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**On Sentence Types in German: An Enquiry into the Relationship between Grammar and Pragmatics'**

**ABSTRACT:** This paper investigates the issue of form-function fit with respect to sentence types; the examples are primarily drawn from German. I will discuss and compare two approaches to this issue: the "correspondence" vs. "derivational" approach, arguing that the latter is to be preferred on theoretical as well as empirical grounds. The productive yield of the derivational approach is demonstrated by deriving a number of form-function correspondences, notably in the area of Echo-wh-clauses and V1-clauses.

**1. What the paper is about**

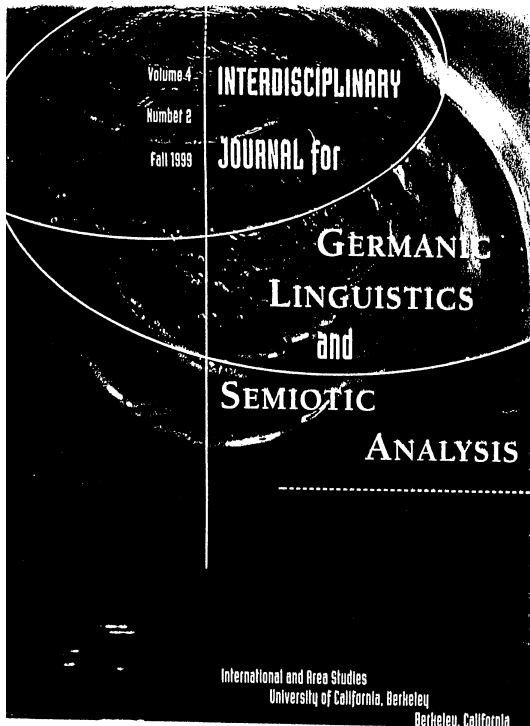
Broadly speaking, this paper is about the grammar/pragmatics interface. How does it come about that the outputs of grammar, which are fully specified sentences, have the specific communicative use potential they have? More narrowly speaking, I will be concerned with one of the important subquestions arising in this context: What does *syntax* contribute to the *illocutionary* use potential sentences have? What this amounts to, obviously, is an enquiry into the issue of sentence types, which I will take up using German as my prime example.

**2. Sentence types and the (lack of) surface form-function fit**

Sentence type distinctions like declaratives vs. interrogatives vs. imperatives have a longstanding tradition in grammatical description. In a way we know what they refer to, for everybody can produce and identify typical examples: (1) is a declarative, (2a,b) are interrogatives, (3) is an imperative, and (4)-(5) are typical examples of the so-called exclamative and optative sentence types, which are the fourth and fifth type recognized in many traditional grammars.

- (1) Einer gab ihm Geld.  
"Someone gave him money".
- (2a) Gab ihm einer Geld?  
"Did someone give him money?"

*JGLSA* 4.2 (FALL 1999): 195-236



- (2b) Wer gab ihm Geld?  
'Who gave him money?'
- (3) Gib ihm Geld.  
'Give him money'.
- (4) Wieviel der ausgegeben hat.  
[how much-the-spent-has] 'Boy, did he spend a lot'.
- (5) Wenn ich doch mehr Geld hätte.  
[If-I-MP-more-money-had] 'I wish I had more money'. [MP = modal particle]

But what exactly is it that makes sentences like (1)-(5) declarative, interrogative, imperative, etc.? The natural presupposition going along with these terms is that they denote a significant correlation between form and function, in other words: that we have (three to five) *syntactically* defined sentence types that are correlated (perhaps even 1:1) with specific illocutionary types.<sup>2</sup> It is here that matters begin to get tricky, for the surface evidence is in obvious conflict with this presupposition:

On the one hand, the same syntactic form type may be associated with several distinct functions. Cf. the Verb-first pattern in German in (6), which is standardly used for questions (6a), (in particular narrative) declaratives (6b), directives (6c), exclamations (6d), and also has distinct subordinate uses (conditional (6e), concessive (6f)):

- (6a) Gab ihm einer Geld?  
'Did someone give him money?'
- (6b) Gab ihm da einer 10 Mark [und sagte...]  
[Gave-him-there-someone 10-marks [...]]  
'At that point someone gave him 10 marks [saying...]'
- (6c) Gib ihm einer Geld.  
'Somebody give him money'.
- (6d) Gab der ihm aber eins drauf.  
[Gave-this one-him-MP-one-on]  
'Wow, the beating he got'.
- (6e) Gab ihm einer Geld, [so bedankte er sich].  
[Gave-him-someone-money [...]]  
'Whenever someone gave him money, [he thanked him]'.

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- (6f) Hatte ihm vorher niemand Geld gegeben, [so drängen sich jetzt die Spender.]  
[Had-him-before-nobody-money-given [...]]  
'While nobody had given him money before, [now he was overrun by sponsors].'

Clearly, these functions do not form a natural class; so there is no hidden correspondence either.

On the other hand, the same broad illocutionary function may be typically realized by various forms; see for example the forms associated with questions in (2) and (7), to which one might be tempted to add "echo-question" forms like (8):

- (7a) Ob ihm einer Geld gibt?  
[whether-him-somebody-money-gives]  
'Will anybody give him money, I wonder'.
- (7b) Wer ihm wohl das Geld dafür gibt?  
[who-him-MP-the-money-that-for-gives?]  
'Who will give him the money for that, I wonder'.
- (8a) Einer gab ihm WAS?  
'Somebody gave him WHAT?'
- (8b) Einer gab ihm GELD?  
'Somebody gave him MONEY?'

Under a surface syntactic view, the form types in (2), (7)-(8) obviously do not form a natural class either (neither do (2), (7) taken by themselves). So there is no form-function correlation at all, no matter whether we look at it from the point of view of form or from the point of view of function.

Note that in all cases considered so far, the association between form and illocutionary function was *direct* rather than *indirect* (cases of straightforward indirectness being of course uninteresting in this context). Hence, if there is a form-function fit, the broad type distinctions we started out with seem to be unfit for modeling it.

3. Handling the facts I: The correspondence approach to sentence types

How do linguists interested in understanding the relation of sentence form to illocutionary effects react to these findings?

3.1. Some do not care. That is they continue to presuppose the familiar broad sentence type distinctions, concentrating their interest instead on the relation between the *meaning* and illocutionary force potential of sentences. The current standard approach is postulating specific mediating semantic elements, alias "sentence moods", on the basis of which the respective illocutionary use potential of the putative sentence types can be accounted for. The most influential example within the German linguistic community is Bierwisch (1980), who specifies so-called "prereflexive propositional attitudes" as sentence moods for the major sentence types, see (9); the sentence types themselves, however, are tacitly taken for granted.

(9) <i>semantic structure of:</i>	yielding roughly, the <i>utterance meanings</i> :
imperatives: <Imp, pc>	I: S intends/wants that ... [pc]
questions: <Qu, pc>	Q: S intends/wants to know ... [pc]
declaratives: < pc >	D: S takes it that ... [pc]
pc = 'propositional content'	(Bierwisch 1980:21-23)

Another conspicuous example is Wilson/Sperber, who criticize the prevailing idea that "every syntactic sentence type determines a distinct and unanalyzable [semantic] mood" (1988:99), maintaining that the sentence types in question "merely encode a rather abstract property of the intended interpretation: the direction in which the relevance of the utterance is to be sought" (1988:101).<sup>4</sup> Again, the sentence type distinctions referred to are just presupposed, but nowhere specified.

There is of course nothing wrong with the idea that sentence type meanings are what grammar specifically contributes to the illocutionary interpretation of utterances, nor with its consequence that the illocutionary forces/acts typically associated with these types are taken to result from the interplay between the respective type meanings and various nonlinguistic competence systems (including in particular a system of social interaction types in Bierwisch's case, see Bierwisch 1979). All serious attempts to come to terms with the intricate form-function relations we observe are based on this idea (though positions vary considerably as to what these sentence type meanings are semantically made of). But it is equally clear that the approaches mentioned just skirt the crucial

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*grammatical-internal* issue, which should be uppermost in a linguist's mind: What grammatical forms are, by virtue of what features, the carriers of these sentence type meanings, alias sentence moods and what status do they have in grammar? In Bierwisch's as well as Wilson/Sperber's approach, this remains totally in the dark.<sup>5</sup>

3.2. Other linguists do care about this question. The most prominent framework in which it has been extensively investigated for German is the one developed in Altmann (1987) plus subsequent work by himself and his students.<sup>6</sup> The basic idea is very simple: The *form types* that are carriers of sentence moods should not be defined by verb position alone, but by simultaneous reference to other types of formal features as well, the obvious candidates in addition to *verb position* being *verbal mood* (notably:  $\pm$ imp[erative]), types of *categorical fillings of certain syntactic positions* (notably:  $\pm$ finite, and initial position [= "Vorfeld"]:  $\pm$ wh-element, complementizers), *intonation* (notably:  $\pm$ final rise contour, exclamatory accent), clearly a nonsyntactic factor. In addition, Altmann uses (groups of) modal particles as defining features, claiming that these are really formal elements, too (as opposed to lexical items). Moreover, only form types in *root position* are considered, which makes +root status the one distinctive formal feature all form types considered have in common.

Given this, the main clause V1-examples in (6) clearly represent mutually distinctive form types; cf. the feature representations of (6a-d) in (10):

(10a) Gab ihm einer Geld?	+root	V1	-imp	int.: rise
(10b) Gab ihm da einer 10 Mark [...]	+root	V1	-imp	int.: fall
(10c) Gib ihm einer Geld.	+root	V1	+imp	int.: /
(10d) Gab der ihm aber eins drauf.	+root	V1	-imp	int.: excl. accent
(10[e]) Gab ihm einer Geld, [...]	-root			
(10[f]) Hatte ihm vorher niemand Geld gegeben, [...]	-root			

This also means that the form-function fit gets considerably better: certain form types signal unambiguously one function. Now, the broad functional categories can also be divided into functional subtypes—in the case of questions for example into *yes-no* questions, *wh*-questions, deliberative questions, echo

*wh*-questions, assertive questions, etc. Given this, we even arrive at 1:1 form-function correlations in a considerable number of cases. Thus the pattern (10a) will always be associated with straightforward *yes-no* questions, and vice versa, the pattern in (10b) always with V1-declaratives, and vice versa, the pattern in (8b) — *V2-imp intr.rise* — always with an assertive question, and vice versa, the pattern in (8a) — *V2-imp intr.rise + w-element in initial position* — always with a so-called echo *wh*-question, and vice versa, etc.

Observing and stating these regular form-function associations is of course valuable in itself. But how do we account for them in terms of grammar? According to Altmann (see 1993:1006) in a very simple way: the grammar is supposed to contain "complex linguistic signs", in which the various form types (defined by distinctive feature bundles in the way just demonstrated) are associated with a functional meaning (Altmann takes propositional attitudes corresponding to Bierwisch's sentence moods, see 1987:23ff.), which underlies its specific illocutionary use potential. In other words, the form-function relation the traditional sentence type distinctions aim at is reconstructed as an arbitrary correspondence relation based on a large number of low level form types. The status of these form types themselves is left unclear in Altmann's framework, but since they constitute the formal side of arbitrary signs, with the constituent elements having no meaning of their own, their status must be, using GB-oriented terms, constructional rather than computational (i.e., they cannot be outputs of the computational core components of grammar). In this sense, according to the still prevailing view of syntax, the status of these form types is that of "syntactic idioms" so to speak; in other words, they have no place in true syntax at all.

Altmann is the most circumspect, but by no means the only one among serious syntacticians advocating a "correspondence approach" to the form-function relation involving sentence types. A comparable approach is advocated within the HPSG framework, aligning itself with the central notions of Construction Grammar,<sup>3</sup> see especially the recent work on German by Kathol (1995, 1997), which is clearly influenced by the German linguistic tradition, and the papers on various English clause types by Sag (1997), Green/Morgan (1996), Ginzburg/Sag (1998). The same position is argued for from a GB-perspective in Akmajian (1984), a paper that is hardly ever cited, but states the consequence of this approach most clearly: Notions like "imperative

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clause", "interrogative clause", etc., implying a significant form-function correlation, have no place in syntax at all (1984:18ff.).

#### 3.4. Problems with the correspondence approach

Now, what is wrong with this position? In my opinion the fundamental flaw is the very claim on which it is founded: that the correspondence between form types and function types is "arbitrary", "conventional", "noncompositional", in other words that no single formal feature in the bundle defining the respective form type contributes by itself to the corresponding functional meaning. (For explicit statements to this effect see Altmann 1987:30, 1993:1010). But this is clearly wrong, or to put it again in Saussurean terms, we do find a considerable degree of "motivation". Let me cite two types of evidence:

4.1. Take first *intra-linguistic evidence*. Consider (2a,b) for example: the form type containing a *wh*-element corresponds to a normal constituent question, the form type without one to a normal *yes-no* question. The same is true, if we look at the pair of deliberative questions in (7): where there is a *wh*-element we have a deliberative constituent question, where there is none, a deliberative *yes-no* question. And the same is true for the pair in (8), (8b) being an "Echo" *yes-no* question, (8a) being an "Echo" constituent question. In other words, ≠presence of interrogative *wh*-elements is directly responsible for the question being a constituent question vs. a *yes-no* question. This is of course trivial, who would expect anything else? But trivial as it may be, the point is that the correspondence approach does not account for it, rather it would even allow for the contrary!

Another case in point is intonational features: For German and similar languages it is simply true that a final rise contour has a clear effect of its own: final rise cancels out assertive function, giving rise to or supporting only questioning functions; assertive function in turn survives only with a final fall contour. Again, this may seem a matter of course, but it is neither predicted nor accounted for by the correspondence approach: It would be just as well if German had V2-clauses with rise contour signalling assertions, *wh*-V2-clauses with rise contour signalling constituent questions, but V1-questions and *wh*-Echo-questions always with fall contour, for the feature bundles would still be distinctive. But this distribution of ≠final rise contours is not found in German, nor in any other language it seems, which cannot be accidental.<sup>4</sup>

Take secondly *comparative evidence*: As for imperatives, for example, it is not only well attested across languages that there is a special imperative form type, but also that the features making it special in German—special verb morphology, lack of subject in the prototypical second person case, special restrictions on negative imperatives—recur over and over again (see Zhang 1991). Again, according to a mere correspondence approach, it could be completely otherwise.

A second example are so-called exclamatives. Apart from special exclamative markers (inflection or particles), it seems to be a fact of cross-linguistic life that form types occurring in exclamative use never serve just this function, but always do double service either as a declarative or interrogative form type, the most remarkable generalization being perhaps that if there are *wh*-exclamatives, they take the form of subordinate *wh*-clauses in the unmarked case (see Sadock/Zwicky 1985:162f.). So the German facts cited in (11) are not accidental:

(11a) *Some exclamatory form types* (cf. Altmann 1987:52):

- V1:        Kennst DER (vielleicht) komische Leute.  
            [Knows-the-(MP)-strange-people]  
            'Boy, does he know strange people'.  
  
V2:        DER kennt (vielleicht) komische Leute.  
            'Boy, does he know strange people'.  
  
wVfinal:   Wen der (alles) kennt.  
            [whom-the-(all)-knows]  
            'The people he knows/What a variety of people he knows'.

(11b) *Declarative/interrogative parallels to exclamative form types*:

- V1:        *declarative* (see (6b)); *interrogative* (see (6a));  
V2:        *declarative*: der Pastor kennt komische Leute.  
            'The priest knows strange people'.  
  
wVfinal:   *subordinate wh-interrogative*:  
            [Er fragt.] wen Peter (alles) kennt.  
            '[He asks] who Peter knows'.

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*subordinate wh-declarative*:

Wen Peter kennt, [hört er ein.]  
'Peter invites who(ever) he knows'.

Neither is it accidental that V1-/V2-clauses in order to be usable as exclamatives must contain gradable lexical material, whereas those introduced by a *wh*-phrase do not. What these facts suggest is that exclamatory effects are in a way parasitic, which come about by interrogative or declarative meanings interacting with superimposed prosodic and lexical means of a certain type. Again, the correspondence approach is at a loss vis-à-vis these findings. On the one hand, the cross-linguistic correlations illustrated in (11) are not to be expected and unexpressible as such. On the other hand, the possible solution accounting for them would be, perhaps, not inaccessible, but self-defeating: It would require admitting that the interacting features have meanings of their own, V1/V2 and *wh*-element transmitting declarative/interrogative meaning, the so-called exclamatory accent having the required expressive meaning. (In addition, the nature of the proposition would have to be taken into account for exclamatives, which calls the notion of "form type" into doubt.)

4.2. This gets us to a few further problems with the "correspondence approach" alias "complex sign approach", all deriving from the fundamental flaw, which I will just list here.

First, the *proliferation of types* problem: If one relentlessly pursues the course of encoding all form-function type correlations as complex signs, one soon gets into big numbers, for there is almost no limit as to how fine-grained you can get.<sup>9</sup> Altmann, who is laudably relentless, considers this as a problem for his approach (1987:50), trying to circumvent it by grouping form types with the same or similar functional meaning together. But what is the descriptive consequence of this move? Cf. for example the one "sentence mood" imperative, to which Altmann (1987:52) assigns the following three (or five, if *isubject* is taken into account) form types:

(12) <i>Form type</i> :		<i>Functional meaning</i> :
a.	V1    - +imp - -subject - ...	
a'.	- -subject - ...	propositional attitude I
b.	V2    - +imp - -subject - ...	I = erreichen wollen, daß p
b'.	- -subject - ...	'want to achieve that p'

c. daB-Vfinal --imp - (MP) - ...

(12) *Examples for (12a-c):*

- a. Laß den Koffer (mal) hier. 'Leave the suitcase here'.
- a'. Laß du den Koffer (mal) hier. 'You leave the suitcase here'.
- b. Den Koffer laß (mal) hier. 'As for the suitcase, leave it here'.
- b'. Den Koffer laß du (mal) hier. 'The suitcase you better leave here'.
- c. Daß du ja den Koffer hier läßt. 'Do leave the suitcase here (or else...)'.

Strictly speaking, we still have three (five) synonymous signs here. The only way to justify the claim that these are just manifestations of one and the same sign would be to show that the three (five) forms are no more than grammatically conditioned alternations ("allo-forms"). As far as I can see, the requisite evidence is just not there.

Second, there is the problem of so-called "*mixed types*", the prime examples being Echo-cases like (8), where not only the form types of declaratives and interrogatives seem to be "mixed", but also the corresponding propositional attitudes: echo-questions like those in (8) do not only ask, but also presuppose that the open proposition in question has been previously closed, i.e., has been asserted or assertable (see section 6.1 below).

The intuition behind calling those cases "mixed types" is certainly sound, but what it would lead up to in terms of signs is not: there is no such thing as a "mixed sign", or to put it differently, there are no genuine *grammatical* mechanisms producing sign contaminations as regular as the one at hand.

Third, the *±root split*: The correspondence approach is bound up with limiting the notion form type/sentence type to those occurring in root position. This split seems spurious in the case of declarative and interrogative structures; cf. (13)-(14): there is not only parallelism of form, but also of "meaning".<sup>10</sup> Moreover, association with illocutionary force, which is one of the driving motivations behind the *±root split*, does not correlate 1:1 with this split to begin with; cf. (15a-b), where the subordinate clauses have an illocutionary use of their own.<sup>11</sup> And this means that we just have to posit declarative sentence mood for them (and in turn also the existence of a number of verb final declarative form types), otherwise the explicit performative use could not be accounted for.

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- (13a) Der Plan funktioniert nicht.  
'The plan won't work'.
- (13b) [Wenn man glaubt,] daß der Plan nicht funktioniert / der Plan funktioniert nicht, ...  
'[If one believes] (that) the plan won't work...'
- (14a) Ob ihm einer (wohl) Geld schickte? / Wer ihm (wohl) Geld schickte?  
[whether-him-somebody-(MP)-money-sent / who-him-(MP)-money-sent]  
'Did anybody send him money? / Who sent him money, I wonder'.
- (14b) [Peter weiß,] ob ihm einer Geld schickte. / wer ihm Geld schickte.  
'[Peter knows] whether somebody sent him money/who sent him money'.
- (15a) Dieser Plan, gegen den ich hiermit mein Veto einlege, würde uns ruinieren.  
'This plan, which I hereby veto, would ruin us'.
- (15b) Ihr könnt mich nicht bestrafen, weil ich hiermit zurücktrete.  
'You can't punish me, because I hereby resign'.

Hence, enforcing a *±root split* means separating what in terms of grammar, syntactically as well as semantically, clearly belongs together.

Is there a way to get around this split in the correspondence approach? A prerequisite would be to drop defining the meaning of these form types in terms of propositional attitudes, for there just are not any with respect to subordinate clauses (except those illustrated in (15)). While I think that this is a correct move anyway, it would not be enough. Note that subordinate clauses by themselves are not specifiable in terms of intonational features; only sentences as a whole ('Gesamtsätze') are. But the declarative and interrogative form types as defined in the correspondence approach *must* refer to intonational features; otherwise the whole system of *distinctive* signs crashes. Hence, the correspondence approach is in a dilemma: either the *±root split* remains or intonation must be given up as a defining parameter for form types.

In sum, the correspondence approach while at first glance plausible, at second glance seems fundamentally flawed.<sup>12</sup>

### 5. Handling the facts II: the derivational approach

5.1. What is a possible alternative? The kinds of flaws just pointed out indicate what is needed: an approach to sentence types in which sentence forms (defined by sets of formal features) and functional meaning alias "communicative use potential" are not arbitrarily paired off, but the latter is *compositionally derived* from the *interpretively relevant properties* of the former. The catchwords "compositional" and "derivational" are just two sides of the same coin: "compositional" with respect to sentence types means that the communicative use potential of the whole sentence, including its illocutionary use potential, can be computed, i.e., derived, from the interpretively relevant properties of its parts and its structure. "Interpretively relevant properties" do not only include the (more or less conventional) meanings of lexical items and of grammatical/functional categories, but also the informational and expressive interpretation potential, plus further iconic interpretation potential, systematically associated with (certain) syntactic and prosodic structures.<sup>13</sup> Of course, while the communicative use potential of a given sentence is certainly determined by the interaction of *all* these properties, this need not be the case with respect to its illocutionary use subpotential. From which factors this subpotential is to be derived and how, is entirely an empirical issue.

Implementing such a derivational approach, then, implies three things: *First*, we have to specify exactly what the interpretively relevant properties of individual elements, including structural and prosodic elements, are. *Second*, we have to show that the use potential of a given sentence and its various subpotentials, in particular the specific illocutionary use potential in question, can indeed be derived on this basis in a non-ad hoc way, that is by employing independently justified grammatical and pragmatic means only. Employing "independently justified grammatical means only" in a derivation means that one respects the grammatical structure (i.e., constituency relations, c-command and linear ordering relations, licensing conditions, level ordering within grammar, etc.) the elements in question appear in. And employing "independently justified pragmatic means only" means that one draws only on recognized "pragmatic" systems of knowledge and inferencing (such as conceptual knowledge, practical maxims, Gricean reasoning, etc.), plus that one uses them at the right points, that is only at those points where grammar and pragmatics can be justifiably said to meet. In other words, and this is the *third* and most

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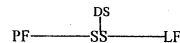
important implication of a derivational approach: Issues of form-function correlations, to which the issue of sentence types clearly belongs, can only be successfully pursued in a derivational way within an *articulated* framework of grammar, which also includes the *grammar-pragmatics interface*. Only then do we know, for example, how intonation ordinarily interacts with syntax and semantics and where lexical insertion of ordinary signs (words and idioms) takes place—both of which have implications on whether or not prosodic information could be part of the formal side of signs at all. And only then, of course, would we know what we are doing when postulating signs cross-cutting levels of grammar including prosody as is constitutive for the correspondence approach.

5.2. A derivational approach to sentence types along these lines, the most explicit one I know of, has been developed in joint work by I. Rosengren, M.Brandt, and I. Zimmermann and myself (see our paper BRRZ 1992; cf. also Rosengren 1992a). I will briefly summarize the main points of our proposal trying to show that it is grammatically non-ad hoc.

The main points of our proposal are the following:

(i) The grammatical framework we adopt is the G[overnment &]B[inding] framework. Three aspects of this framework are of crucial importance:

- existence of structure beyond mere surface structure;
- distinction between lexical and functional heads with respect to clause structure;
- T-model of grammar:



(=> no prosodic input to LF/semantic interpretation!)

(ii) The clause structure we posit for German includes the following claims:

- V-position in DS: V-final; V-position in SS: I<sup>0</sup> (> V-movement is to I<sup>0</sup>);
- V2/V1 clauses are I-projections;
- V-final clauses are matched C/I-projections (content of C: marking subordination, viz. clause-dependency);

- Spec positions can be optional/optionally filled (=> V2 vs. V1 differs in  $\pm$ (filled) Spec);

If this were all to be said about syntactic structure and clause types, then we would of course be committed to the same conclusion as the correspondence approach, which is that sentence type notions like interrogative, declarative etc. have no place in syntax at all, for C vs. I marks  $\pm$ subordination;  $\pm$ Spec corresponds only partially to sentence type distinctions. But we go beyond that; see (ii)-(vi):

(ii) I<sup>0</sup> is characterized by syntactic features: +wh, -wh, imp;

=> these features define three syntactic sentence types in German cross-cutting verb position types:

declaratives: -wh (V2, V1, V-final: subordinate declaratives, e.g., relatives)

interrogatives: +wh (V2: wh, V1: yes-no, V-final:  $\pm$ subordinate wh/yes-no)

imperatives: imp (V2/V1)

(iv) The syntactic features  $\pm$ wh, imp are carriers of sentence moods which specify referential modes, not propositional attitudes towards the proposition expressed:

- *declarative sentence mood*, roughly: there is an event instantiating the clausal proposition;
  - *interrogative sentence mood*, roughly: *yes-no questions*: the event the clausal proposition refers to is open wrt its truth-value; *wh-questions*: the event the clausal proposition refers to is open wrt to the variable position indicated by the wh-phrase;
  - *imperative*: sets a norm (related to the addressee) wrt the existence of the event the clausal proposition (virtually) refers to.
- } EPISTEMIC MG
- } DEONTIC MG

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(v) All clauses (including subordinate clauses) are specified for sentence mood, which corresponds to all clauses containing an I-projection.

(vi) All other so-called sentence types and subtypes and their respective functional meanings [= illocutionary use potential] can be derived on the basis of the three sentence types/sentence moods characterized in (iii)-(v) plus the interpretively relevant properties of the additional (structural, lexical, prosodic etc.) elements involved.<sup>14</sup>

The central step in the argument is, of course, (iii): (iii) says, very much in harmony with traditional intuitions, that there *are* syntactic sentence types, that there are just three of them, and that they are defined by abstract syntactic features. The ugly suspicion immediately arising is, of course, that this is viciously circular, i.e., that we first syntacticize the pragmatic distinctions in question, and then we "derive" them from the syntactic basis thus gained. So let me first dispel this suspicion (see also Reis 1991a, BRZR 1992:29ff.).

5.3. There is independent *syntactic* justification for these features, as I will briefly demonstrate for *wh*-interrogative clauses. Cf. (16a-d):

- (16a) *Wieviel kostet das Auto?*  
‘How much does the car cost?’
- (16b) *Wieviel das Auto kostet, weiß ich nicht.*  
‘I don’t know how much the car costs.’
- (16c) Die Frage, *wieviel das Auto kostet*, stellt sich für mich nicht.  
‘As for myself, the question how much the car costs, doesn’t arise.’
- (16d) *Wieviel glaubt Peter, daß das Auto kostet?*  
‘How much does Peter believe that the car costs?’

(16a-d) are or contain *wh*-interrogative clauses, which are indicated by italics. What makes us identify them as such? Two things: we know (a) that a *wh*-interrogative clause must contain an interrogative *wh*-phrase and (b) that this *wh*-phrase must have scope over the entire interrogative clause (this clause corresponding to the "question proposition", i.e., the proposition within which the *wh*-variable indicated by the *wh*-phrase must be specified). In other words, what defines a *wh*-interrogative clause is not only its containing a *wh*-phrase, but also its being and marking the scope domain of this phrase. In standard cases like (16a-d), the marking is effected by the initial position of the



*wh*-phrase, for its scope domain is identical with the immediate clause which it introduces.

If this were always the case, we would need no additional distinctive feature, for *wh*-interrogative clauses in German would be exactly those sentences that are introduced by an interrogative *wh*-phrase. But there are a number of interrogative cases in German in which the scope domain of the relevant *wh*-phrase is *not* marked by its position. The one crucial case is the *was...w*-construction illustrated in (17):

- (17) *was...w* - construction:  
 (17a) Was glaubt Peter, wieviel das Auto kostet?  
 [What-believes-Peter, how-much-the-car-costs]  
 'How much does Peter believe that the car costs?'  
 (17b) [\*Peter glaubt, wieviel das Auto kostet/wen wir anrufen sollten', ...]  
 [Peter-believes, how-much-the-car-costs/whom-we-call-should/...]

What is typical for this construction is that the relevant *wh*-phrase we want an answer to is the one introducing the embedded clause: *wieviel*, but that the scope domain of *wieviel* includes the matrix clause beginning with *was* (evidence being that with (17a) the same question is asked as with (16d)). Note moreover that *glauben* usually cannot take *wh*-interrogative clauses; cf. (17b). Hence, the embedded clause does not correspond to a *wh*-interrogative clause, although it has a *wh*-phrase in initial position. On the other hand, *was* in the matrix clause has no other function than being the scope marker for *wieviel*.

Even more conspicuous cases of discrepancy are *wh*-imperatives (cf. Reis/Rosengren 1992):

- (18) *wh*-imperatives:  
 (18a) Wieviel schätz mal, daß das Auto kostet!  
 [How-much-guess-IP-that-the-car-costs.]  
 'Guess, how much the car costs'.  
 (18b) Schätz mal, wieviel das Auto kostet!  
 'Guess how much the car costs'.

(18a) has the same interpretation as (18b), which means that it is an imperative clause, although it is introduced by an interrogative *wh*-phrase. Conversely, this *wh*-phrase has only scope over the embedded *daß*-clause, which thus is the

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*wh*-interrogative clause proper, although the relevant *wh*-phrase is not present in this clause in surface structure—only its trace is there.

Of course, we have to assume that the scope domain is marked even in these two cases. Since no overt marker does the job, we just have to assume an abstract marker: the feature +*wh*, which generally marks scope domain. Hence, a syntactic feature +*wh* marking *wh*-interrogative clauses is independently justified. What happens in the standard cases—see (16)—is that the +*wh* feature attracts one of the *wh*-phrases in the clause,—which corresponds to the regularity holding for German, English, etc., but not for example for Chinese, that +*wh* *must* be saturated/realized/"checked" by a *wh*-phrase (or its trace).

Given this evidence that there are abstract syntactic features marking *wh*-interrogative sentence type, it is natural—and not unsupported by further evidence—to extend this approach to all interrogatives, plus declaratives and imperatives. In the latter case, the evidence is rather clear-cut: the verb is marked +*imp* by verbal mood, and this feature, assuming it to be strong, must be checked. It is natural to assume that this happens by way of V-movement, which is obligatory for imperatives and always to I<sup>0</sup>. Hence, there must be a corresponding feature +*imp* in I<sup>0</sup>, which then—what else?—can be called a syntactic sentence type feature. (Cf. Rosengren 1993, Platzack/Rosengren 1997/98 for further details.)

Thus, we have syntactically justified sentence type features, which are subcategorized for the I<sup>0</sup>-position and carry the respective sentence moods; these in turn will be compositionally integrated into semantic interpretation in the normal way. In other words, the notion sentence type does seem to have a place in syntax, albeit on an abstract syntactic level.

5.4. Now, is this argumentation really conclusive? Recently, the approach to sentence types I am advocating here has been rejected wholesale by Kathol (1997:82ff.; see also Kathol 1995:194ff.). He argues i) that appealing to abstract functional heads in syntax is wrong in principle, for they could neither be plausibly part of the conceptual inventory available to the language learner nor be plausibly inferred by him from the available evidence (1997:86ff.), ii) that a plausible surface-oriented ("linearization-based"), albeit noncompositional ("constructional") HPSG account of German clause types is feasible. These arguments, however, are unconvincing:

First, (i) is certainly more of a programmatic than an empirical statement, and it is by no means obvious that the formal framework advocated by Kathol as an alternative to GB-syntax passes the requirements on learnability set by Culicover's "concrete minimalism" guiding Kathol's argument (i) either. So as an independent argument from learnability (i) is neither here nor there. *Second*, and more importantly, however, (i) is also an argument involving descriptive adequacy, and as such it squarely depends, *inter alia*, on (ii) being correct. So far, I think, Kathol has failed to show that it is: To be sure, the few basic form-function types he considers (V2-declaratives, *wh*-V2-interrogatives, V1-questions, V1-imperatives, plus subordinate counterparts inasmuch as they are possible) could indeed be distinguished by just referring to "linear" or "positional" notions. But this is a spurious result, for it covers just a small fragment of the form-function types to be treated (to see this, compare the range of data covered by Altmann (1987) or BRRZ (1992) and their respective followers), leaving out the many form-function types that immediately contradict it and have led to assuming additional descriptive machinery in more comprehensive approaches. Thus, it is far from obvious that his approach to sentence types employing only surface syntactic features will succeed, where other surface-oriented approaches, even though employing a richer apparatus (prosodic features,  $\pm$ root split, mixed types, etc.), fail (see Section 4 above). In particular, appealing to the notion of "construction" by itself is no safeguard against abstract syntactic features: only a constructional account of the pertinent phenomena: *was...w*-interrogatives, *wh*-imperatives, etc., plus the "movement" regularities involved therein<sup>15</sup> that is feature-free and at the same time descriptively adequate, would be. So far, such an account is missing—and in view of the peculiarities of these phenomena, it will probably be as difficult to give as it looks.<sup>16</sup>

In sum, no sound case against our approach has (yet) been made. Hence I feel justified in sticking to this approach, where at least a good part of the requisite homework has already been done.

#### 6. Some sample "derivational" analyses

Let us now return to the issue of form-function fit. Given the results of Sections 5.2-5.4, we have achieved the basic level of adequacy: If there are syntactic sentence types correlating with semantic sentence moods, then—presupposing that these moods mark relevant correspondences with illocutionary types<sup>17</sup>—the

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respective default correlations between sentence types and illocutionary types we observe have a plausible basis. But the real challenge for the derivational approach are of course the many systematic form-function correspondences differing from or modifying these default correlations. Can we really live up to the claim put forth above (Section 5.2:(vi)), and repeated here in (19)?

(19) "All other so-called sentence types and subtypes and their respective functional meanings [= illocutionary use potential] can be derived on the basis of the three sentence types/sentence moods characterized in (iii)-(v) plus the interpretively relevant properties of the additional (structural, lexical, prosodic, etc.) elements involved."

In the following I will give some illustrative examples showing that we can, at least to a considerable extent. For reasons of space I will have to be brief and suggestive rather than pervasive and persuasive, but since things are all worked out at length in accessible publications, this will be forgivable, I hope.

#### 6.1. Echo-*wh*-questions

My first example are so-called echo-*wh*-questions in German. (For a fully worked out treatment, see Reis 1991b, 1992.) Let us first look at a minimal pair of "normal" (20) vs. "echo"-*wh*-questions (21):

- (20) Bei wem hat Karl damals geARBeitet?  
[At-whom-has-Karl-then-worked]  
'Who did Karl work for at that time?'
- (21) Karl hat damals bei WEM gearbeitet?  
'Karl worked for WHOM at that time?'

In both cases, the same subtype of question—a constituent question—is performed: the speaker marks the position in the proposition identified by the *wh*-phrase as "open"/"to be specified", and expects the hearer to close it (i.e., to give an answer). But in (21), there is a pragmatic effect beyond that: listening to (21) we infer that the proposition in question is known to one or both of the participants of the conversation as having been closed before, the "echo-effect". This difference in interpretation correlates with differences of form between (20)-(21) turning on the *wh*-phrase: whereas in (20) the *wh*-phrase is invariably clause-initial, and the nuclear accent positionally free, in (21) the *wh*-phrase is (i) variable in position (hence can be non-initial), but (ii) obligatorily bears the nuclear accent, hence is minimally focused.<sup>18</sup> Besides,

there is a tone difference in that *wh*-interrogative clauses like (20) have a final fall contour, whereas "EwCs" ("Echo-*wh*-C clauses", that is clauses having the formal characteristics (i)-(ii)) typically have a rise contour.

Correspondence approaches, at least for German, have always been content with just stating this form-function correlation. But what a derivationally minded linguist wants to show is that the latter derive from the former. How does he/she do it?

All we have to do is to make use of what we know about the regular effects of focusing. Note that in EwCs the *wh*-phrase not only must bear the nuclear accent (22a), but it must bear it on its *wh*-part, as becomes clear from bisyllabic *wh*-words (22b):

- (22a) \*Karl hat damals bei wem geARbeitet? (vs. (21))  
[Karl-has-then-at-whom-worked]
- (22b) \*Karl ist woHIN gegangen? vs. √Karl ist WoHIN gegangen?  
[Karl-is-where-to-gone] 'Karl went WHERE'
- (22c) \*Karl wurde warUM gekündigt? vs. √Karl wurde WARum gekündigt?  
[Karl-was-why-fired] 'Karl was fired for WHAT reason?'

Considering that *wh*-phrases always contain the interrogative operator meaning (which, no matter how formulated, amounts to something like "OPEN x") plus a specific meaning (in the case of *wer/wem*: person, in the case of *wohin*: direction, etc.), it is reasonable to assume that the *wh*-part corresponds just to the interrogative meaning. In other words, in EwCs the interrogative meaning "OPEN x" is always minimally focussed, backgrounding everything else in the clause including the specific content of the *wh*-phrase. If so, we have all we need: A clause having this focus-background structure projects onto every context of utterance that everything except the interrogative "OPEN x" meaning is background information, that is information known to S[peaker] and/or H[earer], which, informationally, is exactly the echo-effect common to all EwCs. Hence EwCs can be used for directly performing Echo-*wh*-questions. On the other hand, there is no other constellation of grammatical properties yielding the same information structure. Hence for directly performing Echo-*wh*-questions *only* EwCs can be used. Ergo, the 1:1 association between form and function is derived and thereby explained as desired.

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Note that approaching Echo-*wh*-questions this way has an additional welcome consequence. We know about Focus-Background-Structure, first, that what is presented as backgrounded, i.e., known information, pertains to information content, not to the form in which it has been transmitted. Hence, if the echo-effect is nothing but the normal effect of a certain focus-background-structure, we should not expect that it always "echoes" the form of a previous utterance, and in fact EwCs are often enough non-quotational (23).

- (23)A: A propos, gestern hab ich Karl über Helmut Kohl, seinen früheren Chef, reden hören und weil ich es komisch gefunden habe, daß er ihn jetzt so lobt,...
- 'By the way, yesterday I heard Karl speak about his former boss, Helmut Kohl, and because I found it strange that he praises him so much nowadays,...

(23)B [interrupting A]: Karl hat damals bei WEM gearbeitet? [(21)]  
Hence, the popular assumption operative in many descriptions of Echo-*wh*-questions that EwCs are just quotes with a *wh*-phrase plugged in is no more than a prejudice.

This becomes even clearer, if we consider a second property of Focus-Background-Structure. A given focus-background-structure does not simply reflect what is ±known or ±given information, but it presents it as such. Thus, if I am asked (24) just as I come in and know nothing, I will just presuppose as given that the coffee-maker was left on by somebody, and that the question pertains to the focussed element only.

- (24) Hast DU die Kaffeemaschine angelassen?  
'Was it you who left the coffee-maker on?'

Hence, if the echo-effect is just a focus-background effect, then we should expect cases where EwCs are not reactive, but projective. In other words, there should be uses of EwCs in which the proposition in question is just presented as known, or by which one conveys the presupposition that, given the circumstances, the proposition in question should actually be known to the hearer. And cases like these do exist; cf. EwCs in special questioning situations (classroom, interviews, quizzes, interrogation of witnesses in court, etc.) as illustrated in (25):

- (25a) Der Angriff auf Pearl Harbour hat WANN stattgefunden?  
 'The attack on Pearl Harbour happened WHEN?'
- (25b) Kohl sagte bei diesem Anlaß, daß die Hauptstadt WOhin verlegt würde?  
 'Kohl said at this occasion that the capital would be transferred to WHERE?'
- (25c) Und wenn ihr etwas nicht wißt, dann lest ihr bitte WO nach, Kinder?  
 'And if there is something you don't know, then you look it up WHERE, kids?'
- (25d) Und Sie haben heute das WIEviele Länderspiel gemacht, Herr Matthäus?  
 [And-you-have-today-the-how-many[th]-country-game-made-Mr. Matthäus]  
 'And including today, you've played in the national team HOW many times, Mr. Matthäus?'
- (25e) Und Sie nehmen an, daß er sich anschließend mit WEM getroffen hat?  
 'And you assume that he met afterwards with WHOM?'

These are not reactive, but initiative questions.<sup>19</sup> Still, the situations in which these questions are uttered are such, that H is obliged to know, or is at least subject to a very strong expectation to know, the closed question proposition (= the answer). Hence in these situations, unlike situations in which normal *wh*-questions are asked, in which S only believes or hopes that H knows the closed proposition (= the answer), S is entitled to strongly expect/take for granted that H does in fact know it. And this is nothing but the echo-effect projected.

To be sure, there are also initial uses of EwCs in more "normal" questioning situations. Cf. (26)-(27):

- (26) [Context:  
 A: Ich möchte mit Ihnen über die Themen fürs Mündliche reden, was ich nehmen soll.—B: Klar, gut. Wird ja auch Zeit. Lassen Sie mal sehen:]  
 Sie sind WANN mit dem Schriftlichen fertig?  
 ['A: I'd like to talk to you about the oral, what kinds of subjects to choose.—B: Sure, ok. It's about time, too. Let's see:] You'll be done with the written exams WHEN?'
- (27) Den Bericht, den möchten Sie nochmal WANN haben?  
 'As for the report, once more, you'd like to have it WHEN?'

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But on closer inspection, there are no counterexamples, for there is a subtle distinction between using EwCs vs. normal *wh*-interrogatives for asking the same question even in these situations: Using EwCs has a "connecting" effect to previous discourse on the same topic, and often has a ring of politeness to it that the normal *wh*-questions lack. We can relate these effects to the echo-effect in the following way: Just as asking EwC-questions in quiz situations, interrogations, etc. presupposes that someone is under obligation to know the answer, that is that the question proposition is known to him as having been closed before, so does asking them in situations as in (26)-(27), the only difference being that in the former case it is the *hearer* who is under obligation, whereas in the latter case it is the *speaker*. If so, the connecting effect automatically follows (S must know the closed proposition from somewhere), and so does the politeness effect: Asking a normal information question always puts the speaker into a weaker position than the hearer, but asking it in a form that conveys the impression that S should already know the answer, makes the speaker's position appear even weaker (having to ask again indicates some defect on his part)—and this is a prime source of politeness effects (see Goody 1978:32ff, Brown/Levinson 1978:144ff).

Note that the existence of cases like (25)-(27) was always considered to be a problem within the correspondence approach to Echo questions in German. What we see now is that it is not a problem at all. On the contrary, it confirms the derivational approach within an articulated framework of grammar which committed us to assuming like linguistic effects for like linguistic causes. And this was successful: by just interpreting the specific focus-background-structure of EwCs in the normal way, the "specific" echo effect was also taken care of.

It is perfectly obvious that this is not all to be said about EwCs, for their second striking property, the positional variability of the *wh*-phrase, also calls for an explanation. There is one, and it makes use of what I pointed out about normal *wh*-interrogatives in Section 5.3: they must have a *wh*-phrase in initial position because German requires that the +*wh*-feature in this position be checked/covered by an interrogative *wh*-phrase. Since *wh*-phrases need not be initial in EwCs, the obvious conclusion is that there is no +*wh*-feature there; in other words, syntactically, EwCs do not belong to the *wh*-interrogative sentence type, for which the initial  $\pm$ *wh*-feature is a constitutive feature. This is a perfectly good explanation for their positional behaviour: there is nothing

to attract the *wh*-phrase, hence it can remain in situ. And there is further support for the absence of the +*wh*-feature: unlike normal *wh*-questions, EwCs i) may not act as interrogative complements to predicates selectionally requiring interrogative complements (28b), which also means that "Echo-*wh*-phrases", if they occur in subordinate clauses, have always scope over the entire clause (28c); ii) they obey none of the island constraints on *wh*-scope binding (29b).

- (28a) Sie weiß, bei wem Karl jetzt arbeitet.  
'She knows, where Karl works right now'.  
(28b) Sie weiß, \*Karl arbeitet jetzt bei WEM/\*Karl bei WEM jetzt arbeitet.  
(28c) Sie weiß, ob/daß Karl bei WEM arbeitet? / bei wem Karl WANN arbeitet?  
'She knows, whether/that Karl works WHERE?/where Karl works WHEN?'  
(29a) \*Wo bestellte KARL Pizza und was?  
[Where-ordered-Karl-pizza-and-what]  
(29b) Wo bestellte Karl Pizza und WAS? / Karl bestellte Pizza und WAS?  
'Where did Karl order Pizza and WHAT?/ Karl ordered Pizza and WHAT?'

Since selectional restrictions as well as scope-binding are sensitive to the property of being an interrogative clause, that is having an initial +*wh* feature in our theory, the respective behaviour of EwCs is again best explained by postulating that they lack this feature. Since this feature is the carrier of sentence mood, it follows that EwCs are neither syntactically nor semantically interrogative—and this in turn offers a most plausible basis for understanding why the sentence type and sentence mood properties of the manifold underlying structures in EwCs—see (30) for examples differing from the "normal" V2 type like (20)—remain operative.<sup>20</sup>

- (30a) Der und WAS tun?  
'Him and do WHAT?'  
(30b) Nieder mit WEM?  
'Down with WHOM?'  
(30c) Sei nett zu WEM?  
'Be nice to WHOM?'

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- (30d) Hat er WEN gesehen?  
'Did he see WHO?'  
(30e) Ob er WEN gesehen hat?  
'Did he see WHO?/You wonder, whether he saw WHO?'  
(30f) Wer ging WOhin?  
'Who went WHERE?'  
(30g) Wer WOhin ging?  
'Who went WHERE?/You wonder, who went WHERE?'  
(30h) Ihm wird Karl WAS?  
[Him-will-Karl-what] 'Karl will do to him WHAT?'  
(30i) Er WAS?  
'He WHAT?'  
(30j) WAS?  
'WHAT?'

This leaves as the only option that EwCs are questions only on a level beyond syntax and semantics proper. In other words the fact that they are *always* used to ask *wh*-questions is nowhere conventionally encoded in grammar but to be derived on the basis of their grammatical properties. This is by no means easy, and I will not go into it here. But as I hope to have shown in Reis (1992), it can be done "applying independently justified grammatical and pragmatic means only", which means in particular that it can be done without appealing to the concept of "mixed sentence type"<sup>21</sup>.

**6.2 Verb-first declaratives**

As already demonstrated above in (10), V1-clauses are associated with many uses. Naturally, a maximally consequent derivational approach would assign to them a uniform use potential and derive all the functional differences between V1-interrogatives vs. V1-declaratives vs. subordinate V1-occurrences from interacting factors. This has not been done yet, and I will not be so boldly speculative as to suggest *that* it can be done, much less how. Especially the difference between V1-declaratives and V1-interrogatives seems somewhat hard to derive from a putative common semantic denominator. To be sure, there is the distinctive rise contour, and as we can see in (31), it is able to turn a V2-declarative into something that can only be used as a question. But I am not sure at the moment that we would be willing to equate the functional

difference effected thereby with the functional difference we meet between the declarative vs. interrogative V1-cases; see (32).

- (31) Ein zweiter Mann kam herein. (I) – Ein zweiter Mann kam herein? (I)  
'A second man entered'. 'A second man entered?'
- (32) Kam ein zweiter Mann herein. (I) –Kam ein zweiter Mann herein? (I)  
'Entered a second man'. 'Did a second man enter?'

So I will be content with looking at a subfield of V1-clauses, to which I will assign -wh, that is declarative sentence mood (by way of analogy to the clear distinction between interrogative vs. declarative V2-clauses which we mark with +wh vs. -wh). The questions to be raised are the following: a) what is their specific illocutionary use potential?, b) starting from there as a common denominator, how can we cover the whole array of declarative use variants; cf. (33)?, c) finally, what are the functional differences to V2-declaratives? My intention is, of course, to relate this again to the defining formal features we meet in these types of clauses.

- (33a) Hab ich ihr da ganz frech noch einen Kuß gegeben. ["narrative" V1-DS]  
[Have-I-her-totally-bold-then-a-kiss-given]  
'Then, I just went ahead and kissed her.'
- (33b) [Soviel zu diesem Argument.] Bleibt nachzutragen... ["enumerative" V1-DS]  
[This much for this argument.] Remains to add, ...'
- (33c) [Nur zu.] Soll sie mit ihrem Bankfritzen doch glücklich werden.  
["deontic" V1-DS]  
[[MP-to.] Shall-she-with-her-bank-fritz-MP-happy-become]  
[Be my guest.] Let her be happy with her guy from the bank, I don't care.'
- (33d) [Dies war merkwürdig.] War es doch der Staatschef, der... ["causal" V1-DS]  
[This-was-strange.] Was-it-MP-the state-chief-who...]  
[This was strange.] For it had been the prime minister, who...'
- (33e) War das ein fröhliches Wiedersehen. ["exclamative" V1-DS]  
[Boy,] was that a happy reunion!  
(examples from Önnerfors 1997: ch.5; DS = "declarative sentence")

V1-declaratives have been thoroughly studied from a derivational perspective by Önnerfors (1997). What he establishes first, is, that V1-declaratives are

genuinely V1-structures (rather than elliptic V2-structures). Thus, initial position of the verb can be taken as the defining formal feature of V1-DS. What he shows next, and he is the first one to show that, is that V1-DS are informationally special with respect to Topic-Comment Structure: While V1-DS may exhibit articulated theme-rheme structure or focus-background structure, there is usually no topic-comment division: V1-declaratives are basically always "all comment", so to speak. This is a clear contrast to V2-structures, and in keeping with the traditional idea that the initial position in V2-structures is the prototypical "topic" position (see also below). If so, it stands to reason that V1-DS, which lack this position, should not favour topic-comment articulation either.<sup>23</sup>

Turning to function, bare V1-DS seem to be basically "narrative": they are most frequent in situations in which "the course of events" is described (and do not occur, for example, in argumentations), using them instead of V2-clauses has the effect of making the account more dynamic, etc. How is this "narrative" characteristic to be derived from the formal characteristics? Önnerfors points out, quite correctly I think, i) that being "all comment" is at least a necessary prerequisite for being "narrative", and ii) that the verb, which after all is the link to the event described, is in first position, thus presenting the event as a kind of extra-linguistic "topic" to which the content of the V1-clause is a comment. Moreover, he shows that narrativity of V1-DS is always bound up with the appearance of dynamic predicates (individual level predicates being incompatible with this function).

If so, the narrative potential of V1-DS is completely derived from its basic formal characteristics, plus support from propositional content. How come, then, that V1-DS may have any other uses at all, see (33b-e)? Narrative function needed support from propositional content, so it comes as no surprise that Önnerfors argues that the other uses arise by lexical and intonational factors preventing via their interpretive effects the "course of events" interpretation ('Bezugnahme auf den Ereignisablauf') underlying narrativity: In (33b) it is the special meaning of the enumerative verb, in (33c) it is the deontic modal, in (33d) the argumentative effect of *doch*, in (33e) it is the exclamative accent linking the utterance to the expressive domain and thus subduing the narrative aspect, so to speak. (Note that Önnerfors is able to support the derivation of V1-exclamatives from V1-declaratives as originally

proposed in Rosengen (1992b) by showing that exclamatives never have a topic-comment division either.)

One can certainly take issue with some aspects of Önnertors' account—why bother, for example, to *derive* the type (33b), which is presumably a truly idiomatic pattern, living more or less on analogy? But on the whole, it seems to me on the right track, showing that there is a lot to be gained, if we approach the issue of form-function correlations alias the issue of sentence (sub)types in a derivational spirit: We find overall order as well as fine-grained systematicity, where before we had only a list of different uses.<sup>23</sup>

With the questions (a)-(c) we started out with basically settled, let me briefly return to an aspect that is particularly interesting about V1-declaratives: the functional difference from V2-declaratives and what it is based on.

As already said, the absence of an initial XP-position allows, in a way forces, V1-clauses to be narrative, the presence of an initial XP-position allows V2-clauses to be non-narrative, which can be suggestively correlated with the absence vs. possible presence of Topic-Comment Articulation. The question is, does this amount to an essential subdistinction with respect to the illocutionary use potential of V1-declaratives vs. V2-declaratives itself—that is does it affect the illocutionary point of declaratives—, or is it just a secondary difference? The following observations suggest that it is essential:

V2-DS are natural answers to factual questions, but V1-DS are not:

- (34) [A: Was ist auf dem Bild zu sehen?]  
[A: [What-is-on-the-picture-to-see] 'What's in the picture?']
- (34a) B: Da steht ein Mann vor der Tür.  
'There is a man at the door.'
- (34b) B: \*Steht da ein Mann vor der Tür.  
[Stands-there-a-man-at-the-door.]
- (35) [A: Spielen Kinder auf der Straße?]  
'Are children playing in the street?'
- (35a) Ja, es spielen Kinder auf der Straße.  
'Yes, there are children playing in the street.'
- (35b) \*Ja, spielen da Kinder auf der Straße.  
[Yes-play-there-children-in-the-street]

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—V2-DS can be the basis of tag questions, but V1-DS cannot:

- (36a) Es steht ein Mann vor der Tür, nicht wahr/oder?  
[It-stands-a-man-at-the-door-not true/or]  
'There is a man at the door, isn't there/ or am I wrong?'
- (36b) \*Steht da ein Mann vor der Tür, nicht wahr/oder?  
[Stands-there-a-man-at-the-door-not true/or]

—V2-DS allow explicit performative use, V1-DS do not:

- (37a) Ich kündige hiermit.  
'I hereby resign.'
- (37b) \*Kündige ich hiermit.  
[Resign-I-hereby]

What I would submit is that V1 presents the proposition expressed as an *event*, V2 however as a *fact*, or, to put it differently: Whereas with V1-DS propositions that are true are *recounted*, with V2-DS it is *stated* that they are true. That is, while V1-DS and V2-DS share the declarative sentence mood, which in both cases is mapped by default onto assertions (in the sense of Scarle 1979:12ff., or BRRZ 1992:31f.), the (virtual) commitment to the truth of the expressed proposition (the 'Wahrheitsanspruch') they thus have in common, has a different status: in V1-DS it is backgrounded, presupposed, in V2-DS it is foregrounded. Hence, apparently, it is only in declarative V2-form that the truth of a sentence can be literally *asserted*, in still other words, that categoric Judgements may be performed. If this is correct, then what is usually just speculated, might have a fundamentum in re: V2-clauses may indeed have a bipartite syntactic structure, with the initial XP position intrinsically having a "topic meaning" rather than just getting one if properly accented. If so, then, of course, the illocutionary subdistinction could again be derived from the formal subdistinction as desired.

**6.3. Further examples**

Let me just cite a few more examples in favour of a derivational approach:

— *Imperatives* as analyzed in Platzack/Rosengen (1997/98), where it is shown that the formal idiosyncrasies of imperatives—they have a special verbal mood and lack subjects—and their functional idiosyncrasy—they do not express a

predication relation, but set a norm relative to the addressee—are just two sides of the same coin. In other words, they show that the latter can be derived from the former, and how.

— *Exclamatives* as analyzed by Rosengren (1992b), (1997), who uses their obvious formal relationships to declaratives and interrogatives (see Section 4.1 above) as the basis for a (bifurcated) derivational account, the specific “degree” meaning plus the expressive flavour of exclamatives being derived from the interaction with the interpretive contribution of the specific accent. As for verb-final *wh-exclamatives* in particular, it is shown in d’Avis (1998) in a more formal framework that their properties can be derived on the basis of the normal *wh*-interrogative meaning.

— *Bare infinitival structures*, which are used either as directives or expressives or as modal *wh*-questions, but never as declaratives or genuine *yes-no* questions. As shown in the analysis by Reis (1995), this functional distribution can also be derived, provided that proper attention is paid to what  $\pm$  finiteness and the absence of subjects can be shown to “mean”.

There is no space to dwell on these examples at length, so let me just underscore the main point: In all these approaches well-known form-function correlations were systematically examined from a derivational perspective, and in every case derivations—or at least suggestive derivational hypotheses—were found for major aspects of these correlations, usually for the first time. To my mind this is convincing proof for the productive yield of the derivational approach.

### 7. Conclusion

In the foregoing sections I tried to argue that a derivational approach is not only preferable to a mere correspondence approach, but that it is also feasible, to a considerable degree. In order to avoid misunderstandings, let me point out two things:

First, the derivational approach—outlined here in GB-oriented terms—is perfectly compatible with assuming (noncompositional) constructions and constructional signs for sentence moods, if there is good evidence that the phenomena in question are constructions, i.e., idiomatic in the required way. Thus, I would presumably not bother to derive the special form-function

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correlation we find with *how about V-ing X* constructions, or the directive use of perfect participle-constructions like *Aufgepasst!* (‘attention please!’). Moreover, a number of language specific restrictions on so-called “minor sentence types”—for example the different extent to which *wh*-phrases in *wh*-exclamatives or independent *wh*-infinitivals are admissible in German vs. English—seem *prima facie* hard to reduce to independent properties of the languages in question, hence may have to be handled as constructional idiosyncrasies. Rather my claim was that not all correlations between sentence form and illocutionary function should be (merely) considered this way, or to be more radical: that many, if not most of the interesting correlations should not be (merely) considered this way.<sup>24</sup>

Second, our approach has been criticized for employing abstract syntactic features. I have offered some evidence that this is no foul gimmick or just blind adherence to GB tradition, but has rather serious empirical motivation. Still, the motivation goes only that far, and one might doubt, for example, that we have any convincing motivation for pairing off declarative vs. interrogative V1-clauses by way of  $\pm$ wh features. But does that refute the derivational approach? Perhaps it shows that we have exaggerated the area within which compositionality in deriving form-function correlations is possible. But perhaps it shows that, on the contrary, we have not been daring enough, in that we have shied away from assigning interpretive import to verb position by itself,<sup>25</sup> and in that we have stuck to the traditional idea that V1-interrogatives should have the same sentence type feature as *wh*-interrogatives, etc. In other words, many of the particular derivational proposals cited here could be seriously wrong, or there might be facts and better alternatives not yet seen. What really matters, however, is that these are empirical issues, arising as soon as the form-function issue at hand is approached in a derivational spirit, within an articulated framework of grammar. If we settle immediately on a mere correspondence approach, these issues have not even a chance to arise. In other words, what recommends the derivational approach first and foremost is that it is a productive research strategy, in fact the only one. The few results I have cited seem to confirm it.

### NOTES

1. This paper is a considerably expanded and revised version of a talk given at the Germanic Linguistics Roundtable at Berkeley, April 3-4, 1998. I am



- grateful to the participants of this conference, as well as Anke Feldhaus (Tübingen) and Inger Rosengren (Lund), for valuable comments and criticisms.
2. A reflex of this presupposition is that issues of sentence types are often discussed under the heading of "speech act distinctions in syntax" (or "in grammar" respectively; see Sadock/Zwicky (1985), Sadock (1988)). An even more interesting reflex is the role the presupposed sentence typology has been accorded in arguing about the correct typology of speech acts; cf. especially Wunderlich (1976, 1986); Sadock (1994), Croft (1994), and, very much in line with the conclusions later reached in Sadock (1994), BRRZ (1992).
  3. Capitals indicate the syllable bearing main stress.
  4. Wilson/Sperber maintain that the truly relevant mediating concepts that operate on these sentence type specific properties, involve the fundamental distinction between descriptive and (first-order, second-order, etc.) interpretive use of utterances, yielding more elementary "moods" so to speak "crosscut[ting] any distinction among sentence types and hence any distinction among semantic moods" (1988:99).
  5. To be sure, in some mood-centered studies this remains only partially in the dark; cf. for example Harnish (1994), who supplies rough sketches of structures associated with various sentence moods, more or less in terms of the obvious morphosyntactic features. The point is that the grammatical status of these structures and the principles for building them up are nowhere made explicit, let alone linguistically justified.
  6. For an overview see Altmann (1988), Altmann/Batliner/Oppenrieder (1989), and in particular Altmann (1993). This framework has been more or less taken over for the treatment of sentence types ("Satzarten") in the latest version of the DUDEN grammar (1995) and also the new voluminous grammar of German sponsored by the Institut für Deutsche Sprache (=Zifonun 1997), but also by Liedtke (1998) (a book which despite its title concentrates on semantic-pragmatic issues of illocutionary interpretation based on German).
  7. Unfortunately, the major reference work on this approach ("Construction Grammar" by Fillmore and Kay) cited everywhere, is still unpublished. Accessible outlines of the crucial assumptions are presented in Goldberg (1995) and Kay (1997). Note that the following remarks are not directed

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- against Construction Grammar (the leading ideas of which may ultimately have to be integrated into any descriptively adequate model of grammar anyway), for a construction grammar approach is not necessarily committed to a noncompositional treatment, which is the hallmark of the correspondence approach to sentence types (see also note 24 below). However, the studies cited in the text, in particular Kathol's, certainly are; see also the discussion in Section 5.4 below.
8. In other words, the facts suggest that these contours make specific and distinctive contributions (be it by way of meaning or of implicature) to the discourse interpretation of utterances, which may also force or preclude certain illocutionary interpretations. For a promising proposal of a "compositional theory of tune interpretation" (developed for tunes in English, but adaptable to German) see Pierrehumbert/Hirschberg 1990. (See also Ward/Hirschberg 1985, whose interpretation of rise contours as "implicating uncertainty" has variously been made use of in derivational approaches to sentence types; cf. Section 5. below).
  9. Altmann has about thirty finite types, but if we also count nonfinite types (like *Alle aufstehen! Wohin sich wenden?, Noch einmal Rom sehen* ['Everybody [should] get up!', 'Where [should one] go?'], 'Ah, if one could see Rome once again'), including the more marginal, but still productive ones (like *Aufgepaßt, Ins Bett mit dir!, Wohin mit Peter?* ['Attention [paid]!', 'To bed with you!', 'Where-to-with-Peter?']) plus the corresponding "mixed types" (*Aufgepaßt, Noch einmal Rom sehen?*, etc.), this gets us already to about 50-60 form types. And once one starts looking, there are many more: "imperative conditional" main clauses like *Sei einmal unfreundlich, und schon giltst du als Tyrann*. ['Be unfriendly once, and you'll be classified as a tyrant at once'], the many V-final subcases listed in Oppenrieder (1989), etc.
  10. The way out immediately coming to mind (and suggested over and over again in the literature) is of course that V2-clauses like (13b) are really "main clauses", and V-final clauses like (14a) are really "subordinate clauses" (with ellipsis of the matrix main clause). On closer inspection, however, this does not work: If the distinction between sentence and discourse grammar is respected, V-final clauses like (14a) must be considered root clauses in terms of sentence grammar (in contrast to truly elliptic cases like (i)); cf. Reis (1985), Altmann (1987), Oppenrieder (1989). And while dependent V2-clauses are indeed syntactically special,

they are still syntactically subordinate (see Reis 1997). Moreover, their appearance as complements to multiply embedded clauses as in (ia), and to nouns as in (ib) should effectively quell all hopes to treat them simply as "main clause phenomena" in the sense of Hooper/Thompson (1973).

- (i) Was wollt ihr herausfinden? 'What do you want to find out?'  
 Ob ihm einer Geld schickte. 'Whether somebody sent him money'.
- (ia) Wenn Peter leugnet, daß Fritz glaubt, der Plan sei nicht ausführbar, ...  
 'If Peter denies that Fritz believes the plan won't work....'
- (ib) Wenn Susanne euch dazu bringt, daß ihr Peters Illusion, er sei der Kaiser von China, zerstört, ...  
 'If Susan persuades you to destroy Peter's illusion (that) he is the emperor of China....'
11. For an extensive study of subordinate clauses of this type, see Brandt (1990). A syntactic interpretation of their special status (unembedded, but dependent) is given in Reis (1997).
12. I do not claim that one could not devise remedies for this approach. Thus, Altmann (1987:31) suggests that there is a hierarchy of features for a given form type, the idea being that if one of them figures as a primary feature ('Leitmerkmal') unambiguously signalling its function (as the verbal mood feature +imp in the imperative case), then other features can be in free variation. In principle, this might take some sting out of at least the first problem. But what I do claim is that the notion of complex sign, under the strain of the higher level of descriptive adequacy these remedies aim at, will become more and more distorted and the correspondence approach will adopt more and more of the compositional features of the alternative approach outlined in Section 5.
13. Perhaps it would be more accurate to say that in terms of grammar the respective syntactic and prosodic structures themselves are the interpretively relevant properties, which are mapped onto their respective informational, expressive and iconic values at the interface to (linguistic) pragmatics (I. Rosengren, pc). The exact way, however, in which the association operative in utterance interpretation comes about, is not really material to the present discussion. —Concerning the notion "communicative use potential" see also the discussion in Motsch/Reis/Rosengren (1990).

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14. This approach is further developed and adapted to the minimalist program in Platzack/Rosengren (1997/98), the most substantial refinement following from the adoption of Rizzi's (1997) conception of the C-domain: Platzack/Rosengren distinguish between a highest functional projection— ForceP—facing outward and hosting the sentence type features, and a functional projection—FinP—relating to tense and mood and facing inward in that finiteness a) anchors the event described by the clausal proposition in time and space, referring to an event in the speaker's world or some other world; b) gives rise to the predication relation between the designated argument and the rest of the clause. The main "derivational" point to be made here is of course not affected by these refinements.
15. This is because constructions have to be learned, too, and because generalizations corresponding to the "regular", productive features of constructions are also to be represented in grammar (Kay 1997:129f.)
16. In his dissertation Kathol deals briefly with *was...w*-constructions (1995:211-214) as well as with *wh*-imperatives (1995:214-217), handling the former by assuming special bridge verb variants that encode the properties of the *was...w*-construction in their lexical entries, and the latter by postulating an interrogative *daß*. Both devices are more or less completely ad hoc; moreover, it is hard to see how they could be constrained to the "right" environments without appealing to some—equally abstract—equivalent to abstract  $\pm wh$  features. For a critical evaluation of some other pertinent aspects of Kathol's work, see Feldhaus (1998).
17. Note that this is a condition of adequacy not only on defining sentence mood distinctions, but also on defining speech act typologies: adequate speech act typologies, besides meeting module-internal criteria of adequacy (such as accounting for typical ranges of speech act variation, openness for indirect interpretations of certain kinds), should also allow an optimally smooth mapping of sentence moods, or more generally, of the functional meanings of sentences (=their illocutionary use potential) onto illocutionary (type) concepts. A typology designed to (also) meet this condition is presented in BRRZ (1992:48ff.).
18. Focusing pronouns always results in narrow focus, no matter whether the pronouns are  $-wh$  or  $+wh$ . As for the fact that in *wh*-pronouns used in

EwCs only the interrogative part of the pronominal content is focused, see below.

19. Of course, reactive uses, including straightforward echo-uses would also be possible for the EwCs in question. The fact that reactive uses seem to be less natural with (25c-e) than with (25a-b) can be derived in rather obvious ways from non-structural factors: kind of propositional content and addressee involved, discourse-connecting, "narrative" effect of initial *und*, etc.
20. Note that while all questions asked with the forms (30a-j) have an echo-effect of sorts, there are certain subdistinctions in that i) some structures are worse than others ((30c) and (30d) are marginal), ii) many structures have only the straightforward quotational echo effect. But note (30e,g), which may echo interrogative V1- and whV2-structures, without formally quoting them. (For a more extensive discussion, see Reis 1992).
21. In a recent paper, Ginzburg/Sag sketch a "construction-based" account for "echo-wh-questions" in English (1998:ch.6), in which they also come to the conclusion reached in Reis (1991b, 1992)—see the summary above—that "reprise" as well as "nonreprise uses" of the typical "EwCs" should be treated on a par, and that these forms with "in-situ wh-phrases" have a place in grammar. Unfortunately, they neither pay attention to the specific focus-background structure of EwCs (let alone use it for deriving a basic "echo effect" as the common denominator for the variant uses), nor to the contextual factors conditioning the use variants. Nor are the relevant syntactic traits—the positional variability of the Echo-wh-phrases, the non-occurrence of EwCs as interrogative complements, the variation in syntactic form type—insightfully accounted for; their argument to the effect that EwCs obey the island constraints (1998:6.1) is at best partially correct (cf. the English equivalents to (29) above). Hence, their "constructional" account as it stands is in many respects descriptively inadequate, for it encodes as arbitrary form and form-function (sub)distinctions what could in fact be derived. It is moreover observationally inadequate in that it allows for ungrammatical EwCs like \**YOU saw what?*, \**Peter IS married to whom?*, etc.

What I am claiming then, obliquely, is that my account of German EwCs by and large carries over to the parallel phenomena in English, the observable differences being relatable to independent syntactic dif-

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- ferences between the two languages. Although there are some tougher nuts to crack (for example English EwCs with initial *wh*-phrase, which obligatorily undergo *do*-inversion), I see no reason to be unoptimistic.
22. A possible counterexample immediately coming to mind are, of course, V2-declaratives introduced by expletive *es*, for they do not readily allow for informational divisions either. However, Önnerfors is able to show that the respective informational restrictions are different from those on V1-DS,—and in keeping with his overall descriptive account of V1- vs. V2-declaratives.
  23. For a more extensive discussion of Önnerfors' work, see Reis (1999).
  24. The "(merely)" is supposed to indicate that, judging from the available sources (see note 7), the derivational approach with respect to sentence types could also be pursued within the overall assumptions of construction grammar. It would amount to the assumption i) that the features defining the respective sentence type (alias "construction") compositionally contribute to the meaning of the whole, and/or are part of the overriding regularities inherited by particular constructions, ii) that in setting up the sign structure for sentence types the usual restrictions on the grammatical formalism hold (for example, there is no ad hoc extension with respect to the interaction of syntactic and prosodic features).
  25. As pointed out by Altmann (1987:30), following Flämig (1964), there have been many unsuccessful attempts trying to do just that. For a recent attempt, see Wechsler (1991).

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