GERMANIC VERB ORDER:
THE CASE FOR INFL-SECOND

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ABSTRACT

Within the framework of Government-Binding Theory, this thesis argues that the Germanic languages, including German and related languages, should be analyzed as having INFL-second underlying word order. Contrary to traditional generative treatments of the so-called "verb-second" (V2) phenomenon, it is claimed here, in light of certain subtle asymmetries, that the final target site of the moved verb is INFL (I^0) in sentences with pre-verbal subjects and COMP (C^0) in those with pre-verbal non-subjects.

It is further maintained that an analysis, as modified and extended in the thesis, in which verb movement is triggered by the Empty Category Principle (ECP) is superior, on both conceptual and empirical grounds, to other theories advanced by generativists to date. A wide variety of clause types in the modern Germanic languages, including in particular German V2 complements and Icelandic infinitival complements, are examined, the final chapter being devoted to a proposal concerning German "parentheticals".

RESUME

Dans le cadre de la théorie du Gouvernement et du Liage, nous présentons dans cette thèse des arguments à l'appui d'une analyse syntaxique des langues germaniques, et notamment de l'allemand et des langues du même sous-groupe, selon laquelle le noeud INFL figure en seconde position au niveau de la structure-profonde. Nous nous écartons des analyses génératives traditionnelles en ce qui a trait au phénomène dit "verbe en seconde position" (V2) en tenant, vu certaines asymétries subtiles, que la position qu'occupe le verbe déplacé au niveau de la structure-surface est INFL (I^0) dans le cas des phrases ayant un sujet en position pré-verbale et COMP (C^0) dans les phrases ayant n'importe quelle autre catégorie en position pré-verbale.

Il est de plus soutenu qu'une analyse, telle que modifiée et développée dans cette thèse, selon laquelle le déplacement du verbe est déclenché par le principe des catégories vides (ECP) est supérieure, tant au plan empirique qu'au plan conceptuel, aux autres théories élaborées jusqu'à présent par les chercheurs ayant adopté le modèle de la grammaire générative. Nous examinons de nombreux types différents de phrases dans les langues germaniques modernes, dont les compléments V2 en allemand et les compléments infinitifs en islandais. Le dernier chapitre est consacré à l'élaboration d'une proposition concernant les incises en allemand.

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CHAPTER ONE

INTRODUCTION AND OVERVIEW OF GERMANIC WORD ORDER FACTS

1.1 Introduction

The problem of major constituent word order in the Germanic languages, in particular the central issue of the position of the finite verb (the "verb-second phenomenon"), has been the focus of much debate in the Generative Grammar literature in recent years. In the spirit of the "Principles and Parameters" model of Government and Binding (GB) Theory (Chomsky (1980, 1981, 1982, 1986a)), the stated aim of current analyses is to account for the observed variation among the discernible structural subgroups of Germanic, as well as the differences and similarities with other word order typologies, in terms of a restrictive system of Universal Grammar (UG) principles which are subject to a limited range of possible parameterization. This thesis will critically examine, in light of these research goals, the various generative analyses of Germanic verb placement which have been proposed over the past several years, with a view to elaborating a theory which will have optimal conceptual value as well as be compatible with the broadest possible range of data.

Nearly all of the more recent analyses conform, in terms of the basic structures and mechanisms assumed to underlie the derivation of verb-second (V2) order, to an analysis first developed in a generative framework by Koster (1975), den Besten (1977, 1983) and Thiersch (1978), the newer accounts differing only in the way they motivate the hypothesized movement(s) of the verb from its d-structure position. It will be demonstrated here (Chapter Two) that, contrary to the consensus which now seems to prevail in the literature on V2, all the analyses which reflect this "traditional" approach are both conceptually flawed as well as descriptively inade-

quate to account in a principled way for the orders which surface in all the basic clause types in the various Germanic languages.

Moreover, it will be shown in Chapter Three that all versions of the traditional analysis are in fact unable to handle the data relating to a class of structures in modern German--one which is extremely common both in discourse and in writing-- namely the variants of tensed subordinate clauses without the complementizer "daß" ('that') which occur in free variation with the equivalent clauses with "daß" as the complements of a large class of German verbs and corresponding nominals as well as certain adjectives.

On the basis of this important set of evidence, in addition to the theory-internal considerations and empirical problems raised in Chapter Two, I will agree with Travis (1984, 1987), contra the traditional analysis, that <u>all</u> the Germanic languages, including the continental West Germanic languages which have a head-final VP, have <u>I-second</u> (SUBJ-I-VP) base word order, such that movement of V^0 into I^0 derives surface V2 order in subject-first matrix clauses. I will further reject, in the manner of Travis (1984, 1987), another fundamental assumption about d-structure order which is inherent in all traditional accounts, namely that all matrix (= root) clauses, at least in the Germanic "V2 languages", and perhaps universally as suggested by Holmberg (1986), are projections of COMP (C^0) at d-structure (CPs). Reformulated in terms of the extended X' phrase structure system of Chomsky (1986a), this premise forms the basis of the traditional claim, familiar since the early generative analyses, that matrix clause word order in "V2 languages" is the uniform output of a syntactic process or processes which land the inflected verb in a base-generated vacant COMP position at the

periphery of IP (= S in earlier versions). Rather, I will contend along with Travis that ordinary, unstressed subject-first declarative matrix clauses are projections of INFL (I^0), i.e. they are IPs at all levels of representation, in "V2 languages" and "non-V2 languages" alike. The claim is that the CP-level is induced in Germanic matrix clauses only when a constituent of the sentence is fronted for contrastive or emphatic purposes (Topicalization), when a constituent is questioned (WH Movement) or when an abstract (phonologically null) operator is introduced at the periphery of IP to signal questionhood or other non-declarative illocutionary force. I will argue that only in these latter matrix clause types does surface V2 order result from a second movement of the inflected verb, i.e. of V^0/I^0 into C^0, such further movement from the I^0 position being entirely unnecessary to derive ordinary subject-first sentences given an I-second underlying analysis.

In Chapter Four I will discuss the theoretical motivation for deriving the various surface orders under Travis' proposal, assuming I-second underlying order as a cross-Germanic generalization. Travis' analysis of verb movement is based on a theory of licensing of empty heads, which requires all empty heads, including those which are base-generated, to be properly governed (the Empty Category Principle (ECP)), and the contents of the gap to be identified by transmission of the necessary features (Head Feature Transmission). If one or the other of these conditions is not met, head movement is triggered in order to fill the improperly identified gap. These general principles, in interaction with the minimal set of language-specific parameters Travis has suggested, will be shown, along with certain modifications I propose, to explain the full range of data from the different Germanic subgroups, including all the basic clause types discussed in the earlier

chapters, as well as certain additional word order facts.

Chapter Five is devoted to a discussion of a class of purported cases of "long extraction" in German which appear, prima facie, to be counterexamples to my analysis of the "daß"-less finite complements proposed in Chapter Four. I argue that the data in question are not in fact cases of long distance extraction out of a "daß"-less complement clause as is claimed by proponents of the traditional analysis, but of extraction out of a higher clause. The so-called "bridge verb" clauses which follow the [+WH] or other fronted phrase in these sentences are in fact not superordinate to the clause out of which the extraction occurs, but a type of clausal adjunct of the fronted phrase. Indeed, this argument is reminiscent of earlier treatments of these structures as "parentheticals"--which analysis was considered and rejected by Thiersch (1978). I will suggest that there is good reason to revive and readopt the "parentheticals" approach to this data in preference to the "long extraction" account and will modify the analysis so as to distinguish these "clausal adjuncts" from other kinds of parenthetical structures which have been discussed in the literature. Examples involving "multiple embeddings" will also be shown to be amenable to such modified "parentheticals" analysis.

I shall conclude that, despite certain remaining problems, the I-second/ECP analysis, as modified, is both conceptually and empirically superior to the various competing versions of the traditional analysis of Germanic languages which have been proposed in the literature to date.

1.2 Overview of Word Order Facts

The remaining sections of this Chapter will be devoted to a review of the major relevant word order facts in languages representative of the different structural subgroups of Germanic.

1.2.1 Finite Verb Position in Continental Germanic Languages

The most striking feature of the word order of the continental Germanic languages, including the continental West Germanic languages and the mainland Scandinavian languages, is the regular alternation in the position of the finite verb between ordinary matrix and subordinate clauses[1], as illustrated by the asymmetry between (1) and (2) in German:

(1) Karl hat dieses Buch wahrscheinlich gekauft.
'Karl has this book probably bought'

[1]Including embedded [+WH] questions and relative clauses.

(2) Johann meint, daß Karl dieses Buch wahrscheinlich
'Johann thinks that Karl this book probably
gekauft hat.[1]
bought has'

A second observation is that the finite verb always occupies second position, after the first major constituent in matrix clauses, irrespective of whether this first constituent is the subject of the sentence, as illustrated by (3). Here the object NP is in first position, leaving the subject NP in superficial third position, following the finite verb:

(3) Dieses Buch hat Karl wahrscheinlich gekauft.
' this book has Karl probably bought'

Similarly, with a preposed adverbial, the finite verb is in second position, followed by the subject:

(4) Wahrscheinlich hat Karl dieses Buch gekauft.
' probably has Karl this book bought'

Such matrix clause structures with various non-subject categories occupying first position are extremely common in ordinary discourse German. In addition to an NP,

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[1] Extensive scrambling has been argued to apply within the VP in German and related languages, as required to account for the relatively free word order of verb complements as well as the fact that IP-scope and other adverbials commonly intervene between the theta-governing verb and its direct object as in (1) and (2), which reflect the neutral surface position of sentential negation in German. As the position of I^0 and the consequences for verb movement are the central focus of this thesis, rather than the internal constituency of the VP, I shall henceforth assume, with Webelhuth (1989) and others and without further discussion, that verb complements scramble leftward around the adverbial at some point in the derivation of sentences like (1) and (2), and will not show the movement in the examples.

AP, PP or ADVP, or any type of complement or adverbial adjunct clause, as in:

(5) Das Buch kaufen müssen will er nicht.
'the book buy be-obliged wants he not'

(6) Wenn er das Geld nicht hat, kann er sich
' if he the money not has can he (refl.)

das Buch von der Bibliothek ausleihen.
the book from the library borrow'

the initial constituent may also be a topicalized non-tensed verb or verb projection, which unit is likewise followed by the finite verb in second position, followed in turn by the subject, e.g.:

(7) a. Aufgegessen können sie den ganzen Kuchen
'eaten-up can they the whole cake

nicht haben.
not have'

b. Den ganzen Kuchen aufgegessen können sie
'the whole cake eaten-up can they

nicht haben.
not have'

c. Den ganzen Kuchen aufgegessen haben können
'the whole cake eaten-up have can

sie nicht.
they not'

d. Aufgegessen haben können sie den ganzen
'eaten-up have can they the whole

Kuchen nicht.[3]
cake not'

Word order facts parallel with those of standard German are found in the other continental West Germanic languages (Dutch, Flemish, Frisian and the various High and Low German dialects). (For purposes of this discussion standard High German will be taken as representative of this structural subgroup.)[4]

Generative linguists, following a nineteenth century European grammatical tradition, have historically considered German subject-first sentences like (1) and the topicalized types like (3) through (7) to be structurally congruent. This has led to a general consensus in the literature that an identical grammatical process or set of grammatical processes must relate the word order of all these structures to that of the subordinate clause (2), the clause-final position of the German finite verb found in (2) being usually assumed to reflect the underlying word order, namely SUBJ OBJ V. Thus German, and the Germanic languages generally, are described in the literature as conforming to a "verb second (V2) con-

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[3] Webelhuth and den Besten (1987) have argued that the fronted phrase in such sentences is a "VP remnant" out of which the other constituents have scrambled prior to the fronting movement, thus allowing these cases to be subsumed under maximal projection movement.

[4] I shall not attempt to classify Afrikaans, which, though a close relative of Dutch, has certain word order properties in common with other languages which are not part of the continental West Germanic subgroup, such as certain embedded V2 effects similar to those of Icelandic and Yiddish, and also exhibits distinctive characteristics of its own. The structure of Afrikaans is the subject of an in-depth study by duPlessis (1986 and forthcoming).

straint" or "V2 movement rule" in matrix clauses. The term "V2 languages" is often used by way of identifying a typological class, isolating English as the exception among the Germanic languages in that the finite verb normally remains in post-subject position in sentences with a fronted non-subject element:

(8) a. John has probably bought the book.
b. Probably John has bought the book.
c. *Probably has John bought the book.

The matrix/subordinate clause asymmetry is somewhat subtler in the mainland Scandinavian languages (Swedish, Norwegian and Danish, represented here by Swedish), which unlike the continental West Germanic languages, have SUBJ V OBJ word order. The crucial evidence involves the position of neutral sentence (wide scope) negation and other IP-scope adverbials (epistemic or "sentence" adverbs, as well as certain other short adverbials, especially time adverbs, which typically appear sentence medially--henceforth referred to as "nexal adverbials" in the manner of Platzack (1988) and abbreviated "IP-Adv").[5] These elements typically follow the inflected verb in Swedish matrix clauses, resulting in V2 order, but precede it, in post-subject position, in subordinate clauses (assumed, as with German, to reflect the mainland Scandinavian underlying order)[6]:

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[5] This is also the position of floated quantifiers and postposed indefinite subjects in the Scandinavian languages (Holmberg (1986, 1988). In other languages, including the other Germanic languages, it appears to coincide with the position assumed by various other classes of adverbs. (See, for example, Travis (1988) for a discussion of "subject-oriented adverbs" in English.)

[6] The Scandinavian data in this thesis are taken from Holmberg (1986, 1988), Platzack (1986a,b, 1988) and Thráinsson (1986).

(9) Sven har troligen köpt boken.
'Sven has probably bought the-book'

(10) Jan tror att Sven sannolikt har köpt
'Jan believes that Sven probably has bought
boken.
the-book'

Like German, Swedish (mainland Scandinavian) matrix clauses also exhibit V2 order when a non-subject constituent appears sentence initially:

(11) Troligen har Sven köpt boken.
'probably has Sven bought the-book'

1.2.2 Infinitivals

The verbs of infinitival complements in the continental Germanic languages are positioned like the finite verb in subordinate clauses, i.e. clause-finally in continental West Germanic as in the German control infinitival (12); after the nexal adverbial in mainland Scandinavian as in the Swedish equivalent (13)[7] :

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[7] It has been successfully argued by Koch Christensen (1983) and Platzack (1986a,b) that the Swedish infinitive marker "att" is generated as a complementizer, under C^0 (similarly for Icelandic að), while its Danish and Norwegian cognates must be generated elsewhere. This is suggested by the position of the infinitive marker after the nexal adverbial in the Danish and Norwegian equivalents of the Swedish control infinitival (13):

(i) Han lovede (PRO) ikke at lese bogen. (Danish)
Han lovet (PRO) ikke å lese boken. (Norwegian)

An additional argument for this distinction relating to the

(12) Er versprach (PRO) das Buch zu lesen.
'he promised the book to read'

(13) Han lovade att (PRO) inte läsa boken.
'he promised to not read the-book'

This generalization holds for all infinitival clause types in these languages, as illustrated by the following example of a German raising verb complement:

(14) Johann$_j$ scheint, (t_j) das Buch gelesen zu haben.
'Johann seems the book read to have'

Adverbial clauses introduced by an infinitival complementizer --German has a few such morphemes which select a tenseless verb preceded by the particle "zu", namely the purposive "um", "(an)statt" ('instead (of)') and "ohne" ('without')--also exhibit the verb final pattern typical of German subordinate clauses:

(15) Er ist gekommen, um (PRO) das Buch zu kaufen.
'he has come in-order the book to buy'

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distribution of these morphemes in the complements of Exceptional Case Marking (ECM) verbs is made in Platzack (1986a). This distinction within the Germanic languages is similar to that made by Kayne (1981), who shows that French "de" is in C^0 while English "to" is in I^0. However, in accordance with the analysis of Germanic I shall ultimately argue for, the infinitive marker in Danish and Norwegian would have to be generated as part of the VP, possibly as a clitic on the top V^0, and not under I^0 as Platzack (1986a) and Holmberg (1986, 1988) have claimed. Likewise, the German infinitive marker "zu" as in (12) would appear to be a clitic of the highest verb of the infinitival clause.

1.2.3 Icelandic and Yiddish

The insular Scandinavian languages Icelandic and Faroese (represented here by Icelandic) are unique among the Scandinavian languages in that the finite verb occupies second position, before the nexal adverbial, in subordinate as well as matrix clauses, so that the linear order of surface elements is the same for both clause types (cf. the asymmetry of the Swedish examples (9) and (10) above):

(16) Helgi hefur trúlega keypt bókina.
'Helgi has probably bought the-book'

(17) Jón segir að Helgi hefur trúlega keypt bókina.
'Jon says that Helgi has probably bought the-book'

However Icelandic patterns <u>with</u> the mainland Scandinavian languages (and <u>with</u> continental West Germanic and unlike English) in having the finite verb positioned second in matrix clauses with a non-subject as first constituent:

(18) Trúlega hefur Helgi keypt bókina.
'probably has Helgi bought the-book'

Another Germanic language, Yiddish, despite its Middle High German origins, exhibits basic word order characteristics similar to those of Icelandic: it has basic SUBJ V OBJ order; the finite verb appears in second position in subordinate clauses as well as in matrix clauses with subjects or with other categories in sentence-initial position.

At a purely superficial descriptive level, then, an appropriate cross-linguistic generalization for the Germanic languages (excluding English) would appear to be that they have "finite V2 order" in matrix clauses and that the posi-

tion of the finite verb in ordinary subordinate clauses varies among the discernible basic structural subgroups: (1) clause-final in continental West Germanic; (2) after the nexal adverbial or "verb-third" in mainland Scandinavian; and (3) second in Icelandic/Yiddish.

But while Icelandic does not exhibit the asymmetry characteristic of finite clauses in the continental Germanic languages, there is evidence that Icelandic is not "V2" underlyingly, but that the verb is indeed base-generated in a position following the nexal adverbial as in the other Scandinavian languages. The latter "verb third" order surfaces in certain types of infinitival clauses, notably those in which there is no complementizer introducing the clause, as in the complements of ECM and raising verbs:

(19) a. Eg tel Jón sennilega vera sterkastan allra.
'I consider Jon probably be strongest of-all'

b. Jón virðist (ţ) ekki hafa lesið bókina.
'Jon seems not have read the-book'

On the other hand, control infinitivals, introduced by the complementizer "að", display the V2 order typical of finite clauses (cf. the German and Swedish equivalents (12) and (13) above):

(20) Hann lofaði að (PRO) lesa ekki bókina.
'he promised to read not the-book'

The syntax of certain types of verbal compounds in Yiddish also provides subtle evidence that the finite verb in this structural subtype does not originate in second posi-

tion.[1] One such class are the particle verbs, consisting of a verb and separable prefix. These collocations behave like their German cognates in that the normal order (P + V) is disrupted in matrix clauses when the verbal root of the separable compound is the inflection-bearing verb of the clause (it appears in V2 position), but remains intact when the inflection is borne by a modal or other auxiliary verb:

(21) a. Er zogt nit ois dem sod.
'he says not out the secret'

= "He does not reveal the secret."

b. Er vet nit oiszogen dem sod.
'he will not out-say the secret'

= "He will not reveal the secret."

As expected, given that Yiddish exhibits V2 order in tensed subordinate as well as matrix clauses, the verbal root also assumes V2 position when a Yiddish compound is the inflected verb in an subordinate clause, unlike in German where the (P + V) order is always retained in subordinate clauses. The following paradigm with the Yiddish compound "avek-shikn" ('send off') (22) and its German counterpart "weg-schicken" (23) illustrates this contrast:

(22) a. Ikh gloyb az er shikt haynt avek dem briv.
'I believe that he sends today off the letter'

b. Ikh gloyb az er hot haynt avekshikt dem briv.
'I believe that he has today off-sent the letter'

[1] The Yiddish data in this thesis are taken from Lowenstamm (1977); Travis (1984, 1987); Den Besten and Moed-van Walraven (1986); and Diesing (1990).

(23) a. Ich glaube, daß er heute den Brief **wegschickt.**
'I believe that he today the letter off-sends'

b. Ich glaube, daß er heute den Brief **weggeschickt**
'I believe that he today the letter sent-off

hat.
has'

Sentences like (21a) and (22a) clearly indicate that V2 represents a derived word order in tensed subordinate as well as matrix clauses in Yiddish, as it does in Icelandic.

1.2.4 English: V2 Effects in a "Non-V2 Language"

As noted above, English is exceptional among the Germanic languages in that fronting of a non-subject constituent does not in general result in V2 word order in declarative sentences. Nevertheless, certain types of preposed elements (classified in current GB theory as "operators", e.g. by Chomsky (1986a)) do trigger the familiar "SUBJECT-AUX inversion" effects of English, in particular [+WH] and [+NEG] phrases, resulting in V2 order in these matrix clause types:

(24) a. Which books **has** he read?
b. When **will** we see you again?
c. How many languages **does** she speak?

(25) a. Never in my life **have** I felt so well.
b. Nowhere **will** you find a person as diligent as John.
c. Not a word **did** he utter.

Other non-declarative matrix clauses in English (and other languages), such as direct yes/no questions, wishes and other "emotive" clauses which exhibit V-initial word order, invite an analysis involving a phonologically null operator posi-

tioned at the periphery of the clause, signalling questionhood or other non-declarative illocutionary force, which abstract element triggers inversion effects parallel to those in (24) and (25). Under these assumptions, these V-initial matrix clauses may be subsumed under the "V2 order" classification[9]:

(26) a. [Ø] has he read the books?
b. [Ø] will we see you again soon?
c. [Ø] does she speak many languages?
d. [Ø] may you have a long and happy life!

Such "inversion" is absent when the constituent questions in (24a-c) and the yes/no questions in (26a-c) are embedded as indirect questions:

(27) a. I don't know which books he has read.
b. We wonder when we will see you again.
c. I'm not sure how many languages she speaks.

(28) a. I don't know whether he has read the books.
b. We wonder if we will see you again.
c. I doubt if she speaks many languages.

The "inversion" process is confined to auxiliary

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[9] See Chomsky (1986, p. 5) for a discussion of "operators of the WH-phrase type"; also Travis (1984, 1987). Other authors do not agree on subsuming V-initial orders in main clauses under "V2 order" in exactly this manner (see, for example, Olsen (1985)). There is general agreement, however, that the same verb-movement process is involved in deriving main clause questions of both the yes/no and constituent ([+WH]) varieties. Indeed, as will be noted in Chapter 2, some recent descriptions derive all surface V2 including declarative word orders from V-initial (i.e. non-declarative) structures--a position I find to be counterintuitive. Cf. also Haider (1986) who suggests the V1 cases are derived from V2 structures, via an additional rule which moves the already fronted verb into the empty operator position, which position is occupied by the [+WH] phrase in a constituent question.

verbs (the aspectual markers "be" and "have" and modals) in English, the default auxiliary "do" appearing in the V1/V2 position when no other auxiliary is present. But aside from English "do-support", the word order asymmetry between the matrix clause questions in (24) and (26) and their subordinate counterparts in (27) and (28) mirrors the asymmetry which shows up in their "V2 language" equivalents, e.g. in German:

(29) a. Welche Bücher hat er gelesen?
'which books has he read'

b. [Ø] spricht sie viele Sprachen?
'[Ø] speaks she many languages?

(30) a. Ich weiß nicht, welche Bücher er gelesen hat.
'I know not which books he read has'

b. Ich bin nicht sicher, ob sie viele Sprachen spricht.
'I am not sure if she many languages speaks'

Similarly, the sentences with a fronted [+NEG] phrase in (25), unlike most English structures with a fronted non-subject, mirror the V2 order of their German counterparts, e.g.:

(31) Nie in meinem Leben habe ich mich so wohl gefühlt.
'never in my life have I (refl.) so well felt'

"V2 effects" are therefore not unique to the Germanic "V2 languages", although it is in these languages that the mechanisms behind V2 order appear to apply with maximum generality. The parallel matrix/subordinate clause asymmetry exhibited in English in specific contexts such as yes/no and constituent questions, as well as the V2 order following [+NEG] phrases and certain other operators, suggests that these structures should receive a treatment similar to the corresponding structures in the Germanic "V2 languages" in a

linguistic description which purports to be in keeping with the broad goals of generative grammar.

1.2.5 Inadequacy of the Matrix/Subordinate Distinction

It becomes apparent when one examines a wider range of clause types in German and Swedish that the characterization of the verb order asymmetries exhibited by these languages in terms of a distribution between matrix and subordinate clauses is too superficial, covering only the canonical instantiations of those clause types.

Swedish (and Scandinavian generally) has a number of special "main clause complementizers", which introduce certain sentence types, among them the morpheme "månne", used to signal a polite question, and "bara" which has the illocutionary force of "I wish that". Notably such Swedish sentences exhibit the "verb third" order typical of subordinate clauses:

(32) a. Månne han faktiskt kan tala tretton språk?
' [?] he actually can speak thirteen languages'

= "I wonder whether he can actually speak thirteen languages."

b. Bara Olle inte också kommer!
'only Olle not also comes'

= "I hope Olle doesn't come too!"

In German, certain complementizers which typically introduce subordinate clauses can also be used to introduce matrix clauses and they likewise induce "subordinate clause", hence verb-final, word order. Haider (1986, after Reis (1985)) notes that these are the most "semantically neutral" of the

German complementizers, namely "daß" ('that'), "ob" ('whether', 'if') and "wenn" (conditional 'if'):

(33) a. Daß er auch immer zu spät ankommen muß!
'that he also always too late arrive must' (!)

b. Ob er wohl verschlafen hat?
'if he indeed overslept has' (?)

c. Wenn er doch endlich hier wäre!
'if he (part.) finally here were' (!)

These clauses, while they are stylistically constrained, like the Swedish examples, to contexts of exclamations or musing questions, nevertheless serve to illustrate the point that there are perfectly well-formed matrix clauses with verb-final order in German, as there are "verb third" matrix clauses in Swedish.

On the other hand, not all subordinate clauses have verb-final order in German, one such class of "exceptions" being unintroduced conditional and concessive clauses. The overt complementizers which head these clauses--the conjunctions "wenn", "falls" ('if', 'in case'), "selbst wenn", "sogar wenn", "wenn auch", ('even if', 'even though'), "obwohl", "obschon", "obgleich", "wennschon", "wenngleich", "wiewohl" ('although', 'though'), "trotzdem" ('despite the fact that', 'notwithstanding that')--may be omitted in German. Loss of semantic information may have to be compensated for by the use of adverbial particles ("auch", "doch", "zwar", "auch noch so" (= 'even', 'indeed', 'ever so') and the like) elsewhere in the clause in the case of concessives, but otherwise the variation is free.

It is to be noted at this point that such clauses do not function as clausal arguments of a matrix verb as do the

"daß" and various other complement clause types illustrated in the preceding discussion of German subordinate clause word order, but rather as predicate adjuncts--a distinction which will turn out to be important for the analysis of verb movement[10]. For now, the generalization to be made is that when complementizers like "wenn" and "obwohl" are omitted, the finite verb of the clause they introduce (which may be indicative or subjunctive) appears in clause-initial position, taking the place of the complementizer in front of the subject:

(34) a. Wir werden bald anfangen, wenn er nicht
'we will soon begin if he not

ankommt.
(pfx.)-comes'

b. Wir werden bald anfangen, **kommt** er nicht an.
'we will soon begin comes he not (pfx.)'

= "We will soon begin if he does not arrive."

c. *Wir werden bald anfangen, er nicht **ankommt.**

d. *Wir werden bald anfangen, **wenn kommt** er nicht an.

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[10]It is for this reason that I have in general refrained from using the term "embedded" in favour of the more traditional "subordinate" when discussing non-matrix clauses. The former term has a tendency to connote only clauses which are embedded as <u>complements</u> of a matrix verb or other matrix clause member. Clearly, an acceptable analysis of non-matrix word order in Germanic languages cannot be confined to a description of sentential complements only.

(35) a. Ich rufe vorher an, falls ich mich verspäten
'I call first (pfx.) in-case I (refl.) be-late

sollte.
should'

b. Ich rufe vorher an, sollte ich mich verspäten.
'I call first (pfx.) should I (refl.) be-late'

= "I'll call first, should I be late."

c. *Ich rufe vorher an, ich mich verspäten sollte.

d. *Ich rufe vorher an, falls sollte ich mich verspäten.

(36) a. Wir können dieses Rätsel lösen, obwohl es schwer
'we can this puzzle solve though it difficult

ist.
is'

b. Wir können dieses Rätsel lösen, ist es auch noch so
'we can this puzzle solve is it ever so

schwer.
difficult.'

= "We can solve this puzzle, be it ever so difficult."

c. *Wir können dieses Rätsel lösen, es auch schwer ist.

d. *Wir können dieses Rätsel lösen, obwohl ist es schwer.

The starred (c) sentences indicate that V1 order is obligatory when the complementizer is absent, while the starred (d) sentences show that the verb and complementizer cannot co-occur in pre-subject position. Parallel effects are found in Swedish, e.g. conditional clauses with and without the complementizer "om" occur in free variation, the finite verb being fronted from "verb-third" position when and only when the

complementizer is omitted:

(37) a. Jag blir arg, om han inte **kommer** snart.
'I get angry if he not comes soon'

b. Jag blir arg, **kommer** han inte snart.
'I get angry comes he not soon'

c. *Jag blir arg, han inte **kommer** snart.

d. *Jag blir arg, om **kommer** han inte snart.

Notably, conditionals and concessives likewise allow omission of the overt complementizer in English, resulting in V1 order, as in the English equivalents of (35b) and (36b). As with the inversion effects in English matrix clauses dealt with above, fronting to pre-subject position is confined to auxiliary verbs, but the conclusion seems nonetheless inescapable that the same process is at work as in the German and Swedish subordinate V1 examples.[11]

1.3 Requirements of a Syntactic Analysis

In summary, an observationally adequate syntactic analysis of Germanic will, as a minimum requirement, have to include a description of all the language-internal asymmetries and basic word order similarities and differences among the structural subgroups discussed above, as well as the differences and properties shared with other languages. A "higher order" account, however, one which has optimal conceptual

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[11] A further constraint in English appears to be that the fronted auxiliary verb in these clauses must be in the subjunctive, which accounts for the unavailability of an English V1 equivalent to German (34b) and Swedish (37b) (the default auxiliary "do" being defective in this respect).

value in line with the goal of a restrictive theory of UG, will have to characterize the shared properties, the cross-linguistic variation and the variation across the different clause types in terms of a set of independently motivated, maximally constrained, principles and mechanisms of grammar interacting with subtle parameters. In particular, a conceptually satisfactory description of the so-called "V2 phenomenon" will have to rely on principles of grammar which are general enough so as to be able to accommodate the limited range of V2 effects which surface in "non-V2 languages" including English (as well as French and other Romance languages) and to account for the cross-linguistic differences in the domains where such V2 effects occur. In the following chapter, the historical development of generative treatments of Germanic word order will be briefly sketched and a representative sampling of recent versions of the traditional analysis will be evaluated in light of these criteria.

CHAPTER TWO
FAILURE OF THE TRADITIONAL ANALYSIS

2.1 Origins of the Traditional Generative Analysis

Nearly all generative accounts of the major word order characteristics of the Germanic languages share a common feature: they represent developments and extensions of an analysis which draws its original inspiration from a long-standing European grammatical tradition known as the "topological fields" theory. Haider (1986) attributes the description of the distributional regularities of the finite verb in the different clause types in modern German originally to Erdmann. Erdmann (1886) observed that the finite verb invariably occurs in the second position of a German declarative matrix clause, following an initial nominal or other constituent which is arbitrarily chosen by the speaker from an inventory of possible categories and which occupies the "clausal onset" position or "Vorfeld" (pre- or front-field) of the sentence, as it came to be known in subsequent grammatical descriptions based on "positional" or "topological fields" (e.g. Drach (1937); Boost (1955)).

Linguists working with the framework of generative grammar (GB Theory and its predecessors) have effectively translated the basic mechanics of the topological fields analysis into generative terms.[1] It was successfully argued by Koster (1975) for Dutch and den Besten (1977, 1983) and

[1] Olsen (1982, for German) and Heltoft (1986, for the Scandinavian languages) offer comparisons of the topological fields and X' analyses.

Thiersch (1978) for German[2] that these languages are underlyingly verb-final, corresponding to the order which surfaces in the most common type of subordinate clause. It was further argued that the surface word order of matrix clauses should be derived via a finite verb-fronting process in conjunction with a second (optional) fronting operation which would move an arbitrary constituent to the pre-verbal position (the equivalent of the traditional front-field). This "double movement" analysis, in its various modified versions which have been proposed in accordance with more recent developments in GB theory (collectively referred to here as the "traditional" analysis), has come to be the most widely accepted generative description for German, Dutch, and by extension, the other continental Germanic languages.

2.2 Den Besten's Description

The apparent crucial dependency of V2/V1 effects on the presence or absence of an overt complementizer particle, and in particular the distribution of complementizer and finite verb in sentences such as those discussed in section 1.2.5 of Chapter One, led den Besten (1977, 1983) to formally propose that the target node for movement of the finite verb should be the COMP position. Den Besten's original proposal was that all surface V1 and V2 orders in German could be derived by a simple substitution rule, which would move the finite verb into a base-generated empty pre-subject COMP position, given the following d-structure order of the German clause:

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[2] Following earlier work by Bach (1962), Bierwisch (1963), Klima (1965) and Esau (1973).

(TOPIC) COMP SUBJ OBJ VERB

Thereafter a second rule would optionally apply to front another constituent of the clause to the pre-COMP (TOPIC) position, deriving a declarative matrix sentence, while non-application of the movement to TOPIC rule would generate the corresponding yes/no interrogative sentence. On the other hand, the first of these two ordered rules, finite verb fronting, would be straightforwardly prevented from applying when COMP is occupied by a lexical complementizer in accordance with the principle prohibiting doubly filled nodes, thereby accounting for the order most commonly found in subordinate clauses.

Notably, the original den Besten version of the double movement analysis simply assumed the proposed finite V to COMP substitution rule to be obligatory in all clauses without a complementizer, fronting of a phrasal constituent (a subject or non-subject) to the TOPIC position being likewise stipulated as applying to generate declarative matrix clauses. In the context of current GB theory, in which movement of constituents under the "move α" schema must be motivated and restricted by general principles of grammar, an analysis of this sort is no longer acceptable. For this reason, much recent research on Germanic has been devoted to theoretical refinements of den Besten's proposal, which attempt to provide an answer to the focal question of what a plausible "trigger" of V to COMP movement might be. Considerably less attention has been devoted to justifying the fronting of a phrasal constituent to a "TOPIC"-like position to the left of COMP (= SPEC-CP in current frameworks) in the derivation of declarative matrix sentences.

Another shortcoming of the original den Besten

analysis was that while it sufficed to describe the verb placement asymmetries of German (generally, of continental West Germanic) finite clauses--and with appropriate modifications could have been made to accommodate the facts of mainland Scandinavian finite clauses as well[3]--a description along these lines is clearly inadequate to account for the finite V2 effects in Icelandic and Yiddish subordinate clauses or for the characteristics of infinitival clauses in Germanic generally. This realization has led to several attempts to modify the den Besten analysis in order to cover a broader range of Germanic word order facts.

2.3 Embedded V2 Effects: Inadequacy of V to COMP

The data presented in Chapter One from Icelandic and Yiddish suggest that their apparent V2 order indeed represents a derived word order in tensed subordinate as well as matrix clauses, and therefore that some type of verb-fronting process must also be posited to account for the "embedded V2 effects" these languages exhibit. This clearly cannot be accommodated within the original den Besten proposal based on a single V to COMP movement rule which is blocked from applying when COMP contains lexical material. Moreover, Travis (1984, 1987) and den Besten and Moed-van Walraven (1986) cite the properties of indirect questions and relative clauses in Yiddish as evidence that the process in question cannot be subsumed under any version of V to COMP movement.

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[3] Reference would have to have been made to the "S-Adv" position, hence the underlying order of Swedish might have been stipulated as:

(TOPIC) COMP SUBJ S-Adv VERB OBJ

Yiddish is a language which allows "embedded root phenomena", such as embedded topicalization, in certain restricted contexts, typically in the complements of assertive verbs of saying and thinking, e.g. in:

(1) Avrom zogt, [az haint vet Roxele kumen] .
'Abraham says that today will Rachel come'

The bracketed clause in (1) would seem to consist, in terms of the Chomsky (1986a) X' system, of a C^0 (occupied by the [-WH] complementizer "az") followed by a CP--arguably a "marked" structure in languages which permit it, among them Yiddish and Icelandic (Holmberg (1986)) as well as English (Hooper and Thompson (1973); Green (1976)). The mainland Scandinavian languages likewise appear to allow clauses with matrix clause characteristics, e.g. matrix clause word order, with or without topicalization, contrastive left dislocation, etc., to appear under verbs taking asserted propositional complements (Andersson (1975); Platzack (1986a); Holmberg (1986, 1988)). In sentences such as Swedish:

(2) a. Han sa [att Bengt kunde inte göra det].
'he said that Bengt could not do it'

the V2 position of the verb "kunde" is in contrast with the "verb third" order encountered in ordinary subordinate clauses. Holmberg (1986, 1988, among others), has appropriately pointed out that clauses such as that appearing under the complementizer in (2), which have more in common with matrix clauses than they do with subordinate clauses (referred to as "Embedded Main Clauses" or "EMCs"), should not be taken to reflect true subordinate clause structure. Another general characteristic of EMCs is that they are structural islands, as observed by Platzack (1986a) and others. The same is apparently also true in Frisian, which, unlike its congener

German, allows EMCs (de Haan and Weerman (1986)).[1] It follows that the behaviour of EMCs cannot be adduced as evidence for an analysis of V2.

But subordinate [+WH] clauses (embedded questions and relatives) are not EMCs and adhere strictly to the word order characteristics of true subordinate clauses even in those languages which permit EMCs in other contexts such as asserted propositions. They are [C SUBJ IP-Adv V OBJ] in mainland Scandinavian, [C SUBJ OBJ V] (like German) in Frisian, and cannot be V2 in these languages. Correspondingly, in Yiddish, where they exhibit surface V2 order like all subordinate clauses with finite verb, they are, according to the data presented in Travis (1984, 1987) and in den Besten and Moed-van Walraven (1986), strictly [C SUBJ V OBJ], i.e. subject-first, no embedded topicalization being permissible in such contexts. This is illustrated by the following grammaticality contrasts:

(3) a. Der yid vos mir hobn gezen in Boston
'the man that we have seen in Boston

iz a groyser lamdn'
is a great scholar'

b. *Der jid vos in Boston hobn mir gezen
'the man that in Boston have we seen

iz a groyser lamdn'
is a great scholar'

[1] A detailed discussion of a class of German complement clauses which exhibit V2 order, but are structurally distinct from "EMCs", will follow in Chapters Three and Four.

(4) a. Ikh veys nit far vos di Kinder heybm on
'I know not why the children start (pfx.)

zeyr heymarbet haynt.
their homework today'

b. *Ikh veys nit far vos haynt heybm di Kinder
'I know not why today start the children

on zeyr heymarbet.
(pfx.) their homework'

These subject/non-subject asymmetries suggest that the embedded COMP in these structures selects a bare IP complement only and (4) shows that an IP-internal movement puts the finite verb (the verbal root of the compound "on-heybm") in second position to the right of the embedded subject. There appears to be a similar subject-first condition on the embedded V2 structures following a [+WH] COMP in Icelandic (Holmberg (1986)). DuPlessis (1986) also shows that in a colloquial dialect of Afrikaans, which exhibits embedded V2 effects similar to those of Icelandic, such structures are always subject-first.

Such data appear to be a forceful argument for the necessity of an additional, IP-internal, post-subject, empty position to serve as a target site for "V2 movement" in subordinate clauses, at least in languages of the Icelandic-Yiddish subtype of Germanic, as has been generally acknowledged in the recent literature. The obvious candidate for this base-generated, clause-second, empty landing site for V^0 within IP is its head INFL (= I^0), introduced in Chomsky (1981, p. 18) as the functional element responsible for the finiteness of the verb, encompassing the tense/mood/aspect and agreement features. Indeed, INFL figures prominently in more recent work on Germanic verb movement syntax within the GB framework.

It should be noted that Diesing (1990) has recently disputed the Yiddish data such as (3) and (4), which are based on examples originally from Lowenstamm (1977), as well as a similar subject-first condition on the complements of Yiddish factive verbs claimed by Koopman (1984). Diesing contends that [+WH] COMPs can indeed co-occur with embedded topicalization in Yiddish and adduces certain counterexamples to the Lowenstamm data based on native speaker judgments and literary sources[5], which she takes as evidence (contra Travis (1984, 1987) and den Besten and Moed-van Walraven (1986)) that SVO and non-SVO orders in Yiddish are structurally indistinguishable.

Diesing goes on to argue that subject-first and non-subject-first V2 word order in Yiddish are the uniform result of verb movement to I^0, in contrast with all the other Germanic V2 languages including Icelandic where the verb purportedly always lands in C^0. A fundamental assumption of her analysis (after Kitagawa (1986), Fukui (1986), Kuroda (1988) and Sportiche (1988)) is that subjects originate within VP and raise to SPEC-IP[6], the position which was reserved for base-generation of subjects in the Chomsky (1986a) X' system. This enables her to claim that SPEC-IP in Yiddish (the so-called "topic position"), unlike in English, has a dual function in that it serves as the landing site of subject and non-subject topics alike, allowing non-subject topicalization to freely occur with a filled COMP in embedded clauses. This

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[5] Diesing attributes several of her literary examples to Prince (1981).

[6] Travis (forthcoming) suggests that if subjects are to be generated VP-internally, this should be restricted to non-derived, theta-marked subjects, which would preclude subjects of passive and unaccusative verbs, in addition to pleonastic subjects such as Yiddish "es".

would be equivalent to the dual (A-position/A'-position) role allegedly filled by SPEC-CP in the other Germanic languages according to the proponents of the various revised versions of the traditional (den Besten-type) analysis to be reviewed below. Diesing does in fact concede that the discrepancy between her data and the native speaker judgments in Lowenstamm (1977) suggests that topicalization under an embedded [+WH] COMP requires heavy contrastive emphasis on the non-subject topic for the sentence to be considered acceptable. However, she imputes this to a "discourse constraint" which does not justify ruling these structures out syntactically.

Diesing's argument for Yiddish therefore parallels the traditional argument regarding Germanic V2, i.e. that subject-first and non-subject-first V2 orders should be derived in congruent fashion. The difference is that the IP-level only, rather than the CP-level, would be involved in Diesing's Yiddish derivations, thus enabling her to accommodate the full range of embedded V2 effects exemplified by her data, in contrast with their more restricted distribution in Icelandic and colloquial Afrikaans. She draws further support for her V^0 to I^0 argument from the fact that extraction is supposedly possible from Yiddish embedded clauses with a non-subject topic (e.g. the clause under "az" in (1) above). This suggests that these sentences are <u>not</u> EMCs as they are in other Germanic languages where they are islands (e.g. in Swedish (2) above and its equivalents with a fronted non-subject) and where "embedded V2 effects" may take two distinct forms, a "true embedded clause", i.e. subject-first type, and an EMC-type--as is arguably the case in Icelandic.

I shall not discuss Diesing's claims further, except to point out that if they can be sustained, this would mean

the analogy with the Icelandic structural subtype I continue to assume in this thesis is possibly misleading, necessitating certain refinements to accommodate the fundamentally different behaviour of Yiddish with respect to embedded topicalization.[7]

But while an empty I^0 position has been clearly demonstrated as essential to the analysis of embedded V2 effects in languages such as Icelandic and Yiddish, it has often been argued (by Haider (1984), Koopman (1984), among others) that there is no comparable direct evidence for a separate categorial position for I^0 available from surface data in the other Germanic V2 languages. Rather, the pervasive claim in the GB literature has been that V2/V1 orders in continental Germanic are consistently amenable to an analysis which ultimately lands the finite verb in C^0 (whether directly or via an intermediate I^0), as per the original den Besten analysis.

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[7] The Yiddish data would still be compatible with the analysis I go on to argue for (assuming it were adjusted to reflect a VP-internal base position for subjects with raising to SPEC-IP). Essentially, what would be required, as Diesing suggests, would be to parameterize the function of the SPEC-IP position across languages such that it may serve as an A'-position as well as an A-position. For some reason, Yiddish would be the lone Germanic language to exploit this option such that any further maximal projection movement to SPEC-CP would be rendered completely unnecessary to derive any variety of V2 word order in that language. However, since I argue with Travis (1984, 1987) that given I-second base word order, fronting of a maximal projection to SPEC-CP, with the additional movement of the moved verb in I^0 into C^0 this entails, is <u>only</u> required in the other Germanic languages to derive <u>non</u>-subject-first V2 order, my analysis would not require "parameterizing the choice of landing site for the verb" across languages. The latter move, which Diesing argues for and which the traditional analysis would indeed be forced to make to accommodate her Yiddish data, runs counter to the principle I put forward at the outset, namely that V2 phenomena should be accounted for in the same way across languages.

The motivation for including I^0 in a description of the continental Germanic languages has derived instead from other considerations. Firstly, projecting the X' system, as extended by Chomsky (1986a) to the functional categories I^0 and C^0, onto the categorial component of all the Germanic languages has obvious conceptual appeal in keeping with the pursuit of a restrictive theory of UG. Secondly, an analysis which forces the highest V^0 to amalgamate with I^0 in order to pick up inflectional features on its way to C^0 is claimed to be consistent with the observed finiteness asymmetry characteristic of verb movement, i.e. the generalization that it is only the inflected part of the verb or the verbal complex which moves to the V2 position and that movement does not in general affect infinitival complements.[1]

On the other hand, the purported lack of any clear empirical evidence for its position in the continental Germanic languages has led to much debate among proponents of the traditional analysis as to where I^0 should fit into the typology of the two major structural subgroups in question, continental West Germanic and mainland Scandinavian.

2.4 Proposed Base Word Orders

One approach to the problem of base word order in continental Germanic which found much favour some few years ago was based on the idea that COMP and INFL might "share" a pre-subject node in the underlying structure of these

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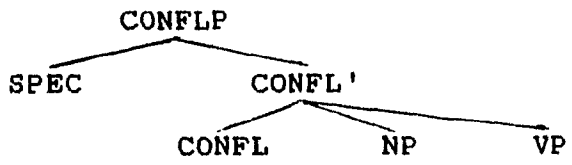
[1] The Icelandic control infinitivals discussed in Holmberg (1986), which exhibit movement of a non-finite verb to second position as exemplified in (20) in Chapter One, appear to be a counterexample to the latter part of this generalization and will be an important set of data in support of a different analysis which I shall ultimately argue for.

languages, such that movement of the head V^0 to I^0 is effectively indistinguishable from V^0 to C^0 (the "conflated category" or "CONFL" solution). An account of movement to the "V2 position" could thus be achieved for the core cases, given the further assumptions (1) that empty CONFLs (those not already filled by a complementizer) are forced to lexicalize in finite clauses (V to CONFL movement); and (2) that a single phrasal constituent would thereafter be fronted to the specifier of CONFLP (often referred to in the literature as the "XP" position) to derive a declarative matrix clause. Platzack (1983) and Koopman (1984) attributed V to CONFL movement to the requirement that the agreement features contained in CONFL be lexically absorbed (by a complementizer or, alternatively, by a verb) in a finite clause in order to be able to assign nominative case to the subject NP, its complement given the following proposed base structure[9] :

Continental Germanic



This view, advocated also by Toman (1985), Lenerz (1985), Haider (1986), Scherpenisse (1986) and deHaan and Weerman (1986), among others, isolated languages like Icelandic and Yiddish as "exceptional" among the Germanic verb-moving languages by virtue of having separate COMP and INFL nodes (in pre- and post-subject position respectively), thereby allowing for the derivation of subject-first V2 order

[9] The traditional categories "S" and "S'" used by Platzack (1983) have been converted here to "CONFL'" and "CONFLP" respectively, to accord with current X' notation.

even in the presence of a lexical complementizer.[10] Latterly, the "CONFL" analysis of continental Germanic seems to have been all but abandoned. There seems to be a general recognition in the more recent literature that this and similar theories which resort to such ad hoc manipulations of the d-structure dominance relations among major syntactic constituents represent a conceptually unattractive solution to the problem of word order variation, particularly among such closely related languages. Indeed, there now appears to be general agreement that such "brute force" approaches should be rejected in favour of solutions which conform to the X' convention and preserve universal constituency as far as possible among the Germanic languages.[11]

Such considerations have contributed to the current consensus in favour of an underlying structure which retains C^0 and I^0 as separate categories in all the Germanic languages. The widely accepted view is that the basic division among structural subgroups occurs at the level of I', I' in the continental West Germanic languages (= I^0 -final, V^0-final) being the mirror image of its counterpart in the Scandinavian languages, Yiddish and English (= I^0-initial, V^0-initial), yielding the following basic trees:

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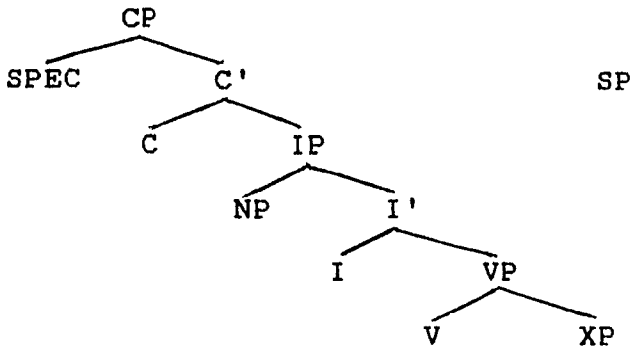
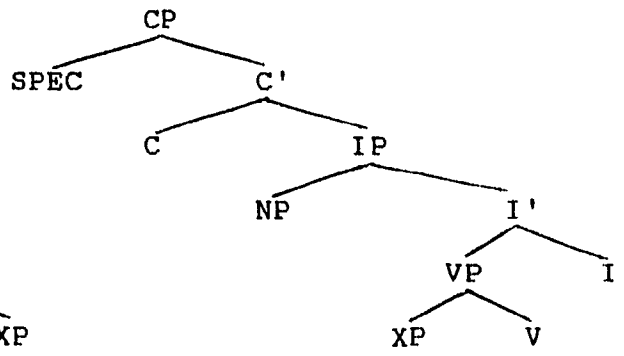
[10]Notably, the motivation for the second movement of the verb, from I^0 to C^0, in Icelandic and Yiddish was never made explicit in analyses of this type.

[11]This accords with Travis' (1984, 1987) claim that word order parameters should be confined to precedence relations among major constituents. See also Platzack (1988).

Scandinavian/Yiddish/English



Continental West Germanic



Analyses of Germanic verb movement which adhere to the above base structure proposals necessarily characterize surface V2/V1 orders as the output of two successive movements of the finite verb (V^0 to I^0 and I^0 to C^0), except in Icelandic and Yiddish, where surface V2 order may result from a single application of finite verb movement, V^0 to I^0--arguably the only analysis possible for subordinate V2 clauses in these languages. The need for the second verb movement is most obvious in the case of the I-final analysis of the continental West Germanic subgroup, where movement of clause-final V/I to C^0, in conjunction with movement of a phrasal category to the SPEC-CP position, is clearly required to derive V2 order in subject-first and non-subject-first matrix clauses alike.

A fundamental premise (explicit or implied in what I shall refer to as "two-step verb movement" analyses) is that the first movement of the head V^0 of VP, into I^0, is <u>obligatory</u> in all finite clauses in order to form an inflected verb[12]. A further refinement of the respective d-structure

[12]Unless I^0 is base lexicalized, as is commonly assumed in the case of the English modals. See, for example, Chomsky (1986a, p. 68); also Holmberg (1986), who relates finite verb raising (V to I), a widespread phenomenon among languages, to

trees then becomes necessary in order to account for the difference in the relative order of finite verb and nexal adverbials in subordinate clauses in mainland Scandinavian and Icelandic--a much debated topic among Scandinavian linguists working in GB as well as traditional frameworks. Holmberg (1986), who assumes nexal adverbials to be generated in the unmarked case as adjuncts of VP with IP scope[13], attributes the variation to the "special" position where the IP-Adv adjoins in mainland Scandinavian, i.e. to the left of I' instead of VP. This ensures that V^0 to I^0 will be string vacuous and <u>not</u> result in V2 order as it does in Icelandic, thus:

(5) Jan tror ... (Swedish)
'Jan believes ...

$[_{C'}$ att $[_{IP}$ Sven $[_{I'}$ inte $[_{I'}$ har$_i$ $[_{VP}$ e$_i$ köpt boken]]]]]
that Sven not has bought the-book'

(6) Eg veit ... (Icelandic)
'I know ...

$[_{C'}$ að $[_{IP}$ Jón $[_{I'}$ hefur$_i$ $[_{VP}$ ekki $[_{VP}$ e$_i$ keypt bókina]]]]]
that Jón has not bought the-book'

Notably, Holmberg also contends that string-vacuous V^0 to I^0 raising, i.e. in mainland Scandinavian <u>only</u>, triggers the application of a "pruning convention", whereby the resulting

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Kayne's (1982) "Predicate Principle", requiring that the head of the predicate (= IP or the traditional S) be filled at s-structure by an element which carries the feature (+V).

[13]See Travis (1988) for an alternate view, i.e. that these and other short adverbs (together with prenominal adjectives) are "co-functors", not licensed by predication as are adverbial PPs (and predicate adjectives), but by a separate licensing mechanism she calls "head feature licensing".

"headless" VP collapses and becomes part of I'. Thus the final s-structure representation given to the subordinate clause in (5) in his analysis is actually:[14]

(5a) $[_{C'}$ att $[_{IP}$ Sven $[_{I'}$ inte $[_{I'}$ har köpt boken]]]]

V^0 to I^0 (plus pruning) in turn makes the further movement of V/I to C^0 --plus fronting to SPEC-CP of the subject or another category--necessary to derive V2 order in mainland Scandinavian, as in the declarative matrix clause equivalent of Swedish (5a):

(7) $[_{CP}$Sven$_j$ $[_{C'}$har$_i$ $[_{IP}$ t_j $[_{I'}$inte $[_{I'}$ e_i köpt boken]]]]]

'Sven has not bought the-book'

Such two-step verb movement accounts then routinely assume the second verb movement and movement to SPEC-CP to apply in parallel fashion in the derivation of all declarative matrix clauses in the Icelandic/Yiddish[15] subgroup, despite the fact that the linear order of elements that results from such additional movements in a subject-first matrix clause, as in the Icelandic equivalent of (7), is the same as the order

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[14]The need for this seemingly unmotivated "pruning convention" in Holmberg's analysis of mainland Scandinavian will become apparent later on. Unlike other two-step verb movement accounts which also invoke a pruning convention after verb raising (cf. Platzack (1986a); Thráinsson (1986)), Holmberg claims that such pruning of the VP after V^0 to I^0 cannot apply in Icelandic where these nodes are not strictly adjacent, given binary branching. This does not, however, explain why the VP should collapse after raising in mainland Scandinavian, nor what would prevent it from doing so in an Icelandic sentence which did not contain an intervening IP-Adv.

[15]Cf. Diesing (1990) for Yiddish, where the final landing site of all "topics" is SPEC-IP, as discussed above.

after simple V^0 to I^0 has applied in that language (cf. the embedded IP in (6)):

(8) $[_{CP}$Jón$_j$ $[_{C'}$hefur$_i$ $[_{IP}$ t_j $[_{I'}$ e_i $[_{VP}$ekki $[_{VP}$ e_i keypt bókina]]]]]]

In an effort to eliminate the necessity of stipulating the position of the IP-Adv as a phrase structure rule, Holmberg (1988) has proposed an alternative analysis which characterizes this difference among the Scandinavian languages as a consequence of a parameterized difference in the status of INFL in the language subgroups in question. Holmberg's more recent proposal is that while INFL functions as the head of its own projection, namely IP, in Icelandic (and by implication, in structurally similar languages), its status has been weakened (as evidenced, among other characteristics, by the lack of morphologically prominent verbal inflection) in the modern mainland Scandinavian languages to the point that its function has changed to that of being merely a "specifier of V". In the latter case, merger of V and I is assumed to result from simple "affix-hopping", rather than actual head movement as in Icelandic. An account of the IP-Adv position then becomes readily obtainable. Assumed to be VP-adjuncts in all the languages under discussion, IP-Advs are predicted to appear between the inflected verb (which moves to INFL) and the remainder of the VP in Icelandic (an "IP language", where I^0 heads the predicate, IP), but to the left of <u>all</u> verbal elements and, alternatively, even to the left of the subject NP (= NP, VP), in the mainland Scandinavian languages ("VP languages", which have no IP, with V^0 heading the predicate). Unfortunately, as Platzack (1988) points out, despite the claimed empirical advantages, the Holmberg (1988) proposal suffers from conceptual drawbacks which are as, or perhaps more, serious than the problems encountered by his original

(1986) analysis. In addition to parameterizing the function of INFL, the subject--SPEC-IP in Icelandic--is relegated to the role of another adjunct of VP, on a par with IP-Adv, in mainland Scandinavian. Such wholesale manipulation of the functional status of a major d-structure constituent is, as Platzack notes, clearly at variance with current notions of X' theory. It is also not clear, given Holmberg's claim that there is no actual head movement of V^0 to I^0 in "VP-languages", how movement to C^0 would then be licit, in accordance with the generally accepted, ECP-related, locality condition on head movement (as argued for, e.g. by Travis (1984); Baker (1988b)).[16]

The alternative Platzack (1988) suggests is in line with the description proposed by Kosmeijer (1986, 1987), who assumes the above illustrated d-structure tree to be common to all the Scandinavian languages and that the IP-Adv adjoins to the left of VP in mainland Scandinavian, exactly as in Icelandic. But a rather conspicuous aspect of the latter analysis is that in order to achieve the desired word order asymmetry with Icelandic in subordinate clauses, it is forced to allow the finite verb in mainland Scandinavian to remain in its d-structure position, I^0 remaining empty, i.e. with null phonetic realization. The implication is that the necessary inflectional features are already assigned at d-structure, or, alternatively, are assignable via some form of feature trans-

[16]Moreover, Holmberg's proposal encounters the further conceptual difficulty of having to characterize English, which exhibits a range of IP-Adv positions (see Jackendoff (1972); Emonds (1976); Travis (1988)), as having a chameleon-like status between an "IP-" and a "VP-language". Indeed, the additional post-subject IP-Adv position needed in English would appear to be a particular consequence of properties of the auxiliary system of that language, as will be discussed in Chapter Four, and independent of the problem of IP-Adv position in Scandinavian.

mission. Like Kosmeijer, Platzack relates the possibility of non-movement of the verb from its base position within VP in mainland Scandinavian to the loss of agreement between subject and finite verb, compared with Icelandic, which has preserved the strong verbal inflection characteristic of Old Scandinavian (1050-1350).

Interestingly, then, as will become clear in subsequent chapters, the analysis Platzack now favours would appear to be converging toward the proposal of Travis (1984, 1987) for the underlying structure of the Germanic languages in general, namely that INFL is base-generated in post-subject (clause-second) position and may remain empty under certain conditions. Indeed, if post-subject I^0 may remain empty in subordinate clauses in mainland Scandinavian, as Platzack (1988) and others now concede, then such an I-second analysis should be equally available for the continental West Germanic (V-final) languages, given the general principle that a gap may be licensed by a properly governing head (in this case empty I^0 by a lexical C^0) with the necessary features to transmit and thereby "fill" the gap. Assuming further that the constraints and parameters affecting verb movement in the different structural subtypes can be coherently characterized, then an analysis based on a common I-second underlying structure has the potential of unifying the description of the Germanic languages, reducing the basic variation to the ordering of elements within the VP. Moreover, if it can be maintained, an I-second account, unlike the I-final analysis of the continental West Germanic languages, offers the additional conceptual advantage of structurally distinguishing the latter group from true head-final (V-final, I-final), left-branching languages (e.g. Japanese, Turkish).

2.5 Proposed "Triggers" of V2: Theoretical Problems

While numerous Germanicists have advocated the "two-step verb movement" account of the "V2 languages" in recent years (e.g., Olsen (1985); Platzack (1986a,b, 1988); Holmberg (1986, 1988); Taraldsen (1986); Weerman (1986); den Besten and Moed-van Walraven (1986); Tomaselli (1987); Schwartz and Tomaselli (1988); Baker (1988a); Noonan (1988); Schwartz and Vikner (1989); Webelhuth (1989)--to name a few), attempts to motivate the movement of the finite verb (V/I) to its putative final C^0 target in terms of general grammatical principles have been relatively few. Of the authors listed above, only Platzack (1986a, 1988), Holmberg (1986), Taraldsen (1986) and Weerman (1986) have offered explicit answers to the question, "What triggers V2?", and attempted to parameterize the differences between "V2 languages" and "non-V2 languages". Rather than embark upon a detailed discussion of the problems encountered by the various analyses, I shall confine myself here to some general remarks concerning the more serious conceptual flaws inherent in all and especially some of the more ambitious explanations which have been attempted to date.

Platzack (1986a,b) modified his (1983) "conflated category" (CONFL) analysis in favour of a two-step verb movement account of the V2 languages based on separate C^0 and I^0 nodes, still relating the V2 "trigger" to the requirement that C^0 be lexicalized to provide a case-assigner for the subject NP. However, this version did not represent a significant advancement, as the revised analysis was still based on the possibility of parameterization of dominance relations among constituents across languages. The V2/non-V2 distinction was derived in terms of a "head of S parameter", the effect of which was to make the subject NP the complement of C^0 in <u>V2 languages only</u>.

Trying to avoid characterizing the V2 property in terms of a stipulative difference in the phrase structure rules of the languages in question, other proponents of the two-step verb movement analysis, such as Holmberg (1986, 1988), have argued that matrix as well as subordinate clauses universally are projections of C^0 (C's or CPs) at d-structure, as reflected in the proposed base word order trees for the Germanic languages, including English, illustrated on page 37 above. The general approach has been to focus on the asymmetry between typical matrix and subordinate clause types, isolating the properties of a (typically) empty matrix C^0 in the V2 languages as the trigger of movement of V/I to C^0.

For Holmberg (1986), matrix CPs are "extended predicates" such that they, like IPs, must have a verbal ([+V]) head in accordance with Kayne's (1982) Predicate Principle, while subordinate clauses function as arguments or modifiers (of predicates or arguments) and therefore have a non-verbal head, hence typically a lexical complementizer or complementizer-like element in C^0. The underlying idea is that there should be a one-to-one s-structure mapping of the categorial features of every C^0 head and the grammatical-logical function of its corresponding maximal projection or clause (C' or CP). Holmberg thus explains the word order variation between non-V2 languages and V2 languages as a consequence of a parameterized difference in the "default specification" of C^0, i.e. the categorial status of clauses with an empty C^0. In what for Holmberg is the unmarked case (non-V2 languages), the categorial specification of an empty C^0 is equal to the s-structure categorial specification of I^0. In essence this means that once I^0 is lexicalized and becomes [+V], either as a result of V to I movement (e.g. in French and many other languages) or the insertion of a [+V] auxiliary (in English), the empty C^0 automatically inherits the [+V] feature (which

can percolate upward from I^0 in the absence of a conflicting feature specification) and no further movement of the finite verb is necessary in matrix clauses. In languages which exhibit the "marked" V2 property, Holmberg claims, C^0 is specified as [-V] by default, with the result that an empty C^0 remains [-V] after V to I has taken place, forcing V/I to movement to C^0 in matrix clauses to provide the clause with the requisite verbal head.

The first problem here is that the distinction which appears relevant for predicting inflected verb position in the V2 languages is not to be made between matrix and subordinate clauses but rather, as originally suggested by Kayne (1982), between clauses which are arguments (NP-like clauses) and clauses which are non-arguments. The correct generalization is that the verb <u>never</u> moves to C^0 in argument clauses, whereas verb movement to C^0 may be triggered in non-argument clauses under certain conditions, notably in the absence of a lexical complementizer, in particular in the complementizer-less conditional and concessive clauses discussed in Chapter One. Accordingly, if categorial features are the way to capture this contrast, then the feature [±N] would seem to make the appropriate distinction. Adverbial adjunct clauses (such as conditionals and concessives) would fall together with matrix clauses as requiring a [-N] head by virtue of being non-arguments, as opposed to argument clauses requiring a [+N] head.[17] Assuming that matrix clauses are also headed

[17]See also Webelhuth (1989), who associates the nominal ([+N]) categorial status of argument clauses headed by [-WH] complementizers with the etymological relation between these complementizers and demonstrative pronouns, e.g. between German "daß" and "das". But note that Webelhuth (contra Holmberg (1986)) also allows finite argument clauses to have [+V] categorial status when they are in complement position. Indeed, allowing verbs to head finite argument clauses proves necessary for the analysis of a class of V2 complements in

by C^0, as traditional theorists would have it, then a [+N] default feature specification for empty C^0 in the V2 languages would serve to trigger V/I to C^0 movement in the relevant clause types. Movement would be appropriately triggered not only in all matrix clauses (with the exception of exclamations), but also in non-argument subordinate clauses without a complementizer.

A proposal similar to Holmberg's (as adjusted here to reflect a [+N] rather than [-V] default value of C^0 as the "V2 trigger") is made by Taraldsen (1986), who also suggests that an explanation should, in the manner of Kayne (1982), "exploit the basic predicate status of the category V". Again, Taraldsen would presumably want to use [+N] as the default feature characterizing empty C^0 in V2 languages, such that the analysis would account for the movement in unintroduced conditional and concessive clauses.

A variation on the idea of categorial features of empty C^0s being responsible for V2 order is offered by Weerman (1986), who proposes that movement of V/I to C^0 is "triggered" by undischarged [AGR] features contained in the empty C^0 head of a matrix clause. For Weerman, [AGR] features always originate in C^0 and are "copied" to, but not "absorbed" by, I^0 under government in the V2 languages, whereas they are "copied and absorbed" by I^0 in the non-V2 languages, obviating V/I to the empty C^0.

A first conceptual shortcoming of these accounts is

German (not discussed by Holmberg) if the traditional framework is assumed, but is not required in the analysis of these clauses which I shall argue for at length in subsequent chapters.

that they cannot accommodate the limited V2 effects exhibited by English and other non-V2 languages, e.g. in matrix clause questions, within the same set of principles they invoke to account for the generalized V2 order of Germanic V2 language matrix clauses. They all require a special mechanism of some sort to be posited, over and above what they propose for the V2 languages, in order to deal with V2 effects in non-V2 languages (see, e.g., Holmberg (1986)) or in non-declarative sentences in general (see, e.g., Taraldsen (1986)), a fact which seriously undermines the theoretical appeal of the proposed triggers.

Yet another significant problem is the stipulative nature of the rule which fronts a constituent to the "XP" or SPEC-CP position to form declarative matrix clauses in the V2 languages. It is certainly far from obvious why the structure derived after movement of V/I to C^0, e.g. in German:

(9) $[_{CP}\ [_{C'}$ **versteht**$_i$ $[_{IP}$ er $[_{I'}\ [_{VP}$ das Buch $e_i\ ]\ e_i\ ]]]]$
' understands he the book '

should receive an interrogative interpretation unless a fronting rule is activated to circumvent this, moving a constituent, e.g. the subject, to the specifier position:

(10) $[_{CP}$ er$_j$ $[_{C'}$ **versteht**$_i$ $[_{IP}$ t_j $[_{I'}\ [_{VP}$ das Buch $e_i\ ]\ e_i\ ]]]]$
' he understands the book '

Another point concerns Platzack's (1988) proposal that I^0 is indeed base-generated in strict second position in the mainland Scandinavian languages but may remain empty in subordinate clauses, accounting for the variable position of the finite verb in relation to nexal adverbials. If, as

Platzack contends, this is due to weakness of inflection as a general characteristic of this group, rather than a structural and/or functional property peculiar to complement clauses which would allow I^0 to remain empty in such contexts cross-linguistically, then what motivates V^0 to I^0, the preliminary movement necessary before V/I to C^0 can take place to derive the correct order in V2 clauses in these languages? This seems to suggest that it is the complement/non-complement distinction which is crucially involved in triggering verb raising to I^0 as well as the further movement of the verb, where applicable, to C^0, rather than particular categorial features associated with different types of IPs or CPs.

2.6 Proposed "Triggers" of V2: Empirical Problems

I turn now to the issue of the observational adequacy of the accounts of V2 which motivate movement of the finite verb on the basis of categorial features, and point out some of the more obvious empirical problems encountered by this approach.

Regardless of whether or not we accept the premise of recent proponents of the traditional analysis (such as Holmberg (1986)) that all clauses, including matrix clauses, are projections of C^0 universally[11], it seems that any attempt to trace the differences between V2 and non-V2 languages to the categorial features associated with empty C^0 s is doomed to inevitable failure on the basic of data coverage. The analysis breaks down when it comes to accounting for an important set of word order facts in subordinate clauses, where English

[11]Or, alternatively, that at least "all verb-second clauses are CPs" (as claimed by Schwartz and Vikner (1989)).

behaves <u>like</u> its V2 language congeners. Even if the feature [±N] can be exploited to advantage to collapse matrix clauses with non-argument subordinate clauses as the cases where the verb purportedly moves into empty C^0 in the <u>V2 languages</u>, a parameter based on such a feature will be unable to account for the parallel cases of fronting of the finite verb to C^0 in English adverbial adjunct clauses in the absence of a lexical complementizer, e.g. in:

(11) I'll call first ...

$[_{C'}$ should$_i$ $[_{IP}$ I $[_{I'}$ e_i $[_{VP}$ be late]]]]

equivalent to German:

(12) Ich rufe vorher an,

$[_{C'}$ sollte$_i$ $[_{IP}$ ich $[_{I'}$ $[_{VP}$ mich verspäten e_i] e_i]]]

In an account along the lines of Holmberg (1986) or Taraldsen (1986), the empty embedded C^0 in English (11) would presumably inherit from I^0 the same categorial feature(s) a matrix clause C^0 does in a non-V2 language (let us assume the relevant feature is [-N]) and there would be no reason for the verb to move to fill it, as opposed to German (12) where the empty C^0, being [+N], would not be a licit head for the adverbial clause.

Indeed, the distinguishing characteristic of these clauses which is relevant for predicting their finite verb position in <u>all</u> the Germanic languages--rather than the categorial specification of the head C^0--would again appear to be their structural-functional relationship to the matrix clause, i.e. the fact that they are not in a complement relation to an argument-taking category contained in the matrix clause such

that they, and hence their empty C^0 head, are not properly governed.

Another problem for non-V2 languages relates to complementizer deletion phenomena in complement clauses. It was mentioned above that the inflected verb in the V2 languages never moves to C^0 in clauses which are complements of a matrix clause member.[19] This generalization is supported by data from the Scandinavian languages. Holmberg (1986, p. 154) reports that "Swedish, Danish, and Norwegian all readily delete the finite clause complementizer corresponding to English 'that', in positions where the subordinate clause is (properly) governed, typically following verbs of saying and thinking." He and Platzack (1986b) provide relevant examples of complementizer deletion in Scandinavian. But while empty C^0 s are possible licit heads of argument clauses in the V2 languages in Holmberg's and like accounts, empty C^0 s should be illicit heads of English complement clauses--since they would automatically inherit "predicatehood" from I^0. This is of course at variance with the possibilities for the English complementizer "that" which, like its Scandinavian equivalents, is deletable when properly governed[20].

Finally, none of the versions of the den Besten description formulated thus far is able to account for the apparent verb movement in Icelandic control infinitivals introduced by the complementizer "ad", as in Holmberg's (1986)

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[19] I contend (contra the consensus in the literature) that the verb does not move to C^0 in complementizer-less complement clauses in German or in the purported cases of long distance extraction out of these complements, for which I will have a different analysis in Chapters Four and Five.

[20] Per Stowell (1981).

data. In:

(13) Hann lofaði ...
'he promised ...

[C' að [IP PRO [I' lesa$_i$ [VP ekki [VP e$_i$ bókina]]]]]
to read not the-book'

the position of the non-finite verb "lesa" before the IP-Adv "ekki" suggests movement of V^0 into I has occurred, as contrasted with the raising verb complement:

(14) Jón virðist ...
'Jon$_j$ seems ...

[IP t$_j$ [I' e [VP ekki [VP hafa lesið bókina]]]]
not have read the-book'

where "hafa", the non-finite head of the VP, remains in its d-structure position, surfacing after "ekki". Indeed, sentences like (13) appear to cast doubt on the claimed finiteness asymmetry with respect to verb movement, a long-standing assumption since the earliest generative analyses of Germanic word order and one which is central to the traditional analysis. Even Holmberg himself does not have a convincing explanation for the contrast between (13) and (14). On the one hand, he argues, within the framework of his analysis based on categorial features, that the verb moves to I^0 in (13) to make I^0 lexical in satisfaction of the Predicate Principle, while on the other, he is prepared to allow I^0 (which in his terms is always [-V] by default in the V2 languages) to remain empty in (14) in clear violation of the same principle.

I should point out, by way of conclusion to the foregoing discussion, that I do not dispute the intuitive

notion that there should be a correlation between categorial features of clausal heads and the grammatical-logical functions of the clauses to which they project. I simply do not believe that parameterizing the assignment of d-structure categorial features of certain empty heads across languages leads to a particularly insightful or descriptively adequate account of the distribution of the empty heads themselves (especially empty C^0) or of the domain of verb movement (V2) in the languages in question.

2.7 General Failure of the Traditional Analysis

In the preceding sections I have outlined some of the more serious theoretical and empirical problems inherent in current versions of the traditional syntactic analysis of the Germanic languages. The focus has been on the lack of success of such accounts in providing a plausible "trigger" for movement of the finite verb initially to I^0 and then to C^0 in the relevant language- and clause-types, given what have come to be routinely accepted assumptions about the base word order characteristics of the language subgroups in question, namely that the continental West Germanic languages are I-final and the mainland Scandinavian languages not strictly I-second underlyingly[11]. But the most forceful empirical argument against all versions of the traditional analysis of Germanic word order is to be found in the behaviour of the finite verb in a very common class of German subordinate clauses, namely the "daß"-less clausal complements of a particular class of German verbs, nouns and adjectives. In the next chapter I shall adduce evidence that these clauses are

[11]Cf. Platzack (1988) who, as noted above, has apparently reversed his position on mainland Scandinavian.

structurally distinct from other clause types with which they have often been confused, and as such cannot be accommodated at all under the assumptions of the traditional analysis, especially the base structure it imposes on the continental West Germanic subgroup. I shall submit that these data argue for a very different proposal concerning the underlying word order of all the Germanic languages.

CHAPTER THREE
AN EMPIRICAL ARGUMENT FOR INFL-SECOND IN GERMANIC

3.1 The Traditional Analysis: German, etc. are I-Final

In Chapter Two, the need for a base-generated empty category in post-subject position to serve as the target of verb movement was motivated for the Icelandic/Yiddish Germanic subtype, in accordance with an argument made by Travis (1984, 1987) and by den Besten and Moed-van Walravan (1986). In particular, it was shown that these languages exhibit V2 effects in various classes of subordinate clauses, such as embedded WH questions and relatives, which are demonstrably not analyzable as cases of embedded root phenomena or "EMCs", in that the V2 structure which follows the complementizer or equivalent obeys a subject-first constraint.[1] The assumption that embedded V2 movement in Icelandic and Yiddish should therefore be to a clause-second I^0 node, rather than to C^0, has latterly been accepted, fairly uncontroversially, by proponents of the traditional description of Germanic, who have modified their individual theories in order to accommodate the Icelandic/Yiddish facts. Thus the overall consensus in recent descriptions is that the underlying structure of Icelandic and Yiddish should be something like the following, with nexal adverbials intervening between I^0 and V^0 (adjoined to the left of VP) in a right-branching tree:

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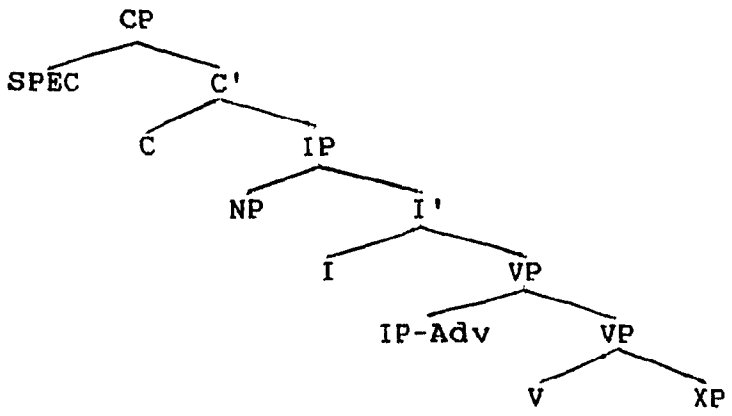
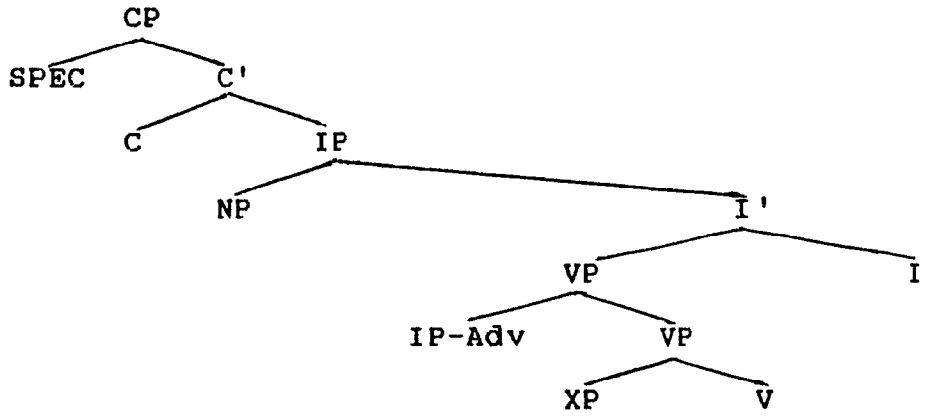
[1] The data, insofar as Yiddish is concerned, have been disputed by Diesing (1990), as noted earlier.

Icelandic/Yiddish



On the other hand, such a post-subject I^0 position is considered not to be motivated for the continental Germanic languages according to current versions of the traditional analysis. Irrespective of the individual theory, a routine claim of virtually all generative linguists since the original proposals for Germanic word order were formulated, as made explicit by Holmberg (1986) and more recently by Schwartz and Vikner (1989, p. 1), is that "all verb-second clauses are CPs" in the mainland Scandinavian and continental West Germanic languages. The more or less standard proposal for the underlying order of the continental West Germanic subgroup is that they diverge from the Scandinavian order by branching leftward from I', thus:

German, Dutch, etc.[1]



3.2 The I^0-second proposal

A more unified account of the underlying structure of the Germanic languages has been provided by Travis (1984, 1987). Travis has proposed, quite controversially, that I^0 is indeed base-generated in post-subject (clause-second) position in all the Germanic languages, including in particular also those of the continental West Germanic subtype. She thus contends that all the Germanic languages have the same base word order down to the level of VP, namely C-initial, I-initial, with the subject NP intervening as the specifier of I' (hence NP-I-VP, or "INFL (I)-second"):

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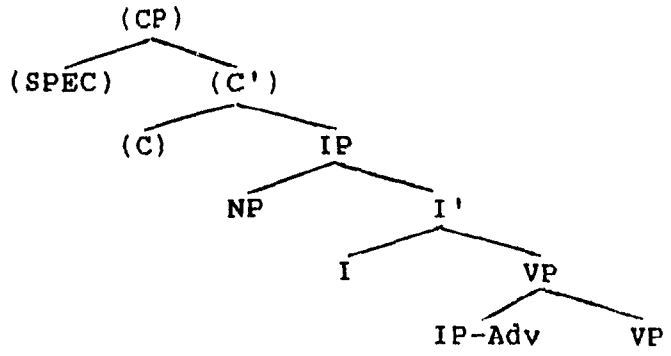
[1] As noted in Chapter One, I am assuming, with Webelhuth (1989) and others, that scrambling of the verb complements leftward around adverbials base-generated at the left boundary of VP accounts for the (neutral) surface order of VP constituents, e.g. in German:

Er kann das Buch_j nicht e_j gelesen haben.

I accordingly incorporate an IP-Adv position adjoined to the left of VP into the standard d-structure tree shown here as well as in the alternate tree proposed by Travis which is illustrated below.

Germanic (includes English, the continental
West Germanic and Scandinavian languages)



Variation is thereby reduced to the headedness of the VP, the basic contrast being between the continental West Germanic subgroup which are V-final (but I-initial) as opposed to all the other subgroups which are both V-initial and I-initial.

3.3 Travis' Arguments for I^0 -second in German

Apart from the inherent theoretical appeal of such an approach to Germanic base word order--provided that surface variation in verb position can ultimately be accounted for in terms of general grammatical principles and tenable parameters which will appropriately restrict the contexts where verb movement occurs in the various language subtypes--Travis has also adduced certain empirical evidence in support of her claim of I^0-second as a cross-Germanic generalization.

Travis contends that it is necessary to structurally distinguish pre-verbal subjects from pre-verbal non-subjects on empirical grounds, not only in Icelandic and Yiddish which exhibit subject-first V2 order in subordinate clauses, but also in matrix clauses in at least one other Germanic language, namely German. Her argument is based on the distri-

bution of the German personal pronouns (in particular the third person series er/sie/ es and their case-inflected forms). Unlike their demonstrative pronoun counterparts (der/die/das) and unlike regular NPs, there appear to be stricter conditions on the occurrence of the non-subject forms of the third person personal pronouns in pre-verbal (sentence-initial) position. While all subject pronouns of this type may appear pre-verbally (in active and passive constructions alike), Travis cites evidence that the non-subject forms may appear there only under heavy stress, while non-subject "es" ('it'), which cannot bear stress, is completely precluded from the pre-verbal position, as suggested by the following examples:[3]

(1) a. Er hat das Brot gegessen.
'he has the bread eaten'

b. Es wurde gegessen.
'it was eaten'

c. Er hat es gegessen.
'he has it eaten'

d. Das Brot hat er gegessen.
'the bread has he eaten'

e. *Es hat er gegessen.
'it has he eaten'

f. Das hat er gegessen.
'that has he eaten'

Crucially, given Travis' all-Germanic base structure tree, movement of the head V from its clause-final position (where it surfaces, typically, in subordinate clauses) to the post-subject I^0 position will derive subject-first sentences with V2 order in German, as in all the Germanic

[3]Parallel examples are given for Yiddish.

languages, without the further movement of the verb to C^0 being necessary. Unlike theorists who have modelled their descriptions along the lines of the traditional account, Travis assumes that in ordinary subject-first matrix sentences in the Germanic languages, V2 and non-V2 alike, only a bare IP is base-generated, such that I^0 is the final target of the moved verb in these sentences. The further movement, of V/I to C^0, being reserved for sentences in which another element is then "topicalized" or a constituent questioned (creating a CP by moving to the (optional) SPEC-CP position[4]), the I-second analysis can account for the distributional asymmetry of the German personal pronouns on the basis of a structural distinction between these two clause types. The relevant generalization, Travis suggests, is that "pronouns that cannot bear stress cannot topicalize", i.e. move to SPEC-CP, as per the following derivations:

(2) a. $[_{IP}$ er $[_{I'}$ hat_i $[_{VP}$ das Brot/es gegessen e_i]]]

b. $[_{CP}$ das $Brot_j$ $[_{C'}$ hat_i $[_{IP}$ er $[_{I'}$ e_i $[_{VP}$ e_j gegessen]]]]]

c. *$[_{CP}$ es_j $[_{C'}$ hat_i $[_{IP}$ er $[_{I'}$ e_i $[_{VP}$ e_j gegessen]]]]]

Holmberg (1986) has challenged this argument, suggesting that the pre-verbal non-subject pronouns in question need not actually be focussed (and hence bear stress), as long as they, along with other fronted non-subjects in the Germanic V2 languages generally, are the "theme of discourse", as opposed to non-V2 languages where all fronted non-subjects, pronominal or otherwise, must bear focal stress. In fact, the generalization that <u>all</u> topicalized non-subject personal pro-

[4] Notably, the analysis allows for the possibility that a truly focussed subject may also be "topicalized" in this manner.

nouns in German must be heavily stressed would appear to be too strong. Given minimal prior context sufficient to establish the R-expression to which a topicalized personal pronoun refers as the theme, it need not bear stress, as in the following discourse sequences:

(3) A. Wo ist die Katze?
'where is the cat'

B. Sie habe ich im Garten gesehen.
'she have I in the garden seen'

("sie" unstressed)

(4) A. Du solltest mal deinem Vater schreiben.
'you should (part.) your father write'
(dat.)

B. Ihm habe ich gerade einen Brief abgeschickt.
'him have I just now a letter sent-off'
(dat.)

("ihm" unstressed)

In a similar vein, Diesing (1990), after Prince (1981), notes that "previous mention" is apparently able to serve the same discourse function as stress with regard to non-subject pronoun topicalization. Indeed, only object "es" (the accusative neuter pronoun) seems to be actually prohibited from the pre-verbal position, as 1(e) above illustrates, an observation which might be considered to weaken this particular argument for a structural distinction between subject-first and non-subject-first sentences with V2 order. The specific prohibition on topicalization of object "es", i.e. in Holmberg's terms its inability to serve as theme in the pre-verbal position, might well be related to the fact that it is homophonous with non-thematic, non-referential, pleonastic "es", as in structures like:

(5) a. Es hat gestern geregnet.
'It has yesterday rained'
= "It rained yesterday."

b. Es wurde bei der Party getanzt.
'there was at the party danced'
= "There was dancing at the party."/
"Dancing took place at the party."

As such it might plausibly have given way to the more distinctive "D-pronoun" form "das" in topicalized structures (as in 1(f)). However, this still leaves unexplained the question of why sentence-initial non-subject NPs have, as a minimum requirement, that they be the theme, if not necessarily the focus, of discourse in V2 languages, while subject NPs do not have to be either, and can even be non-arguments like pleonastic "es"--even though both are fronted in parallel fashion from their d-structure position according to traditional-type analyses. The latter are thus forced to resort to a distinction between two types of XP fronting--one for subjects, the other for non-subjects[5] --or some other theoretical construct which would account for the stricter conditions on fronted non-subjects.

Another argument Travis employs for a structural distinction between subject-first and non-subject first sentences with V2 order in Germanic is the fact that a German sentence like (6), where the subject and object NPs are not marked by distinctive morphological features, is nevertheless unambiguously assigned an SVO analysis in the absence of focal

[5] See, e.g., Diesing (1990), who suggests a parameter in languages might allow the same specifier position--whether SPEC-IP in her analysis of Yiddish or SPEC-CP in the traditional analysis of the other Germanic V2 languages--to serve as the landing site for both A-movement and A'-movement, i.e. for two distinct types of "topics", the operator (A')-type requiring stress or its equivalent.

stress on the initial NP:

(6) Die Mutter hat die Tochter geküßt. (without stress)
'the mother has the daughter kissed'

= "The mother has kissed the daughter."
≠ "The daughter has the mother kissed."

Given Travis' analysis in which a single movement of V to I^0 is responsible for uniquely deriving SVO word order, this can be accounted for on the basis of a default interpretive strategy, which assumes the surface order corresponds as closely as possible to base word order in the absence of additional information supplied by morphological or contextual clues or by focal stress. Such an explanation is not as readily available to traditional analyses, as the congruent SVO and OVS s-structures are both considered to reflect two movements of the finite verb plus XP-fronting. Nevertheless, in terms of linear strings of constituents, the SVO order might still be considered "closer" to the d-structure order even in the latter type of analysis, so that this argument cannot be seen as decisive in favour of Travis' analysis.

In the remainder of this chapter, I shall therefore present an additional empirical argument which I believe provides more compelling evidence that the underlying word order of the continental West Germanic languages (in particular German), while V^0-final, must be I^0-second in accordance with Travis' description.

3.4 German "daß"-less Complements

There is a class of sentential complement-taking verbs (most of them bridge verbs) in German which, in addition

to the typical finite clause introduced by "daß", may also freely select a variant without the complementizer. While the members of this group may generally be classified as verbs of saying, hearing, thinking and feeling[6], the optional selection of a "daß"-less clausal complement structure appears to be a subcategorization property of individual lexical items, there being a number of verbs in the same semantic category which (with some dialectal variation) do not allow the complementizer to be omitted. Among the most common verbs which readily admit the complementizer-less variant are "sagen" ('say'), "hören" ('hear'), "erfahren" ('learn'), "wissen" ('know'), "behaupten" ('claim'), "meinen", "denken" ('think'), "glauben" ('believe'), "sich denken", "sich vorstellen" ('imagine'), "vermuten" ('suppose'), "schätzen" ('estimate', 'reckon'), "(sich) wünschen" ('wish'), "hoffen" ('hope'), "ahnen" ('anticipate'), "bitten" ('ask', 'request'), "vorschlagen" ('suggest'), versprechen ('promise') (hardly an exhaustive list). The class which does not readily allow the complementizer to be omitted includes such verbs as "erwähnen" ('mention'), "bemerken" ('notice'), "verdächtigen" ('suspect'), "sich freuen" ('be glad'), "bedauern" ('regret'), "beabsichtigen" ('intend'), "sich entschließen" ('decide'), "ausschließen" ('exclude'), and others.

When the context permits these "daß"-less finite complements, they are always in free variation with the corresponding clause <u>with</u> "daß" (often, depending on the verb,

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[6] See <u>Der große Duden (Band 4), Grammatik der deutschen Gegenwartssprache</u> (1966, p. 567). The finite verb in the clausal complement of these verbs--with or without "daß"--is often a subjunctive form, especially when the matrix verb is in a past tense and introduces a thought, belief, hope, possibility or simply a repeated statement of someone else (indirect discourse subjunctive) from which the speaker/writer wishes to distance himself.

also with a control infinitival equivalent). Importantly, omission of the complementizer triggers finite V2 order in the subordinate clause:

(7) a. Er hoffte, daß er eine Lösung finden **könnte.**
'he hoped that he a solution find could'

b. Er hoffte, er **könnte** eine Lösung finden.
'he hoped he could a solution find'

c. *Er hoffte, er eine Lösung finden **könnte.**

d. Er hoffte, eine Lösung finden zu können.
'he hoped a solution find to be-able'

The same pattern is also in evidence in an analogous class of noun-complement and adjective-complement constructions, where the head noun (e.g. "Hoffnung" ('hope'), "Illusion" ('illusion'), "Vorschlag" ('suggestion')) or adjective (e.g. "gewiß", "sicher" ('certain')) permits a "daß"-less finite complement variant:

(8) a. Von der Illusion, daß er die ganze Welt erobern
'from the illusion that he the whole world conquer

könnte, hat er sich nie befreien können.
could has he (refl.) never liberate been-able'

b. Von der Illusion, er **könnte** die ganze Welt
'from the illusion he could the whole world

erobern, hat er sich nie befreien können.
conquer has he (refl.) never liberate been-able'

c. *Von der Illusion, er die ganze Welt erobern **könnte,**
hat er sich nie befreien können.

(9) a. Es ist gewiß, daß unsere Steuern im nächsten Jahr
'it is certain that our taxes in-the next year

erhöht werden.
raised will-be'

b. Es ist gewiß, unsere Steuern werden im nächsten
'it is certain our taxes will-be in-the next

Jahr erhöht.
year raised'

c. *Es ist gewiß, unsere Steuern im nächsten Jahr
erhöht werden.

The "daß"-less complements have received relatively little attention in the generative literature on German word order, given the almost exclusive concern with the explanation of matrix clause word orders as the presumed "core cases" of V2 positioning. I shall argue that these cases of V2 word order in German subordinate clauses in fact yield some crucial evidence for deciding between competing analyses of Germanic underlying structure and consequently of V2 movement.

There are three possible ways of looking at these clauses, given the traditional framework. The first--that they are cases of simple deletion of the complementizer "daß" --can be dismissed outright. These structures are in clear contrast with saying and thinking verb complements in the mainland Scandinavian languages, where, as noted by Holmberg (1986) and by Platzack (1986b), the finite complementizer may be omitted and the verb in the subordinate clause remains in its "verb-third" position after the nexal adverbial, as in Platzack's Swedish example:

(10) Det var konstigt (att) min syster inte ville
'it was strange (that) my sister not wished

säga något.
say anything'

Whatever accounts for the lack of verb movement in (10) obviously does not explain the behaviour of the verb in the German examples, where V2 is forced in the complement clause. Secondly, the German clauses cannot be considered variants of direct reports or quotations, as a first-person subject would be required in the quotations corresponding to the subordinate clauses in (7b) and (8b).

The third possibility, the one which seems to be implicit in most work which deals with these clauses (e.g. Reis (1985); Haider (1986); Schwartz and Vikner (1989); Webelhuth (1989)), is that they fall together with the complements of assertive verbs of saying and thinking in many languages as being contexts which permit a range of embedded root phenomena, i.e. they are a type of "EMC", as defined in Chapter Two. This means that they are derivable by the same syntactic operations as matrix clauses, in the traditional analysis via movement of the finite verb eventually into C^0.

It was noted in Chapter Two that the analysis usually proposed for EMCs is that they are [C^0 CP] structures, i.e. that the [-WH] complementizer which heads these clauses can, in many languages (including the mainland Scandinavian languages, Icelandic, Frisian and English), exceptionally select a CP rather than the characteristic IP complement.[7] This makes a second, lower C^0 position, as well as a SPEC-CP position, available for the finite verb and another constitu-

[7]But cf. Diesing (1990) for Yiddish.

ent (a subject or non-subject) to move to, respectively. Thus Holmberg (1986) and Platzack (1986a, 1988) derive subject-first and non-subject-first EMCs in a manner which is exactly parallel with the traditional analysis of matrix clauses, e.g. in Swedish:

(11) a. Han sa att $[_{CP}$ Bengt$_j$ kunde$_i$ $[_{IP}$ e_j e_i e_i
'he said that Bengt could
göra det]]
do it'

b. Han sa att $[_{CP}$ nu$_j$ kunde$_i$ $[_{IP}$ Bengt e_i e_j e_i
'he said that now could Bengt
göra det]]
do it'

De Haan and Weerman (1986) argue for an essentially similar analysis for assertive verb complements which exhibit V2 order in addition to other matrix clause characteristics in Frisian.

Returning to the German clauses, a first point of dissimilarity therefore relates to the complementizer itself. While the [-WH] complementizer is typically present in EMCs, it is curiously absent in the German sentences: the V2 order (e.g. in (7b), repeated below) is <u>only</u> grammatical when the complementizer is <u>omitted</u>:

(7) b. Er hoffte, (*daß) er könnte eine Lösung finden.
'he hoped he could a solution find'

Haider (1986) discusses the German "daß"-less clauses in some detail, correctly pointing out that the V2

pattern is incompatible with a [+WH] element. Thus when a typical bridge verb, such as "sich denken" ('imagine'), accepts a [+WH] as well as a [-WH] clausal complement, only subject-first, verb-final order is possible in the indirect question case, as evidenced by the following paradigm:

(12) a. Ich kann mir denken, daß er ihr die ganze
'I can (refl.) imagine that he her the whole
Geschichte erzählt hat.
story told has'

b. Ich kann mir denken, er hat ihr die ganze
'I can (refl.) imagine he has her the whole
Geschichte erzählt.
story told'

c. Ich kann mir denken, was er ihr erzählt hat.
'I can (refl.) imagine what he her told has'

d. *Ich kann mir denken, was er hat ihr erzählt.

e. *Ich kann mir denken, was ihr hat er erzählt.

f. *Ich kann mir denken, was hat er ihr erzählt.

Pursuing the idea that German "daß"-less clauses are EMCs with an empty higher C^0 node and thus, by analogy with the Swedish examples (11a) and (11b), have the underlying structure [C' e [CP e [C' e [IP]]]], (12d) and (12e) could presumably be ruled out on the basis that the CP in an EMC is a structural island, which would serve to preclude [+WH] extraction out of the CP to the higher C^0 ! The prohibited structure (12f) suggests, however, that even assuming extraction to the higher C^0 is prohibited, or, alternatively, that

! The island-like property of the CP in an EMC might indeed be attributable to its being a "non-complement" of C^0, rather than to subjacency considerations as commonly assumed (e.g. by Holmberg (1986); Diesing (1990)).

there is no higher C^0, the V2 clause still cannot be a CP. Haider attempts to save the account by proposing that the class of lexical items in question optionally selects a complement of the form [$_{CP}$ e [$_{C'}$ e [$_{IP}$]]], such that the inflected verb moves to the empty C^0, with a specific prohibition on [+WH] elements appearing in COMP (read "in the SPEC-CP position").[9]

The problem with this explanation is that it reflects only a part of the correct generalization about these subordinate V2 structures. Not only is the V2 pattern in these clauses incompatible with a fronted [+WH] phrase, it is also <u>generally incompatible with topicalization or fronting of any kind</u>, as well as with the various other matrix clause characteristics which are typically permissible in contexts where embedded root phenomena show up in other languages, e.g. contrastive left dislocation and VP preposing, i.e. these clauses are <u>subject-first</u>. Contrary to the contention of Schwartz and Vikner (1989), sentences such as the following--with a topicalized non-subject phrase in first position in the "daß"-less complement clause--are not possible in standard German discourse:

(13) *Ich kann mir denken, [die ganze Geschichte hat er
'I can (refl.) imagine the whole story has he

ihr erzählt.]
her told'

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[9] Schwartz and Vikner (1989) and Webelhuth (1989) argue for a similar analysis based on CP-selection by the verbs, etc., in question and movement of the embedded verb to C^0 in the absence of a complementizer followed by XP-fronting. Webelhuth makes a similar observation that these V2 complements are incompatible with a [+WH] COMP structure.

(14) *Von der Illusion, [**die ganze Welt könnte** er
'from the illusion the whole world could he

erobern,] hat er sich nie befreien können.
conquer has he (refl.) never liberate be-able'

(15) *Er sagte, [**kommen würde** sie morgen.]
'he said come would she tomorrow'

(16) *Sie hoffte, [**rechtzeitig würde** sie eintreffen.]
'she hoped on-time would she arrive'

whereas the bracketed structures are of course perfectly acceptable in isolation, i.e. as matrix clauses, where <u>non-subject-first</u> orders of all types are extremely common. Sentences like (13-16) are also not found in contemporary German writing; the bracketed clauses would have to be set off by a dash or colon, i.e. by some stronger form of punctuation indicating a full pause, caesura or break in the sentence. On the other hand, a <u>subject-first</u> complement clause appears naturally in this context, separated from the verb merely by a comma, which in accordance with current German punctuation conventions is used to set off all subordinate clauses from their superordinate clauses.

It has been pointed out to me that speakers of some German dialects may sometimes--apparently with much idiosyncratic variation from speaker to speaker and sentence to sentence--judge sentences with the structure and written form of (13-16) to be possible sentences in their dialect. If this is indeed the case, it merely suggests to me that embedded root phenomena may, not implausibly, be making inroads in the dialects in question. Presumably, such sentences would, in these dialects, receive an analysis equivalent to the analysis EMCs receive in languages which are patently amenable to them, such as Swedish, Frisian, etc., as in Swedish (11b), except

that the higher C^0 in such German EMCs would be empty rather than containing the [-WH] complementizer. This in no way detracts from the clear-cut subject-first/non-subject-first asymmetry we find in V2 complements in standard German, which is formulated as a "rule" in prescriptive grammars, e.g. in Cochrane (1963, p. 196): "If daß is omitted, the normal (read "subject-first" per his preliminary definitions, p. 191) word order is required." A similar reference to the prescribed order [subject - finite verb - other constituents] for these V2 complements is found in the summary of grammar rules section of the Wahrig Deutsches Wörterbuch, a standard German dictionary.[10] In conjunction with the evidence from native speaker judgments and literary texts, this textbook prescription establishes that--at least in standard High German and perhaps in other languages/dialects of the continental West Germanic subtype--we are dealing with a distinct syntactic phenomenon in the complements of the lexical class in question, and one which demands an explanation.

Clearly, then, the German "daß"-less complements must be structurally distinguished from EMCs. But more significantly, the I^0-final description of continental West Germanic base word order is unable to account for such subject-first condition in these "daß"-less complements, since that analysis (like all versions of the traditional analysis) of necessity assumes that the moved verb in V2 structures always lands in C^0 and that subjects and non-subjects are fronted indiscriminately to the SPEC-CP position. In short, we have here some crucial evidence from a class of subordinate clauses of a pre-verbal subject/pre-verbal non-subject asymmetry in German which is comparable to that

[10]See Gerhard Wahrig: Deutsches Wörterbuch mit einem »Lexikon der deutschen Sprachlehre« (1975), section 5.2 on page 107.

exhibited in Icelandic embedded [+WH] structures, which latter asymmetry uncontroversially motivates a post-subject I^0 node to serve as a landing site of verb movement in that language. We therefore have support for Travis' claim that pre-verbal subjects must likewise be structurally distinguished from pre-verbal non-subjects in German. Moreover, having established that there is at least one class of V2 structures--indeed a very common class of structures in German--in a Germanic language outside the Icelandic/Yiddish subgroup, which cannot be accommodated in a "movement to C^0" framework, we have an important piece of evidence for I^0 -second underlying word order in the continental West Germanic languages and, by extension, converging evidence for I^0 -second as a cross-Germanic generalization.

In next chapter I will discuss how, given the premise of I^0 -second underlying order I have argued for, the framework based on the ECP, as developed by Travis, can account for verb movement in all the various clause types in the different Germanic language subtypes illustrated in the preceding chapters, and how the cross-linguistic variation can be explained. My arguments will incorporate certain modifications and extensions to the Travis account, and in particular a new proposal regarding the German "daß"-less complement clause data which I have shown here to be problematical for the traditional analysis.

CHAPTER FOUR
THE INFL-SECOND/ECP ANALYSIS

4.1 Introduction

The claim that sentences with pre-verbal subjects should be distinguished structurally from those with pre-verbal non-subjects in all the Germanic "V2 languages", as made by Travis (1984, 1987), is fundamentally at variance with traditional approaches which have prevailed since the earliest generative accounts of the continental Germanic languages and which in one form or another characterize V2 surface orders in these languages as the uniform result of movement to C^0.[1] In the previous chapter, German clausal complements with the complementizer "daß" omitted, which have subject-first V2 order only, were presented as important evidence for the necessity of this distinction and, accordingly, for Travis' proposal that all the Germanic languages have a post-subject I^0 node at d-structure (SUBJ-I-VP underlying order), which may serve as the final target site of V2 movement in subject-first sentences.

I have also discussed, in Chapter Two, some serious shortcomings, at both the theoretical and empirical levels, of the "triggers" of V2 which have been argued for within the framework of the traditional analysis of Germanic. In this chapter I will show that Travis' explanation, which exploits a version of the ECP as the fundamental principle motivating all cases of verb movement, offers a far more coherent solution to

[1] Thiersch (1978) notes that a non-congruent analysis of Germanic subject-first and non-subject-first matrix clauses has only occasionally been argued for in the literature, e.g. by Haiman (1974).

the "V2 trigger" question. I shall also extend the Travis I^0-second/ECP framework in a manner which will enable all the data presented in the preceding chapters to be accounted for without encountering the kinds of pitfalls for which the various explanations based on the traditional analysis have been criticized.

4.2 Fundamentals of the ECP Account

The basic intuition behind Travis' account is that, given the common base structure tree illustrated in section 3.2 (p. 57), verb positioning in all the Germanic languages falls out from the theory of the distribution of empty categories, with particular reference to empty heads. The basic theoretical principles (from Travis (1987)) are as follows:

Empty Category Principle (ECP)

Empty categories must be identified.

Identification

An empty category is identified iff

- its position is identified, i.e. the gap is properly governed; and
- its content is identified, i.e. the features of the gap are recoverable.

Proper Government

α properly governs ß iff α governs ß and

(i) ß is a complement or the head of a complement of α, or

(ii) α is an antecedent for ß.

The idea is that heads (unlike maximal projections), including the functor nodes (per Abney (1986)), may be base-generated without lexical content, although they may carry features, making them subject to the ECP.[1] The effect is to force movement to fill a base-generated empty I^0 and/or C^0 in cases where the gap (e) in question is not properly identified because either of the above conditions is not satisfied. Moreover, features of heads are retrieved (as required for the second condition) not by chain co-indexing as in the case of maximal projection movement (which leaves behind co-indexed traces of the form t_j), but by "head feature transmission" which is subject to the following restriction:

Restriction on Head Feature Transmission

Head features may only be transmitted from a head to its sister.

Once the features of a head are assigned to its sister maximal projection, they then percolate to the head of that maximal projection. This effectively imposes a strict locality condition on the movement of heads (Head Movement Constraint), i.e. a Y^0 may only move into an X^0 which properly governs it via YP, a complement of X^0. (See also Lamontagne and Travis (1986); also Koopman (1984), Chomsky (1986a) and Baker (1988b) for different formulations.)

As already pointed out in Chapter Three, Travis makes a major departure from the traditional account by

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[1] Notably, this is at variance with Chomsky (1986a), in which the ECP is a chain phenomenon, applying only to traces left by movement. Travis' ECP, extended to apply to base-generated empty heads, has more in common with the ECP-framework of Chomsky (1981), as used by Stowell (1981) to account for the generalizations of English "that"-drop and similarly by Platzack (1986b) for Swedish "att"-drop.

assuming that ordinary subject-first declarative matrix clauses are projections of I^0 only, i.e. they are base-generated as and remain IPs in all in Germanic languages. Only when a constituent is fronted or questioned, or an abstract operator (such as a phonetically null Q-morpheme) is introduced at the periphery of the sentence, may a CP projection be considered to be generated. Moreover, this only occurs to the extent that the optional SPEC-CP position provided for by the base structure tree is exploited by the particular language type as the target site for these fronted categories, the fronting rules for various classes of categories being subject to considerable cross-linguistic variation with particular consequences for the "V2 languages". Another significant departure from traditional approaches is the assumption--which seems latterly to have been endorsed by Kosmeijer (1986, 1987) and Platzack (1988)--that the finite verb may remain in its d-structure position within VP, and is not required to move to amalgamate with I^0, provided empty I^0 is appropriately identified by the features contained in C^0, making the gap licit. In such cases, inflection is likewise assumed to be achieved through head feature transmission, the inflectional features in I^0, which is otherwise empty, being transmitted to the head of its VP complement where they are realized phonetically on the verb.[3]

Given this framework and I^0-[illegible]d base word order, the finite verb may surface in one of t[illegible]ee locations in the Germanic verb moving languages, namely, as exemplified by German:

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[3] Alternatively, inflectional morphology could be generated directly on the verb at d-structure and "checked" for correspondence with the features of I^0, in the manner of Fabb (1984, cited in Travis (1984)).

The head of VP[4] in a clausal complement[5]:

(1) Johann meint, ...
'John thinks

[$_{C'}$ daß [$_{IP}$ Karl [$_{I'}$ e [$_{VP}$ das Buch wahrscheinlich
that Karl the book probably

---

[4] As already noted in earlier chapters, I shall not illustrate scrambling movements within VP in my German examples, the only aspect of the internal structure of the German VP which is relevant here being its head-finalness, which is uncontroversial.

[5] I assume with Travis that tensed clausal complements in German and the other V-final Germanic languages are extraposed from their argument position, but remain within the complement domain of the matrix main verb which subcategorizes them. Clear evidence for extraposition is found in sentences involving multiple embeddings, where complement clauses must move rightward around the entire cluster of verbs at the end of their superordinate clause, e.g. (only the relevant movement is shown here):

Es ist klar, daß Johann t_j gemeint hat,
'it is obvious that Johann thought AUX (+perf.)

[daß Karl das Buch wahrscheinlich gekauft
that Karl the book probably bought

hätte/hatte]$_j$.
had'

Webelhuth's (1989) claim that German verbs actually select clausal complements in a rightward direction would seem difficult to maintain in light of such examples.

Incidentally, the seemingly desirable notion that an extraposed clausal complement nonetheless remains within the argument-taking verb's complement domain is more easily accommodated in an I-second/V-final framework where a moved clause can stay within its superordinate VP, rather than move completely out of I' as would clearly be necessary to derive the lowest clause in the above sentence if German were I-final as traditionally assumed.

gekauft hat/habe]]]][6]

bought has'

The head of IP in a subject-first matrix clause:

(2) $[_{IP}$ Karl $[_{I'}$ hat $[_{VP}$ das Buch wahrscheinlich gekauft e]]]

'Karl has the book probably bought'

The head of CP in other structures, e.g. a topicalized matrix clause:

(3) $[_{CP}$ wahrscheinlich$_j$ $[_{C'}$ hat $[_{IP}$ Karl $[_{I'}$ e $[_{VP}$ das Buch t_j

' probably has Karl the book

gekauft e]]]]]

bought'

In (1), the embedded finite verb is in its d-structure position, where it may--indeed must--remain, because empty I^0 is identified by the lexical complementizer in C^0 which properly governs and transmits the appropriate features to I^0.[7]

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[6] The indicative and subjunctive forms of the finite verb ("haben") are interchangeable in this type of complement clause, i.e. following a matrix verb which is in the present tense.

[7] Travis suggests the transmission of features to an identified empty node effectively "fills" the node in some sense, preventing movement into I^0 from occurring in such structures. I have also adopted her practice of not co-subscripting heads vacated by head to head movement, which would be inconsistent with the underlying theoretical assumption that such movement does not leave behind co-indexed traces. I leave it for the reader to infer the path of movement resulting in s-structure "e" in accordance with the

In (2), <u>one movement only</u> of the finite verb has taken place, the head V^0 of VP having been forced to move into the base-generated empty I^0 which was not properly governed:

(2a) d-structure of (2):
$[_{IP}$ Karl $[_{I'}$ e $[_{VP}$ das Buch wahrscheinlich gekauft hat]]]

In the resulting s-structure (2), the empty head of VP vacated by head movement is licit, its contents identified by the features of I^0. Unlike in the traditional analysis, no further verb movement is necessary here: the subject remains in its base position, the finite verb remains in I^0, and <u>no CP is generated</u>.

In (3), on the other hand, the adverb "wahrscheinlich" has been topicalized, fronting to SPEC-CP and creating a CP:

(3a) d-structure of (3) with maximal projection movement:
$[_{CP}$ wahrscheinlich$_j$ $[_{C'}$ e $[_{IP}$ Karl $[_{I'}$ e $[_{VP}$ das Buch t_j gekauft hat]]]]

In (3a), neither C^0 nor I^0 is properly governed, triggering <u>two applications of movement</u> of the finite verb to derive (3): the verb is forced to move through I^0 to C^0 to prevent an ECP violation. In the resulting s-structure (3), the features of the empty heads of IP and in turn of VP, vacated by head movement, are retrievable from C^0.

Head Movement Constraint (<u>supra</u>).

4.3 Parameters of Germanic Word Order

Using the ECP as the basic "trigger" for all verb movement as described above, Travis is able to characterize the variation in verb positioning in the basic clause types among the subgroups of the Germanic verb moving languages in terms of three word order "parameters"[8], as follows:

Parameter 1: VP Headedness (head-initial/final).
Parameter 2: Adjunction to IP (whether used for fronting rules).
Parameter 3: COMP Features Identify INFL (whether sufficient to identify the contents of INFL).

The values for these parameters selected by the major verb moving language subgroups are schematized as follows (Travis (1987)):

	Icelandic/ Yiddish (I/Y)	Mainland Scandinavian (MSc)	Continental West Germanic (CWG)
VP Headedness (Head-initial = "+")	+	+	-
Adjunction to IP	-	-	-
COMP Features Identify INFL	-	+	+

In the next sections I shall show how the Travis schema can effectively account for the major cross-linguistic differences and similarities among the Germanic languages with respect to

[8] Travis' characterization of these language differences as parameters is offered with the proviso that their theoretical status as such is still quite unclear and the hope that these putative "parameters" will "ultimately be subsumed under larger, more explanatory parameters".

word order. I shall first review the three standard clause types Travis herself discusses, namely subject-first and non-subject-first matrix clauses and tensed complement clauses with complementizers, and then illustrate how the analysis can be extended to cover the German data from Chapter Three and the additional clause types discussed in Chapter One, as well as certain special facts about English.

4.4 Matrix Clauses

The analogues of the German subject-first matrix clause (2) above in Swedish and Icelandic, which exhibit the same V2 word order, receive a parallel analysis in the ECP account. The only difference is in the d-structure position from which the head of VP moves to the empty head of IP, as reflected in the "+ head-initial" value selected by mainland Scandinavian and Icelandic/Yiddish for the VP Headedness parameter, as opposed to the "- head-initial" value selected for continental West Germanic:

(4) $[_{IP}$ Sven $[_{I'}$ har $[_{VP}$ troligen $[_{VP}$ e köpt boken]]]]
'Sven has probably bought the-book'
(Swedish)

(5) $[_{IP}$ Helgi $[_{I'}$ hefur $[_{VP}$ trúlega $[_{VP}$ e keypt bókina]]]]
'Helgi has probably bought the book'
(Icelandic)

Moreover, it is to be noted that (4) and (5) are exactly parallel structurally with their analogues in many other SVO-type "non-V2 languages"--which are nonetheless verb-moving (V to I) languages--such as the Romance languages. In French,

for example, the head of VP also raises to I^0, presumably for the same reason as in the Germanic examples, i.e. to prevent an ECP violation:

(6) $[_{IP}$ Jean $[_{I'}$ a $[_{VP}$ probablement $[_{VP}$ e acheté le livre]]]]
'Jean has probably bought the book'

However, unlike Romance, when any other category is topicalized in Icelandic or Swedish, a <u>second</u> movement of the finite verb is triggered as in German (3). This is attributed to the fact that the Scandinavian languages (and likewise Yiddish) share with the continental West Germanic languages the "-" selection for the Adjunction to IP parameter, i.e. they <u>typically do not exploit IP Adjunction</u> as a fronting rule option. Rather, as a general rule, <u>all</u> fronted categories land in SPEC-CP, creating a CP with an empty head which is not properly governed and which must therefore be filled by movement of the head of VP through I^0 to C^0, always resulting in strict V2 surface order:[9]

(7) $[_{CP}$ Troligen$_j$ $[_{C'}$ har $[_{IP}$ Sven $[_{I'}$ e $[_{VP}$ t_j
'probably has Sven

$[_{VP}$ e köpt boken]]]]]
bought the-book'

(Swedish)

[9] I continue to equate Yiddish with Icelandic in terms of its basic word order typology, duly noting that it would require a special classification along the lines discussed in Chapter Two, if Diesing's (1990) claims can be maintained.

(8) $[_{CP}$ Trúlegaj $[_{C'}$ hefur $[_{IP}$ Helgi $[_{I'}$ e $[_{VP}$ t_j

'probably has Helgi

$[_{VP}$ e keypt bókina]]]]]]

bought the-book'

(Icelandic)

The movement of the matrix clause verb to the pre-subject (V2) position following fronting of the various classes of elements which may be topicalized in these languages, as illustrated in Chapter One, will accordingly be accounted for in a manner consistent with (3), (7) and (8) above. Thus fronting (topicalization) of a subordinate clause is likewise assumed to reflect movement of that entire clause to SPEC-CP of the matrix clause, creating a matrix CP which in turn triggers two applications of movement of the matrix verb, through I^0 to C^0. For example, fronting of the German adjunct clause (= example (6) from Chapter One) will yield the matrix V2 s-structure:

(9) $[_{CP}$ [Wenn er das Geld nicht hat,]$_j$ $[_{C'}$ kann $[_{IP}$ er

'if he the money not has can he

$[_{I'}$ e $[_{VP}$ $[_{VP}$ sich das Buch von der Bibliothek

(refl.) the book from the library

ausleihen e] t_j]]]]]

borrow'

Thus the Adjunction to IP parameter serves to distinguish the Germanic "V2 languages" from English, Romance and

a wide variety of other language groups[10], which use Adjunction to IP for fronting of certain classes of elements and consequently do not exhibit generalized V2 word order in matrix clauses. In English, [+WH] and certain other "operator"-like elements do move to SPEC-CP, resulting in V2 effects (V/I to C^0) in these particular structures only, e.g.:

(10) $[_{CP}$ Which books$_j$ $[_{C'}$ has $[_{IP}$ he $[_{I'}$ e $[_{VP}$ e read t_j]]]]]

while [-WH] phrases adjoin to IP:

(11) $[_{IP}$ Probably$_j$ $[_{IP}$ John $[_{I'}$ has $[_{VP}$ t_j
$[_{VP}$ e bought the book]]]]]

Since adjunction to IP does not create a CP, the auxiliary verb in I^0 moves no further in (11), surfacing in superficial third position in contrast with its "V2 language" counterparts (3), (7) and (8). Indeed, the particular contexts (classes of fronted categories) in which individual languages take up the option of IP Adjunction for maximal projection movement vary considerably across "non-V2 languages". For example, Travis (1987), based on Torrego's (1984) data, notes that in Spanish, [+WH] arguments can only front to SPEC-CP (as do [+WH] arguments and non-arguments alike in English), while Spanish [+WH] non-arguments may either move to SPEC-CP or adjoin to IP. In a similar vein, [+NEG] phrases front to SPEC-CP in English, while in French they adjoin to IP.

Thus the ECP analysis has the important conceptual advantage of being able to account for all matrix clause V2

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[10]For example, the Afrikan Kru languages studied by Koopman (1984), which have V^0 to I^0 raising like Romance, but do not exhibit V/I to C^0.

phenomena in a uniform manner across languages, in contrast with traditional approaches, the explanation being based on an independently motivated, very general principle of grammar. Moreover, the account does not entail invoking any exceptional d-structure properties for any of the "V2 languages" or the "non-V2 languages" with regard to the projections of the functional categories I^0 and C^0, as was shown to be the case with the other "trigger" hypotheses based on the traditional premise that "verb-second" equates with movement to C^0.[11]

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[11]It is appropriate to include a word about "EMCs" here. As noted in earlier chapters, they exhibit all the characteristics of matrix clauses, possibly being more akin to direct statements, and, properly speaking, should be teased out of an analysis of embedded clauses as being "non-complements" of the complementizer "that" and its various cognates in the languages which allow such "embedded root phenomena". Holmberg (1986) has suggested that the fact that Travis' (1984) theory requires a non-congruent analysis of subject-first EMCs and non-subject-first EMCs represents a disadvantage, whereas in the traditional analysis they can all be assigned the same exceptional structure, namely [C^0 CP]. I fail to understand how this is a drawback for Travis' account. Indeed, forcing a [C^0 CP] analysis of <u>all</u> EMCs leads to the same difficulties as a congruent analysis of matrix clauses, which is what prompted Travis to argue for a structural distinction between subject-first and non-subject first sentences in the first place. Moreover, the uniform [C^0 CP] analysis cannot be extended to English EMCs. In the I-second/ECP account, the structure under the [-WH] complementizer in an EMC will be an IP if it is subject-first and a CP if topicalization has occurred, exactly as in ordinary matrix clauses, but in both cases the head-complement relation between the complementizer and the following structure (whether IP or CP) will be assumed to have been interrupted. The breakdown of the complement relation between the nexal C^0 and what follows it will also account for the fact that all EMCs are structural islands.

4.5 Complement Clauses

4.5.1 Tensed Complements

In the ECP account, unlike in traditional accounts of the mainland Scandinavian languages[12], the head of VP remains in its d-structure position in the Swedish equivalent of the tensed complement clause in (1), as it does in its German counterpart. Again, the assumption is that the gap in I^0 is identified, as to both its position and its content, by the lexical complementizer in C^0. But Scandinavian VPs being head-initial, rather than head-final as they are in German and its congeners, the lack of verb movement here results in the characteristic "verb-third" embedded surface order, with the VP-adjoined IP-Adv intervening between the subject and the finite verb, thus obviating the need for a "special" I'-external adverb adjunction position as was required in previous analyses of the mainland Scandinavian subgroup:

(12) Jan tror ...
'Jan believes

$[_{C'}$ att $[_{IP}$ Sven $[_{I'}$ e $[_{VP}$ sannolikt
that Sven probably

$[_{VP}$ har köpt boken]]]]
has bought the-book'

The [-WH] complementizer can also be freely deleted in mainland Scandinavian without affecting the structure of the complement clause. In that case, the empty C^0 will be "saved" from the ECP--as per Platzack's (1986b) original explanation which squares with the one adopted here--by virtue of being in

[12] I.e., until Kosmeijer (1986), (1987); Platzack (1988).

the complement domain of, hence properly governed by, and in terms of Travis' account identified by, the matrix verb via the clause (C') it heads. Once C^0 is identified, the features of the matrix verb may be further transmitted to the head of the embedded IP complement of C^0, and since I^0 too is identified, no verb movement will occur.

In Icelandic, on the other hand, where embedded V2 effects (V to I) are triggered in sentences like the equivalent of (12):

(13) Jón segir ...
'Jon says

$[_{C'}$ að $[_{IP}$ Helgi $[_{I'}$ hefur $[_{VP}$ trúlega
that Helgi has probably
$[_{VP}$ e keypt bókina]]]]]
bought the-book'

it is clear, in terms of the ECP account, that empty I^0 in the corresponding d-structure (13a) cannot have been identified by the complementizer "að" in C^0, as otherwise there would be no reason for movement to have occurred to derive (13):

(13a) d-structure of (13):

Jón segir ...
$[_{C'}$ að $[_{IP}$ Helgi $[_{I'}$ e $[_{VP}$ trúlega
$[_{VP}$ hefur keypt bókina]]]]]

Since the structural/functional relationship between C^0 and its IP complement appears identical in (12) and (13), Travis imputes the movement of the finite verb into I^0 in (13) only to the inability of the Icelandic complementizer "að" to

transmit features to I^0. Movement is thus triggered to fill the empty head whose position is identified but whose content is not.[13] Similarly, the inability of the Yiddish complementizer "az" to identify the empty head of its IP complement is considered responsible for the embedded V2 effects exhibited by that language, accounting in particular for the movement of the finite verbal root to the post-subject position in subordinate as well as matrix clauses involving particle verb structures, e.g.:

(14) Ikh gloyb ...
'I believe

$[_{C'}$ az $[_{IP}$ er $[_{I'}$ **shikt** $[_{VP}$ haint $[_{VP}$ **avek**-e dem briv]]]]]
that he sends today off the letter'

These data lead Travis to propose her third parameter. The distinction is made between the Icelandic/Yiddish subgroup, which have a "-" setting for the COMP Features Identify INFL parameter, and the mainland Scandinavian and continental West Germanic languages which pattern together in having a "+" setting for this parameter. So formulated, this "parameter" suggests that the inability to identify the contents of an empty I^0 is a general property of all complementizers in languages such as Icelandic and Yiddish. While languages appear to behave quite consistently in this regard, the possibility is left open that, as a property attaching to a class of lexical items, there may be some variation among complementizers within a given language. I shall argue below that this is indeed the case in German.

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[13]There are no equivalent examples with complementizer deletion available in Icelandic to compare with the Swedish ones, apparently because the deletion of Icelandic "að" is restricted for independent reasons. (See Holmberg (1986).)

4.5.2 German "daß"-less Complements

I now return to the "daß"-less alternative complement structures in German which I introduced in Chapter Three as crucial evidence for Germanic I^0-second base word order, arguing that their subject-first V2 order is not amenable to a traditional-type analysis in terms of "movement to C^0". Assuming, therefore, that we have here another case (as in Icelandic and Yiddish) of V^0 to I^0 movement being responsible for V2 order in a class of true subordinate clauses, we must now address the question of the status of the C^0 node in these structures and how we can account for the movement under the ECP analysis.

Unlike the Icelandic and Yiddish structures which exhibit "embedded V2 effects", the German structures in question have no overt complementizer heading the embedded clause, as in the "daß"-less equivalent of (1) above:

(15) Johann meint, Karl **hat/habe** das Buch wahrscheinlich
'Johann thinks Karl has the book probably

gekauft.
bought'

I have already suggested in Chapter Three that the possibility that C^0 in the embedded clause is merely an "empty" category, either by virtue of being base-generated as such or as a result of deletion or "dropping" of the complementizer "daß", can be ruled out. Such an empty head would be properly governed by the matrix verb or other category of which the clause is the complement. In terms of the two-part identification required for empty heads under the ECP analysis, such matrix head, if it is lexical as in the case of an *in situ* main verb, a noun or an adjective, could presumably transmit

features to the embedded C^0 and from there to the embedded I^0 such that both these empty heads would be identified. If the argument-taking verb of the matrix clause has moved to I^0, as is the case in (15), both functional heads of the embedded clause would still be identified: here the chain of feature transmission would begin with the moved matrix verb in I^0, which would transmit features to the V^0 head of the matrix VP vacated by verb movement, which features would in turn be transmitted to C^0 and I^0 of the complement clause. An empty C^0 should therefore have no effect on the position of the verb in a complement clause, as indeed it does not in Scandinavian complement clauses with deleted complementizers where the embedded "verb third" order is preserved as we saw in Chapter Three. The fact that the German finite verb, e.g. "hat/habe" in (15), moves from its clause-final (VP-final) base position into the post-subject (V2) position indicates that an "empty C^0" analysis does not carry over to these German "daß"-less clauses, which accordingly cannot be of the form:

(16) $[_{XP} \ldots t_j \; X^0 \; [_{C'} \; e \; [_{IP} \; NP \; [_{I'} \; e \; [_{VP} \ldots V^0]]]]_j \;]$

On the other hand, an account in terms of bare IP-selection by this lexical class does not seem to be a viable alternative either. If the relevant portion of (15) were instead of the form:

(17) $[_{XP} \ldots t_j \; X^0 \; [_{IP} \; NP \; [_{I'} \; e \; [_{VP} \ldots V^0]]]_j \;]$

the ECP analysis would still predict that the embedded finite verb should remain in its VP-final d-structure position, as the embedded empty I^0 would still be identified by a matrix clause member--in this case by the IP-complement-taking matrix verb in matrix I^0, via the vacated V^0 position.

Clearly, then, these structures must have a non-empty C^0 node. I therefore propose that C^0 in these clauses contains an abstract "Ø" [-WH] complementizer with null phonetic realization (an alternate to "daß"), which makes C^0 impervious to feature transmission from outside its own clause, effectively interrupting the chain of empty head identification as do "daß" and other German complementizers. Thus the class of German verbs, nouns and adjectives which may select this type of tensed clause have an additional optional subcategorization frame specified for their argument structure, namely:

(18) $[_{XP} \ldots X^0 \quad [_{C'} \ Ø \quad \underset{[+tense]}{IP} \ ]]$

in addition to:

(19) $[_{XP} \ldots X^0 \quad [_{C'} \ daß \quad \underset{[+tense]}{IP} \ ]]$

as well as:

(20) $[_{XP} \ldots X^0 \quad [\quad \underset{[-tense]}{IP} \ ]]$

in the case of those which also select an infinitival. An important difference between the two [-WH] tensed clause complementizers "Ø" and "daß", however, is that "Ø" is unable to transmit the features necessary to identify the head of its own IP complement, hence triggering V^0 to I^0 as in the derivation of the complement clause in (15):[14]

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[14] A second difference, which will emerge later, is that German Ø always blocks extraction, whereas some dialects allow extraction over "daß".

(21) $[_{IP}$ Johann $[_{I'}$ meint, $[_{VP}$ t_j e
'Johann thinks

$[_{C'}$ Ø $[_{IP}$ Karl $[_{I'}$ hat/habe $[_{VP}$ das Buch
Karl has the book

wahrscheinlich gekauft e $]]]]_j$ $]]]$
probably bought'

A similar derivation would obtain for the parallel "daß"-less noun-complement and adjective-complement structures illustrated in Chapter Three, e.g.:

(22) $[_{NP}$ die t_j Hoffnung,
'the hope

$[_{C'}$ Ø $[_{IP}$ er $[_{I'}$ würde $[_{VP}$ eine Lösung finden e $]]]]_j$ $]$
he would a solution find

(23) $[_{IP}$ Es $[_{I'}$ ist $[_{VP}$ $[_{AP}$ t_j gewiß ,
'it is certain

$[_{C'}$ Ø $[_{IP}$ unsere Steueren $[_{I'}$ werden $[_{VP}$ im nächsten
our taxes will-be in-the next

Jahr erhöht e $]]]]_j$ $]$ e $]]]$
year raised'

Indeed, the Ø complementizer I propose would be atypical of German complementizers, resembling instead the general behaviour of complementizers in Icelandic and Yiddish with respect to Travis' third parameter. As mentioned above, such language internal variation is a possibility the ECP account allows for in that the ability of complementizers to transmit features is conceived as a property of lexical items. Especially as it is an abstract element without phonetic

content, it is not inconceivable that the ∅ complementizer might lack sufficient features to identify empty I^0.

The idea of such abstract elements with null phonetic realization (as opposed to empty categories) activating syntactic movement is hardly new, as evidenced by the proposals for various sentence-peripheral abstract operators (such as the "Q-morpheme") triggering subject-verb or -aux inversion (= V/I^0 to C^0 in current frameworks) discussed in Chapter One. Nor is the notion of an abstract head category, in particular an abstract complementizer, without precedent, a "∅" complementizer having been proposed more than once in other contexts in the GB literature.[15] What will undoubtedly be more controversial is my further claim that the German "∅" complementizer in structures like (21-23) is an absolute barrier to extraction out of its IP complement--a claim I shall substantiate in Chapter Five. By this I mean that not only is movement to a lower SPEC-CP impossible--these complement clauses being subject-first like their equivalents with "daß" as we saw in Chapter Three--but neither is extraction possible via successive cyclic movement to a higher clause. Indeed, as I shall show, "long extraction" over C^0 (through a SPEC-CP "escape hatch") is a very restricted phenomenon in German which, to the extent it is allowable (there being considerable dialectal variation), is only possible over the complementizer "daß". IP complements of the German [+WH] complementizer "ob" ('whether') are islands with respect to

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[15] E.g. by Kayne (1981), after Chomsky and Lasnik (1977), as part of an attempted explanation of the differing properties of "believe"-type verbs in English and French with respect to control and exceptional case marking. See also Platzack (1986a), who has suggested a phonetically null complementizer is present in C^0, selected by the matrix verb, in indirect questions, alternating in Swedish with the morpheme "som".

extraction and I shall contend, in the face of certain purported counterevidence, that the alternate [-WH] complementizer "Ø" in fact patterns with [+WH] "ob" with respect to the island-creating property.

4.5.3 Infinitival Complements

While not discussed by Travis (1984, 1987), the ECP analysis appears to extend very neatly to infinitival complement clauses, in particular to the Scandinavian data supplied by Holmberg (1986) and by Platzack (1986a).

The distinction between Icelandic and mainland Scandinavian with respect to the COMP Features Identify INFL parameter carries through to control verb complements, which, as shown by Koch Christensen (1983) and Platzack (1986a), are headed by the complementizer "að" in Icelandic and "att" in Swedish. Consistent with the ECP analysis, the (non-finite) head of VP moves into I^0 in the Icelandic infinitival only, where it surfaces to the left of the nexal adverbial, presumably because the infinitival complementizer "að", like its finite equivalent, is unable to transmit features to the empty head of its IP complement:

(24) Hann lofaði ...
'he promised

$[_{C'}$ að $[_{IP}$ PRO $[_{I'}$ lesa $[_{VP}$ ekki $[_{VP}$ e bókina]]]]]
to read not the-book'

(Icelandic)

whereas Swedish "att" can transmit features such that the empty I^0 position is identified, as it is in finite clauses,

obviating head movement:

(25) Han lovade ...
'he promised

$[_{C'}$ att $[_{IP}$ PRO $[_{I'}$ e $[_{VP}$ inte $[_{VP}$ läsa boken]]]]]
to not read the-book'

(Swedish)

In the other Scandinavian languages, where the distribution of the infinitive marker (the cognates of "ad/att") indicates that it is not a complementizer, the verb also remains in its d-structure position, as in the Danish and Norwegian equivalents of (25):

(26) Han lovede ...
'he promised

$[_{IP}$ PRO $[_{I'}$ e $[_{VP}$ ikke $[_{VP}$ at lese bogen]]]]
not to read the-book'

(Danish)

(27) Han lovet ...
'he promised

$[_{IP}$ PRO $[_{I'}$ e $[_{VP}$ ikke $[_{VP}$ å lese boken]]]]
not to read the-book'

(Norwegian)

Here the empty head of the infinitival IP is identified by head feature transmission from outside the clause, as is also the case in the continental West Germanic languages, where the non-finite verb in a control verb complement remains in its base position within VP, thus surfacing clause-finally, e.g.

in the German equivalent:[16]

(28) Er versprach ...
'he promised

$[_{IP}$ PRO $[_{I'}$ e $[_{VP}$ das Buch nicht zu lesen]]]
the book not to read'

Indeed, the ECP analysis predicts that the head of VP will remain in its d-structure position in COMP-less infinitival complement types generally across languages, as the COMP Features Identify INFL parameter will be irrelevant in such structures and the empty I^0 head will always be identified by a matrix clause member. This prediction is borne out by the "verb-third" surface order common to raising and ECM verb complements in all the language types under discussion, including Icelandic, which would all receive the same structural analysis under the ECP account:

(29) $Hann_j$ virdist ...
'he seems

$[_{IP}$ t_j $[_{I'}$ e $[_{VP}$ ekki $[_{VP}$ hafa lesið bókina]]]]
not have read the-book'

[16]Regardless of whether these infinitivals, which have no overt complementizer, are considered to be projections of C^0 or of I^0, the analysis is essentially unchanged: a chain of head feature transmission will still be created from the matrix verb selecting the infinitival (whether it is in situ or in the matrix I^0) in the absence of intervening material in the embedded C^0, such that any empty head position(s) in the complement clause will be identified.

(30) Eg tel ...
'I believe

[$_{IP}$ hann [$_{I'}$ e [$_{VP}$ ekki [$_{VP}$ hafa lesid bókina]]]]
him not have read the-book'

(Icelandic)

(31) Han$_j$ verkar ...
'he seems

[$_{IP}$ t$_j$ [$_{I'}$ e [$_{VP}$ inte [$_{VP}$ ha läst boken]]]]
not have read the-book'

(32) Jag anser ...
'I believe ...

[$_{IP}$ honom [$_{I'}$ e [$_{VP}$ inte [$_{VP}$ ha läst boken]]]]
him not have read the-book'

(Swedish)

(33) Han$_j$ synes ...
'he seems

[$_{IP}$ t$_j$ [$_{I'}$ e [$_{VP}$ ikke [$_{VP}$ å lese boken]]]]
not to read the-book'

(Norwegian)

(34) Er$_j$ scheint, ...
'he seems

[$_{IP}$ t$_j$ [$_{I'}$ e [$_{VP}$ das Buch nicht gelesen zu haben]]]
the book not read to have'

(German)

Thus the ECP analysis accounts both for the cross-linguistic difference with respect to verb position in control verb complements between Icelandic (24) and the mainland Scandinavian languages (25 to 27)[17], as well as for the verb order

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[17]The analysis requires that the infinitive marker in Danish and Norwegian, which surfaces to the right of the IP-Adv, be generated as part of the VP as proposed by Koch Christensen (1983), possibly as a clitic on the highest V^0 of an infinitival clause, as reflected in the structures shown for the control infinitivals (26) and (27) and the raising infinitival (33). Clearly, in a strict I-second analysis of Scandinavian word order as is argued for here, it cannot be generated under I^0 as has been claimed by Platzack (1986a) and Holmberg (1986, 1988), who posit an IP-Adv position intervening between the subject and I^0 in the mainland Scandinavian languages.

Notably, the status of the infinitive marker as a member of VP is independently motivated for German, as in (28) and (34). Proponents of an I-final analyis of the continental West Germanic subgroup might want to suggest that German "zu" could be generated in I^0 and reposition itself to the left of the last verb at PF, possibly belonging to the class of "second-to-last-position (S-2) clitics" proposed by Baker (1988b) to accommodate the reordering of the elements within verb clusters in these languages. This might in turn be interpreted as an argument in favour of I-final rather than I-second base word order for German. However, the "zu" in I^0 hypothesis turns out to be untenable given certain additional facts, namely the well-attested clause union effects associated with verb cluster formation (see, e.g., Haegeman and van Riemsdijk (1986); Baker (1988a, b)) involving COMP-less infinitivals (such as control, perception, causative and raising verb complements). Unless it is extraposed from its argument position (extraposition being a commonly exploited option in such contexts, although not obligatory as for tensed complements), the IP complement of the verb "versucht" arguably gets absorbed into its superordinate clause in the following German sentence, as suggested by the wide scope of the negation, over the whole complement of "weil":

Wir	konnten	die	Aufgabe	sogar	nicht	anfangen,	weil
'we	could	the	exercise	even	not	begin	because
$[_{IP}$ der	Lehrer	uns	das	Problem	nicht	zu	erklären
	the	teacher	to-us	the	problem	not	to	explain

asymmetry internal to Icelandic between control verb complements on the one hand, which are headed by the complementizer "að" (24), and raising and ECM verb complements (29 and 30). Since the latter types have no complementizer, they are unaffected by the COMP Features Identify INFL parameter even in Icelandic, which explains why (29) and (30) pattern with their counterparts in the other Scandinavian languages, the verb remaining in its d-structure position.

The facility with which the ECP analysis accommodates the infinitival complement data would appear to be another important point in its favour, especially as none of the other "V2 trigger" theories which have been put forward based on the traditional analysis can successfully explain the above contrasts. As pointed out in Chapter Two, even the most ambitious framework thus far developed, the categorial features-based analysis of Holmberg (1986)--which is one of the few analyses which does not motivate V^0 to I^0 movement in relation to "finiteness" and therefore one of the few which are in a position to be able to handle verb movement in infinitivals at all--is unable to adequately account for the variation between the different infinitival complement types within Icelandic in terms of the "Predicate Principle". As for the contrast between Icelandic and Swedish control infinitival word order as exemplified by (24) and (25), Holmberg (1986) contends that V^0 to I^0 actually occurs in the Swedish control infinitival as well, i.e. by the same string-vacuous movement followed by "VP pruning" he argues for in finite

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versucht hatte].
tried had'

Having "zu" generated under I^0 in the infinitival is clearly incompatible with the notion that it loses its status as a separate clause, the resulting structure being the bracketed IP which, needless to say, can have only a single [+tense] I^0.

subordinate clauses in that language. He accordingly attributes the different surface order of the verb in relation to the nexal adverbial in the Swedish control verb complement, as in finite clauses, to the special I'-external adjunction position for IP-adverbs he posits for the mainland Scandinavian languages, as discussed in Chapter Two. However, assuming Holmberg would want to preserve the parallelism of structure in the other infinitival clause types, e.g. between (29-30) in Icelandic and (31-32) in Swedish, he would have the same problem accounting for the asymmetry regarding V^0 to I^0 within Swedish, i.e. between control verb complements and other infinitivals, as he has for Icelandic. Alternatively, he would have to claim that V^0 raises to I^0 in the Swedish raising and ECM verb complements (31-32) as well, but that for some reason movement is suppressed in the Icelandic equivalents (29-30). It is hard to imagine how this difference could be motivated.

4.6 Non-Complement Clauses

4.6.1 Adjunct Clauses

Tensed and untensed adverbial adjunct clauses alike are ordinarily introduced by one of a large class of subordinating conjunctions which in current GB frameworks are standardly assumed to be generated in C^0. The prediction, in terms of the ECP analysis, is that these clauses will be affected by the COMP Features Identify INFL parameter just as complement clauses headed by lexical complementizers are, i.e. that verb position within such an adjunct clause will be determined by the ability of its lexical COMP-like head to transmit features to its empty I^0. The fact that the whole adjunct clause itself bears a structural/functional rela-

tionship to the matrix clause which is different from that of a complement clause will basically be irrelevant to the issue of verb position. Thus these adjunct clauses should exhibit the same word order characteristics as complement clauses with complementizer in each of the language subgroups under study, which is indeed the case, as exemplified by the clause-final, "verb-third" and V2 positions of the verb in German, Swedish and Icelandic adjunct clauses, respectively, indicating V^0 to I^0 occurs in Icelandic only:

(35) Ich rufe $[_{VP}$ $[_{VP}$ vorher an e,]
' I call first (part.)
$[_{C'}$ falls $[_{IP}$ ich $[_{I'}$ e $[_{VP}$ mich verspäten sollte]]]]]
in-case I (refl.) be-late should
(German)

(36) Jag blir $[_{VP}$ $[_{VP}$ e arg,]
'I get angry
$[_{C'}$ om $[_{IP}$ han $[_{I'}$ e $[_{VP}$ inte $[_{VP}$ kommer snart]]]]]]
if he not comes soon'
(Swedish)

(37) $[_{VP}\ [_{VP}\ \ldots\ ]$

$[_{C'}$ þegar $[_{IP}$ ég $[_{I'}$ hitti $[_{VP}$ loksins $[_{VP}$ e Jón]]]]]]

'when I met finally Jon

(Icelandic[18])

But while the complement/non-complement distinction is inconsequential insofar as verb position is concerned when a complementizer heads a subordinate clause, it becomes quite significant when the complementizer is omitted, creating an empty head, in an adjunct clause. As discussed in Chapter One, this is possible for a limited class of adverbial complementizers, in particular those which introduce conditional and concessive clauses, in some of the languages in question. Omission of the complementizer triggers movement of the finite verb, in this case all the way to the pre-subject (V1) position, i.e. filling the vacant C^0 head. Again, what is striking is the congruency of these structures in <u>all</u> the Germanic languages, including English, e.g.:

(38) Ich rufe $[_{VP}\ [_{VP}$ vorher an e,]

' I call first (part.)

$[_{C'}$ sollte $[_{IP}$ ich $[_{I'}$ e $[_{VP}$ mich verspäten e]]]]]

should I (refl.) be-late'

---

[18]Thráinsson (1986), following Maling (1980), whose example this is, notes that the (Swedish-type) "verb-third" order is also possible in such clauses with certain adverbs, a phenomenon he tentatively attributes to "some sort of permutation rule". The whole complex issue of how to account for the apparent freedom of certain Icelandic adverbials to occur in various positions is distinct from the verb movement issue and beyond the scope of this thesis.

(39) Du hättest $[_{VP}$ $[_{VP}$ ihn noch getroffen e,]
'you would-have him still met
$[_{C'}$ wärest $[_{IP}$ du $[_{I'}$ e $[_{VP}$ rechtzeitig gekommen e]]]]]
had you on-time come'
(German)

(40) Jag blir $[_{VP}$ $[_{VP}$ e arg,]
'I get angry
$[_{C'}$ kommer $[_{IP}$ han $[_{I'}$ e $[_{VP}$ inte $[_{VP}$ e snart]]]]]]
if he not comes soon'
(Swedish)

(41) I'll $[_{VP}$ $[_{VP}$ call first,]
$[_{C'}$ should $[_{IP}$ I $[_{I'}$ e $[_{VP}$ be late]]]]]

(42) You would $[_{VP}$ $[_{VP}$ have still met him,]
$[_{C'}$ had $[_{IP}$ you $[_{I'}$ e $[_{VP}$ e come on time]]]]]
(English)

While the various "trigger" theories proposed within the traditional framework were unable to account for the parallelism across languages, the ECP analysis offers a straightforward explanation. Clearly, in the d-structure of (38):

(38a) Ich e $[_{VP}$ $[_{VP}$ vorher anrufe ,]
' I first (part.)-call
$[_{C'}$ e $[_{IP}$ ich $[_{I'}$ e $[_{VP}$ mich verspäten sollte]]]]]
I (refl.) be-late should'

the empty C^0 in the adjunct clause, which is a non-complement, is not properly governed, in accordance with Travis' structural/functional definition provided above.[19] In fact, given the structural representation I have assigned to these predicate adjunct clauses (Chomsky-adjoined to VP--not the only possible analysis, nor necessarily the correct one), even the structural condition of government of the empty C^0 by a member of the matrix clause, the first criterion for proper government, is not met. In any event, the C^0 head of the adjunct in (38a) (and therefore empty I^0 as well) is not identified and the finite verb is forced to move from its base position through I^0 to fill C^0, yielding (38). The heads V^0 and I^0 vacated by movement will thereafter be identified by head feature transmission from the verb in C^0 and will therefore be licit. Parallel derivations obtain for (39-42).

4.6.2 Subject and Topic Clauses

While not directly related to the issue of verb movement, some remarks concerning subject and topic clauses are in order here. One is initially tempted to impute the non-deletability of the [-WH] complementizer "that" and its various Germanic language cognates in sentence-initial argument clauses to the ECP as well, along the lines of the traditional link made in the literature between adjunct and subject clauses as non-complements (see, e.g. Huang (1982); Travis (1984)). Like adjuncts, which are modifiers, *in situ* (intraposed) subject clauses, as specifiers of I' in the

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[19] Cf. also Stowell (1981) and Abney (1986).

Germanic languages, are also not properly governed.[20] Topicalized object clauses--a structure commonly occurring in the V2 languages where they front to SPEC-CP of the matrix clause --move out of the complement domain of the matrix verb to a position where they too are not properly governed. As originally pointed out by Stowell (1981) for English, deletion of the contents of the clausal head in such contexts results in an ECP violation, apparently yielding an account of the obligatoriness of the complementizer in subject clauses such as:

(43) $[_{IP}\ [_{C'}$ *(That) he comes $]\ [_{I'}$ is $[_{VP}$ e nice $]]]$

and its Swedish equivalent:

(44) $[_{IP}\ [_{C'}$ *(Att) har kommer $]\ [_{I'}$ är $[_{VP}$ e trevligt $]]]$

as well as in topicalized object clauses like:

(45) $[_{CP}\ [_{C'}$ *(Att) han var trött $]_j\ [_{C'}$ trodde $[_{IP}$ jag $[_{I'}$ e

'that he was tired thought I

$[_{VP}$ inte $[_{VP}$ e t_j $]]]]]$

not'

(Swedish)

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[20]Travis (1984) proposes that in languages where subject NPs are VP-adjacent, they may indeed be properly, or "complement" governed, citing the example of post-verbal subject NPs in Italian. This argument could presumably be extended to extraposed subject clauses, which, like <u>in situ</u> object clauses, often allow deletion of the complementizer.

(46) $[_{CP}\ [_{C'}$ *(Daß) er letzen Endes eine Lösung finden
'that he finally a solution find
würde $]_j\ [_{C'}$ bezweifelte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ nie t_j e]]]]]
doubted he never'

(German)

The same prohibition on deletion of the overt [-WH] complementizer heading a sentence-initial argument clause is in evidence in all the languages under study. However, consideration of additional facts leads to the conclusion that something more than the ECP is responsible for the consistency across languages in this regard. In particular, the German V2 complement clauses selected by certain verbs, which I have claimed are headed by a "Ø" complementizer, cannot be topicalized, thus:

(47) *$[_{CP}\ [_{C'}$ Ø er würde letzen Endes eine Lösung finden $]_j$
'he would in-the-end a solution find
$[_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t_j e]]]]
said he'

As Webelhuth (1989) appropriately points out, surface strings like that in (47) may be grammatical only with an intonation break (or, in written language, a comma), signalling the rightmost clause (here the words "sagte er") as a "parenthetical" appended to a <u>matrix</u> clause. But given my argument that "Ø" is not a syntactic empty category but a lexical entry with null phonetic realization I have likened to elements such as the "Ø" question operator, which should therefore not be precluded from appearing in a position where it would not be properly governed, the ECP alone is insufficient to rule out the topicalized object clause structure as represented in

(47). Since such structures are indeed impossible[21], I am led to conclude, along with Olsen (1985), Holmberg (1986) and others, that the requirement that sentential subjects and topicalized object clauses be headed by a complementizer with phonetic content should be attributed to a discourse constraint necessitating the presence of an overt marker of subordination to prevent false processing as a matrix clause.[22]

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[21]As can be verified by considering similar examples in which a matrix clause + "parenthetical" interpretation of the surface string is unavailable, e.g.:

*Er würde letzten Endes eine Lösung finden(,)
'he would in-the-end a solution find

hat er immer geglaubt.
has he always believed'

A discussion of "parenthetical" clauses in German is the subject of Chapter Five.

[22]The condition is stronger than Webelhuth's requirement that the heads in question must be [+N]. Webelhuth explicitly exempts finite complement clauses only from this requirement --a move which is necessary in the traditional (V to C^0) analysis of V2 in order to accommodate German "daß"-less complements. He further contends that mainland Scandinavian complements with deleted complementizers (and no internal verb movement, e.g. example (10) in Chapter Three) are bare IPs, also with verbal heads, and hence, like the German V2 complements, cannot appear in the topic position. I find the idea that a finite argument clause in any position can have a [+V] head to be counterintuitive and, indeed, no such assumption is needed in the analysis I have argued for. Accordingly, sentence-initial argument clauses appear to require more than merely a [+N] head: they require a [+N] complementizer with overt phonetic features. Moreover, it has been argued by some authors that subjects are properly governed in German (see, e.g., Noonan (1988))--possibly a further indication that something other than the ECP accounts for the obligatory presence of "daß" in sentential subject clauses.

4.7 Scandinavian Object Shift

The I-second/ECP analysis also affords a more straightforward account of the facts relating to the phenomenon known as Scandinavian "Object Shift" than do the various two-step verb movement versions of the traditional analysis.

Investigated extensively by Holmberg (1986) following on earlier studies, "Object Shift" refers to an optional syntactic process operating in all the Scandinavian languages whereby an object is moved leftward around one or more adverbials and/or floated quantifiers under certain conditions. Holmberg shows that Object Shift can apply under conditions which essentially reduce to the requirement that movement of the main verb out of its d-structure position has occurred, leaving the base position of the object NP governed by a verbal head which is phonetically empty.[23]

Thus Object Shift in matrix clauses is only possible when the main verb is finite, having accordingly moved into the V2 position, as illustrated by the following contrast in Icelandic:

(48a) Jón keypti ekki bókina.
'Jon bought not the-book'

(48b) Jón keypti bókina ekki. (with Object Shift)
'Jon bought the-book not'

(49a) Jón hefur ekki keypt bókina.
'Jon has not bought the-book'

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[23]His suggested explanation is based on the idea that the phonetically empty verb position, unlike a lexical V^0, can (optionally) choose to remain "invisible" for case-marking purposes (1986, pp. 177-179).

(49b) *Jón hefur bókina ekki keypt.
'Jon has the-book not bought'

So far, the only difference between the analyses is that in a two-step verb movement account, such as Holmberg's (1986) or Platzack's (1986a), the verb "keypti" in the subject-first matrix clause (48) will have moved all the way to C^0, whereas in the I-second/ECP account its final landing site will be I^0, a second movement of the verb into C^0 occurring in such clauses only if another category is topicalized. Under either analysis the structural condition necessary for Object Shift to be able to apply will still be met: "bókina" in (48a) will be governed by an empty V^0, allowing Object Shift (48b), in contrast with (49a) where the governing verb is <u>in situ</u>.

A further restriction in the mainland Scandinavian languages is that Object Shift can only apply to unstressed pronouns. Therefore, while the equivalents of (48b) and (49b) with a non-pronominal NP are <u>both</u> impossible in Swedish, the order with Object Shift is possible with a finite main verb (the equivalent of (48b)) if the direct object is replaced by an unstressed personal pronoun:

(50a) Johan köpte inte den.
'Johan bought not it'

(50b) Johan köpte den inte. (with Object Shift)
'Johan bought it not'

(51a) Johan har inte köpt den.
'Johan has not bought it'

(51b) *Johan har den inte köpt.
'Johan has it not bought'

Now, Object Shift can also apply in subordinate clauses in Icelandic, both in finite subordinate clauses, provided the main verb is the top verb of the clause (cf. (48)

and (49)), and in control verb complements:

(52) Eg veit ...
'I know

a. að Jón keypti ekki bókina.
that Jon bought not the-book'

b. að Jón keypti bókina ekki. (with Object Shift)
that Jon bought the-book not'

c. að Jón hefur ekki keypt bókina.
that Jon has not bought the-book'

d. *að Jón hefur bókina ekki keypt.
that Jon has the-book not bought'

(53) Jón lofaði ...
'Jón promised

a. að lesa ekki bókina.
to read not the-book'

b. að lesa bókina ekki. (with Object Shift)
to read the-book not'

Here again, there is no difference between the traditional and the ECP analyses, there being general agreement that movement of the VP head to I^0 occurs in both these contexts in Icelandic, such that the necessary environment for Object Shift --an empty V^0 governing the direct object--is created in the finite subordinate clause (52a) and the control infinitival (53a). Thus the object-shifted equivalents (52b) and (53b) are permissible.

The difficulty for the traditional analysis arises with subordinate clauses in mainland Scandinavian. Two-step verb movement accounts routinely assume that the head of VP raises to I^0 in finite clauses, including non-matrix clauses, in these languages as well, as it purportedly does in all the Germanic languages. As a consequence of the position they

posit for IP-Adv, V^0 to I^0 is a string-vacuous movement in mainland Scandinavian in these accounts, as we saw in Chapter Two. Accordingly, V^0 to I^0 in the Swedish equivalent of (52a) (with an unstressed pronoun substituted for the object NP) would, e.g. in Holmberg's (1986) binary branching framework with an I'-external adverb position, derive:

(54a) Sven tror ...
'Sven believes

$[_{C'}$ att $[_{IP}$ Johan $[_{I'}$ inte $[_{I'}$ köpte$_i$ $[_{VP}$ e_i den]]]]]
that Johan not bought it'

With the structure (54a) remaining as it is, Object Shift should be permissible in this context, given the "empty verb" criterion, but it turns out that this is not the case:

(54b) Sven tror ...
'Sven believes

*att Johan den inte köpte.
that Johan it not bought'

We can now understand why the two-step verb movement analysis needs a "pruning convention", whereby, according to Holmberg (1986), the mainland Scandinavian VP "collapses" after V^0 to I^0, becoming part of I'. "Pruning" is the only way Holmberg can purge the Swedish structure (54a) of the unwanted empty V^0 and thereby suppress the possibility of Object Shift:

(54aa) Sven tror ...
'Sven believes

$[_{C'}$ att $[_{IP}$ Johan $[_{I'}$ inte $[_{I'}$ köpte den]]]]
that Johan not bought it'

He can then claim that Object Shift is possible in the matrix

clause equivalent of (54) (= (50b)) on the basis that a second verb movement (of V/I to C^0) has taken place in the matrix clause--the standard assumption of the traditional analysis--leaving the V/I^0 node empty. Holmberg likewise needs to "prune" the VP in Swedish control infinitivals, which he contends have V^0 to I^0 raising like their Icelandic counterparts, in order to block Object Shift in these structures as well:

(55) Johan lovade ...
'Johan promised

a. $[_{C'}$ att $[_{IP}$ PRO $[_{I'}$ inte $[_{I'}$ läsa$_i$ $[_{VP}$ e_i den]]]]]

aa. $[_{C'}$ att $[_{IP}$ PRO $[_{I'}$ inte $[_{I'}$ läsa den]]]]
to not read it'

b. *att den inte läsa.
to it not read'

All the above facts are handled much more simply by the I-second/ECP analysis where, as was shown above, I^0 remains empty in mainland Scandinavian complement clauses as well as all clauses headed by a lexical complementizer. The impossibility of applying Object Shift to the sentences (54a) and (55a) follows directly as a consequence of the fact that, unlike in their Icelandic counterparts (52a) and (53a), there is no movement of the verb from its d-structure position, these Swedish sentences (like their analogues with a non-pronominal NP (12) and (25) respectively) receiving the following analysis:

(56) Sven tror ...
'Sven believes

[$_{C'}$ att [$_{IP}$ Johan [$_{I'}$ e [$_{VP}$ inte [$_{VP}$ köpte den]]]]]
that Johan not bought it'

(57) Johan lovade ...
'Johan promised

[$_{C'}$ att [$_{IP}$ PRO [$_{I'}$ e [$_{VP}$ inte [$_{VP}$ läsa den]]]]]
to not read it'

The account requires no "pruning convention" of the sort required in the two-step verb movement analysis of the Scandinavian languages. As noted in Chapter Two, this "pruning convention"--applying in Holmberg's framework only when it would not disturb binary branching, hence only where V^0 and I^0 are adjacent and verb movement is string-vacuous--is of dubious theoretical status.[14]

4.8 English INFLs

As the foregoing discussion illustrates, the three parameters Travis has proposed in conjunction with the ECP account effectively schematize the major dimensions of contrast among the Germanic languages with respect to surface verb position. Nevertheless, it would appear that some additional provision must be made to accommodate the peculiarities of the English modal/auxiliary system if the description is to be complete.

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[14]The alternative framework for the mainland Scandinavian languages presented in Holmberg (1988), which admittedly would not require "pruning" to account for the distribution of object shift, was shown in Chapter Two to be problematical on theoretical grounds.

Unlike the other Germanic languages, English does not conform to the common cross-linguistic pattern of having all verbs generated within VP and, as required by the context, raising the top V^0 into a base-generated empty I^0 node containing only the abstract features of inflection/agreement. Indeed, while English I^0, like I^0 in the Icelandic/Yiddish language subgroup, is always lexical in finite clauses[25], English exploits more than one means of achieving this. Careful consideration suggests Travis' COMP Features Identify INFL parameter cannot account for the English facts.

The modals of modern English are standardly assumed to be base-generated in I^0, thus:

(58) $[_{IP}$ He $[_{I'}$ will $[_{VP}$ not $[_{VP}$ come to the lecture]]]]

as substantiated and explained in Lightfoot's (1979) treatise on their historical emergence as a distinct inflectional, syntactic and semantic class which led to their reanalysis as a new category at the end of the Middle English period. In the absence of a modal in I^0, only the progressive, passive and perfective auxiliaries ("be" and "have"), which are base-generated in VP, are permitted to raise there from their d-structure position (V^0 to I^0)[26], as in:

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[25]It is generally assumed to be lexical in nonfinite clauses as well, where it is considered to be filled by the base-generated infinitive marker "to" (which may then move around nexal adverbials, such as the negation, and adjoin to VP, deriving the "normal" non-split infinitive ordering "NP not to VP"). (See, e.g., Chomsky (1986a); cf. Pollock (1989).)

[26]See Jackendoff (1972); Akmajian, Steele and Wasow (1979)). Recently, Pollock (1989) has associated the unique ability of the auxiliary verbs "be" and "have" to raise from their d-structure position in VP with their unique status with respect to theta-theory. In essence, the idea is that English

(59) $[_{IP}$ He $[_{I'}$ has $[_{VP}$ not $[_{VP}$ e come to the lecture]]]]

If no modal or other auxiliary verb is present, English avails itself of one of two options to lexicalize the I^0 node. Travis (1987 and p.c.) appropriately characterizes the first of these as "morphological merger" in the sense of Pranka (1983), a process whereby the features of two nodes can be combined under the condition of adjacency. Accordingly, merger of the heads V^0 and I^0 yields:

(60) $[_{IP}$ He $[_{I'}$ $[_{I+V}$ came] to the lecture]]]]

That the process exemplified by (60) is not verb movement, i.e., that it is neither V^0 to I^0 nor I^0 to V^0, is evidenced, respectively, by the ungrammaticality in Modern English of:

(61) *$[_{IP}$ He $[_{I'}$ came $[_{VP}$ not $[_{VP}$ e to the lecture]]]]

and:

(62) *$[_{IP}$ He [I' e $[_{VP}$ not $[_{VP}$ came to the lecture]]]]

Rather, if adjacency is interrupted, as by the sentential negation, the familiar, if still poorly understood, phenomenon of "do-support" is the default strategy, yielding instead:

(63) $[_{IP}$ He $[_{I'}$ did $[_{VP}$ not $[_{VP}$ come to the lecture]]]]

AGR (which in Pollock's X' system is a separate category, the head of its own AgrP) is morphologically so "impoverished" in comparison with other languages (among them French, as well as the other Germanic languages) that it is "opaque" to theta-role assignment. If a verb's theta-grid is prevented from percolating up to such opaque AGR, it follows that the possibility of raising will be lexically restricted to verbs that have no theta role to assign.

What concerns us for purposes of the ECP analysis is the level at which the two processes exemplified by the well-formed structures (60) and (63) apply. The distribution of periphrastic "do" and inflected main verb forms indicates that both processes occur at PF. That is to say, it is only after <u>all</u> syntactic movement--both maximal projection and head movement--has occurred that the adjacency condition becomes relevant in determining whether merger of I^0 and V^0 can apply, failing which the default strategy is then employed. In particular, if a yes/no question is formed, a [+NEG] element other than the subject is topicalized, or a constituent other than the subject is questioned (triggering I^0 to C^0), a "do" form must appear in C^0, since I^0 in these contexts, once it has moved into C^0, will no longer be adjacent to the main verb in VP, as the lexical subject will intervene. We thus derive:[27]

(64) $[_{CP}\ \underset{[+?]}{\emptyset}\ [_{C'}$ did $[_{IP}$ he $[_{I'}$ e $[_{VP}$ come to the lecture]]]]

and:

(65) $[_{CP}$ Which lecture$_j$ $[_{C'}$ did $[_{IP}$ he $[_{I'}$ e $[_{VP}$ come to t_j]]]]]

It is clear that I^0 and V^0 cannot merge before movement; if they could, we should be able to derive the ungrammatical sequences:

(66) *$[_{CP}\ \underset{[+?]}{\emptyset}\ [_{C'}\ [_{I+V}$ came] $[_{IP}$ he $[_{I'}$ e to the lecture]]]]

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[27]On the other hand, I^0 (in C^0) and V^0 will still be string-adjacent at PF in the case of a subject extraction: only the trace of maximal projection movement will intervene between the nodes and merger will occur, deriving sentences like "Who came to the lecture?"

and:

(67) *[$_{CP}$ Which lecture$_j$ [$_{C'}$ [$_{I+V}$ came] [$_{IP}$ he [$_{I'}$ e to t_j]]]]

But having determined that morphological merger and "do-support" only apply at PF gives rise to a problem for the ECP analysis based solely on the three parameters as formulated by Travis. If I^0 is base-generated empty in English sentences without a modal, and if it is only filled at s-structure if one of the other raisable auxiliaries "be" and "have" is present, then s-structure ECP violations will systematically occur in English sentences containing only a main verb. The inescapable conclusion is that English I^0 is in fact not empty at d-structure--containing only abstract features as in the other Germanic languages--but is <u>always</u> base-generated with some lexical content, even in the absence of a modal, "be" or "have".

Indeed, the description of the process which results in the appearance of the default auxiliary "do" in English I^0 has been the subject of considerable debate in the literature, and in some theories (e.g. Emonds (1976); Akmajian, Steele and Wasow (1979); den Besten (1977, 1983); Platzack (1983)), "do" is not inserted by a late-level rule but rather, in the absence of a modal or auxiliary, is inserted in I^0 at d-structure along with the tense/mood and agreement features, and is later deleted or "not phonetically realized" in certain environments. In present-day English these would be confined to when it occurs before the negation, before the subject (in C^0), before a deletion site (in anaphoric VPs and tag questions) or when it is stressed.

I do not believe it is necessary (nor particularly theoretically elegant) to resort to this approach to the

problem of base-lexicalization of I^0 as a property of English. Rather, it is sufficient to say that I^0 is lexicalized at d-structure either as a modal plus inflectional affix or, minimally, as a bare inflectional affix which is fully specified as to phonetic as well as non-phonetic features. Since I^0 is not empty, raising of "be" and "have" in English syntax--unlike V^0 to I^0 in the other Germanic languages--will thus be unrelated to the ECP. The English auxiliaries presumably raise from V^0 in order to provide the affix in $\overset{0}{I}$--a bound morpheme--with a bearer (see Chomsky (1986a), p. 68), after which the appropriate morphophonemic changes can take place. Similarly, in sentences without auxiliaries, the default affix bearer "do" is inserted at PF to carry an affix left "stranded"--after all syntactic movement has occurred--in a position not adjacent to an <u>in situ</u> verb with which it can merge, the process of "do"-insertion being again unrelated to the ECP. If, along these lines, we therefore incorporate "base lexicalization of I^0" into Travis' word order typology framework for the Germanic languages, her third parameter, pertaining to the ability of complementizers to transmit features and hence identify an empty I^0, will, as a consequence, be simply irrelevant for English. This, of course, will not affect the role of the ECP as the "trigger" of movement of I^0 to fill an empty C^0 which is not properly governed, where such structures arise in English as illustrated above.

Another adjustment, or rather extension, which appears warranted for English relates to Travis' second parameter regarding the possibility of IP adjunction. While the position of the sentential negation particle "not" is fixed (between I^0 and V^0, adjoined to VP) in English finite clauses, as evidenced by (58), (59) and (63) above, other English IP adverbs may appear to the left of I^0, in post-subject position. In fact, in the absence of a modal or auxiliary, they

must be able to "leak" leftward around I^0 so that I^0 and V^0 remain adjacent and can merge; support by unstressed periphrastic "do" does not work with adverbs other than "not":

(68) a. He would never come to our meetings.
b. He never would come to our meetings.
c. *He did never come to our meetings.
d. He never came to our meetings.
e. *He did probably come to the meeting. (did unstressed)
f. He probably came to the meeting.

The only possible analysis of sentences like (68d) and (68f) is one in which the IP-Adv adjoins to I'--the pre-I^0 adjunction position I argued was not required for the mainland Scandinavian languages, but which does indeed appear to be motivated for English, at least for adverbials[28]:

(69) $[_{IP}$ He $[_{I'}$ probably $[_{I'}$ $[_{I+V}$ came] to the meeting]]]

It therefore seems appropriate to modify Travis' Adjunction to IP parameter in order to assimilate the possibility of I' adjunction exhibited by English to the larger phenomenon of adjunction along the projection line of I^0.[29]

We can now revise Travis' table of parameters

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[28]See, e.g., Jackendoff (1972); Emonds (1976); Travis (1988).

[29]It may turn out to be the case that a language which allows adjunction to I' will, by implication, also allow adjunction to IP, but not vice-versa, as exemplified by French and many other languages which allow adjunction to IP but not to I', IPs in such languages being accordingly "strictly V2":

*Jean probablement a lu le livre.

Investigation of this proposed directional universal is a suggested avenue for further research.

affecting verb position in the various Germanic language subtypes, completing it to reflect the additional facts about English discussed in the preceding paragraphs as follows:

	Icelandic/ Yiddish (I/Y)	Mainland Scandinavian (MSc)	Continental West Germanic (CWG)	English
VP Headedness (Head-initial = "+")	+	+	-	+
Adjunction to I-Projections	-	-	-	IP, I'*
Base Lexical INFL	-	-	-	+
COMP Features Identify INFL	-	+	+	irrelevant

* Cf. Languages which allow adjunction to IP only.

4.9 On a Purported Argument against the ECP Analysis

Arguments for the traditional position that V2 word order should be uniformly equated with movement to C^0, and which are therefore, explicitly or implicitly, against the type of analysis of the Germanic languages advocated here, have in general revolved around a central claim. The contention which has pervaded the literature since the early generative accounts of Germanic syntax has been that anything short of a "V^0 in C^0" account misses an important generalization about the so-called "V2 languages", namely that any of a large class of different phrasal categories may appear in the preverbal position in matrix clauses, the subject NP appearing to have no privileged right of occurrence there (see, e.g. Thiersch (1978)).

I have shown in this chapter that an analysis based on I-second base word order and the ECP can indeed account for the generality of surface V2 order in matrix clauses in these languages as contrasted with the "non-V2 languages" as a consequence of the parameterization of the rules for fronting non-subject constituents. While subject-first sentences with V2 order are derived by V^0 to I^0 raising alone in the ECP analysis, fronting of other categories in languages which do not allow adjunction to IP, but instead front all categories to SPEC-CP, will effectively trigger the further movement of the verb to C^0, again resulting in a V2 surface string.

It has been further demonstrated that a "V^0 in C^0" account does not generalize to the V2 word order exhibited by most subordinate clause types (except for certain infinitivals) in languages like Icelandic and Yiddish and, indeed, by a certain subordinate clause type found in German. Such clauses, which, crucially, are <u>just as "strictly V2"</u> as matrix clauses, are <u>subject-first</u> and consequently amenable only to an analysis which lands the moved verb in a base-generated post-subject I^0 node. There are therefore good reasons--in addition to the evidence originally presented in Travis (1984)--for teasing apart "V^0 in I^0" and "V/I^0 in C^0" as distinct sources of V2 surface word orders in the various Germanic languages, which is only possible if they share a common I-second underlying structure. Indeed, far from missing a generalization, an I-second analysis captures subtleties which are missed by a congruent analysis of Germanic verb movement. Moreover, none of the other, more specific, arguments raised by the proponents of generalized movement to C^0 in "V2 languages" provides convincing evidence that that analysis has an advantage over the one presented

here.[30]

Recently, Schwartz and Vikner (1989) have challenged one of the specific proposals of the ECP account of verb movement, namely the prohibition on adjunction to IP in the continental West Germanic and mainland Scandinavian languages, citing evidence from German and Swedish, which I shall now examine briefly.

As pointed out in earlier papers, notably by Platzack (1986b) who had considered the matter in some detail, certain classes of elements may intervene between C^0 and the subject in German and Swedish, in particular reflexive pronouns and short IP-type adverbials. Schwartz and Vikner (1989) provide the following examples with an adverb:

(70) a. Ich weiß, ...
'I know

[$_{C'}$ daß gestern [$_{IP}$ Peter diese Sache erledigt hat]]

that yesterday Peter this matter take-care-of has'

b. [$_{CP}$ Hat$_{[+?]}$ gestern [$_{IP}$ Peter diese Sache erledigt]]

'has yesterday Peter this matter taken-care-of'

c. [$_{CP}$ Diese Sache hat gestern [$_{IP}$ Peter erledigt]]

'this matter has yesterday Peter taken-care-of'

(German)

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[30]See, for example, claims such as those made by Platzack (1986a) and Holmberg (1986) to the effect that only a V^0 in C^0 analysis accords with the distribution of the Swedish adverb "kanske" or the possibility of deletion of the auxiliary "ha". The "rules" they propose to account for such facts can just as easily be restated in terms of the I-second/ECP framework.

(71) a. Jag beklagar ...
'I regret

[$_{C'}$ att aldrig [$_{IP}$ Johan vill läsa de här bökerna]]
that never Johan will read these books'

b. [$_{CP}$ Vill [+?] aldrig [$_{IP}$ Johan läsa de här bökerna]]
'will never Johan read these books'

c. [$_{CP}$ De här bökerna vill aldrig [$_{IP}$ Johan läsa]]
'these books will never Johan read'

(Swedish)

These authors assume (following Eubank (1988) and Tomaselli and Schwartz (1988)) that these elements are adjoined to IP, thereby disputing Travis' Adjunction to IP parameter which prohibits such adjunction in these languages. They then go on to claim that, if indeed adjunction to IP is possible but adjunction to CP is not, the ungrammaticality of:

(72) *Gestern Peter hat diese Sache erledigt.
'yesterday Peter has this matter taken-care-of'

and:

(73) *Aldrig Johan vill läsa de här bökerna
'never Johan will read these books'

will follow under the traditional analysis only, where the subject NPs in (72) and (73) would have been fronted to SPEC-CP, these structures receiving an analysis congruent with the equally ungrammatical:

(74) *Gestern diese Sache hat Peter erledigt.
'yesterday this matter has Peter taken-care-of'

and:

(75) *Aldrig de har bökerna vill Johan läsa.
'never these books will Johan read'

This line of reasoning is entirely self-serving, there being no conclusive basis for the initial premise that the highlighted elements adjoin to IP at all. In fact, Platzack (1986b) has convincingly argued that the distribution of these elements suggests they cliticize to a lexical C^0, which may be a complementizer or a fronted verb. The latter explanation is consistent both with the I-second/ECP analysis and with the Adjunction to IP parameter, according to which (72) and (73) are generated as bare IPs to which adjunction will be precluded in the languages in question.

There is, however, a class of cases in German--not those raised by Schwartz and Vikner--which may call into question the absolute prohibition against adjunction to IP for all categories.

Recalling the unintroduced adjunct clauses discussed earlier in this chapter, in which the finite verb is fronted to C^0, it is noteworthy that when a complementizerless conditional clause (with V1 order, thus V^0 in C^0) is itself fronted to the SPEC-CP position of the matrix clause, the matrix verb moves to C^0 of that clause, resulting in a surface string which gives the impression of two structurally indistinguishable clauses. Holmberg gives an example in Swedish (cf. (37b) in Chapter One), which I adapt here to the ECP analysis:

(76) $[_{CP}\ [_{C'}$ Kommer $[_{IP}$ han $[_{I'}$ e $[_{VP}$ inte e snart$]]]]_j$
'comes he not soon
$[_{C'}$ blir $[_{IP}$ jag $[_{I'}$ e $[_{VP}\ [_{VP}$ e arg $]\ t_j\ ]]]]]$
get I angry'

As far as German is concerned, formal grammar textbooks recommend the use of a correlative element--usually an adverb such as "dann" or "so"--in this context for pragmatic reasons, i.e. by way of facilitating recognition of the matrix clause (as the one introduced by the correlative). The "Duden-Grammatik" (p. 567) provides the following example, the (b) sentence being strongly preferred over (a):[31]

(77) a. (??) [Will ein Besitzer Grundstücke veräußern,]
'wants an owner lands to-dispose-of

hat er eine Meldung zu machen.
has he a notification to make'

b. [Will ein Besitzer Grundstücke veräußern,]
'wants an owner lands to-dispose-of

dann hat er eine Meldung zu machen.
then has he a notification to make'

Structures like (77b) suggest a Contrastive Left Dislocation (CLD) analysis, where the bracketed fronted clause would be in a TOPIC-like (CP-external) position, the correlative adverb in SPEC-CP and the matrix clause verb in C^0. In other words, they would basically be structurally equivalent to sentences like:

(78) Maria, [$_{CP}$ auf sie können Sie sich verlassen.]
'Maria, on her can you (refl.) rely'

But, curiously enough, this is not what happens when a complementizerless concessive clause is fronted, there being no

[31] Op. cit. The use of such correlatives is not necessarily confined to contexts where the matrix clause follows a complementizerless clause. In fact, the pattern is quite common with all fronted adjunct clauses, with or without complementizer.

inversion of subject and matrix verb in such contexts. I again cite the Duden's (p. 568) example:

(79) Ist es auch dunkel, **wir werden** das Ziel schon erreichen.
'be it ever-so gloomy we shall the goal soon reach'

Most importantly, a **subject-first** condition is again in evidence--as was the case with the German "daß"-less complements. But this time the asymmetry applies to **matrix clauses**, i.e.:

(80) *Ist es auch dunkel, **das Ziel werden** wir schon erreichen.
'be it ever-so gloomy the goal shall we soon reach'

with a non-subject as the initial constituent following the fronted clause, is at best a highly unnatural German sentence, requiring, as did the "daß"-less complement structures with attempted internal topicalization, a stronger break in the sequence, set off by punctuation such as a colon, etc. I have no particularly enlightening comments to make about these structures other than to suggest that the prohibition against IP adjunction in German may have to be relaxed to allow this specific class of fronted categories to adjoin to IP so that sentences like (79) but not (80) can be generated.[32] The point is that, far from undermining the ECP analysis, we have here another piece of evidence for a subject-first/non-subject-first distinction in German matrix clause structure, converging with Travis' evidence involving personal pronouns. The traditional analysis--where matrix clauses are always CPs, obscuring this distinction--would seem to be at a loss to

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[32]Cochrane (1963) links the "unexpected" uninverted word order in the second (the matrix) clause to the fact that, historically, these sentence types were once independent clauses. In terms of a synchronic description, however, there can be no doubt that a relation of subordination exists between the matrix clause and the concessive clause which precedes it.

explain the asymmetry.

I now turn to the promised defence of the "Ø" complementizer I proposed above as an alternate to German "daß", specifically to the claim that this complementizer is an absolute barrier to extraction, to which claim I devote the next chapter. In the process I shall also refute certain additional purported counterevidence against the I-second/ECP analysis adduced, among others, by Schwartz and Vikner in their 1989 paper.

CHAPTER FIVE
GERMAN "PARENTHETICALS" REVISITED

5.1 Long Distance Movement in German

In Chapter Four I proposed an analysis of German "daß"-less finite complement clauses based on a "Ø" morpheme which may appear in C^0 instead of the [-WH] complementizer "daß". I argued that, unlike "daß" and German complementizers generally, the "Ø" complementizer lacks the features necessary to identify the base-generated empty I^0 head of its complement, triggering V^0 to I^0. This accounts for the fact that these clauses, optionally selected by a certain class of verbs, nouns and adjectives, have subject-first V2 surface word order, any further movement of the verb being effectively blocked by "Ø" which occupies C^0. I further claimed that the "Ø" complementizer exhibits the same island-creating property as the German [+WH] complementizer "ob" and unlike "daß", which--subject to considerable dialectal variation--allows a constituent to be "long extracted" over it to SPEC-CP of a higher clause.

Consider the following attempts at long distance [+WH] movement:

(1) (?) Wen_j sagte er, t_j daß er t_j gestern angerufen
'who(m) said he that he yesterday called
hatte/hätte?
had'

(2) (??) Wen$_j$ sagte er, t_j daß er seiner Mutter versprochen
'who(m) said he that he his mother promised
hatte/hätte, t_j daß er t_j demnächst anrufen
had that he soon call
würde?
would'

(3) *Wen$_j$ fragte die Mutter, t_j ob ihr Sohn
'who(m) asked the mother whether her son
t_j gestern angerufen hatte/hätte?
yesterday called had'

(4) *Wen$_j$ sagte er, t_j Ø er hatte/hätte t_j gestern
'who(m) said he he had yesterday
angerufen?
called'

While some speakers reject extractions over "daß" altogether, and while the contrast between (1) and (2) indicates acceptability diminishes each time "daß" is crossed, even in dialects which allow the long movement, the complete ungrammaticality of (4) as well as (3) would appear to support my claim that "Ø", like "ob", is an absolute barrier to extraction of any kind.[1]

There is, however, an important set of data which the "Ø"-complement proposal must deal with, which was first discussed by Thiersch (1978) within the traditional generative framework and, latterly, has been adduced by Schwartz and Vikner (1989) as evidence against the ECP analysis in what is in essence an updated version of Thiersch's original argument.

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[1] Not surprisingly, long movement over any of the complementizer-like elements which head adjunct clauses is also completely impossible in German.

I refer to structures like the equivalent of (4) with <u>verb-subject order in both clauses</u>, which structures, unlike (4), are grammatical:

(5) Wen, sagte er, hatte/hätte er gestern angerufen?
'who(m) said he had he yesterday called'

(6) Seine Tante, sagte er, hatte/hätte er gestern
'his aunt said he had he yesterday
angerufen.
called'

Since Thiersch (1978), the consensus among generativists (e.g. Travis (1984); Haider (1986); Schwartz and Vikner (1989)) has been that sentences like (5) and (6) should be treated as congruent with (1), i.e. as the result of long movement of a non-subject constituent out of a complement clause to the front of a matrix clause, the extracted constituent moving cyclically (through SPEC-CP in current theories). It is routinely assumed that as the extracted constituent moves through the embedded SPEC-CP to the matrix SPEC-CP in structures like (5) and (6), the embedded finite verb moves into the embedded C^0, followed in turn by the matrix finite verb which moves into the matrix C^0. Thus (5) and (6) would be derived in the following manner (assuming I-second base word order and extraposition of complement clauses to VP-final position as argued for independently in this thesis):

(5a) $[_{CP}$ Wen$_k$ $[_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t_j e $[_{CP}$ t_k $[_{C'}$ hatte/hätte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t_k gestern angerufen e $]]]]]_j$ $]]]]]$

(6a) $[_{CP}$ Seine Tante$_k$ $[_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t_j e $[_{CP}$ t_k $[_{C'}$ hatte/hätte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t_k gestern angerufen e $]]]]]_j$ $]]]]]$

Similar derivations purportedly obtain for extractions out of multiply embedded "daß-drop" clauses, V/I^0 to C^0 ("subject-verb inversion") occurring in each clause as the extracted constituent moves from its base position in the most deeply embedded clause through successive SPEC-CPs to the front of the sentence, e.g.:

(7) $[_{CP}$ Wen$_m$ $[_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t_k e $[_{CP}$ t_m
'who(m) said he
$[_{C'}$ hatte/hätte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ seiner Mutter t_j
had he his mother
versprochen e $[_{CP}$ t_m $[_{C'}$ würde $[_{IP}$ er $[_{I'}$ e
promised would he
$[_{VP}$ t_m demnächst anrufen e]]]]]$_j$]]]]]$_k$]]]]]
soon call'

If the long extraction analysis were the correct analysis of such sentences, this would obviously undermine my proposal that C^0 in "daß"-less complement clauses is filled by "$\emptyset$", blocking extraction. Clearly, C^0 heading these complements would have to be empty, either by base generation or as the result of complementizer deletion, to be able to serve as the landing site for V/I^0 to C^0 movement, giving rise to the verb-subject surface order. Moreover, if this were the case, then, <u>prima facie</u>, the ungrammatical examples with subject-verb order in the complement clause, like (4), might well be construed as evidence in favour of the traditional view of Germanic V2 order, as claimed by Schwartz and Vikner (1989), after Thiersch (1978). These ungrammatical sequences, these authors argue, invite an analysis where the pre-verbal subject NP occupies the embedded SPEC-CP position, having moved there on the initial cycle in conjunction with V/I^0 to C^0, both

maximal projection and head movement to C^0 applying obligatorily in the absence of a complementizer in the traditional account. This achieves the very desirable effect of making extraction of any other constituent out of the embedded clause illicit, for lack of an "escape hatch", as in the type of structure that would be assigned to (4) under these assumptions:

(4a) *$[_{CP}$ Wen$_m$ $[_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t_j e $[_{CP}$ er$_k$ $[_{C'}$ hatte/ hätte $[_{IP}$ t_k $[_{I'}$ e $[_{VP}$ t_m gestern angerufen e]]]]]$_j$]]]]]

The same "blocking" effect is not available to the ECP analysis where the subject in a subject-first V2 clause remains in its base position in SPEC-IP. Indeed, in the ECP analysis, where movement of the finite verb into C^0 is explicitly associated with the prevention of ECP violations, it is unclear why extraction of a [+WH] or topicalized phrase through an embedded SPEC-CP to the matrix SPEC-CP would trigger movement of the embedded finite verb into C^0 to derive sentences like (5), (6) and (7), nor is it clear what would rule out (4), as such empty C^0 head of the complement clause would be properly governed, hence identified, by the bridge verb in its superordinate clause. As pointed out in Chapter Four, even V^0 to I^0 would not be motivated under the standard assumptions of the ECP analysis if C^0 were empty in the complement clause.

The problem for the traditional analysis, however, is that this still leaves unexplained the subject-first condition on these V2 complements in the absence of long extraction discussed in Chapters Three and Four, as instantiated by the ungrammaticality of:

(8) *Er sagte uns, wen hatte/hätte er gestern angerufen.
'he told us who(m) had he yesterday called'

(9) *Er sagte, seine Tante hatte/hätte er gestern angerufen.
'he said his aunt had he yesterday called'

As pointed out in Chapter Three, a specific prohibition on [+WH] COMP structures appearing in V2 complements may serve, in an ad hoc fashion, to rule out examples like (8), but does not account for the general resistance to topicalization in these complements evidenced by (9).

My answer to the puzzle is that the complementizer is not "dropped" or deleted in "daß"-less finite complements, C^0 being indeed occupied by an island-creating "Ø", as I have claimed all along. Accordingly, examples like (4) are correctly analyzed as failed attempts at extraction over "Ø", thus:

(4b) *$[_{CP}$ Wen$_k$ $[_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t_j e $[_{C'}$ Ø $[_{IP}$ er $[_{I'}$ hatte/hätte $[_{VP}$ t_k gestern angerufen e]]]]$_j$]]]]]

and the grammatical surface strings in (5), (6) and (7) are not derived by long movement. Long extraction out of a complement clause must arguably be involved in the genesis of German structures like (1) and (2) in those dialects which allow them, as is the case in their English counterparts where, in addition, the complementizer "that" (being in a properly governed position) may be deleted without affecting the structure:

(10) Who(m)$_j$ did he say t_j (that) he had called t_j yesterday?

(11) Who(m)$_j$ did he say t_j (that) he had promised his mother t_j (that) he would soon call t_j?

But I suggest that the claimed structural parallelism with German sequences like (5), (6) and (7) is illusory. The matrix clause in (5) and (6) is not the one containing the left-most verb, i.e. the verb "sagte", but rather the sentences "Wen **hatte/hätte** er gestern angerufen?" ('who(m) had he yesterday called?') and "Seine Tante **hatte/hätte** er gestern angerufen" ('his aunt had he yesterday called') respectively, "sagte er" ('said he') being a type of interpolated clause or "parenthetical" embedded in the main sentence frame.[2]

The idea that sequences like "sagte er" in (5) and (6) could be a type of parenthetical is of course the option which Thiersch (1978) considered and rejected in favour of analyzing them as the matrix clause taking a "daß-drop" complement out of which a constituent has been long-extracted (in the "English" manner) to derive the constructions in question along the lines sketched above. Thiersch makes much of the fact that a sequence like "sagte er" in (5) and (6), if it were a "parenthetical" which he contends it is not, would be fundamentally different from a "true insert", the latter being totally independent of the matrix clause. An example he gives is a German "Schaltsatz"[3], which is itself a structurally intact matrix clause interrupting the main sentence, such structures being often used as a literary device, as in:

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[2] Incidentally, the two commas which surround and set off sequences like "sagte er" in these examples are obligatory in written German in accordance with standard punctuation conventions, while in (1) only the second comma (the one before "daß") is required, all German subordinate clauses being preceded by a comma (see, e.g., Cochrane (1963, p. 367)).

[3] See Duden Grammatik, op. cit., p. 526.

(12) " ... und er verzweifelte -- es ist furchtbar zu
'and he despaired it is terrible to

sagen -- , er verzweifelte an Wissenschaft und
say he despaired of science and

Fortschritt. (Th. Mann)
progress'

He argues that such intrusions in the main sentence frame, just like phrases such as "Gott sei dank!" ('Thank God!'), can appear virtually anywhere in a sentence, whereas the inverted order sequences like "sagte er" in (5) and (6) are limited to certain positions. While this is undeniably true, and while I concede that the label "parenthetical" applied to these sequences may be something of a misnomer, I suggest that the comparison with "true parentheticals" is entirely beside the point and does not speak to the issue of whether the [verb - subject -(X)] sequences in question are or are not the matrix clause. As I shall show below, there is in fact good empirical evidence for maintaining that they are embedded as dependent structures in, rather than being, the matrix clause.

5.2 Adjunction to SPEC

I propose that sequences like "sagte er" in (5) and (6) are a type of sentence-medial clausal adjunct, predicated of a phrasal category in sentence-initial position.

A first observation is that there is an obvious structural parallel between a sentence such as (6) (repeated below) and its equivalent made into a direct quotation:

(6) Seine Tante, sagte er, hatte/hätte er gestern
'his aunt said he had he yesterday

angerufen.
called'

(13) »Meine Tante«, sagte er, »habe ich gestern angerufen.«
'my aunt said he have I yesterday called'

the clause "sagte er" in (13) being commonly assumed to be a type of parenthetical, sometimes referred to as a "performer" or "p-parenthetical"[4]. The same parallelism obtains between indirect and direct discourse when a subject NP is the initial phrase:

(14) Seine Tante, sagte er, hatte/hätte ihn gestern
'his aunt said he had him yesterday

angerufen.
called'

(15) »Meine Tante«, sagte er, »hat mich gestern angerufen.«
'my aunt said he has me yesterday called'

In addition to appearing after the initial phrasal constituent, "performer parentheticals" also typically appear at the very end of the main sentence and, again, there are parallel indirect discourse examples, e.g.:[5]

(16) Seine Tante hatte/hätte er gestern angerufen, sagte er.
'his aunt had he yesterday called said he'

(17) »Meine Tante habe ich gestern angerufen«, sagte er.
'my aunt have I yesterday called said he'

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[4] See, e.g., Holmberg (1986).

[5] As noted in Chapter Four, there is a required intonation break in sentences like (16), setting off the words "sagte er" in final position as a parenthetical appended to the matrix clause.

Thus the sequences I am claiming are clausal adjuncts share a similar distribution and form with a class of structures which are, quite uncontroversially, acknowledged to be "parentheticals", subordinate to the matrix clause. Indeed, the inverted form of the "sagte er" parentheticals in (13), (15) and (17)--and by analogy those in their indirect discourse counterparts (6), (14) and (16)--suggests that they project to the C' level, that their finite verb has moved to I^0 and then to $\hat{C}$ because these empty heads are not properly governed, and that they have an empty complement position in VP. Those occurring sentence-finally ((16-17)) presumably adjoin to the whole matrix clause (IP or CP as the case may be). Those that intercede sentence-medially ((6) and (13-15)) are typically positioned after the first phrasal constituent of the clause in which they are embedded, which suggests that in German they adjoin to the SPEC(ifier) position of either of the functor projections, i.e. to SPEC-IP or SPEC-CP.[6]

Another set of parallel structures gives further support to the claim that "sagte er" in sentences like (5) and (6), as well as in the subject-first example (14), is a C' adjoined to a SPEC position. Consider the perfectly well-formed sentences corresponding to (5), (6) and (14) respectively:

(18) Wen, wie er sagte, hätte er gestern angerufen?
'who(m) as he said had he yesterday called'

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[6] While sentence-medial parentheticals typically intercede after a specifier position, this being by far the most semantically neutral pattern, they may arguably appear in positions lower down in the sentence as well, especially following a category which receives contrastive stress (but cf. Thiersch (1978, p. 141), who considers the latter type somewhat marginal). I shall in any event confine the discussion here to parentheticals of the SPEC-adjunct type.

(19) Seine Tante, wie er sagte, hatte er gestern angerufen.
'his aunt as he said had he yesterday called'

(20) Seine Tante, wie er sagte, hätte ihn gestern angerufen.
'his aunt as he said had him yesterday called'

Almost needless to say, clauses of the form "**wie er sagte**" (= 'as he says') can only be adjuncts, hence parentheticals in (18-20). In (18) and (19) they are adjoined to the matrix SPEC-CP and in (20) to the matrix SPEC-IP. Moreover, the "**wie er sagte**" type are clearly C's. Accordingly, the "**sagte er**" type found in (5), (6) and (14) are, quite plausibly, the unintroduced equivalent of the fuller version headed by a complementizer. Indeed, such SPEC-adjuncts are most commonly unintroduced, triggering movement of the finite verb, e.g. "**sagte**" in (5), (6) and (14), via I^0, into the vacant, ungoverned C^0 head of the adjunct clause to derive their inverted surface order.

I therefore propose that the sentences (5), (6) and (14) are <u>correctly</u> analyzed as follows (cf. the traditional, long movement analysis illustrated in (5a) and (6a) above):

(5b) $[_{CP}[_{SPEC}[_{SPEC}$ Wen$_j$ $]][_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ e $]]]]$ $][_{C'}$ hatte/
'who(m) said he had
hätte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t$_j$ gestern angerufen e $]]]]]$
he yesterday called'

(6b) $[_{CP}[_{SPEC}[_{SPEC}$ Seine Tante$_j$ $]][_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ e $]]]]$ $]$
'his aunt said he
$[_{C'}$ hatte/hätte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t$_j$ gestern
had he yesterday
angerufen e $]]]]]$
called'

(14a) $[_{IP}[_{SPEC}[_{SPEC}$ Seine Tante$]][_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ e $]]]]$]

'his aunt said he

$[_{I'}$ hatte/hätte $[_{VP}$ ihn gestern angerufen e $]]]$

had him yesterday called'

Thus (5) and (6) are actually cases of short extraction out of a matrix clause, in which a [+WH] object ("wen") and a topicalized object ("seine Tante") respectively are moved to the matrix SPEC-CP, triggering head movement of the matrix verb "hatte/hätte" into I^0 and then into C^0, while in (14), where the sentence-initial NP "seine Tante" is the subject, no matrix CP is generated and "hatte/hätte" lands in the matrix I^0. The form of the intervening SPEC-adjunct clause (= C'), which is not properly governed in any case, is of course identical in the three examples, with the verb in C^0.

It is important to point out that the fact that the verbs I claim are the matrix verb in sentences like (5), (6) and (14) are often in the subjunctive cannot be used as an argument against the analysis I propose. It should be clear from the short passage from a contemporary German text reproduced in Appendix "A", in which several syntactically independent sentences contain a subjunctive verb, that the use of the "indirect discourse subjunctive" is not confined to embedded contexts in Modern German. Unlike in English, the availability of this type of subjunctive enables the speaker/writer to convey a doubtful, skeptical or ironical attitude toward, or merely distance himself from, an assertion reported in an isolated sentence--e.g., "Seine Tante hätte er gestern angerufen" ('his aunt had (subj.) he yesterday called')--without having to resort to an introductory clause such as 'He claimed', 'She says', or the like, or even provide surrounding context.

The major challenge my "parentheticals" analysis faces is how to account for the "multiple embeddings" cases like (7) above, in which proponents of the long movement analysis claim a constituent is questioned (or topicalized) from a deeply embedded "daß-drop" complement, triggering verb movement into C^0 in each clause as the fronted constituent passes through successive SPEC-CPs. The surface string in question is repeated below:

(7) Wen, sagte er, hatte/hätte er seiner Mutter versprochen,
'who(m) said he had he his mother promised

würde er demnächst anrufen?
would he soon call'

The first possibility that comes to mind is that SPEC-adjuncts can "stack", much like "stacked" relative clause structures. Sentences like (7), and even more complex examples, could then be derived as follows:

(7a) $[_{CP}\ [_{SPEC}\ [_{SPEC}\ [_{SPEC}$ Wen$_j$ $]\ [_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e
'who(m) said he

$[_{VP}$ e $]]]]\ ][_{C'}$ hatte/hätte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ seiner
had he his

Mutter versprochen e $]]]]\ ]\ [_{C'}$ würde $[_{IP}$ er $[_{I'}$ e
mother promised would he

$[_{VP}$ t_j demnächst anrufen e $]]]]]$
soon call'

Thus rather than being a multiply embedded complement structure under the verb "sagte" as assumed by the traditional analysis, the matrix sentence in (7) would be the frame "Wen würde er demnächst anrufen?" ('who(m) would he soon call?')

with two "parentheticals" ("**sagte er**" and "**hatte/hätte er seiner Mutter versprochen**") appended to "wen" in SPEC-CP, the second stacked upon the first by successive adjunction to the SPEC-CP incorporating the first adjunct.

The problem with this explanation is that it suggests the two parenthetical clauses are not directly related to each other. Unlike stacked relatives, where the individual adjoined clauses are predicated of one and the same head noun, there is clearly a relationship of subordination between the parentheticals themselves in (7). Part of the meaning encoded in the structure is equivalent to "he said that he promised his mother X" and this is not captured by the representation in (7a). On the other hand, this does not mean that the clause containing "**hatte/hätte er seiner Mutter versprochen**" has to be the complement of the verb "**sagte**", any more than the clause containing "**würde er demnächst anrufen**" has to be the complement of the verb "versprochen" despite the fact that "he promised his mother that he would soon call Y" is a component of the sentence's meaning, or, indeed, any more than the matrix clause had to be the complement of the verb contained in the parenthetical in a simple example like (5).

Consideration of certain variations of structures like (7) appears to shed some light on its derivation. The following are all possible sentences:

(21) a. **Wen, hatte/hätte er, sagte er, seiner Mutter**
'who(m) had he said he his mother

versprochen, würde er demnächst anrufen?
promised would he soon call'

b. Wen, sagte er, hatte/hatte er seiner Mutter
'who(m) said he had he his mother

versprochen, würde er demnächst anrufen?
promised would he soon call'

c. Wen, hatte/hätte er seiner Mutter versprochen,
'who(m) had he his mother promised

sagte er, würde er demnächst anrufen?
said he would he soon call'

Curiously enough, the meaning is unchanged by the relocation of "sagte er": both (21a) and (21c) are equivalent in meaning to (21b) (which is the same as (7)), i.e. all three variations encode the same basic meaning which is equivalent to that of the complement structure "he said that he told his mother that he would soon call X". Presumably, therefore, the three sentences have the same LF representation. I suggest that they are very closely related syntactically as well and that in fact (21b) and (21c) are both derived from (21a).

Since inverted order parentheticals are C's, they have no SPEC-CP but do contain a SPEC-IP position which can in turn serve as the adjunction site for another parenthetical, such that a second parenthetical may be embedded (as a SPEC-IP adjunct) within the first one. There is also the potential for the latter process to apply recursively, deriving as complex examples as processing constraints will allow. Returning to (21a), it is thus derivable as follows:

(22) $[_{CP}\ [_{SPEC}\ [_{SPEC}$ Wen$_j$ $]\,[_{C'}$ hatte/hätte $[_{IP}\ [_{SPEC}\ [_{SPEC}$ er]

'who(m) had he

$[_{C'}$ sagte $[_{IP}$ er $[_{I'}$ e $[_{VP}$ e]]]] $]\,[_{I'}$ e $[_{VP}$ seiner Mutter

said he his mother

versprochen e]]]] $]\,[_{C'}$ würde $[_{IP}$ er $[_{I'}$ e $[_{VP}$ t_j

promised would he

demnächst anrufen e]]]]]

soon call'

The orders in (21b) (= (7)) and (21c) are then obtained by scrambling the "sagte er" clause leftward or rightward, respectively, to the positions indicated by the arrows:[7]

(23) Wen hatte/hätte er [sagte er] seiner Mutter versprochen

(21b) (21c)

würde er demnächst anrufen?

In contrast with (21a-c), any attempt to permute the order of clauses--as for example, to scramble "er sagte"--will result in an ungrammatical or anomolous sentence or, at best, in a meaning change, in sentences like the following, which are indeed multiply embedded complement clause structures, of the "daß"-less variety (with "$\emptyset$" in C^0):

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[7] Scrambling of sentence-final parentheticals presumably occurs in a similar manner, e.g. to derive:

Wen würde er demnächst anrufen, [sagte er, $]_j$
'who(m) would he soon call said he

hatte/hätte er t_j seiner Mutter versprochen?
had he his mother promised'

(24) a. Er sagte, er hatte/hätte seiner Mutter
'he said he had his mother

versprochen, er würde seine Tante demnächst
promised he would his aunt soon

anrufen.
call'

b. *Er hatte/hätte, er sagte, seiner Mutter

versprochen, er würde seine Tante demnächst

anrufen.

c.(??)Er hatte/hätte seiner Mutter versprochen, er
'he had his mother promised he

sagte, er würde seine Tante demnächst anrufen.
said he would his aunt soon call'

d. *Er hatte/hätte seiner Mutter versprochen, er würde

seine Tante demnächst anrufen, er sagte.

(25) a. Er sagte, sie behauptete, Peter würde
'he said she claimed Peter would

schließlich eine Lösung finden.
eventually a solution find'

b. Sie behauptete, er sagte, Peter würde
'she claimed he said Peter would

schließlich eine Lösung finden.
eventually a solution find'

c. *Sie behauptete, Peter würde schließlich eine
'she claimed Peter would eventually a

Lösung finden, er sagte.
solution find he said'

Clauses like "er sagte" cannot interrupt another clause (only parentheticals may do so), so (24b) is precluded; the status of (24c) is very questionable, due to a sequence of tenses violation and, if it is marginally acceptable, it represents a meaning change from (24a); both (24d) and (25c) violate the Theta Criterion as well as the subcategorization requirements of the verb "sagen". On the other hand, (25b) is a perfectly good sentence, but the meaning does not correspond to that of (25a).

A final observation is in order here with respect to parenthetical scrambling. The fact that (21c) is taken to be equivalent in meaning to (21b) undoubtedly has something to do with considerations which are not purely syntactic, such as verb tenses and semantic cues, which favour an interpretation corresponding to a derived structure in which "sagte er" in (21c) has scrambled rightward around "hatte/hätte er seiner Mutter versprochen", rather than the other way around. But if all such contrasts are neutralized, i.e. if we use two very similar non-factive verbs with the same tense/mood features in multiple parenthetical examples similar to (21b-c), such that the sentences might be systematically ambiguous between a "left-scrambled" and a "right-scrambled" interpretation, we find that a "left-scrambled" interpretation is always preferred. In accordance with this default strategy, which I take to be an interpretive heuristic, the following will normally be assigned different meanings:[8]

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[8] The reverse would appear to hold for the "wie er sagte" type of parentheticals, or they may be able to "stack" in the manner originally suggested and rejected for the inverted order type. Both derivations appear possible, depending on the reading of sentences like:

Wann$_j$,	wie	er	behauptete,	wie	sie sagte,
'when'	as	he	claimed	as	she said

(26) a. Wann$_j$, sagte er, behauptete sie, würde Peter
'when said he claimed she would Peter

t_j eine Lösung finden?
a solution find'

b. Wann$_j$, behauptete sie, sagte er, würde Peter
'when claimed she said he would Peter

t_j eine Lösung finden?
a solution find'

In contrast with German, the possibilities for adjunction to SPEC, in particular to SPEC-CP, are limited in English since, as discussed in Chapter Four, only certain kinds of elements front to the SPEC-CP position in the first place.[9] If we consider the two relevant cases, we note that while [+NEG] topics seem to admit clausal adjuncts (which, in contrast with German where they are C's, are generally of the form IP):

(27) Never, she$_j$ says, does Mary$_j$ expect to find anyone she can trust.

this is not generally the case with [+WH] fronting. All the following attempted variations are clearly bad:

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würde Peter t_j eine Lösung finden?
would Peter a solution find'

[9] Since [-WH], [-NEG] constituents normally adjoin to IP in English and thus do not trigger inversion, examples like "This man Mary claims is an honest man" invite both a "long-subject-extraction" and a "parenthetical" (adjunction to SPEC-IP) interpretation. Similarly, two analyses appear possible when the initial element is a fronted [-WH] non-subject, as in "This man Mary claims she can trust", assuming parentheticals could also adjoin to the English Adj-IP position. Parenthetical structures would presumably be distinguished by an intonation break or set off by commas.

(28) *Who(m) she thinks can Mary trust?
does she think can she trust?
Mary thinks
thinks Mary
does Mary think

Indeed, the grammatical structure closest to (28), namely:

(29) Who(m) does Mary think (that) she can trust?

is the type which, as noted above, can only be analyzed as a case of long movement out of a complement clause. In fact, the only "parenthetical" clauses that can adjoin to a [+WH] phrase in SPEC-CP in English are those which contain a verb which is itself marked for the [+WH] feature (e.g. "wonder", "ask", etc.), as in the following indirect and direct speech examples which, unlike (29), cannot be long extractions:

(30) Who(m) in the world, she_j wonders, can she_j trust?
$Mary_j$ wonders, can she_j trust?
she_j wonders, can $Mary_j$ trust?

(31) "Who(m) in the world," Mary asked, "can I trust?"

Whatever accounts for this particular condition on clausal adjuncts of [+WH] phrases in English (or its relaxation in German), the differences between the two languages in regard to the respective domains of long movement (broader in English) and of clausal adjunction to SPEC positions (broader in German) would appear to be responsible for the considerable confusion that has arisen in the literature surrounding the analysis of German sentences like (5), (6), (7) and (14).

5.3 Empirical Evidence against Long Movement out of "Daß-Drop" Clauses

In this section, I shall adduce certain specific empirical evidence against the long movement analysis and in favour of the SPEC-adjunct analysis of structures like (5-7) and (14) in German.

First, consider the following paradigms:

(32) a. Er sagte, daß er seiner Mutter versprochen hätte,
'he said that he his mother promised had

daß er seine Tante demnächst anrufen würde.
that he his aunt soon call would'

b. Er sagte, er hätte seiner Mutter versprochen,
'he said he had his mother promised

daß er seine Tante demnächst anrufen würde.
that he his aunt soon call would'

c. Er sagte, daß er seiner Mutter versprochen hätte,
'he said that he his mother promised had

er würde seine Tante demnächst anrufen.
he would his aunt soon call'

d. Er sagte, er hätte seiner Mutter versprochen,
'he said he had his mother promised

er würde seine Tante demnächst anrufen.
he would his aunt soon call'

(33) a. Wen$_j$ sagte er, daß er seiner Mutter versprochen
'who(m) said he that he his mother promised

hätte, daß er t_j demnächst anrufen würde?
had that he soon call would?

b. **Wen$_j$**, sagte er, **hätte** er seiner Mutter
'who(m) said he had he his mother
versprochen, daß er t_j demnächst anrufen **würde**?
promised that he soon call would'

c.(?) **Wen$_j$** sagte er, **daß** er seiner Mutter versprochen
'who(m) said he that he his mother promised
hätte, **würde** er t_j demnächst anrufen?
had would he soon call'

d. **Wen$_j$**, sagte er, **hätte** er seiner Mutter
'who(m) said he had he his mother
versprochen, **würde** er t_j demnächst anrufen?
promised would he soon call'

The first set (32a-d) are, quite uncontroversially, multiply embedded complement structures, without any attempt at extraction, and serve to illustrate that "daß" complements (with V-final order) and "daß"-less complements (with subject-first V2 order) may be systematically varied at successive levels of embedding with a perfectly grammatical result. But in the extraction paradigm (33), one member of the set, (33c), stands out conspicuously as much less acceptable than the other variants, i.e., speakers who admit extraction over "daß" stumble over this particular sentence and some reject it outright. Given the traditional assumption that long movement is possible out of "daß-drop" complements (being at least as acceptable as extraction over "daß") and triggers V/I^0 to C^0, the lower acceptability level of (33c) remains a mystery. In particular, the traditional (Thiersch-type) analysis, which treats all four members of the set as cases of long movement out of the most deeply embedded clause, predicts that (33b) and (33c) should be equally acceptable.

On the other hand, if the SPEC-adjunct analysis presented above is assumed, in conjunction with my claim that German "daß"-less complements are headed by an alternate [-WH] complementizer "Ø" which blocks extraction completely, the contrast becomes explainable. In the analysis I have proposed, (33a) is the only sentence in the group in which the matrix clause is the one containing "**sagte er**", with "**wen**" having moved out of two complement clauses (over "daß" in each instance) to the matrix SPEC-CP position. Movement of "**wen**" out of the lowest clause is ruled out as a possible analysis of any of the other variations, as "Ø" heading either or both complement clauses would have blocked such attempted extraction. Rather, the grammaticality of (33b) results from the fact that the matrix clause is the middle clause in the surface string, the one containing "**hätte er seiner Mutter versprochen ...** ", "**wen**" having been extracted out of the complement of "versprochen" (over "daß") to the matrix SPEC-CP and "**sagte er**" being a "parenthetical", i.e. a SPEC-CP adjunct. In (33d) (the same example as (7)), the matrix clause is the last clause in the string, the one containing "**würde er demnächst anrufen**", out of which "**wen**" has been short-extracted to SPEC-CP, "**sagte er**" and "**hätte er seiner Mutter versprochen**" being a multiply embedded parenthetical structure adjoined to it ("**sagte er**" having scrambled leftward from its original adjunction position to the right of "**hätte er**" as shown in (23)). The problem with (33c) is that the presence of "daß" in the middle clause suggests to the hearer/reader that a sequence of one or more complements is about to follow at this point in the structure and therefore that the "**sagte er**" clause is the matrix clause. But the clause which follows "versprochen hätte", "**würde er demnächst anrufen**", is not a proper form of complement clause ("daß" and blocking-"Ø" being the only licit heads of asserted finite complements in German), nor is the context appropriate for it to be a SPEC-

adjunct "parenthetical", hence the sentence is seen as anomolous.

The only possibility for analyzing the sentence as grammatical--which is the way it is apparently construed by speakers who accept it on careful reading--is if "**Wen$_j$ würde er t_j demnächst anrufen?**" is seen as the matrix clause (again a case of short [+WH] extraction) and "**sagte er, daß er seiner Mutter versprochen hätte**" is considered a complex "parenthetical" or SPEC-CP adjunct. Accordingly, the sentence would receive the following analysis:

(34) (?) $[_{CP}\ [_{SPEC}\ [_{SPEC}$ **wen$_k$** $]][_{C'}$ **sagte** $[_{IP}$ **er** $[_{I'}$ e $[_{VP}$ t_j e

'whom(m) said he

$[_{C'}$ **daß** $[_{IP}$ **er** $[_{I'}$ e $[_{VP}$ **seiner Mutter versprochen**

that he his mother promised

hätte $]]]]_j$ $]]]]$ $][_{C'}$ **würde** $[_{IP}$ **er** $[_{I'}$ e $[_{VP}$ t_k

had would he

demnächst anrufen e $]]]]]$

soon call'

Thus the acceptability of (33c) reduces to the question of whether a SPEC-adjunct may itself incorporate a "daß" complement as part of the "parenthetical" (or is necessarily monoclausal). In written German, a comma after "wen" can provide a subtle cue, demarcating "**sagte sie, ... **" as the beginning of an extended parenthetical, such that the reader anticipates the eventual resumption of the matrix clause frame, thus:

(35) **Wen, $[_{C'}$ sagte er, daß er seiner Mutter versprochen hätte], würde er demnächst anrufen?**

Indeed, such an introductory comma--equating with an intonational break--would be absolutely obligatory in order for (33c) to stand a chance at such a "complex parenthetical" interpretation. But the important point is that the long movement analysis is unable to differentiate this structure from the other members of (33).[10]

A second, even more compelling argument, against extraction out of so-called "daß-drop" clauses is derived from a careful consideration of embedded [+WH] contexts. Compare the following attempts at formation of complex indirect constituent questions:

(36) Ich kann mich nicht erinnern, [von wem]$_j$ sie sagte,
'I can (refl.) not remember from whom she said
daß sie den Brief t_j bekommen hätte.
that she the letter received had'

(37) *Ich kann mich nicht erinnern, [von wem]$_j$ sie sagte,
'I can (refl.) not remember from whom she said
hätte sie den Brief t_j bekommen.
had she the letter received'

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[10]The marginal status of such complex parentheticals is not unexpected, given that parentheticals in direct quotations are always monoclausal. Note that speakers who accept (33c) (analyzed as (35)) also accept the equivalent with the parenthetical in sentence-final position:

(?) Wen würde er demnächst anrufen, sagte er, daß
'who(m) would he soon call said he that
er seiner Mutter versprochen hatte/hätte?
he his mother promised had'

(38) *Ich kann mich nicht erinnern, [von wem]$_j$ sie sagte,
'I can (refl.) not remember from whom she said
sie hätte den Brief t_j bekommen.
she had the letter received'

Unlike in (33c) in the direct question paradigm, there is no possibility of analyzing (36-38) in any other manner but as multiply embedded complement structures: the [+WH] phrase in the middle clause can only introduce an indirect question as a complement of "Ich kann mich nicht erinnern" which must be the matrix clause, and in turn the last clause of the sequence can only be a complement of a complement. As was the case above, the long movement analysis cannot differentiate between (36) and (37)--if extraction is supposed to be possible out of "daß-drop" complements and triggers V/I^0 to $\bar{C}$, (37) should be a perfectly good sentence. Here we have a clear case of overgeneration as a result of allowing long movement out of these clauses: (37) is not merely marginal or questionable as was (33c); it is completely ungrammatical.

The SPEC-adjunct analysis, on the other hand, again makes the right predictions with regard to (37), for the same reasons (33c) was predicted to be impossible when the middle clause was read as a complement of the first. The verb-subject order in the last clause makes it inadmissible as a complement and the environment is inappropriate for a SPEC-adjunct. Of course (38), with subject-verb order in the offending final clause, is no better, since "Ø" heading such a complement would still bar extraction, with or without inversion. In fact, the only possible sequence under the embedded [+WH] phrase which results in a grammatical sentence without "daß" is the following:

(39) Ich kann mich nicht erinnern, [von wem]$_j$, sagte sie,
'I can (refl.) not remember from whom said she
sie den Brief t_j bekommen hätte.
she the letter received had'

While the long movement analysis is incapable of accounting for this possibility, it can be explained very straightforwardly if "sagte sie" is considered a "parenthetical" adjoined to the PP which has been short-extracted to SPEC-CP[11], thus[12]:

(40) $[_{IP}$ Ich $[_{I'}$ kann $[_{VP}$ mich t_j nicht erinnern $[_{CP}$ $[_{SPEC}$
'I can (refl.) not remember
$[_{SPEC}$ von wem$]_k$ $[_{C'}$ sagte $[_{IP}$ sie $[_{I'}$ e $[_{VP}$ e $]]]]$ $]$ $[_{C'}$ e
from whom said she
$[_{IP}$ sie $[_{I'}$ e $[_{VP}$ den Brief t_k bekommen hätte $]]]]]_j$ $]]]$
she the letter received had'

Exactly the same pattern of grammatical and ungrammatical examples can be found in relative clauses, e.g.:[13]

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[11]SPEC-CP is generally assumed to be the initial landing site of embedded [+WH] movement, even if SPEC subsequently restructures with C^0 to become the derived head of an embedded [+WH] clause, as has been suggested by some authors (see, e.g., Holmberg (1986); Taraldsen (1986)).

[12]As in the other examples, the long form "wie sie sagte" could equally well be substituted for "sagte sie" as the parenthetical in this sentence.

[13]The German relative pronouns of the "der/die/das" paradigm alternate with the overtly [+WH] forms "welcher/welche/welches".
A PP has been deliberately chosen as the extracted constituent in the examples so as not to obscure the contrast, there being independent reasons why extraction over "daß" is generally better with a PP than an NP in German, especially in

(41) Sie hat dem Mann, [von dem]$_j$ sie glaubte, daß
'she has the man by whom she believed that
ihre Freundin t_j bereits betrogen worden sei,
her girlfriend already betrayed been has
ihr Geld dennoch anvertraut.
her money nevertheless entrusted'

(42) *Sie hat dem Mann, [von dem]$_j$ sie glaubte, sei
'she has the man by whom she believed has
ihre Freundin t_j bereits betrogen worden,
her girlfriend already betrayed been
ihr Geld dennoch anvertraut.
her money nevertheless entrusted'

(43) *Sie hat dem Mann, [von dem]$_j$ sie glaubte, ihre
'she has the man by whom she believed her
Freundin sei t_j bereits betrogen worden,
girlfriend has already betrayed been
ihr Geld dennoch anvertraut.
her money nevertheless entrusted'

(44) Sie hat dem Mann, [von dem]$_j$, glaubte sie, ihre
'she has the man by whom believed she her
Freundin t_j bereits betrogen worden sei,
girlfriend already betrayed been has
ihr Geld dennoch anvertraut.
her money nevertheless entrusted'

A final argument relates to backwards pronominalization, e.g., in:

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relative clauses.

Again, a "wie sie glaubte" parenthetical could be substituted in the grammatical (44).

(45) Wem, glaubte sie_i, konnte $Maria_i$ nunmehr noch
'who(m) thought she could Maria now still
vertrauen, nach allem, was geschehen war?
trust after all that happened had?

The possibility of coreference of "sie" and "Maria" is in accord with the idea that "glaubte sie" in (45) is not the matrix clause but an adjunct, as opposed to an example of extraction out of a "daß" complement, where coreference, just as in its English equivalent, is impossible, in accordance with the standard assumptions of Binding Theory:

(46) *Wem glaubte sie_i, daß $Maria_i$ nunmehr noch
'who(m) thought she that Maria now still
vertrauen konnte, nach allem, was geschehen war?
trust could after all that happened had?

All these facts together, I suggest, provide ample support for my claim that a "Ø" complementizer" heading German "daß"-less finite complements effectively blocks extraction out of these clauses, long movement, to the extent it is possible in German, being limited to extraction over "daß". A closer examination of the kinds of examples cited by Thiersch (1978) and Schwartz and Vikner (1989) as support for the traditional analysis--where long [+WH] extraction out of "daß"-less clauses to form questions purportedly triggers movement of the verb in a complement clause into an embedded C^0--reveals that this is only an illusion of long movement based on a misguided attempt to assimilate these sentences to the English pattern.

5.4 A Note on Parentheticals in Subject Clauses

Thiersch (1978, p. 142) cites a final piece of evidence against a "parentheticals" treatment of the sentences in question, which I shall briefly address, namely the purported prohibition on would-be parentheticals in sentential subjects. The relevant example, as given by Thiersch, is:

(47) *Wen, sagte Hans, ich anstellen sollte, ist nicht klar.
'who(m) said Hans I appoint should is not clear'

What seems to be the issue is not that (47) is ungrammatical as such, but that "Hans" and the pronoun "ich" must co-refer, i.e. the sentence can only be interpreted as a direct quotation--which Thiersch considers the "unintended" reading. Contrasting this with a similar sentence with a parenthetical PP where "Hans" in the parenthetical and "ich" in the following clause do not co-refer:

(48) Wen, nach Hansens Meinung, ich anstellen sollte, ist
'who(m) in Hans's opinion I appoint should is

nicht klar.
not clear'

Thiersch's quarrel seems to be that a non-co-referential reading of a sentence like (47) is unavailable. He deduces from this that the distribution of clauses like "sagte Hans" is restricted to positions where a complement may follow them and thus that they are the top clause.

I fail to see how this constitutes evidence that the clause to the right of "sagte Hans" in (47) must be a complement of "sagte" or that "sagte Hans" cannot be a parenthetical. It merely means that--for reasons about which I will not speculate here--a parenthetical in the sentential subject

context must be construed as an insert in a direct quotation, as opposed, for example, to cases where one is adjoined to the SPEC-CP of an embedded [+WH] clause which, needless to say, cannot be a direct quotation. As demonstrated above, "sagte sie" can perfectly well be inserted after the [+WH] phrase in (39), as can "glaubte sie" in (44), and the clause which follows these clauses is clearly not the complement of "sagte". I therefore do not believe this data speaks to the issue of whether German sentences like (5), (6), (7) and (14) are derived by long distance movement. Rather, there is substantial evidence, as adduced in the preceding section, that these structures must in fact be derived in accordance with the clausal adjunction or "parentheticals" analysis I have presented here.

CONCLUSION

This thesis has, first and foremost, marshalled evidence for the claim that the Germanic languages have INFL-second underlying word order within the extended X' system of phrase structure assumed in Chomsky (1986a) and most subsequent work in generative grammar. I have argued that a post-subject INFL position, which is base-generated as an empty node in all the Germanic languages except English, is required to serve as the target site for movement of the finite verb, deriving "verb-second" (V2) word order in certain types of subordinate clauses and in subject-first matrix clauses in all these languages, including, most controversially, the continental West Germanic languages exemplified by German. I have claimed, as per the analysis of Travis (1984, 1987), that generation of a COMP projection in matrix clauses and the additional movement of V/I^0 into $\bar{C}$, should be reserved for sentences in which another category appears in the matrix SPEC-CP position as a result of processes such as topicalization and WH movement.

This "non-congruent" treatment of clauses which exhibit surface V2 word order runs counter to the traditional analysis of the "V2 phenomenon" in the continental Germanic languages as the uniform result of a process or processes which move the verb to a final C^0 target site. The analysis also challenges the prevalent belief among researchers working in comparative Germanic syntax that the continental West Germanic languages should be distinguished from the other subgroups of the Germanic languages as having <u>INFL-final</u>, in addition to V-final, base word order. My argument that while V-final, the continental West Germanic group, like all the

other Germanic languages, are INFL-second, has been based in large measure on careful consideration, in Chapters Three and Four, of an important set of data from German, namely complement clauses with V2 word order, which I have shown are subject-first and should therefore be differentiated from embedded root phenomena or "EMCs". I contend that the subject-first/non-subject-first asymmetry exhibited by these V2 complement converges with certain asymmetries of a similar nature found in matrix clauses in German and the other Germanic languages, in particular those relating to personal pronoun distribution (Travis (1984)) and fronting of German complementizerless concessive clauses as discussed in my Chapter Four. Together, all these data provide a forceful argument that a structural distinction between subject-first and non-subject-first V2 word orders is warranted for German and for most of, if not all, the other Germanic languages (cf. Diesing (1990) on Yiddish), whereas the traditional, congruent (V in COMP) treatment obscures these subtle asymmetries. Clearly, such a distinction between V2 with V^0 in I^0 and V2 with V^0 in C^0 is only possible if the languages in question, including the continental West Germanic and mainland Scandinavian subgroups, are all strictly INFL-second.

Secondly, assuming INFL-second as a cross-Germanic generalization, I have argued that the ECP analysis of verb movement phenomena across languages, as formulated by Travis (1984, 1987), with certain modifications, is superior, on both conceptual and empirical grounds, to all other verb movement "trigger" theories which have been proposed in the literature thus far. It has been demonstrated that an I-second/ECP framework, which appeals to a very general principle of Universal Grammar, is successful in explaining a wide array of data, avoiding the problems of other analyses. With regard to the basic clause types, as discussed by Travis, matrix clause

V2 orders in all the languages are accounted for, the cross-linguistic variation being attributed to parameterization of the processes exploited by languages for fronting constituents. The cross-linguistic variation in verb position in clauses headed by complementizers (typically, subordinate clauses) is traced to the headedness of VP in conjunction with the ability of complementizers to identify the empty head of their IP complement by head-feature transmission. I have suggested that the latter parameter is in fact irrelevant for determining verb position in English in that it is distinguished from the other Germanic languages by its property of having INFL base-lexicalized, minimally by an inflectional affix which is a bound morpheme requiring subsequent amalgamation with a carrier.

In addition to the data already covered by Travis, a number of additional clause types were examined in this thesis. The ECP analysis was shown to correctly isolate Icelandic control infinitivals (headed by the complementizer "að") as a unique case of non-finite V^0 to I^0 (V2) movement in the Scandinavian languages and to predict the correct distribution of object shift in the different clause types in those languages. Moreover, it was demonstrated that by focussing on the complement/non-complement distinction between clause types, the ECP analysis appropriately predicts the common behaviour of all the Germanic languages, including English, with respect to movement of the verb into C^0 in complementizer-less adverbial adjunct clauses.

Given that the ability of complementizers to identify the empty head of their IP complement is considered a property of lexical items, allowing for variation among complementizers within a language, an explanation for the German subject-first V2 complements was provided. I proposed that a

"Ø" complementizer alternates with "daß" as the C^0 head of finite [-WH] complements of certain verbs, nouns and adjectives, serving to block head-feature transmission under proper government from outside the clause, but that, unlike "daß", such "Ø" complementizer lacks the necessary features to identify I^0, hence triggering V^0 to I^0 (V2). It is hoped that this notion of a null lexical entry (a phonetic "zero" morpheme selected as a clausal head by a particular class of lexical items), as distinct from a syntactic empty category--which I have used here to describe a particular phenomenon in German--will eventually find further support, on both the theoretical and empirical levels, as a result of future investigation of other languages and configurations.

Also, contrary to standard assumptions in the literature, I have argued that topicalization, direct question and relative clause formation by long distance extraction out of these German V2 complements--purportedly triggering multiple V^0 to C^0 movements as the extracted constituent moves cyclically through successive SPEC-CPs--are actually precluded. This I have attributed to the fact that the "Ø" complementizer completely blocks extraction, unlike its counterpart "daß" which does (with dialectal variation) allow certain long extraction possibilities. I have suggested that the class of German sentences which look deceptively as if they were formed by long extraction out of a V2 complement should be analyzed entirely differently. On the basis of subtle evidence, I have claimed that the clause which is standardly assumed to be a V2 complement, out of which extraction has allegedly occurred by successive cyclic movement to the SPEC-CP of its superordinate clause, is instead itself the superordinate clause such that the extraction is actually "shorter", the clause intervening after the extracted constituent being a type of "parenthetical" which may adjoin to

SPEC-IP or SPEC-CP. The distribution of these "parentheticals" parallels that of the "performer-parentheticals" which may be inserted sentence-medially in direct quotations.

But in spite of the elegance with which the ECP analysis, in conjunction with Germanic I-second base word order, deals with a variety of V2 phenomena in a Principles and Parameters GB framework, certain problems remain. I shall briefly sketch a few which come to mind.

First, I have omitted any detailed discussion of the position assumed by the verb in embedded [+WH] clauses in the various languages under scrutiny, its treatment under the ECP analysis being clouded by the same unresolved issues regarding the matrix/subordinate asymmetry in [+WH] clauses which beset other analyses of V2.

Travis (1984, 1987) has suggested that in embedded [+WH] questions, the chain of identification of empty categories begins with the matrix verb selecting the [+WH] complement, which fills the empty C^0 position and in turn empty I^0 by head-feature transmission under proper government. The assumption is therefore that the [+WH] phrase originates in and remains in SPEC-CP. While this analysis works for the continental Germanic languages where there is no movement of the verb from d-structure position in VP, the predictions it makes about verb position in embedded [+WH] questions are not borne out in Icelandic, in which V^0 raises to I^0 as it does in clauses with a lexical complementizer. In terms of the ECP analysis, this suggests it is the [+WH] phrase <u>itself</u> which determines the position of the finite verb, as it would if it were in C^0, in accordance with the proposed inability of complementizers to transmit features to I^0 in Icelandic generally.

Such facts are consistent with earlier observations in the literature to the effect that [+WH] phrases in a number of "V2-languages" and "non-V2 languages" "act like complementizers" in embedded contexts. As required to accommodate English and certain mainland Scandinavian data within his own theory of V2 movement, Holmberg has, for example, suggested that the [+WH] phrase, preposed initially to the "XP" (= SPEC-CP) position, may undergo a restructuring process with an empty C^0 in embedded clauses whereby it becomes the derived head of the clause. Taraldsen (1986) makes a similar proposal. The ECP analysis, as well, appears to require that embedded [+WH] phrases ultimately occupy C^0 such that V^0 to I^0 will be triggered in Icelandic indirect questions. Relatives likewise support the view that embedded [+WH] phrases in general occupy C^0 like a complementizer. Assuming that as modifiers, relative clauses are adjuncts and thus not properly governed, if C^0 were empty one might expect the finite verb to move there as it does in adverbial clauses in all the Germanic languages. The verb position facts, however, coincide with those of clauses headed by complementizers in the languages in question: V^0 lands in I^0 in Icelandic and remains in VP in the other subgroups. Moreover, the data regarding embedded [+WH] clauses are further complicated by the appearance of the morpheme "som" (in C^0) after the [+WH] phrase in Swedish and Norwegian under certain conditions, as well as by the fact that some languages, such as Afrikaans, do allow verb movement to C^0 as an option in embedded questions (see du Plessis (1986)).

A related problem pertains to English relatives with no [+WH] phrase or complementizer ("that"-less relatives), which in accordance with the ECP analysis would have to be bare IPs in order to prevent verb movement to an empty C^0 node--again, assuming an adjunction analysis of relative

clauses. This is not implausible, given that certain other types of English adjunct clauses, in particular direct and indirect discourse parentheticals as discussed in Chapter Five, are also usually IPs.[1] In any event, the same issues involving embedded [+WH] clauses would seem to be problematical for all competing descriptions of the Germanic languages.

Another remaining difficulty, as framed by Webelhuth (1989), is the question of how the ECP analysis would deal with control infinitivals in subject and topicalized object positions. Specifically, what licenses the empty C^0 heads of these clauses--arguably required for the PRO Theorem of Binding Theory when they are in the complement position--when they appear in subject/topic positions where they are not properly governed?

A final important empirical issue which bears investigating is the question of just how pervasive EMCs with V2 order may be in various spoken and written dialects of German--a problem I touched upon in the discussion in Chapters Three and Four, noting that such EMCs, to the extent they are entering or have entered the language, would have a different structure (plausibly C-CP with an empty higher C^0 node) from that of ordinary V2 complements, which are subject-first. It is important to point out that the existence of such embedded root phenomena in German would not affect my "parentheticals" analysis of the purported long extraction cases. If EMCs are possible in German, they are--on independent grounds--predicted to be impervious to extraction as discussed in the thesis. Thus the sentences in question would not be deriv-

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[1] Weisler (1980) has proposed such a bare IP analysis of "that"-less relatives on independent grounds.

able by means of long distance movement out of EMCs any more than out of subject-first V2 complements headed by the "blocking" complementizer "Ø". Moreover, I would speculate that, irrespective of the analysis of V2 in Yiddish, the equivalent cases of purported long extraction (triggering movement to C^0 in intermediate clauses per Diesing (1990)) will, on closer examination, turn out to be more appropriately analyzed in the manner I have claimed for the German sentences with "parentheticals".

I leave these issues as open questions to be explored in further research.

APPENDIX "A"

REFERENCE TEXT

M. Walser, Dorle und Wolf: eine Novelle. Frankfurt/Main: Suhrkamp, 1987. (Pages 91-93)

Indirect speech subjunctive forms are highlighted.

[...]

... Daß die im Haus MA JOIE liebenswürdige Menschen
That they in-the house MA JOIE kind people

seien, sagte sie, bezweifle sie überhaupt nicht. Sie
were said she doubted she not-at-all. She

werfe es sich wirklich vor, daß sie so verklemmt
reproached (refl.) truly (pfx.) that she so inhibited

gewesen sei. Voreingenommen, ängstlich und nichts als
been had. Presumptuous, fearful and nothing but

selbstbezogen sei sie gewesen. Das werde ihr noch
self-centred had she been. That was-going-to her still

lange nachgehen. Für sie seien die alle
for-a-long-time haunt. For her had they all

miteinander ein Trupp gewesen, ausgeschickt, Wolf
together a clique been sent Wolf

zurückzuholen. Im Gegenteil, sagte Wolf. Ja, ja,
to-fetch-back. On-the contrary, said Wolf. Yes, yes,

aber letzten Endes sind die doch ein
but in-the-final-analysis are they neverthless an

Anbindungskommando. Daß er dorthin gehöre, das zu
enticement-commando. That he there belonged - that to

demonstrieren sei deren Auftrag gewesen. Deshalb
demonstrate had their mission been. Because-of-that

sei sie so empfindlich gewesen gegen alles, was
had she so hyper-sensitive been toward everything

die sagten.
they said.

[...]

Er sagte, er finde es toll, daß Dorle es abgelehnt
He said he found it great that Dorle it refused

habe, mit Bergmann zu sprechen. Das sei dem offenbar
had with Bergmann to speak. That had him apparently

noch nie passiert. Der sei ganz verlegen gewesen
never-before happened He had entirely overcome been

vor Überraschtheit. Aber gegen den General könne sie
by surprise. But against the general could she

nun wirklich nichts sagen. Sie sage auch nichts
(part.) truly nothing say. She had-to-say also nothing

gegen Bergmann, sagte Dorle, der tue ihr durch und
against Bergmann, said Dorle, he made her utterly

durch leid. Warum, wisse sie nicht. Vielleicht
feel-sorry. Why knew she not. Maybe

sei es Anmaßung ihrerseits. Wenn sie Bergmann
was it presumptuousness on-her-part. When she Bergmann

anschaue, könnte sie heulen. So trostlos wirke der
looked-at could she cry. So miserable appeared he

auf sie. ...
to her.

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