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WHAT DO *WH*-IMPERATIVES TELL US ABOUT
WH-MOVEMENT?*

This paper is concerned with two variants of *Wh*-movement, +*Wh*-question-movement and *topicalization*. Drawing on German material, we argue that they crucially differ as to the features of the landing sites: *Wh*-question movement is movement of +*Wh*-phrases into A-bar positions marked by +*Wh*, which assigns clausal scope to the +*Wh*-phrases; topicalization is movement of XP-phrases into A-bar positions unmarked by +*Wh*.

Since +*Wh*-phrases are also XP-phrases, our account predicts that +*Wh*-phrases may undergo not only +*Wh*-question movement, but also topicalization, i.e., that they can be *Wh*-moved without the scope effects typical of +*Wh*-interrogatives. This prediction is borne out by the existence of *Wh*-imperatives in German, i.e., long distance extractions of ±*Wh*-phrases into imperative clauses, which we discuss in detail. It is shown that +*Wh*-imperatives presuppose complements with an initial +*Wh*-phrase, which is topicalized into the matrix clause, thus showing conclusively that scope assignment is independent of *Wh*-movement.

1. THE PROBLEM

As is well-known, German has syntactic *Wh*-movement applying in a considerable range of constructions. Long distance movement from *daß*-clauses, however, is common only in certain dialect areas.¹ (1)–(2) are examples of long distance movement of –*Wh*-phrases, yielding –*Wh*-declaratives, and of +*Wh*-phrases, yielding +*Wh*-interrogatives respectively:

- (1) Den Fritz verspreche ich dir, daß
 the Fritz(A) promise I you(D) that
 ich nie wieder besuchen werde.
 I never again visit will

Fritz I promise you that I shall never visit again.²

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¹ The so-called "extraction dialects" include in particular the German dialects spoken in the south, but the construction in question seems to be used by dialect speakers from many other regions and speakers of Standard German as well. Systematic studies of the phenomenon are rare, but cf. Bayer (1984) on Bavarian, and, concerning the reflexes of the phenomenon in Standard German and its restrictions, Andersson and Kvam (1984).

² Abbreviations in the glosses: D 'dative', A 'accusative' (nominative is always unmarked); case in prepositional phrases is usually unmarked); P 'particle in a verb particle construction',

- (2) Wohin sagte Fritz, daß Peter gegangen ist?
where said Fritz that Peter gone is
 Where did Fritz say that Peter went?

In the literature, this correlation between sentence type and *Wh*-moved phrase type has tacitly been assumed to be a matter of course. In languages such as English or Swedish there is, in fact, no surface evidence to the contrary. In German, however, subject to the same dialect restrictions as normal long distance movements, we find long distance movement of $\pm Wh$ -phrases into imperative clauses as well:

- (3) Den Fritz versprich mir bitte, daß
the Fritz(A) promise me(D) please that
 du nie wieder besuchen wirst.
you never again visit will
 Fritz promise me please that you will never visit again.
- (4) Wohin sag mir bitte doch mal gleich,
where tell me(D) please.MP MP right away
 daß Peter gegangen ist.
that Peter gone is
 Tell me please right away where Peter went.

At first sight, these " $\pm Wh$ -imperatives" look so much like the normal cases of long distance movement illustrated above that integrating them into the normal picture of *Wh*-movement seems to be a trivial matter. However there are substantial differences: there is no correlation between sentence type and *Wh*-moved phrase: (3)–(4) are still imperative clauses. In particular, $+Wh$ -imperatives like (4) seem to be just variants of imperative sentences containing an embedded $+Wh$ -clause such as (5). In other words, the $+Wh$ -phrase does not take scope over the matrix clause, a fact without parallels among ordinary $+Wh$ -interrogatives.

MP 'modal particle' (particle related to specific sentence and/or illocutionary types) ind. 'indicative', subj. 'subjunctive', imp. 'imperative'. Ungrammatical German examples are just glossed, not translated.

- (5) Sag mir bitte doch mal gleich,
tell me(D) please MP MP right away
 wohin Peter gegangen ist.
where Peter gone is
 Please tell me right away where Peter went.

Nothing in the current theory of *Wh*-movement explains how this is possible. In particular, the putative difference in scope effects runs counter to the assumption that *Wh*-movement is always operator movement leaving behind a variable.

What is required then is a modified theory of *Wh*-movement that is able to explain the differences between *Wh*-imperatives and ordinary *Wh*-constructions without losing sight of their similarities. It is the aim of this paper to present the outlines of such a theory.

2. THE DATA

We shall begin by presenting a detailed comparison between the $\pm Wh$ -phrase extractions into declarative and interrogative clauses and those into imperative clauses. We shall take the more or less traditional picture of *Wh*-movement as outlined in Chomsky (1981, 1986) as a point of departure, introducing the revisions necessitated by our findings in Section 3. Meanwhile, we shall keep the terminology as non-committal and surface oriented as possible, thus speaking of *Wh*-phrases rather than operator phrases, and referring to possible landing sites in terms of left-most or clause-initial positions rather than Spec C or Spec I, etc.

As for movement terminology, we shall be concerned with *Wh*-movement of two types of phrases: $+Wh$ -phrases, that is, XP-phrases containing an interrogative *Wh*-word in an appropriate position, vs. $-Wh$ -phrases, that is, XP-phrases not containing lexical operator elements of certain types.³ In view of the differences outlined above, we shall refer to the $\pm Wh$ -phrase movements into declarative and interrogative vs. imperative

³ These are interrogative *Wh*-words, relative *Wh*- and *d*-words, and the degree words *je* (+AP) and *so* (+AP). The diagnostic position is the initial position of finite verb final clauses, where the respective XP-phrases may appear, whereas $-Wh$ -phrases in the sense defined above may not. A broader notion of " $-Wh$ -phrase" will be discussed in Section 3.1.

clauses by different terms: to the former by *topicalization*⁴ and *+Wh-Question-movement* respectively, to the latter by *±Wh-Imperative-movement*. The term *Wh-movement* will be retained in its broad sense, in which it refers to A-bar movements, long or short, of all sorts of XP-phrases.

Concerning the data our discussion is based on, the examples illustrating extractions into declarative and interrogative clauses are more or less standard. Concerning *Wh-imperatives*, a hitherto unnoticed phenomenon, there are next to no recorded examples in the literature; the data and grammaticality judgments cited in the text are basically our own. We have, however, made sure that they are representative of other extraction idioms as well.⁵ Due to certain, apparently pragmatic, restrictions on possible *Wh-imperative* matrix clauses (concerning subject expressions ≠ 2nd pers., and expansions not referring to the immediate speech situation, cf. Reis and Rosengren 1988, p. 4f.) we shall be using examples with practically the same canonical matrix structure throughout. It should be

⁴ We subscribe to the traditional view of topicalization, whereby the *-Wh*-phrases themselves are *Wh*-moved. As far as we can see, the Left Dislocation or TOP analysis (originally proposed by Chomsky 1977, see also Koster 1978), where the topicalized phrase is base generated in TOP (a position possibly made available by discourse grammar) and the element *Wh*-moved into the adjacent A-bar position is a pronominal or empty *Wh*-operator, which gets coindexed with the TOP phrase (and, in the case of the pronominal *Wh*-operator, optionally deleted), cannot be upheld.

First, there exists topicalization within embedded CP structures, definitely so in English and arguably also in German (see Section 3.2); in neither language is this CP-internal position a *Wh*-operator position. Second, the TOP analysis presupposes that wherever topicalization occurs, Left Dislocation or so-called "topic drop" (see Huang 1984), which is taken to be a topicalized instance of the empty *Wh*-operator, should likewise be possible, but this is not generally true, cf. among others topicalized sentence adverbials or negated constituents, and embedded topicalization in general. Third, certain advantages cited in favor of the TOP analysis (see especially Weerman 1988, p. 51ff.) are, on closer inspection, only apparent: that "Topic Drop" can be explained in terms of a *Wh*-moved empty operator is refuted by cases such as *Freut mich, daß ihr kommt* 'makes me happy that you are coming', where an expletive *es* is dropped, which cases rather call for positing ellipsis (see Fries 1988). Moreover, embedded topicalization, even in verb-second clauses, which are by no means "assertional" throughout, cannot involve TOP as a discourse position. This leaves the argument from Dutch V projection topicalization with resumptive pro-verb (see Weerman 1988). Since there are no parallels in German, we suspect that it testifies to a language specific difference rather than providing insight into the general nature of topicalization proper.

⁵ We are both native speakers of southern varieties of Standard German, a Hessian and a Svbian extraction dialect respectively. Many of our examples have been informally tested with other speakers to show that extraction dialect speakers find them acceptable (though more unusual than normal long distance extractions), whereas speakers of nonextraction dialects do not. A more systematic test concerning long distance constructions including *+Wh-imperatives* (10 speakers of the same Svbian extraction dialect, 8 speakers of *±* extraction varieties of Standard German) yielded the same results. (We are indebted to D. Le Claire for carrying out this test.) As to the marginality of *+Wh-imperatives*, see Section 3.3.

pointed out, however, that these restrictions seem to be either independent of the movement process underlying *Wh-imperatives* or to hold for other long distance constructions as well, which makes them immaterial to our investigation.

2.1. *-Wh-imperatives and Wh-movement*

The instance of normal *Wh-movement* with which *-Wh-I-movement* has to be compared is topicalization. There seems to be a near perfect one-to-one correspondence between the two, no matter which property is looked at:

1. The same subtypes of *-Wh*-phrases are moved in both: DPs, PPs, APs (DegPs), CPs, sometimes VPs, subject in the same restrictions.
2. The landing sites are the same (the only one at issue being the initial position in verb-second root clauses).
3. There is both long and short distance movement in either case.
4. Either movement is optional.
5. The restrictions on possible extraction clauses are the same.
6. Neither movement has an impact on the sentence type of the target clause nor any relevant scope effects: declarative clauses remain declarative, imperative clauses remain imperative.

Of these parallels, 1-4 and 6 are more or less self-evident, or at least easily verifiable. Parallel 5, however, requires comment, for the fact about possible extraction clauses will be of crucial importance in what follows.

In German, the extraction domains for topicalization are restricted in the following way. Extraction is impossible from adverbial and relative clauses; marginally possible from *+Wh*-complement clauses, including *ob*-clauses; possible from *daß*-clauses (dependent on the presence of a bridge verb) and subject to restrictions on extractable constituents (in terms of a grammatical "extraction hierarchy", see Andersson 1988); and freely possible from infinitival complement clauses and from (the preverbal position of) verb-second clauses. Exactly the same pattern emerges for *-Wh-I-movement*, special attention being required only by the following cases:

- (a) Finite verb final complement clauses involving *daß*:⁶ the relevant facts to compare are the restrictions on possible bridge verbs. Those

⁶ As for extraction from *+Wh*-complement clauses, there are halfway acceptable instances of topicalization from *ob*-clauses (see Andersson and Kvam 1984, pp. 56ff., 111). The *-Wh-imperatives* constructed along the same lines seem just as good.

figuring in topicalization are the familiar ones appearing in all instances of *Wh*-movement in German: *glauben* 'believe', *annehmen* 'assume', *meinen* 'think', *denken* 'think', *wünschen* 'want', *zugeben* 'admit', *behaupten* 'claim', *sagen* 'say', 'tell', *erlauben* 'permit', *zusehen* 'see to it', *verlangen* 'request' etc., that is, semantically transparent verbs, which take finite *-Wh*-complements (frequently not only *daß*-complements but also verb second complements). The bridge verbs figuring in *-Wh*-imperatives all belong to this class. Thus, there is no *-Wh*-imperative involving *daß*-clauses without a topicalization counterpart, and if topicalization is impossible with certain matrix structures, so is *-Wh*-imperative formation.

There are some bridge verbs, for example *erfahren* 'be informed', 'hear' and *wissen* 'know', that figure in topicalization only. But this is due to the semanto-pragmatic fact that *Wh*-imperative matrix structures always have directive force; it does not reflect a difference in the underlying movement processes.

(b) Verb-second complement clauses: as shown by Tappe (1981), following Thiersch (1978), the topicalization cases (6)–(8) may all be analyzed as instances of long distance movement, with the preverbal position of the embedded verb-second clause being filled by the trace of the *Wh*-moved phrase. While (6) also admits of a parenthetical analysis, in (7)–(8) the movement analysis is forced, for the diagnostic signs of matrix-subordinate clause relationship are present, i.e., the pronoun antecedent relation in (8) and the use of present subjunctive in (7), which is dependent on the matrix verb.

- (6) Den Mantel gibt Karl zu, hat Fritz
the coat(A) admits Karl P has [ind.] Fritz
 schon am Montag gekauft.
already on Monday bought

The coat Karl admits (that) Fritz has bought already on Monday.

- (7) Den Mantel gibt Karl zu, habe Fritz
the coat(A) admits Karl P has [subj.] Fritz
 schon am Montag gekauft.
already on Monday bought

The coat Karl admits (that) Fritz has bought already on Monday.

- (8) In Hannover gibt Karl_i endlich zu, genießt
in Hannover admits Karl_i finally P enjoys
 er_i das Leben auch.
he_i the life(A) too

In Hannover Karl_i finally admits, (that) he_i enjoys life, too.

These diagnostic signs never show up in *-Wh*-imperatives, cf. (9). But the absence of clear movement cases is not caused by peculiarities of the rule of *-Wh*-I-movement but by the peculiarities of imperative matrix clauses: present subjunctive seems to be always impossible under imperative matrix verbs, even if the verb allows it in principle, cf. (10).

- (9) den Mantel gib zu, hat/*habe Fritz
the coat(A) admit P has [ind./subj.] Fritz
 schon am Montag gekauft.
already on Monday bought

Admit (that) Fritz has bought the coat already on Monday.

- (10) *Gib zu/*Sag mir, er habe den Mantel
admit P/tell me he has [subj.] the coat(A)
 schon am Montag gekauft.
already on Monday bought

As to the pronoun antecedent relation, the diagnostic constellation requires 3rd pers. antecedents, which the canonical imperative matrix structures simply do not provide. Thus, the claim that topicalization and *-Wh*-I-movement are exactly parallel can be upheld even with respect to verb-second extraction clauses.

This established, we can safely conclude from the six parallels listed above that *-Wh*-I-movement is topicalization, its imperative instance, so to speak. Thus, *-Wh*-imperatives could in principle be fitted into the traditional picture of *Wh*-movement.

2.2. +*Wh*-imperatives and *Wh*-movement

With +*Wh*-imperatives, matters are different. When comparing +*Wh*-I-movement with +*Wh*-Q-movement, we observe parallels in just two respects:

1. The same subtypes of +*Wh*-phrases are moved: DPs, PPs, APs (DegPs), no VPs, but perhaps CPs,⁷ subject to the same restrictions.
2. The landing sites are the same (the only one at issue being again the preverbal position in verb-second root clauses).

But everything else is different:

3. +*Wh*-Q-movement includes (a) short distance movement as the unmarked case, cf. (11), (b) long distance movement from embedded clauses that may be infinitely far down, cf. (12), whereas +*Wh*-I-movement includes long distance cases only, cf. (13) vs. (14):

- (11) Wen benennst du als meinen Nachfolger?
whom(A) nominate you as my successor(A)?
 Who do you nominate as my successor?
- (12) Wen glaubst du denn, daß Peter (glaubt,
whom(A) believe you MP that Peter (believes
daß Maria meint, daß Franz sagt, . . . ,
that Mary thinks that Franz says . . .
daß Hans) als deinen Nachfolger benennen wird?
that Hans) as your successor(A) nominate will
 Who do you believe that Peter (believes that Mary thinks that
 Franz says . . . that Hans) will nominate as your successor?
- (13) *Wen benenne als meinen Nachfolger.
whom(A) nominate [imp.] as my successor(A)
- (14) Wen sag mir doch mal gleich, daß
whom(A) tell me MP MP right away that
 Peter (glaubt, daß Maria meint, daß Franz sagt, . . . , daß
Peter (believes that Mary thinks that Franz says . . . that
 Hans) als deinen Nachfolger benennen wird.
Hans) as your successor(A) nominate will
 Tell me right away who Peter (believes that Mary thinks that
 Franz says . . . that Hans) will nominate as your successor.

⁷ As to +*Wh*-CP constructions, see van Riemsdijk (1985). The lack of +*Wh*-VP constituents is conspicuous and cannot be accounted for on the basis of the category features countenanced by X-bar theory, see Baltin 1982, p. 16, fn. 9). Nonetheless, it is apparently a cross-linguistic fact.

The reason for this contrast is obvious: while (11) is simply an interrogative sentence, there is no grammatical source sentence for (13) to begin with. A true +*Wh*-interrogative clause cannot contain a verb in the imperative mood, nor can a true imperative clause contain an initial +*Wh*-phrase having clausal scope as is characteristic for the +*Wh*-interrogative sentence type.⁸ By this mutual semantic clash between interrogative and imperative sentence mood,⁹ the sentences in question are ruled out. But if there are no short distance +*Wh*-imperatives, why should there be any long distance +*Wh*-imperatives? The same semantic clash should rule them out as well. Since they actually exist, there must be a *structural* difference between them and normal +*Wh*-interrogatives beyond the difference in \pm imperative matrix clause on the basis of which their acceptability can be accounted for. In other words, the relevant point is not (only) that short distance cases are deviant, but that long distance cases are nevertheless acceptable.

4. +*Wh*-Q-movement is obligatory; +*Wh*-I-movement is optional. This difference is certainly related to the difference to be noted under 6.

5. Regarding the restrictions on extraction clauses, long distance +*Wh*-Q-movement patterns practically like topicalization. +*Wh*-I-movement shares this pattern inasmuch as adverbial and relative extraction clauses are impossible. But with complement clauses, matters are different, no matter which type is looked at.

(a) Finite verb-final complement clauses: there are no acceptable +*Wh*-imperatives involving *ob*-clauses.¹⁰ The crucial difference between +*Wh*-interrogatives and +*Wh*-imperatives involving *daß*-clauses shows up by comparing the respective classes of bridge verbs.

The class of +*Wh*-imperative bridge verbs comprises verbs such as *sagen* 'say', 'tell', *vorstellen* 'imagine', *vorschlagen* 'propose', *erklären* 'explain', *kontrollieren* 'check', *überlegen* 'think about', *berechnen* 'calculate', *erwägen* 'ponder', *sich informieren* 'get informed', *schätzen* 'guess', 'estimate', *überprüfen* 'examine', *untersuchen* 'investigate', *erzählen* 'recount', 'tell', *mitteilen* 'inform', cf. (15)–(17):

⁸ This does not rule out the echo question interpretation for (13) nor for sentences such as *Benenne als Nachfolger wen? 'nominate (imp.) as successor who?'*, which at least some speakers accept, cf. Reis (1991).

⁹ As to the correlation between sentence type and sentence mood, see Brandt et al. (1990).

¹⁰ Since there is no long distance +*Wh*-Q-movement involving *ob*-clauses in German, this is, at first sight, not surprising. It follows, however, from the generalization to be presented at the end of this section, that +*Wh*-imperatives involving *ob*-clauses are ruled out for different reasons. As to the question of *ob* functioning as a supplementary element, see Section 3.3.

- (15) Wieviel stell dir vor/schätz mal/?berechne
how much imagine yourself(D) P/guess MP/calculate
 mal, daß das kostet.
MP that this costs
 How much imagine/guess/calculate that this cost
- (16) Wieviel erklär/überleg/?erwäg/??überprüf/??informier
how much explain/think about/ponder/examine/inform
 dich mal, daß das kosten dürfte.
yourself(A) MP that this cost may
 Explain/think about/ponder/examine/get yourself informed
 how much this may cost.
- (17) Wen sag mal/erzähl mal/?teil mir
whom(A) tell MP/recount MP/inform me(D)
 mit, daß du getroffen hast.
P. that you met have
 Tell/recount/inform me who you met.

If some of these examples seem less acceptable than others, this may be related to factors such as heaviness and semantic transparency, which are known to be of general importance for long distance extractions (see Erteschik-Shir and Lappin 1979).

All of these verbs also appear as bridge verbs in long distance +*Wh*-interrogatives. But the converse does not hold: verbs such as *meinen*, *glauben*, *denken*, *wünschen*, which are acceptable bridge verbs in all *Wh*-movement constructions, never yield acceptable +*Wh*-imperatives. The relevant restriction is, apparently, that +*Wh*-I-movement presupposes bridge verbs that are subcategorized for +*Wh*-complements; bridge verbs taking -*Wh*-complements only are out. Notice (18)–(20) vs. (21)–(23), where the bridge verbs involved are semantically close but differ in their ±*Wh*-subcategorization patterns:

- (18) Hans kann sich vorstellen, daß Peter Susi getroffen
Hans can himself(D) imagine that Peter Sue(A) met
 hat/wen Peter getroffen hat.
has/whom(A) Peter met has
 Hans is able to imagine that Peter met Sue/who Peter met.

- (19) Wen kann sich Hans vorstellen, daß
whom(A) can himself(D) Hans imagine that
 Peter getroffen hat?
Peter met has
 Who is Hans able to imagine that Peter met?
- (20) Wen stell dir vor, daß Peter getroffen hat.
whom(A) imagine yourself(D) P that Peter met has
 Imagine who Peter met.
- (21) Hans glaubt, daß Peter Susi getroffen hat/*wen
*Hans believes that Peter Sue(A) met has/*whom(A)*
 Peter getroffen hat.
Peter met has
 Hans believes that Peter met Sue/*whom Peter met.
- (22) Wen glaubt Hans, daß Peter getroffen hat?
whom(A) believes Hans that Peter met has
 Who does Hans believe that Peter met?
- (23) *Wen glaube, daß Peter getroffen hat.
whom(A) believe [imp.] that Peter met has

It follows that bridge verbs in normal *Wh*-movement and in +*Wh*-I-movement are restricted in totally different ways: the former *must* be subcategorized for -*Wh*-complements and used this way, whereas the latter *must* (also) be subcategorized for +*Wh*-complements and used this way. Hence, the overlap between the respective classes of admissible bridge verbs is only apparent, induced by the fact that there are a number of verbs that are subcategorized for +*Wh*- and -*Wh*-complements at the same time.

(b) Infinitival clauses and verb second clauses: first, in contrast to +*Wh*-Q-movement, there is no +*Wh*-I-movement from infinitival clauses, cf. (24) vs. (25):

- (24) Auf wen verspricht mir Peter, nicht
 of whom(A) promises me(D) Peter not
 eifersüchtig zu sein?
 jealous to be
 Who does Peter promise me not to be jealous of?

- (25) *Auf wen versprich mir, nicht eifersüchtig zu sein.
 of whom(A) promise me(D) not jealous to be

Since extraction from infinitival clauses is the most normal case in all instances of long distance *Wh*-movement in German, this contrast is especially striking.

Second, there are again no true cases of +*Wh*-I-movement from verb-second clauses: the acceptable +*Wh*-imperative cases are, just like their interrogative counterparts, always amenable to a parenthetical analysis, cf. (26)–(27), whereas whenever an extraction analysis of the +*Wh*-interrogatives is forced (as it is by the occurrence of present subjunctive, which is ruled out in +*Wh*-interrogative root clauses), the corresponding +*Wh*-imperatives are out, cf. (28) vs. (29).

- (26) Wen sagt Susanne, hat Peter um Rat gefragt?
 whom(A) says Susan has Peter for advice asked
 [Interpretation 1:] Whose advice does Susan say Peter asked?
 [Interpretation 2:] Whose advice, Susan says, did Peter ask?
- (27) Wen sag mir, hat Peter um Rat gefragt.
 whom(A) tell me has Peter for advice asked
 [Only interpretation:] Whose advice, tell me, did Peter ask?
- (28) Wen sagt Susanne, habe Peter um Rat gefragt?
 whom(A) says Susan has[subj.] Peter for advice asked
 [Only interpretation:] Whose advice does Susan say Peter asked?
- (29) *Wen sag mir, habe Peter um Rat gefragt.
 whom(A) tell me has[subj.] Peter for advice asked

Since imperative matrix clauses are always incompatible with present subjunctive in complement clauses (cf. (9)–(10), Section 2.1), this difference seems, on first sight, independently accounted for and thus negligible. But since there is no extraction from infinitival clauses either, a different

account covering both cases suggests itself. Note that neither embedded verb-second clauses nor infinitival clauses tolerate +*Wh*-Q-movement into their initial position. In other words, in German neither infinitival +*Wh*-complements, nor verb second +*Wh*-complements are possible.¹¹

- (30) *Hans sagte uns, was zu tun.
 Hans told us(D) what to do

- (31) *Hans sagte mir, wen liebt Peter.
 Hans told me(D) whom(A) loves Peter

This means that the A-bar positions of German verb-second and infinitival complements may never contain visible +*Wh*-phrases. If it is this property that prevents +*Wh*-I-movement from applying, then the facts presented under (b) fit neatly to those presented under (a), yielding the following overall generalization: +*Wh*-I-movement presupposes +*Wh*-complement extraction clauses.

This result raises several questions, to which we shall return (in Sections 2.3 and 3.3).

6. Turning finally to the effects of both movements on target clauses, we again observe differences on all counts:

(a) As to the overt effects on sentence type, +*Wh*-Q-movement obviously plays a crucial role in +*Wh*-interrogative formation in German, +*Wh*-interrogatives must be overtly marked by a +*Wh*-phrase in clause-initial position, which, in the standard case, gets there by +*Wh*-Q-movement. But even in the exceptional case of *was*-interrogatives such as (32), where the initial +*Wh*-phrase *was* is base generated,¹² subsidiary +*Wh*-Q-movement of a +*Wh*-phrase into the A-bar position of the embedded clause must take place.

- (32) Was glaubst du, wen Peter getroffen hat?
 what believe you, whom(A) Peter met has
 Who do you believe that Peter met?

Thus, there is no +*Wh*-interrogative sentence in German that does without syntactic +*Wh*-Q-movement. Multiple +*Wh*-interrogatives show that this process may apply only once, the other +*Wh*-phrases having to remain *in situ*.

¹¹ There are infinitival +*Wh*-clauses without *zu*, cf. *wohin sich wenden?* 'whereto oneself turn', *wem in diesen Zeiten trauen?* 'in whom in these times trust', but the differences from normal infinitives are considerable, see Reis (1985).

¹² For a recent study of this phenomenon, cf. McDaniel (1989).

By contrast, +*Wh*-I-movement has no impact on sentence type. +*Wh*-imperatives are still imperatives, which is reflected by the totality of their behavior. In particular, they may not be embedded.

(b) As to scope effects related to sentence type, we find in +*Wh*-interrogatives that all +*Wh*-phrases have clausal interrogative scope marked by the obligatory +*Wh*-phrase in initial position since the domain it c-commands in S-structure is the scope domain (i) for itself and (ii) for all the +*Wh*-phrases it minimally c-commands. Given the role +*Wh*-Q-movement plays in fronting +*Wh*-phrases, its crucial importance for scope marking is obvious, albeit different in the two types of +*Wh*-interrogative constructions.

In the case of standard +*Wh*-interrogatives, the +*Wh*-phrase moved by +*Wh*-Q-movement will also have scope over the target clause, into which it is moved, see (i), and the scope domain of the respective +*Wh*-phrases *in situ* will also include the target clause, see (ii). As a consequence, root and embedded +*Wh*-interrogatives such as (33) and (35) have the same meaning, in that the respective scope domains of *wohin* are the same, and questions like (34) and (36) differ in meaning, in that the respective scope domains of *wohin* are different. Likewise, if the scope domains of the +*Wh*-phrases moved differ, the scope domains of the respective +*Wh*-phrases *in situ* differ accordingly, cf. (37) vs. (38) (scope domains being indicated by identical superscripts to the respective clause brackets).

- (33) *Wohin ist Peter gefahren?*
where is Peter gone
 Where did Peter go?
- (34) *Wohin sagte er dir, daß Peter gefahren ist?*
where told he you(D) that Peter gone is
 Where did he tell you that Peter went?
- (35) (Er sagte dir,) *wohin Peter gefahren ist.*
(he told you(D)) where Peter gone is
 (He told you) where Peter went.
- (36) *Sagte er dir, wohin Peter gefahren ist?*
told he you(D) where Peter gone is
 Did he tell you where Peter went?

- (37) *Wohin sagte sie dir, daß er mit*
where told she you(D) that she with
wem gefahren ist?
whom(D) gone is
 Where did she tell you that she went with whom?
- (37') [ⁱ*wohin_i sagte sie dir [daß er mit wem_j t_i gefahren ist]*]
- (38) *Hans sagte mir, wohin er mit wem gefahren ist.*
Hans told me(D) where he with whom(D) gone is
 Hans told me, where he went with whom.
- (38') [ⁱ*Hans sagte mir [ⁱwohin_i er mit wem_j t_i gefahren ist]*]

This also implies that the scope domains of +*Wh*-phrases *in situ* are always +*Wh*-clauses, and in no case are they -*Wh*-clauses.

In the case of *was*-interrogatives, where *was* and a specific +*Wh*-phrase must be present, matters are as follows. The initial *was* marks the scope domain of the specific +*Wh*-phrase, which in turn has been moved by +*Wh*-Q-movement to the next available A-bar position, and thus is either immediately subjacent to the position of its scope marker or related to it by *was* in all the intermediate A-bar positions:

- (39) *Was glaubst du, (was er sagt,) wen*
what believe you, (what he says,) whom(A)
Peter getroffen hat?
Peter met has
 Who do you believe that he says that Peter met?
- (39') [ⁱ*was glaubst du [was er sagt [wen_i Peter t_i getroffen hat]]]*]

Although the specific +*Wh*-phrase does not mark scope for itself, its surface position still serves to identify the scope domain of further +*Wh*-phrases *in situ*. All the +*Wh*-phrases it minimally c-commands also share its scope domain. Since this c-commanding position is effected by +*Wh*-Q-movement, it seems that +*Wh*-Q-movement is always, directly or indirectly, in the service of overt scope marking. This may also account for its applying obligatorily in all cases.

By contrast, +*Wh*-I-movement, as already stated, is optional and seems to have no relevance to interrogative scope. Thus, in (40), the +*Wh*-phrase moved seems to have scope only over the embedded clause but

not over the matrix clause, which is still read as an imperative. As a consequence, (40) and (41) have the same meaning. In the same vein, if +*Wh*-imperatives contain +*Wh*-phrases *in situ*, their scope domains never include the imperative matrix clause but are limited to the embedded *daß*-clause, cf. (42):

- (40) Wen sag mir doch mal gleich,
whom(A) tell me(D) MP MP right away
daß Peter gestern besucht hat.
that Peter yesterday visited has
Tell me right away who Peter visited yesterday.
- (41) Sag mir doch mal gleich, wen
tell me(D) MP MP right away, whom
Peter gestern besucht hat.
Peter yesterday visited has
Tell me right away who Peter visited yesterday.
- (42) Wohin stell dir vor, daß er mit
where imagine yourself(D) P that he with
wem gefahren ist.
whom(D) gone is
Where imagine that he went with whom.
- (42') [wohin_i stell dir vor [^{ij}daß er mit wem_j t_i gefahren ist]]

Last but not least, *was*-imperatives are strikingly absent. While normal long distance +*Wh*-interrogatives always allow counterparts involving the scope marker *was*, +*Wh*-imperatives do not, cf. (43)–(44) vs. (45)–(46):

- (43) Wen sagst du, daß Peter getroffen hat?
whom(A) say you that Peter met has
Who do you say that Peter met?
- (44) Was sagst du, wen Peter getroffen hat?
what say you whom(A) Peter met has
Who do you say that Peter met?

- (45) Wen sag mir, daß Peter getroffen hat.
whom(A) tell me(D) that Peter met has
Tell me who Peter met.
- (46) *Was sag mir, wen Peter getroffen hat.
what tell me whom(A) Peter met has

Before interpreting these differences, let us point out that the notion of scope (domain) that we have been talking about is *interrogative scope (domain)*, that is, the propositional domain, in which the variable corresponding to the respective +*Wh*-phrase is bound and on which the characteristic existential implicature of +*Wh*-interrogatives is defined, as is the set of possible answers. This notion corresponds to +*Wh*-phrases being interrogative operators. However, +*Wh*-phrases are also, in some sense, quantifiers (see Karttunen and Peters 1980), having clausal *quantifier scope* and interacting with (the scope of) other quantifiers. One might ask, then, whether +*Wh*-phrases moved by +*Wh*-Q-movement acquire quantifier scope over the target clause as well. If (and only if) there were a necessary correlation between the interrogative and quantifier scope domain of a +*Wh*-phrase moved by +*Wh*-Q-movement, the respective data from +*Wh*-interrogatives vs. +*Wh*-imperatives would be a relevant testing ground for the identity of the underlying movement processes. But as far as we can see, such a correlation does not exist. Although a +*Wh*-phrase moved to a +*Wh*-A-bar position must have interrogative scope over everything to its right, this is not generally true for quantifier scope. Judging from relative scope relations, the pattern is divided as follows.

On the one hand, there are non-interrogative quantifiers like *einer* 'someone' that have inherent wide scope tendencies, thus allowing only the narrow scope reading for +*Wh*-phrases moved to their left by +*Wh*-Q-movement; cf. (47). These are the cases that led Haik (1984) to assume that "for scope interpretation with respect to other NPs, it is not the *Wh*-word itself that should be considered, but rather its trace" (p. 196).

- (47) Welche Männer sagte jemand/einer, daß Maria t liebt?
which men(A) said someone that Mary t loves
Which men did someone say that Mary loves?

On the other hand, there are quantifiers like *jeder/alle* 'everyone' that do allow the wide scope reading for the *Wh*-moved +*Wh*-phrase, thus showing that the +*Wh*-phrase changes its relative scope possibilities by movement, cf. (48)–(49). Whether this reading is possible, preferred, or the

only one, seems to depend on a number of additional factors such as type of matrix verb involved, type of +*Wh*-phrase, focus structure, etc.; cf. Pafel (1991).

- (48) Wen sagt jeder/hat sich jeder
 whom(A) said everyone/has himself(D) everyone
 vorgestellt, daß Maria t liebt?
 imagined that Mary t loves
 Who did everyone say/imagine that Mary loves?

- (49) Wieviel sagt/schätzt jeder von euch, daß
 how much says/estimates everyone of you that
 das t kostet?
 this t costs

How much does everyone of you say/estimate that this costs?

If left-to-right surface order is a contributing factor to the relative quantifier scope relations a +*Wh*-phrase may enter, we should expect that the quantifier scope effects of +*Wh*-I-movement and +*Wh*-Q-movement are similar. Pertinent +*Wh*-imperative examples are hard to find because the requisite type of matrix structure is rare, but on the whole they seem to conform to this expectation.

- (48') Wen sag mal jeder /stell sich mal
 whom say [imp.] MP everyone imagine [imp.] himself MP
 jeder vor, daß ich getroffen habe
 everyone P that I met have
 Everyone please say/imagine who I met.

- (49') Wieviel sag mal jeder /schätz mal
 how much say [imp.] MP everyone /estimate [imp.] MP
 jeder, daß das kostet.
 everyone that this costs

Everyone please say/estimate how much this costs.

At any rate, the wide scope reading for the +*Wh*-phrase does occur and becomes prominent if the factors favoring such a reading are jointly present, although the narrow scope reading of the +*Wh*-phrase usually seems to be stronger than in the respective +*Wh*-interrogatives. The latter tend-

ency may be interpreted as showing that correlation with interrogative scope is a further contributing factor to the wide scope interpretation of +*Wh*-phrases,¹³ cf. the different interrogative scope domains in +*Wh*-interrogatives vs. +*Wh*-imperatives noted above. On the whole, however, quantifier scope of +*Wh*-imperatives is immaterial to the issue at hand, since it does not seem to matter by which type of movement the surface ordering comes about.

This leaves just the interrogative scope difference to be accounted for. Let us first explore the possibility of a conservative explanation, claiming (a) that the +*Wh*-phrase in +*Wh*-imperatives does indeed have wide scope, corresponding to its position, but (b) that this wide scope reading converges for semantic and pragmatic reasons with the narrow scope reading of the putative embedded counterparts; from this it would follow (c) that the different scope effects could not be taken to reflect a difference in the underlying movement processes at all.¹⁴

If such an account is taken to imply that +*Wh*-imperatives have exactly the same syntactic structure as long distance +*Wh*-interrogatives, it can be rejected out of hand: the data presented in Sections 3 and 5 show conclusively that the two constructions are structurally different. But even a weaker claim, by which are granted these syntactic differences but not the differences concerning scope, is problematic, for if we assume the +*Wh*-phrases in +*Wh*-imperatives to have interrogative scope over the imperative matrix clause, we have to explain how the +*Wh*-imperative structure survives the interrogative-imperative conflict that ruled out short distance +*Wh*-imperatives. If, for the sake of argument, we assume that they somehow do, we may in fact find examples where the wide scope reading of the +*Wh*-imperative comes fairly close to the narrow scope reading of the embedded counterpart, cf. the respective readings of (40) and (41) above (the imperative being interpreted in terms of deontic modality):

¹³ This interpretation can be supported by observing that comparable scope differences appear between normal long distance constructions and corresponding *was*-constructions, cf. (i)–(ii). In (ii), where the position of the +*Wh*-phrase does not simultaneously mark interrogative scope, the distributive reading is much easier to get than in (i).

- (i) Wen sagt jeder, daß Maria liebt.
 whom says everyone that Mary loves
- (ii) Was sagt jeder, wen Maria liebt.
 what says everyone whom Mary loves

¹⁴ This possibility was suggested to us by an anonymous reviewer, who also outlined the argument based on the examples (40)–(41). The paraphrases of the meanings (40')–(41') are his/hers.

(40') Which x is such that in all worlds where my demands are satisfied you tell me that Peter visited x yesterday.

(41') In all worlds where my demands are satisfied you tell me which x is such that Peter visited x yesterday.

In other words, for all practical purposes, (40) and (41) seems to be equally good candidates for getting across the propositional content of an order intended to get you to tell me who Peter visited yesterday.

However, this observation does not generalize beyond the matrix verb *sagen* to all +*Wh*-imperative cases, cf. (50)–(51):¹⁵ The putative wide scope interpretations (50') invariably amount to questions, where the deontic meaning of the imperative just adds to the propositional content. By no stretch of the imagination do they converge with the request interpretations (51') (i.e., orders to ponder, to have a guess, or to imagine who Peter visited yesterday) that are expressed by (51) and are possible interpretations for the +*Wh*-imperatives in (50).¹⁶

(50) Wen stell dir vor/ schätz mal/ überleg
whom(A) imagine yourself(D) P/ guess MP/ ponder
mal, daß Peter besucht hat.
MP that Peter visited has

¹⁵ Even the impression that in the case of verbs of saying the wide and narrow scope interpretations converge can be accounted for in different terms: Every question *P?/Which x is such that P[x]?* asked in dialogue situations is pragmatically equivalent to an order 'tell me, whether P/Which x is such that P[x]' (a fact exploited for example by Searle 1969 in his analysis of questions as directive speech acts). Given this, it is to be expected that deontic qualifications via "tell me", be they "inside" or "outside" of the question, do not lead to wildly different interpretations.

¹⁶ In replying to this argument the same reviewer observed that (50) and (51) have different use conditions: (50) is most likely taken as a question concerning the person Peter visited; a request to really imagine/have a guess/think about who Peter visited most likely takes the form (51). This is true, but in no way proves that (50) and (51) differ in scope, i.e., in meaning: (i) Given appropriate contexts and matrix verbs, e.g., *überlegen*, structures like (50) do allow for the request reading. We do not see how this reading could be derived from a wide scope = question interpretation, whereas, the other way around, the question reading can be derived from a narrow scope interpretation (as for pragmatic mechanisms suppressing matrix meanings, cf. "indirect questions" such as *Weißt du, wieviel Uhr es ist?* 'do you know what time it is'). (ii) A pragmatic explanation for the prevailing question reading of (50) is available: since phrases occupying the preverbal position in imperatives (an optional position) usually are topics (see Rosengren in prep.), as can be seen from their accent contour, preposing a +*Wh*-phrase into this position naturally leads to also "topic"-alizing its interrogative meaning. Thus, the difference between (50) and (51) is most likely not one of scope but of information structure.

(50') Which x is such that in all worlds where my demands are satisfied you imagine/have a guess/ponder that Peter visited x.

(51) Stell dir vor /Schätz mal /Überleg
imagine yourself(D) P, guess MP /ponder
mal, wen Peter besucht hat.
MP whom(A) Peter visited has

(51') In all worlds where my demands are satisfied you imagine/have a guess/ponder which x is such that Peter visited x.

This shows that the conservative account cannot go through. A final argument against it is provided by the absence of +*Wh*-imperatives involving the scope marker *was*, which would be completely mysterious, if the initial +*Wh*-phrase in +*Wh*-imperatives were indeed in a scope position.

This result forces us to assume, alternatively, that +*Wh*-I-movement, unlike +*Wh*-Q-movement, has nothing to do with interrogative scope marking, which also means that they must be different processes.

The relevant differences can be summed up as follows: (i) While the scope position of +*Wh*-interrogatives is its highest A-bar position, the scope position of +*Wh*-imperatives is the A-bar position of the complement. (ii) While +*Wh*-Q-movement moves +*Wh*-phrases *into* their scope positions, +*Wh*-I-movement moves +*Wh*-phrases *out of* their scope positions.¹⁷ By *scope position* we understand the A-bar position that delimits the interrogative scope domain of a +*Wh*-phrase and at the same time determines its quantifier scope relations. Since having a scope position in this sense is obviously a privilege of +*Wh*-interrogative clauses, (i) confirms the findings of Section 5: In +*Wh*-imperatives, *daß*-clauses (and only these) are indeed +*Wh*-interrogative clauses.

2.3. Consequences and Problems

The facts and arguments presented in Section 2.2 leave but one conclusion: while +*Wh*-I-movement is a *Wh*-movement process, it is not an instance of +*Wh*-Q-movement. If so, what kind of *Wh*-movement process is it? The relevant observation is the following: in almost all respects in which +*Wh*-I-movement differs from +*Wh*-Q-movement, it patterns like –*Wh*-I-movement. Since –*Wh*-I-movement was found to be topicalization, the

¹⁷ To our knowledge, this fact has no exact *Wh*-movement parallel anywhere. A case that comes close in important respects is, however, discussed in Belletti (1982, p. 116; p. 132, fn. 21). (We are indebted to J. Geilfuß for drawing our attention to this case.)

following hypothesis suggests itself: *+Wh-I-movement is an instance of topicalization.*

The immediate advantage of this hypothesis is, of course, that it accounts for the many parallels between *-Wh-I-movement* and *+Wh-I-movement*. Furthermore, it allows us to view $\pm Wh$ -movement into imperative clauses as a unitary process. However, it also raises serious problems:

First, and most importantly, we are getting into conflict with accepted doctrine: if *+Wh-I-movement* is crucially different from *+Wh-Q-movement*, the topicalization hypothesis of *+Wh-I-movement* has substance only if we either reject the standard assumption that *+Wh-Q-movement* and topicalization are (variants of) one and the same A-bar movement process, or if we define the unity of A-bar movement in a novel way such that it allows (a) movement of one and the same phrase to be associated with different properties (see *+Wh-I-movement* vs. *+Wh-Q-movement*) and (b) movement of different phrases to be associated with the same properties (see *+Wh-I-movement* and topicalization).

Second, there are some more specific problems to be taken care of. In particular, the fact established in Sections 5 and 6, that *+Wh-imperatives* contain *+Wh-complements*, gives rise to questions that have no obvious answer: (a) How do we account for the *daß* that appears in all *+Wh-imperatives*? Obviously, we cannot appeal to subcategorization properties, for even if the matrix verbs in question likewise take *daß*-complements, the verbs are not used this way. (b) Why are there no *+Wh-imperatives* involving bridge verbs such as *fragen*, *erkundigen*, that are subcategorized for *+Wh-complements* only? Finally, we have to explain (c) why *+Wh-imperatives* are more marginal than comparable *Wh-movement* constructions, even in extraction dialects.

We shall take up these problems in turn in the following sections, trying to show that a coherent solution is possible.

3. A POSSIBLE SOLUTION

The solution we propose is based on the assumption favored by Occam's razor that there is just one process of A-bar movement. If so, this process must be assumed to operate in terms of a property all A-bar moved phrases have in common. If A-bar movement were always operator movement, as frequently maintained (see Chomsky 1981, p. 102; 1986, chs. 2, 9), and undisputable in the case of *+Wh-Q-movement*, there would be a choice between the syntactic XP property and the operator property. However, there is next to no evidence for topicalized *-Wh-phrases* being or behaving

like operators,¹⁸ which is in keeping with what we found in the case of *+Wh-imperatives*. This leaves the XP property as the only one shared by all A-bar moved phrases. It follows that *Wh-movement* is to be conceived of as movement of XP-phrases into A-bar positions, nothing more.

Proceeding from there, we have to account for the mutual differences and similarities between *+Wh-Q-movement*, topicalization, and *+Wh-I-movement* by appealing to factors that are extraneous to the movement process itself. The obvious factors to turn to are the type of phrases moved and the structure of the clauses into which movement takes place. Our solution makes use of both factors, special importance being attributed to \pm operator phrase features on the one hand, and the respective features of A-bar positions on the other.

3.1. Phrase Types and Features

Beginning with the role of phrase types, let us first separate the XP property of phrases from their remaining features. If we do, several things fall into place. First, it becomes obvious that the $\pm Wh$ -phrase features are not on a par: while the *+Wh*-feature is a positive feature characterizing a certain subtype of XP-phrases, the *-Wh*-feature is just a negative feature, indicating that the phrases in question lack certain additional operator features. From this perspective, we understand, second, why, according to traditional terminology, quantifier phrases, relative phrases, etc., are *-Wh*-phrases at the same time, the so-called *-Wh*-feature combining with operator features of various kinds. If so, the term "*-Wh*-phrase" by itself is practically coextensive with "XP-phrase", "*-Wh*" like "XP" standing for the properties all the phrases in question have in common. As a consequence, *+Wh*-phrases can also be treated as *-Wh* = XP-phrases to which, by way of specific lexical properties, the *+Wh*-operator feature has been added. By the same token, however, the *-Wh* property, by itself, is not an operator property. This explains, third, why topicalization, in keeping with its traditional definition as A-bar movement of *-Wh*-phrases,

¹⁸ The syntactic evidence from weak crossover patterns of focussed *-Wh*-phrases usually appealed to is unconvincing, cf. the counterevidence cited in Koopman and Sportiche (1982, pp. 155f.). Moreover, if the topicalized constituents are unfocused (as is frequently the case in German), the respective effects do not show up at all. As for the conspicuous lack of strong crossover effects in the case of topicalization as opposed to *+Wh-Q-movement*, see Koster (1982/83, p. 78; 1987).

This result converges with the observations on topicalization by Rochemont (1986), and is in keeping with the proposals of Aoun and Hornstein (1985) and Hornstein (1988), where it is shown that a more diversified typology of operator phrases is needed, topicalizable *-Wh*-phrases like *John*, *him*, *this man*, etc., certainly being lowest on the scale.

may apply to *-Wh*-phrases and *+Wh*-phrases alike, thus being more "basic" than *+Wh-Q*-movement.

So far, we can account for the differences between *+Wh-Q*-movement and topicalization by appealing to the fact that *+Wh*-phrases have an operator feature that other *-Wh*-phrases lack, and we have paved the way for understanding *+Wh*-imperatives by recognizing that the *-Wh* property is also present in *+Wh*-phrases. What we still need, however, is an explanation for the fact that *+Wh*-phrases act out their operator property of taking interrogative scope in one context (*+Wh*-interrogative formation), but not in the other (*+Wh*-imperative formation), in other words that their ability of taking scope can only be realized in cooperation with an additional factor. We propose that this factor is the *+Wh*-feature in the initial position of *+Wh*-interrogatives. The theory of German sentence types behind this proposal will be taken up in a moment. Let us just point out here how it leads to the desired conclusion: if clausal scope of *+Wh*-phrases depends on cooperation with a *+Wh*-feature in the relevant A-bar position, and if this feature is only present in interrogative clauses, and if, furthermore, the A-bar position of imperative clauses is open to XP-phrases of any kind, then it follows (a) that *+Wh*-phrases may move to the A-bar position of either clause type, but (b) will have scope over the respective clause only in the case of *+Wh*-interrogatives.¹⁹

In effect, we propose then that the scope domain of a *+Wh*-phrase is determined by the position of the *+Wh*-A-bar feature minimally c-commanding it or its trace rather than by the surface position of the *+Wh*-phrase itself. (52)–(56) show that the scope properties of the various sentence types containing *+Wh*-phrases can be correctly accounted for on this basis:

- (52) Vielleicht sagst du, wen er gesehen hat.
perhaps say you whom(A) he seen has
 Perhaps you tell (us), whom he saw.

¹⁹ Independent support for this approach comes from so-called echo questions such as (i), where the *+Wh*-phrase is contained in a clause that lacks an A-bar *+Wh*-feature, see (i'). Our account predicts that, in these cases, we do not find the scope effects (including the characteristic existential implicature) typical for *+Wh*-phrases. Apparently, this prediction is borne out, cf. Reis (1991).

- (i) Gerade sagte er, daß Fritz wen gesehen hat?
 (i') [-*wh* gerade [sagte er [-*wh* daß [Fritz wen_i gesehen hat]]]]
just said he that Fritz whom seen has
 He just said that Fritz saw whom?

- (52') [-*wh* vielleicht [sagst du [+*wh* wen_i [er t_i gesehen hat]]]]
 (53) Sag, wen er (wann) gesehen hat.
say whom(A) he (when) seen has
 Tell (us), whom he saw (when).
 (53') [[sag [+*wh* wen_i [er t_i (wann)_j gesehen hat]]]]
 (54) Wen sagst du, daß er (wann) gesehen hat?
whom(A) say you that he (when) seen has
 Who do you say that he saw (when).
 (54') [+*wh* wen_i [sagst du [-*wh* t_i daß [er t_i (wann)_j gesehen hat]]]]
 (55) Wen sag, daß er (wann) gesehen hat.
 (55') [wen_i [sag [+*wh* t_i daß [er t_i (wann)_j gesehen hat]]]]
whom(A) say that he (when) seen has
 Tell (us) who he saw (when).
 (56) Was sagst du, wen er gesehen hat?
what say you, whom(A) he (when) seen has
 Who do you say that he saw (when).
 (56') [+*wh* was [sagst du [-*wh* wen_i [er t_i gesehen hat]]]]

Note that there is not even a partial correlation to actual *+Wh*-phrase position or A-bar movement: *+Wh*-phrases may be in the same position as their scope assigner, but also lower in the tree (*+Wh-in situ*, *+Wh*-phrases in *was*-constructions), which shows that syntactic A-bar movement is unnecessary for scope assignment. While this is a recognized fact since Huang (1982), *+Wh*-imperatives show something new: *+Wh*-phrases may also be higher in the tree; hence, syntactic A-bar movement is also insufficient for scope assignment. As a consequence, just about all the S-structure implicational universals about *+Wh*-phrases in relation to *+Wh*-featured A-bar positions suggested by Lasnik and Saito (1982) lose their force: contrary to the S-structure filters they posit for all languages having syntactic *Wh*-movement (see pp. 284f.), German *+Wh*-imperatives contain (a) a complement *+Wh*-A-bar position *not* headed by a *+Wh*-phrase in S-structure, (b) a *+Wh*-phrase in the matrix A-bar position which is not *+Wh*.

Thus, our proposal constitutes a further, if not final step in dissociating

syntactic A-bar movement from scope *assignment*. In terms of scope, all that movement of +*Wh*-phrases is relevant for is scope *marking*, in the following way. In German, +*Wh*-interrogative scope domains must be made visible by a +*Wh*-phrase, which can only be done by employing syntactic +*Wh*-Q-movement (see above Section 2.2, remark 6). This marking constraint refers to the +*Wh*-interrogative scope position as such, rather than to the scope domains of the individual +*Wh*-phrases, which is in keeping with the fact that, in German, syntactic +*Wh*-Q-movement may apply once only per clause. This fact would be much less understandable if +*Wh*-Q-movement were to assign rather than to mark scope, thus lending intuitive support to our approach.

Let us finally point out that our account of scope assignment for +*Wh*-phrases refers to a constellation of factors that is entirely present in S-structure. In terms of scope assignment, then, *Wh*-movement in LF does not seem to be really necessary.²⁰ However, even if scope is read off from LF constellations presupposing *Wh*-movement in LF, it is the +*Wh*-A-bar feature minimally c-commanding the traces of the +*Wh*-phrases that marks the distinction between interrogative and non-interrogative +*Wh*-constructions, which is crucial for semantic interpretation, cf. again +*Wh*-imperatives, where the initial +*Wh*-phrase is not in a scope position. Hence, the LF position of +*Wh*-phrases could be made responsible for scope assignment only if this phrase were moved back by a process of reconstruction that is otherwise unmotivated and, moreover, if it causes an internal conflict in the theory of Lasnik and Saito (1984), for this theory implies not only a movement account of scope assignment, but also that moving +*Wh*-phrases out of A-bar positions in LF is impossible.

All these conclusions could, of course, be circumvented if +*Wh*-I-movement were a stylistic case of *Wh*-movement applying at the level of Phonetic Form.²¹ Then the irrelevance of the matrix position of the +*Wh*-phrase in +*Wh*-imperatives to LF would be predictable, for the S-structure position of the +*Wh*-phrase serving an input to LF would still be the embedded A-bar position. This would, in turn, allow the standard account for the respective scope effects.

This idea, however, cannot be made to work. Note that syntactic topicalization as a whole cannot be relegated to PF, for the topicalization of –*Wh*-quantifier phrases (those involving *jeder/alle/einer*) may have scope

²⁰ In the literature, this has been repeatedly argued for, albeit on different grounds, cf., for example, van Riemsdijk and Williams (1981).

²¹ This hypothesis was suggested to us by an anonymous reviewer.

effects that are relevant for LF, cf. the topicalized declarative and –*Wh*-imperative structures in (57) vs. their untopicalized counterparts in (58):

- (57) Über jedes Buch versprach mir einer/versprich
about each book promised me(D) somebody/promise
 mir bitte einer, eine Rezension zu schreiben.
me(D) please somebody a review(A) to write
 About each book somebody promised me/somebody promise
 me please to write a review.
- (58) Einer versprach mir/versprich mir bitte,
somebody promised me(D)/promise me(D) please
 über jedes Buch eine Rezension zu schreiben.
about each book a review(A) to write
 Somebody promised me/promise me please to write a review
 about each book.

Clearly, the reading in which *jedes* has scope over *einer* is available only in the case of (57). If so, syntactic topicalization must have happened at S-structure. Since +*Wh*-I-movement is also an instance of topicalization, it follows that the +*Wh*-phrase in +*Wh*-imperatives is also fronted in S-structure. Moreover, the facts about +*Wh*-imperative quantifier scope mentioned in Section 2.2, remark 6) independently show that +*Wh*-I-movement may contribute to changing relative scope relations, and thus must have happened already at S-structure.²²

Summing up, then, our account of scope assignment confirms our purely

²² Apparently, quantifier phrases extracted into imperatives are always referentially used (purely quantification phrases such as *höchstens ein, viele X* 'at most one, many X' being excluded). However, the argument based on (57) vs. (58) still holds, for what matters is that the *Wh*-imperatives in (57) do have an additional reading that the imperatives in (58) do not allow. (We are indebted to J. Geilfuß for these observations). As for +*Wh*-imperatives, due to their directive force this surplus "wide scope" reading is much harder to get (situations that force it almost always force it for the source sentence with the embedded +*Wh* complement, too), but cf. (i), which, without losing its directive force, has a "rhetorical" reading (aiming at a specific candidate) that is hard to get with (ii).

- (i) Wem (schon) überleg mal jeder, daß man den
to whom MP think [imp.] MP everybody that one the
 Nobelpreis geben kann.
Nobel prize give can
 To whom everybody please think about that one can give the Nobel prize.

syntactic view of *Wh*-movement as XP-movement into A-bar positions leaving behind traces rather than as operator movement leaving behind variables.²³ Not only may true non-operator XP-phrases undergo A-bar movement but even true operator phrases such as +*Wh*-phrases act out their operator property of taking scope only in cooperation with the +*Wh*-feature in the relevant A-bar position, irrespective of whether actual movement to this position takes place. The way we distinguished between topicalization and +*Wh*-Q-movement in terms of phrases moved and target positions brings this out, topicalization being non-operator movement in the sense that the A-bar feature inducing clausal scope is lacking, and +*Wh*-Q-movement being operator movement in the sense that the A-bar feature inducing clausal scope for the specific phrase type moved is there.

3.2. German Clause Structure and Landing Sites

Turning now to German clause structure, we find that the account presupposed by our solution has independent support.

As to interrogative clauses, the assumption of a +*Wh*-feature (or "Q") in their leftmost position has a long tradition,²⁴ and there is plenty of motivation for it in the theory of sentence types: without this feature, a satisfactory account of the distinctive syntactic, semantic, and pragmatic properties of interrogative clauses (including subcategorization and the distribution of type-sensitive lexical items such as modal particles) seems impossible. This +*Wh*-feature is, moreover, responsible for both hallmarks of +*Wh*-interrogatives: It marks their scope position (see the preceding discussion and Section 2.1, remark 6), and gets marked by their obligatory initial +*Wh*-phrase.

- (ii) Überleg mal jeder, wem man den Nobelpreis geben kann.
 think [imp.] MP everybody to whom one the Nobel prize give can
 Everybody please think about to whom one can give the Nobel prize.

²³ This result is in line with Koster (1982/83; 1987), who, in defending his much more radicalized position, makes a convincing case for all traces being syntactically anaphors.

²⁴ Cf. as an early example within the generative tradition, the Q analysis of direct and indirect questions by Baker (1970) and the COMP analysis developed later on, whereby direct and indirect questions are marked by a [+*Wh*] feature in COMP, see e.g., Chomsky (1981, p. 53). This analysis has also been taken over for German, see among others Haider (1986), and McDaniel (1989). By contrast, von Stechow and Sternefeld (1988 pp. 396ff.) assume ±*Wh* features for German verb final viz. subcategorized clauses only. Given the existence of independent verb-final +*Wh*-interrogatives and the distinction to be made between independent ±interrogative verb-first structures, we do not think that this position can be upheld, even if +*Wh*-imperatives were left out of account.

By contrast, the initial position in declarative sentences can be filled by moving all sorts of constituents there, or by expletive *es*, cf. (59) and its ordering variants (60)–(62).

- (59) Ein großer, dicker Mann trat als letzter herein.
 a big fat man came as last in
 A big, fat man was the last to enter.
- (60) Herein trat als letzter ein großer, dicker Mann.
- (61) Als letzter trat ein großer, dicker Mann herein.
- (62) Es trat als letzter ein großer, dicker Mann herein.

Hence, the overt mark of a declarative sentence is the obligatory presence of the initial XP position²⁵ (and the absence of defining features for other sentence types), rather than its particular makeup.

While the initial position of declaratives certainly must be distinct (further evidence being again provided by the distribution of modal particles), the question arises, of course, whether it must be characterized by a feature. The usual assumption is that it is by –*Wh*. Conclusive evidence is nowhere cited but may be provided by the fact that +*Wh*-phrases cannot be topicalized into declarative clauses, cf. (63)–(64) vs. (65)–(66) (the declarative status being forced by the particles *ja/doch*):

- (63) Er sagte ja/ doch, daß er auf Susanne vertrauen kann.
 he said MP/MP that he in Susan trust can
 He said that he could have faith in Susan.
- (64) Auf Susanne sagte er ja/ doch, daß er vertrauen kann.
 in Susan said he MP/MP that he trust can
 In Susan he said that he could have faith.
- (65) Er sagte ja/ doch, auf wen er vertrauen kann.
 he said MP/MP, in whom he trust can
 He told (us), in whom he could have faith.

²⁵ There are two apparent exceptions: (a) verb first declaratives such as *Kommt da plötzlich Peter herein...* 'enters there suddenly Peter...' and (b) "zero topic" cases such as (*Was ist mit dem Geld?*) *Ist schon ausgegeben* '(What about the money?) Is spent already'. Both cases, however, are highly marked, and at least the latter can be accounted for as a discourse phenomenon, see Huang (1984) and Fries (1988).

- (66) *Auf wen sagte er ja/ doch, daß er vertrauen kann.
in whom said he MP/MP that he trust can

These data can only be accounted for by assuming that the declarative sentence has a feature $-Wh$ that allows topicalization of $-Wh$ -phrases as in (64), but prevents topicalization of $+Wh$ -phrases as in (66), because the features involved are distinct. This explains, then, why there are no “ $+Wh$ -declaratives”.

As for imperative clauses, since $+Wh$ -phrases as well as $-Wh$ -phrases may be moved to their initial position, this position cannot be marked by any feature at all, for $+Wh$ would mark the sentence as interrogative and disallow $-Wh$ -phrases, and $-Wh$ would result in a conflict between topicalized $+Wh$ -phrases and the $-Wh$ -feature, as was the case in declaratives. The absence of a feature in the preverbal position and, as a consequence, its optionality seems natural, given the fact that the imperative clause is defined by its distinctive verbal mood (see Rosengren 1988, in prep.).

Note that the syntactic features $\pm Wh$ can be given a consistent semantic interpretation in terms of sentence mood (see Brandt et al., 1990), thus providing independent support for positing them.

So far, we have dealt with German clause structure only in terms of the features in the respective A-bar positions, restricting ourselves tacitly to verb-second clauses. In order to handle $+Wh$ -imperatives, this is all we need: the feature distinction posited for the preverbal A-bar positions of $+Wh$ -interrogative, declarative, and imperative clauses will do its job of regulating the respective movements, no matter what else the clause structure looks like. While this relieves us of discussing the complexities of German clause structure in full,²⁶ we shall take a closer look at the categories of the A-bar positions involved, asking whether the difference in features between the landing sites of $+Wh$ -Q-movement and topicalization is reflected in a categorial difference as well.

In German, unlike English, there is no surface difference between the landing sites of both movements in verb-second root clauses. However, just like in English (and a number of other languages, including Icelandic and Yiddish, cf. Baltin 1982), there is a clear difference in the respective

²⁶ Cf., in particular, the controversial issue of clause category concerning verb-second clauses (CP or IP or C/IP?) and the related question as to whether German clause structure is uniform (CP) or diverse (only verb final clauses being CP). It should be pointed out, however, that the case in favor of an IP analysis of verb-second clauses is much better than the majority view pro uniform CP structure would lead us to suspect, cf. Reis (1985), von Stechow and Sternefeld (1988, ch. 11.7), and Höhle (1990).

complement (in German: verb final) clauses. Taking for granted that these are CP structures, we observe, first, that $+Wh$ -Q-movement (and other operator movements) may go into Spec C, whereas topicalization may not, cf. (67) vs. (68); this holds for Standard German and extraction dialects alike.

- (67) *Er sagt mir, den Mantel (daß) Petra gekauft hat.
he tells me(D) the coat(A) (that) Petra bought has

- (68) Er sagt mir, wen (daß) Petra getroffen hat.
he tells me(D) whom(A) (that) Petra met has
 He tells me who Petra met.

Second, there is some evidence that topicalization may also operate in verb-final clauses, cf. (69)–(71).²⁷

- (69) Obwohl verlieren_i er nur SCHWER t_i kann, (...)
although lose_i he only with difficulties t_i can (...)
 Although he can hardly bear to lose, (...).

- (70) Obwohl Neues_i es heute GAR nichts
although new_i(A) it today absolutely nothing(A)
 t_i zu berichten gibt, (...)
 t_i to report gives, (...)
 Although there is absolutely nothing new to report today, (...)

- (71) Obwohl verlieren_i er nie und NIMMER glaubte,
although lose_i he never and no more believed,
 jemals t_i lernen zu müssen, (...)
ever t_i learn to have to, (...)
 Although he never thought of ever having to learn (how) to lose, (...)

The phrases moved (a) precede personal pronouns, a position that may not be reached by scrambling, (b) belong to types that topicalize, but do not scramble in verb-second clauses, where both processes can be clearly distinguished, and (c) may even come over long distance from an embed-

²⁷ Topicalization in verb-final clauses seems to be restricted to “topics” (the tell-tale sign being the rise contour) and, perhaps by the same token, to clauses having a special pragmatic status (cf. Jacobs (1988, p. 35)).

ded clause, cf. (71). This shows that the movement process involved is indeed topicalization.

Since the landing site is invariably right adjacent to Spec C/C⁰, we may identify it as (adjunction to) Spec I. The two embedded landing sites are mutually exclusive: Spec C admits only phrases with certain operator features (+Wh, rel, je, so), the Spec I (adjunction) position admits only true -Wh-phrases. Hence, the Spec C position itself must always be characterized by operator features, allowing for the respective operator movements, but excluding topicalization. The embedded Spec I position, on the other hand, may be reserved for topicalization by being exclusively -Wh.

Thus, German adds to the considerable evidence in favor of the position that the landing sites of +Wh-Q-movement vs. topicalization should be categorially distinct in principle, the respective categories being Spec C vs. (adjunction to) Spec I (see Lasnik and Saito in prep.). This evidence, in turn, adds intuitive support to our treatment of +Wh-Q-movement and topicalization, for the categorial difference between their landing sites in subordinate clauses is again clearly related to their being ±operator movement and yet is extraneous to the movement process itself. Of course, it also raises the question whether the two differences ascribed to the respective landing sites, one in terms of features, the other in terms of categories, cannot ultimately be reduced to one, but this is an issue too complex to pursue here.

If the above picture of German clause structure and landing sites is correct, then we have completed our account for the major differences and similarities between the various XP movements and resulting structures registered in the previous sections. In particular, we have shown that our account for the scope phenomena, which relies heavily on the feature structure of A-bar positions, can in principle be upheld. There certainly remain problems.²⁸ The obvious sources of possible overgeneration, however, seem to be checked by independent means: thus, unwanted topicalization of relative XP into declaratives is out because relative phrases need

²⁸ The most important one is the scope marking *was*-construction, where the *Wh*-moved +*Wh*-phrase always goes into the A-bar position of a -*Wh*-complement. Since we explained the absence of +*Wh*-declaratives by the feature clash between the A-bar position of declaratives (-*Wh*) and of the moved phrase (+*Wh*), our account seems to predict, wrongly, that this construction should be out, too. However, the A-bar position in question is special in that it is linked (possibly by a series of *was*) to the scope position of the +*Wh*-phrase marked by *was* in S-structure, whereas the +*Wh*-phrase in putative declaratives is not. It is this difference that a descriptive solution can make use of (as done by McDaniel 1989, pp. 579–581), although a mystery remains: why, if the Spec C position in question were indeed -*Wh*, is topicalization of true -*Wh*-phrases barred from this position?

an antecedent phrase under which they are embedded. And unwanted movements of +*Wh*-phrases from one +*Wh*-A-bar position to a further +*Wh*-A-bar position higher up seem to be checked by a principle that an operator phrase (viz. its chain) of a certain kind (+*Wh*, rel, *je/so* + AP) may interact with only one operator position.²⁹ If nothing else, this will prevent deriving S-structures like (73) from the deep structure underlying (72), in accordance with the facts: There is no sentence like (73) having the same meaning as (72); if it can be accepted at all, the corresponding S-structure would have to be (73").³⁰

(72) Wann sagte er, wohin er gegangen ist?
when said he where he gone is
When did he say, where he went?

(73) ??Wohin sagte er wann, daß er gegangen ist?
where said he when that he gone is

(73') *_[+wh] wohin_i [_{sagte er wann_j [_{+wh} t_i daß [er t_i gegangen ist]]]]}

(73") _[+wh] wohin_i [_{sagte er wann_j [_{-wh} t_i daß [er t_i gegangen ist]]]]}

3.3. Residual Problems

What remains to be dealt with, then, are the specific problems mentioned in Section 2.3 and still left open: first, how do we account for the *daß* that appears in all +*Wh*-imperatives, which cannot be the *daß* of subcategorization? Second, why is +*Wh*-I-movement, that is +*Wh*-topicalization, only allowed with verbs subcategorizing for ±*Wh* and not, as expected, also with verbs subcategorizing for +*Wh* only? Third, why are +*Wh*-imperatives quite marginal even in so-called extraction dialects? We shall try to show that the account for the normal extraction cases can be made to cover +*Wh*-imperatives in these respects as well.

Since the traditional issue of "double COMP" is central to the discussion, we shall also use the traditional terminology, thus speaking of "COMP" (corresponding now to Spec C and C⁰) as if it were one unit that may contain one or two COMP elements.

²⁹ The Baker ambiguities may be only apparent counterexamples, cf. the pragmatic account suggested for them by Klumpp (1990).

³⁰ Perhaps, sentences like (73) are already bad for independent reasons, the crossing of +*Wh*-phrases from different clauses being illegitimate. (Note that there are no superiority effects in German; in particular, *wohin* may always cross *wann* in simple clauses: *Wohin ging er wann?* 'where did he go when?')

In all dialects of German, the COMP position of verb final clauses is subject to a visibility condition: COMP may not be phonetically empty. (See also von Stechow and Sternefeld (1988, p. 384).) The proper extraction dialects differ from the others in allowing COMP to be doubly filled (see Bayer 1984). In embedded *daß*-clauses, this happens only in the case of long distance movement, assuming that the extract phrase leaves a trace to the left of the subcategorized *daß*, cf. (74). In embedded +*Wh*-clauses, COMPs may always be doubly filled, in which case there is not only a +*Wh*-phrase present (in Spec C), but also a supplementary element. This element is invariably *daß*, cf. (75), never *ob*, even if the matrix verb in question is subcategorized for +*Wh*-complements only, cf. (76)–(77):

- (74) [Wem_i [meinte er, [t_i daß [er t_i die
to whom_i(D) thought he t_i that he t_i the
Rezension anvertraut hatte]]]]
review(A) entrusted had
Who did he think that he had asked to write the review.
- (75) [Dann [sagte er, [wem_i daß [er t_i die
then said he, whom_i(D) that he t_i the
Rezension anvertraut hatte]]]]
review(A) entrusted had
Then he said, who he had asked to write the review.
- (76) [Dann [fragte er, [wem_i daß [er t_i die
then asked he, whom_i(D) that he t_i the
Rezension anvertraut hatte]]]]
review(A) entrusted had
Then he asked, who he had asked to write the review.
- (77) *[Dann [fragte er, [wem_i ob [er t_i die
then asked he, whom_i(D) whether he t_i the
Rezension anvertraut hatte]]]]
review(A) entrusted had

We find, then, that extraction dialects use *daß* not only as a subcategorized complementizer, but also as a supplementary COMP element. Since *daß* is the most neutral complementizer, this is certainly no accident. By the same token, the complementizer *ob* may be ruled out as a supplementary

element in COMP, because it is semantically much more specific in that it indicates a yes/no-question: using it would result in one COMP containing two lexical realizations of the +*Wh*-feature with different meanings, which is impossible.

The fact that only "double COMP" dialects allow long distance extraction from *daß*-clauses traditionally has been explained by positing a language specific filter ruling out doubly filled COMPs (DFCF), which only extraction dialects are exempt from. If *Wh*-movement is COMP-to-COMP movement, with the extracted phrase leaving a trace in the intermediate COMP, this filter works as desired: it rules out (74) as well as (75) in non-extraction dialects, including many varieties of Standard German, in accordance with the facts. We shall not go into the question whether a more principled explanation is possible. Let us just point out that in accounting for the absence of the "normal" long distance cases, a mechanism just ruling out doubly filled COMPs of any kind is sufficient.³¹

Turning now to +*Wh*-imperatives, we are, of course, only interested in +*Wh*-complement clauses. In keeping with the analysis just outlined, the putative source sentences and the results of extraction would, on the level of PF (where supplementary elements have already been inserted, '∅' signifying emptiness), look like (78)–(79) in extraction dialects, and like (78')–(79') in non-extraction dialects:

- (78) [[Sag mal, [wem_i daß [du t_i die Rezension anvertraut hast]]]]
- (78') [[Sag mal, [wem_i ∅ [du t_i die Rezension
tell (me) MP whom_i(D) that/∅ you t_i the review(A)
anvertraut hast]]]]
entrusted have
Tell (me) who you have asked to write the review.
- (79) [Wem_i [sag mal, [t_i daß [du t_i die Rezension anvertraut hast]]]]

³¹ A problem for this explanation, pointed out to us by S.-G. Andersson, is the fact that doubly filled COMPs do not occur in the extraction varieties of Standard German. Since, however, the correlation is quite conspicuous in "natural" extraction dialects, where no normative pressures obtain, we think that the explanation based on it should be upheld. Perhaps speakers may differ as to whether the DFCF rules out doubly filled COMPs in general, or just COMPs that are visibly doubly filled (this could also be the effect of a prescriptive norm), thus allowing for the extraction cases in question. The same would, of course, hold for +*Wh*-imperatives.

- (79') * $[Wem_i$ [sag mal, $[t_i \emptyset$ [du t_i die
whom $_i(D)$ tell (me) MP that/ \emptyset you t_i the
Rezension anvertraut hast]]]]
review entrusted have

(79'), as opposed to (79), is out, because it violates the condition on visibility. This violation, in turn, is intuitively connected to the DFCF viz. the difference in source sentences. However, in order to account for the presence vs. absence of +Wh-imperatives and the other cases of long distance extractions in a uniform way, it has to be slightly revised. If we assume (correctly, we think) that the German version of the DFCF specifically aims at ruling out supplementary elements in C^0 (that is, elements that are not subcategorized for and/or coindexed) rather than allowing "free deletion in COMP" or the like, we have all we need: if there can be no supplementary elements in C^0 in non-extraction dialects, there is no way to fulfill the visibility condition, as soon as +Wh-I-movement takes place. If so, there can be no +Wh-imperatives in non-extraction dialects.

This yields the answer to the first question: the *daß* we meet in +Wh-imperatives is the supplementary *daß* typical for +Wh-complement clauses in extraction dialects.

As to the second question, the near total absence of +Wh-imperatives like (81) which involve matrix verbs subcategorized for +Wh-complements only may be accounted for by the type of restrictions concerning *daß* vs. *ob* that we observed above, cf. (81) and its putative source sentence (80):

- (80) Erkundige dich mal, wem daß/*ob er die
inquire yourself MP whom(D) that/whether he the
Rezension anvertraut hat.
review(A) entrusted has
Find out who he asked to write the review.
- (81) Wem erkundige dich mal, ??daß/??ob er die
whom(D) inquire yourself MP that/whether he the
Rezension anvertraut hat.
review(A) entrusted has

In (80) *ob* is ruled out because it is no neutral supplementary element; by the same token, *daß* is possible. But in (81) neither element is appropriate: *ob* is out because it is not neutral, and *daß* is out because it causes

a surface conflict between the obligatory +Wh-subcategorization requirement of *erkundigen* and the apparent -Wh-status of *daß*.³² Thus, there is just no way to realize +Wh-imperatives such as (81) even in extraction dialects.

In some way, this conflict is built into the construction of all +Wh-imperatives, where, after all, a +Wh-complement clause appears as a *daß*-clause on the surface. This certainly adds to the oddity of +Wh-imperatives which, given the surface conflict between the interrogative and imperative characteristics, has been big enough from the start. Thus, the fact that +Wh-imperatives in general are somewhat marginal cases of long distance extractions can be accounted for without detracting from their linguistic significance.

Summing up, then, all the relevant data concerning Wh-imperatives are accounted for by our theory.

4. SUMMARY

The account of Wh-imperatives worked out above and its implications for Wh-movement may be summarized as follows:

- (a) Wh-movement is XP-movement into A-bar positions, of which topicalization and +Wh-Q-movement are different instances. In view of (b)/(d), topicalization is the unmarked instance.
- (b) +Wh-phrases are XP-phrases with the operator feature +Wh.
- (c) Interrogative clauses are characterized by a +Wh-feature in their initial A-bar position, declarative clauses by a -Wh-feature. The A-bar position of imperatives is unspecified.
- (d) +Wh-Q-movement is movement of +Wh-phrases into +Wh-A-bar positions (additional provisos taking care of the *was*-construction), whereas topicalization is movement of XP-phrases into A-bar positions without an operator feature.
- (e) +Wh-phrases takes scope only in cooperation with the +Wh-feature in the A-bar position (the 'scope position'). This feature assigns scope to the +Wh-phrases it minimally c-commands.
- (f) Syntactic +Wh-Q-movement is obligatory in German (applying once only) because in this language the scope domains in +Wh-interrogatives must be visibly marked. Topicalization is optional, because there are no comparable demands it is subject to.

³² An alternative explanation (pointed out to us by J. Geilfuß) might be that the verbs subcategorized only for +Wh-complements may not act as bridge verbs (which, in fact, they never do), thus ruling out long extractions of any kind.

(g) The scope of +*Wh*-phrases can be read off directly from the S-structure constellation described in (e), the determining factor being the A-bar +*Wh*-feature, rather than the actual surface position of the +*Wh*-phrase.

(h) The properties of +*Wh*-Q-movement and topicalization listed in (a)–(g) account for the existence of ±*Wh*-imperatives. In particular, they explain how it is possible for a +*Wh*-phrase to be in the leftmost position of an imperative matrix clause at S-structure, but to have interrogative scope only over the +*Wh*-complement clause introduced by *daß*.

This result adds further support to the changing picture of *Wh*-movement: the existence of +*Wh*-imperatives shows that scope assignment is in fact to be dissociated from *Wh*-movement, and that *Wh*-movement is just movement of XP-phrases into A-bar positions, nothing more.

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CASE AND NP LICENSING*

This paper considers the theory of Case proposed in Pesetsky (1982) and adopted in Chomsky (1986a) and compares it to that proposed in Burzio (1986). Pesetsky's proposal is that a lexical feature of the verb determines whether or not it assigns accusative Case, and that possessing the feature [+Case] is what allows a head to c-select NP complements. I show that this proposal is empirically inadequate since (i) some heads that can assign Case are predicted by Pesetsky to be marked [-Case] and (ii) [+N] heads which do not assign Case differ as to whether they c-select NP complements. Furthermore, Pesetsky's proposal is stipulatory since there is no general way of predicting which V is marked [+Case]. Burzio's proposal that Case is a structural property of all verbs with specific theta properties is more adequate, both empirically and explanatorily. An additional conclusion is that Grimshaw's (1979, 1981) claim that heads subcategorize as well as select semantically is vindicated.

0. INTRODUCTION

The status of subcategorization, or c-selection (categorical selection) has been the subject of considerable debate. Grimshaw (1979, 1981) argues that there is evidence that subcategorization is required as an autonomous mechanism in the grammar, since verbs with the same s-selection (semantic selection) requirements may or may not take an NP-object. Pesetsky (1982) argues that the subcategorization properties of the lexical items Grimshaw discusses are determined by whether or not the predicate assigns accusative Case. There are several important theoretical implications of Pesetsky's proposal, which was adopted in Chomsky (1986a). One is that subcategorization can be eliminated as a syntactic mechanism. Another is that Case-assignment, as Pesetsky envisages it, must be understood as a lexical property.

Pesetsky's approach to Case-assignment, as I shall show, is incompatible with "Burzio's generalization" (Burzio 1986), which states that a verb assigns Case to a VP internal position if and only if that verb assigns an external theta-role. This incompatibility stems from the fact that the latter

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