *hanem a KÈKinget
but the blue-shirt.ACC
2. *hanem a KÈKingeset
but the blue-shirt-with.ACC
3. *hanem a KÈKinges volt foglyot
but the blue-shirt-with ex convict.ACC
4. hanem azt a férfit aki a KÈKinges volt foglyot
but that the man who the blue-shirt-with ex convict.ACC
hívta meg
invited-he PERF

In this type of island configuration, the same effect can be obtained with the silent affirmative counterpart of contrastive negation, which I offered as a possible candidate for the role of the empty particle binding "bare focus" in 2.2.2 above.

(56) He interrogated the man who invited the ex-convict with the RED shirt,

1. *not the BLUE shirt
2. *not with the BLUE shirt
3. *not the ex-convict with the BLUE shirt
4. not the man who invited the ex-convict with the BLUE shirt

2. Adjunct Islands:

(57) John didn't fall asleep before MARY came home

1. *but JANE
2. but before JANE came home

3. Specificity Condition:

(58) a. Who did you see pictures of t?

- b. *Who did you see those pictures of t?

The same condition constrains AWF:

(59) They didn't look at these pictures of BOYS

- a. *but of GIRLS
- b. but at those pictures of GIRLS

4. Factive Islands:

While the sentential complements of "propositional verbs" (Hegarty 1992), such as believe or think, are transparent to AWF, the complements of factive verbs, such as know or regret, and so-called "response stance verbs" (Cattell 1978, Hegarty 1992), such as admit or doubt, show island effects. Both types of verbs

are associated with a presupposition: The complement of a factive verb is presupposed to be true, whereas the complement of a response stance verb must be "under debate." A stance verb does not express a propositional attitude, but a reaction to a discourse-linked proposition (cf. Hegarty 1992 for discussion).

(60) He doesn't believe that they invited his WIFE, but

- a. his DAUGHTER
- b. that they telephoned his daughter

(61) He doesn't know [that they invited [his WIFE]], but

- a. *JANE
- b. that he loves JANE

Similar Hungarian sentences show essentially the same effects:

(62) Nem hiszi, [hogy [a FELESÉGÉT]] hívták meg, hanem
not believe-he that the wife-his.ACC invited PERF but

- a. [?]a [LÁNYÁT]
the daughter-his.ACC
- b. hogy [a LÁNYÁT]
that the daughter-his.ACC
- c. [hogy a LÁNYÁNAK telefonáltak]
that the daughter-his.DAT telephoned-they

- (63) Nem tudja, [hogy meghívták [a FELESÉGÉT]], hanem
 not know-he that invited-they the wife-his but
- a. *[JANET]
 Jane.ACC
- b. [?][hogy JANET szereti]
 that Jane.ACC loves-he
- c. azt, [hogy JANET szereti]
 DEM.ACC that Jane.ACC loves-he

5. WH-Islands

- (64) John doesn't wonder who saw MARY but
- a. ^{??}JANE
- b. who saw JANE

By way of summary, we may say that contrary to what has frequently been claimed, there is considerable evidence for the assumption that AWF interacts with syntactic islands. When a focus is contained in an island, the island containing the focus turns into a focus, which then associates with the polarity element. When the focus is contained in more than one island, the uppermost island eventually "inherits" the role of focus and undergoes AWF. This shows that the island insensitivity of AWF is only apparent: LF movement can always resort to Pied Piping, circumventing a Subjacency violation by moving the topmost island. This is what the term Focus Phrase suggests: A focus caught in an island "pied pipes" the island containing it into a FocP, and so on, until the focus feature reaches a category which can move to SpecPolP at LF without crossing any barriers:

(65) ...FocP[... FocP[...XP...]



That the focus feature must somehow percolate up the tree is clearly indicated by the distribution of FocP, which occurs in every position in which a focus can occur: 1.) FocP is the adjunction site for focus adjacent particles like only or even and occupies the syntactic focus position in focus-moving languages; 2.) FocP occurs in the focus position of a cleft sentence (cf. Jackendoff 1972):

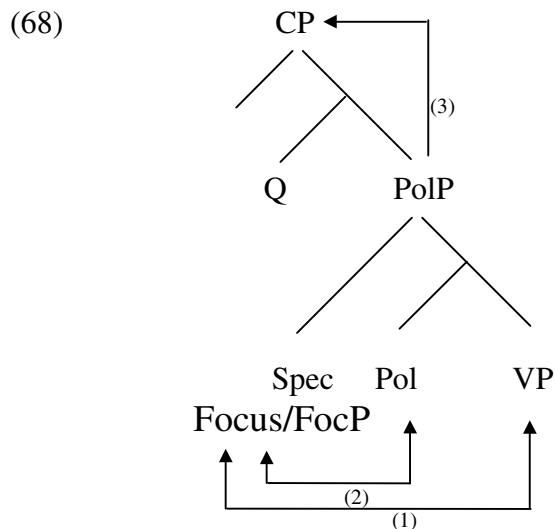
(66) [It was the man who was wearing a RED hat] that Sam saw

3.) FocP can be integrated into a wider focus domain when it occurs in a configuration where focus is "projected":

(67) Q: And what did Jane do?

A: She [_F invited [_{FocP} the woman who chaired THE ZONING BOARD]]

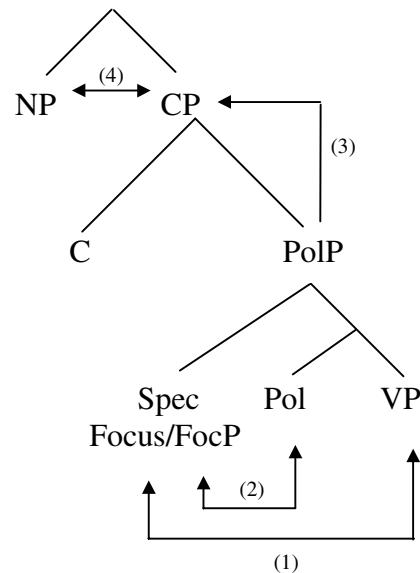
At any rate, the overall distribution of FocPs suggests that they are [+F] and the question arises, as to what kind of mechanism they inherit this feature through. Although a FocP may participate in "focus projection," it cannot inherit its focus feature by means of projection, because the focus inside the island is licensed as a narrow focus, not by successive integration. Faced with this apparent contradiction we must assume that narrow focus in islands is licensed in the same way as narrow focus in a sentential domain, namely, by island-internal covert movement to SpecPolP. By recursive application of this process and percolation from Spec to head (cf. Ortiz de Urbina 1989) we can then derive the focus effects of such constructions in the same fashion as in main clauses. The process involved in WH-Islands is schematically represented in (68):



Assuming that a WH-clause, a CP, has the necessary internal structure to accommodate PolP, we may conclude that the process deriving CP into FocP has the following components shown in (68): 1. covert movement of a focussed constituent (a FocP, in the recursive case); 2. Spec-head agreement; 3. percolation. Adjunct Islands based on free relatives (where/when-clauses), instantiate the same patterns, except that C in this case is the λ -operator. Factive Islands (including the complements of factive or stance verbs and of prepositions such as after in adverbial adjunct clauses) may be analyzed as definite descriptions of events in the spirit of the proposals by Hegarty (1992) or Melvold (1991). C in this case is the iota-operator binding an event role. This establishes a close parallel between factive islands and the Specificity Condition: Referential/specific DPs are assumed to have an internal structure essentially parallel to CP. Furthermore, Drubig (1997) and Giusti (1996) present evidence that in a split-DP analysis DPs can be shown to have internal FPs (equivalent to PolPs) in addition to other functional projections parallel to CP structure. As a matter of fact, there is evidence not only for DP-internal information structure, but also for overt DP-internal focus movement in a number of languages (cf. Giusti 1996).

Finally, complex NPs involve clausal adjuncts, i.e. relatives, in an attributive configuration. I assume that this means that Predication is involved in such cases as a fourth component relation, linking head NP and relative clause:

(69)



In 4.4 I will show that Predication also serves as a link in a chain transmitting [+WH]. Hence (4) in (69) seems to be independently necessary. Although the details remain to be worked out, a syntactic account for FocP effects appears to be possible.

The important conclusion that follows from the observation of island effects occurring with focus in situ is that the difference between focus in situ and focus ex situ is not a fundamental one. Both instances of narrow focus constructions are licensed under essentially similar conditions applying at different levels of representation and we may hope to derive ex situ and in situ constructions from the same basic configurations in a parameterized framework.

2.2.4 Narrow Focus and Exhaustivity

2.2.4.1 Focus in the Vicinity of the Verb

The analysis of Pol₂P as the landing site of narrow focus with a contrastive reading may turn out to be appropriate for all those languages in which narrow foci move to the sentential periphery either at PF or at LF, under standard locality restrictions, but it cannot be extended to languages with a preverbal focus position, such as Hungarian or Basque. In Hungarian focus movement is obligatory, whereas focus in situ has a presentational reading, as shown in Kiss (1998b). Some other languages, such as Western Bade (Chadic) or Aghem and Kimatuumbi (both Bantu), have the focussed constituent in a position immediately following the finite verb. In her analysis of focus constructions in Chadic, Tuller (1992) takes up Horvath's (1986) suggestion that the category relevant for focus is INFL and proposes that the order V-Focus-O found in Western Bade arises when V raises to INFL. In three other Chadic languages, Kanakuru, Ngizim and Tangale, the order is V-O-Focus. In these languages, according to Tuller, V movement is followed by a movement of the direct object, which is right-adjoined and incorporated into V, a process presumably motivated by Case requirements. A movement analysis is further supported by the fact that Ngizim and Tangale also allow a process of optional "direct object splitting," resulting in the order V-N-Focus-Relative Clause, a type of extraposition from NP. Interestingly, Kanakuru, Ngizim and Tangale have a second focus position in the sentential periphery, which is initial in Kanakuru and final in Ngizim and Tangale. In order to make the evidence compatible with her assumption that F arises in INFL, Tuller has to stipulate that INFL rises to COMP at LF, thereby establishing a link between COMP and INFL which enables SpecCP to host

focussed constituents at PF. This position is effectively criticized by Green (1997: 47), who points out that the approach runs into a serious difficulty: SpecCP acts as a focus position at PF, while the condition making it eligible for this role is not met until LF. This strongly suggests that Kanakuru, Ngizim and Tangale have two syntactically distinct focus positions, one in INFL and another one in COMP. Under the present approach, it is possible in principle that there are languages that exploit both the INFL-related and the COMP-related focus positions, which I analyzed as Pol₁P and Pol₂P in 2.2.2. In this section, I will argue that what little is known about Kanakuru focus constructions seems to support this conclusion. Furthermore, we may assume that the focus position of preverbal focus languages like Hungarian is SpecPol₁P.

2.2.4.2 Preverbal Focus in Hungarian

After a comparison of preverbal focus in Hungarian with focus fronting constructions in Romanian, Italian, Modern Greek, Finnish and Arabic, Kiss (1998b: 268f.) points out that focus in Hungarian is not only licensed in a different position, but also receives an interpretation different from that found in languages where focus occurs in the sentential periphery. Kiss quotes the following examples from an analysis of Romanian in Göbbel (1995):

- (70) a. Am auzit că i-ai invitat pe Ion și pe Ioana
 have.1s heard that CL.have.2s invited Ion and Ioana
 'I heard that you invited Ion and Ioana'
- b. [Numai pe ION] I-am [v_P invitat t]
 only Ion CL.have.1s invited
 'It is only Ion I invited'

- (71) a. Am auzit că ai mulți musafiri
 have.1s heard that have.2s many guests
 'I heard that you have many guests'
- b. *[Numai pe ION] l-am [VP invitat t]
 'It is only Ion I invited'
- c. L-am [VP invitat numai pe ION]
 'I invited only Ion'

In Göbbel's framework, which is similar to that suggested in 2.2.2, focus moves to the equivalent of SpecPol₂P, but it may optionally also occur *in situ*. The contrastive interpretation of a fronted focus comes out very clearly in Göbbel's examples: Focus in SpecPol₂P in (70) b. has a contrastive reading and presupposes a closed list of contextually salient alternatives, on which the exclusive focus particle operates. Since this reading also occurs *in situ*, (71) c. is also compatible with (70) a. (71) a., however, if taken in isolation, does not seem to specify the type of context in which a sentence such as (70) b. would be felicitous. Kiss concludes that narrow focus in a focus fronting language like Romanian is [+contrastive], whereas preverbal focus in Hungarian is [+exhaustive]. According to Kiss, focus is [+exhaustive] if and only if the focus operator "expresses exhaustive identification; it identifies all and only the members of a relevant set determined by the context or situation in which the predicate holds" (Kiss 1995d: 188).

While Kiss does not further specify the intended distinction between contrast and exhaustivity, I will assume the following: As I pointed out in 2.2.2, focus in SpecPol₂P must be related to a closed list of contextually salient competing alternatives, all of which are "under debate." This I take to mean that it has been

assumed, suggested or claimed in the antecedent context that (at least) one alternative value from this set gives a true sentence when substituted for the variable in the salient open proposition. This would account for the "reclamatory" interpretation that contrastive focus constructions seem to have. The semantic effect of the focussed constituent, namely, the exclusion of alternatives, is contributed by the specific polarity head it is associated with. The semantics of the polarity element is the same, whether it occurs in Pol₁ or in Pol₂.

As (71) shows, the contextual background of an exhaustive-listing focus is somewhat less specific: The selectional properties of the governing verb, possibly enriched by scenario- or frame-supported information (typical invitees of a family reunion, a goodbye party, etc.), narrow down the range of choices, but there is no contextually specified list of alternatives. This is why (71) b. is too strong in the context provided by (71) a.. The exhaustive-listing interpretation of this type of focus (in situ in Romanian, preverbal in Hungarian) is exclusively determined by the polarity element it associates with. In the case of "bare focus," this is "silent only" according to Lasnik and Stowell (1991), the affirmative opposite of replacive negation under the approach presented above. A [+exhaustive] focus in Kiss's sense is a narrow information focus associated with a polarity head, whereas a [+contrastive] focus imposes an additional salience condition on the set of alternatives.

In Romanian and apparently also in other languages in which focus occurs in the left periphery, the focus operator seems to require that the set of alternatives is a closed list known to the participants in the interchange. According to Kiss, the Hungarian focus operator may also have this interpretation, but it does not require it. In the following, I will assume that this difference in interpretation correlates

with the different syntactic positions in which narrow focus is licensed in particular languages.

The syntactic identity of the category hosting focus in Hungarian is highly controversial. Horvath (1986) analyzes it as a left sister of V under V', Kiss (1987) as the specifier of S', Kiss (1995c) as SpecVP and Horvath (1995) as SpecIP. Brody (1990) and Molnár (1991) were the first to propose a special functional projection for focus (FP), an assumption which was adopted by Kiss (1995c) and Szabolsci (1997). Although this analysis has been taken over by many linguists working on languages other than Hungarian, there is no general agreement on the exact location of FP in the functional hierarchy. Kenesei (1996) suggests focus may be hosted by TenseP (cf. also Brody 1995), but it remains unclear how focus can acquire its characteristic exhaustive reading in such a position.¹⁹ A rather different analysis of Hungarian focus is defended by Puskas (1997), who adopts the split-COMP analysis of Rizzi (1997) and proposes the following structure (the star indicates possible recursion):

(72) CP-TopP*-FP-IP

As Rizzi (1997) notes, such a proposal would entail that we somehow make sure that in Hungarian focus in this particular position does not receive the contrastive reading that it typically has in languages with a COMP-related focus position. In view of the fact that focus is nonuniform both in syntactic form and interpretation, as Kiss (1995d, 1998b) has demonstrated, a uniform approach in terms of a single FP occupying a fixed position in a crosslinguistically invariant hierarchy does not appear to be feasible. In fact, Kenesei (1996) has convincingly argued that a uniform base approach is unrealistic in view of the observed crosslinguistic variation in focus constructions. Furthermore, an approach that tries to assimilate

preverbal focus in Hungarian to sentence-peripheral focus constructions is forced to analyze all nominal and adverbial categories preceding a focus or a WH-phrase as multiple topics, which also may not be justified. Under the approach presented here, the exhaustive interpretation of preverbal narrow focus in Hungarian forces us to assume that it is licensed in SpecPol₁P.²⁰

2.2.4.3 Two Focus Positions in Kanakuru

In an effort to defend a uniform FP approach to focus constructions in Chadic languages Green (1997) runs into problems similar to those encountered in the analysis of Hungarian. Green assumes that FP must be located between CP and IP, an assumption for which she finds support in Hausa. Green's discussion very clearly brings out the difficulties that a uniform FP approach runs into when applied to a language like Kanakuru, where focus may appear either in the left periphery of the sentence or in the vicinity of the verb. A brief look at the data in Kanakuru suffices to see why the stipulation of two distinct focus positions in COMP and INFL is unavoidable in this case. The two positions where focus can occur in Kanakuru are shown in (73) and (74)-(75).²¹

(73) Postverbal focus position:

- a. are lowoi jewei la lushu
 buried boy-the slave-the in the bush
 'THE SLAVE buried the boy in the bush'

VP-internal focus position:

- b. a wupə (-ro) landai gən shire
 he sold (it) cloth-the to her
 'He sold the cloth to HER'

(74) Neutral sentence:

- a. Basha à tupe yi
Basha PERF sent him
'Basha sent him'

Initial focus position:

- b. Basha shée tupa ya
Basha 2nd PERF sent him
'BASHA sent him'

(75) Neutral sentence:

- a. wù bele Ngoje
they chose Ngoje
'They chose Ngoje'

Initial focus position:

- b. Ngoje wún bela (ya)
Ngoje they chose (him)
'They chose NGOJE'

I assume that the presentational focus structure is represented by the sentence type Newman (1974) refers to as "neutral." In Kanakuru, NP is the only category that can appear in a focus position, as Newman notes. Interestingly, both focus positions may also host WH-phrases. In order to extend a uniform FP analysis to the postverbal focus construction, one would have to analyze all arguments preceding the postverbal focus as topics, similar to what Puskas (1997) proposes for Hungarian. However, as Green herself points out, there is no firm evidence for such an analysis, especially since Kanakuru is a topic-prominent language which clearly marks topics in sentences where they occur (Newman 1974: 67):

(76) Initial topic:

Balau, wù aŋge yi

Balau they paid him

'Balau (topic), they paid him'

(77) Initial focus:

Balau wù aŋga ya

Balau they paid him

'BALAU, they paid (and not someone else)'

Although Newman marks both types of focus with the same focus feature [+e(mphasis)], he notes that only the preposed type is contrastive. On the other hand, sentences like (78) show that the VP-internal focus position, similarly to the initial one, can be occupied by a pronoun, which clearly excludes a presentational interpretation of this focus. This leaves us with the possibility that the VP-internal focus position has an exhaustive reading. All the examples quoted by Newman are at least compatible with such an interpretation.

(78) a. Neutral sentence:

mə gopo-mu Shani

we passed-by Shani

'We passed by Shani'

b. V-O-Focus

gopo-mu Shani mənir

passed-by Shani we

'WE passed by Shani'

There are even stronger reasons to conclude that a uniform FP analysis cannot be appropriate. Apart from certain changes in pronominal form, initial focus constructions in Kanakuru are accompanied by a shift in tense forms, which is an extremely common phenomenon in African (including Afroasiatic) languages (cf. Hyman and Watters 1984; Givón 1990: 717ff.). If an NP in a sentence is focussed and occurs in the left-peripheral position, the tense of the out-of-focus clause regularly shifts from the perfect to a so-called "relative tense form," the second perfect, as shown in (74) a. and b. But according to Newman, this shift occurs only when focus occurs in initial position. It is absent from sentences with the order V-O-Focus.

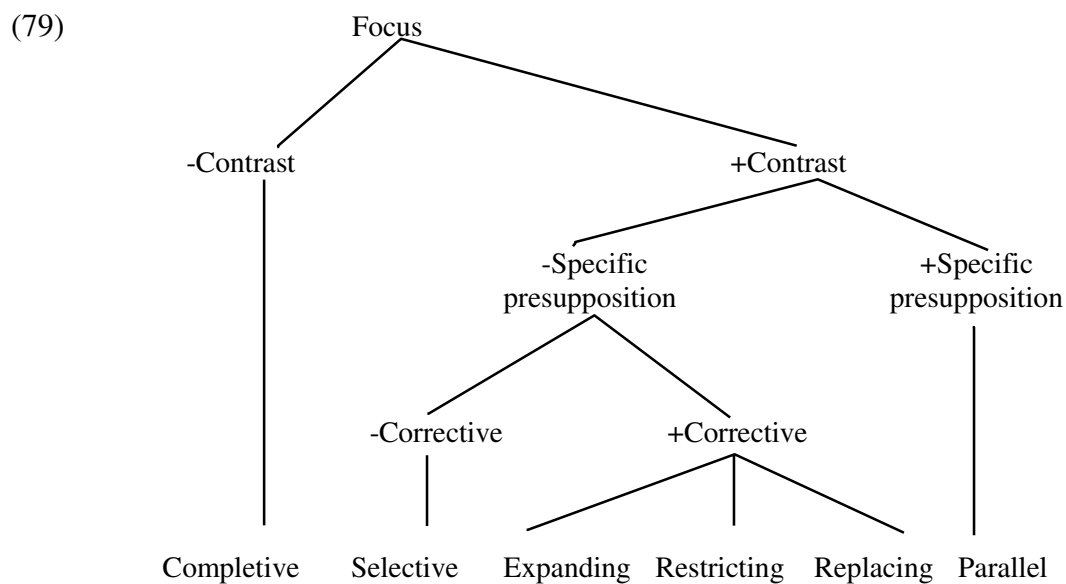
Another phenomenon that speaks against a uniform approach is shown in (76) and (77): both topic and focus in initial position are linked to a resumptive pronoun, which is optional in certain cases and empty when the antecedent is inanimate. Again this is an exclusive feature of the initial focus construction. As we will see in 4. below, there are African languages which have similar focus constructions with resumptive pronouns. While the exact semantic interpretation of the postverbal focus position in Kanakuru remains unclear, there can be no doubt that this language has two syntactically distinct focus positions. In contrast to postverbal focus, left-peripheral focus occurs with a "relative tense form" and binds a resumptive pronoun. This evidence does not support an analysis that links initial focus to INFL and speaks against a uniform FP analysis. The available evidence clearly supports the conclusion that a theory of focus is needed which provides for distinct focus positions in INFL and COMP. Pol_1P and Pol_2P are possible candidates for this role. Furthermore, the proposed relational account also seems to be more appropriate for an analysis of preverbal focus constructions in

Hungarian and other languages than the TenseP approach proposed by Kenesei and Brody.

3. Completive Focus Constructions

3.1. Focus and Connectedness

The claim that the contrastive/exhaustive/presentational trichotomy exhausts the range of possible focus interpretations is at variance with a more extended taxonomy proposed by Dik et al. (1981), which has played a certain role in typological studies on focus. The authors propose the following taxonomy:



(80)-(85) exemplify the types of focus in (79):

(80) Completive Focus:

A: What did John buy?

Presupposition: John bought x; x = _____

B: John bought COFFEE

(81) Selective Focus:

A: Did John buy coffee or rice?

Presupposition: John bought x; x = coffee or x = rice

B: He bought COFFEE, not RICE

(82) Expanding Focus:

Presupposition of A: John bought x; x = coffee

B: a. John not only bought COFFEE, he also bought RICE

b. Yes, but he also bought RICE

(83) Restricting Focus:

Presupposition of A: John bought x; x = coffee and rice

B: a. No, he didn't buy RICE, he only bought COFFEE

b. No, he only bought COFFEE

(84) Replacing Focus:

A: John went to London

B: a. No, he didn't go to LONDON (he went to NEW YORK)

b. No, he went to NEW YORK (he didn't go to LONDON)

(85) Parallel Focus:

A: I know that John and Peter bought a Volkswagen and a Toyota. But who bought what?

B: JOHN bought a TOYOTA, and PETER a VOLKSWAGEN

As we can see in (82)-(84), the difference in interpretation between the three types of focus marked "+ Corrective" in (79) is due to the different particles they are associated with: (82) and (83) correspond to the focus particles also/too and only, respectively, and (84) to replace polarity. This is what we would expect under a relational approach, in which differences in interpretation are assumed to originate

in the lexical content of the particles associating with focus. The remaining three types of focus are related to Q/A contexts. I will set aside Selective Focus, which is related to alternative questions, a topic I have nothing to say about in this paper.²² This leaves us with two more types of focus in Q/A contexts: Completive Focus in answers to single WH-questions, and Parallel Focus in pair -list answers to multiple WH-questions. Completive Focus is a term I will adopt, but I will use it as a cover term for focus in Q/A pairs and cleft constructions. What is missing in this taxonomy is the distinction between presentational and contrastive/exhaustive focus.

In the taxonomy of Dik et al. Completive Focus is not associated with any specific presupposition, hence it is close to the category of presentational focus discussed above. That this cannot be appropriate I have already pointed out in 1.: WH-questions may induce both presentational and contrastive answers. In fact, some languages have syntactically distinct WH-questions for contrastive and presentational answers. In Akan, a neutral WH-question corresponds to a neutral answer, as in (86), and a focussed question to a focussed sentential answer (A₁) or a focussed constituent answer (A₂) as in (87), as we have already seen in 1.:

(86) Q: Ama rehwehwe HENA?

Ama is-looking-for who?

'Who is Ama looking for?'

A: (Ama rehwehwe) Kofi

(87) Q: HENA na Ama rehwehwε?
 who FOC Ama is-looking-for
 'Who is it that Ama is looking for?'

A₁: KOFI na *(Ama rehwehwε)
 Kofi FOC Ama is-looking-for

A₂: KOFI a (*Ama rehwehwε)
 '(It is) KOFI (that Ama is looking for)'

Chinese, which has WH in situ, is another language showing this effect. According to Hoh and Chiang (1990) WH-phrases in neutral questions are in situ (88), but in a focussed question the WH-phrase moves to an initial position where it is preceded by the focus particle shi (89). This latter type of question requires an answer in which the focussed term is in initial position and also preceded by shi (cf. Hoh and Chiang 1990: 48):

(88) Q: ni kanjian shenme dongxi diao dao wuding le ?
 you see what thing fall onto roof ASP
 'What did you see fall on the roof?'

(89) Q: shi shenme dongxi_i ni kanjian t_i diao dao wuding le ?
 FOC what thing you see fall onto roof ASP
 'What was it that you saw fall on the roof?'

A: shi shuzhi_i wo kanjian t_i diao dao wuding le.
 FOC branch I see fall onto roof ASP
 'I saw A BRANCH fall on the roof'

A somewhat similar distinction can be observed in Hungarian, as Kiss (1995d: 179) has pointed out. In Hungarian the WH-phrase obligatorily appears in focus position, but a question may be answered by a sentence with the focussed term

either in situ or in focus position, as A₁ and A₂ in (90) show. If the focussed term is in the focus position, it has an exhaustive reading, if it is in situ; the interpretation is presentational.

(90) Q: Hova tettél könyveket?

where put-you books

'Where did you put books?'

A₁: Tettem könyveket A POLCRA

put-I books the shelf-on

'I put books ON THE SHELF (among other places)'

A₂: A POLCRA tettem könyveket

'It was the shelf that I put books on'

The fact that many languages have different WH-questions for neutral and focussed questions shows that the classification of focus constructions in (79) cannot be adequate. As we have already seen, the question itself has a focus structure, which may be either presentational or contrastive/exhaustive, and the information structure of the answer corresponds to that of the question. In languages in which focus has a particular morphosyntactic representation, the form of the WH-question often unambiguously indicates the information structural status of the syntactic position targeted by the WH-operator.

This shows that we need a category of "completive focus constructions" which would have to be cross-classified in the feature framework used in the taxonomy proposed by Dik et al. (1981): Typical examples of completive focus constructions would be Q/A₁ or Q/A₂ in (90).

(91)

	- contrast	+ contrast
- completive	presentational focus (spontaneous)	contrastive focus (spontaneous)
+ completive	presentational focus (induced by a question)	contrastive focus (induced by a question)

Hungarian questions show still another aspect of completive constructions. As we have seen, in this language focus is licensed at PF in a preverbal focus position, which I tentatively analyzed as SpecPol₁P in 2.2.4.2. WH-phrases presumably occupy the same position. This may give rise to the impression that WH-phrases are equivalent to narrow foci, but as Kiss's example (90) shows, the WH-phrase in Hungarian, as in other languages, simply licenses a gap which has to be filled by an answer. The constituent filling the gap may be either a presentational or an exhaustive-listing focus, depending on the specific information structure associated with the question. A Q/A pair represents a particular type of completive focus construction which consists of an open proposition with one or more variables licensed by a WH-operator, and a syntactically disconnected structure, the answer, which supplies the constituent(s) filling the gap(s) in the open proposition. In order to derive a proposition with a context-changing effect, question and answer (filler and gap) must be connected.

The term "completive focus construction," under the interpretation it is given here, applies to all constructions with a discontinuous information structure. The defining feature of a completive focus construction is syntactic disconnectedness. Q/A pairs are only the most prominent example of this type of focus construction; another important variety of completive focus construction is represented by cleft

constructions, which Carlson (1983) insightfully characterizes as a type of self-answered question. In Q/A pairs focus and open proposition occur in separate speech acts, while in clefts they are linked by the predication relation (Drubig 1998).

We must note, however, that WH-questions and cleft constructions show an important difference in interpretation. While linguists agree that WH-questions can have an exhaustive (or contrastive) as well as a neutral (i.e., presentational) reading (cf. Comorovski 1996 for discussion and references), cleft foci are typically exhaustive.²³ An analysis of clefts as a specific type of completive focus construction suggests a possible explanation for this asymmetry: As we saw in 1., a WH-question forces an exhaustive/contrastive reading on its answer only if the WH-phrase is marked as a narrow focus and the open proposition as salient mutual knowledge. This latter condition turns out to be a necessary one in the case of cleft constructions, if we assume that clefts are self-answered questions. In this case, the open proposition must be presupposed, otherwise the cleft construction cannot be felicitously asserted.

Furthermore, both in Q/A pairs and in cleft constructions the filler category is raised to a level of prominence above that of the open proposition. This effect is particularly noticeable in languages with prosodic focus marking, which has led linguists to the assumption that completive focus constructions and, in particular cleft constructions, are linguistic devices for the representation of focus-background structures. I claim that this is true in one respect, but wrong in another. There can be no doubt that all completive focus constructions single out and - in a particular sense - "focus" values that are assigned to variables in open propositions, but I think that this effect is epiphenomenal with respect to

information structure. In prosodically marking languages the isolated filler category in clefts is prosodically prominent, at least in the standard case. But this layer of prominence is a kind of secondary focus structure, superimposed on the primary one, which is echoed in the cleft clause as well as in a sentential answer, as the following examples show:²⁴

(92) Q: Who only EATS rice?

A: THE CONSUMER only eats rice

(93) It is THE CONSUMER that only eats rice

Although syntactically discontinuous, term answer and WH-question - as well as cleft focus and cleft clause - are connected. Beneath the secondary focus structure, which temporarily highlights the value substituting for the variable in the open proposition, the primary focus structure bridges the gap between syntactically discontinuous constituents. In a language in which the WH-phrase of a single WH-question is licensed in the same position as narrow focus, such as in Hungarian, the structure of a WH-question with a presentational answer is the same as that of a WH-question with an exhaustive or contrastive answer. In languages that have distinct question types for contrastive and presentational answers, such as Akan, however, it is immediately clear that the interpretation of the answer is determined by primary information structure. This interpretation of the focus properties of WH-questions and cleft constructions adds information structure as one more item to the long list of connectedness phenomena that have been observed in such constructions. Typical examples of connectedness effects found in WH-cleft sentences are shown in (94)-(95).

(94) What John found in the drawer was a picture of himself.

(95) *What he_i misses is John's_i wife.

(94) and (95) illustrate the phenomenon of binding connectivity, the most common type of connectedness effect. In (94) an anaphor occurs in the focus constituent of a cleft construction, which is coindexed with - but not c-commanded by - the antecedent contained in the cleft clause. In (95), the focus constituent is a referring expression causing a violation of principle C, although the pronoun with which it is coindexed is contained in the cleft clause. The configuration giving rise to such an effect appears to have the following crucial property: The constituent in the post-copular focus position behaves as if it occupied the syntactic position bound by the WH-operator.²⁵

The attempts to account for the connectedness phenomenon and other problematic aspects of clefts virtually exhaust the range of available possibilities. In den Dikken, Meinunger and Wilder (1998), the focus constituent is derived by means of ellipsis from a full clause, which reduces binding connectivity and related effects to familiar syntactic configurations. Barss (1986) (similarly to Higgins 1979) argues for a surface-oriented analysis which relies on an extension of binding principles, while Sternefeld (1998) accounts for bound variable pronouns by compositional semantic interpretation of surface structure clefts. Heycock and Kroch (1999), and similarly Bošković (1997), propose Reconstruction of the focus constituent at a post-LF level. The only two studies more directly concerned with the focussing properties of cleft constructions, Kiss (1998b) and Meinunger (1998a), independently suggest similar syntactic approaches establishing a derivational relationship between clefts and focus-fronting constructions.

I will not attempt to evaluate the various proposals on cleft constructions in this paper. For reasons that will become clear as the discussion proceeds, I will favor a Reconstruction approach similar to that proposed by Heycock and Kroch (1999)

(cf. also Bošković 1997). In contrast to these authors, however, I assume that a specificational WH-cleft such as (94) is the syntactic inversion of a CP small clause supported by a copula, i.e., a predicational structure whose subject is the focus constituent, a type of analysis against which Heycock and Kroch (1999) argue at length. A defense of the predicational approach is presented in Drubig (1998).

The most important advantage of a Reconstruction analysis of cleft constructions is that it can be extended to Q/A pairs, which also give rise to connectedness effects (Higgins 1979):

(96) Q: What did John find in the drawer?

A: A picture of himself

The fact that term answers to WH-questions and the focus constituents of cleft constructions display similar connectedness properties to clefts is indicative of a deeper relationship. A successful account of the relatedness between Q/A pairs and cleft constructions would contribute substantially to our understanding of focus phenomena (cf. Drubig 1998).²⁶

3.2. WH-Questions and Lexical Association

In this section I would like to return to the claim that WH-questions are focus constructions of a particular type, in order to show how we can account for the fact that WH-phrases may stand for presentational, exhaustive or contrastive foci. I will take as my point of departure the proposal by Culicover (1991), who analyzes English main clause WH-questions as PolPs (equivalent to my Pol₂Ps) and stipulates that they are licensed by an abstract polarity element WH. Embedded questions, according to Culicover, are CPs headed by Q, the

interrogative complementizer. I will adopt the clause typing approach of Cheng (1991), as well as the split-COMP hypothesis of Rizzi (1997), and try to show that Culicover's idea that WH belongs to the natural class of polarity elements gains an unexpected significance under the account developed here.

As a polarity element, WH is an exception, because in contrast to the other elements in this class it is not associated with a constituent headed by lexical material. That lexical polarity elements must associate with lexical material can be derived from an observation by Tancredi (1990). In the framework of an investigation into the scope properties of focus particles, he observes sentences like the following:

- (97) a. i. JOHN only seems t to be happy ii. It only seems that JOHN is happy
 b. i. JOHN I only saw t ii. I only saw JOHN
 c. i. Who do you only like t? ii. You only like WHO?

Tancredi points out that all (i) sentences in (97) a.-c. are well-formed on one reading, but in none of them can only be associated with a raised category via its trace. Apparently c-command over the trace of a moved category is not sufficient to establish an association between the focus particle and its focus. In order to account for this, Tancredi formulates (98), which is claimed to hold at PF and LF:

- (98) Principle of Lexical Association (PLA) (Tancredi 1990: 33)

An operator like only must be associated with a lexical constituent in its c-command domain.

In 2. above I tried to show that the set of polarity elements undergoes AWF. Assuming that AWF is equivalent to "lexical association" in Tancredi's sense, we may conclude that standard polarity elements must meet the PLA. The abstract polarity head WH, however, may be analyzed as a particle which contrasts with

all other polarity heads in that it temporarily associates with variables in open sentences. The required association with lexical material filling the gap is postponed until the post LF level, at which the context-changing proposition resulting from a Q/A pair is constituted. Under this assumption, a focussed WH-phrase has to move to two different positions to check features: Like a focussed lexical constituent in a noncompletive focus construction, it moves to SpecPol₁P or SpecPol₂P to check its focus feature, depending on whether it has an exhaustive or a contrastive interpretation. In addition, it also has to move to SpecForceP for the purpose of clause-typing. This latter configuration is the only one activated in the case of WH-phrases with a presentational reading. Furthermore, we may assume that WH-phrases may surface in different configurations (VP peripheral, sentence peripheral) in different languages. Kanakuru, e.g., has WH-phrases at PF in both focus positions, presumably with different interpretive effects.

3.3 Conclusion

In this section I have argued for a systematic dissociation of WH- and focus structure in information questions. I have tried to show that WH-questions must be analyzed as independent focussing devices (cf. Brennan 1996) that set up a secondary focus-background division (completive focus structure), which is orthogonal to primary information structure. WH-questions and clefts are two major types of completive focus constructions. In completive focus constructions, focus and background are discontinuous but display connectedness effects, which clearly indicate that discontinuous focus-background constructions must undergo Reconstruction at a post-LF level of representation: This level we may tentatively identify with the level of Information Structure (IS) postulated by Vallduví

(1992), Rosengren (1993) and the Prague school theory of functional sentence perspective.

4. Cleft-Based Focus Constructions

4.1 Resumptive Focus Constructions: A Typological Problem

A serious problem for an operator analysis of focus comes to light when we inspect a wider range of typological variation in focus-fronting constructions. While many languages have focus-fronting constructions displaying the characteristic properties of A-bar-movement, such as island sensitivity and WCO effects, some languages discussed in the literature do not conform to this pattern. In such languages a narrow focus with a contrastive reading regularly occurs in a left-peripheral position. The position in the sentence which the focussed category binds, however, is not occupied by a gap, but by a resumptive pronoun, which may be phonetically empty under certain conditions. In some languages this type of focus construction may violate locality conditions and lack WCO effects. WH-questions often have the same properties in such languages. The following Akan sentences show the phenomenon in question.

- (99) Adaka_i bɛn na wo nim [DP onipa [CP a [IP \mathcal{D} rehwehwe
 box which FOC you know person REL (s)he is-looking-for
 e_i]] no]
 (it) the
 'Which box_i do you know the person who is looking for (it_i)?'

(100) Adaka_i no na wo nim [DP onipa [CP a [IP ∅ rehwehwe e_i]]
 box this FOC you know person REL (s)he is-looking-for (it)
 no]
 the

'This box_i you know the person who is looking for (it_i)'

(99) is a focussed question, which requires a focussed answer in Akan. (100) is a possible answer to (99). Both the WH-phrase and the focus occupy the sentence-initial focus position, and both are accompanied by the obligatory focus particle na, which has been described as an "exhaustive focus marker ... [which] narrows down the referential range of the constituent to which it is attached and places it in an exclusive class by itself, thus bringing this constituent into sharp contrast with all other members of the paradigm to which it belongs" (Boadi 1974: 5). Both the WH-phrase in (99) and the focus in (100) bind an argument position which is embedded in a complex NP. As Saah (1988, 1992, 1994) and Goodluck, Saah and Stojanović (1995) have shown, the empty category in sentences like (99) and (100) must be analyzed as a resumptive pronoun without phonetic content. Pronouns with inanimate antecedents are always empty. When the antecedent is animate, the resumptive pronoun has phonetic content, as (101) (quoted from Schachter 1973) shows. This type of pronominal variation is very common in West African languages (Ameka 1992).

(101) ∅baa_i no na me huu no_i
 WOMAN the FOC I saw (her)

'It was the woman I saw (her)'

(101) shows that resumptive pronouns in Akan are not restricted to island configurations. In Akan this turns out to be true for all types of constructions

where such pronouns occur, in particular focus constructions, WH-questions and relative clauses. Besides arguments, adjuncts may also be focussed and placed in initial position, but there is no pronominal copy (Ameka 1992: 17; Boadi 1974: 6, 54).

Similar observations have been made in other African languages, e.g., in Bantu languages such as Tuki (Bilola 1995) or Duala (Epée 1976), but also in Cushitic languages like Somali (Saeed 1984; Svolacchia, Mereu and Puglielli 1995), to mention only a few. Tuki, in particular, has resumptive constructions which are similar to those found in Akan. Resumptive pronouns in Tuki are silent, but have an optional realization with phonetic form if the antecedent is [+human]. Another similarity to Akan is the absence of apparent WCO effects. Furthermore, adjuncts are not associated with resumptive pronouns and in contrast to arguments, the extraction of an adjunct strictly observes island conditions. Obviously, languages like Akan and Tuki use similar strategies to form long dependencies in WH-questions, focus constructions and relative clauses. Other languages show parallels between focus constructions and relative clauses, but lack the expected parallels between focus constructions and WH-questions. Creider (1989) notes that focus constructions and relative clauses in Maasai and other Nilotic languages may violate Subjacency, while WH-questions respect island constraints. This suggests that the parallels between focus and relatives are perhaps more significant in these languages than those between focus and WH-phrases.

The evidence of resumptive WH- and focus constructions in Akan, Tuki and other African languages has important consequences for the framework sketched in 2.: Obviously, the island-sensitive focus-operator constructions which figure prominently in discussions of morphosyntactic focus marking are not the only

type of syntactic narrow-focus marking found in natural languages. The crucial point is the occurrence of resumptive binding, which is unexpected both in focus constructions and in WH-questions. In order to prepare the ground for a discussion of this type of phenomenon, we have to briefly look at the various types of pronouns that can be found in A-bar dependencies.

4.2 Types of Resumptive Pronouns

The use of the term "resumptive pronoun" in the literature is not uniform. Sells (1984) has pointed out that we must distinguish between at least two different types of pronouns that come under this heading. One type, which Sells calls "intrusive," occurs in English. Intrusive pronouns are restricted to syntactic islands and occur in positions where traces would induce locality effects. Such pronouns may be said to have an "amnestying effect" (Kroch 1981) on violations resulting from illegitimate extractions. Since the amnesty is only partial, sentences with an intrusive pronoun are never judged fully acceptable:

(102) ?I would like to see the book_i that Bill couldn't remember whether he had read it_i ten years ago.

Chao and Sells (1983) have shown that intrusive pronouns do not occur with quantificational antecedents:

(103) *I would like to see every book_i that Bill couldn't remember whether he had read it_i ten years ago.

This observation leads Chao and Sells to the conclusion that intrusive pronouns are not bound variables but E-type pronouns (cf. Evans 1980). This implies that

intrusive pronouns are felicitous in relative clauses with referential heads, rather than in WH-questions.²⁷

In contrast to intrusive pronouns, constructions with resumptive pronouns are always fully acceptable. Typical examples of resumptive pronouns proper occur in Hebrew relative clauses (Demirdache 1991: 58):

- (104) Ze ha-baxur_i še yidaqti ?et ha-horim šel-o_i še ha-more
this the-guy that informed-I ACC the parents of-him that the-teacher
yaxšil ?oto_i
will flunk him
'This is the guy that I informed his parents that the teacher will flunk him'

Resumptive pronouns proper as defined in Sells (1984) and Chao and Sells (1983) have three properties: They are not restricted to islands, alternate freely with gaps in certain positions, and can have the interpretation of bound variables. In all three properties, resumptive pronouns contrast with intrusive pronouns.

A third type of pronoun, which is found in Hausa, is only superficially similar to resumptives. According to Tuller (1986), this type of pronoun occurs in relatives, questions and focus constructions, where it serves the purpose of preventing ECP violations. Such forms are better characterized as "traces with phonetic content". They are restricted to contexts where traces occur and are therefore excluded from islands. In (105), such a pronoun occupies the extraction site of the complement of a preposition, a position in which an empty category would induce a violation, as Tuller argues. (106) shows that this type of pronoun, unlike intrusive pronouns, does not have the power to "amnesty" island violations (Tuller 1986: 158 f.)

(105) Waa ka yi naganaa da *(shii)

who 2sm do talk with him

'Who did you talk with?'

(106) *Waa ka san naatar da ta yi naganaa da shii

who 2sm know woman REL 2sf do talk with him


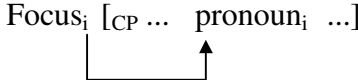
'Who did you know the woman that talked to him?'

In addition to this, Hausa also has intrusive pronouns similar to those found in English or Italian, which are used to obviate Subjacency effects, as Tuller (1986) demonstrates. Intrusive pronouns and spell-out traces occur in (nearly) complementary contexts. Akan pronouns occur in both types of contexts and are therefore distinct from either type of Hausa pronoun. There can be no doubt that Akan pronouns are resumptive pronouns proper, but the fact that they are not limited to relative clauses but also occur in focussed WH-questions and focus constructions is unusual and calls for an explanation. Similar remarks would apply to Tuki and some other languages.

4.3 Two Types of Binding in Narrow Focus Constructions

Since focus constructions and focussed WH-questions in Akan and other languages depend on resumptive pronouns, they cannot be derived by means of A-bar-movement. As a matter of fact, we have good reason to assume that the pronominal nature of the binding relation indicates an underlying resumptive relative clause construction. From this we may conclude that there is evidence for two distinct types of focus (and focussed WH-) constructions:

(107) Focus Constructions

- a. Type I
Focus_i ... t_i ...

- b. Type II
Focus_i [CP ... pronoun_i ...]


In Type I constructions, focus is an operator undergoing A-bar-movement (overt in Hungarian, covert in English) under standard conditions. It is subject to locality restrictions and induces a WCO effect. In Type II constructions, focus is base-generated in situ and binds a resumptive pronoun, which we expect to be embedded in a relative clause. This binding relationship cannot be based on overt movement, since there are no locality effects and the extraction site is occupied by a resumptive pronoun proper. It also does not seem to show WCO effects.

As the comparative literature on focus constructions from Schachter (1973) on has demonstrated, the evidence for a deeper relationship between relative clauses and what I call Type II constructions goes well beyond the distribution of resumptive pronouns and includes a large number of morphosyntactic parallels, ranging from the type of "relative tense" I mentioned in connection with (74) in 2.2.4.3 to auxiliaries, forms of negation, complementizers and many others. A particularly rich selection of such phenomena has been attested in African languages. Tuller (1986: 106) mentions other Chadic languages, such as Kanakuru and Tera, as well as Fula (West Atlantic), More (Gur), Zulu and Kikuyu (both Bantu). Non-African languages quoted by Clements (1985) include Jacalteco, Chippewa, Malagasy and Telugu.²⁸ Below I will argue that the structure underlying Type II focus constructions is a particular type of 'reduced' cleft construction, i.e., a small clause

construction whose predicate is a relative clause. On the basis of such an analysis we can attempt to account for the generalizations observed by Schachter and others.

4.4 Focus Constructions as Cleft Constructions

In this section I will investigate some of the properties of focus constructions mentioned above and try to show how we can account for them. The analysis focusses on the problem of resumptive pronouns and relies on a proposal by Demirdache (1991, 1997). Demirdache analyzes resumptives as relative pronouns in situ. This has the important consequence that languages can be assumed to show parametric variation with respect to relative constructions in ways that are completely parallel to the more familiar type of variation found in interrogatives. Furthermore, Demirdache shows that resumptive pronouns in Hebrew behave like A'-traces in a number of respects; in particular, they license parasitic gaps, cooccur with gaps in ATB-constructions and serve as the loci of Reconstruction. The most striking difference between resumptive pronouns and A'-traces, however, is the absence of WCO effects from resumptive relative clause constructions in Hebrew. WCO effects are also absent from focus constructions and focussed WH-questions in Akan, as I pointed out above. Lack of WCO is a standard argument against an LF movement analysis. In the theory of Lasnik and Stowell (1991) the absence of WCO from resumptive constructions could be derived from the nonquantificational status of the relative operator, whose trace after movement at LF is not a variable, but a null epithet. Null epithets do not trigger WCO, according to Lasnik and Stowell.

Demirdache, however, argues against such an account and demonstrates that the absence of WCO from resumptive constructions is only apparent. Under certain circumstances, it becomes visible. This confirms the assumption that resumptive pronouns are relative operators in situ which move at LF. Some of the evidence Demirdache presents can be found in Akan, which shows that also Akan Type II focus constructions (including focussed WH-questions) are based on relative clauses. In view of the observations on relative marking reported in Schachter (1973) and many other studies, this is exactly what we would expect.

Demirdache notes that Hebrew and a number of other languages not only have a resumptive relative construction lacking WCO (108), but also a parallel null operator construction of the more familiar type which shows the effect (109). (Cf. Demirdache 1991: 55):

(108) ha-ʔiš_i še ʔim-o_i ʔohevet ʔoto_i
 the-man that mother-his loves him
 'The man that his mother loves (him)'

(109) *ha-ʔiš_i še ʔim-o_i ʔohevet t_i
 the-man that mother-his loves
 'The man that his mother loves'

Since the only difference between (108) and (109) is the presence of an overt pronoun, this pronoun must be the factor responsible for the apparent lack of WCO in (108). Demirdache argues that in sentences like (108) a WCO effect cannot be observed because there are two pronouns and either one can function as the relative operator moving at LF. The apparent lack of WCO in resumptive constructions and the difference between (108) and (109) can then be explained as the combined effect of two factors: the ambiguous status of the two pronouns and

the different levels at which movement applies. Resumptives are relative pronouns *in situ* and move at LF, whereas null operators move at PF.

The ambiguity, however, can be resolved by neutralizing one of the two factors that give rise to it: We can either identify the resumptive pronoun as the relative operator by moving it at PF, or replace the first of the two pronouns in a configuration of the type shown in (108) with a nonpronominal anaphor. Hebrew has both options. When the resumptive pronoun is topicalized within the relative clause, the expected WCO effect appears. The same result, however, can also be obtained by replacing the resumptive pronoun in (110) with an anaphoric epithet, as shown in (111). (Cf. Demirdache 1991: 58):

(110) Ze ha-baxur_i še yidaqti ʔet ha-horim sel-o_i še ha-more
 this the-guy that informed-I ACC the parents of-him that the-teacher
 yaxšil ʔoto_i
 will-flunk him
 'This is the guy that I informed his parents that the teacher will flunk him'

(111) *Ze ha-baxur_i še yidaqti ʔet ha-horim šel ha-idiot_i še
 this the-guy that informed-I ACC the-parents of the idiot that
 ha-more yaxšil ʔoto_i
 the-teacher will-flunk him
 'This is the guy that I informed the idiot's parents that the teacher will
 flunk him'

Anaphoric epithets are definite NPs with functions similar to those of pronouns. They can be coreferential with another NP and trigger WCO effects, but they cannot function as relative operators moving at LF. In contrast to Hebrew, Akan

does not have the option of moving a resumptive pronoun at PF but it does have anaphoric epithets, which produce the same results as in Demirdache's Hebrew examples:

(112) Sukunni_i yi na me kakyre ne_i awofo nom se adekyrefo no
 student this FOC I told to his parents them that teacher the
 bebo no
 will-flunk him

'This is the student I told his parents that the teacher will flunk him'

(113) *Sukunni_i yi na me kakyre okwasia ne awofo nom se
 student this FOC I told to idiot his parents them that
 adekyrefo no bebo no
 teacher the will-flunk him

'This is the student I told the idiot's parents that the teacher will flunk him.'

In (112) there are two pronouns. A WCO effect cannot be observed, because the first of the two pronouns can be interpreted as the relative operator. In (113), the substitution of an epithet for the first pronoun excludes this alternative and forces the second pronoun into the role of the operator moving at LF. Since the anaphoric epithet has a quasi-pronominal status, it gives rise to a WCO effect and the sentence is unacceptable. This suggests that resumptive pronouns in Akan are similar to Hebrew resumptives and must be analyzed as relative operators *in situ*, if Demirdache's approach is on the right track. The question of why they occur not only in relative clauses but also in sentences with foci and focussed WH-phrases, however, remains open.

In his analysis of operator-variable dependencies in Akan, Saah (1994) is faced with the same problem. Since he sees no evidence that would support an

interpretation of Akan resumptive pronouns as spelled out traces, he decides in favor of an analysis in which focussed WH-phrases are base-generated in SpecCP, as shown in (114) a. The same type of analysis had been proposed for lexical foci in earlier work (Saah 1988). Accordingly, a focus construction would have the analysis shown in (114) b.:

(114) a. [CP wh-operator_i [C na] IP[... pro_i / no_i...]]

b. [CP Adaka_i no [C na] [me huui pro_i]]

box the FOC I- saw (it)

'It was THE BOX that I saw'

While this analysis is descriptively adequate, it has a number of shortcomings. On the one hand, it is not entirely clear how the focussing effect on WH-phrases and on other focussed constituents can be accounted for; on the other hand, the suggestive parallels between focus, WH- and relative constructions, which can be observed in Akan and in so many other languages, remain unexplained. (114) a. is also incompatible with the analysis of resumptive pronouns proposed by Demirdache, who argues that a WH-phrase binding a pronoun that cannot be interpreted as a trace cannot be assumed to occupy SpecCP; instead, a sentence containing such a WH-phrase must be analyzed either as a cleft or as a left-dislocation construction.

A further difficulty is that Akan also has unfocussed WH-questions with WH in situ, which show the expected WCO effects (Saah 1994: 80).

(115) * Ne_i maame do hena_i

his_i/her_i mother loves who

'Who does his mother love?'

Apart from this, there are also theoretical reasons that speak against an analysis such as (114). (114) violates a well-known prohibition against base-generated WH-constructions. In order to prevent the system of grammar from freely generating operator-variable configurations not subject to any locality restriction, Chomsky (1982: 59f.) argues that Free Indexing should be confined to categories in A-position. Saah's proposal would seem to fall under this verdict. Similar objections could be raised against the analysis of Tuki WH-and focus constructions defended in Biloa (1995).

As a way out of this dilemma, I propose that Akan is a language that relies on two different syntactic strategies in the formation of WH-questions: Besides WH in situ, which occurs in a neutral question like (115), Akan has a second, focussed type of WH-question, which must be analyzed as a "reduced cleft" in the sense of McCloskey (1979, 1990). This second type occurs not only with focussed WH-phrases, but also with other narrow foci, as (114) b. shows.

According to McCloskey (1979), Irish has two different cleft constructions: "full clefts," which represent the familiar type of cleft sentence (116), and "reduced clefts," which lack the copula (117).

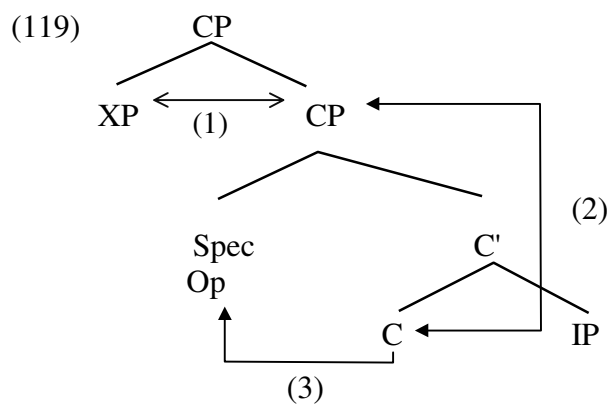
(116) Is é Seán Bán aL d'inis an scéal dom
 COP him Seán Bán COMP told the story to me
 'It was Seán Bán who told me the story'

(117) Seán Bán aL d'inis an scéal dom
 Seán Bán COMP told the story to me
 'It was Seán Bán who told me the story'

Following Cheng (1991: 63ff.) I will adopt the structure proposed for cleft constructions by Browning (1987: 60ff.) and assume that cleft constructions are CP small clauses whose predicate is a relative clause.

(118) It was [_{CP} [_{DP} John][_{CP} Op_i that [_{IP} Mary loved t_i]]]

A reduced cleft then is a CP small clause without a copula. The WH-phrase or focus occupying SpecCP in a reduced cleft is licensed through the chain shown in (119).



The chain of coindexation in (119) is the combined effect of three different relations: Spec-Head Agreement (3), Percolation (2), and Predication (1). (3) in (119) is interpreted as a non- θ -related subject-predicate relationship, which is established, according to Browning, when XP enters into an agreement relationship with a chain contained in the complex predicate.

Cheng (1991) examines WH-fronting in three "optional WH-fronting languages," namely, Bahasa Indonesia, Egyptian Arabic and Palauan, all of which have WH-phrases in fronted position, in addition to WH in situ, which reminds us of the situation found in Akan or Tuki. She proposes analyzing sentences with WH ex situ in all three languages as reduced clefts. I tentatively suggest that an analysis along these lines would also be adequate for Akan, Tuki and perhaps other languages with Type II focus constructions. In Akan and Tuki, the variable

position inside the predicate in (119) is occupied by a resumptive pronoun, which I analyze as the overt in situ-counterpart of the empty operator in (119), in accordance with Demirdache's theory of resumption.

We can now represent Type II constructions as shown in (120). (120) a. is an Indonesian WH-cleft construction, as analyzed by Cheng (1991: 68), which requires a null operator binding a trace. Since the quantifier in (120) a. also binds a pronoun not c-commanded by its trace, the presence of this pronoun induces a visible WCO effect. (120) b. is the Akan counterpart of this construction, which contains a resumptive pronoun, i.e., a relative operator in situ. A WCO effect is not visible in this case, due to the simultaneous presence of two pronouns.

- (120) a. *_[CP]Siapa_i _[CP]Op_i [yang] _[IP]dosen-nya_i suka t_i]]
 who_i Comp/ FOC professor-his like
 'Who_i does his_i professor like?'
- b. _[CP]Hena_i _[CP]Spec [na]] <sub>[ne_i maame dɔ no_i]]
 who Comp/ FOC his/her mother loves him/her
 'Who does his/her mother love (him/her)?'</sub>

In (120) b. the Akan "focus marker" na is analyzed as the complementizer appearing in the clause that serves as the predicate of the cleft construction.²⁹ This analysis allows us to preserve the insight of the proposal by Saah (1988, 1994), and at the same time it establishes a close parallel with Cheng's account of similar morphemes in Bahasa Indonesia and other so-called optional WH-movement languages. It should be noted that Cheng's "optional fronting languages", in particular Bahasa Indonesia, also have Type II focus constructions that are very similar to those found in Akan or Tuki, but lack resumptive pronouns. In the Indonesian example (121), the focus position preceding Comp is occupied by a

complex NP functioning as a FocP of the type discussed in 2.2 above (Soemarmo 1971: 67):

(121) [Anak yang lewat TADI PAGI] yang membeli sepatu

child that passed this morning that/FOC bought shoes

'It was the child that passed THIS MORNING that bought the shoes.'

In order to account for the obligatory focus effect of reduced clefts we may assume that CP in (119) stands for a hierarchy of projections, as stipulated in Rizzi's split-COMP analysis. One component projection would have to be a polarity-headed phrase whose specifier serves as the checking position for the contrastive focus feature marking WH-phrases and lexical foci.³⁰ Under the analyses presented above, "reduced clefts" are a special type of completive focus construction which has to undergo Reconstruction at post-LF, similar to Q/A pairs and full clefts. Notice that the finite features of such sentences are located in the cleft clause and not in the predicative structure, which also lacks a verbal head. In this sense reduced clefts are structurally deficient. The WH- or focus operator in such a construction is parasitic on the cleft clause, which provides not only the finiteness feature but also the thematic and lexical structure for the proposition that emerges after Reconstruction. In general, languages with reduced clefts also seem to have full clefts as an alternative, copula-supported completive focus construction.³¹

An important difference between Type II constructions in Akan or Tuki and their counterparts in languages like Bahasa Indonesian lies in their behavior with respect to locality restrictions. While a Type II construction in Bahasa Indonesian involves an empty operator moving at PF under standard locality conditions, foci in the focus positions of Type II constructions in Akan and Tuki are linked to

resumptive pronouns which may be embedded in NPs of various types, including Complex NP islands. In 4.1, I pointed out that such Subjacency effects are unexpected under an approach that tries to account for this type of construction on the basis of Type I focus operator constructions. The reduced cleft analysis of Type II constructions combined with Demirdache's analysis of resumption as relativization in situ suggests a straightforward solution to the apparent dilemma. Since resumptive pronouns undergo covert movement, their distribution must be parallel to the distribution of WH-phrases and foci in situ: Both resumptive pronouns and WH or focus in situ are licit in positions from which traces at PF (gaps) are excluded. Under the LF-pied piping approach to WH and focus in situ proposed in 2.2.3 this is predicted, because we may assume that every case in which a link between a focussed constituent and a resumptive pronoun is supported across an island involves pied piping of the entire island to the SpecCP of the relative clause functioning as the predicate of the Type II focus construction. This shows very clearly that the most important differences between Type I and Type II constructions can be derived from the relative clause underlying Type II constructions.

A further dimension of crosslinguistic variation in focus constructions comes to light when we observe the type of Japanese sentence shown in (122):

- (122) [Kono tokei o [PARI de]_F katta no] da
 This watch ACC PARIS LOC buy-Past NOM COP
 'It was in Paris that I bought this watch'

This type of construction is discussed in great detail by Schaffar (1996, *forthc.*), who documents its frequency in the Altaic languages and in numerous East Asian and South East Asian languages, all of which turn out to be SOV. Schaffar

analyzes sentences like (122) as cleft-in-situ constructions. Such constructions appear to have two striking properties which set them apart from all other types of focus construction discussed in the literature:

1. The cleft clause is accompanied by a copula, but the focus occurs inside what would appear to be the cleft clause, where it occupies the position of the expected variable;
2. The main verb of the cleft clause appears in nominalized form.

If the cleft-in-situ analysis proposed by Schaffar is appropriate, we are forced to assume that Type II constructions may also vary along an in situ/ex situ-parameter, similar to Type I constructions. As we have seen, variation in Type II constructions are expected to originate in the underlying relative clause. The potential significance of the two properties listed above was first noticed by Bickel (1995), who suggests that the clausal component of a cleft-in-situ focus construction must be an internally headed relative clause. Such constructions are known to have "heads" in situ as well as nominalized verbs. Furthermore, they have been claimed to occur primarily or perhaps exclusively in SOV languages (Cole 1987). An analysis of cleft-in-situ constructions in terms of internally headed relatives would be interesting from the standpoint of the typology of focus constructions, because it could account for both their structure and their typological distribution at one stroke. In addition, it would lend support to the raising approach to relativization advocated by Schachter (1973) and more recently by Kayne (1994: 95ff.). (Cf. Bianchi 1999: 61ff. for discussion and references). Unfortunately, the results of Culy (1990) and others seem to indicate that internally headed relatives are not strictly confined to SOV languages, in contrast to what we know about cleft-in-situ constructions. In addition, cleft-in-

situ constructions can be found in SOV languages that do not appear to have internally headed relative clauses, as Schaffar (forthc.) shows.

Obviously, more work needs to be done, not only on Type II constructions, but also on focus constructions in general, before we can expect typologically significant generalizations to emerge. Nevertheless, the phenomena discussed in this section strongly suggest that Type II constructions are underlying cleft constructions and that one major source of crosslinguistic variation in Type II constructions originates in the structural properties of the relative clauses functioning as their predicates.

4.5 Historical Aspects of Morphosyntactic Focus Constructions

The analysis of Type II constructions I argued for in 4.4 draws a sharp boundary between the two types of focus constructions in terms of their binding properties. In Type I constructions the focussed constituent itself has the status of an operator which must undergo overt or covert movement in order to form a chain under standard locality conditions, giving rise to a WCO effect under appropriate circumstances. In Type II constructions the focussed constituent occupies the focus position of a reduced cleft construction and is linked to a resumptive chain by coindexation. The operator in this case is the resumptive pronoun which induces a covert WCO effect that becomes visible only under certain conditions.

Schachter's observation that in languages with morphosyntactic focus marking the out-of-focus clause has a structure resembling that of a relative clause can be easily accounted for in the case of Type II languages. In regard to Akan, Schachter notes that the tonal shift from low to high that marks the distinction between ordinary and resumptive pronouns occurs in relatives and in out-of-focus

clauses. Furthermore, the focus marker or complementizer nà is inserted at the beginning of an out-of-focus clause, whereas the relative marker áà occurs at the beginning of a relative clause. That an Akan focus construction is structurally close to a cleft is suggested by the fact that a full cleft construction is created when it is preceded by ɛyɛ 'it is' or ɛnyɛ 'it isn't' (Ameka 1992; Saah 1988).

In Ilonggo Schachter describes a similar situation: The clause initial relative marker is nga, its out-of-focus counterpart is ang. In Bahasa Indonesian the parallels suggesting a reduced cleft construction are even stronger. The complementizer-like element yang, which has been analyzed as a focus particle (in Saddy 1991, *inter alia*), is identical to its relative counterpart, similar to the element illi that occurs in relativization, clefting and WH-fronting in Egyptian Arabic, as discussed by Cheng (1991). If the extension of Cheng's reduced cleft analysis to Akan and other Type II languages I suggested above turns out to be justified, we may conclude that complementizers and similar elements in Type II focus constructions are one of the historical sources for König's "pure focus particles" (König 1991).

Other focus phenomena seem to even link Type I constructions to cleft constructions. In a number of languages we find Type I focus constructions with a type of morphosyntactic focus marking that clearly shows that these constructions have developed from full cleft constructions by way of historical reanalysis. A number of authors, among them Heine and Reh (1984), Givón (1990) and more recently Harris and Campbell (1995), have demonstrated that in many cases so-called "pure focus particles" go back to the copula of cleft constructions, which have been reanalyzed as monoclausal focus constructions. The historically

documented direction of the development suggests a general drift from biclausal to monoclausal focus constructions.

As a result, we also find many Type I languages which fall under Schachter's generalization. One such case, which Schachter himself mentions, is Hausa, whose focus particle is at least historically related to the copula occurring in equative sentences and similar predicative constructions in this language. In earlier work, Hausa focus constructions have indeed been analyzed as cleft constructions (McConvell 1973). Green (1997), however, convincingly argues that Hausa moves focus to SpecFP. In terms of the typology I have proposed, this means it is a Type I language, whose focus structure nevertheless shows traces of its historical origins in a cleft construction.

Schachter observes that Hausa has a type of "resumptive" pronoun which occurs both in relative clauses and in focus constructions, but unlike those found in Akan and Tuki, which are true resumptive pronouns in the sense defined in 4.2, they conform to the pattern of resumption characteristic of Type I languages, as we have already seen in 4.2: Pronouns spell out traces in contexts where they serve to obviate an impending ECP violation, as Tuller (1986) demonstrates, or else they are "intrusive" and amnesty island violations. Intrusive pronominalization, in particular, is a phenomenon that we cannot expect to occur in Type II languages.

The second phenomenon Schachter mentions is the out-of-focus morphology of the Hausa verb, an aspect of Hausa syntax insightfully analyzed in Tuller (1986). Since relative tense marking not only occurs in focus constructions and WH-questions, but also in relatives, Hausa relative tense cannot be analyzed as out-of-focus morphology in a strict sense. As I pointed out in 2.2 above, coding strategies in general target the focus, not its background. In a number of languages

it has also been shown that the development from cleft constructions to Type I focus constructions is still in transition.³²

By way of summary, we may say that in the course of historical change, full cleft constructions may undergo reanalysis and development into monoclausal Type I or Type II focus operator constructions. This process may also lead to the development of focus marking morphology, sometimes accompanied by the survival of other traces of the biclausal sources of the construction in more fossilized form.

5. Summary and Conclusion

In this paper I have discussed some consequences of the assumption that focus is a nonuniform phenomenon and tried to take a first step towards a typology of focus and focus constructions. Departing from the familiar observation that there is an intimate relationship between focus constructions and information questions, I first turned to the distinction between presentational focus structure and narrow focus constructions, in which focus is claimed to function as an operator. In the tradition of generative work on information structure, focus on syntactic categories is taken to be a syntactic feature assigned freely to word level categories at Numeration. I argue that focus on syntactic categories is licensed in one of two alternative ways, either by integration into a wider domain or by association with an operator. The former mode of licensing is associated with presentational focus, which is assumed to have a purely incremental effect on the discourse representation, the latter with focus operator constructions which require more complex manipulations such as the exclusion of alternatives. Presentational focus, as discussed in 4.1, is considered the informational default

case in information packaging approaches. We expect it to show the least variation across languages. From the Mapping Hypothesis we may derive the prediction that coding strategies target operations that exclude elements from the domain of presentational focus.

This prediction is strongly supported by comparative evidence. Natural languages employ a multitude of different strategies marking the exclusion of elements from the focus domain, such as deaccentuation, scrambling, clitic doubling, agreement morphology, and others. In contrast to this, the integration of focus shows less crosslinguistic variation. Moreover, it is implemented primarily by a neutralization of coding differences between internal and external arguments: Thetic subjects usually display the morphosyntactic characteristics of internal arguments. All this amounts to the claim that the feature [+F] alone has no particular bearing on syntax or semantics, whereas [-F] triggers checking movements. Since some of these operations also affect expletives, they cannot be equated with topicalization, which presumably involves further movement of specific and referential expressions to a higher projection (i.e., RefP, in Target Landing Site Theory (Szabolsci 1997)).

In 2.1 I turned to narrow focus constructions in order to determine what kind of operators associate with focus and where they are located in the functional hierarchy of sentences. I tried to show that the concept of an FP developed in the analysis of Hungarian and other languages can be accommodated in a relational theory of focus, which claims that narrow focus can only be licensed by association. The elements performing this function form the natural class of polarity heads, which head a functional projection above VP called PolP (or SigmaP) in recent work on negation. Since in many languages narrow foci with

contrastive readings are subject to movement toward the sentential periphery (Focus Topicalization), I stipulate that PolP must have a second instantiation, equivalent to the FocusP assumed by Rizzi (1997) in his split-COMP analysis. As a result, there are two distinct polarity projections, Pol₁P in INFL and Pol₂P in COMP, both headed by the same set of elements with the same meaning in both positions.

Licensing of contrastive focus requires overt or covert movement under standard locality conditions. According to Brody (1990), languages vary along the in situ/ex situ parameter. The fact that focus is licensed by association allows us to demonstrate that focus in situ is subject to essentially the same locality conditions as focus ex situ. The interpretation of a focussed constituent occupying SpecPol₂P at PF or LF is determined by two factors: the semantic content of the polarity element it associates with, which presupposes a set of alternatives, and the contrastive focus condition, which requires that the set of alternatives be identified by the context in which the proposition is asserted. Since the interpretation of "bare focus" in SpecPol₂P is contrastive and exhaustive, we are led to conclude that "bare focus" is associated with a silent polarity head whose meaning is equivalent to only or the affirmative opposite of replacive negation.

In the interest of eliminating superfluous head positions I adopted the Layered Specifier Hypothesis, according to which topic and focus are both specifiers of the same polarity head. This hypothesis also allows us to account for the selectional relationship between topic and focus discovered in empirical work on Topic/Focus Topicalization in English: The projection of an external specifier (or topic) is contingent upon the projection of an internal specifier (or focus).

Based on observations by Göbbel (1995) and Kiss (1998b) on the interpretation of focus in Hungarian and Romanian, I stipulated that VP peripheral focus is exhaustive and overtly or covertly moves to SpecPol₁P, while sentence peripheral focus is contrastive and overtly or covertly moves to SpecPol₂P. The exhaustive reading goes back to the associated abstract polarity element, whereas the contrastive reading depends on an additional contextual condition. Within the framework of a target landing site theory of quantification (Szabolsci 1997), which attempts to factorize "Quantifier Raising" into a family of displacement operations addressing different positions in the scope-defining hierarchy of functional projections, this is a natural step to take, since focus movement was originally conceived as a subtype of Quantifier Raising (Chomsky 1977).

In order to prepare the ground for further typological differentiations, I addressed myself to the WH/focus relationship in 3. and argued that interrogative and cleft constructions are distinct but related instantiations of a completive (i.e., gap filling) type of focus construction, which assigns focussed values to variables in open propositions. Completive focus structure is secondary and orthogonal to the primary information structure. This explains why WH-questions and their answers may have presentational, exhaustive or contrastive readings, depending on the primary information structure of the closed proposition. The interpretation of clefts turns out to be more constrained for independent reasons. The discontinuous nature of the primary information structure in Q/A pairs and cleft sentences gives rise to connectedness effects, which I interpreted as evidence for Reconstruction at a post-LF level of representation, the equivalent of the level of Information Structure familiar from traditional proposals.

In 4. I briefly turned to languages with morphosyntactic focus marking devices and tried to show that there is evidence for another type of narrow focus construction, whose basic structure is that of a cleft sentence. This gives us the following typology:

(123) Typology of narrow focus constructions:

Type I:	Focus _i ... x _i ...	<ol style="list-style-type: none"> 1. Target landing site: Pol₁P/Pol₂P 2. Movement: PF/LF
Type II:	$\left. \begin{array}{l} \text{Focus}_i \left[\text{CP Op}_i \dots x_i \dots \right] \\ \left[\text{CP} \dots \text{pronoun}_i \dots \right] \end{array} \right\}$	<ol style="list-style-type: none"> 1. Predication: copula-supported/copula-free 2. Movement: PF/LF ("resumption")

As we can see, the main source of variation in Type I constructions is the focus operator targeting different landing sites either by overt movement under standard locality conditions or by covert movement accompanied by LF Pied Piping (or "Focus Phrase") effects. In Type II constructions one major factor in variation is the predication relation, the other one the relative operator which shows standard locality effects under overt movement and selective Pied Piping in the case of resumptive pronoun construal.

If the cleft-in-situ construction found in SOV languages is indeed based on an internally headed relative clause, as has been suggested in the literature, then we have to add one more option to the copula-supported Type II construction in (123): Focus itself may be the operator inside CP. Furthermore, by way of linguistic changes, biclausal Type II constructions may develop into monoclausal Type I constructions with different types of morphosyntactic focus marking representing various stages of reanalysis and fossilization. The effects first noted

by Schachter (1973) occur both in constructions that are still underlying clefts and in cases where reanalysis has progressed further. The most remarkable aspect of the relational theory of focus presented here is that the elements that associate with and attract focussed constituents may occupy two different positions in functional structure, one in the INFL and one in the COMP range. The meaning of the particles is identical, but their effect on the interpretation of the sentence varies with the layer of functional structure on which they operate.

¹ This work was carried out in connection with a project on the typology of information structure supported by the Deutsche Forschungsgemeinschaft from 1995 to 1999. For discussion and advice I have to thank many linguists, but I would like to single out Kirsten Brock, Diana Gierling, Edward Göbbel, Konstantin Kazenin, Wolfram Schaffar, Patrick Schindler and in particular, Susanne Winkler. Usual disclaimers apply. Furthermore, I would like to thank Patricia Afari for sharing with me her intuitions as a speaker of Akan.

² Cf. Drubig (1994, 1997, 1998), and similarly Winkler (1997).

³ Cf. Boadi (1974) and Saah (1988, 1992, 1994) for descriptions of Akan focus and WH-constructions. Other languages in which the WH-phrase is associated with a focus marker are Somali (Saeed 1984: 222f.) and Gungbe (Aboh 1995).

⁴ This formulation may suggest an unwarranted simplification. In some cases the term answer is less adequate than its elaborate counterpart, as in the German example in (i), and in others a fully acceptable term answer may not even be available.

(i) Q: Was tat Hans, als er seine Frau entdeckte?

'What did Hans do when he discovered his wife?'

A₁: Sie umarmen

'Embrace her'

A₂: Er umarmte sie

'He embraced her'

The answer does not simply supply a term that can be substituted for the trace bound by the WH-operator. The important point is that question and answer merge into a proposition that changes the context.

⁵ Cf., e.g., the discussion of the focus structure of questions in Erteschik-Shir (1986), in particular the idea that the "new information" corresponding to the WH-phrase is specified in the term answer.

⁶ Experimental evidence supporting the distinction between the two types of focus in Hungarian is presented in Hockey (1998).

⁷ Cases where complete sentences have a contrastive reading are discussed in Szabolsci (1996).

⁸ For reasons of space I cannot go into the empirical problems that a number of authors have pointed out. Particularly relevant would be cases where nonspecific readings have been claimed to be possible in VP-external positions. Cf. Vallduví (1992) for Catalan or Kondrashova (1996) for Russian, among others.

⁹ Rochemont (1986) formulates a principle which predicts that all categories right-adjoined to VP are in a structural focus position where they must be interpreted as presentational foci and argues that certain "stylistic constructions" in English, such as Subject Verb Inversion, Heavy NP Shift and others, fall under this principle. In Drubig (1992) I have tried to show that the focussing effects in such cases can be derived independently and that no such principle is needed.

¹⁰ Vallduví (1992) makes no systematic distinction between presentational and contrastive/exhaustive focus and in fact argues against such a distinction. In more recent work, however, he develops a theory of "Kontrast", essentially equivalent to the notion of contrastive focus in my approach, thus acknowledging the non-uniformity of focus (Vallduví and Vilkuuna 1998).

¹¹ Cf. Winkler (1997) for a defense of the argument structural approach in the tradition of Selkirk (1984), and an extensive critical review of its rivals, in particular Cinque (1993). Cf. Winkler and Göbbel (2000) for a critical reaction to Zubizarreta (1998).

¹² Parallels between scrambling and clitic doubling are discussed in Alexiadou and Anagnostopoulou (1997), Delfitto (1995) and Gierling (1996, 1997), among many others. Gierling, in particular, discusses information structural parallels between the two types of givenness marking in some detail.

¹³ Both Adger (1994) and Anagnostopoulou and Giannakidou (1995) suggest that AgrP should be reinterpreted as a functional category with semantic content, which they call "Ref(erence)P". While the problem of expletive displacement shows that this is not an appropriate interpretation for the landing site targeted by argument externalization, a specific landing site for specific or

referential categories (wide scope indefinites, definite descriptions) is independently necessary and actually proposed within the framework of the theory of scope-taking discussed in Szabolsci (1997). But RefP is not equivalent to AgrP, no matter how we will eventually interpret the latter.

¹⁴ Cf. Erteschik-Shir (1997) for discussion. The idea thatthetic sentences have "stage topics" is rather old and has been suggested repeatedly in the literature on information structure (cf. Masunaga 1987).

¹⁵ A recent syntactic defense of this position is Costa (1998).

¹⁶ I would like to thank Valéria Molnár (University of Lund) for the Hungarian evidence.

¹⁷ Cf. Krifka (1998: 95) for a discussion of the semantic plausibility of this assumption.

¹⁸ Questions of the island sensitivity of focus movement in Hungarian are discussed in Horvath (1986: ch.3). Cf. also Kenesei (1996) and Szabolsci (1996) for a discussion of cases where the category in the focus position is not a focus, but an XP containing a focus. In Hungarian the category that moves to the focus position is the maximal argument or adjunct containing the focus. Szabolsci quotes examples from Kenesei's paper such as the following:

(i) Mari [A TEGNAPI cikkeket] olvasta
Mary the YESTERDAY'S articles.ACC read
'It's YESTERDAY'S articles that Mary read.'

Kenesei interprets such examples as evidence supporting the claim that the F-feature cannot be assigned in the Spec position of the Hungarian FP, as Horvath (1986), Brody (1990) and others have assumed, because the constituent in focus is not the constituent occupying the focus position. I would argue, however, that a focus particle such as only, when accompanying such a constituent, is associated with the entire argument, because we must assume that the syntactic focus positions in discourse configurational languages are occupied by FocPs, not by foci. If the focus position is targeted by a FocP for checking, it must have "inherited" the feature F from the prominent constituent it contains. Below I will sketch an approach that accomplishes this.

¹⁹ Cf. Green (1997: 59ff.) for a criticism of Kenesei's proposal. In her account of focus in Hausa, Green returns to Brody's (1990) original position and proposes an FP analysis.

²⁰ This analysis of the Hungarian focus position bears some similarity to the Target Landing Site Theory approach presented in Szabolsci (1996, 1997). Cf. also the "extended Sigma P" analysis of Piñòn (1991, 1992). Furthermore, Kayne (1998) proposes an analysis of focus and polarity in English and other languages in which postverbal foci and polarity constituents move to the specifier of a polarity projection which is the equivalent of Pol₁P under the account defended in this paper (cf. esp. p. 134, n. 9). In his analysis of the English data Kayne goes one important step further than my analysis and suggests that foci and other polarity constituents in postverbal position actually undergo overt, rather than covert movement to the equivalent of Spec Pol₁P. This is followed by a further type of displacement, VP scrambling, which results in a word order virtually identical to pre-movement base order. VP scrambling as an overt form of givenness marking has been attested in a number of languages (cf. Simpson 1998). Kayne's reanalysis of verb-related focus and polarity has the important consequence that the differences between focus constructions in English and Hungarian do not follow from the in situ/ ex situ-parameter, as originally suggested in Brody (1990), but from the presence (English) vs. absence (Hungarian) of VP scrambling (Kayne 1998: 164ff.). Although the results of the work supported here also suggest that in situ vs. ex situ is not the most important parameter of typological variation in focus constructions (cf. the discussion in 4. below), much further work will be necessary to ascertain whether Kayne's approach is on the right track.

²¹ The data underlying the following discussion are taken from Newman (1974) and Tuller (1992).

²² But cf. Chen and Schaffar (1997) for an in-depth discussion of the focus structure of polarity questions and its typological aspects.

²³ In the literature on clefts there is no general consensus on this point. Cf. Horn (1981) for references to the discussion and still relevant conclusions.

²⁴ The layered character of focus structure was noted and intensively discussed in the work of Prague school linguists such as Sgall, Hajičová and Benešová (1973). Cf. Krifka (1995), Rooth (1996a) and Zubizarreta (1998: 88ff.) for some recent discussion of second instance sentences and echoed focus structures.

²⁵ With the notable exception of NP scope (Williams 1994: 62f.; Matsuda 1997: 196 ff.) virtually any kind of syntactic dependency involving c-command can give rise to connectedness effects. Cf.

Higgins (1979) for an extensive discussion of connectedness phenomena in cleft constructions and Q/A pairs.

²⁶ The complete dissociation of WH-structure and information structure I argue for predicts that WH-phrases should also be able to undergo [-F] checking, or act as topics. The [-F] checking option can be tested in scrambling languages. In the literature on German it has often been claimed that WH-phrases are excluded from scrambling positions (cf. Müller 1995: 142ff., and references cited there). Wiltschko (1998), however, argues convincingly that WH-phrases in German may scramble and when scrambled, receive a D-linked interpretation in the scrambled position. In (i) a.-b. the adverbial oft marks the left edge of VP.

- (i) a. Wer_i hat wen_j [_{VP} oft t_i t_j eingeladen]?
 Who has whom often invited
- b. Wer_i hat [_{VP} oft t_i wen_j eingeladen]?
 Who has often whom invited
 'Who has often invited whom?'

Furthermore, WH-phrases can also be topics, as the evidence of topic-prominent languages such as Chinese shows (Wu 1996). Topicalized and focussed WH-questions are also discussed in Erteschik-Shir (1997) and Denham (1997).

²⁷ Exceptions are questions with syntactically D-linked WH-phrases in which intrusive pronouns are marginally acceptable. (i) is an example from Kayne (1984: 181):

- (i) [?]Which guys_i did you say that you didn't know whether they_i were gonna be there or not?

²⁸ The number of languages in which Schachter's generalization has been attested is in fact much greater. In the study reported on here almost forty other languages from diverse families were taken into consideration.

²⁹ This interpretation of the focus marker I take over from Saah (1988, 1994). Earlier approaches have tried to link it to the copula (Boadi 1974).

³⁰ My analysis of reduced and copula-supported clefts is similar to Green's (1997:144ff.) analysis of copula constructions in Hausa. Green assumes that such constructions in general have a FP layer. SpecFP is the checking position for [+F] in her analysis.

³¹ I cannot present a fully articulated analysis of copula-supported cleft constructions in this paper. Such an analysis is outlined in Drubig (1998). Heycock and Kroch (1999) have recently proposed an analysis of clefts in terms of equative structures. In Drubig (1998) I have tried to show that a predicative analysis, as originally proposed in Williams (1983, 1994), is a preferable solution, especially if we want to consider Type II constructions as a "reduced" alternative to full clefts, which is important from the standpoint of an articulated typology of focus constructions.

³² This is demonstrated in some detail by Takizala (1973) with reference to Kihungan (cf. Givón 1990: 719, for discussion).

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