RULES WHICH NOTHING UNDERGOES:

An investigation of impersonal passives and object raising constructions in German

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A thesis submitted in partial fulfillment of the requirements for the degree Bachelor of Arts with honors in the Department of Linguistics, Harvard University, April 7, 1975. The life of a human being does not exist merely in the sphere of transitive verbs.

Martin Buber I and Thou

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INTRODUCTION

This study centers around two impersonal constructions in German.

The first is the impersonal passive, exemplified by:

- 1) Ihm wurde von jedem im Raum gedankt.
 Him(dat) was by each in the room thanked.
 He was thanked by each person in the room.
- 2) In MIT wird sogar am Sonntag gearbeitet.
 At MIT is even on Sunday worked.
 Work goes on at MIT even on Sunday.

Impersonal passives in Turkish will also be discussed.

The second is an impersonal object-raising construction:

- 3) Ihnen war schwer zu helfen. Them(dat) was hard to help. They were hard to help.
- Hier ist schwer zu tanzen.
 Here is hard to dance.
 It is hard to dance here.

Both of these constructions have striking parallels to personal constructions in which a rule turning an object into a subject has applied. In the first case, the rule is just the passive rule; in the second, it is a version of object-raising in which non-objects are also moved into the top clause:

- 5) Elefanten sind mit Doppeldeckern schwer zu transportieren. Elephants are with biplanes hard to transport. Elephants are hard to transport with biplanes.
- Die Polka ist hier schwer zu tanzen. The polka is here hard to dance. The polka is hard to dance here.

Impersonal passives have been noted by Keenan, Kirsner, and Postal and Perlmutter; I am not aware of any work on sentences like 3)-6). The analysis which will be advanced here is that an object-promoting rule has applied in the derivation of both impersonal constructions, even through their underlying structures lack an object. In Chapter 5 some data will be presented which suggest that German allows a parallel

exception to be made in the application of two rules which move a subject into a higher clause: predicate raising and subject-to-subject raising.

There are two possible ways to encode these conclusions about passive, object-raising, predicate raising and subject-to-subject raising into the grammar of German. The first is to expand our conventions on parenthesization. The use of parentheses has up to now been tacitly limited to constituents which define the context in which a rule applies rather than constituents whose status or position is actually changed by the rule. Call the latter category of constituents "rule protagonists". One way to encode the conclusions reached here is simply to allow parenthesization of protagonists, and then insert parentheses around the object in passive and object-raising, the subject in subject-to-subject raising, and predicate raising.

The alternative approach is to add a convention to the grammar of German on when a rule may accept as input a structure which is missing something specified in the structural description. The convention would read something like this:

7) The Null Protagonist Convention:

A rule which promotes a subject or object may apply to a structure in which the rule protagonist is missing. Except for promoting the protagonist, the rule has all its usual effects.

If we consider these two approaches from the point of view of universal grammar, we see that the second makes the stronger claim.

Under the first approach, the parentheses inserted around the object in the passive rule are unrelated to those inserted in the other three

rules. In short, it is being claimed that German just happens to have four constructions which display the same behavior, and some other language with the same four rules might parenthesize the protagonist in only one or two of them.

Under the second approach, 7) is a convention which a given language either does or doesn't have. This means that if the language has one rule which applies with protagonist missing, and other rules of appropriate form, we predict the others will apply with protagonist missing, too. German seems to display a syndrome. The prediction is that languages either will have the syndrome or, like English, won't.

Of course a study of one language alone cannot determine whether the stronger universal claim is the correct one or not. My feeling about German, though, is that the occurrence of four constructions with this same behavior is probably not accidental. Thus in the following pages, the stronger claim, if not pushed energetically, will at least be examined in greater detail and pushed tentatively.

Both the parenthesization proposal and the null protagonist convention fail to bring out one important aspect of the phenomenon under consideration. Passive, object-raising, subject-to-subject raising, and predicate raising are all rules that have lots of things going on. In addition to affecting their protagonists, they mark the verb, alter tree structure radically, or whatever; even if the rule applies with protagonist missing, there are ways of knowing the rule has applied. These rules contrast with rules like topicalization; if one applied a topicalization rule with protagonist parenthesized to a structure with nothing to topicalize, one would get out just what one put in. Thus there is no reason to think that null protagonists for rules like

topicalization are a fact of natural language; we don't want a theory which claims they are. Hence, however we choose to encode the possibility of null protagonists, it will be restrictive; either we will have something like 7), or we will have constraints on when protagonists can be parenthesized. An interesting question is whether a rule which has any side-effects whatsoever can apply with a null protagonist or whether some quantity or kind of side-effects is necessary.

The line of argument which I will pursue in defending the proposal for German is this: a comparison of impersonal passives and object-raising constructions with their personal counterparts shows that each is indeed the same construction as its personal counterpart; generalizations would be lost by deriving them via different rules. However, in both cases, there is evidence that the NP which would normally undergo passive or object-raising is missing. This means that passive and object-raising must be applicable even when their protagonists are missing.

Chapter 1 discusses impersonal passives in German, with some reference to the same construction in Turkish. The topic of Chapter 2 is German es-insertion. This rule is of interest here because of its interaction with passive object-raising and subject-to-subject raising. This interaction plays a part in Chapters 3-5. The conclusion reached in Chapter 2, that es-insertion is post-cyclic, is also of considerable interest in its own right. Chapter 3 is a refutation of an alternative analysis of impersonal passives proposed by Postal and Perlmutter, which depends crucially on the es-insertion rule. Chapter 4 argues that object-raising in German must be allowed to apply in the absence of an object, as passive did in Chapter 1. Chapter 5 contains two further examples which seem to support the proposal for German, as well as a number of questions for linguistic theory.

INTRODUCTION

Footnotes

- 1. "Subject" is used here to refer to an NP with a distinguished syntactic position, which allows it, for instance, to control verb agreement and undergo Equi. The idea that subjecthood is a substantive notion which can be equated with a cluster of syntactic properties is important to this thesis, and will show up over and over. "Object" is used much more loosely; for the purposes here, an object can be taken to be any NP which German passive or object-raising turns into a subject. See Appendix 1 for more discussion of relational notions and the role they play here.
- avoiding applying rules with their protagonists missing by splitting these complicated rules into several simpler rules, not all of which apply in the constructions under consideration. This idea is discussed in Chapter 1, Footnote 4, and in Chapter 4; it turns out that for the cases at hand, it entails loss rather than gain of generality.

CHAPTER 1

IMPERSONAL PASSIVES

Section 1.0. Introduction

In German and Turkish, as well as many other languages, passive morphology is not restricted to transitive verbs. In German one finds not only passive sentences like 1), involving verbs with underlying objects, but also sentences like 2), involving so-called obliquetransitive verbs (verbs which subcategorize a following NP in an oblique case) and sentences like 3) involving pure intransitive verbs.

- 1a) Kolumbus hat Amerika entdeckt. Columbus discovered America.
 - Amerika wurde von Kolumbus entdeckt.
 America became by Columbus discovered.
- 2a) Jeder im Raum hat ihm gedankt. Each in the room has him(dat) thanked.
 - b) Ihm wurde von jedem im Raum gedankt. Him(dat) was by each in the room thanked.
- 3a) Man hat Uber diesen Fehler lange gelacht.
 Pro has over that mistake long laughed.
 People laughed about that mistake for a long time.
- b) Uber diesen Fehler wurde lange gelacht.
 Over this(acc) mistake was long laughed.

A parallel set of examples in Turkish is:

- 4) Et ye-n-di.
 The meat :eat-passive-past.
 The meat was eaten.
- 5) Ders-e başla-n-dr The lesson-dat was begun.

tilbo.

6) Bu yol-dan Ankara-ya gid-il-ir.
This road-ablat Ankara-dat go-pass-aorist.
One goes to Ankara by this road.

Unlike the personal passives (those with transitive verbs), the impersonal passives (those with oblique-transitive and pure intransitive verbs) always have third person singular verb agreement, and seem to

lack both underlying object and derived subject. Yet they definitely do look like passives. German examples 2b) and 3b), like 1b), have the passive auxiliary werden, a passive participle, and an agent in a von agent phrase; Turkish examples 5) and 6), like 4b), have a verb marker -In or -I1.²

We would like an explanation for why the personal and impersonal constructions look so much the same.

In this section, I will argue on the basis of facts in German and Turkish for a proposal that they are the same. The proposal is that in the many languages which have impersonal passives, there is a convention which allows the passive rule to apply to underlying structures which lack one term of the structural description -- the object. Since there is no object, the part of the rule which promotes the object to subject necessarily applies vacuously and the output, an impersonal passive, is subjectless. The contention in Chapter 4 and Chapter 5 is that this convention is not restricted to passives, but also applies to other rules which promote objects and subjects. Hence what is being presented is not an argument for a complication of the passive rule, but rather the first step of an argument for a language-wide convention in German.

The line of argument in this section depends on the fact that linguistic theory supplies limited resources for capturing similarities among constructions: either the constructions have parallel deep structures, or the same rule has applied in their derivation, or they are subject to the same constraint. It is clear that the first and third of these possibilities are not relevant here. It is our rules rather than our constraints that go tacking on morphology; and if anything is represented in deep structure, the difference between a transitive and

intransitive verb is.

Then the obvious way to relate personal and impersonal passives universally is to apply the same rule in the derivation of both. 3

The body of this chapter is therefore devoted to showing that this assumption entails allowing passive to apply when one term of its structural description is missing. Section 1.1 goes over what the content of the passive rule is. Section 1.2 and Section 1.3 argue that impersonal passives lack derived subjects. This constitutes an argument that they did not have underlying objects either; if they did, the passive rule would create a derived subject. Section 1.4 presents independent evidence that impersonal passives lack in underlying structure an NP which could be expected to undergo passive.

Section 1.1. The Passive Rule.

Restricting our attention for the moment to ordinary personal passives, we find that all generative accounts of passive single out two NPs. The first (which I will refer to as the subject) has in underlying structure a status or position which would enable it to appear in the nominative, control verb agreement, and undergo Equi or subject-to-subject raise if the language has these rules (see Keenan 1974). The rule removes the NP from this position and marks it in some way. The second NP (which I will refer to as the object) is the NP which gets moved into the position the first vacated and which must in some way be distinguished from other NPs in the sentence which are not eligible to replace the first.

There have been various proposals for encoding these aspects of passive. A strictly transformational account of passive picks out the subject and object on the basis of linear order alone. In the looser

version of transformational grammar in which many linguists now work, reference might also be made to tree structure: the subject might be defined as the NP immediately dominated by S, and the object, as the NP after the verb immediately dominated by NP. In contrast, relational grammar claims that information about linear order is not available at the point passive applies, but that the labels "subject" and "object" are. The passive rule is then simply "Turn the object into the subject" or "II —> I".

The question of which, if any, of these formulations is correct is of interest and importance. But it is not directly relevant here. The claim advanced here is that however the passive rule picks out its two NPs, the underlying structure for impersonal passives lacks an NP eligible to become subject and the derived structure lacks an NP which took on the position vacated by the subject. Except for the portion of the rule which moves or promotes the object, however, the passive rule can apply: the underlying subject is moved or lowered in status and marked, and passive morphology is added to the verb.

Section 1.2. Some impersonal passives lack a derived subject.

In his winter 1974 LSA paper, Keenan assumes that some NP in all impersonal passives takes on the role of subject. It is not hard to argue that this position cannot be maintained.

One notes first that both German and Turkish have impersonal passives with no NPs in them whatsoever

- 7) Er sagte dass getanzt wurde. 5
 He said that danced was.
 He said that there was dancing.
- 8) Sigara iç-il-mez. Not an UP?
 Smoke-pass-may not.
 No smoking.

Clearly such sentences have no underlying object and no surface subject.

In a second set of examples, brought to my attention by Jorge
Hankamer, it would be impossible to maintain that one of the NPs present
is a subject without entirely evacuating the notion of subject. These
are impersonal passives which have two NPs of precisely equal status:

- 9) Ilkbaharda çarşambalarda dans edilecek. what about dans In spring on Fridays will be danced. There will be dancing in the spring on Fridays.
- 10) Letztes Jahr wurde Sonntags gearbeitet.
 Last year was Sundays worked.
 Last year work went on on Sundays.

In 9) and 10), both NPs are time adverbials; both are in the same case; neither controls verb agreement. Linear order is determined entirely by discourse properties. Thus there is no possible reason to pick one over the other as subject of the sentence. The same argument clearly pertains to the objecthood of these NPs in underlying structure.

Pursuing this argument further, consider 9) and 10), minus one NP apiece:

- 11) Ilkbaharda dans edilecek. In spring will be danced.
- 12) Letztes Jahr wurde gearbeitet.
 Last year was worked.

It would be curious indeed if <u>ilkbaharda</u> and <u>letztes Jahr</u> acquired a different grammatical status by virtue of the absence of <u>carsambalarda</u> and <u>Sonntags</u>. In short any time we have an NP which could as well have been one of twins (or triplets), we have no reason to assign it a special status, whether as object or subject.

Section 1.3. All impersonal passives lack a derived subject.

The only case which presents difficulties, then, is that of the NP which could not just as well have been a twin -- the so-called oblique

object. It is not hard to conveive of some scheme for picking these out as objects in underlying structure, making them undergo passive, and leaving them as oblique subjects in derived structure. This section argues that they do not behave like subjects in derived structure: it follows that there is no reason to think they started in underlying structure eligible to undergo passive. Section 1.4 will present some additional evidence that these NPs could not be expected to passivize.

- 1.3.1. One hallmark of a subject is the ability to control verb agreement; as Keenan points out in the list of subject properties attached to his 1974 LSA paper, ability to control verb agreement is a pretty easy subject property to acquire. However, in impersonal passives, the verb is always third person singular: in particular, the oblique NPs currently under consideration never control verb agreement:
 - 13) Den Arzten wurde/*wurden geglaubt. The doctors(dat) was/ were believed.
 - 14) Keçi-ler-den kork-ul-ur-Ø. pluse wwb?
 Goats-pl-ablat fear-pass-aorist-3rd sing.
 Goats are to be feared.

This is one way these oblique NPs fail to behave like subjects.

- 1.3.2. Sentence-initial position has been adduced as evidence for subjecthood in German (Keenan 1974). It is true that the oblique NPs whose subjecthood is under consideration can occupy initial position.
- 15) The wurde gestern geholfen.
 Her(dat) was yesterday helped.
 However, word order is quite free in German; another constituent in the sentence can equally well occupy first position.
 - 16) Gestern wurde ihr geholfen. Yesterday was her helped.

It is also possible to insert an expletive es which, as will be

shown in Chapter 2, is not a subject.

17) Es wurde ihr gestern geholfen. It was her(dat) yesterday helped. She was helped yesterday.

In these circumstances, to call <u>ihr</u> a subject on the basis of word order would be to evacuate the notion of "subject" entirely. The argument goes through equally well in Turkish, where word order is, if anything, freer than in German.

- 1.3.3. Subjects can normally undergo Equi. 18) shows that subjects of passives in German and Turkish can be deleted by Equi.
 - 18a) Ich möchte geklisst werden.
 I want to be kissed.
 - b) Ali Ayşe tarafindan sev-il-mek istedi. Ali Ayşe by love-pass-infinitive wanted. Ali wanted to be loved by Ayşe.

However the oblique NPs in question cannot undergo Equi:

- 19a) Mir wird dadurch geholfen. Me(dat) is by that helped.
 - b) *Ich möchte geholfen werden. I want to be helped.
- 20a) Ali-den korkulur.
 Ali-ablat is feared.
 - b) *Ali kork-ul-mak istedi.
 Ali fear-pass-infin wanted.
 Ali wanted to be feared.

Again the oblique NPs are not behaving like subjects.

1.3.4. Another aspect of "behaving like a subject" is the ability to undergo subject-raising rules.

Appendix 3 demonstrates that German has a rule of subject-tosubject raising responsible for sentences like 21b):

21a) Es scheint, dass Inge schläft. It seems that Inge is sleeping. 21b) Inge scheint zu schlafen.
Inge seems to be sleeping.

Subjects of passives undergo this rule:

22) Er scheint von der Polizei gesucht zu werden. He seems by the police to be sought.

However, the datives in impersonal passives do not subject-to-subject raise:

- 23a) Es scheint, dass ihm geglaubt worden ist. It seems that him(dat) was believed.
 - b) $*{Hm}$ scheint geglaubt worden zu sein. $He {(dat) \atop (nom)}$ seems to have been believed.

Turkish has a rule of subject-to-object raising (Aissen 1974). Underlying structure 24a) can be realized as 24b):

- 24a) Hasan s/Mehmet geldi saniyor.

 Hasan Mehmet came thinks.
 - b) Hasan Mehmed-i geldi saniyor. Hasan Mehmet-acc came thinks.

Mehmet is now in the main clause. Scrambling, first person reflexivization, and Rightward Leaking are all clause-bounded in Turkish (Aissen 1974). NPs in the position of Mehmet indeed scramble, reflexivize, and leak as main-clause members. They also undergo passive:

25) Mehmet Hasan tarafindan geldi san-il-iyor.

Mehmet Hasan by came think-pass-progressive.

Mehmet is thought by Hasan to have come.

By contrast, the oblique NPs in impersonal passives do not subject-toobject raise. They cannot acquire an accusative ending:

26) *Ali keçiler-i kork-ul-ur saniyor.

Ali goats-acc fear-pass-aorist thinks. [Ali believes the goats to be femal)

Nor can they become members of the main clause without acquiring an accusative ending. In 27), <u>keçilerden</u> cannot scramble or leak in the main clause, as it could were it a member of that clause.

27) Ali keçiler-den kork-ul-ur saniyor. Ali goats-ablat fear-pass-aorist thinks. Ali thinks goats are to be feared.

CAX. Ali Korkulur Sanyar Keçilerler

First person reflexivization is likewise impossible:

28) *Ben kendim-den kork-ul-ur saniyorum.

I self-blat am to be feared think.

I think I am to be feared.

Thus in both Turkish and German, the oblique NPs under consideration are not undergoing the raising rules we would expect them to undergo if they were subjects.

- 1.3.5. A fifth set of facts involves the German rule of quantifier float. Subjects and objects can float quantifiers:
 - 29a) Wir sind alle ins Kino gegangen. We are all to the movies gone. We all went to the movies.
 - b) Die Äpfel sind alle gegessen. The apples are all eaten.
 - 30a) Die Äpfel habe ich alle gegessen. The apples have I all eaten.
 - b) Die Bleisoldaten hat sie alle seiner Nichte geschenkt. The toy soldiers has she all to her niece given.

Indirect objects do not float quantifiers:

31) ?Ihnen habe ich allen Blumen gegeben.
Them(dat) have I all(dat) flowers given.

The dative NPs in impersonal passives float quantifiers reluctantly:

- 32a) ?Ihnen ist allen geholfen worden.
 Them(dat) is all helped become.
 They were all helped.
 - b) ?Den Arzten ist allen geglaubt worden.
 The doctors(dat) was all(dat) believed.

In this respect they behave like indirect objects rather than subjects.

1.3.6. In the last five subsections, the oblique NPs in impersonal

7 is there a difference in grammeticality here?

alors.

like French- le brace.

" like m'a trappe

passives have been found to have no syntactic properties which would label them as subjects. Calling them subjects under these circumstances would say nothing about them, and would evacuate our otherwise useful notion of "subject."

Section 1.4. Impersonal passives lack an underlying object.

Because the oblique NPs in impersonal passives involving obliquetransitive verbs do not behave like subjects in derived structure there is no reason to think they were objects in underlying structure. In fact there is some evidence that impersonal passives lack the sort of NP which could undergo passive; this section presents that evidence.

- 1.4.1. Claiming that the oblique NPs in question are underlying objects leads to ad hoc subcategorization for certain verbs in German. These are verbs like glauben (to believe) and antworten (to answer) which subcategorize a dative NP plus an optional accusative:
 - 33a) Man hat dir deinen Geschichten geglaubt. Pro has you(dat) your stories(acc) believed.
 - b) Man hat dir geglaubt. Pro has you(dat) believed.
 - 34a) Man hat mir ecwas komisches geantwortet.
 Pro has me(dat) something comical(acc) answered.
 - b) Man hat mir geantwortet.
 Pro has me(dat) answered.

These verbs appear in both personal and impersonal passive constructions. When the accusative NP is present in underlying structure, we get the personal construction:

- 35) Deinen Geschichten wurden dir geglaubt. Your stories(nom) were you(dat) believed.
- 36) Etwas komisches wurde mir geantwortet. Something comical(nom) was me(dat) answered.

So we know the accusative NP is an object. The dative NP does not seem to be a second object, for it cannot undergo passive.

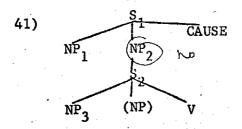
- 37) *Du wurdest deinen Geschichten geglaubt.
 You(nom) were your stories(acc) believed.
- '38) *Ich wurde etwas komisches geantwortet.
 I(nom) was something comical(acc) answered.

I will consider the dative here to be an indirect object. The impersonal passive is what occurs when the accusative NP is missing in underlying structure; the passives of 33b) and 34b) are 39) and 40).

- 39) Dir wurde geglaubt. You(dat) was believed.
- 40) Mir wurde geantwortet.
 Me(dat) was answered.

Now consider the dative NPs in these impersonal passives. They have exactly the same selectional restrictions as the datives in personal passives 35)-36). If they started out as objects, then antworten and glauben must be subcategorized either for a dative object or for an accusative object and a dative indirect object. The fact that the selectional restrictions on the dative object and the dative indirect object are the same remains a perfect coincidence. If we subcategorize glauben and antworten for an optional object and obligatory indirect object on the other hand, this fact falls out automatically. But this characterization implies that the underlying structures of 39)-40) have no object.

1.4.2. Turkish has a predicate raising rule which applies to structures of the form: 8



 S_1 and S_2 are collapsed into a single clause and the higher verb CAUSE is realized as a suffix $\underline{-DIR/-D}$ on the lower verb. The surface case marking on the downstairs subject NP $_3$ will allow us to determine whether S_2 has an object or not.

It works like this: NP_3 shows up in the accusative if the verb in S_2 is intransitive:

42) Ayşe Mehmed-i Öl-dür-dü. Ayşe Mehmet-acc die-cause-past. Ayşe caused Mehmet to die.

.12

If the verb in S₂ has an accusative object, then NP₃ shows up in the dative:

43) Ayşe Mehmed-e kabağ-i ye-dir-di. Ayşe Mehmet-dat squash-acc eat-cause-past. Ayşe made Mehmet eat the squash.

The crucial piece of evidence concerns what happens when the downstairs verb has a nonspecific object. The so-called accusative marker in Turkish really appears only on specific objects. Nonspecific objects appear without a case ending:

- 44a) Hasan kabağ-i yi-yor. Hasan squash-acc eat-prog. Hasan is eating the squash.
 - b) Hasan bir kabağ-i yi-yor.
 Hasan a squash-acc eat-prog.
 Hasan is eating a (particular) squash.
 - c) Hasan kabak yi-yor.Hasan squash eat-prog.Hasan is eating squash.
 - d) Hasan bir kabak yi-yor.
 Hasan a squash eat-prog.
 Hasan is eating a squash.

In fact in 44c), <u>kabak</u> has been incorporated into the verb, and is no longer subject to scrambling, rightward leaking, or passive. (Aissen 1974a.) Nonetheless, when 44c) is embedded under CAUSE, <u>Hasan</u> surfaces in the dative case:

45) Mehmet *Hasan-i kabak ye-dir-di.
Mehmet Hasan-acc squash eat-cause-past.

Hasan-a Hasan-dat
Mehmet made Hasan eat squash.

This fact suggests that the case-marking rule looks at grammatical relations rather than at the case endings on the other NPs in the sentence. ¹⁰ In relational terms, the facts may then be summarized as follows: the normal case for a direct object is accusative, and for an indirect object, dative. The subject of the lower clause becomes a direct object if there is no direct object already, and appears in the accusative. If there is a direct object, the subject can become an indirect object if there is no indirect object, and it appears in the dative. Therefore, if the subject of an oblique-transitive verb shows up dative, we will conclude the verb has a direct object; if the subject shows up accusative, we will conclude the verb lacks a direct object. It turns out that the subject is accusative:

- 46) Ayşe Mehmed-i keçiler-den korku-t-tu. Ayşe Mehmet-acc goats-abl fear-cause-past. Ayşe made Mehmet fear goats.
- 47) Ayşe Mehmed-i ders-e başla-t-ti.
 Ayşe Mehmet-acc lesson-dat begin-cause-past.
 Ay@ made Mehmet begin the lesson.

47/2~

So we conclude that ders-e and keciler-den are not direct objects.

1.4.3. In Section 1.3.5 it was noted that quantifier float provides an argument that the oblique NPs in German impersonal passives are not subjects. Parallel facts are available for the underlying structures of these impersonal passives. The dative NPs in question cannot float whe quantifiers in underlying structure any more than in surface structure:

active 5

48a) ?Den Kindern habe ich allen geholfen.
The children(dat) have I all(dat) helped.

Den Ärzten habe ich allen geglaubt.
The doctors(dat) have I all(dat) believed.

In this way they behave more like indirect objects than like direct objects.

Section 1.5. Conclusion.

So the evidence is that impersonal passives lack in derived structure an NP which underwent passive and that they lacked in underlying structure an NP of the sort we would expect to undergo passive. If we are going to relate impersonal passives to personal passives by applying the same rule in both, we must therefore contrive to have the rule apply whether an object is present or not. 11

CHAPTER 1

Footnotes

- Languages which have impersonal passives include Latin, Sanskrit,
 Anglo-Saxon, and Dutch.
- 2. <u>-In</u> is used when the stem ends in a vowel cr <u>1</u>; <u>-Il</u> is used otherwise. The vowel in the suffix is subject to front/back and rounding vowel harmony, as are almost all high vowels in Turkish. It is deleted if it follows a vowel.
- 3. Since the underlying structures of impersonal passives lack objects (as will shortly be demonstrated), many of the arguments which are available to justify active underlying structures for personal passives are not available. Because of this, it might be proposed that impersonal passives are not transformationally derived. Note that such a proposal claims impersonal and personal passives are unrelated constructions Also, since impersonal passives in German can have agent phrases, this proposal complicates the statement of subject-verb selectional restrictions.
- 4. An alternative proposal would be to split passive into two rules, a subject demotion rule, and an object promotion rule; only the first would apply in impersonal passives. A two-rule proposal has been advanced by Chomsky (1973). It works out less than perfectly for the facts under consideration here. The problem is this: In English, and other languages which have only personal passives, it is necessary to link the rules so that the subject is not postposed or demoted (depending on your theory) without preposing or promoting the object. This linkage is taken to be a consequence of a universal constraint on empty nodes: removing the subject empties a node

which must one way or another be filled, and the only way to fill it is by moving the object into it. The same constraint will be needed in German to force the object into the subject node when the subject of a transitive verb is moved into a von-phrase. Otherwise transitive verbs, too, would have impersonal passives. But this constraint predicts that German will have no impersonal passives at all, since in impersonal passives the node vacated by the subject never gets refilled.

717.2

The only way out of this difficulty seems to be to scrap the constraint on node refilling and encode the linkage between the two rules as conditions on their application. One way to do this would be to make the rule which moved the object into the subject node obligatory, in both English and German, on a structure with empty subject node and ex-subject in an agent phrase. In English, but not in German, the subject-demotion rule would have to be contingent on the presence of an object. While such a proposal might generate the correct sentences in both languages, it seems to involve considerable loss of intralinguistic and corss-linguistic generality.

- 5. If this passive were not embedded, it would begin with an expletive

 Es wurde getanzt.

 es:

 i) It was danced.

 It will be shown in Chapter 2 that this es is inserted postcyclically and, if put into a sentence containing a subject, in no way takes over the function of subject.
- 6. It follows in the absence of a coherent proposal to promote and then demote them. Such a proposal, indeed the closest to a feasible one I can imagine, is refuted in Chapter 3.

- 7. It has been pointed out to me that one might posit a rule which converted lonely indirect objects into objects before passive applied. Note that this rule would have no effects whatsoever: it would change neither tree-structure nor case-marking. Hence the only possible empirical evidence for the rule would be unexpected ability of the dative NP to undergo passive and become a subject; this is exactly the sort of evidence which Section 1.3 showed to be absent. The intrinsic vacuousness of this proposal is reason enough to dismiss it.
- 8. See Aissen 1974a and b for discussion of the motivation and behavior of this rule.
- 9. These facts provide evidence against a proposal to describe impersonal passives in Turkish by investing intransitive verbs with dummy direct objects. If a dummy were present for the purposes of one rule, it would be present for the purposes of another. Thus we would expect that predicate raising would be unable to distinguish a lower clause verb with dummy object from a verb with lexical object, and so would put the downstairs subject into the same case in every instance. Clearly it would require frequent and ad hoc distinctions between dummy and nondummy nodes to make this proposal generate the correct sentences.
- 10. A further piece of evidence for such a conjecture is the fact that the causative rule distinguishes indirect object datives from directional datives; it is possible to causativize a sentence with both a direct object and a directional, but impossible to causativize a sentence with both a direct and an indirect object:

- ia) Orhan Hasan-a kutu-yu Istanbul-a gö-tür-di.
 Orhan Hasan-dat box-acc Istanbul-dat take-cause-past.
 Orhan made Hasan take the box to Istanbul.
- iib) *Orhan (Hasan-a) kitab-i Ayşe-ye ver-dir-di.
 (Hasan-i)
 Orhan Hasan (dat) book-acc Ayşe-dat give-cause-past.
 (acc)
 Orhan made Hasan give the book to Ayşe.

(Similar sentences are cited in Aissen 1974a, though not as evidence for a relational account of case-marking.)

- 11. A fact which seems at first to be disturbing counterevidence to the proposal advanced here is that there are no impersonal statal passives. (Statal passives are passives which have sein (to be) rather than werden (to become) as auxiliary.) We find:
 - i) Ist das Zimmer nicht geheizt? Is the room not heated?
 - ii) Diese Briefe sind mit der Maschine geschrieben. These letters are with the typewriter written. These letters are typewritten.

but:

- iii) *Ihr ist geholfen.
 Her(dat) is helped.
- iv) *Herrn Meyer ist zuhört.
 Mr. Meyer(dat) is listened.

While I have not studied statal passives in detail, I believe that there are independent reasons for this gap.

There is another case where a <u>werden</u> passive is possible but a <u>sein</u> passive is not. This is when the derived subject was the nonreferential object in an idiom chunk:

v) Doch wurde /*war der rote Hahn aufs Dach gesetzt. (emphatic particle) became/ was the red cock on the roof put. Arson was committed.

vi) Die Kastanien wurden/*waren von mir aus dem Feuer geholt.

The chestnuts became/were by me out of the fire pulled.

I did the dirty work.

(Note that in vi) the <u>werden</u> passive cannot be the impersonal construction because the verb is plural rather than singular.)

My conjecture is that both cases are part of a single phenomenon: the statal passive is basically a predicate adjective construction which ascribes a property to the subject; thus it needs a subject which can have properties ascribed to it. A non-specific NP or a nonreferential idiomatic NP, or nothing, won't do.

CHAPTER 2

ES-INSERTION IN GERMAN

Section 2.0. Introduction.

- . The topic of this section is the rule of <u>es</u>-insertion, one of several sources of expletive <u>es</u> in German. It is exemplified by:
 - 1) Es stiess ihn jemand von der Brücke, der ihn nie vorher It pushed him someone off the bridge who him never before Someone who had never seen him before pushed him off the bridge. gesehen hatte. seen had.
 - 2) Es traumten die drei Kinder in ihren Betten. It dreamed the three children in their beds. The three children dreamed in their beds.
 - 3) Es wird hier sogar am Sonntag gearbeitet.
 It is here even on Sunday worked.
 Work goes on here even on Sunday.

This <u>es</u> must be distinguished from the extraposition <u>es</u>, exemplified by 4) and also from the <u>es</u> which appears in a certain group of impersonal expressions, exemplified by 5)

- 4a) Es ist möglich, dass Erich spurlos verschwunden ist. It is possible that Erich without a trace disappeared is. It is possible that Erich has disappeared without a trace.
- b) Es ist leicht autozufahren. It is easy to drive (a car).
- 5a) Es regnet. It is raining.
- b) Es gibt jeden Tag Schweinebraten. (Lohnes and Strothmann, It gives every day roast pork. p. 441)

 Every day there is roast pork.

The inserted <u>es</u> is restricted to initial position in matrix declarative clauses, whereas the extraposition and weather <u>es</u>'s are not; on the other hand, <u>es</u>-insertion is not lexically governed, whereas extraposition (and weather <u>es</u>-insertion, if this is a rule) are.

The section will use these properties of <u>es</u>-insertion to demonstrate that it is a post-cyclic rule. This conclusion is of interest for two reasons. First, the expletive <u>es</u> is a feature of impersonal passives:

- 6a) Es wird ihr nie geholfen. It is her(dat) never helped. She is never helped.
- b) Es wurde getanzt.

 It was danced.

 There was dancing.

I found no impersonal passives in which es-insertion could not apply, and in certain cases (such as 6b)) its application was obligatory. However, if impersonal passives are to be directly related to personal passives, they must be formed cyclically. The conclusion that es-insertion is post-cyclic undermines any proposal that it be crucially involved in the formation of impersonal passives. Such a proposal will be discussed in detail in Chapter 3. Second, es-insertion has obvious parallels to English there-insertion, which is known to be cyclic. This raises some interesting cross-linguistic questions. Postal and Perlmutter have claimed that all dummy insertion rules insert a dummy cyclically as subject or object. Once this proposed universal is refuted we need some other way for linguistic theory to capture the similarities in effect and motivation of dummy insertion rules.

The formulation of es-insertion which will be advanced involves two rules. The first moves new-information subjects rightward. The second inserts es before the verb in a matrix declarative clause just when no other constituent occupies that position -- when no constituent has been fronted and there is no subject or the subject has moved rightward. There are three arguments for this formulation over a

cyclic formulation. They are presented in Section 2.1 - Section 2.3.

Section 2.4 is devoted to defense of the subject-rightward rule.

Section 2.1. A globality argument.

I will argue first that if <u>es</u>-insertion were cyclic, it would be necessary to posit a post-cyclic <u>es</u>-insertion rule with unmotivated global power. It was mentioned above that the inserted <u>es</u> occurs only in initial position in matrix declarative sentences. This means that <u>es</u> is never found in embedded sentences:

- 7a) Es wurde den Kindern geholfen. It was the children(dat) helped.
- b) Er sagte, dass (*es) den Kindern geholfen wurde. He said that (*it) the children(dat) was helped.
- c) Die Kinder, denen (*es) geholfen wurde, sind sehr jung.
 The children, whom(dat) (*it) was helped, are very young.

 and also that es does not appear when a noncyclic rule such as question

 formation or fronting has triggered subject-verb inversion. Compare

 examples 8) to examples 9)
 - 8a) Den Kindern wurde (*es) geholfen. The children(dat) was (*it) helped.
 - b) Wurde (*es) den Kindern geholfen? Was (*it) the children(dat) helped? Were the children helped?
 - c) Wem wurde (*es) geholfen? Whom(dat) was (*it) helped?
 - 9a) Uber 100,000 Exemplare wurden im letzten Jahr verkauft.
 Over 100,000 copies were in the last year sold.
 - b) Im letzten Jahr wurden über 100,000 Exemplare verkauft. In the last year were over 100,000 copies sold.

If <u>es</u> is inserted cyclicly, it will be inserted into embedded clauses and, in matrix clauses, it will be subjected post-cyclically to subject-verb inversion. Hence, we will need a post-cyclic rule to

remove the non-matrix-sentence initial es's:

10) es \longrightarrow \emptyset noninitially

2.4

But the rule as stated will not work; we must avoid deleting extraposition <u>es</u>'s and the impersonal <u>es</u>'s which can appear non-initially and in embedded sentences.⁴

- 11a) Es ist natürlich möglich, dass Erich spurlos verschwunden ist. It is of course possible that Eric has disappeared without a trace.
 - b) Naturlich ist (es möglich, dass Erich spurlos verschwunden ist.

 Of course is it possible, . . .

 *Ø
 - c) Ist es möglich, dass Erich spurlos verschwunden ist? Is it possible,
- 12a) Erich sagte dass es schon wieder gehagelt hat.
 Erich said that it already again hailed has.
 Erich said that it has already hailed again.
 - b) Hat es schon wieder gehagelt?
 Has it already again hailed?
 Has it already hailed again?
- Wieviele Hotels gibt es denn hier? (Lohnes and Strothmann, How many hotels gives it here? p. 441)

 How many hotels are there here?

To generate the correct sentences, the <u>es</u>-deletion rule must have either global power or a structural description which lists as exceptions the lexical items which take an impersonal <u>es</u> and the structural change of the extraposition rule. The second is redundant, and the first is entirely unmotivated, since its sole function is to allow the grammar to escape the consequences we expect to follow from extraposition being cyclic. Instead of positing a rule to make <u>es</u>-insertion look post-cyclic, we would conclude that it is post-cyclic.

Section 2.2. Lexical government.

The second argument is based on the generalization that cyclic rules are lexically governed and post-cyclic rules are not (Ross, 1967). The

body of this subsection will be a set of examples which points toward the conclusion that <u>es</u>-insertion is not lexically governed; this fact suggests that it is post-cyclic. It is of course impossible to prove that a rule is not lexically governed without searching the language exhaustively. However, it is possible to come up with a sufficient range of examples to shift the burden of proof onto the opposite viewpoint. This is what I have tried to do.

Like English there-insertion, es-insertion applies in passives and with intransitive verbs connoting appearance or disappearance.

- 13a) Es ist gerade ein Gemälde gefunden worden, das aus It has just a painting found been which out of A painting which was stolen from the Louvre in 1920 has just dem Louvre im Jahre 1920 gestohlen worden ist. the Louvre in 1920 stolen been has. been found.
 - b) Es sind einige Schiffe von Lloyds versichert. It are some ships by Lloyds insured. Some ships are insured by Lloyds.
- 14a) Es ist ein kleiner Mensch aufgesprungen.
 It is a little person jumped out.
 A little person jumped out.
 - b) Es verlöschte ein Stern nach dem andern.It faded out one star after another.One star after another faded out.

However, <u>es</u>-insertion also applies with transitive verbs and verbs having nothing to do with disappearance or appearance:

- 1) Es stiess ihn jemand von der Brücke, der ihn nie vorher It pushed him someone off the bridge who him never before Someone who had never seen him before pushed him off the bridge. gesehen hatte. seen had.
- 15) Es steuerte eine böse Hexe die Frösche bei. It contributed a wicked witch the frogs. A wicked witch contributed the frogs.

2.6

- 16) Es kumpfte nur ein Mensch weiter, der an Utopien glaubte.

 It fought only one person on who in utopias believed.

 Only one person, who believed in utopias, fought on.
- 2) Es traumten die drei Kinder in ihren Betten. It dreamed the three children in their beds. The three children dreamed in their beds.

Es-insertion also applies with a variety of predicate adjectives:

- - b) Es werden funf Fragen schwer sein. It will five questions hard be. Five questions will be hard.
 - c) Es sind funf Plätze vorrätig. It are five places available. There are five places available.

and with predicate prepositional phrases:

18) Es sind heutzutage immer mehr Dinge aus Plastik.

It are these days more and more things of plastic.

More and more things are of plastic these days.

I couldn't find any predicate which blocked <u>es</u>-insertion. So it seems safe to conclude that <u>es</u>-insertion is not lexically governed and so might be suspected to be post-cyclic.

It is also true that <u>es</u>-insertion is not constrained by tense; one finds <u>es</u>-insertion sentences in future, past, perfect and present, as well as with modals:

- 19a) Es haben trotzdem drei Vorübergehende mitgewirkt.

 It have nevertheless three passersby cooperated.

 Nevertheless, three passersby cooperated.
 - b) Es ist eine Schar Hühner in den Fluten zu grunde gegangen.
 It is a flock of chickens in the flood to the bottom gone.
 A flock of chickens perished in the flood.

(see also 14)-15) and 16))

- 20a) Es durfen hier keine Kinder spielen. It may(pl) here no children play. No children may play here.
 - b) Es soll jemand das Dach reparieren.
 It should someone the roof repair.
 Someone should repair the roof.

Section 2.3. A surface structure constraint.

3.7

There is a well-known surface structure constraint in German which requires that the tensed part of the verb appear as the second constituent in a matrix declarative sentence. This section will show that a post-cyclic formulation of <u>es</u>-insertion can be motivated by this constraint, whereas a cyclic formulation cannot.

The verb-second constraint is posited to account for two
phenomena which occur in matrix declarative sentences. The first is
that if the sentence has an overt subject, the subject must move after
the verb if any rule moves some other constituent into initial position:

- 21a) Sie gehen heute in die Oper. They are going today to the opera.
 - b) Heute {gehen sie {in die Oper. *sie gehen}

c) Wenn es regnet {gehen sie | in die Oper. *sie gehen}

It it rains
$$\left\{go \text{ they}\right\}$$
 to the opera.

The second is that if the sentence lacks a subject, some other constituent must be found to take the position before the verb. This can be either some constituent which was available to be fronted (examples 22)-23)) or an expletive <u>es</u> (example 24)):

- 22a) *Hungert mich.

 Hungers me(acc).

 I'm hungry.
 - b) Mich hungert. Me(acc) hungers.
- 23a) *Wird hier sogar am Sonntag gearbeitet.

 Is here even on Sunday worked.
 - b) Hier wird sogar am Sonntag gearbeitet. Here is even on Sunday worked.

- 24a) *Wurde getanzt.
 Was danced.
 - b) Es wurde getanzt. It was danced. There was dancing.

Note that in 24) es-insertion is obligatory because the sentence has no NPs or adverbs which could be fronted. Es-insertion would also be necessary in 23) if the speaker, for whatever reasons, did not choose to front one of the adverbs. 23), in short, may also be salvaged as in 25):

25) Es wird hier sogar am Sonntag gearbeitet. It is here even on Sunday worked.

It is a short step from this to John Haiman's idea (Haiman 1971) that the verb-second constraint motivates the <u>es</u>-insertion rule: <u>Es</u>-insertion exists to supply an initial constituent to sentences which reach the end of the derivation and are on the verge of being scrapped for failure to meet the verb-second constraint. It applies, then, in sentences where no constituent has been moved into initial position, and the subject is either lacking as in 22)-24) or has been moved rightward, as in 13)-20).

This picture of <u>es</u>-insertion explains its interaction with other post-cyclic rules. If <u>es</u>-insertion were just any post-cyclic rule, we would expect other post-cyclic rules to apply after it. Even after an <u>es</u> was inserted, the structural descriptions for fronting and wh-question movement would still be met; it would be possible to generate ungrammatical

- 26a) *Hier wird es sogar am Sonntag gearbeitet.

 Here is it even on Sunday worked.
 - b) *Wo wird es sogar am Sonntag gearbeitet? Where is it even on Sunday worked?

However, I am claiming that <u>es</u>-insertion is not just a post-cyclic rule, but a surface structure adjustment. There is no reason to expect that other post-cyclic rules will apply after the last touch to the structure

has been added.5

A cyclic es-insertion rule cannot be related to the verb-second constraint. The constraint pertains only to matrix clauses, and it applies at the level of surface structure rather than during the cycle. Clearly the post-cyclic es-deletion rule which is a concomitant of a cyclic es-insertion rule cannot be motivated by the verb-second constraint, either: the deletion rule applies in embedded as well as matrix sentences, and its effect has nothing to do with satisfying the constraint. This means that the combination of cyclic es-insertion and post-cyclic es-deletion constitutes at best, a description of the facts. The post-cyclic formulation of es-insertion, on the other hand, is an explanation.

Section 2.4. The Subject-Rightward Rule.

The formulation of <u>es</u>-insertion as a surface structure adjustment inserting a space filler to satisfy the verb-second constraint depends on the existence of a rule which moves new information subjects rightward, leaving the pre-verbal slot empty. This section presents evidence for this rule.

I have pointed out that <u>es</u>-insertion applies freely in subjectless constructions (with the exception of impersonal object-raising constructions; see Section 4.5). Sentences which do have subjects do not always have <u>es</u>-insertion paraphrases. It works like this: If the sentence has an indefinite subject, an <u>es</u>-insertion paraphrase with subject moved rightward is generally possible; Sections 2.1-2.3 provide a plethora of examples. Note that the subject does not just move to after the verb, as it would had fronting some constituent forced it out of initial position, but can also cross an adverb or pronominal object:

- 27a) Es steuerte sie eine böse Hexe bei.
 It contributed them a wicked witch.
 A wicked witch contributed them.
 - b) Es werden hier Schuhe repariert.
 It are here shoes repaired.
 Shoes are repaired here.

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If the sentence has a definite subject, an <u>es</u>-insertion variant is not ordinarily available: compare

- 17a) Es sind schon fünf Gäste betrunken. It are already five guests drunk. Five guests are already drunk.
- 28) Es stiess ihn ein Soldat von der Brücke. It pushed him a soldier off the bridge. A soldier pushed him off the bridge.
- 29a) *Es sind schon die Gäste betrunken.
 It are already the guests drunk.
 - b) *Es stiess ihn der Soldat von der Brücke. It pushed him the soldier off the bridge.

Sentences like 29), however, can be salvaged in either of two ways. They are all right with contrastive stress on the subject:

- 30a) Es sind schon die <u>Gäste</u> betrunken. The <u>guests</u> are already drunk.
 - b) Es stiess ihn der <u>Soldat</u> von der Brücke. The <u>soldier</u> pushed him off the bridge.

In such cases, the subject, although it is definite, is new information. Even though <u>die Gäste</u> and <u>der Soldat</u> have been mentioned before, it is new information that these rather than the host and civilian are the people in question.

Second, it also seems (although I do not have extensive data on this point) that <u>es</u>-insertion sentences with definite subjects can be improved by the addition of a relative clause.

31a) Es stiess ihn der Soldat von der Brücke, der ihn 10 minuten

The soldier who had seen him 10 minutes before pushed him off

vorher gesehen hatte.

before seen had.

the bridge.

31b) Es sind schon die Gäste betrunken, die immer betrunken sind. It are already the guests drunk, who always drunk are. The guests who are always drunk are already drunk.

Again, the information content of the subject has been increased. 8 It should be noted that a relative clause or contrast also adds to the acceptability of an es-insertion sentence with an indefinite subject. The most usual and felicitous es-insertion sentences with a subject are those with a heavy or contrastive indefinite subject.

Es-insertion sentences with pronominal subjects are always ungrammatical (John Haiman).

- 32a) *Es kam er.
 It came he.
 He came.
 - b) *Es ist schon sie betrunken.
 It is already she drunk.
 She is already drunk.
 - c) Es wollen sie Hausfrauen nicht werden. It wants they housewives not to become. They don't want to become housewives.

Our analysis of <u>es</u>-insertion explains this fact: pronominal subjects are always anaphoric, hence they are never moved rightward as new information. This means the verb-second constraint is satisfied by the subject, and so <u>es</u>-insertion does not have a chance to apply.

It might seem off the cuff that another similar proposal would equally well account for this fact and the others in this section. This would be to collapse the two rules I have posited into one which inserted es freely into subjectless constructions and inserted es under certain discourse conditions into constructions with subjects, causing the subject to move rightward. There are two arguments against having just one rule. First, we would lose the verb-second constraint motivation for es-insertion, since the rule would apply in sentences where the constraint was satisfied by the subject in its usual sentence-initial

position. Second, we find sentences where there is no trace of <u>es</u>insertion, but the subject is further rightward than subject-verb
inversion would take it:

- 33a) Gestern stiess ihn jemand von der Brücke, der ihn nie vorher Yesterday pushed him someone off the bridge, who had never seen gesehen hatte.

 him before.
 - b) Jetzt sind schon funf Gaste betrunken. Now are already five guests drunk.

To generate such sentences under this alternative formulation would again require an <u>es</u>-deletion rule, to remove the <u>es</u> which was inserted to get the subject to the right.

So we are left with the two rule proposal: one, a discourse-governed rule which moves subjects rightward and two, a rule which inserts <u>es</u> to satisfy the verb-second constraint. This set-up yields a fourth, somewhat tentative argument that <u>es</u>-insertion is post-cyclic. Jorge Hankamer has proposed (Hankamer, 1973 and 1974) that only post-cyclic rules can be discourse-governed. If this proposal is correct, the subject-rightward rule must be post-cyclic. But then <u>es</u>-insertion must likewise be post-cyclic, since it applies after a post-cyclic rule.

Section 2.5. Conclusion.

Thus we have three and a half arguments that <u>es</u>-insertion is post-cyclic: one, a post-cyclic <u>es</u>-insertion rule does not need an ad hoc and possibly global <u>es</u>-deletion rule, as a cyclic <u>es</u>-insertion rule would; two, <u>es</u>-insertion is not lexically governed; three, the verb-second constraint can motivate a post-cyclic but not a cyclic version of <u>es</u>-insertion; and a half, <u>es</u>-insertion follows a discourse-governed rule.

CHAPTER 2

Footnotes

- 1. It is easy to show that the formation of personal passives is

 cyclic in German, as in English. We know from sentences like i)

 where Equi has applied twice, that Equi must be cyclic.
 - i) Ich verspreche Ihnen zu versuchen, früh zu kommen. I promise you to try early to come. I promise you to try to come early.

Sentence ii), where the subject of a passive has been deleted by Equi, shows that Passive must be allowed to precede Equi.

ii) Ich möchte geküsst werden. I want kissed to be. I want to be kissed.

So Passive must be cyclic. It would be more difficult to show directly that impersonal passives are formed cyclically, since they have no subject or object to undergo a two-story rule on the next higher cycle.

- 2. Evidence against Postal and Perlmutter's claim is also available in French, where ca-extraposition can be shown to be post-cyclic (Pinkham, 1975).
- 3. This means that <u>es</u> is not the subject. The only way <u>es</u> behaves like a subject is that it appears in initial position; it does not govern verb agreement or undergo the cyclic rules which define subject-like behavior. But as Section 1.2 pointed out, initial position is meager evidence indeed of subjecthood in German. To call the inserted <u>es</u> the subject under these circumstances would be to evacuate the notion of subject.
- 4. It is not necessary for this argument that extraposition be cyclic in German, only that it not be constrained to apply after the

post-cyclic es-deletion rule under consideration. However, since Hankamer has just shown that extraposition in English is cyclic and Pinkham (1975), that il-extraposition in French is, it seems likely that extraposition will also turn out to be cyclic in German.

- 5. The way es-insertion interacts with post-cyclic rules allows us to rule out the possibility that it is last-cyclic rather than post-cyclic. Since it is in effect the very last rule, if it is last-cyclic all post-cyclic rules in German must be reclassified as last-cyclic. Substituting a class of last-cyclic rules for that of post-cyclic rules in turn forces us to sacrifice the insight that applications of post-cyclic rules do not have to be interspersed among applications of cyclic rules on the top cycle. There is no reason to think any rules, let alone es-insertion in German, are last-cyclic rather than post-cyclic.
 - 6. A third point can be aimed just at the relational grammar cyclic formulation of es-insertion. According to this formulation, es-insertion is a term-creating rule which inserts es as a subject.

 But the verb-second constraint is not a surface subject constraint; any sort of constituent can staisfy it. So while the constraint can motivate the insertion of a space-filler, it cannot motivate the insertion of a subject.
 - 7. There are also a few expressions which contain an inserted es and a non-contrastive non-heavy definite subject.
 - i) Es klingen die Glocken. It rings the bells. The bells ring.

ii) Es kommt der Bralltigan. | 16. Here was John.
It comes the groom.
Here comes the groom.

These are fossilized expressions; my informants tell me, for instance, that <u>die Glocken</u> in i) can refer only to Christmas bells, though in other contexts it refers to various kinds of bells.

- 8. Jorge Hankamer points out that this situation has a certain parallelism to Heavy NP Shift in English, where both syntactic and semantic weight seem to play a part. Even a fairly short NP can be shifted if it is sufficiently surprising or emphatic: compare i) and ii).
 - i) John embezzled yesterday his own money.
 - ii) *John embezzled yesterday his firm's money.

CHAPTER 3

THE POSTAL-PERMUTTER ACCOUNT OF IMPERSONAL PASSIVES

Section 3.0. Introduction.

Postal and Perlmutter have also given some attention to impersonal passives, (conveyed to me in personal communications, March-August 1974). Their proposal is made in the framework of relational grammar; readers who are not familiar with this theory are referred to Appendix 1. The analysis handles only impersonal passives involving verbs like <u>zuhören</u> (to listen), which require a following dative NP. The claim is that this dative NP is a II, which is promoted to I by ordinary application of passive, and then obligatorily put into chômage by a cyclic <u>es</u>-insertion rule. Section 3.1 spells out the details of the derivation, which is quite intricate. Section 3.2 is about the regards in which the analysis is successful. Section 3.3 is a refutation.

Section 3.1. The Postal-Perlmutter proposal.

The proposed derivation depends on two universal conventions included in the current theory of relational grammar. The first is the Dummy Agreement Law:

1) If the cycle-final term triggering agreement is a dummy, the verb either does not agree at all (i.e. is 3rd person singular), or else agrees with the NP the dummy put into chômage. (Perlmutter, personal communication).

In the case of English there-insertion, the verb agrees with the NP which the dummy (there) replaced:

2) There seem/*seems to be some mice in the basement.

However, after the very similar rule of \underline{il} -insertion has applied in French, the verb is third personal singular:

3) (a) Trois personnes sont arrivées. Three people have arrived(3rd pl fem). (b) Il est arrivé trois personnes.

It has arrived(3rd sing masc) three people

The second convention is the Kinky Case Marking convention.

Kinky Case Marking occurs when a verb idiosyncratically marks its object in some case other than the accusative. Verbs in German which can take a single dative NP, such as helfen (to help), glauben (to believe), and zuhbren (to listen) are taken to be such verbs, marking their objects in the dative. These dative NPs are then subject to the following universal convention:

4) Kinky Case Marking takes precedence over the general case marking rule (which marks subjects nominative, objects accusative, and indirect objects dative) unless the NP ends up with a higher rank.

Thus the so-called objects of <u>helfen</u>, <u>glauben</u>, and <u>zuhören</u> will appear on the surface in the dative unless their rank has somehow increased -- that is, unless they become surface subjects or land in a higher clause.

An example from French due to Gilles Fauconnier will make it clearer how these conventions are supposed to work. In French the verb obeir (to obey) takes an NP in the dative:

5) On a obéi au capitaine.
Pro obeyed the captain(dat).

This dative NP can, for most speakers, undergo passive:

6) Le capitaine a été obéi. The captain was obeyed.

If the output of passive is not tampered with further, the general case marking rule marks <u>le capitaine</u> nominative, since it has a higher rank than it did as object. However, Fauconnier claims that <u>il</u>-insertion can apply to (6), in which case the output is (7):

7) Il est obei au capitaine. It is obeyed the captain(dat). Le capitaine is now in the dative: it has been put into chômage by il-insertion (which Postal and Perlmutter presume, without proof, to be a cyclic replacement), so it is not higher in rank than it was as object of obéir and Kinky Case Marking applies.

I have been unable to find a Frenchman who corroborates Fauconnier's judgment of (7); indeed all of my informants found the sentence unintelligible. I am inclined to believe it is simply not a fact of French.

However, this still leaves open the possibility of a parallel derivation for German impersonal passives involving oblique-transitive verbs. The derivation offered for (8) is as follows:

8) Ihm wurde geholfen. Him(dat) was helped.

In the deep structure, (9), ihm is taken to be a dative direct object:

9) Man half ihm. Pro helped him(dat).

Hence, it should be able to undergo passive, becoming subject in (10):

- 10) *Er wurde geholfen.
 He(nom) was helped.
- (10) is ungrammatical. Postal and Perlmutter explain this by positing a constraint for German (but not for French) which requires that an NP marked by Kinky Case Marking never end up in a position where it would lose its Kinky Case Marking -- that is, that it never end up with a higher rank than it started with. The only available way to lower the rank of the subject in (10) is es-insertion. Hence at the next step in the derivation, es is obligatorily inserted, giving (11).
 - 11) Es wurde ihm geholfen.
 It was him(dat) helped.

If ihm is fronted, as in (8), the es is deleted by the post-cyclic

<u>es</u>-deletion rule which (as was pointed out in Chapter 2) is a necessary concomitant of a cyclic <u>es</u>-insertion rule.

Section 3.2. What the proposal explains.

This analysis is successful in three regards. It relates impersonal passives with oblique-transitive verbs like helfen, glauben, and zuhören to personal passives in a very direct way. Furthermore, it explains why impersonal passives with such verbs do not participate in Equi constructions (cf. Section 1.3.3). By the time the cycle on which Equi would apply is reached, the Kinky Case Marked NP is no longer a subject. It cannot be subject-to-subject raised (Section 1.3.4) for the same reason.

Section 3.3. Five counterarguments.

But it is clear that the Postal-Perlmutter analysis of impersonal passives is wrong. First, it runs afoul of the evidence presented in Chapter 1 and Chapter 2 that the dative NPs following verbs like helfen and zuhören are not underlying objects and that es-insertion is post-cyclic. Even if the assumptions on which it is based were correct, however, the analysis itself would not stand up. I will give five counterarguments.

3.3.1. Because the analysis relies on promoting an actual NP object, it cannot be extended to cover impersonal passives involving intransitive verbs. Thus it claims that impersonal passives with intransitive verbs and impersonal passives with oblique-transitive verbs are totally unrelated constructions. This leaves no way of explaining their obvious similarities: passive morphology, von-phrase agents, lack of a surface subject.

with alle in some other case? Uthrest post

a science constraint that

- 3.3.2. Quantifier float is a cyclic rule which would apply on the same cycle as passive. If the Postal-Perlmutter analysis is correct, we should be able to float a quantifier off the subject as in intermediate structure (12), and then insert es giving (13), the source of the ungrammatical sentence (14).
 - 12) (*)Sie wurden alle geholfen. They were all(nom) helped.
 - 13) (*)Es wurde ihnen alle geholfen. It was them(dat) all(nom) helped.
 - 14) *Ihnen wurde alle geholfen.
 They(dat) was all(nom) helped.

The constraint on Kinky Case Marked NPs does not help us here since derived alle, the chômeur of an ascension rule, according to Postal and Perlmutter, is a nonterm (see Appendix 1) just as it was when it started as a modifier of ihnen.

- 3.3.3. In <u>es</u>-insertion sentences the verb agrees with the NP which used to be the subject (and which in my view, but not Postal and Perlmutter's, still is):
 - 15) Es werden /*wird hier Schuhe repariert.
 It are/*is here shoes repaired.
 Shoes are repaired here.
 - 16) Es sind /*ist flinf Generale gestorben. It is/*are five generals died. Five generals have died.

The Postal and Perlmutter account of this fact would be that German esinsertion sentences take the second option available under the Dummy

Agreement Law (1) above): the verb agrees with the NP the dummy es

put into chômage. If in (17) ihnen used to be a subject and es-insertion put

it into chômage, we should get plural verb agreement. But we don't:

17) Es wird/*werden ihnen geholfen.
It is/*are they(dat) helped.
They are helped.

Since the verb agreement is singular, we conclude <u>ihnen</u> never was the subject.

- 3.3.4. Recall from Section 2.4 that sentences with pronominal subjects do not have es-insertion variants:
 - 18a) *Es kam er.
 It came he.
 He came.
 - b) *Es ist er betrunken.
 It is he drunk.
 He is drunk.

Under Postal and Perlmutter's assumption that <u>es</u> is inserted cyclicly to replace the subject, (18) would have to be explained by saying that <u>es</u> cannot replace a pronominal subject. Hence we would predict that <u>es</u>-insertion would fail to apply in sentences like (10), where a former pronominal "oblique object" has supposedly been promoted to subject. This means that sentences (11) and (8), impersonal passives with a pronominal oblique NP, should be ungrammatical. Since (10) is also ungrammatical, underlying structures like (9) with a pronominal "oblique object" should have no grammatical passive.

Of course this is incorrect; impersonal passives with pronominal dative NPs occur just as freely as impersonal passives with nonpronominal dative NPs. The only way to fix up the proposal so that it does not make this incorrect prediction is to allow the constraint on Kinky Case Marked NPs to override the structural description for <u>es</u>-insertion. This amounts to evacuating the claim that the interaction of passive <u>es</u>-insertion, and Kinky Case Marking explains impersonal passives in German.

3.3.5. The proposed analysis for German impersonal passives is supposed to extend to all languages where impersonal passives occur.

Now Turkish has no overt expletive pronoun: to make the derivation go through, it would be necessary to posit a morphologically null expletive pronoun. There is no a priori reason to rule this move out. However, the existence of such a pronoun should be reflected in agreement facts or evidence of NPs put into chômage by a replacement. I have been unable to find such evidence for Turkish. To posit a null expletive pronoun in the absence of such evidence amounts to an evacuation of the claim that insertion of an expletive pronoun is a crucial step in the derivation of impersonal passives.

Section 3.4. Conclusion.

The Postal-Perlmutter proposal that German impersonal passives are derived by promoting an oblique object to subject and then demoting it via es-insertion has run into five difficulties. It fails to relate impersonal passives with intransitive verbs to impersonal passives with oblique-transitive verbs; it predicts incorrectly that impersonal passives should be able to contain a nominative floated quantifier, that the dative NPs in them should be able to control verb agreement, and that they should be ungrammatical with a pronominal dative NP; it requires us to posit an expletive pronoun in Turkish for which there is no evidence.

The proposal advanced in Chapter 1 that es-insertion is postcyclic and impersonal passives are derived by promoting null objects runs into none of these difficulties. Impersonal passives with intransitive verbs are related to other impersonal passives and to personal passives. The quantifier float and verb agreement facts are predicted by the claim that the dative NPs in impersonal passives are at no point subjects.

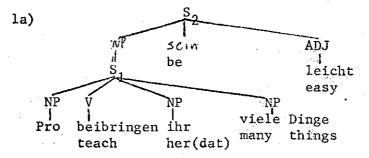
The existence of impersonal passives with pronominal oblique NPs likewise presents no problem. Lastly, we are not forced into positing an expletive pronoun in Turkish for which there is no evidence. In short, the evidence presented in this chapter supports the proposal of Chapter 1, which I conclude is correct.

CHAPTER 4

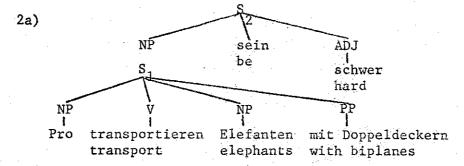
OBJECT RAISING IN GERMAN

Section 4.0. Introduction.

German has two constructions which involve object raising. In the first, the object is raised and the clause remnant is extraposed:



b) Viele Dinge sind leicht ihr beizubringen.
Many things are easy her(dat) to teach.
Many things are easy to teach to her.



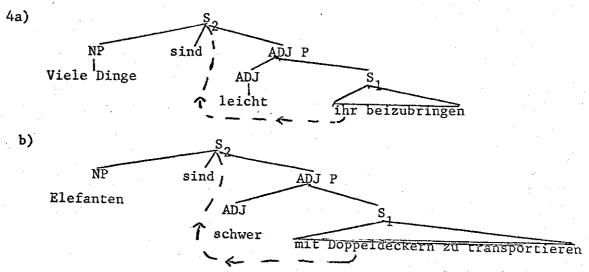
b) Elefanten sind schwer mit Doppeldeckern zu transportieren. Elephants are hard with biplanes to transport. Elephants are hard to transport with biplanes.

In the second construction, an indirect object, prepositional phrase or adverb from the lower clause ends up to the left rather than the right of the matrix adjective. 3a) and 3b) are synonymous with 1b) and 2b), respectively. 1

- 3a) Viele Dinge sind ihr leicht beizubringen. Many things are her(dat) easy to teach.
- b) Elefanten sind mit Doppeldeckern schwer zu transportieren. Elephants are with biplanes hard to transport.

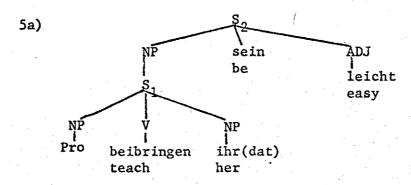
This word order is truly surprising. When object-raising applies to la) and 2a), the outputs are structures 4), with <u>ihr</u> and <u>mit Doppeldeckern</u> in a clause fragment attached to the right of the matrix adjective (evidence that it is not a daughter of S_2 is given in Section 4.3). Something must have happened to move these two constituents to the left of the matrix adjective; also, as the dotted lines indicate, the only position for them to attach left of the adjective is in the matrix clause.

?

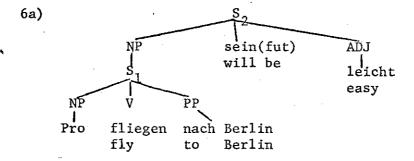


The process which moves constituents like <u>ihr</u> and <u>mit Doppeldeckern</u> into the top clause will be referred to as floating: its status and operation will be discussed in more detail in the following pages. An object raising construction in which floating has occurred will be called a clause-union object raising construction.

Like passives, clause-union object raising constructions have an impersonal counterpart. This third construction is exemplified by 5) and 6).



b) Ihr ist leicht beizubringen.
Her(dat) is easy to teach.
She is easy to teach.



b) Nach Berlin wird leicht zu fliegen sein. To Berlin will easy to fly be. It will be easy to fly to Berlin.

construction are clear: object raising matrix adjective, extraposed verb, floating of downstairs indirect object or PP into the top clause.

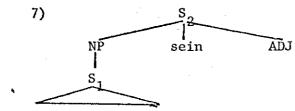
However, like impersonal passives, 5) and 6) have no obvious underlying object or derived subject; also like impersonal passives, sentences like

5) and 6) always display third person singular verb agreement.

We now have three constructions to cope with: a personal object raising construction, a personal clause-union object raising construction, and an impersonal clause-union construction which seems to be related to the personal clause-union construction. The first and second will be lumped together as "the personal constructions", and the second and third, as "the clause union constructions". Anticipating the conclusion, all three will be called "object raising constructions."

As in the case of passives, the problem is how to relate the impersonal construction to its personal counterpart. The question is complicated by the fact that the clause-union object raising and the plain object raising construction also seem to be related. Section 4.1 concerns the parallelism in underlying structure of three constructions. It argues

that all three start out with the form:



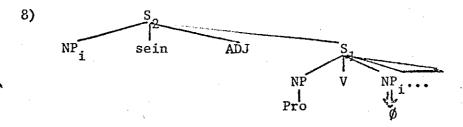
The first and second constructions involve raising the object of S_1 ; the second and third involve floating up other constituents of S_1 . Section 4.2 shows that the constituents which show up in the top clause in the impersonal construction have the same status as the constituents which floated up in the clause-union personal constructions; that is, they aren't derived subjects and weren't in deep structure NPs eligible to undergo object raising. Section 4.3 presents arguments that the impersonal construction is nonetheless the same construction as the personal clause-union construction; that is, it has all the syntactic idiosyncracies of an object raising construction in which floating has taken place.

Section 4.4 argues for the proposal that the clause-union version of object raising must be allowed to apply even when one term of its structural description -- the object which is to be raised to subject -- is missing. As in the case of passives, the absence of an object in the input to the rule results in a subjectless output. Section 4.5 deals with the applicability of es-insertion in object raising constructions and with some further consequences of the convention being proposed.

Section 4.1. Underlying structures and evidence for object raising.

This section does two things. It shows that the two personal constructions are derived by a rule of object raising from an underlying structure like 7) rather than being base-generated or derived by

object-deletion from a structure like 8)²



Along the way, it shows that the impersonal construction shares an underlying structure of form 7) with the personal constructions; thus the impersonal construction is also neither base-generated nor derived from a structure involving a sentential object, like 8) minus the NP_i's. The process of floating is assumed in this section to account for the derived structure of the personal and impersonal clause-union constructions under either the object raising or object deletion analysis. This process will not become an issue until Section 4.2.

- 4.1.1. The first area of difficulty which our two alternative hypotheses encounter is the existence of extraposition paraphrases for object raising constructions. 1)-6) have paraphrases 9); all other object raising constructions follow the same pattern.
 - 9a) Es ist leicht, ihr viele Dinge beizubringen. It is easy her(dat) many things to teach.
 - b) Es ist schwer, Elefanten mit Doppeldeckern zu transportieren. It is hard elephants with biplanes to transport.
 - c) Es ist leicht ihr beizubringen. It is easy her(dat) to teach.
 - d) Es wird leicht sein, nach Berlin zu fliegen. It will easy be to Berlin to fly.

Under either the base-generation or object-deletion analyses, <u>leicht</u> and <u>schwer</u> will need two distinct subcategorizations, something like:

| 1 | 0 | i |) | S sein | |
|---|---|---|---|--------|--|
| | | | | | |

ii)
$$\begin{cases} NP \\ PP \end{cases} sein \begin{cases} (NP)* (PP)* \\ \underline{\hspace{1cm}} (NP)* (PP)* (ADV) zu \end{cases}$$
 (for base-generation)

or

(NP) sein _____S (for object deletion)

The regular synonymy relationships between object raising and extraposition structures turn out to be purely coincidental.

- 4.1.2. Second, consider more closely the second subcategorization needed for base-generating object raising constructions. What is to the right of <u>leicht</u> or <u>schwer</u> always constitutes a clause minus the constituents which appear to the left. An analysis under which the constituents to the left have been moved out of the clause containing the verb to the right explains this fact perfectly; the base-generation hypothesis utterly fails to account for it.
- 4.1.3. Third, the subjects of the two personal constructions enter into selectional restrictions with the infinitive verb rather than with leicht and schwer
 - 11a) Das Kissen ist schwer { ?zu verfolgen } zu werfen }

 The pillow is hard { to follow } to throw }
 - b) Dieser Beweis ist leicht { ?zu werfen zu vergessen }

 This proof is easy { to throw. } to forget. }
 - 12a) Das Kissen ist leicht, aber es ist schwer zu werfen. The pillow is light but it is hard to throw.
 - b) ?Das Kissen ist leicht, aber/es ist schwer. The pillow is light but it is hard.
 - 13a) Dieser Beweis ist schwer, also er ist leicht zu vergessen. This proof is hard also it is easy to forget.
 - b) ?Dieser Beweis ist schwer, also er ist leicht. This proof is hard also it is easy.

(Examples like 12)-13) were first noted in English by Arlene Berman 1974a.)
When there is no infinitive, <u>leicht</u> and <u>schwer</u> do place selectional restrictions on their subjects:

- 14a) ?Sieben ist leicht.
 Seven is easy.
 - b) Sieben ist leicht zu teilen. Seven is easy to factor.
- 15a) ?Vorurteile sind schwer. Prejudices are hard.
 - b) Vorurteile sind schwer auszuräumen. Prejudices are hard to eradicate.

Under the object raising analysis of 11)-13) we expect these facts.

Under the base-generation hypothesis, two things remain unexplained:

why <u>leicht</u> and <u>schwer</u> place selectional restrictions on their subjects

just when there is no infinitive, and why the restrictions on the subject

of <u>leicht</u> and <u>schwer</u> when there is an infinitive are the same as between

the infinitive and its object in other constructions. The object-deletion

analysis explains why there are restrictions imposed by the lower verb,

but fails to explain why the matrix adjective imposes no restrictions

just when an embedded clause is present.

- 4.1.4. Fourth, we find that many idioms can appear in object raising constructions:
 - 16a) Es war leicht, den roten Hahn aufs Dach zu setzen.
 It was easy the red cock on the roof to put.
 It was easy to commit arson.
 - b) Der rote Hahn war leicht aufs Dach zu setzen.
 The red cock was easy on the roof to put.
 Arson was easy to commit.
 - 17a) Es war nicht leicht, den Karren aus dem Dreck zu ziehen.

 It was not easy the cart out of the mire to pull.

 It wasn't easy to do the dirty work.
 - b); Der Karren war nicht leicht aus dem Dreck zu ziehen. The cart was not easy out of the mire to pull.

- 18a) Es war schwer, die Kastanien aus dem Feuer zu holen.
 It was hard the chestnuts out of the fire to pull.
 It was hard to pull the chestnuts out of the fire.
 - b) Die Kastanien waren schwer aus dem Feuer zu holen. The chestnuts were hard out of the fire to pull.

Under the object-raising analysis, the verb and its non-referential object can be introduced as a chunk into underlying structure. The fact that the idiomatic reading is retained in the b) sentences falls out automatically. Under the base-generation hypothesis, the distribution of the non-referential subjects will have to be stated separately from that of the non-referential objects. This is clearly a loss of generalization.

These sentences are also a problem for the object-deletion analysis. Even if some way is found to get a figurative subject upstairs just when it matches a figurative object in an idiom chunk downstairs, it will be impossible to carry out the deletion; the figurative NPs are non-referential and therefore noncoreferential.

- 4.1.5. Fifth, under the object deletion analysis, object deletion would have to be super-obligatory. We not only get ungrammatical sentences through failure to delete the coreferent object:
 - 19) *Erich war leicht ihn zu finden. Erich was easy him to find.

we also get ungrammatical sentences if a coreferent upstairs subject and downstairs object are not present at the point the rule would apply:

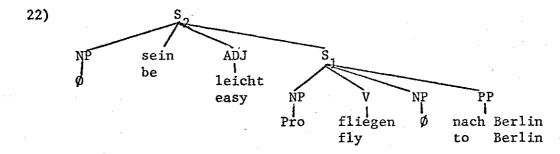
- 20a) *Erich war schwer, Inge zu finden. Erich was hard Inge to find.
 - b) *Erich war Inge schwer zu finden.
 Erich was Inge(acc) hard to find.

This requirement is a gratuitous complication of the grammar when an alternative analysis which does not involve a super-obligatory rule is available. Furthermore, making object-deletion super-obligatory

prevents us from generating impersonal sentences like 21).

21) Nach Berlin ist leicht zu fliegen.
To Berlin is easy to fly.
It is easy to fly to Berlin.

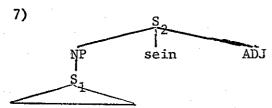
Under the analysis currently under attack, 20) would have underlying struture 22)



Since the S_2 subject and S_1 object, represented by \emptyset , are missing, the structural description for object deletion would never be met and the sentence would be scrapped.

Section 4.2. Evidence that the impersonal constructions lack underlying objects and derived subjects.

Section 4.1 established that the underlying structure for objectraising constructions is:



It is clear from examples like 1-4) that the personal constructions involve raising the object in S_1 to subject of S_2 . This section will demonstrate that in the impersonal construction, no NP in S_1 is raised to subject of S_2 and furthermore that no NP was eligible to be raised to subject. The conclusion is that the NPs which show up in the top clause in the impersonal construction have the same status as the non-objects which float up in the personal clause-union construction.

- 4.2.1. The arguments available that impersonal object-raising constructions lack a subject run very parallel to those that impersonal passives lack a subject. First, as noted in Section 4.0, the verb is always third person singular; no constituent in the impersonal construction has acquired the subject property of controlling verb agreement. Second, given the freedom of word order in German, initial position cannot be taken as a criterion of subjecthood. The difference between 23) and 24) is entirely due to discourse conditions.
 - 23) Ihm wird dafür schwer zu danken sein.
 Him(dat) will for that hard to thank be.
 He will be hard to thank for that.
 - 24) Dafur wird ihm schwer zu danken sein. For that will him(dat) hard to thank be.

Third, we find sentences where the two candidates for subject are of such equal status that to pick either out as subject would be to evacuate the notion of subject. An example is:

25) Für Schuhe ist mit einem Karte Blanche schwer zu bezahlen. For shoes is with a Carte Blanche hard to pay. It's hard to pay for shoeswith a Carte Blanche.

As in the impersonal passives, the best candidates for subject are the NPs which can be "picked out", the so-called oblique objects. But we can show that these do not behave like subjects either. The strongest arguments are that they do not govern verb agreement and do not undergo Equi. Compare:

- 26a) Er behauptete, schwer zu erkennen zu sein.
 He claimed hard to recognize to be.
 He claimed to be hard to recognize.
 - b) *Ich weiss, du versuchst schwer zu helfen zu sein.
 I know you are trying hard to help to be.

Another piece of evidence is that they fail to float quantifiers:

27a) ?Ihnen ist allen leicht zu helfen. Them(dat) is all easy to help. b) ?Den Arzten war allen schwer zu glauben.
The doctors(dat) was all(dat) hard to believe.
The doctors were all hard to believe.

In this regard they behave more like indirect objects than like subjects.

4.2.2. Given that the connection between the object raising which takes place in the two personal constructions and the constituent floating which occurs in the clause union constructions is at present unclear, one might imagine that the impersonal construction results from floating a constituent which could have been raised. There is ample evidence against such a conjecture.

Section 4.2.1 has already shown that datives and objects of prepositions can't raise to subject position retaining their case ending or preposition. It is also true that they can't raise to become nominative subjects:

- 28) *Orvieto war schwer in zu fahren.
 Orvieto was hard in to drive.
 Orvieto was hard to drive in.
- 29) *Sie ist leicht viele Dinge beizubringen.
 She is easy many things to teach.
 She is easy to teach many things to.
- 30a) Ich habe ihm geholfen.
 I have him(dat) helped.
 - b) *Er war schwer zu helfen. He was hard to help.

This is not surprising: in general prepositions cannot be stranded in German and oblique case endings cannot be erased.

Hence only objects -- the accusative NPs which could undergo passive -- can be raised. The case against the conjecture just stated seems to be clinched by the fact that when such an NP is available to be raised, it cannot be floated: that is, it must be raised unless the whole sentential subject is to be extraposed.

31) *Ihn ist schwer zu finden.
Him(acc) is hard to find.

Furthermore other constituents cannot be floated up without raising an available object to subject:

- '32a) *Ihr ist {immer leicht Geschenke zu kaufen.}

 Geschenke immer leicht zu kaufen.}

 Her(dat) is {always easy presents to buy.}

 presents always easy to buy.

 It is always easy to buy presents for her.
 - b) *Inge wird { leicht einige GemUse zu Übergeben sein. }
 einige GemUse leicht zu Übergeben sein. }
 Inge(dat) will(sing) { easy some vegetables to deliver be. }
 some vegetables easy to deliver be. }

This means that if <u>ihm</u> in 24) had been eligible to be raised to subject, it should have been impossible to float <u>dafUr</u> without first raising <u>ihm</u>. The fact that <u>dafUr</u> is in the top clause without <u>ihm</u> having been object-

Inge will be easy to deliver some vegetables to.

raised is evidence that ihm was not even eligible to be object-raised.

Section 4.3. Idiosyncracies which object-raising constructions share.

So far I have established that impersonal object-raising constructions have the same underlying structure as the personal constructions, except for lacking an NP which can be raised to subject. This section will show that the impersonal construction shares certain idiosyncracies of the personal construction. The cumulative force of these shared idiosyncracies is that the impersonal construction is, in fact, the same construction as the personal clause-union structure.

4.3.1. The impersonal and personal constructions are governed by exactly the same predicate adjectives. There are quite a few adjectives in German which can take an infinitival sentential subject. Leicht and

schwer are amply instantiated in the pages above; here are some others:

- 33) Es ist nett, Blumen zu finden.
 It is nice flowers to find.
 It is nice to find flowers.
- 34) Es ist unmöglich, Champignons zu finden. It-is impossible mushrooms to find.
 - 35) Es ist wichtig, ihn zu erreichen. It is important him to reach.
 - 36) Es ist immer angenehm, Ruhe zu haben. It is always pleasant peace to have.
 - 37) Es ist notwendig, Butch Cassidy gefangen zu nehmen. It is necessary Butch Cassidy to capture.

However, object-to-subject raising is possible only with <u>leicht</u> and <u>schwer</u>. The object-raised versions of 33)-37) are all ungrammatical.

- 38) *Blumen sind nett zu finden.
 Flowers are nice to find.
- 39) *Champignons sind unmöglich zu finden.
 Mushrooms are impossible to find.
- 40) *Er ist wichtig zu erreichen.

 He is important to reach.
- 41) *Ruhe ist immer angenehm zu haben.

 Peace is always pleasant to have.
- 42) *Butch Cassidy ist notwendig gefangen zu nehmen.
 Butch Cassidy is necessary to capture.

Similar examples in which the clause union version of object-raising must have applied are also available:

- 43) *Die Frage ist ihm { notwendig } zu beantworten. { wichtig }

 The question is him(dat) { necessary } to answer. { important }

 It is necessary/important to give him an answer to the question.
- 44) *Seine Geschichten sind ihm unmöglich qu glauben.

 His stories are him(dat) impossible to believe.

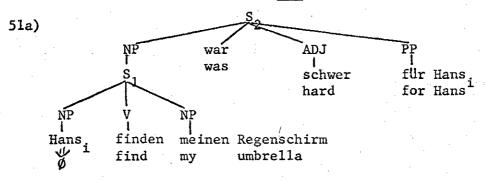
 It's impossible to believe him when he tells his stories.
- 45) *Geschichten sind ihm angenehm zu erzählen.
 Stories are him(dat) pleasant to tell.
 Stories are pleasant to tell to him.

Similarly, though we have many examples of the impersonal construction with <u>leicht</u> and <u>schwer</u>, we find none with these other extraposition adjectives:

- 46) *Nach Berlin ist nett zu fliegen.
 To Berlin is nice to fly.
 - 47) *Ihm war unmöglich zu antworten.
 Him(dat) was impossible to answer.
 He was impossible to answer.
 - 48) *Thm ist wichtig zu antworten.
 Him(cat) is important to answer.
 - 49) *Ihr ist immer angenehm zu zuhören.
 Her(dat) is always pleasant to listen.
 She is always pleasant to listen to.
 - 50) *Herrn Meyer ist notwendig zu trauen.
 Mr. Meyer(dat) is necessary to trust.
 It is necessary to trust Mr. Meyer.

All three object-raising constructions also occur without any overt matrix adjective; either <u>sein</u> is an object-raising predicate in German, or German has a morphologically null raising adjective. See Appendix 4 for a discussion of such cases.

4.3.2. In sentences with an extraposed infinitival subject, it is possible to have in the top clause a controller for Equi into the bottom clause. (Berman 1974a and b proposes this for English.) The controller is either a dative NP, or an NP in a filr phrase, depending on the speaker.



b) Es war schwer für Hans, meinen Regenschirm zu finden. It was hard for Hans my umbrella to find.

Further examples include:

- 52) Es war mir schwer, den Koffer zu tragen.
 It was me(dat) hard the suitcase to carry.
 It was hard for me to carry the suitcase.
- 53) Es war schwer für sie, Erich zu verfolgen. It was hard for her Erich to follow.

The presence of an overt controller for Equi prevents object-raising:

- 54a) *Mein Regenschirm war für Hans schwer zu finden.

 My umbrella was for Hans hard to find.

 My umbrella was hard for Hans to find.
 - b) Mein Regenschirm war schwer zu finden. My umbrella was hard to find.
- 55a) *Der Koffer war mir schwer zu tragen.
 The suitcase was me(dat) hard to carry.
 - b) Der Koffer war schwer zu tragen. The suitcase was hard to carry.
- 56a) *Erich war für sie schwer zu verfolgen. Erich was for her hard to follow.
 - b) Erich war schwer zu verfolgen. Erich was hard to follow.

The presence of upstairs constituents does not in general prevent raising:

- 57) Wegen des Regens ist der Weg schwer zu sehen.

 Because of the rain is the road hard to see.

 Because of the rain, the road is hard to see.
- 58) Laut Inge war Erich schwer zu erreichen.
 According to Inge was Erich hard to reach.
 According to Inge, Erich was hard to reach.

The same constraint applies in which the clause-union version of objectraising has clearly taken place:

- 59a) Es war schwer für mich, ihn im Deutschen zu unterrichten.

 It was hard for me him in German to instruct.

 It was hard for me to instruct him in German.
 - b) *Er war im Deutschen schwer für mich zu unterrichten.
 He was in German hard for me to instruct.
 - c) Er war im Deutschen schwer zu unterrichten. He was in German hard to instruct.

. Lö

The presence of a controller for Equi blocks the formation of the impersonal construction as well:

- 60a) *Ihr war für Hans schwer zu helfen.

 Herrn Meyer

 Her(dat) was for Hans

 Mr. Meyer(dat) hard to help.

 She was hard for Hans/Mr. Meyer to help.
 - b) Ihr war schwer zu helfen. Her(dat) was hard to help.
- 61a) *Hier ist für mich schwer zu tanzen.

 mir

 Here is for me hard to dance.

 me(dat)

 It is hard for me to dance here.
 - b) Hier ist schwer zu tanzen. Here is hard to dance.
- 4.3.3. The constituents which make it up into the top clause in the impersonal construction are exactly the same sort which can float up in the personal construction. Datives, prepositional phrases, and locatives can float up:
 - 62a) Es ist leicht, ihr viele Dinge beizubringen.
 It is easy her(dat) many things(acc) to teach.
 It is easy to teach many things to her.
 - b) Viele Dinge sind ihr leicht beizubringen.
 Many things are her easy to teach.
 - 63a) Es wird leicht sein, Inge ein Kleid zu nähen. It will easy be Inge(dat) a dress to sew. It will be easy to sew a dress for Inge.
 - b) Ein Kleid wird Inge leicht zu n\(\text{lhen sein.} \)
 Λ dress will Inge(dat) easy to sew be.
 - 64a) Es ist schwer, Elefanten mit Doppeldeckern zu transportieren. It is hard, elephants with biplanes to transport. It is hard to transport elephants with biplanes.
 - b) Elefanten sind mit Doppeldeckern schwer zu transportieren. Elephants are with biplanes hard to transport.
 - 65a) Es ist schwer, hier die Polka zu tanzen. It is hard, here the polka to dance. It is hard to dance the polka here.

b) Die Polka ist hier schwer zu tanzen. The polka is here hard to dance.

Examples with the impersonal construction are:

- 66a) Es ist schwer, Kindern beizubringen.
 It is hard children(dat) to teach.
 - b) Kindern ist schwer beizubringen. Children(dat) is hard to teach.
- 67a) Es ist schwer, ihm zuzuhören. It is hard him(dat) to listen.
 - b) Ihm ist schwer zuzuhören. Him(dat) is hard to listen.
- 68a) Es war schwer, in Orvieto zu fahren. It was hard in Orvieto to drive.
 - b) In Orvieto war schwer zu fahren. In Orvieto was hard to drive.
- 61b) Hier ist schwer zu tanzen. Here is hard to dance.

Manner adverbs, which are known in general to be more closely bound to their verbs than other constituents are, do not float up:

- 69a) Chinin ist schwer freiwillig zu schlucken. Quinine is hard voluntarily to swallow.
 - b) *Chinin ist freiwillig schwer zu schlucken. Quinine is voluntarily hard to swallow.
 - c) *Freiwillig ist schwer zu niesen. Voluntarily is hard to sneeze. It is hard to sneeze voluntarily.
- 70a) Zungenbrechern sind schwer schnell auszusprechen.
 Tonguetwisters are hard fast to pronounce.
 Tonguetwisters are hard to pronounce fast.
 - b) *Zungenbrechern sind schnell schwer auszusprechen.
 Tonguetwisters are fast hard to pronounce.
 - c) Schnell ist schwer zu übersetzen.
 Fast is hard to translate.
 It is hard to translate fast.

hypo

Prepositional phrases which form parts of idiom chunks also seem to be in general, too closely bound to the verb to float:

.18

- 71) Der rote Hahn war {leicht aufs Dach} zu setzen.

 **aufs Dach leicht}

 The red cock was {easy on the roof} to put.

 Arson was easy to commit.
- 72) Die Kastanien waren schwer aus dem Feuer zu holen.

 *aus dem Feuer schwer

 The chestnuts were schwer out of the fire to pull.

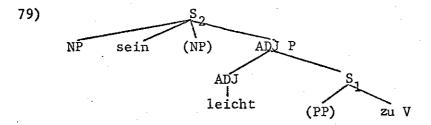
 The chestnuts were hard to pull out of the fire.
 - 73) *Mit eisernem Besen ist schwer auszukehren.
 With iron broom is hard to sweep.
 It's hard to sweep with an iron broom.
 It's hard to make a clean sweep of things.
 - 74) *In die Bresche war schwer zu springen.
 Into the breach was hard to spring.
 It was hard to spring into the breach.

Extraposition paraphrases parallel to 62)-68a) are of course also available for 69)-74).

- 4.3.4. The fourth piece of evidence that the personal and impersonal constructions are really the same construction is that they share characteristics of derived structure which contrast with those of extraposition sentences. First, we find that in the three object-raising constructions leicht/schwer plus whatever was extraposed can be fronted as a constituent under contrast:
 - 75a) Inge ist immer leicht zu erreichen. Inge is always easy to reach.
 - b) Leicht zu erreichen ist Inge immer. Easy to reach is Inge always.
 - 76a) Deutsch war ihr nicht leicht zu lehren.
 German was her(dat) not easy to teach.
 German was not easy to teach to her.
 - b) Leicht zu lehren war ihr Deutsch nicht. Easy to teach was her(dat) German not.
 - 77a) Ihr war nicht leicht zu glauben. Her(dat) was not easy to believe.
 - b) Leicht zu glauben war ihr nicht. Easy to believe was her(dat) not.

- 78a) Das Tier war nicht leicht in das Zimmer zu bringen.
 The beast was not easy into the room to convey.
 The beast was not easy to convey into the room.
 - b) Leicht in das Zimmer zu bringen war das Tier nicht. Easy into the room to bring was the beast not.

This suggests that the derived structure of object-raising constructions contains an adjective phrase; 75)-78a) have the structure:



Extraposition does not create a derived adjective phrase. 80) is ambiguous between an extraposition reading and a raising reading where es is some dance; 81) has just the raising reading.

- 80) Es ist nicht leicht zu tanzen. It is not easy to dance.
- 81) Leicht zu tanzen ist es nicht. ν Easy to dance is it not.
- 82), which has no raising reading, is ungrammatical:
 - 82) *Schwer autozufahren ist es nicht.
 Hard to car-drive is it not.

The second contrast involves what happens to the second part of the verb in compound tenses. Ordinarily, the untensed part goes to the end of the clause:

- 83a) Ich verstehe Sie nicht.
 I understand you not.
 - b) Ich habe Sie nicht verstanden.
 I have you not understood.

In extraposition sentences, there seems to be some ambiguity about what counts as the end of the clause: the second part of the verb can go either before or after the extraposed infinitive:

. 20

- 84a) Es wird leicht sein zu schlafen. It will easy be to sleep.
 - b) Es wird leicht zu schlafen sein. It will easy to sleep be.

84a) appears to be preferred to b). In both personal and impersonal object-raising sentences, on the other hand, there is no such ambiguity.

The second part of the verb must go all the way to the end of the sentence:

- 85a) *Er wird leicht sein zu erreichen. He will easy be to reach.
 - b) Er wird leicht zu erreichen sein. He will easy to reach be.
- 86a) *Thm wird schwer sein zu helfen.
 Him(dat) will hard be to help.
 - b) Ihm wird schwer zu helfen sein. Him will hard to help be.
- 87a) *Nach Berlin wird schwer sein zu fliegen.
 To Berlin will hard be to fly.
 - b) Nach Berlin wird schwer zu fliegen sein. To Berlin will hard to fly be.
- 88a) *Er wird schwer sein im letzten Moment au erreichen.

 He will hard be at the last moment to reach.
 - b) Er wird schwer im letzten Moment zu erreichen sein. He will hard at the last moment to reach be.

This fact of course follows from the hypothesis that <u>leicht/schwer zu v</u> is a derived adjective phrase.

Section 4.4. Object-raising as a rule which nothing undergoes.

In this section, I will argue that the way to account for the facts of Section 4.3 is to derive the impersonal constructions via the clause-union version of object-raising. Given the conclusions of Section 4.2, this means that a rule applies in the derivation of these constructions whose structural description is not fully met; the object, which would ordinarily be raised to subject, is missing. Except for failing to make

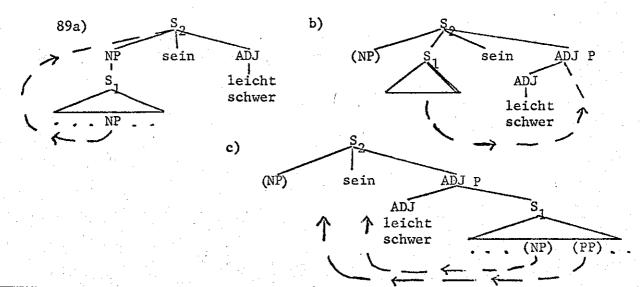
a new subject, the rule applies as usual; it floats up non-objects not closely bound to the verb, it puts the verb into a derived adjective phrase and it can be blocked by the presence of an upstairs controller for Equi.

The most promising alternative to this proposal is to view the clause-union personal construction as the product of two rules: the object-raising rule and the rule responsible for deriving the impersonal construction from its underlying structure. This proposal were feasible, the derivation of the impersonal construction would not involve raising a non-existent object, but rather applying some rule which also happened to apply optionally to object-raising structures. This rule will be called Floating for the duration of its existence; the proposal as a whole will be shown to involve considerable loss of generalization.

4.4.1. Suppose first that the effects of Floating are exactly the difference between the plain and clause-union personal object-raising constructions. This means that the object-raising rule is responsible for turning the object into the subject, for extraposing the clause remnant, and for the sensitivity to the presence of an Equi controller. Floating takes non-objects out of the clause remnant and moves them into the top clause. But it will be impossible to generate the impersonal sentences without somehow extraposing the sentential subject, since Floating is formulated to apply to constituents of an extraposed infinitival clause or clause remnant. The ordinary extraposition rule won't do, since it inserts an es and gives the wrong derived structure: let us then posit a special extraposition rule which doesn't insert an es, which creates a derived adjective phrase, and which is sensitive to the presence of an Equi controller. But this is just object-raising minus the object:

to make it a new separate rule is an unacceptable redundancy. So if Floating takes constituents out of an extraposed clause remnant, object-raising must still have applied in the derivation of the impersonal construction.

- 4.4.2. Another tack would be to include in the Floating rule everything needed to generate the impersonal constructions: constraint against Equi controller, non-object floating, verb extraposition and attachment. Then object-raising does just that -- raise the object. Obviously this makes it impossible to generate the non-clause-union personal constructions: we have no way to get the clause remnant extraposed and we have failed to include the constraint against the Equi controller. A proliferation of extra rules might allow us to generate the correct sentences mechanically, but we would have posited a very redundant mechanism which failed to capture all the similarities of the two personal object-raising constructions.
- 4.4.3. As a last effort to avoid applying object-raising to a structure which has no object, one might propose dividing responsibility for the phenomena among not two, but three rules: One rule to raise objects; a second rule to extrapose a clause or clause remnant in the absence of an Equi controller and Chomsky-adjoin it to the adjective; a third to float non-objects:



The first two would apply in the plain personal construction, the last two in the impersonal construction, and all three in the clauseunion personal construction. But now bserve that no one of these rules ever applies without one or more of the others also applying. We have here three one-legged rules: They will all need crutches. b) is obligatory if a) has applied; in the plain construction the clause remnant must be extraposed. b) is inapplicable if the structural description for a) was met, but a) did not apply; the clause can't be extraposed without inserting as es if an object was available to be raised. b) is optional if the structural description for a) was not met; if there is no object to raise, one can either take the next step towards an impersonal construction, or extrapose the sentential subject by the usual rule, which inserts an es. c) is optional if a) has applied: we find both plain and clause-union personal constructions. On the other hand, c) is obligatory if b) applied but a) didn't; in the impersonal construction gome constituents of S_1 must float up into S_2 .

This imbroglio of conditions is motivated solely by insistence on spreading the responsibility among three separate rules. In short, it is badly motivated; it leaves us no clue why there are these constraints rather than others. So I return without further ado to the original proposal.

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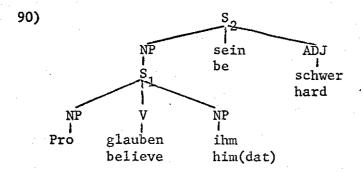
4.4.4. The original proposal accounts for the facts straightforwardly. There is a rule of object-raising, which applies only in the absence of an upstairs controller for Equi and which extraposes what is not raised. Floating of other constituents can be viewed as as optional side-effect

of this rule. If such a drastic side-effect is found distressing, it might alternatively be viewed as a separate rule, as in Section 4.4.1. In the plain personal construction object-raising applied without floating; in the clause-union constructions, both personal and impersonal, object-raising applied with floating. The similarities of the impersonal construction to the personal constructions are a consequence of having the same rule apply in all three. This means that the clause-union version of object-raising applies even when one term of its structural description is absent.

Section 4.5. A problem.

If the convention on rule application stated in the introduction is really as broad as stated, it should also be possible to apply object-raising without the clause-union side-effect when there is no object in the embedded sentence. The failure of this prediction is the topic of this section.

The result of applying object-raising without floating to 90) would be 91).



- 91) *Ist schwer ihm zu glauben.
 Is hard him to believe.
- 91) is ungrammatical. However, there is an independent reason for its ungrammaticality; it fails to satisfy the verb-second constraint. One might therefore propose salvaging it by inserting an expletive es, as

the impersonal passives lacking constituents to front were salvaged.

92) is in fact grammatical, but 93a-b) show that the <u>es</u> here is the extraposition <u>es</u>, which can occur noninitially, rather than the inserted es, which cannot:

- 92) Es ist schwer ihm zu glauben. It is hard him to believe.
- 93a) Ist es schwer ihm zu glauben?
 Is it hard him to believe?
 - b) *Ist schwer ihm zu glauben?
 Is hard him to believe?

It turns out that it is difficult in general to insert es into impersonal object-raising structures:

- 94) ?Es ist für unserem König schwer zu kämpfen.
 It is for our king hard to fight.
 It is hard to fight for our king.
- 95) ?Es war dem Spion schwer zu folgen.
 It was the spy(dat) hard to follow.
 It was hard to follow the spy.
- 94) is all right on the readings where the <u>es</u> is the result of extraposition and the upstairs NP is a controller of Equi: "It is hard for
 our king to fight." Such a reading is not available for 95) since <u>folgen</u>
 is not very good with an unspecified indirect object. This difficulty
 cannot be explained by the presence of <u>schwer</u>; recall that <u>es</u>-insertion
 is not lexically governed. Nor does the object-raising construction in
 general block <u>es</u>-insertion; 96) is grammatical.
 - 96) Es war nur ein Zebra schwer zu fangen. It was only one zebra hard to catch. Only one zebra was hard to catch.

The only available explanation seems to be transderivational: es-insertion does not apply when it would produce a sentence which would look like an extraposition sentence. 96) is saved from looking like an extraposition construction by the presence of an upstairs subject. The impersonal

constructions always look like extraposition sentences when an <u>es</u> is inserted.

Returning to 90), we now have an explanation for why floating is obligatory if an object-raising structure is to be the output. Since es-insertion is not available to satisfy the verb second constraint, some constituent from the lower clause must be gotten into a position to do so. This explanation, however, does not generalize as far as we need it to. It does not explain why question 93b) is ungrammatical; the verb second constraint does not apply in questions. Furthermore, it predicts that it should be possible to apply object-raising in declarative sentences in the absence of an object just when there is already some constituent upstairs to satisfy the verb-second constraint. However such sentences, too, are ungrammatical:

- 97) *Laut Inge ist leicht autozufahren.
 According to Inge is easy to drive.
- 98) *Trotzdem war schwer ihr zu helfen.
 Nevertheless was hard her(dat) to help.
 Nevertheless, it was hard to help her.

Their extraposition paraphrases show both that the underlying structures were well-formed and that <u>Laut Inge</u> and <u>Trotzdem</u> can satisfy the verbsecond constraint:

- 99) Laut Inge ist es leicht autozufahren. According to Inge is it easy to drive.
- 100) Trotzdem war es schwer ihr zu helfen. Nevertheless was it hard to help her.

These sentences clearly present an area for further investigation.

CHAPTER 4

Footnotes

- Both constructions seem to exist in the grammars of most speakers.
 A few speakers accepted just 3); one informant rejected 3) and accepted 1) and 2).
- Lasnik and Fiengo have proposed a structure like 8) as the source for English Tough-Movement sentences (Lasnik and Fiengo 1974).
 Berman argues against such a structure on the basis of idiom chunk sentences parallel to 16)-18). Sweetser has some additional counterarguments based on properties which Tough-Movement sentences share with what are generally agreed to be extraposed structures.
- 3. Object-raising is also possible with schwerig, a synonym of schwer
 - i) Es war schwerig, Erich zu verfolgen. It was hard Erich to follow.
 - ii) Erich war schwerig zu verfolgen.
 Erich was hard to follow.

 Schwerig seems to behave exactly like schwer in these constructions.
- 4. There is some evidence that even when the top clause lacks an overt controller for Equi, a PRO in the top clause serves as controller to delete a PRO subject in the bottom clause, and then fails to materialize morphologically since it is not a subject. Leicht and schwer cannot extrapose clauses with a subject present:
 - i) *Es war schwer, dass Erich meinen Regenschirm findete.
 It was hard that Erich my umbrella found.

However, if the subject is absent for an un-Equi-related reason, the sentence is still out: in ii) and iii) we have been unable to have an impersonal passive as subject of <u>leicht</u>.

- ii) *Es ist leicht, dass im Sommer getanzt wird.

 It is easy that in the summer danced is.

 It is easy to dance in the summer.
- iii) *Es ist leicht im Sommer getanzt zu werden.
 It is easy in the summer danced to be.
 It is easy to dance in the summer.

The only good sentences are ones in which a lower clause infinitive is understood as having a Pro subject:

iv) Es ist leicht von der Polizei geschnappt zu werden. It is easy by the police picked up to be. It is easy to get picked up by the police.

Since German has a subject Pro form, man, which does not spontaneously delete leaving an infinitive behind, the only way to get iv) is to have the Pro subject deleted by Equi. This of course implies that there was a controller upstairs. An upstairs non-subject Pro can be counted on to disappear. Note that if a sentence with Pro subject is passivized, we get an agentless passive rather than one with an agent phrase von man

- v) Man findete sie. Pro found her.
- vi) Sie wurde gefunden. She was found.
- 5. I have been told that similar facts are found in Portuguese: see
 Quicoli.
- 6. Positing a structure with derived Adj P does leave us with one paradox. In a personal clause-union construction in which some other element is fronted, causing subject-verb inversion, there are two places for the subject to go; it can appear either before or after the adjective:
 - i) Thr sind Geschenke immer leicht zu kaufen. ¿ beschenke sond
 Her(dat) are presents always easy to buy.

 For her, presents are always easy to buy.

 Zu kaufen.
 - ii) Ihr sind immer leicht Geschenke zu kaufen. Her(dat) are always easy presents to buy.
 - iii) Inge sind Geheimnisse leicht zu erzählen. Inge(dat) are secrets easy to tell. To Inge, secrets are easy to tell.

iv) Inge sind leicht Geheimnisse zu erzählen. Inge(dat) are easy secrets to tell.

Note that the verb agreement shows raising has applied. If Leicht zu V is a constituent, it is surprising that the subject can break it up as in ii) and iv). On the other hand, if it is not a constituent it should be impossible to front it as in 75-78).

- 7. A much less promising alternative is to derive the impersonal constructions by first extraposing the sentential subject, and then fronting constituents out of the extraposed clause. This derivation runs afoul of the surface structure data presented in Section 4.3.

 Also, while some speakers (but no means all who accept the impersonal tops construction) can front constituents out of extraposed clauses:
 - i) Meiner Schwester w\u00e4rde es nett sein, einen Schosshund zu geben. To my sister would it nice be a lapdog to give. To my sister, it would be nice to give a lapdog.

mobody can front the two constituents needed to derive iii).

- ii) *Einen Schosshund würde meiner Schwester es nett sein zu geben.

 A lapdog would to my sister it nice be to give.

 A lapdog to my sister, it would be nice to give.
- iii) Ihm wird dafür schwer zu danken sein. Him(dat) will for that hard to thank be.

A further obstacle to this proposal in the curious deletion rule it would need to get rid of the extraposition es in just the right places.

8. The judgments on sentences such as these were fairly fuzzy and variable. I believe that the examples and judgments I have given above are typical.