

STRUCTURAL PROPERTIES OF INFORMATION PACKAGING IN GERMAN AND IN UNIVERSAL GRAMMAR

Mais quel'qu'un troubla la fête (La Fontaine)

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1. Purpose and overview

This article aims at defining in structural terms what have been called **theme** and **rheme** in the traditions of German linguistics and general functional linguistics, of the Praguean pronunciation as well as other. The fundamental idea is to describe in formal ways a general mapping device between the sentential functions of **focus** and **presupposition** and the discourse functions of **rheme** and **theme**. For this link to be meaningful it is necessary to define sentential **focus** and **presupposition** in general and formal terms of sentential structure. This will be achieved by what will be called the *Null Hypothesis* of accent prominence. The general idea embodied in this hypothesis is that every declarative sentence has a specific grammatical, i.e. unmarked or neutral, distribution of structurally defined focal accent. The Null Hypothesis borrowed from Cinque (1990) boils down to the claim that the most prominent sentential accent assigned for textually neutral single sentences is carried by the head of the deepest embedded node in sentential structure (in terms of the syntactic (sentential) representation in Chomsky 1981, 1986). In the present article, this claim will mainly be substantiated for German. Further, it will be shown to what extent the packaging of discourse and text information is a function of the Null Hypothesis and in which sense it is derivable.¹

Since the prediction about the position of sentential focal prominence will be made solely in general structural terms the claim bears some universal quality. Cross-linguistic parametrization may be seen to lie in the various ways single languages permit different mappings of the rheme prominence under discourse conditions onto the sentential structure, most prominently movement and whether or not refocussing effects take place. A limited portion of discussion will be devoted to this aspect in the last section, 5. Section 2 draws the necessary terminological distinctions. Section 3 contains the central claims with respect to the Null Hypothesis.

2. The discourse functions *Theme and Rheme* and syntactic (sentential) *focus* and *presupposition*: expository remarks

More often than not the literature on discourse functions does not draw any distinction between accent prominence evoked under the impact of the flow of discourse, on the one hand, and that accompanying the different sentential structures. Let us, for the time being, draw a dividing line between the two types of focus (stress) prominence by the following established and reasonably transparent terminology: **focus** and **presupposition** for stress prominence on the sentential level (Chomskyan tradition); and **theme** and **rheme** on the discourse, or textual, i.e. supra-sentential level (Praguean tradition).

2.1. Focus projection

The main claim made in this paper, namely that the Praguean, discourse-based, categories of *theme* and *rheme* can be derived from, and their surface position determined by, the syntactically defined position of *focus* presupposes a crucial concept, namely that of the *focus projection*. Essentially, focus projection relates the assignment of focus to some structural element in the sentence and the number and structural quality of elements that fall under the same focus scope of the former, single syntactic position. The practical effect of this rule-governed mechanism is the relation between one single question and different answer foci. See Jackendoff (1972: 234 ff.) as well as Selkirk (1984: 207 f. and 230 ff.) for discussions of this phenomenon. Neither of the two, however, has used the terminology used here², essentially because their discussion of the phenomenon has not been conducted with the aim to account for the position of focus in purely syntactic (UG) terms. For a brief discussion of prominent previous literature see below.

The following examples, (1)-(2a-d), are meant to illustrate the mechanism of focus projection and, specifically, what has come to be called the ambiguity of focus assignment (Chomsky 1976). Furthermore, it is claimed here that it is not only reasonable, but also necessary to draw the conceptual and terminological distinction sketched above. While the four answers in (2a-d) are without exception compatible with, or felicitous with respect to, the question in (1), they contain nevertheless various different syntactic elements under accentual prominence. (1) is thus ambiguous in that it does not presuppose only one answer to be contextually correct, but, rather it allows for more than one single answer. The fact that the four syntactically distinct focal positions in (2a-d) are possible and simultaneously compatible with the previous question in (1) (a fact that qualifies the specific foci in (2a-d) as unmarked in the specific single context of (1)) suggest that, at the sentential level, there is an interface between the two mechanisms inducing stress-prominence, phrasal and contextual.

{Henceforth, and throughout, CAPS for elements under focal realization; PO = prepositional object (i.e. prepositional argument of the governing verb, as opposed to an adjunct, PP!)}

(1) Wurde Mutter nicht [_{VP1} gebeten, [_{PP} mit dem Fahrrad [_{IP} [_{PO} nach einem Jungen [_{PP} mit einem roten SCHAL] zu suchen]]]]?

"Was mother not asked to look out with a bike for a boy with a red SHAWL?"

(2)a Nein, Mutter wurde gebeten [[_{PO} nach einem Jungen [_{PP} mit roten STRÜMP-

- FEN] zu suchen]]
 No, mother was asked-for a boy-with red SOCKS-to look out
- b Nein, sie wurde gebeten [_{IP} [_{PO} nach dem räudigen STRASSENKATER zu suchen]]
 No, she was asked-for the mangy TOM-CAT- to look out
- c Nein, sie wurde bloß gebeten [_{IP} AUSSCHAU zu halten]
 No, she was asked only-on the WATCH to be
- d Nein, sie wurde bloß [_{VP₂} zu VORSICHT gemahnt]
 No she was just told-CAREFUL to be (VP₁ = VP₂!)

What legitimates, and qualifies as unmarked, the various syntactically different answers in (2a-d) to one single question context, (1), is the wide projection of focus within the VP₁-constituent. Note that each head in any of these bracketed subconstituents within VP₁ qualifies as focus in the answer. See (2a-d), where the focussed constituents cover anything between the V-adjacent *w*-constituent in the question context, (1), and the highest constituent in VP, as in (2d), VP₂ being an acceptable focus variant to VP₁. As a first generalization we can thus conclude that focus ambiguity is induced from the lowest constituent-head in the clause structure upwards.

If, however, the question had featured some *w*-element higher or lower than the deepest constituent in the syntactic representation (like *JUNGE* "boy" within the higher IP, or *GEBETEN* "asked" as the lowest element, V⁰, in the canonic V-last base of German within VP₁), the textual felicity, or acceptability and, consequently, no such focal ambiguity would have been yielded, or, in textual terms, the interpretability of any of (2a-d) in context would have suffered severely. More precisely, both *JUNGE* and *GEBETEN* under focus lead to the presupposition of all other material in the clause thus excluding it from answer contexts such as those in (2a-d). Likewise, as soon as the focus of the question moves to a non-head or to a constituent which is not part of the lexically governed, argument constituents answer contexts like those in (2a-d) disqualify as contextually felicitous.

To illustrate this let us assume, in a sentence like (1), focal prominence on the attributive adjective *ROT* "red". This will change the focal projection in the structure of the answer. It will reduce the number of text-compatible variants to just one, i.e. a variant on the colour of the shawl. Consequently, it will thus rule out any focus ambiguities.

This leads us to draw the further following important generalizations all pertaining to a clearer insight into the nature of focus projection/ambiguity and its restrictions: the focus projection is blocked unless, (i), the focus lies on the element adjacent to the basic V-position (in the German clause); (ii) this element has head status; and, (iii), it belongs to an argument constituent (i.e. it must be properly governed by the main finite verb). If, and only if, these conditions are met together focus ambiguity, or wide focus as opposed to narrow focus, will arise as illustrated. Note that this does not yet say anything about the deeper, structural nature of the place of the element under focus that elicits wide focus projection as in (1)-(2). All we have been able to say so far, in terms of four generalizations, is under which conditions to be met together such wide focus is yielded. From this follows that, if one or more of these conditions are not met, narrow focus will be projected.

For purposes of illustration only, let us call the focus domain extending from

SCHAL in (1) up to VP_1 a focal projection chain (FPC)³. The FPC in (1) is such that it includes any of the four heads in the constituents above the sister to V^0 in its base position (V-last). Now let us consider focus placement under violation of one of the conditions to be met for wide focus scope, i.e. on the attributive adjective *ROT* "red" in (1). This focus placement allows only one structural answer variant (like *GREEN*). The attributive adjective is thus not a member of the focus chain of constituents whose head is ultimately V (up to IP or CP). The reason has been spelled out above: the attribute, albeit contained in the governed constituent, is not properly governed government holding for heads of the governed constituents only.⁴

The very same restriction to narrow focus scope holds for non-argumental adjuncts, NPs or other, at just any place that they may be allowed in the German sentence (see our distinction of PO for (argumental) prepositional object in (1) and (2) as opposed to non-argumental PPs). Notwithstanding the fact that this PP-adjunct may be a sister to V^0 in final position, such a PP does not elicit wide focus scope the way the argumental PO (or its attributive PP) in (1) did. See (3)-(4), which illustrates this. Note that (3) reads such that mother does the searching in the garden, and not that the son is in the garden.

- (3) Wurde Mutter nicht gebeten [_{IP} [_{VP} [_{NP} ihren Sohn [_{PP} im GARTEN] zu suchen]]]?
Was mother not asked to look for her son in the GARDEN?
- (4)a *Nein, der Mutter wurde GERATEN ihren Sohn im Garten zu suchen.
No, mother was ADVISED to look for her son in the garden.
- b Nein, Mutter wurde gebeten ihren Sohn im HAUS zu suchen.
No, mother was asked to look for her son in the HOUSE.

(4a) would be a correct answer only under the reading that brackets the locative adjunct, *im GARTEN*, together with the direct object, *ihren Sohn*, as a postposed attribute: [_{IP} [_{VP} [_{NP} ihren Sohn [_{PP} im GARTEN]]] zu suchen]].

This should suffice as support for the claims made with respect to the conditions for wide focus scope and its restrictions.

2.2. Summary: the claim as to the relation between phrasal focus and textual, or discourse, focus/rheme.

What we have so far appears to support the following claims:

- (a) Discourse may require some prominence status of an element in terms of stress which is different from that within a single non-text bound sentence (expression "out of the blue").
- (b) The discourse felicity of some single sentence is a function of the focal projections of the discourse-related elements in this same sentence. In particular, text- or discourse felicity in German is sentence-structure sensitive in the sense that a head

element of a projection chain can pick up the focal element of the previous question context as long as the constituent of this head meets certain requirements. See (3)-(4) and the prior four generalizations.

- (c) In general, the representation of theme and rheme (or, in other terms, the linear order and stress structure of any single sentence in terms of text-felicity) will be due to some extra representation level. It is assumed that languages will differ with respect to whether or not there is some systematic interface between the syntactic level and the theme-rheme level such that the theme-rheme structure can, or cannot, be derived from, or related to, the syntactic representation without extra theoretical stipulations. Quite obviously, there needs to be some extra focus identifying property on the syntactic level such that this interface can do the expected systematic job. For German, however, it is claimed that no such interface between two different focus assigning representations is required. Rather, discourse focus, or rheme, is assigned in dependence from phrasal focus.

Note that (b) in itself is indicative of the fact that the text or discourse compatibility in German relates to the structural properties of the focal elements in question. And the last conclusion in (b) leads directly to (c), i.e. the question as to what the stress prominence structure is in a single, non-text-bound sentence. Note that, if we want to identify in structural terms just any stress configuration in some text-bound expression we will need to be able to say what the syntactic stress configuration is of textually unbound expressions. In other words, we want to be able to identify syntactically the focal position in unmarked clauses. This is what the following section is meant to achieve.

As will be noted readily the fact whether or not languages are disposed to structurally identify the focal position is not the only imaginable parametrizing faculty. Languages may also differ with respect to which grammatical node, in UG-terms (Chomsky 1986), hosts the focal element. We shall illustrate in at least one case how versions of the Afro-Asiatic Chadic (according to Tuller 1988) and German differ from one another in specifically this respect although either language belongs to the focus-configurational ones. Last but not least, parametrization may also be seen to be brought about in terms of (obligatory or optional) movement. Chadic and Hungarian seem to be languages where an element in order to be focussed must move into the domain of some fixed category. German, by contrast, is not such a language in that the focussed element can also appear in positions at considerable structural distance from the canonic domain. Yet, any focal position other than the canonic one will receive some extra pragmatic load with respect to the text environment so that a clear picture of an Archimedial, pivotal focal position in purely structural terms emerges. No doubt, finally, languages will also differ with respect to the faculty of carrying focal stress on just any element in base order, or whether a language requires some reshuffling of the elemental order ("refocussing") or even marked constructions to achieve such refocussing. Obviously, English is such a language, much rather than German or Hungarian. We shall not be concerned with this aspect in the present paper. See Hoffmann (1991) for a pursuit of this question in German.

3. The "Null Hypothesis" and the "Extended Null Hypothesis" with respect to the clausally anchored focus and textual rheme

3.1. The general assumption

This is what can be called the (Extended) Null Hypothesis for the description and explanation of syntactic (sentential, or phrasal) stress as distinct from discourse-induced stress.

Thesis 1: The (Phrasal) Null Hypothesis for German suggests - much in disagreement with traditional as well as modern linguistic assumptions (see Bolinger 1961, 1972 or Schmerling 1976 for English; Eroms 1986 for German) - that the distribution of syntactic (sentential) focus and presupposition in single expressions is neither a random, extra-grammatical phenomenon, nor is it overlaid by, or dependent solely from, discourse-motivated focal stress. Rather, syntactic (sentential) focus in German is structurally determined in the sense of Universal Grammar.

Thesis 2: The (Textual or Discourse) Null Hypothesis suggests - likewise in disagreement with traditional as well as modern linguistic assumptions - that the distribution of discourse rheme and theme is neither a random, extra-grammatical, such as, for example, a semantic or encyclopedic, phenomenon. Rather, there is an intricate, but well-motivated interplay with the syntactic (sentential, and thus structurally determined) focus and presupposition structure of the single sentence. The (partial) account of the interplay between the two stress mechanisms in terms of Universal Grammar appears to be a function of the degree of refocussing, i.e. movement alternatives that cooccur obligatorily with new stress patterns. The identifiability of textually felicitous prominence is warranted by contrastive accent in the case that the grammatical distribution of syntactic (sentential) focus and presupposition deviates from the textual prominence requirements.

Note that what *Theses 1 and 2* amount to is the claim that there is no fundamental distinction between (sentential) focus(/presupposition) and (textual) rheme(/theme) and that, ideally, (textual) rheme can be accounted for in terms of the (sententially determined, basic) focus position and its derived positions, respectively. In what follows I shall discuss in more detail the postulates under *Theses 1 and 2*.

Let us take up the aforementioned two types of prominence and background, or presupposed: syntactic (sentential) focus vs. presupposed and their exponents; and textual or discourse rheme and theme. Focus and rheme will in general not be identical as we have seen above (examples (1)-(4)). What, then, are the identifiers, or - as we shall also say - *exponents*, of focus and rheme?

3.2. The structural properties of sentential (phrasal) focus

The sentential focus exponent is the structurally identified element carrying the grammatical sentential, or phrasal, stress (grammatical accent = GA, henceforth), as opposed to contrastive accent (CA), which is grammatically identified only insofar as it

deviates from GA AND is text-felicitous. GA presupposes the smallest range of context restrictions. In other words, GA is the result of textual felicity without changing the syntactic (sententially/phrasally) motivated focus. Ideally, the GA distribution does not presuppose any specific context. Furthermore, it will consider any precontext, or question, with the widest projection of focus.⁵ Intuitively speaking, the GA-distribution characterizes a sentence, or phrase, "out of the blue". This assumption is widely shared in the literature, notwithstanding the fact that assumptions and conclusions other than ours - among which that focus (and rheme) may not be dealt with in terms of the structure of the sentence - may be opted for. See, among many others, Newman 1946; Bolinger 1961, 1972; Bierwisch 1966, 1968; Kiparsky 1966; Chomsky/Halle 1968; Berman/Szamosi 1972; Bresnan 1972; Lee 1975; Schmerling 1976; Libermann 1978; Fuchs 1976; Gundel 1977; Erteschik-Shir/Lappin 1983; Bing 1979; Höhle 1982; Jacobs 1982; Lötscher 1983; Dell 1984; Gussenhoven 1984; Selkirk 1984; Swedek 1986; Bardovi-Harlig 1986; Rochemont 1986; Kim 1988; and Cinque 1990.

There have been several attempts at defining "normal sentential/ phrasal stress" (= GA) in structural terms: see the NUCLEAR STRESS RULE ("NSR"; Halle/Vergnaud 1987; NSR presupposes subrules such as the STRESS EQUALIZATION CONVENTION and the REVERSE NSR working under conditions of cyclicity). These rules are dependent on the branching direction of the specific languages. In other words, it is stipulated that, for left-branching German, NSR works differently from right-branching English or French⁶. For German, then, we would be required to appeal to the inverse of the NSR, a rule which is necessary for compounds in German as well as in English (Compound Stress Rule, CSR). But this is counter to the evidence. German displays the essentially the same distribution of phrasal focus/stress as English, namely rightbound. This in itself indication enough that NSR is not likely to be the answer to the focus phenomena which are so much alike in right-branching English and left-branching German.⁷

The Null-Hypothesis with respect to phrasal prominence, however, makes no such parametrizing stipulation. Its main assumption, generalizing essentially an idea developed by Cinque 1990, is possibly universal and reads in the following way, (5a-c).

- (5)a The head of the D-structurally deepest-embedded lexical constituent carries GA and, consequently, has focal status.

Note that the place of the unmarked focus is structurally determined irrespective of whether it has argument status or not. Thus, the definition does not exclude adjuncts generated adjacent to V in last position. See the illustrations in (1)-(4) above.

(5a) is not sufficient, however. What we would like to account for beyond the right-hand identification of the structural focus location is the empirical fact that subjects usually do not carry unmarked focus, but, rather, are exponents of contrastive stress if they realize focus. This is taken care of by (5b).

- (5b) There is no X^0 under XP such that X in
 $[\alpha \dots X \dots [{}_{VP} YP V]] \dots X \dots]_{\alpha}$,
 for the projection path relation $\alpha > VP$,
 carries GA and is therefore the focus exponent of the phrase, XP.

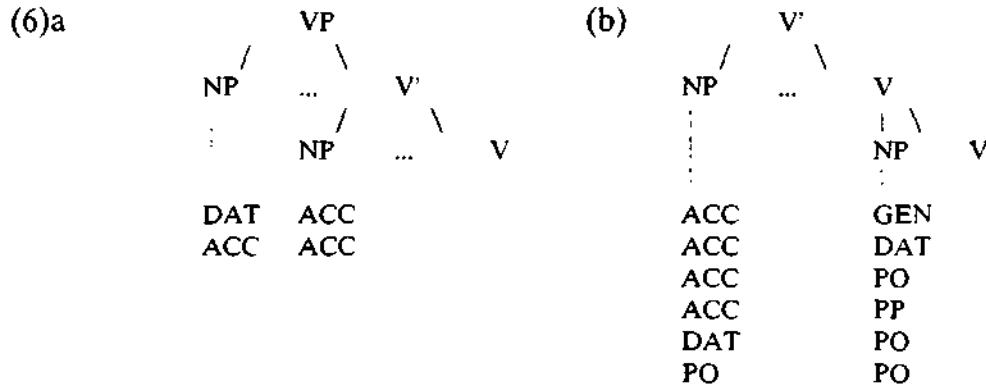
What (5b) states is that no other NP other than one from within VP is eligible for the assignment of unmarked focus in terms of (5a). In other words, the structural place [Spec, IP], the normal location of subjects in German, cannot carry unmarked stress since it is outside of the VP⁸. Under the configuration that no other constituent is contained in VP, V will take unmarked focal stress since it is the deepest constituent. Note, specifically, that another prediction would seem to follow from (5b). Categories that are not tolerated within VP for their inherent properties, i.e. elements that have to move out of VP, will never be candidates for carrying unmarked focus. If they do their focus exponency will be that of contrastive focus. This prediction bears out, as we will see, for constituents that bear inherently characteristics like specificity and definiteness or elements that lack these characteristics, respectively.

The observations made in connection with (1)-(4) permit one more empirical generalization to be added to the basic insights in (5a,b). What (1)-(4) show is that context felicity for a limited number of clausal constituents is yielded only under unmarked focus for that constituent which contains the felicitously arranged contexts constituents. In other words, the focal projection range (the widest focus projection under some specific structural focus position) can be calculated only if the exact structural place of the unmarked focus is determined. This is the job (5a,b) have to do. What we have called the "focal projection chain" in connection with discussing (3)-(4a,b) is just a pretheoretic notion serving merely a generalizing descriptive purpose. All depends on whether or not (5a) and (5b) can be corroborated by detailed structural analyses of the four main categorial constituents in the clause: VP; NP; AP; and IP. These are the steps that we will be guided by in our empirical investigation into the focus structure of the different constituent configurations. For the rest, (5c) repeats, for purposes of convenience, the conditions we observed to hold for unmarked (neutral) focus and, consequently, for the extension of wide focus.

- (5c) (i) Focus ambiguity is induced from the lowest constituent-head in the clause structure upwards.
 The focus projection is blocked unless.
 (ii) the focus lies on the element adjacent to the basic V-position (in the German clause);
 (iii) this element has head status;
 (iv) the focus element belongs to an argument constituent (i.e. it must be properly governed (L-governed) by the main finite verb).

If, and only if, the conditions (5c)(i)-(iv) are met together focus ambiguity, or wide focus as opposed to narrow focus, will arise as illustrated. Note that wide focus always correlates with neutral, unmarked focus, while narrow focus does with contrastive (semantic) focus.

Since (5a-c) applies to the basic configuration of the German sentence, and since the "middle field" in German (VP and its immediate domain to the left below CP) is subject to verb- classificatory restrictions, (6) sketches the two⁹ basic sentential configurations of German sentential case patterns (I follow, with one essential deviation⁶, Czepluch 1991: 166).



The dots in (6a,b) mark the linear positions reserved for adjuncts. German is binary-branching, and it has a hierarchical VP with a (non-recursive) V', with the specific cases restrictively distributed under these syntactic nodes dependent upon verbal classification. Note that adjuncts can occur in all positions inside of VP, even directly adjacent to V' depending upon verbal classes. It is easy to see that an account of the placement of unmarked focus cannot be given in terms of argument positions only. It, in accordance with (5), it is the most deeply embedded position carrying unmarked focus, then, clearly, this position can be an adjoined position for an adjunct as well. This is in line with the evidence of focal distribution both in German and in English.

As is to be noted, the principle in (5) relates exclusively to X-projection theory. In other words, (5) is neutral with respect to the the direction of branching and/or the direction of government of the head, for example, of VP.

The generalization in (5) is in need of some exemplification. Note, first, that phrasal focus in independent German clauses lies on the clause-final element, as opposed to embedded clauses where it lies on the pre-final element. See (6). [CAPS for stress position; note the respective GAs for the English versions, which are always clause-final.]

- | | | |
|------|---|-------|
| (6)a | Er schob [_{VP} den KINDERWAGEN] | ...GA |
| | he pushed the BUGGY | ...GA |
| b | Sie ließen [_{VP} die Kinder in den GARTEN laufen] | ...GA |
| | they let the kids into the garden run | |
| | "They let the kids run into the GARDEN" | ...GA |
| c | daß er [_{VP} den KINDERWAGEN schob] | ...GA |
| | that he pushed the BUGGY | ...GA |
| d | daß sie [_{VP} die Kinder in den GARTEN laufen ließen] | ...GA |
| | that she the kids into the garden run let | |

"that they let the kids run into the GARDEN"

...GA

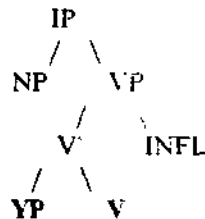
This, however, can be aligned in that (5) appeals to the D-structural position of finite V, which is always clause-final. The following subsections, following in great lines Cinque (1990), take up the 4 lexical and the two functional phrasal categories and their maximal projections (VP, AP, NP, PP; and IP, CP, respectively) and define the place of the focal element within, and in relation to, these categories.

3.2. The structural position of focus/GA in the lexical and the functional maximal projections.

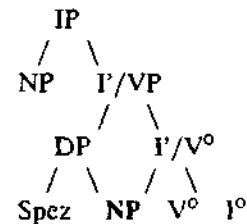
3.2.1. The verbal phrase, VP

In the case that the phrasal focus in German lies on the XP which is left-adjacent to V (see already Stechow/Uhmann 1985: 315; Grewendorf 1988, section 4. 3.), the position of GA is accounted by the Null-Hypothesis in that phrasal stress lies on the most deeply embedded constituent within VP. See (5) above. In German this is the maximal constituent left-adjacent to the basic position of the lexical V^0 , thus the sister-constituent to V^0 . See (8) with XP, or, more specifically, the head of XP, in the structural GA-position. XP is the rightmost and most deeply embedded maximal constituent. Its position is predicted by the (surface-oriented) NSR if the rule co-opts the structural restriction on embedding as defined in (5). See (8a) and (8b), both base structures for the dependent and the independent sentence in German, where (8b) fuses the V- and the I-projections, under inflection of the verb, in accordance with Bayer/Kornfilt 1989.¹⁰

(8)a



(8)b



Inevitably, the sister constituent to V is the deepest clausal constituent, as in (8a), or at least its head is the deepest, as shown in (8b). As for the structural position of GA in XP in (8a, b), the Null-Hypothesis (see (5) above) is not satisfied (counter to Cinque 1990) in the case that YP is not in its base position, i.e. if, for example, YP is derived by object inversion ("scrambling"). See (9) below where one has to assume refocussing (new focus distribution enforced under movement) in the German middle field (IP without V-final, according to the German grammatical tradition) and in topicalized positions. If scrambling always goes with refocussing (or, in other words, if refocussing is focus-movement and not inversion without new focus assignment) then it follows that there is no interesting notion of scrambling in German. This is exactly the position I advocate (see for an identical assumption Höhle 1982: 126).

It can easily be shown what the effect of the Null-Hypothesis is with respect to the underlying V-last order in the German clause. Note that (5) leaves open the option that V hosts GA itself in the case that no [NP,VP] is present (as in the case of empty VPs). See (10a) [CAPS designate focus; iV = intransitive verb; tV=transitive verb; eV=ergative ("unaccusative") verb]

One-place predicates:

(9) predicatives:

subject-verb or subject-adjective/nominal constituent (NP)-copula == >
 == > subject-PREDICATIVE

- | | | | | | | |
|-------|------|-----------|-------|---------------|------------------------------|----|
| (10)a | daß | Erich | | <i>LACHTE</i> | ... | iV |
| | that | Eric | | laughed | | |
| | b | daß | Erich | | <i>ARZT war</i> | |
| | | that | E. | | (a) doctor was | |
| | c | weil | sie | eben | <i>TROTZIG sein wollte</i> | |
| | | since she | | | PARTICLE obstinate be wanted | |

This includes the subjects of unaccusative verbs, since these move out of VP (to pick up nominative case, or according to the Extended Projection Requirement). Pre-empted Vps carry focus themselves as do iVs; see (10) above.

Many-place structures:

(11) VP-internal NPs: DO (but not "unaccusative subjects" despite their deep DO-status):

(XP)-[_{VP} YP-arbitrary constituent-verb] == >
 == > (XP)-[_{VP} YP-ARBITRARY CONSTITUENT-verb]

- | | | | | | |
|-------|-----|------|--------------------------------|----------------------|------------------|
| (12)a | daß | sie | sich den FILM | <i>ansah</i> | ...tV, Nebensatz |
| | b | Sie | <i>sah</i> sich den FILM | <i>an</i> | ...tV, Hauptsatz |
| | c | weil | ihn der MARSCH | <i>interessierte</i> | ...eV, NS |
| | d | Ihn | <i>ärgerte</i> die laute MUSIK | | ...eV, HS |

In other words, the structural sister position to V⁰ is the locus of phrasal focus, or GA.

Two things will readily be noted by the reader. First, the GA with definite object-NPs is ambiguous between the object-GA or the V-GA, intuitively without priority of one over the other. This may be due to the fact - alignable with the Null-Hypothesis in (5) - that if the object-NP carries GA it is within the VP, otherwise its position is outside of VP.¹¹ Note that this option is not present for indefinite object-NPs, which are always within VP and, consequently, invariably carry GA. See (12e,f) and compare with (12a) above.

- | | | | | | |
|-------|-----|------|----------------------------|--|-------|
| (12)e | daß | sie | sich den Film _i | [_{VP} [_{V^e} [ANSAH]]] | ...GA |
| | f | *daß | sie | einen Film ANSAH | |

If adverbs like *oft* "often" have scope over VP at the least, if not wider, then it would be expected that indefinite NPs can never occur left of such adjuncts; and, according to our assumption, that definite NPs must always occur to the left of this wide adjunct. This is borne out. See (12g,h) below. Note that the grammaticality rating of (12g,j) is under GA.

- (12)g *daß sie sich [_{VP} oft [_{VP} den FILM ansah]] ...GA
 h daß sie sich [_{VP} oft [_{VP} einen FILM ansah]] ...GA
 j *daß sie sich den FILM [_{VP} oft [_{VP} ansah]] ...GA
 k daß sie sich den Film [_{VP} oft [_{VP} ANSAH]] ...CA

This yields the generalization that definite objects permit both maximal and narrow focus projections under GA, whereas indefinite objects allow only a maximal focus projection, *ceteris paribus*.

One more generalization is called for. Note that adjuncts, if in V-adjacent position - which is the unmarked position for a wide class of V-modifying adverbs - obtain the focus position and may even replace definite direct objects in this function. See the following examples with directional verbs of movement, i.e. where the adjunct takes over an integral part of the meaning of the movement verb. Compare above all (13a,c) and (13b,d), respectively, which differ only in that the adjunct is directional in (a,c), but static-local in the (b,d)-versions. This is responsible for the sketched asymmetry. [CAPS denote focus; GA = grammatical accent/ focus; CA = contrastive/semantic focus]

- (13)a daß sie [_{VP} mit Stiefeln [_{VP}[_V in die WOHNUNG [_V kamen]]] ...GA
 that they with boots into the FLAT entered
 b daß sie mit Stiefeln in die Wohnung EINtraten ...CA
 c daß sie mit St. [_{VP} in der WOHNUNG [_{VP}[_V herumliefen]]] ...CA
 "that they ran around in the FLAT with boots"
 d daß sie [_{VP} mit St.[_{VP} in der Wohnung [_{VP}[_V HERUMLiefen]]]] ...GA
 (14)a um die Kinder [_V in den GARTEN [_V laufen zu lassen]] ... GA
 for (to) the kids into the garden run to let
 b um die Kinder in den Garten LAUFEN zu lassen ...CA
 (15)a bevor er den Kinderwagen UMstieß ... tV, GA
 before he the buggy over-pushed
 b bevor er den KINDERWAGEN umstieß ...CA

Note that the distribution in the examples so far is not one between ungrammaticality versus grammaticality, but one between different, and distinct, context felicities: CA, the marked focus versions, presuppose more specific links with some prior context, and thus restricts the set of compatible prior texts, whereas GA, the unmarked version, is compatible with less specific contexts and, most prominently, with null contexts. It is not to be assumed that all languages share with German this property of contextual adaptation via focus movement. What is to be expected is that, dependent upon the specific movement and constructional restrictions in the various languages, more ungrammatical, or fewer marked, variants are to be found. We will discuss a few English variants and their counterparts in German below.

The Null-Hypothesis excludes non-lexical verbs as GA-carriers. See (16) which is marked for GA. Accordingly, other focus distributions, as for example on the auxiliaries

scheinen "appear" or *können* "can", would have to go with contrastive stress (CA).

- (16) daß Gerhard das Buch INTERESSANT zu finden scheinen könnte ..GA
 that G. the book interesting to find appear could
 "that G. could appear to find the book INTERESTING"

The lexical head of VP in (16) is *finden*. *scheinen* and *könnte* have the status of AUX- and semi-copula, respectively. They are not recognized as lexical heads by the Null-Hypothesis.

The distinct distributional differences between definite and indefinite NPs warrant the conclusion that definite NPs, non-tonic (phonetically weak) pronouns and pronominal clitics, as opposed to indefinite and unspecified NPs, are not to be base-generated in the VP (see also Abraham 1991). See (17a-d) with grammaticality judgments on the basis of a GA-characteristic. [CAPS designate NP-status; non-caps = unstressed pronouns/pronominal clitics.]

- (17)a [_{Co} daß [_{SpecAgrS} er [_{SpecAgrO} (den) Kindern oft [_{VP} BONBONS schenkte]]]]
 that he the-DAT kids often goodies gave ...DAT + Adv + ACC
 "that he often gave the kids GOODIES"
 b *daß er Bonbons oft [_{VP} (den) KINDERN schenkte]
 that he goodies often the-DAT kids gave ..*ACC + Adv + DAT
 c *daß Bonbons sie ihm schenkten ...*ACC + nom + dat
 that goodies they him-DAT gave
 d daß [_{SpecAgrS} sie [_{SpecAgrO} ihm [_{SpecAgrO} die Bonbons [_{VP} [_V ohne NEID [_V schenk-
 ten]]]]]]]]
 that they him the goodies without envy ...nom + dat + ACC + Adv

Pronouns carry contrastive stress only by exception, mostly in topicalized position, if that position is not excluded in the first place. What counts here is that (17) shows that pronouns and their clitic forms cannot occur anywhere except in IP (AGR-P) or in right-adjunction to COMP, respectively. This appears to be in line with the observation that (unstressed) pronouns (and their clitic manifestations) cannot carry GA. See (17c) vs. (17d). Consequently, they never represent focal (or rhematic) material on the strength of their categorial status, but, rather, prototypical grounding (presupposed, thematic) material linking their clause to some previous context. Note, by the way, that these unstressed categories can never occur in detachment to the right, which is a domain for other grounding, namely non-presupposed, or thematic, elements. This just confirms their typical status as grounding AS WELL AS presupposed (= text-linking) elements. They are thus excluded from the structural GA-position as defined according to the Null-Hypothesis. Note also that, according to their VP-external position, they appear to share the status of definites rather than indefinites.

(17a-d) show also that scrambling in German is not neutral to the distribution of focal stress. I have argued above that much, if not all, of scrambling in German occurs under refocussing restrictions and that it should accordingly be termed *focus movement*.

Note, finally, that (17d) shows that not only arguments, but also non-arguments, such as adverbial adjuncts, can carry GA. This is not excluded by the Null-Hypothesis since it defines as GA-position the most deeply embedded node under the head of the formally governing (not L-governing!) constituent.

(18), finally, is meant to show that in German only contrastive stress, not however GA, can warrant the acceptability of certain linear orders. As far as the narrow concept of object scrambling is concerned, this observation would confirm our conclusion drawn above that scrambling in German is not possible without refocussing, and, consequently, would have to be replaced as a descriptive term, by focus-movement.

- (18)a Sie hat WILDSCHWEINE_i den Kindern_j [_{VP} e_j e_i gezeigt] ...ACC+DAT
 she has wild boars the-DAT kids shown
 "She showed the kids wild BOARS"
- b *Sie hat Wildschweine den KINDERN gezeigt ...*ACC+DAT
 she has wild boars the kids shown

(18) shows one more time that indefinites (as well as non-specifics) may remain inside the VP, while definites (and specifics) must move out. While the indefinite accusative object can move to the left only under simultaneous refocussing (displacement of phrasal stress yielding CA in this case) as in (18a), de-accentuation under the same linear order cannot be maintained as (18b) illustrates. Similarly, (19a) below is unacceptable unless proper, grammatical focussing takes place yielding (19b), or unless, under radical movement, the presupposed element is put in topicalized position such as to oust the focal element from the clause-initial position and put it within the reach of the focus projection within VP; see (19c).

- (19)a *Jede Hilfe kam für die Lebensmüde zu spät ...flat accent!
 any help came for the weary-of-life too late
 "For the suicidal candidate, help was too late"
- b Jede HILFE kam für die Lebensmüde zu SPÄT
- c Für die Lebensmüde kam jede Hilfe zu SPÄT

No doubt also purely lexical characteristics play a role in the distinction between typical presentative (all focal/ rhematic) and predicative (split between property and individual argument characterized by this property) clauses. The following examples are due to Ickler (1990: 18). Any focus assignments other than those signalled yield infelicitous text representations.

- (20)a Was IST? ...*perspective of existence - all-focus clause*
 what is (it)
- b Das TAXI kommt/Die SONNE scheint/Meine BRIEFTASCHE ist weg
 the cab comes the sun shines my wallet is gone
 "the cab is coming/the sun is shining"
- c Was ist da LOS?
 what is there on
- d Das RADIO läuft/ANNA wird GEKITZELT
 the radio is running/A. is being tickled
- (21)a Was IST das? ...*perspective of characterization - split between focus and presupposition*
 what is that
- b Otto GEIGT
 O. is playing the violine

- c Was FEHLT dir?
 what's wrong with you
 d Das Kind ISST nicht richtig/Anna LÜGT
 the child does not eat/A. is lying

The predicates under (20) appear to be classifiable as *descriptions of events or states designating the existence of some individual entity*, such as verbs or predicates of (dis)-appearing and of the type of human behavior characteristic of subject referents. Verbs such as those in (21), on the other hand, can be classified as *property assigning predicates*. Verbs of the type in (20) stage *dynamic entities*, whereas those in (21) stage *static* ones: their existence is presupposed, as opposed to those in (20), whose existence is newly stated (Ickler 1990: 18). Other languages draw the same lexical differences: see, for Spanish, Hatcher (1956) and Contreras (1976), for Dutch Kirsner (1979), for Japanese Kuroda (1972), and for German Krifka (1985).

There are also other verbal classes, such as *stage setting vs. individualizing verbs*, which show a strikingly distinct behavior under phrasal focus. The consequence of the Null-Hypothesis with respect to these lexical verbal classes is sketched in (22). Note that (22) invalidates Höhle's (1982: 126) more general observation that *any* movement from a base position yields CA.

- (22) Under topicalization to CP and "scrambling" in the German middle field, all elements have to occur under refocussing (contrastive accent) except for those elements which are base-generated outside of VP (such as the subject and some, but not all, types of adjuncts).

This does not hold, however, for elements and constituents extraposed to the right end of the clause. The relation between structural order and prosody is thus sensitive to movement to the left, for left-branching German, but not for movement to the right. See (23).

- (23)a Er ist [_{AP} t_i STOLZ [_{PP} auf seine Kinder]_j] ...GA
 he is proud of his kids
 b Er ist stolz auf seine KINDER ...extraposition, CA
 c Er ist auf seine Kinder STOLZ ...GA

For a further discussion of the focal behavior of adjectives and their complements see the following subsection.

3.2.2. The Adjectival Phrase in attributive and predicative function

In general, German adjectives select pure (i.e. prepositionless) case dependents to the left, in agreement with the general direction of government in German. As far as prepositional objects go, however, both positions, after and in front of the adjectival head, can be observed. As we have seen, extrapositions are not sensitive for refocussing; cf. (23a).

As has been indicated above, however, APs seem to defy the Null-Hypothesis. The blem is that, beyond doubt, in the case of pure case selection it is not the deepest

embedded NP, but the head of the predicative AP that appears to carry grammatical focus (GA). See (24a) below. According to the Null-Hypothesis, though, the case-governed NP within the AP-predicate should carry focus. There is indication, however, that pre-adjectival complements have to be taken as adjuncts to VP, if not higher in the structural tree (Webelhuth 1989, chapter 6; Tappe 1990). In other words, they cannot be taken to remain within A' (Cinque 1990: 20). This, then, yields the head of the AP as the deepest node, as required by the Null-Hypothesis, and thus qualifies this head as the carrier of the grammatical phrasal focus, GA. See (24).

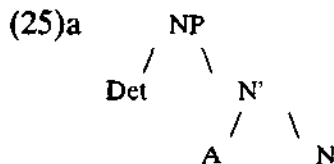
- (24)a Sie scheint [auf ihre Kinder][_{AP}[_{Spec} außerordentlich STOLZ
 she seems of her kids extraordinarily proud
 b *Sie scheint außerordentlich auf ihre Kinder STOLZ
 c Sie scheint außerordentlich STOLZ auf ihre Kinder
 d daß er auf seine Kinder STOLZ zu sein scheint
 that he of his kids proud to be seems

The Spec of AP, *stolz* "proud", must not remain to the left of the complement of A, *auf ihre Kinder* "of their kids"; see (24b). What we are confronted with is the acceptable order of elements "complement-SPEC-governing head", not, however, the order "SPEC-complement-governing head". This leads us to assume that AP-governees are in any case higher than the head of the AP. Note that the Null-Hypothesis in (5) predicts: first, the complement is in the governing domain of α , but not within the predicative VP; and, second, in the case there is no governee within VP or predicative, the focus, GA, is assigned to the head of the predicate, in our case A^o. See once again (5) above. As (24d) shows, only some lexical X^o can function as a structural host of focus (GA).

Following this analysis, true adjuncts within AP cannot host GA, as opposed to adjuncts within VP. See (24e-h).

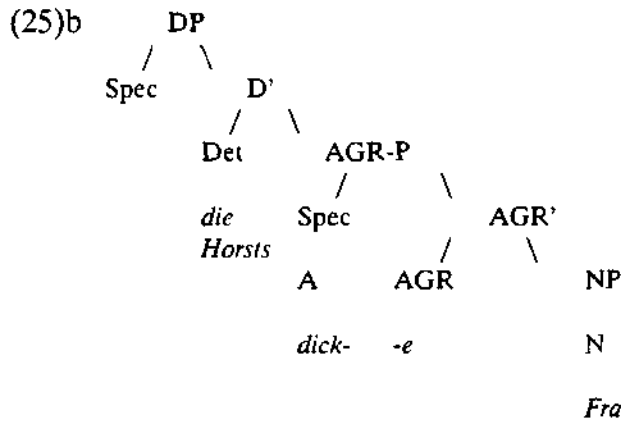
- (24)e weil Peter [_{VP} Almosen [_{PP} OFT] gab] ...CA
 since Peter alms often gave
 f *weil Peter auf seine Kinder stolz IMMER war
 since P. of his kids proud always was
 g weil Peter auf seine Kinder IMMER stolz war ...CA
 h weil Peter <immer> auf seine Kinder <immer> STOLZ war ...GA

While the analysis of predicative adjectives is pretty much forward, adjectives in attributive function do not seem to support the Null-Hypothesis at all since A and N within an NP are commonly analyzed to be of equal depth irrespective of whether one opts for the traditional NP-analysis or Abney's DP-analysis. See (25a).



According to Cinque (1990), however, the NP-structure, at least in α to be enriched considerably to account for inflectional morpholog

adjective and the noun. German is one of those languages (viz. the indigenous grammatical term "Beugungsmorphology"). The idea is to generate A and N under one common maximal functional node taking care of the AGR(ement)-markers on the two zero-categories. By this the head N receives a deeper structural position than A, which is what we need for the assumptions of the Null-Hypothesis to be met.



(adapted from Cinque 1990: 23)

What this shows furthermore is, first, that the syntax has to be accounting for morphosyntax in ways that reflect the syntactic structure above the zero-level: and, second, that any syntax that is purely surface-oriented will not be able to render accounts in an empirically satisfactory fashion.

3.2.3. The Nominal Phrase, NP

The locus of GA is always on the last, most deeply embedded (head of the) constituent, as long it is lexical. This holds for postnominal subject genitives as well as adverbial modifiers. See (26).

(26)	Det	N	Adjunct
a	das	Wort	des MONATS
b	das	Wort	des Monats von B. CARSTENSEN
c	die	Heimat	in DEUTSCHLAND
d	[_{DP} [_D das [_{NP} [_{N'} Wort] [_{PP} [_{DP} des [_{NP} [_{N'} MONATS]]]]]]]]		
e	[_{DP} [_D das [_{NP} [_{N'} Wort] [_{PP} [_{P'} von [_{DP} CARSTENSEN]]]]]]]]		

The appositive PP-adjunct clearly is deeper than the head N in DP (Giorgi/Longobardi 1991). See (26d).

In the case of prenominal appositions, genitives and adjectives, the focus, GA, always lies on the nominal head, N. This is true also for NPs without an article word. The locus of this focus, carrying GA is predicted, by the Null-Hypothesis, irrespective of whether we choose an X'-analysis for the attributive adjective or the genitival attribution, or a more complex one accounting for agreement features¹² as suggested by Cinque (1990). See (27) for a more conservative analysis and (28) for a more complex one with

functional projections (FP). What remains, however, is that the head, N, is the most deeply embedded category.

- (27)
- | | Det | Adj | N | Adjunct |
|---|---------------------|----------|--------|----------------|
| a | <die> | böse <n> | ZUNGEN | |
| b | Peters _i | | HUT | t _i |
- (28)a [DP die [AGR-P [A böse- [AGR -n] [NP [N' ZUNGEN]]]]]
 b [DP [DP [D' Peters [NP e]]] [AGR-P [A AGR [NP [N' HUT]]]]]

Compare also (25) above. Both in (27) and in (28), with the adjectives in the Spec-position of the first functional projection (or congruence projection), F, the N-heads are always the most deeply embedded constituents, which, as predicted by the Null-Hypothesis, carry the phrasal focus, GA, and, consequently, have the status of the syntactic (sentential) focus. Note that it is assumed that the genitive name *Peters* in (27b) has been raised from its basic postposed position. In the absence of a phonetic form in the emptied position the next deepest realized position, *Hut*, is in the focus position in accordance with the Null-Hypothesis.

A similar analysis is assumed for adjuncts of adjectivals and a certain class of verbal adjuncts. Viz. the bold face elements in (29).

- (29)a ([AP [_{Spec} **ungemein** [A' BELASTBAR]]] sein
 extraordinarily resilient be
 b [daß [JP sie [VP **böse** [VP [V' SCHAUEN]]] will]]
 that she mad look wants

3.2.4. Separable verbal prefixes and "affixoids"

I take over van Riemsdijk's (1988) assumption that those components of verbal lexicals, which always carry the (word) accent, are not part of complex lexical units, but, rather, heads of intransitive PPs. The heuristic reason for this assumption is the very fact that they are separable. This being so, the distribution of stress is a question of syntactic (sentential) accent and, thus, GA versus CA, not, however, one of word accent. This, in turn, forces us to show in how far this is predicted by the Null-Hypothesis. In other words, it has to be demonstrated if indeed, according to our formal generalization in (5), the phrasal focus, GA, falls onto the verbal prefix, and that the prefix is more deeply embedded than the verbal stem. (30c) exemplifies what has been called in traditional German grammar writing a "verbal affixoid".

- (30)a Ich möchte meine Mutter nicht [[PP [P AUF]] [V regen]]
 I will my mother not ex- -cite
 "I do not want to irritate my mother"
 b Ich rege meine Mutter nicht [[PP [P AUF]] [V t]]
 I -cite my mother not ex-
 c Ich lasse meine Mutter nicht [[PP [P LOS]] [V t]]
 I let my mother not loose

The PP is embedded more deeply than the head of the VP, V. This is in agreement with

what the Null-Hypothesis predicts.

3.2.5. The functional categories, IP and CP

IC and CP complete the picture sketched so far. In German, I is selected by VP in terms of leftward-government, while IP is governed by C in terms of right-directed government. In root clauses (independent as well as dependent, as far as verbal classes are concerned) the most deeply embedded (transitive) object carries focus, GA. Note that in independent clauses superficially (however, not structurally), the direct object may be in the final position, whereas in dependent clauses it occurs inevitably in prefinal position. Viewed from the base structure, however, this is completely predicted by the Null-Hypothesis. In embedded clauses with a filled COMP-position, the NP within the VP carries the focus, GA - and thus has the discourse function of the Rheme, RH, for some context yet to be determined -, as the structurally deepest element. In one-place constructions, as in (31a), V_0 receives the GA, according to the Null-Hypothesis since the VP is preempted and has no material for refocussing. This holds as well for topicalization of V' together with auxiliaries. See (31b).

- (31)a da [_{IP} er ja schon [_{VP} so gut [_V LESEN]] können will]
 since he PART already so well read can wishes
 "since already he wants to read so well"
 b [_{CP}[LESEN können wollen]_i]_C hat[_{IP} er es NICHT VP_i]]
 read can wish has he it not
 "As goes for reading, that he did not wish to be able to"

Negation and its different types of expression are a chapter in themselves. My assumption is that negation always evokes contrastive focus and, thus, refocussing irrespective of its status as sentential or constituent negation (for a discussion of the latter in contexts like the present one, see Abraham 1992). This appears to carry over to the different types of scope-extending adverbials also.

4. Discourse-functional focus: the assignment of Rheme

4.1. Exposition

In its commonest sense focus is a phenomenon that relates to the semantic interpretation of a sentence to the extent that some specific part of the sentence receives semantic prominence in that it contains unexpected information. This generalization covers both constituent focus as well as sentence focus. In this article, we have considered syntactic (sentential) focus only. Section 3 dealt with the question how the locus of focal accent was to be determined for null-contexts. The question to be tackled now is how focus can be predicted, in any systematic way, for context-bound expressions. Everything we have said so far about the division of persuasions in the field relates in fact specifically to this question, the main conviction being that the assignment of context focus, or Rheme, is, at best, a matter of some as yet undetected grid of textual conditions, or, at its worst, based on our encyclopedic knowledge. Note that the latter

position appears to lead to the absurd in that the understandability text-bound speech would then be a matter of the knowledge of individuals. This would no doubt constrain the quality of the social instrument of language in a disastrous way, which is counter to fact.

Yet, there is still a variety of approaches that opt for a systematic and language internal mechanism (see, for example, von Stechow/Uhmann 1982, with a thorough discussion of several other approaches). Invariably, as far as the different suggestions could be tracked, Rheme is selected on the basis of a hierarchical scale consisting either of syntactic sentential functions or of semantic roles (von Stechow/Uhmann 1982: 315).

In the present article, no such hierarchy is presumed. Rather, I assume that the discourse-functional focus position can be derived along the following lines:

1. Where focus according to the (syntactic) sentential focus representation, SFR (section 3), and discourse focus representation, DFR, are congruent, the basic order of elements and the maximal focus projection accounts for the discourse distribution of focus.
 2. Where the foci under SFR and DFR do not match congruently, DR specifies some focal projection beneath maximal of SFR.
 3. Where according to DR the grammatical structure of some single sentence does not allow CA (refocussing), this will require either
 - (a) some syntactically different construction, or
 - (b) that the focus projection in the single sentence under DR is taken over by some exponent which, according to SR, accounts also for some other focal projection. In other words, we consider the scenario that some focus position, which is unmarked normally, may receive the status of a marked focus exponent. One example for such a scenario is an all-rhematic clause in DR, which has nevertheless has structural focus.
- 3a. above is illustrated by cleft- and pseudo-cleft constructions as well as hanging topics. As for 3b. above, the following subsections, 4.2. and 4.3., will provide exemplary material.

4.2. Some observations about the interface between the sentential representation level and the discourse representation level

Let us first look at focus assignments that are a little more complex contextually. Note that the distribution of the foci is asymmetrical in the first and the second of the two context-bound sentences below.

(32)a Er hätte ja ZEIT, aber er MAG keine Mädchen.

he'd have time but he likes no girls

"He'd have time alright, but he does not LIKE girls"

b Kennst du "Blue STEEL"? - Nein, ich GEHE nicht ins Kino.

"Do you know 'Blue Steel'? - No, I don't LIKE movies.

There is contrastive accent, CA, in the second clause under clause structural conditions since the indefinite objects should carry clausal accent. How is that to be accounted for given the neutral focus exponent in the first sentence?

Note, first, that German need not appeal to some restructuring mechanism since German can accommodate a variety of clausal linear orders within some context merely

by refocussing, i.e. changing from GA to CA without (superficial) linear change of the linear order. Needless to say, however, that the assumption valid for German need not have the same validity for other languages.

Let us briefly speculate as to what the conditions could be like under which an interface between the clausal syntax and its discourse representation should be operative? See the following semantic structures in (33) representing approximately the most salient aspects of (32a,b)? ["-->" for 'presupposes as antecedent']

- (33)a for all x,y: x has time --> x can see y
 x mag keine y (girls)
 therefore: x has no time for y (girls)
- b question: does x know a particular movie --> x goes to the movies
 x does not go to the movies
 therefore: x does not know the movie mentioned by the speaker

The foci in these expressions lie on the predicates; the referent-arguments are presumed to be known. This is what *aber* "but" and the *nein*-answer convey. That German is able to obtain text accommodation of the postcedent clauses in (33a,b) by means of refocussing is possibly a specific characteristic of German and is certainly not one shared by just any other language. Note that CA is possible on the strength of the unmarked GA assignment under structural identification. The important conclusion to be drawn for German from this is that no autonomous discourse level of representation is necessary. Rather, the distribution of CA, as opposed to GA, may be derivable from such semantic interpretive configurations as those in (33).

Let us further see what the discourse correlates are for the phenomenon that weak pronouns and their clitic representations have to leave VP (possibly universally) and, consequently, move to less rhematic, i.e. more thematic, or presupposed, positions. Note that it is beyond doubt that weak pronouns and clitics are prototypical text linkers. It has been argued (Abraham 1991) that such weak pronouns and pronominal clitics obligatorily move outside of VP to AGRS⁰ and AGRO⁰, respectively. [PREF = verbal prefix; CAPS denote focal stress]

- (34)a Heute [_C laden [_{SpecAgrS} wir [_{VP} IHN ein t]]]
 today invite we him PREF
- b Heute laden ihn WIR ein
 today invite him we PREF
- c Heute [_C laden [_{SpecAgrS} WIR [_{SpecAgrO} ihn [_{VP} ein t]]]
- d *Heute laden IHN wir ein
- e *Heute laden ihn wir EIN

Let us assume that the weak subject pronoun, *wir* "we", generally moves to AGR-S, while the weak object pronoun *ihn* "him" settles in AGR-O. Only the strong (accentuable) pronouns may retain their original positions within VP; see (34b). If the weak subject pronoun obtains the AGR-S position, the topicalized strong(stressed) object pronoun, *IHN* "him", would have no landing site left between COMP for the finite verb and the weak subject pronoun; see (34d,e). This accounts for the ungrammaticality of (34d,e). There is thus no reason to assume for German that the Null-Hypothesis accounting for focus under structural clausal conditions is invalidated by text or discourse requirements.

4.3. The interface between discourse and clausal representations in cross-linguistic comparison.

Under the premiss that the prominence under discourse conditions overpower clausal focus prominence (see (3) and (4) above). German has two means of meeting this general premiss. First, the discourse motivated focus, Rheme, may fall on an element within the focus projection of the clausal focus assignment. This will yield clause text accommodation without altering the GA-position. This situation is exemplified by (2a-d) above in relation to (1). In case the specific context requires focus to land outside of this clausal projection we expect either contrastive accent (CA) without any movement of the clausal elements, or some element has to move to take up CA. Unchanged word order with refocussing is exemplified by (32a,b) in the preceding section, 4.2., where the discourse focus enforces CA. The second case is illustrated by complex idioms. See (35a-c), where the metaphorical predicates stand for *X ist gestorben* "X died". If the metaphoric, or idiomatic, status is taken to be of X⁰-status any split of this complex X⁰ expectably destroys the idiomatic reading in favour of a literal meaning. This is demonstrated by (35)-(37).

- (35)a Truman hat [_vo ins GRAS gebissen]
 Truman has into (the) grass bitten
 "Truman died"
- b Johnson hat [_vo das ZEITLICHE gesegnet]
 Johnson has the time blessed
 "J. died"
- c DUTCH: Hij heeft [_vo het LOODJE gelegd]
 he has the plumb laid
 "He died"

In the case of non-default accent (\neq GA), (36), the unity of the idiom will be destroyed unreconstructibly as one lexical complex and, consequently, will lose its idiomatic meaning. This will also happen in the case of a split VP and topicalization of the direct object from within the idiom VP as in (37).

- (36)a Truman hat ins Gras GEBISSEN
 Truman has into (the) grass BITTEN
- b Johnson hat das Zeitliche GESEGNET
 J. has the time blessed
 "Johnson died"
- (37)a GEBISSEN hat Truman ins Gras
 b ??bitten has T. into (the) grass

(36) and (37) represent encyclopedically dubious, hardly interpretable de-idiomatized readings.

The following discussion of contrastive accent and its relation to text felicity is due to Schmerling (1976: 41f.), who claimed that, in the examples hereunder, the assignment of focus and presupposed elements is a matter of encyclopedic knowledge. For a detailed discussion see also Cinque (1991: 29).

- (38)a Truman DIED
 b JOHNSON died

As Schmerling observed the ailing Truman had been on the media some time before he died. Consequently, reference to his name was thematic. Cf. (38a). His death was the news to be added to his name, thus the rheme. By contrast, Johnson's death came as a surprise rendering a complementary, but likewise neutral phrasal accent, as in (38b). The general conclusion Schmerling drew from this was that, if such distribution of phrasal accents was neutral in either case, and given the different historical situations referred to, the assignment of discourse functions such as *thema* and *rheme* was motivated by encyclopedic knowledge, not, however, by grammatical conditions extended by the sentential structure. This position was not new and widely represented across different linguistic traditions (for English see, next to Schmerling, Bolinger 1961, 1972, 1992, Huck/Na 1989, 1992; for German Lötscher 1981, 1983, Eroms 1986). Note that both sentences in (40a,b) are preempted of prior contexts. They are true "out-of-the-blue" expressions.

The first step in the attempt to refute the position sketched above may be sought by way of reference to some other language. According to Cinque (1991: 29), no such stress distribution as in (38b) is grammatical in Italian. Note, further, that German identifies this accent distribution only as contrastive (CA) as in (40b), or else as some presentative expression, i.e. as an all-rheme clause, (40c). (40d,e) present alternative versions to the all-rheme expression.

- (39)a *JOHNSON e' morto ...=(38b)
 Johnson is died
 b E' morto JOHNSON
- (40)a A: TRUMAN ist heute gestorben. ...=(38a)
 Truman is today died
 b B: Ich dachte, JOHNSON ist heute gestorben.
 I thought Johnson is today died
 c Weißt du, was (heute) passiert ist? (Der) JOHNSON (ist heute gestorben).
 "Do you know who died (today)?
 d [_{IP} Es ist [_{VP} heute [_{VP} [_{V'} JOHNSON gestorben]]]]
 EXPL is today J. died
 e [_{CP} Heute ist [_{VP} [_{V'} JOHNSON gestorben]]]]
 today is J. died

Note that German would display (40d,e) as true contextless versions conveying the information of (39b). The phrasal stress in GA-distribution is in line with the Null-Hypothesis. However, this does not carry over to (40c). Discourse functionally, it is a rhematic, since all new, expression, also according to Schmerling. On the other hand, the phrasal focus appears to be in a contrastive position, viz. the subject. All-rhematic clauses certainly never have contrastive accent. But this is easy to be accommodated under the assumption that subjects, as opposed to other argument-NPs in topicalized position (i.e. in Spec,CP or Spec,IP), do not carry phrasal stress in discourse functionally unmarked environments. From this follows that they are thematic in this position, much in contrast to objects. See (41a-k).

(41)a	Heute sahen die Kinder den/einen[+def] Mann am FENSTER	...GA
	"Today, the kids saw the/one man at the window"	
b	Die Kinder sahen den/*einen[-def] Mann heute am FENSTER	...GA
c	Den MANN sahen die Kinder um 1 Uhr am Fenster	...CA
d	Den Mann sahen die Kinder am FENSTER	...CA
e	*Um 1 Uhr sahen die Kinder einen Mann[-def] am FENSTER	
f	Um 1 Uhr sahen die Kinder einen MANN[-def] am Fenster	...CA
g	*Um 1 Uhr sahen einen MANN[-def] die Kinder am Fenster	
h	Um 1 Uhr sahen die Kinder am Fenster einen MANN[-def]	...GA
j	Einen MANN sahen die Kinder am Fenster	...CA
k	*Einen MANN sahen die Kinder am FENSTER	
m	Die Kinder sahen den MANN am Fenster	...CA
n	Die Kinder sahen den Mann am FENSTER	...GA

The indefinite article marked as [+definite] in (41a) signals a definite description, i.e. a certain, as yet undefined man. Note, though, that an indefinite article can also identify the description of the definite usage ("definite description" in logical semantics and type theory). I assume that the position of definite NPs is outside of VP, i.e. in IP. True indefinites, however, as in (41b, e,f,j, k) are clearly inside of VP. Moving to topicalized position is allowed only under contrastive stress.

Let us summarize our observations made so far and, specifically, turn back to (40d,e).

- (41) All-rheme ("presentative") clauses require a focal signal in defiance of the prerequisites of GA with thematic material AND, simultaneously, they require the prototypical clause-focal representation, GA. This can be achieved by VP-internal subjects in GA-position or double foci/accents (focal exponents) in many-place clauses. See (40f).
- (42) Definite subjects and strong pronouns, since outside of VP, are the only arguments in presupposed positions; their unstressed function is compatible with the distribution of GA in the rest of the clause. See (41b,c) versus (41g, k).
- (43) NP-movement to the left (whether "scrambling/focus movement" or some other movement that does not fall under this rather specific movement identity) enforces CA. Such movement without refocussing leads to ungrammaticality. Cf. (41k).

(43) reminds one of the freezing effect¹³ as described by Wexler/ Culicover (1980; as to its specific effects in German see Scherpenisse 1986), albeit with the reservation that movement by one step or even more is tolerated in German under contrastive phrasal stress. If, under normal conditions, the structural position Spec,AgrP hosts presupposed material, movement of elements other than subjects, then, to this position would be tolerated only under CA. Note, further, that the reading of (41n) is not identical to that of (41m), since, under both interpretations, the scope of the adverbial differs from that in (41m). Needless to say that more is at stake for an account of the linear orders in (41). See, for example, the ungrammatical (41e,g). All that bears on the present issue in

certain respects is, however, that the VP-internal position of the object cannot be left even under refocussing by indefinite NPs, as opposed to definites.

Let us return to our initial examples in (38) (and, likewise, the German (39) and (40)) repeated here for convenience as (44).

- (44)a Truman DIED
b JOHNSON died

(42) and (43), now, appear to permit a more adequate account of the examples (38a,b). English does not tolerate a postverbal position of the subject as does German or Italian; viz. (39b) and (40d,e). The subject has to move to [Spec,AgrP]. If it receives focus in this structural position outside of VP, this may indicate, in defiance of a contrastive reading, that the whole sentence contains nothing but rhematic material. English has no subject positions inside the VP, counter to what is displayed by German and Italian; viz. (39b) as well as (40d,e). Note that this result, although based on the defiance of a default reading, is not in agreement with the conclusion reached by Schmerling, whose generalization was that subject focus in English identifies an inversion of the unmarked discourse functional order "theme-rheme". What we would have to say is, rather, that, in all-rhematic expressions, the focus projection extends from the right end of the clause beyond the VP to contain also the rhematic subject. Note that in German the very same focus projection never extends beyond the VP and, consequently, would never include the subject unless it is contained within the VP. Other than in English, the German subject has a structural place inside of VP.

It is interesting to see, in this context, what the exceptional status of the subject is as opposed to other sentential arguments. See the following question-response contexts.

- (45)a [CP [VP-FOK WAS machte]] [IP [VP-PRÄ Hans t t]]? ...GA-question
"WHAT did Hans do?"
b [IP-PRÄ Hans [VP-FOK ging WEG]] ...GA-response
"Hans LEFT."
(46)a [CP-FOK WER] [IP t [VP-PRÄ t ging weg]]? ...CA-question
"WHO left?"
b [CP-FOK HANS] [IP t [VP-PRÄ t ging weg]]? ...CA-response
"HANS left."

Note that, by contrast to (45a), focus on the VP-internal *Hans* would likewise yield an unmarked question because the proper name subject, *Hans*, since occupying the deepest structural position in the clause, is in the appropriate focus position. Consequently, we would expect the response to be of the unmarked, i.e. GA-type. This prediction is borne out: the response is identical to that in (45b). By contrast, (46a) places the question focus on an element outside of VP, which is a position tolerating focus only under CA. As expected, this yields a contrastive response.

5. Complex sentences

Advocates of the position that discourse functional assignment of focus (Rheme) and

clause structural focus assignment have nothing to do with one another might devise the following argument to defy the counter position. Dependent upon the context, the most deeply embedded and thus the element carrying (phrasal) focus might be simultaneously the carrier of old information and thus be the *thema*. However, this is incompatible, since one single element cannot be both the text rheme and the presupposed at the same time and because phrasal focus is determined by some neutral context. See the following sentences illustrating such a situation (examples taken from Huck/Na 1991 and Bolinger 1991).

- (47)a **The GUY** *t_i* just came in [who I met at **TRENO'S** yesterday]; [=H/N's1]
 b **A GUY** just came in **who I met at TRENO'S** yesterday [=H/N's3]
 (48)a **The IDEA** is abroad that diet counts for **EVERYTHING** [=B's148]
 b **The SON** survived, who perpetuated the **NAME** [=B's 61b]
 c **The PLOT** is usually preferred that pleases the biggest **AUDIENCE** [=B's 42]

The argument runs as follows. Constituents extraposed from NPs are generally interpreted as foci. Foci carry stress. Therefore, both (47a) and (47b), carrying the same stress, should be of equal acceptability with respect to some prior context. However, they are not, (47a) being appropriately interpreted only under contrastive focus (new information), whereas (47b) is acceptable non-contrastively (interpreted as presupposed), as are the sentences under (48). How come that some stressed element in phrasal focus position is once *GA*, as in (47b), and the other time *CA*, as in (47a), where the discourse functional distributions of these two expressions allow no overlap, i.e. are clearly to the exclusion of one another.¹⁴

Let us first look at definiteness. Definite NPs are acceptable, probably universally, in sentences if the identity of their referents are calculable from the information in the prior context, for example if the NPs in question have already been established as discourse referents. The definiteness marker as in (47a) will then identify the intended referent. According to Huck/Na (1991: 2f.) the oddness of (47a) in unmarked, non-contrastive contexts follows since the extraposed clause participates in the identification of the discourse referent and, simultaneously, has to be the locus of either informational or contrastive focus since it is dislocated from its base position. If the relative clause is informational (and non-contrastive), it is assumed to convey new information. But the definite NP carries the presumption that the identity of the referent of the NP is already known. Thus, the extraposed is not supposed to contain new information requisite to the identification of its head. But it is focussed. Thus, there is a clash of interpretations: its position conveys a focus function, which is in contradiction with the fact that the NP, head of the extraposed clause, is preidentified, and thus the *thema* *thema*, in the first place. Consequently, (47a) requires a contrastive context to be acceptable, and would be unacceptable in non-contrastive contexts. Not so (47b), however. The head nominal of the relative clause is indefinite, thus not presuming identification of some discourse referent. This leaves the grammatical focus in the extraposed clause to function as contrastive focus - which is its function in the clause link in the first place, since it has been dislocated (Huck/Na 1991: 2). Consequently, (47b) has the same focal distribution as

(47a), but a different, i.e. non-contrastive, discourse status on account of the indefiniteness marking of its nominal head in the embedding clause.

Similar arguments allegedly apply for (48a-c). The embedded clauses are not identifying some presupposed referent in (48a,b), despite the definite articles in the subject-NPs, nor is the matrix subject-NP in (48c). The conclusion is that while the sentences under inspection can be compatible with contrastive contexts, they are not restricted to contrastive contexts. Yet, Huck/Na (1991: 6f.) conclude that presentational clauses such as the matrix clause in (47b) are always contrastive.

I disclaim that. But before I develop my line of counter argument let us look at Bolinger's examples in (48a-c), which have lead the author to conclude that where what has been extraposed from a matrix NP has not the status of (subject) nominal modifier, but, rather, that of a complement to the noun (viz. (48a)) or a non-restrictive relative (viz. (48b)), or where the head of the embedded predicate-NP is non-specific (see (48c)), a definite NP patterns with indefinite NPs qua focus distribution. And, Bolinger questions the commonly accepted opinion that the subject of (49b) is in contrastive focus - a position which is refuted at great length by Huck/Na (1991: 5ff.).

(49)a A: What happened?

b B: A BOMB exploded that someone must have planted somewhere. [= Bolinger's 34]

I think that both of Bolinger's arguments are essentially correct. Let us briefly discuss them and then draw the necessary conclusions with respect to our central claims. First, note that any of the matrix subjects in (48a-c) and (49b) are not acceptable without focus. Note, also, that any of the matrix clauses with definite subject NPs in (48a-c) would have to have grammatical focal stress (GA) on the verb, according to the Null-Hypothesis. Thus, the conclusion would be legitimate that the sentences do in fact have contrastive stress. Now look at (49b). Here, likewise, focal stress on the indefinite subject-NP is required. For indefinites, however, this is canonic qua category belonging. Indefinites are always rhematic, since they do not identify inherently some afore-mentioned object. The conclusion that we can draw from this is that the stress distribution in English, as in (48) and (49), is by default, in the absence of, (a), sufficient mobility of NPs to remain within VP (as required for category-inherent reasons for indefinites) and, (b), the fundamental inability of the definite article within an NP to carry contrastive stress. In both cases, some default rule should be operative, such as "If the first choice, according to the Null-Hypothesis, cannot carry stress under grammatical/phrasal conditions, select the next higher node, *ceteris paribus*."

According to Bolinger (1991) and (26), embedded clauses (including relative clauses) are identifying - and, thus, restrictive and new/rhematic - only in case the extraposed constituent is a noun complement, a non-restrictive relative, or where the head of the embedded predicate is itself non-specific. Only a non-modifying element patterns with an indefinite. And if indefinites are inherently predicative¹⁵, and not thematic/presupposed, then the conclusion is warranted that all of the complex clauses in (48) and (49) are presentational and, by implication, all-rhematic. If so, they are also non-contrast-

ive (see Huck/Na (1991: 5ff.) for the opposite view reached along a totally different line of thought, though).

Note, in particular, that the view that the extraposed relative clause must be contrastive (Huck/Na 1991:2) is not warranted for a variety of reasons: first, no contrastive accent (CA) is realized such that such contrastiveness is materialized; second, movement across the right border of the clause in general never leads to contrastiveness, but, rather, signals understood clausal material (note Antinucci/Cinque's 1977 term "emarginazione"; Rochemont 1986; Tuller 1988: 24ff.; Givón 1990); and, last but not least, obligatory movement like that of relative clauses and *that*-complement clauses in the examples (48) and (49) cannot possibly enforce refocussing, in the absence of an alternative, which would otherwise not be realized at all.

What all this boils down to is an account in terms of focal matching. Both the matrix clause and the embedded clause autonomously assign their focus, expressed by GA, either by assignment through some category ([± definiteness]), or by principles as advocated by Bolinger, and, foremost, by the structural position (Nullhypothesis) within the innermost CP-confines as well as within the movement domain (CP within some other CP). Nothing else appears to be at stake. Note, in particular, that if the extraposed relative clauses in (48)-(49), under the specific contextual conditions sketched, are not contrastive and thus not restrictive, this renders superfluous, and possibly even misleading, Huck/Na's (1991: 3) argument that the embedded clauses are not identifying. The only thing at stake is whether or not extraposed relative clauses require contrastive contexts. See (50) surveying the three possibilities systematically in functional terms.

(50)a [+restrictive relative clause] = not (part of the) presupposed:

$$[{}_{DP} D [NP][{}_{NP} [CP \dots]]] \approx [{}_{RH/TH} \dots] [{}_{RH} \dots]$$

b [-restrictive relative clause] = (part of the) presupposed:

$$[{}_{DP} D [NP][{}_{NP} [CP \dots]]] \approx [{}_{RH/TH} \dots] [{}_{TH} \dots]$$

c extraposed relative clause:

$$\approx [{}_{RH/TH} \dots] [{}_{RH} \dots]$$

Now let us look at the German equivalents of (47) and (48). German, with its relative freedom of word order, can be predicted to position the rhematic indefinites in our examples in (phrase) focal position - something that English is not capable of -, together with expletives filling the clause initial position. This would bring the inherent rhemata to their phrasal focal loci. Restrictive relatives in German can (but need not) be indicated by stressed definite articles or demonstratives in the matrix clause and may thus carry contrastive stress - again something that is absent in the English examples in (47) above and which is not possible with the demonstrative elements contained in a topicalized NP. Compare (47a) with (51), (47b) with (52), and (48) with (53). [GA = grammatical accent = non-contrastive context; CA = contrastive accent = contrastive context]

(51)a ?Es kam [_{VP} der MANN herein, den ich in TAMPERE traf]

it came the man in whom I in T. met

..GA+GA

b Es kam [_{VP} DER Mann herein, den ich in TAMPERE traf]

..CA+GA

c *Der MANN kam herein, den ...

d ??DER Mann kam herein, den ...

that man came in

(52)a Es kam ein MANN/Mann herein, den

..GA+GA

b Ein MANN kam herein, den ...

..CA+GA

- c Es kam JENER Mann herein, denCA+GA
 it came that man in
- (53)a Es ist die ANSICHT verbreitet, daß Arnika ALLES heilt ..GA+GA
 it is the opinion spread around that arnica all heals
- b ?Die ANSICHT ist verbreitet, daß ...
- c *Die Ansicht ist verbreitet, daß ...

Note that the accent ratings on the right margin, GA and CA, say nothing about overall discourse status of the sentences. Rather, they mark the place, but not the resultant status, of the foci of the single clauses. The resultant discourse status is calculable from such insights as those of Bolinger's, which are repeated for convenience under (54).

(54) Embedded clauses (including relative clauses) modify (are contrastive), and are thus restrictive and, consequently, new/Rheme, unless one of the following conditions is met:

- a the embedded clause is a matrix noun complement (*the idea [that...]*; see (48a).
- b no contrastive stress (such as on some matrix determiner) evokes a restrictive reading; see (48b).
- c the head of the identifying predicative of the embedded clause is non-specific; see (48c).

Note that the condition in (54b), namely that some restricted relativizing clause is elicited under minimal stress on the matrix determiner, is not a necessary requirement. The restriction can just go without any focal exponency. For the rest, however, (54a-c) are distinct structural properties, by way of which the positionally or categorially marked, and thus rhematic, status of an embedded structure can be signalled to be in defiance of the default reading. Although for the time being the generalized theoretical status of (54a-c) is unclear it serves the purpose of identifying rhematic material at least on an exhaustive list score and by reference to phrasal stress.

6. Summary

These have been our key observations: In German, and possibly in all configurational languages, the position of the focal element can be defined in purely structural terms (Null-Hypothesis): it is the most deeply embedded constituent head within VP. It is to be noted that this is a more general, and less specific, characterization than, e.g., determining the clausal focal position in terms of association with INFL (Tuller 1988/1992 for Chadic) or in association with case assignment (Horvath 1992 for Hungarian). We have further seen that German does not appear to be in need of an extra, autonomous representative level of discourse functions like Theme and Rheme. Rather, the two discourse categories are assigned in some systematic deviance from the default distribution of the focal and the grounding elements. Also, we have noted that German is a strict refocussing language, in the sense that whenever some order of elements deviant from the underlying one is reached reaccentuation with respect to the underlying structural order is required. This is no doubt due to the relatively tolerant word order requirements. Other, less tolerant, languages, like English and Italian, will realize text-motivated discourse foci by paraphrasing the clause in question.

We have further seen that it can be misleading to conclude just from the surface distribution of focus as to what the deeper, i.e. structural, reasons might be for some particular focal position in some specific language. What led Schmerling (1976) to assume some extrasyntactic, namely a pragmatic, encyclopedic motivation for the assignment of discourse focus turned out to be, under closer scrutiny, a natural result on the basis of purely structural assumptions (Null-Hypothesis plus refocussing principles on the basis of the language-specific clause structure).

No doubt many more questions have remained open, or have not even been touched upon. We have made an attempt at computing the position of discourse oriented foci in complex sentences from the focus signals sounded out by the component clauses in a relatively simple way. It may well be that other far more complicated mechanisms, than those sketched, play the supposed role of assignment and derivation the uncertainty lying in the fact that a number of default assumptions have to be taken, which in themselves are not quite self-evident. Areas such as the assignment of focus in compound NPs have been left aside completely. However, Cinque (1990) has adduced evidence that this area also can be covered successfully within the purely structural approach adopted here.

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Notes:

1. It is worth noting that hardly any grammar of German - or that of any other of the well-known European languages - has anything to say about sentential stress in purely structural terms. This pertains to grammars in a traditional as well a modern linguistic spirit.
2. which, as far as I can see, is due to Höhle (1982).
3. corresponding, in an untechnical way, to Rochemont's focus percolation mechanism. See Rochemont 1986 or Lenerz/ Klein 1988.
4. It is interesting to see that the fact that an attributive adjective is generally an island under movement requirements correlates with the observation made here that it cannot elicit wider focus projection. This may be an independent fact accounting for the restriction observed in the discussion of the adjective in *mit einem roten Schal* "with a red shawl" subsequent to (1) and (2). In the present context, it will be argued in section 3 that the attributive adjective cannot be the locus of neutral focus, and therefore must be an exponent of contrastive focus. Contrastive focus, on the other hand, can only have narrow scope.
5. This is not a contradiction. If some sentence, S, pairs with any other sentence, {S_i}, to form an acceptable text, then, obviously, its focus structure is not such that it would single out any item from {S_i} to form an acceptable text.
6. Note that the formulation of NSR, in Halle/Vergnaud's (1987) version, contains a few L-specific parameters such as "left/right headedness" and "constructed from the right to the left or conversely".
7. Haider (1992) proposes that this particular traditional distinction between English and German be discarded in favour of a universal left-branching configuration. If this claim can be solidified this would add further support to the present attempt to account for the focus/stress configurations in terms not dependent upon branching directionality.
8. As in fn. 4, we observe another interesting correlation for subjects. As is commonly observed, subjects are islands once they are external, i.e. not governed by the verb (L-governed), but by the functional category responsible for agreement. This correlation is interesting in that it may account for the empirical generalization expressed in (5b). Note that the lack of L-government is one of the components of the restrictions to the wide focus mechanism in (5c). Lack of wide focus has been claimed to be the empirical correlate to non-neutral, contrastive, and, consequently, narrow focus.
9. Czepluch (1991: 166 ff.) assumes 3 distinct configurations adding to (6a,b) a third, non-binary tree for double accusative verbs and the restricted class of verbs serializing accusatives before datives (counter to the very productive "dative preceding accusative"). I will not follow him with this assumption.
10. See Reuland/Kosmeijer (1988) for a similar solution for V-final Dutch.

11. I take the movement of the definite NP to be like Q-raising. Landing sites are [Spec, AGR-S] and [Spec, AGR-O], in the case of two objects. Note that definite NPs have a reduced predicative quality in that they cannot occur as predicative NPs, just like quantified expressions. Elly van Gelderen pointed out to me that the assumption of definite NPs having to move out of VP has been made also for Hindi by Mahajan (1990).

12. not only agreement of number, gender, and case, but also agreement in the sense of German *Beugung*, akin to pure syntactic agreement dependent upon the realization of the previous syntactic node and its specific kind.

13. The Freezing Effect has originally been observed to hold for raising: once a constituent is moved it becomes "frozen", i.e. it may not be reanalyzed by any further extraction.

14. As Huck/Na (1990) have observed, extrapositions from definite NPs, such as in (47a) and (48a-c), may also lead to complete unacceptability in English. They argue that this, among other extractions, is a consequence not of structural restrictions on movement, but, rather, of restrictions imposed by the system that orders and assigns importance to information in discourse. This is in line with the theoretical conclusions drawn by such linguists such as Bolinger 1961, Schmerling 1974, Rochemont 1986, and others. As will have become clear from my prior arguments I do not subscribe to this conclusion.

15. We shall have to make this claim more precise. See below what we have to say about the combination of indefinite subjects and "presentational categories".