SOME SUBORDINATE CLAUSE CONSTRUCTIONS
IN MODERN GERMAN
SWEDISH AND ENGLISH

A thesis presented for the degree of
Doctor of Philosophy
in the University of Surrey

by

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January 1982

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SUMMARY

This study is an examination of subordinate clause constructions, focusing in particular on dass-clauses in German, and where necessary their Swedish and English equivalents. Chapter 1 discusses previous definitions of the term "subordinate clause", concluding that the presence of a COMP node in the underlying structure of subordinate clauses accounts for differences in their behaviour from that of main clauses. In Chapter 2 we examine the role of primary and ancillary markers of syntactic status, which serve to disambiguate syntactic relations. Chapter 3 concentrates on the function of these markers in German, showing that this language requires a comprehensive system of surface markers, due to the potential ambiguity arising from the existence of a number of polyfunctional elements and constructions. This chapter also includes a discussion of the use of the Subjunctive, which is viewed as yet another ancillary marker in German. Resultant upon this, the verbs of Reported Speech are focused upon in Chapter 4, where a reappraisal of this type of dass-clause is undertaken. Chapter 5 explores supporting evidence from recent analyses of German, discussing the implications of our findings for a general theory of word order. We conclude by suggesting that the term "subordinate clause" be restricted in German to those clauses which display both a complementizer/subordinating conjunction and verb-final word order, the primary markers of subordination. This is a consequence of the interaction of basic word order in German and the fact that German clause-introductory morphemes are often polyfunctional in nature, which weakens their subordinating power and necessitates the use of both word order and morphological markers to clarify syntactic status.
ACKNOWLEDGEMENTS

I should like to express my thanks to Dr. G. M. Anderman for her continued support and guidance throughout this work and far beyond.

Acknowledgement is also due to the Department of Education and Science and the University of Surrey for their financial support.

The German Academic Exchange Service and the Swedish Institute kindly granted me research travel awards which enabled me to make invaluable field trips to the Federal Republic of Germany and to Sweden.

I am indebted to colleagues at the Department of Linguistic and International Studies for their unceasing help and encouragement, in particular, Prof. Nigel Reeves, Margaret Rogers, Dr. Stephen Barbour and Dr. G. G. Corbett. Special thanks are also due to Barbara Wilcox, Sue Dobbie, Barbara Grundy and all the secretarial staff.

I should also like to express my gratitude to Karen Denk and Judy Bridgeman for typing this manuscript.

Finally, I should like to thank my husband, Tim, for his unflagging kindness and support, and my dear parents, Tommy and Renie Cuthbert, to whom this thesis is dedicated.
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Introduction

This thesis is a study of subordinate clause constructions, concentrating in particular on clauses introduced by dass in German, but also, where necessary, treating equivalent constructions in Swedish and English. However, in order to describe these constructions, it has proved necessary to examine a variety of different approaches to the characterization of subordinate clauses. Since much of the material on subordination in existence has been written within a transformational generative framework, the present study is naturally influenced by this theory. However, it has proved necessary to draw on more than this one particular theory, in order to account adequately for observable German data.

To this end, Chapter 1 is devoted to a discussion of a number of proposed or implied definitions of the term "subordinate clause". Initially, we examine previous approaches to a general characterization of subordination and reach the conclusion, in agreement with Bresnan (1972) and Anderman (1978), that the essential distinction between main and subordinate clauses can be neatly captured if we posit a COMP node in the underlying structure of subordinate clauses, thereby accounting for observable differences in syntactic behaviour. Having adopted this approach, we subsequently examine other proposed definitions of the term "subordinate clause". In particular, we investigate the analyses put forward by Emonds (1970; 1976) and Ross (1973), and in the light of observable data, we are forced to reject their approach to the question of determining the status of a clause.

In Chapter 2 we discuss the nature and function of surface markers of syntactic status, i.e. those elements which are used by a language to signal the status of a clause. We show that these signals of syntactic status can be one of two types. They may be PRIMARY MARKERS, i.e. obligatory and direct signals of subordinate
status, as in the case of complementizers and verb-final word order in German. Alternatively, they may be ANCILLARY MARKERS, i.e. (usually) optional and indirect signals of clause status.

These two chapters form the basis of our analysis of subordination, which we then apply to German. In particular, we show in Chapters 3-5 that previous analyses of subordination (notably that of Emonds, 1970; 1976) fail to account adequately for observable data in this language. We look specifically at Emonds' so-called Root Transformation analysis (ibid.), according to which the status of a clause can be determined by those transformational processes which it does and does not allow. Here we show that Root Transformations may frequently apply to subordinate clauses in German, so that in contrast to the situation in English, their application to clauses in German cannot be considered a diagnostic for main clause status. Instead we propose a working definition of the term "subordinate clause" according to which we refer to a clause as subordinate just in case it has been subjected to the operation of primary markers of subordination or of a combination of primary and ancillary markers, or occurs in combination with a main clause which contains ancillary markers of syntactic status. We shall, however, have cause to modify this definition in the light of our discussion of the language specific constraints affecting clause behaviour in German, and this will be discussed further in Chapter 5.

In Chapter 3 we see that the function of surface marking elements or ancillary markers in German appears to be to disambiguate syntactic relations. It is shown that an important reason for the use of surface markers is to ensure that syntactic relations within the sentence are not obscured, particularly in view of the fact that there exist in German a number of elements and constructions that may fulfill one of a number of syntactic functions. Such polyfunctional elements and constructions are potential causes of perceptual confusion, and as such necessitate extra marking. This claim requires us to reexamine some previous studies of German syntax (e.g. Pütz, 1973 and Esau, 1973), and an alternative analysis of the data proposed in both these studies is proposed. In particular we propose a reinterpretation of the nature and function of the elements es and das in German.
Another important finding in Chapter 3 concerns the use of the subjunctive in German, which, we show, is another marker of subordination in German. A particular subgroup of matrix verbs, namely, *verba dicendi*, *putandi* and *sentiendi* etc., is singled out for special attention as the group of verbs which introduce Reported Speech. Chapter 4 is devoted to a discussion of this particular type of *dass*-clause, and involves a significant reappraisal of traditional notions associated with Reported Speech and the use of the subjunctive.

In the fifth and concluding Chapter of this study we take a look at some of the more recent studies of word order in German which provide substantial support for our analysis, and we discuss the broader implications of our findings for a general theory of word order in German.

A significant conclusion reached in this study is that the particular nature of basic word order in German consistently affects its syntactic behaviour (cf. Thompson, 1978; Vennemann, 1971). It emerges that a comprehensive system of surface markers of syntactic status is required in German. This is a consequence of the interaction between its basic word order and the fact that clause-introductory morphemes are often polyfunctional in German, hence automatically weakening their overall subordinating power. This conclusion provides us with an answer to an important question concerning German syntax, namely, why does German have to resort to the use of both morphological markers and word order to signal the status of a subordinate clause.

Regarding terminology, we refer to the general subordinating morphemes *dass* in German, *that* in English and *att* and *som* in Swedish, etc. as complementizers, following Rosenbaum (1967) (cf. Ch. 1, Section II, below). I have decided to use the terms *subordinate clause* and *main clause* throughout, since I feel that no other proposed terminology, e.g. "non-root S" and "root S" (Emonds, 1970, 1976), represents any particular advantage over the traditional terms. Similarly, in Chapter 5, I have chosen to call clauses whose status represents an 'intermediate' stage between main and subordinate clauses "dependent clauses". I am, however, not wedded to this term, as the use of inverted commas shows.
I have also chosen not to employ the term Root Transformations for those Movement Rules which place sentence elements in emphatic position (cf. Hooper and Thompson, 1973). Instead, I refer to them as Emphasizing Movement Transformations, in order to distinguish them from Movement Transformations whose function is other than emphatic. Finally, I have introduced the terms primary and ancillary markers of syntactic status to denote the broader class of elements and syntactic devices whose function is the disambiguation of syntactic relations. They differ in that primary markers are usually markers of subordination, while ancillary markers often have a more general marking function. For this reason, I normally refer to the former as primary markers of subordination and the latter as ancillary markers of syntactic status.

A final point concerns foreign language examples. Occasionally, I have supplied supplementary data from an error corpus collected over four years of teaching at the University of Surrey. Some of these examples appear in the original "Student German", and may therefore appear less than orthodox. It must be borne in mind therefore that their function is illustrative, rather than normative. I have supplied all examples with glosses, including those which have been quoted from other sources and which originally lacked glosses. In some cases I have received help with glosses and translations, as in the case of the data from Old and Middle High German in Chapters 3 and 4, where I have acknowledged all assistance in footnotes. Translations have also been provided (in quotation marks "..."), wherever I considered this necessary for ease of comprehension.
CHAPTER 1

GENERAL CHARACTERISTICS OF SUBORDINATE CLAUSES

0. Introduction

The most immediately obvious characteristic of subordinate clauses is that, unlike main clauses, they are preceded by a subordinating conjunction. The most general subordinating conjunction in English is that, which has been labelled by Rosenbaum (1967) as a "complementizer", introducing complements containing a finite verb (ibid.; 23). In fact, this complementizer is obligatorily required with finite verb complements under certain syntactic conditions, to ensure that the subordinate clause is not confusable with a main clause (Bever and Langendoen, 1972).

Moreover, unless the complementizer is specified in the Phrase Structure Rules of the language, it would appear, we are unable to account in any consistent and reliable way for the differences in behaviour and meaning between different complements. In this Chapter we shall see that by positing a COMP node in the underlying structure of finite verb complements as proposed by Bresnan (1972), we are able to account for these differences in a satisfactory and reliable fashion. Furthermore, Anderman (1978) has suggested that if we posit a COMP node in the underlying structure of all subordinate clauses, we can account for the difference in behaviour between main and subordinate clauses. In agreement with this claim we shall be demonstrating the value of the COMP node for the description of subordinate clauses in English, and later on, in Chapter 3, we shall demonstrate the validity of this analysis for a description of subordination in German.

Having made the claim that the presence of a complementizer in the surface structure of subordinate clauses is an essential signal of the distinction between main and subordinate clauses, we shall be contrasting this description with other definitions of the notion 'subordinate clause'. It will be seen that other descriptions fail to make reliable predictions about the nature
of clauses, particularly those based on the assumption that the
status of a clause can be predicted from the transformations which
may or may not apply in that clause. The most important analysis
of this type is that proposed by Emonds (1976), who argues that
the application of certain Movement Transformations and other
transformational processes (Root Transformations) is restricted
to main (root) clauses. Several researchers (e.g. Ross, 1973;
Hooper and Thompson, 1973; Green, 1976) have subsequently shown
that Root Transformations are not restricted to main clauses but
may indeed apply in subordinate (non-root) clauses in the 'correct
environments'. What exactly these 'correct environments' are,
however, would appear to have eluded researchers up to this point.
As we shall see in this Chapter, the fact that Root Transformations
may apply in certain subordinate clauses negates the validity
of their acceptability in a clause as a reliable marker of clause
status. For this reason we choose in Chapter 1 to adhere only
to our preliminary characterization of a subordinate clause, and
conclude that the difference in behaviour between main and subordinate
clauses is best captured if we posit a COMP node in the underlying
structure of subordinate clauses only. Once we have established
this difference we can then proceed to ascertain exactly what
other constraints and conditions affect the tolerance of Movement
Transformations in these clauses, since these transformations
are clearly not Main Clause Phenomena only.

Another important factor conditioning the behaviour of clauses
will come to light in the course of Chapter 1, that is, the effect
of the polyfunctional nature of certain conjunctions. It will
be seen that several conjunctions which traditionally have been
regarded as monofunctional do in fact introduce either a main
or a subordinate clause, depending on, amongst other things, the
nature of the matrix verb. This fact also helps to explain why
what superficially might be regarded as a subordinate clause does
not behave in typical fashion: in certain instances, it functions
as a main clause, and is therefore subject to different constraints.
This notion of polyfunctionality, as discussed by Hammarberg and
Viberg (1975 and 1979) will be discussed further and expanded
in Chapter 2, where its importance as a grammatical concept will
be further exemplified.
I. The Nature and Function of the Complementizer THAT

In traditional grammars the difference between main or coordinate clauses and subordinate clauses is usually described in terms of the type of conjunction present in the clause in question:

"Two or more sentences, clauses....linked together by one of the conjunctions and, but, or, nor, for, yet, only are called COORDINATE, i.e. of the same rank; and the conjunctions which link them together are called co-ordinating conjunctions:

(1) God made the country, and man made the town (COWPER)
(2) Thou shalt speak my words to them, whether they will hear or whether they will forbear (BIBLE)

....All other conjunctions are SUBORDINATING CONJUNCTIONS"

(Onions, 1971: 14-15)

This is equivalent to saying that main clauses are introduced by a coordinating conjunction or no conjunction at all, while subordinate clauses are introduced by subordinating conjunctions.

The most common subordinating conjunction in English is that which is restricted to appearing with subordinate clauses:

(3)(a) It was surprising that John came early
(3)(b) *That he came early

Thus with considerable ease we have been able to pinpoint the most obvious distinguishing characteristic of subordinate clauses in English, i.e. the presence of a subordinating conjunction. We shall now probe deeper into the nature of the conjunction that which marks the beginning of a subordinate clause and which, as we shall see, belongs to a set of marking elements known as "complementizers". The term "complementizer" was first introduced by Rosenbaum (1967) and applies to the set of markers of predicate complements that distinguishes them from other types of complement (ibid.; 24).
Whilst admitting that it would be possible to introduce complementizers via the Phrase Structure Rules of English, claiming that whichever method is ultimately adopted has little effect on the description of complementation he proposes, Rosenbaum opts for a transformational approach to the question of how to introduce complementizers into the various predicate complement constructions (ibid.; 25). In other words, he chooses, quite arbitrarily, to introduce complementizers via a Complementizer Insertion Transformation, while fully aware of the alternative, which is to have complementizers present in the Phrase Structure machinery of the language.

Rosenbaum's analysis of complementation in English, then, assumes that complementizers are introduced at some stage in the derivation of the sentence by a Complementizer Insertion Transformation. Claiming that not all verbs and predicates can take all named complementizers, he suggests that a "Rule Feature" (of the form ± the complementizer in question) be associated with all verbs and predicates (ibid.; 25; cf. Lakoff, 1971), which Rosenbaum considers a convenient and expedient method of specifying which complementizers are permitted to appear with which predicates.

Bresnan (1972) points out that according to the Rosenbaumian hypothesis, which she refers to as the "Transformational Hypothesis" (Bresnan, op. cit., 10) complementizers are considered to have neither semantic content, nor significant syntactic function. In other words, according to this theory the following sentence would only be considered different in regard to the optional transformations that have applied to a COMMON underlying structure (ibid.; 9):

(4)(a) It may distress John for Mary to see his relatives
(4)(b) It may distress John that Mary sees his relatives

---

Rosenbaum cites a third example in this connection, which incorporates the combination POSS-ing, which he proposes is a complementizer for English. However, Bresnan (op. cit.) provides convincing arguments against POSS-ing as a complementizer (q.v.).
However, one can immediately see that there is an obvious semantic difference between sentences (4)(a)-(b). For example, (4)(b) implies that Mary does in fact see John's relatives, while this is not necessarily the case with (4)(a). According to the Transformational Hypothesis, on the other hand, the sentences in (4)(a)-(b) have been derived from a common underlying structure by the insertion by transformation of a complementizer, which is equivalent to saying that the complementizers in these examples are not distinguishable in deep structure and that the sentences in (4)(a)-(b) do not differ semantically (ibid.; 10). This fact obviously represents a substantial inadequacy of the Transformational Hypothesis.

Bresnan also contests the Transformational Hypothesis from another, syntactic point of view (ibid.). Since characteristics of the matrix verb affect complementizer choice, (i.e., not all verbs can appear with all complementizers) complementizers cannot be inserted into the sentence during the cycle on S, but only during the cycle on the next sentence dominating S, because otherwise the complementizers would not 'know' which verb is dominating them and what Rule Features the predicate in question is sensitive to (ibid.; 12). Although this peculiarity guarantees that complementizers will not appear with main clauses, producing unacceptable sentences like the one in (3)(b), the Complementizer Insertion rule unfortunately violates a general condition on transformations, stated by Chomsky (1965;146) and generally accepted by other linguists. According to this condition, while transformations can remove material from embedded clauses, they cannot insert morphological material into "lower Ss" (Bresnan, op. cit.:13).

Since the Transformational Hypothesis thus appears inadequate on both semantic and syntactic grounds, Bresnan proposes an alternative analysis of the behaviour of complementizers, which she calls the "Phrase Structure Hypothesis" (ibid.). According to this hypothesis, complementizers are specified in underlying structure by a Phrase Structure Rule which stipulates that any subordinate
clause in English can be rewritten:

\[(5) \quad \text{COMP S}^1\]

- where the symbol COMP represents a Deep Structure node (or feature bundle (Chomsky, 1971b)), which dominates (or is featurally specified for) complementizers (ibid.).

Apart from these obvious semantic considerations, Bresnan's reanalysis of the Transformational Hypothesis highlights other, syntactic inadequacies of this approach. A brief discussion of these would suffice to demonstrate the superiority of the Phrase Structure Hypothesis.

The transformationally introduced complementizer theory cannot, according to Bresnan, adequately describe the distribution of the complementizers that and for, because complementizer choice is dependent not only on the nature of the matrix verb, as we have seen above, but also on the presence of modals, other complementizers and the type of subject or object subcategorized by the verb (ibid.; 16). Bresnan maintains that these syntactic factors conditioning complementizer choice are more characteristic of subcategorization rules than syntactic transformations, and bases her observations on problems related to the interaction of a putative Complementizer Insertion Transformation with other...

1 Bresnan's original notation takes the form

\[\text{NP} \rightarrow \text{COMP S}\]

However, since I have not used the \(\tilde{X}\) notation in my description of subordination in German, I have omitted \(\tilde{S}\) here, for the sake of consistency.

2 It is important to note that in Bresnan (1970; 301, footnote 4) and in Bresnan's later work (e.g. 1977) and work by Chomsky (e.g. 1977), it has been suggested that all clauses are preceded by a COMP node in underlying structure, and that this node is not simply restricted to appearing in the deep structure of subordinate clauses. The disadvantages of such an assumption are to my mind perfectly obvious -- without the distinguishing characteristic of the COMP node with subordinate clauses, we are unable to account for undeniable differences in behaviour between them and main clauses. In her analysis of complementation in Swedish, Anderman (1978) has shown that these differences are most easily accounted for by positing COMP in the underlying structure of subordinate clauses. As will become obvious, this analysis also accounts most easily for the facts in German.
transformations (ibid.; 67). It would seem pertinent to the present study to examine this claim more closely.

Verbs such as mean, show, imply, reveal, entail, suggest, prove, etc. take multiple sentential complements (ibid.; 17):

(6) That he eats cabbage means nothing
(7) This means that he is of low birth
(8) That he eats cabbage means that he is of low birth

However, whereas a that-complement can appear both as subject and as object of these verbs, a for-complement cannot (ibid.):

(9) For him to eat cabbage means nothing = It means nothing for him to eat cabbage
(10) *This means for him to eat cabbage

According to Bresnan the transformationally based description of these facts, which entails the use of a Rule Feature, cannot produce an adequate explanation of the behaviour of verbs like mean: "for if there were a complementizer-insertion transformation operant in (6)-(8), it would have to be sensitive not only to the rule feature in the verb, but to the subcategorization of the verb — that goes on subject or object, for on object only" (ibid.; 17). In other words the feature annotation [±R] is inadequate to describe the behaviour of predicates like mean.

Another important syntactic consideration brought to light by Bresnan is that interdependencies between complementizers themselves would appear to affect the ultimate choice of complementizer. For example, when that occurs in the object complement position, for cannot occur as the subject of the sentence (ibid.):

(11)(a) *For him to eat cabbage means that he will be sick

In order to render (11)(a) grammatical, a modal would have to be present, as in the case of (11)(b):

(11)(b) In those days, for him to eat cabbage would have meant that he was of low birth
Interestingly, if a that-complement were to appear in subject position in this sentence, the whole sentence would assume a completely different meaning (ibid.):

(12) In those days, that he ate cabbage would have meant that he was of low birth (but for the fact that...)

Thus we must question a transformation like the Complementizer Insertion Transformation, which must be sensitive both to features of the matrix verb and its strict subcategorization and which must take account of the behaviour of the modal auxiliary, something which it clearly cannot do. Rosenbaum himself (op. cit.; 31) has in fact admitted that these are considerations which the "Transformational Hypothesis" is inadequate to explain. When we also consider the fact that similar interdependencies exist between the choice of complementizer in object position and that in subject position (e.g. that a for-complement in subject position requires a that-complement in object position) we must agree with Bresnan's conclusion that this complex network of interdependencies would appear impossible to describe "within the standard rule-government framework" (ibid.). Subcategorization, the method proposed by Bresnan, on the other hand, would appear to capture such interdependencies, one such example being that certain verbs prohibit noun phrase objects when they have sentential subjects (ibid.; 20):

(13) That John eats cabbage means that he likes cabbage
(14) The first statement implies the second statement
(15) The first statement implies that the second statement is true
(16) *That the first statement is true implies the second statement

In the case of the verb tell the choice of complementizer depends on the presence of another object of the verb:

(17)(a) Susie didn't tell \{ *that they had eaten
             \}
         \{ whether they had eaten
(17)(b) Susie didn't tell us \{ that they had eaten
             \}
         \{ whether they had eaten
In other words, this suggests that the complementizer that is only permitted with \textit{tell} if the indirect object is specified in surface structure. There is evidence that \textit{tell} always has objects in deep structure because totally intransitive verbs may appear where \textit{tell} cannot, e.g. in constructions like \textit{the sleeping man v *the telling man} (ibid.). Bresnan argues for the assumption that the indirect object of verbs like \textit{tell} may occasionally fail to be filled by lexical insertion rules (cf Chomsky, 1964). Since this option of having such dummy objects is restricted to certain lexical items only, Bresnan argues that this is a matter for subcategorization (ibid.; 21). In other words, verbs that take multiple sentential complements pose seemingly insoluble problems for the Transformational Hypothesis, while their behaviour can be correctly described and predicted by means of subcategorization, an essential function of Bresnan's Phrase Structure Hypothesis.

Furthermore, certain acceptable conjoined sentences would not be derivable if complementizers were inserted by transformation, but are easily derivable from familiar rules if complementizers are specified in underlying structure (ibid.; 23). For example, sentence (18) is ambiguous in that one reading asserts the strangeness of a conjunction of events, while a second reading conjoins assertions of strangeness:

(18) It is strange that Kip flew to New York and that Mary flew to Chicago

According to Bresnan the second reading of (18) is derivable by Conjunction Reduction from the structure underlying (19) (ibid.; 25):

(19) It is strange that Kip flew to New York and it is strange that Mary flew to Chicago

However, the first reading, that a conjunction of events is strange, requires, according to Bresnan's analysis, the presence of the complementizer of each subordinate clause in underlying structure, since without this, Conjunction Reduction could not apply to produce this reading of (18) (ibid.). In other words, complementizers MUST be present before Conjunction Reduction applies,
and hence before Complementizer Insertion can have applied (ibid.). Now, the fact that certain grammatically acceptable sentences are not derivable by means of Complementizer Insertion must prove conclusive evidence for the inadequacy of the Transformational Hypothesis. The fact that these and other phenomena can be satisfactorily described in terms of the Phrase Structure Hypothesis constitutes a clear case for the adoption of this analysis in preference to the Rosenbaumian treatment (ibid.; 28).

We must therefore conclude, in accordance with Bresnan's (1972) theory, that positing a COMP node in the underlying structure of subordinate clauses in English enables us to account for the complexities of complementation in a satisfactory way. Furthermore, in her treatment of subordination in Swedish, Anderman (1978) proposes that all subordinate clauses have a COMP node in underlying structure, and that this may also be the case for English (ibid.; 252 ff.). In the course of this study we shall see that if we posit a COMP node in the underlying structure of all subordinate clauses in German, we can similarly account for differences in behaviour between main and subordinate clauses in this language.

The discussion in this section suggests that the absence versus presence of a complementizer should be considered a primary signal of clause status. As we shall see below (Ch. 2) the COMP node may or may not be filled by a complementizer in surface structure, depending i.a. on the nature of the matrix verb. Wherever it does appear in surface structure, however, it provides a reliable signal of subordinate status and for this reason we shall refer to it as a PRIMARY MARKER OF SUBORDINATE CLAUSE STATUS. In the next section, however, we shall see that occasionally extra marking is required to clarify syntactic relations within the sentence, and these extra markers will be analyzed in greater detail in Chapter 2.

For the moment, however, we shall adopt the COMP node description as a basis on which to build a more comprehensive analysis of subordination. Firstly, however, we shall examine some previous treatments of subordination in the light of what we have just discussed. In particular, we shall see that, while affording valuable insights into subordination and the behaviour of clauses,
no theory hitherto presented can account for differences in behaviour between clause types in a completely reliable and systematic way.

II. Previous scholarship: Definition of the term 'subordinate clause'

In our discussion of the earlier work of Bresnan (1972), we suggested that there is a COMP node in the underlying structure of all subordinate clauses which may be filled by any one of the repertoire of complementizers a language has at its disposal. I should like to contend that this is an essential distinction between main and subordinate clauses, since it enables us to account for observable differences in behaviour between them, i.e. in particular that some clauses can undergo certain syntactic processes which others cannot. In this section we shall see that this description succeeds where others have failed. Exhaustive studies like that of Emonds (1976) have failed to capture this essential distinction between main and subordinate clauses. Attempts to characterize clause types according to other criteria, such as the type of transformations they allow, appear to make either too weak or too strong claims, as we shall now see.

Bresnan's analysis of the difference between clause types is firmly supported by L-G Andersson (1974), who examines some of the better known 'definitions' of subordination offered by linguists hitherto, and also concludes that the most satisfactory definition of the subordinate clause is the following:

(20) En bisats är en sats inledd av en "complementizer"

(A subordinate clause is a clause introduced by a complementizer)

(Andersson, op. cit.; 17).

One of the definitions which Andersson chooses to reject is that suggested by Emonds (1970), namely that:

(21) A subordinate clause is a clause (S-node) which is not a "root"

(Andersson, op. cit.; 16).

My translation.
This is the original version of Emonds' (1976) analysis and deserves closer scrutiny. Emonds (1976) basically distinguishes two large classes of transformation: Root Transformations and Structure Preserving Transformations. The latter type are able to move a node only into a position in which a node of that category would be generated by the Phrase Structure Rules of the language concerned. Root Transformations, on the other hand, may move nodes into non-phrase structure positions, but are constrained, according to Emonds, in that they are not allowed to apply in subordinate clauses. A root sentence is defined as an S node which is the highest S in a tree, an S immediately dominated by the highest S, or the reported S in direct discourse. A Root Transformation is one in which any constituents moved, inserted or copied are immediately dominated by a root S in the derived structure and, Emonds maintains, is a transformation which can never apply to an embedded (i.e. non-root) S. In other words, according to Emonds' analysis, the application v. non-application of Root Transformations is a signal of the status of the clause. As we shall see below, there are grave difficulties involved in such a definition.

An example of a Root Transformation is the process which Emonds calls Directional Adverb Preposing (cf. Emonds, 1976; 29). This Root Transformation allows a prepositional phrase indicating direction to be preposed if the verb of a sentence is in the simple past or present tense (i.e. it has no auxiliaries) (ibid.):

(22) (a) In came John!
(22) (b) Up trotted the dog!
(22) (c) Here he comes! (cf. the synonymous He is coming here)
(22) (d) Away they ran!
(22) (e) Down the street rolled the baby carriage!

1 He also distinguishes a third group of transformations, Minor Movement Transformations or Local Transformations (1972), which are later classed as Stylistic Transformations (1976). However, these do not directly concern us here.

2 i.e. a directly quoted S (cf. Emonds, 1976; 2). For a detailed discussion of Reported Speech, see Ch. 4 below.
According to Emonds' analysis, the sentences in (22) are derived by the application of two transformations: firstly, the adverbial PP is preposed, and secondly, the simple verb is moved into second position, a process which Emonds calls Subject-Simple Verb Inversion (ibid.; 30). Emonds classifies both these processes as Root Transformations and contends that they therefore cannot apply in "non-root" (i.e. subordinate) clauses (ibid.):

(23)(a) *I noticed that in came John
(23)(b) *It seems that away they ran
(23)(c) *I was surprised when up trotted the dog
(23)(d) *The fact that down the street it rolled amazed her

L-G Andersson (op. cit.) objects to Emonds' analysis as stated on several grounds. Firstly, the definition that a subordinate clause is a clause which is not a root is based on the description of the constituent structure of sentences. As Andersson points out, linguists are as yet undecided as to exactly how the constituent structure should be characterized (ibid.; 16). In other words, if one accepts the given definition of a subordinate clause, one would somehow have to give (24)(a)-(b) below different constituent structure, although they are felt to fulfill the same function and have the same meaning in Swedish and therefore cannot easily be divided on the grounds of differing constituent structure. In these sentences, the conjunctions have different functions. Ty in (24)(a) is a coordinating conjunction (cf. German denn), while därför att in (24)(b) is a subordinating conjunction. The glosses to (24)(a) and (b) show that English, on the other hand, uses since and because, which are both subordinating conjunctions, so that in this language there is no dispute about the constituent status of the second part of the sentences. That the Swedish conjunctions in (24)(a) and (b) introduce a coordinate clause and a subordinate clause, respectively, can be seen from (25)(a) and (b), where the adverbial alltid assumes typical main clause and subordinate
clause position, depending on the type of conjunction involved:

(24)(a) Maja beställde telefonväckning, ty hon var rädd att missa tåget
Maja ordered a telephone alarm since she was afraid to miss the train

(24)(b) Maja beställde telefonväckning därför att hon var rädd att missa tåget
Maja ordered a telephone alarm therefore that she was afraid to miss the train

(25)(a) Maja beställde telefonväckning ty hon var alltid rädd att missa tåget
Maja ordered a telephone alarm since she was always afraid to miss the train

(25)(b) Maja beställde telefonväckning därför att hon alltid var rädd att missa tåget
Maja ordered a telephone alarm because she always was afraid to miss the train

Once again, (25)(a) and (b) are synonymous. Moreover, the definition in question would not in itself classify isolated subordinate clauses as subordinate clauses, or, in other words, it would not classify examples (26)-(27) below as subordinate:

(26) Qu.: What do you think?
Answ.: That we should forget the whole thing

(27) Att du bara kunde tänka på det!
That you only could think of that
'That you could actually think of that!'

However, there is a much greater and more fundamental objection to be raised to Emond's analysis, and this has been pointed out by many researchers independently (e.g. Hooper and Thompson, 1973; Andersson, A-B, 1973; Green, 1976). The fact is that many of Emond's Root Transformations can indeed apply to subordinate clauses, given the correct conditions, as we shall see below.
Ross (1973) argues that the emphasis of Emonds' analysis has been misplaced, and that, instead of generalizing from what happens in the highest S in the sentence, one should make the following claim:

(28) No syntactic process can apply only in subordinate clauses

(Ross, 1973:397)

This principle is referred to by Ross as the Penthouse Principle (PHP). A corollary of Ross's argument is that, given (28), it would also follow that the underlying order of German is SOV, since otherwise a rule would be needed to move the verb to the end of the clause if, and only if the clause is a subordinate clause. In other words, a rule would be needed which would immediately negate the Penthouse Principle (ibid.; 407). Another argument Ross poses is that, if we accept (28) and the hypothesis that all languages are OV, then we can explain why there are no instances of a language with SVO in embedded clauses and SOV in main clauses ('Upside-Down-German') (ibid.). The reason is that this language would need a verb-fronting rule that applies in non-root clauses only. Although at first glance many possible counterexamples to the PHP immediately spring to mind, Dahl and Andersson (1973) claim that a rule like Equi-NP-Deletion might be thought to contradict (28), since it involves the deletion of subjects from non-root sentences (ibid.; 1). This is not the case, Ross argues, because rules that affect subordinate clauses do not affect the PHP if their structural description contains a reference to something outside the clause in question. The structural description of Equi-NP-Deletion must contain a subject which is coreferential with some element in the clause that dominates it:

(29) N - NP - X - X - [S_y - NP - Z_s] - R

(Ross, op. cit.; 403)

According to Ross, Equi would only be a real counterexample to (28) if it had the added restriction that it never worked on the two highest clauses of a sentence, but only on clauses embedded lower down (ibid.; 403-4, cf Dahl and Andersson, op. cit.; 1),
a rule which would not be very likely, since there are no known examples of its type.

Dahl and Andersson discuss this interpretation of (28) in the light of the query raised by Ross himself in this paper, when noting that (28) cannot be relied upon to exclude configurations which it would be desirable to exclude, eg. those that would produce 'Upside-Down-German', if they applied to a normally "well-behaved" language to move verbs from final position in non-root clauses (Dahl and Andersson, op. cit.; 2):

(30) \[ X - [s^Y - V_s] - Z \]

\[ 1 \quad 2 \quad 3 \quad 4 \]

\[ 1 \quad 3+2 \quad 0 \quad 4 \]

condition: 2 3 is a subordinate clause (Ross, op. cit.; 414)

Ross's analysis would ideally 'throw this rule out' and Ross justifies the fact that he does so by suggesting that the rule is 'triggerless', because there is nothing in the context to trigger it off (ibid.).

Dahl and Andersson object to this solution since, provided that some element is found that is present in all main clauses, eg. Aux or V, any rule can be written, even (30), with such a triggering element (ibid.; 2). In other words, Dahl and Andersson are objecting to an obviously ad hoc justification by Ross. Moreover, they point out that rules like (30), that can apply to subordinate clauses irrespective of the nature of the main clause, do indeed appear to exist. The rule they cite is from Swedish, where the auxiliary ha (have) can be optionally deleted from subordinate clauses, apparently independent of any characteristic of the main clause of the sentence itself, eg. tense (Dahl and Andersson,
op. cit.; 2):

(31)(a) Nixon säger/sa att han redan på ett tidigt stadium
Nixon says/said that he already at an early stage
insett att han måste förstöra banden
realized that he had to destroy the tapes
'Nixon says/ said that he had already realized at an
early stage that he had to destroy the tapes.'

(31)(b) Nixon säger/sade att han redan på ett tidigt stadium
Nixon says/said that he already at an early stage
hade insett att han måste förstöra banden
had realized that he must destroy the tapes

Thus, in (31)(a) the optional absence of the auxiliary in
the subordinate clause makes no difference to the grammaticality
of the sentence, while in (32)(b) it leaves the sentence unacceptable,
since it has applied to a main clause (ibid.; 2-3):

(32)(a) Han hade insett på ett tidigt stadium att han måste
He had realized at an early stage that he must
förstöra banden
destroy the tapes

(32)(b) *Han insett på ett tidigt stadium att han måste
He realized (p.p.) at an earlier stage that he must
förstöra banden
destroy the tapes
'He realized (p.p.) at an early stage that he had to
destroy the tapes.'

^1 I have slightly altered Dahl and Andersson's glosses.
Another such rule which must also undermine Ross's analysis, but which Dahl and Andersson fail to mention, is the Adverbial Placement Rule in Swedish, which dictates that in subordinate Ss only the negative adverbial inte (not) (and certain adverbials) must immediately precede the verb:

(33)(a) Jag tror att han inte har några pengar alls
       I believe that he not has any money at all
       'I believe that he has no money at all'
(33)(b) *Han inte har några pengar alls
       'He has no money at all'
(33)(c) Han har inte några pengar alls
       'He has no money at all'

In example (b) we see quite clearly that this transformation is not applicable in main clauses in Swedish, as was the case with Aux Deletion.

Moreover, it is most interesting to note that Aux Deletion in subordinate clauses did in fact exist as a transformation in German until quite recently, and might even still exist in highly stylized or literary registers. Voyles (1978: 12) claims that this transformation is no longer productive in German, but was to be found primarily in the literary language until fairly recently. The following (b) examples illustrate this transformation (ibid.):

(34)(a) Der Bote sagte, dass der Kaiser hier gewesen sei
       The messenger said that the emperor here been
       is 'The messenger said that the emperor had been here'
(34)(b) Der Bote sagte, dass der Kaiser hier gewesen Ø
       The messenger said that the emperor here been
(35)(a) Wenn es im Lauf menschlicher Begebenheiten für ein Volk nötig wird, die politischen Bande, wodurch es mit einem anderen verknüpft gewesen ist, zu trennen...

When it in the course of human events becomes necessary for a people to dissolve the political bonds by means of which it has been joined to another...

(Der Pennsylvanische Statsbote, 9.6.1776)

(35)(b) Wenn es im Lauf menschlicher Begebenheiten für ein Volk nötig wird, die politischen Bande, wodurch es mit einem anderen verknüpft gewesen ist, zu trennen...

Thus in examples like (34)–(35)(b) the perfect auxiliary sein or haben can be optionally omitted from the subordinate clause. That this transformation cannot apply within a main clause can be seen from the following example:

(36) Der Kaiser ist hier gewesen

The emperor is here been

'Ver the emperor has been here'

Furthermore, example (37) demonstrates that this optional deletion transformation is not acceptable in all environments:

(37) ?*Als die Polizei die Razzien gemacht Ø, kreiste sie die Schwarzmarkte ein ...

When the police the raids made Ø, circled they the black-markets in

'When the police made their raids, they encircled the black markets...'

The fact remains, however, that there did, and possibly still does exist an optional Aux Deletion Transformation in German which
may only apply in subordinate clauses, an observation which stands in complete contradiction of Ross's analysis.

Another interesting correspondence between German and Swedish which might be mentioned at this point is that, while Swedish differentiates between main and subordinate clauses by differences in the position of adverbials (and Neg particles) (cf. examples (25)(a)-(b) above), German distinguishes between subordinate and main clauses by having verb-final word order in subordinate clauses, as in (38)(a)-(b), below, where the (a) example contains a coordinating conjunction with SVO word order in the 2nd clause, and (38)(b) contains a subordinating conjunction and SOV word order. Surely this in itself speaks for the existence of rules which apply in subordinate clauses only!

(38)(a) Ich fahre nicht gern Motorboot, denn ich werde leicht
I travel not gladly motor boat, for I become easily
seekrank
sea-sick
'I don't like travelling by motor boat, because I get sea sick easily'

(38)(b) Ich fahre nicht gern Motorboot, weil ich leicht
I travel not gladly motor boat because I easily
seekrank werde
sea sick become

Thus, Ross's observations about the impossibility of 'Upside-Down-German' appear to be completely invalid. With the aid of data from Dahl and Andersson, and with supporting data from Swedish and also German, we have been able to show that the principles that would predict the non-occurrence of rules like (30) which would produce 'Upside-Down-German' are unable to predict this convincingly, and that, furthermore, rules like (30) do indeed exist. We can therefore say that Ross's attempt to improve on Emonds' description of clause behaviour has failed, and that things do indeed go on in subordinate clauses that do not go on in main clauses.

There is, however, one very correct observation in Ross's (1973) description which, as we suggested above, casts very real
doubts on Emonds' analysis of subordination. It is to this that
we now turn our attention. It would appear that, despite the
claims of Emonds, some of the so-called Root Transformations can
indeed apply in subordinate clauses, and that there are "differences
in embeddability" between different sentences (Ross, op cit.; 399):

(39)(a) *I know that off went the alarm
(39)(b) ?? I know that your uncle, I got along with him o.k.
last week
(39)(c) I know that these apples we're going to have to heave.

As Ross indicates, all of these sentences may be starred
by some speakers, but in any case it would appear that (c) is
more acceptable than (b) or (a). However, as we have just seen,
the Penthouse Principle is an inadequate hypothesis to base any
alternative explanation upon and we must therefore turn to other
authors' observations about the inadequacies of Emonds' analysis
in order to shed light on examples like (39)(a)-(c).

Hooper and Thompson (1973) examine Emonds' Root Transformations
and find that in general their function is to create 'more emphatic'
sentences (ibid.; 469). In other words they produce sentences
that would often have exclamatory punctuation in speech:

(40) (a) Mary plans for John to marry her and marry her he will

(Neg Constituent Preposing)
(40) (b) Never in my life have I seen such a crowd

(Directional Adverb Preposing)
(40) (c) Up the street trotted the dog

Directional Adverb Preposing, they claim, is a typical device
of narrative or formal styles of speech (ibid.; 470). Apart from
two of Emonds' RTs (Tag Question Formation and Subject-Auxiliary
Inversion, cf. below and Emonds, op. cit.) Hooper and Thompson
claim that all the RTs in question have an emphasizing function
(while not claiming, of course, that all Emphasizing Transformations
are RTs) (ibid.; 471). Linked with the inherent claim that all the RTs in question have an inherent emphasizing function is the fact that they produce word orders which could not be generated by the Phrase Structure Rules. Thus, for example, Topicalization is a RT because it produces the sequence NP - NP - VP:

\[
\text{NP \quad NP \quad V}
\]

(41)(a) This book you should read

Clefting, on the other hand, is a Structure Preserving Transformation because it produces the sequence in (41)(b), which is generable by the Phrase Structure Rules of English (ibid.; 472):

\[
\text{NP \quad V \quad NP \quad S}
\]

(41)(b) It is this book that you should read

Having discussed the emphasizing function of most Root Transformations, Hooper and Thompson attempt to explain why they are acceptable in some subordinate Ss but not in others. They associate restrictions on the applicability of Root Transformations with the notion of assertion, claiming that RTs that can produce emphasis are restricted in application to asserted clauses because emphasis would be unacceptable in non-asserted clauses, e.g. subordinate clauses which are presupposed question clauses or imperative clauses (ibid.; 472-3). In other words, what we are dealing with here is an analysis which attempts to explain syntactic behaviour in terms of semantic criteria. According to Hooper and Thompson it is unsatisfactory to describe the behaviour of main and subordinate clauses in terms of the transformations they allow, since Emonds' analysis has been shown to produce incorrect predictions about the acceptability of certain sentences.

In general, the conditions in which certain transformations normally restricted to main clauses may occur in subordinate clauses are as yet "mysterious" and inexplicable in terms of purely syntactic environment (Green, 1976; 382). Green believes that "an adequate solution [to this problem] will involve a complex interaction of several factors - syntactic, semantic and pragmatic" (ibid.; 382). Indeed, as we shall see in our analysis of German in Chapters 3
through 5, this is an extremely astute observation which finally gets away from the restrictive monodimensional approach of previous studies. Moreover, Green would specifically not agree that the question why some Root Transformations are in fact permissible in certain subordinate clauses and not in others is answerable in terms of assertion v presupposition (ibid.). Let us therefore examine these two claims in more detail and attempt to evaluate whether either or both of them can contribute to our general characterization of subordination.

So far we have established only that there is a large class of transformations, Emonds' Root Transformations, which in general are only applicable in main or so-called root Ss, but which, given the correct environment, may apply in some, but not all subordinate Ss. In examples (42)-(46)(b)+(c), we have examples of subordinate Ss containing RTs and differing in their degree of acceptability, compared with their application in main Ss ((a)-examples) (Green, op. cit.; 383-5):

NEGATIVE ADVERB PREPOSING

(42)(a) Never before have prices been so high
(42)(b) *Nixon regrets that never before have prices been so high
(42)(c) I knew that never before had prices been so high

PARTICIPIAL PHRASE PREPOSING

(43)(a) Squatting in the corner was a spotted tree frog
(43)(b) *I never enter the room when squatting in the corner is a spotted tree frog
(43)(c) John knew that squatting in the corner was a spotted tree frog

VP PREPOSING

(44)(a) John says he'll win it, and win it he will
(44)(b) *John wants to win it, but the claim that win it he will is absurd
(44)(c) John wants to win it, and I'm afraid that win it he will
DIRECTIONAL ADVERB PREPOSING

(45)(a) In came the milkman. Up it goes.
(45)(b) *John thinks that in came the milkman
(45)(c) I realized that in would come the milkman, with me there and my hair in curlers

DIRECTIONAL PHRASE PREPOSING

(46)(a) Into the garden ran a golden haired girl. Into the garden she ran
(46)(b) *I guess that into the garden ran a golden-haired girl
(46)(c) It seems that into the garden ran a golden-haired girl

Some RTs, however, can never occur in subordinate Ss. Two examples of this are Truncation and Negative NP Preposing (ibid.):

TRUNCATION

(47)(a) *I knew (that) hadda go
(47)(b) *It seems (that) gotta go
(47)(c) *I guess (that) see you later

NEGATIVE NP PREPOSING

(48)(a) *Mary says that not a bite did he eat
(48)(b) *I knew that not a bite had he eaten
(48)(c) *I guess that not a bite had he eaten
(48)(d) *We'll have to eat because not a bite has he eaten

Obviously not all all these RTs are applied in the same subordinate clause environment in the above examples, but there are superficially many factors linking the tolerance of RTs with the type of sentence in question. Green (op. cit.) points out that since most RTs have been described as emphatic devices, it is an attractive hypothesis to say that RTs may be embedded "just in case the proposition they affect, and thereby emphasize, is one which the speaker supports" (ibid.; 386). In other words, contexts indicating support will tolerate RTs while those indicating disagreement will not. This hypothesis is supported by examples such as (49). In (49)(a)
Negative Adverb Preposing has applied in a syntactic and conversational context which indicates agreement, while in (49)(b) the speaker indicates disagreement and the sentence is much less acceptable (ibid.):

(49)(a)  John says that never before have prices been so high, and I agree
(49)(b)  *John says that never before have prices been so high, but I disagree/but he's wrong

Given the hypothesis that the applicability of RTs in subordinate Ss is a function of the speaker's agreement with the content of that clause, Green proposes a hierarchy of environments which will tolerate such phenomena, ordered according to the amount of agreement expressed or implied (ibid.; 387). Basically, the greater the degree of agreement, the more types of RT should be applicable and vice versa. Below is a list of environments which ought to reflect decreasing tolerance for Main Clause Phenomena, reading from top to bottom, according to Green's preliminary proposal (ibid.):

(50)  TYPES OF COMPLEMENT-TAKING VERBS, WITH EXAMPLES:
(50)(a)  Agreement presupposed: emotive factives (regret); semi-factives: (discover, realize); wishy-washy factives (know)
(50)(b)  Agreement asserted: I say, I said, I think, I claim
(50)(c)  Agreement conversationally implied: X says, X thinks
(50)(d)  Neutral: guess, seem, possible
(50)(e)  Disagreement implied: X claims
(50)(f)  Disagreement asserted: I doubt, I deny
(50)(g)  Disagreement presupposed: pretend

However, although this hierarchy correctly predicts that eg. clauses with RTs embedded under 1st person assertive verbs are better than those under 3rd person verbs (cf. (51)), there are still many occurrences of RTs which it fails to predict (Green; ibid.):

(51)(a)  I think that indeed, they will come
(51)(b)  ??John thinks that indeed, they will come
While it predicts that realize and say will embed RTs and that guess and pretend will not, it does not predict that know is a good matrix for more RTs than realize, which in turn is more tolerant than regret — in fact, it predicts the exact opposite (ibid.):

(52) (a) I know that win it he will
(52) (b) I know that into the garden ran a yellow cat
(52) (c) ?I know that not a bite did she eat

(53) (a) I realize that win it he will
(53) (b) ?I realize that into the garden ran a yellow cat
(53) (c) ?*I realize that not a bite did she eat

(54) (a) ?*I regret that win it he will
(54) (b) ?*I regret that into the garden ran a yellow cat
(54) (c) ?*I regret that not a bite did she eat

In fact, Green lists many ways in which such a hierarchy, based on the hypothesis that clauses expressing agreement will be more tolerant to RTs, is inadequate. This suggests that something other than the speaker's agreement is the crucial factor in deciding the degree of tolerance of RTs. As an alternative, we now return to the suggestion made by Hooper and Thompson (op. cit.) that the extent to which the subordinate structure can be used to make an assertion is the deciding criterion for predicting the tolerance of RTs.

Hooper and Thompson's hypothesis is that RTs produce emphasis and that they "are restricted in application to asserted clauses" (ibid.: 472), because emphasis would be inappropriate in non-asserted clauses. According to this theory a number of verbs allow asserted complements, although these may not be the only assertions in the sentence, or they may be reported assertions (cf. Emonds, 1970).

Green (op. cit.; 390) argues that Hooper and Thompson's analysis may well be based on a circular definition, presumptively in view of the fact that they allow so many permutations of assertion. According to their theory the complements in (55) are asserted while those in (56) are not and therefore do not tolerate RTs.
In (56)(a) the complement is neither presupposed nor asserted and in (56)(b) the complement is presupposed by speaker and hearer:

(55)(a) John says it's raining
(55)(b) I suppose she'll win
(55)(c) I realize he's a kleptomaniac
(56)(a) It's possible that it's raining
(56)(b) John regrets that Mary won

However, once again this hypothesis can be shown to be inadequate on the grounds that it makes false predictions about the grammaticality of certain subordinate clauses containing RTs. For example, Hooper and Thompson claim that all subordinate clauses with a head noun (e.g. the fact) are presupposed, and therefore intolerant to RTs. The same analysis is applied to gerund complements. Green (op. cit.; 391) cites the following acceptable example however:

(57) We can support the claim that standing in the corner was a black umbrella

In fact, many of the verb types - counterfactives, non-assertive verbs like bet, promise and predict - which Hooper and Thompson claim cannot take asserted complements can indeed be seen to do so (Green, op. cit.; 391):

(58) John pretended that standing in the corner was a Tiffany lamp
(59)(a) I promise that not a bite will I eat
(59)(b) I bet that win it he will
(59)(c) I predict that more significant will be the amount of money contributed to campaign funds

Once again we are faced with a hypothesis which is not fully adequate to describe and predict the occurrence of RTs in subordinate Ss. So the question still remains, why do some RTs embed in many subordinate Ss, some in few and some in none at all? Green suggests that this question is really secondary to the more fundamental
one: why is there a hierarchy of tolerance, and what independent property is held in increasing or decreasing degree by the items in each of the hierarchies? (ibid.; 392). We have seen that assertedness or emphaticness and agreement with the content of the subordinate S on the part of the speaker both contribute to the answer, but what other properties of the sentence, if any, also affect the applicability of or tolerance of RTs?

First of all there would appear to be pragmatic factors affecting this tolerance. For example, in the context of an answer to a question it would appear that subordinate Ss containing RTs are not acceptable:

**QUESTION:** When was he washing the dishes?

(60)(a) He was washing the dishes when the dog came in

(60)(b) *He was washing the dishes when in came the dog

**QUESTION:** What was he afraid of?

(61)(a) *He was afraid that in would come the dog

(61)(b) He was afraid that the dog would come in

The nature of the subordinate S in the (b) sentences above makes it impossible for them to be answers to questions. Georgia Green:

"if the content is asserted, it cannot describe a state or event assumed to be familiar to the hearer, as would be required if it were cited as identifying a time or a reason. Consider in this regard the fact that (60)(b)¹ and NOT, significantly, (60)(a) - can be stated less vividly as follows:

(62)¹ The dog came in when he was washing the dishes"

(ibid.; 393)

¹My numbering.
Apart from these pragmatic reasons, there are also semantic reasons why certain syntactic frames eg. John knows, John regrets, John realizes, etc. are no good for embedding assertions. Acceptable complement "assertions" are less forceful than direct statements. For example, the sentence:

(63) John says Bill left

when reported by a third person, Jack, would only mean that Jack heard from John that Bill left, but had no desire or evidence to support the claim - i.e. it is a pure report. If a factive verb like know, regret or realize in the 3rd person singular were used by me to introduce a report, it would be taken for granted that the complement proposition was true and known to be true¹ (Green, ibid.):

(64) John realized that Bill left

However, it can hardly be attributable to the assertedness (or lack of such) of the subordinate S that RTs like Directional Phrase Preposing are always better with a grammatically indefinite subject than with a definite one:

(65)(a) I knew that into the garden ran a cat and a dog
(65)(b) ??I knew that into the garden ran the cat and the dog
(65)(c) It seems that into the garden ran a golden-haired girl
(65)(d) ?It seems that into the garden ran the golden-haired girl

This phenomenon has been attributed to the difference in structure between given and new information, or difference in information structure (cf. e.g. Kirkwood, 1969, and below for discussion of this phenomenon in German). New or otherwise important

¹In Chapter 4 below we shall take a look at closely related phenomena in German. In particular we shall be examining such terms as Indirect and Direct Report in order to ascertain exactly what they mean in terms of subordination. It will be seen that the phenomenon to which Green is alluding in (64) is similar to "author's comment" in German.
information is said to be often placed at the end of a sentence - one of the effects of Directional Phrase Preposing. If this is so, then phrases which are grammatically definite but pragmatically indefinite and not presupposed should, according to Green, function like indefinites and permit this RT (ibid.; 394). When looking at actual examples, however, we find that this is not the case (ibid.):

(66) ??I know/It's clear/I saw that into the garden ran the fattest cat in Urbana

In fact, it can only be concluded that a veritable plethora of factors affects the embeddability of RTs and that no one single set of factors, semantic, syntactic, pragmatic or psychological, is the key to embeddability. Up to this point we have seen that Emonds' purely syntactically based hypothesis is not capable of describing and predicting the occurrence of RTs in non-root clauses. We have also seen that Hooper and Thompson's superficially clear-cut assertion versus presupposition theory also falls short of the mark, while Green was correct in stating that a hierarchy of two characteristic features -- assertiveness and agreement with the content of the subordinate S -- is also inadequate and insupportable as a basis for judgement about clause status.

It seems to me that all these analyses share one basic flaw, which was hinted at in Green's study. It would appear that a monodimensional approach will not solve the problem of how subordinate clauses behave in relation to main clauses. It has been seen that if one assumes that clauses are either main clauses or subordinate clauses, one is surprised by how badly they conform to preconceived notions of how such clauses should behave. Instead, I would suggest that we look at actual data, and see what we can infer from them regarding the status of clauses. In other words, it is important to keep an open mind on the subject of clause status, and not automatically assume that clauses fall into one of only two distinct types. So far we have identified only that there is a basic distinction between main and subordinate clauses, borne out by the way they behave. For example, we mentioned above for (38) (a) - (b), that German subordinate clauses display SOV word order while main clauses
display SVO order. We have suggested that an underlying COMP node might enable us to account for some of these differences. Let us now build on this basic assumption and see if there are also 'differences within differences', i.e. whether we can isolate palpable degrees of "subordinateness" within clause types. The work of Green (op. cit.) poses many questions which indicate that such a line of approach is called for. One of the most intriguing of her observations is that, having described the behaviour of a general class of subordinate clauses and shown that most of them tolerate at least some RTs in the correct environment, none of them can ever undergo "the most reluctant" of RTs, Truncation (ibid.; 396) unless, that is "you can make a subordinate clause look like a main clause by getting it into initial position in the sentence, without a subordinating conjunction" (ibid.):

(67)(a) John says (that) it's time for dinner
(67)(b) I guess it's time to quit now

(68)(a) *John says (that) time for dinner
(68)(b) *I guess (that) time to quit now

(69)(a) Time for dinner, John says
(69)(b) Time to quit now, I guess

My question here is, are we sure that we can talk in terms of totally subordinate Ss in the case of (69)(a) - (b)? It would appear illogical to note that no subordinate clause tolerates Truncation and then say that if you put just such a subordinate clause at the front of the sentence without a subordinating conjunction then you make it behave as if it were not subordinate! Moreover, if Slifting (i.e., S-lifting; Ross, 1973a) helps examples (69)(a) + (b) to become acceptable, why isn't a similar device effective with exclamations and other emphatic RTs? (Green, op. cit.; 396):

(70)(a) *Are we in for it, John says/I bet etc.
(70)(b) *Not a bite did he eat, you realize/it seems etc.

(71)(a) *John says are we in for it
(71)(b) *??You realize (that) not a bite did he eat
The fact remains that the behaviour of these clauses in no way resembles that of subordinate clauses, but rather that it is characteristic of main clauses. A brief look at a similar observation made about Swedish might therefore help to clarify the nature of such clauses.

Teleman (1967) points out that violations of subordinate clause word order are very common in spoken Swedish. Andersson, L-G. (1974) contends, moreover, that these violations are very common in written Swedish too. In certain clauses the conjunction may produce ambiguous constructions because it performs a dual function - i.e. it may introduce either a subordinate S or a coordinate S. This is particularly true of so-called "complex conjunctions" which are made up of preposition + complementizer (ibid.; 20):

(72) Robin studerar inte lingvistik därför att han är intresserad av språk
    Robin studies not linguistics because he is interested in languages

Sentence (72) is ambiguous. In one interpretation the causal relation between the two clauses is negated - i.e. there is some other reason why Robin is studying linguistics. In the second interpretation, however, Robin is not studying linguistics precisely for the reason that he is interested in languages. In this latter interpretation only the main S is negated. If we were to replace därför att in (72) by ty (a coordinating conjunction), only the second interpretation would be possible, the second clause being perceived as a main S. Similarly, if we were to add the adverb alltid (always) to the sentence in (72) it would appear as in a subordinate S in the first interpretation, while in the second
interpretation it would appear as in a main clause. Only in the
(a) version of (73) below is the auxiliary optional:

(73)(a) Robin studerar inte lingvistik därför att han
Robin studies not linguistics because he
alltid (har) varit intresserad av språk
always has been interested in languages
(73)(b) Robin studerar inte lingvistik {därför att han har
{ty
alltid varit intresserad av språk

(Andersson, op. cit.; 20)

Thus a conjunction which normally functions as a subordinating
conjunction may appear in a coordinating capacity, particularly
in the spoken language. According to Anderman (op. cit.; 311),
the fact that this occurs in particular with "complex conjunctions"
is hardly surprising, since it is solely the presence of the comple­
mentizer that establishes the subordinating function of this set
of conjunctions. This does not mean, however, that the rules
operating in subordinate clauses are violated more freely in the
spoken language. The characteristics of subordinate clauses are
only absent when the S is perceived as a main clause (ibid.).
Thus Andersson L-G. (1974) provides us with a structural explanation
for the so-called "violation" of subordinate clause word order
conventions in this type of sentence. In the correct syntactic
environment certain generally subordinating conjunctions can function
as coordinators, which introduce de facto main clauses and therefore
cause the characteristics of subordinate clauses to be absent.
In other words, we cannot speak of "violations" of subordinate
clause word order, or of subordinate clauses "permitting" Root
Transformations to apply. What we have instead is an embedded
clause functioning as a main clause after a particular type of
conjunction which may be polyfunctional. As we have seen in the
above examples, other signals from the clause, such as word order,
may provide extra marking of clause status with such polyfunctional
elements as these complex conjunctions to minimize the possibility
of structural ambiguity, as in the case of (72) above. This notion
of 'polyfunctionality', originally discussed by Hammarberg and
Viberg (1975) is an important concept in the context of the maintenance of syntactic relations, and will be discussed in greater detail below in Chapter 2.

Another type of superficially subordinate clause in which the typical word order is not strictly adhered to is a clause introduced by the complementizer att (that) alone. It is in these clauses that some of Emonds' Root Transformations (ibid, 1976) can be seen to apply. For example, in (74)(a) below we have a main clause which has undergone the Root Transformation Topicalization. In (b), however, Topicalization has applied in an att-clause, while in (c) Topicalization is blocked completely because the clause is introduced by a conjunction other than att (Andersson, A-B, 1973a; 8):

(74)(a) Derbyt fär vi inte missa
    The Derby may we not miss
    'We mustn't miss the Derby'
(74)(b) Han sa att till Florida ville han gärna åka
    He said that to Florida wanted he gladly to travel
    'He said that, he would like to go to Florida'
(74)(c) *Hugo hurrade eftersom första bollen slog Gais in
    Hugo cheered because the first ball hit Gais in
    'Hugo cheered because Gais scored the first goal'

That the same applies to certain that-clauses in English can be seen from the following example from Chvany (1973; 266):

(75) Churchill said that never before had so many owed so much to so few

As in English, RTs tend to apply in Swedish after verba dicendi. Andersson A-B, points out that Reported Speech in particular constitutes a category of subordinate clauses where Root Transformations may occur, and that the syntactic features characteristic of subordinate clauses are frequently absent from reported clauses in both spoken and written Swedish. Teleman (1967; 167) observes that the function

The glosses provided are mine.
of att following verba dicendi in spoken Swedish is often equivalent to the colon of written Swedish. In other words, att no longer serves as a marker of subordination in such cases, which explains the occurrence of examples like (76)(b) below, deriving from (76)(a). In (b) the subject of the subordinate clause refers to the same person as the subject of the matrix. (75)(c) shows the usual word order in a version of (b) incorporating a real subordinate clause (ibid.; 13):

(76)(a) Jag ska inte göra det  
I shall not do it

(76)(b) Han sa att jag ska inte göra det  
He said that I shall not do it

(76)(c) Han sa att han inte skulle göra det  
He said that he not would do it

"He said that he would not do it"

The above examples lead us to the conclusion that Root Transformations are permitted in subordinate clauses which are perceived of as main clauses. Lindberg (1973; 212) has coined the term 'emancipated' for clauses which have been 'elevated' to main clause status¹. In Chapter 4 below we shall be discussing such observations further in our analysis of Reported Speech in German.

If we look again at examples (75)(a)-(b), moreover, we see that there is a certain amount of structural ambivalence in Reported Speech between actually reporting what was said (as in (c)), and a direct rendering of what was said (as in (b)). Hammarberg and Viberg (1976) notice the difference between 'Direct' and 'Indirect' forms of report and consequent effects on the teaching of Reported Speech forms to non-native learners of a language. We shall return to this topic in Chapter 4. For the moment, however, we can give a clear example of a direct rendering of what has been said in

¹This term is acceptable if we can be sure that clauses have at some stage been 'lower down' or 'subordinate'. Perhaps a term like 'co-equal' would be nearer the mark, since this gets away from the idea that the complement S has at some stage been subordinate.
(77), where even the original imperative mood is used in the att-clause:

(77) Men jag har ju sagt det att jaga nu inte  
But I have (tag) said that that harass now not  
ihjål dig.  
to death yourself  
'But I told you, didn't I, that, don't run around so much.'

In German, the possibility of directly rendering a command in a clause preceded by a complementizer dass (that) does not exist:

(78)(a) *Aber ich habe dir doch gesagt, dass, frage mich  
But I have you (tag) said that ask me  
nicht immer darüber  
not always about that  
'But I've told you, haven't I, that don't keep asking me about that.'

(78)(b) Aber ich habe dir doch gesagt, dass du mich nicht  
But I have you (tag) said that you me not  
immer darüber fragen sollst  
always about that ask should  
'But I've told you, haven't I, that you shouldn't keep asking me about that.'

We shall discuss these and other related phenomena for German in Chapter 4. The conclusion to be drawn from these observations is clear, however. We must be sure that we are talking about a real subordinate clause before we can give a complete description of the behaviour of that clause in terms of the transformations it allows. Traditional distinctions regarding main and subordinate clauses must be subject to slight reinterpretation in the light of observable data.

Returning to the Swedish example in (77), it is important to note that complementizers are OBLIGATORILY present whenever the subordinate status of the clause is in doubt. As we saw above,
this is one reason that led Andersson, L-G. to support the claim that a subordinate clause is one that is introduced by a COMP node in deep structure. It would appear that in all the languages thus far discussed, subordinate clauses can be characterized to a greater extent in this way (cf. Anderman, op. cit. for further discussion). Indeed, Bresnan (1972) has coined the term COMP-initial languages for all those languages which may be described in this way. In Chapters 2-5 below we shall be investigating some of the implications of this analysis for the system of surface markers used by a number of COMP-initial languages, paying particular attention to the marking system of German.

In this Chapter we have seen that subordinate clauses in English can very often be immediately recognized by the presence of a subordinating conjunction in surface structure. The most common general subordinating conjunction in English is that, which we have labelled a complementizer, following Rosenbaum (1967). In other languages in which complementizers are found, e.g. German and Swedish, the equivalent to English that may appear either on its own or in combination with other elements to form complex conjunctions.

We have argued that it is useful to posit a COMP node in the underlying structure of subordinate clauses in order to enable us to account for observable differences in behaviour between main and subordinate clauses. This COMP node may (or may not -- cf. Chapters 2 and 3 for discussion) be filled by a complementizer in surface structure.

However, having argued that the presence of a conjunction in surface structure is a comparatively reliable sign of subordinate clause status, we were careful to qualify this observation in the light of material from Swedish and English. The data demonstrated that we must be careful not to assume that all those conjunctions which have traditionally been referred to as 'subordinating conjunctions' always function as such, and always introduce subordinate clauses. The function of several so-called subordinating conjunctions has been seen to be more diverse than traditionally supposed, and in particular, complex conjunctions have been seen to be polyfunctional, i.e. they can introduce either a main or a subordinate clause. Thus we have had to reinterpret certain superficially subordinate clauses.
as having the status of main clauses, in the light of this evidence. Moreover, we have also seen that the nature of the matrix verb appears to influence the function of the complementizer and the status of the clause it embeds. After verba dicendi it would appear that, like the complementizer att in Swedish, the English complementizer that occasionally functions like the colon of written speech, i.e. it introduces a main clause. These findings have provided more support for a reinterpretation of the traditional classification of clauses into main and subordinate clause types. The implications of these and related observations for a description of Reported Speech in German will be discussed in detail in Chapter 4.

What we have seen in the present Chapter is that what might superficially look like a subordinate clause might in fact not be so. This has obvious effects on the type of transformations a clause will allow, and is perhaps one reason for the difficulties encountered by linguists hitherto in ascertaining the status of a clause by looking at the transformations it allows. Furthermore, we have suggested that these purely syntactic conditions are merely the "tip of the iceberg", and that many other factors conspire to influence the type of transformational processes a clause can undergo. Indeed, we have seen that no theory yet proposed for adjudging the status of a clause is sufficiently reliable to form the basis of a sound description of subordination. In particular, those studies that attempt to determine clause status by looking at the transformations allowed in the clause fail singularly to provide a reliable diagnostic, whatever the basic criteria they adopt as a starting point -- semantic, pragmatic, syntactic etc.

It would appear that a complex network of constraints affects the tolerance of Movement Transformations, and hence no monodimensional approach is likely to succeed in supplying a comprehensive description of subordination in any of the languages thus far discussed.

One conclusion remains tenable, however: there is a basic difference in behaviour between main and subordinate clauses and this may be captured if we posit a COMP node in the underlying structure of subordinate clauses. On top of this basic difference, there are also other constraints of various types which affect
the tolerance of Movement Transformations. These constraints are based on various syntactic, semantic, pragmatic and psychological factors.

One such factor is psychological in nature, and we have discussed it briefly in this Chapter. The fact is that syntactic relations within the sentence must be clear-cut in order to facilitate intelligible communication. We have mentioned briefly that in certain instances where there is doubt about clause status the complementizer must obligatorily appear in surface structure. This phenomenon will be discussed in greater detail in the following Chapter. Moreover, when, for example, polyfunctional conjunctions are used, extra markers may be needed to clarify grammatical relations. These markers will be seen to be used in many situations where there is potential ambiguity. Below in Chapter 2 we explore further the important implications of polyfunctional elements, paying particular attention to how and when extra surface markers are needed for the maintenance of clear-cut syntactic relations.
CHAPTER 2

SURFACE MARKERS OF SYNTACTIC STATUS

0. Introduction

In their (1976) study of subordination, Hammarberg and Viberg suggest that it is common for languages to feel the need to mark main and subordinate clauses distinct from one another. For example, in Turkish, nominalizations are used almost exclusively to express subordination (ibid; 14). Japanese, on the other hand, is a SOV language which marks subordination by the use of clause-final particles (ibid.). Whatever the method, however, it would appear that this basic distinction is consistently upheld in a great number of languages. As we mentioned in Chapter 1, languages like English and Swedish all appear to use clause-initial complementizing morphemes to mark clauses subordinate, belonging to the group which Bresnan (1972) has labelled "COMP-initial" languages. In a wider context, then, this use of complementizers can be seen as just one of a number of different methods which languages use to clarify the status of a clause.

The fact that this distinction between main and subordinate clauses appears to be of relatively universal importance is very significant. On the one hand it provides clear support for the theory of subordination adopted in this work, namely, that subordinate clauses are preceded by a COMP node in underlying structure (see Chapter 1). On the other hand, however, it casts doubt on the analyses of Chomsky (1977) and Bresnan (1977) who fail to acknowledge a need for a distinction in underlying structure between these two types of clause (cf. footnote 2 on page 14, and Anderman, op. cit., for detailed discussion). Moreover, it reinforces our claim that Emonds' (1976) attempt to classify clauses in terms of the transformations they allow is only significant if we first acknowledge an underlying difference between main and subordinate clauses. It is our contention that the reason why these three studies make the claims they do is because they use English as their starting language. English is unusual in that it relies extremely heavily on strict SVO word order for the maintenance
of basic grammatical relations. This point will be discussed in greater detail in Chapter 5, but it is important that it be borne in mind throughout. In particular, it will be seen from our study of subordination in German that overt surface distinctions would suggest that there is a basic difference in underlying structure between main and subordinate clauses, which we can conveniently capture by positing a COMP node in the underlying structure of subordinate clauses only.

Having stated in Chapter 1 that the presence of a complementizing morpheme in surface structure can be considered a PRIMARY MARKER of subordinate status, we also mentioned that occasionally not even the presence of a conjunction is sufficient to obviate the danger of syntactic ambiguity. Hammarberg and Viberg (1979) have pointed to the important function of a wide range of elements, notably pronominal subjects and complementizers, for the disambiguation of "sentence grammatical function" and syntactic relations. In the present Chapter we shall be arguing that there are a number of sentence elements, the function of which is to act as a kind of 'back-up system' to complementizers, and we shall therefore term these elements ANCILLARY MARKERS of syntactic status. It will be seen that their main function is to mark the distinction between main and subordinate clauses in particular and also to help clarify basic grammatical relations within the sentence as a whole.

We shall also be examining the term POLYFUNCTIONALITY, discussed in the context of subordination by Hammarberg and Viberg (1975 and 1979). This concept is central to a discussion of markers of syntactic status. Polyfunctional elements are those which may fulfil any of a number of functions, depending on the syntactic environment in which they appear. For example, certain introductory morphemes can either introduce a main clause or a subordinate clause, while Subject-Verb Inversion can be a sign of either an Indirect Question, or a Direct Statement in which the fronting of an element other than subject has caused the subject and the main verb of the sentence to invert, in accordance with the V/2 CONSTRAINT. As a consequence of this polyfunctionality, the clauses in which such elements or word order patterns appear are a potential source of ambiguity, and as such require extra marking to clarify
their function. In this Chapter we shall be looking at different types of polyfunctionality and the way surface markers can be used for the purpose of disambiguation. Throughout the present Chapter, we shall be stressing the importance of perceptual strategies in processing subordinate clause constructions. The work of Haiman (1974) and Kuno (1974) provides independent support for the crucial need for transparent grammatical relations within the sentence. Haiman suggests that the operation of the V/2 CONSTRAINT, which we shall be discussing below, has led to the development of particular constructions and 'dummy' elements. The purpose of these, it will be seen, is to clarify the basic grammatical relations obtaining within the sentence. On a similar note, Kuno (op. cit.) suggests that basic word order types create their own particular problems with regard to understanding basic grammatical relations. For each type of language, he maintains, essential syntactic constructions have developed which conspire to avoid configurations that are difficult to process. The conclusion will therefore be drawn that it is essential to maintain clear-cut basic grammatical relations within the sentence, and that in the languages we are concerned with, particularly in German, surface marking systems are amongst the mechanisms which fulfill this crucial function.

I. Primary Markers of Syntactic Status

We have argued that the complementizer that may be considered a PRIMARY MARKER of syntactic status, since it is an essential signal of subordinate clause status. Though we have restricted discussion in the main to that-clauses, we must remember that there are other ways of expressing subordination in English. The examples below demonstrate the use of an infinitival complement (1) and a gerund complement (2):

(1) It was difficult to make her rest
(2) I was annoyed at her constant moaning.

In such cases there is no need for a complementizer that, since the non-finite form of the verb in the second clause leaves
no doubt as to its subordinate status. Anderman (op. cit.; 154 ff) has shown that Swedish, which lacks a productive gerund construction, makes greater overall use of complementizers, and indeed has two at its disposal. The first is att, the complementizer of subordinate clauses with a finite verb, as in English that\(^1\). The second, som, is used with relative clauses, interrogatives, cleft and pseudo-cleft constructions, where English would also use the complementizer that (ibid.; 303). The use of som is clearly as a marker of syntactic status, since it is obligatory after the WH-word of embedded clauses when the WH-word functions as the subject of the subordinate S, thus marking the WH-word as the subject of the clause, and marking the clause as subordinate:

(3)(a) Jag vet vem som gjorde det  
I know who did it
(3)(b) *Jag vet vem gjorde det  
I know who did it

In other syntactic positions, however, e.g. when the WH-word functions as object, som is not present:

(4) Jag undrar vem han träffade på Hötorget  
I wonder who he met at Hötorget

This is a very interesting function of the complementizer. With ordinary relative clauses the pattern is similar: when the WH-word functions as the subject of the relative clause, som appears obligatorily:

(5)(a) Om du förklarar för mig vad som har hänt  
If you explain to me what has happened
(5)(b) *Om du förklarar för mig vad har hänt  
If you explain to me what has happened

It is clear that this use of som is dictated by perceptual strategies, since the absence of the complementizer results in

\(^1\)See Anderman (op. cit.) for a more thorough discussion of complementizers in Swedish.
a construction which is identical in word order to a direct question:

(6) Vad har hänt?

What has happened?

In other words, it would appear that the complementizer is being used to disambiguate a syntactic configuration which has more than one function -- firstly, as a relative clause introduced by a WH-word, and secondly, as a direct question. In the course of this chapter we shall see that polyfunctionality of sentential elements and word order patterns is a major potential source of syntactic ambiguity and requires the use of a whole range of surface markers for the clarification of syntactic relations. Hammarberg and Viberg (1979; 24) have discussed the effect of the polyfunctionality of sentential elements in Swedish. One major consequence of this polyfunctionality is that word order is extensively relied on to establish basic differences between elements in the sentence in terms of their "sentence grammatical function" (ibid.). More particularly, they observe that the placing of elements in the sentence (i.e. subject, verb, etc.) according to "strictly grammaticalized rules" (ibid.), plays an essential part in signalling the difference between subject and object, between statement and question, and between the main/subordinate clause status of an S (ibid.; 16 ff). The following are illustrations of these differences (ibid.):

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>WORD ORDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>subject/object</td>
<td>(7)(a) Ture har slagit Tore</td>
</tr>
<tr>
<td></td>
<td>S V O</td>
</tr>
<tr>
<td></td>
<td>Ture has hit Tore</td>
</tr>
<tr>
<td>(7)(b)</td>
<td>Tore har slagit Ture</td>
</tr>
<tr>
<td></td>
<td>S V O</td>
</tr>
<tr>
<td></td>
<td>Tore has hit Ture</td>
</tr>
<tr>
<td>question</td>
<td>(8) Har Ture slagit Tore?</td>
</tr>
<tr>
<td></td>
<td>V S</td>
</tr>
<tr>
<td></td>
<td>Has Ture hit Tore?</td>
</tr>
<tr>
<td>main clause</td>
<td>(9)(a) Vad köpte Ture?</td>
</tr>
<tr>
<td></td>
<td>V S</td>
</tr>
<tr>
<td></td>
<td>What bought Ture?</td>
</tr>
<tr>
<td></td>
<td>'What did Ture buy?'</td>
</tr>
<tr>
<td>subordinate clause</td>
<td>(9)(b) Vad Ture köpte, vet ingen</td>
</tr>
<tr>
<td></td>
<td>S S V</td>
</tr>
<tr>
<td></td>
<td>What Ture bought, noone knows</td>
</tr>
</tbody>
</table>

1 I have slightly altered Hammarberg and Viberg's table for the sake of clarity of exposition.
That the complementizer can help to establish the function of a polyfunctional element like a WH-word in the examples above, which can either introduce a relative clause or a direct question, can be seen from the following examples. Here, word order cannot be relied on to signal early enough what kind of clause is being dealt with, and som is therefore used optionally to help distinguish between a question and a direct (reported) statement (cf. Anderman, op. cit.; 322):

(10)(a) Varför kommer inte Ture?
   Why comes not Ture?
   'Why isn't Ture coming?'
(10)(b) Varför Ture inte kommer, vet ingen
   Why Ture not comes knows noone
   'Why Ture isn't coming, noone knows'
(10)(c) Varför (som) Ture inte kommer, vet ingen
   Why COMP Ture not comes knows noone
   'Why Ture isn't coming, noone knows'

Thus, we see that the complementizer appearing in a subordinate S which precedes the matrix S acts as a clear marker of the subordinate status of the clause in which it appears. Its presence has the advantage, so far as perceptual strategies are concerned, that it gives an early warning of the type of clause being dealt with, when word order might otherwise (albeit temporarily) mislead the hearer. We have seen that the complementizer acts as an obligatory signal of subordinate clause status with finite verb complements. The above examples demonstrate that these elements may also be relied on to provide an unequivocal signal of the main/subordinate clause distinction.

That complementizers have a distinct disambiguating function with regard to polyfunctional elements gains support from the following observations about Swedish by L-G Andersson (1973a). Andersson has shown that in Swedish a number of subordinating
conjunctions consist of a preposition followed by
(det) att (that that) (ibid; 3):

**PRONOUN**    **SUBORDINATING CONJUNCTION**

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Subordinating Conjunction</th>
</tr>
</thead>
<tbody>
<tr>
<td>efter</td>
<td>efter (det) att</td>
</tr>
<tr>
<td>före</td>
<td>före det att</td>
</tr>
<tr>
<td>till</td>
<td>till dess att/tills att</td>
</tr>
<tr>
<td>sedan</td>
<td>sedan det att</td>
</tr>
<tr>
<td>för</td>
<td>för det att/därfor att</td>
</tr>
<tr>
<td>på</td>
<td>på det att</td>
</tr>
<tr>
<td>i</td>
<td>i och med att</td>
</tr>
<tr>
<td>med</td>
<td>= in and with that</td>
</tr>
<tr>
<td>genom</td>
<td>genom det att</td>
</tr>
</tbody>
</table>

Thus, prepositions can either be followed by a simple NP or form part of a conjunction incorporating (det) att, as the following sentences demonstrate:

(11)(a) Efter min artonde födelsedag fick jag dricka sprit  
After my 18th birthday could I drink alcohol  
'After my eighteenth birthday I was allowed to drink alcohol'

(11)(b) Efter (det) att jag blev arton fick jag dricka sprit  
After that that I became eighteen could I drink alcohol  
'After I became eighteen I was allowed to drink alcohol'

In spoken Swedish, as we mentioned in Chapter 1, the att of these complex constructions is often omitted, a fact which provides support for the claim that this att is also a complementizer (ibid.; 298). For example, Teleman (op. cit.; 195) observes that in spoken Swedish, examples like (12)(a), where the complementizer
is omitted, are much more common than sentences like (12)(b):

(12)(a) Vi var enda fabriken till bröderna Sunde satte i gång
We were the only factory till bros. Sunde set in motion
'We were the only factory till Sunde Bros. started up'
(12)(b) Vi var enda fabriken tills att bröderna Sunde satte i gång
until that

While the majority of conjunctions in Swedish are complex
conjunctions, i.e. they are either combinations of preposition
+ complementizer or preposition + pronoun + complementizer (e.g.
trots att or trots det att (despite (the fact) that)), there are
also several single-morpheme conjunctions. Almost all of these,
however, have corresponding complex conjunctions, as discussed
by Anderman (op. cit.; 298):

(13)(a) Fastän hon var sjuk
Although she was ill
(13)(b) Trots (det) att hon var sjuk
Despite that that she was ill
'Despite (her) being ill'
(13)(c) Trots sin sjukdom
Despite her illness

It is also interesting to note, however, that some of these
single morpheme conjunctions may optionally be followed by the
complementizer att:

(13)(d) Fastän (att) hon var sjuk
Although that she was ill

In the above example the complementizer acts as an optional
extra marker of subordinate status and reinforces the function
of the subordinating conjunction fastän.

The complementizer som may also be optionally present with
certain locative and temporal constructions in certain dialects
of Swedish. According to Andersson, L-G. (1973a) the (b) sentences
of (14) and (15) are commonly found variations of the (a) sentences found in spoken Swedish (ibid.; 15):

(14)(a) Robin såg pa när Maja fick sina kattungar
Robin was watching when Maja had her kittens
(14)(b) Robin såg pa när som Maja fick sina kattungar
Robin was watching when that Maja had her kittens

(15)(a) Robin brukade sova där Maja fick sina kattungar
Robin used to sleep where Maja had her kittens
(15)(b) Robin brukade sova där som Maja fick sina kattungar
Robin used to sleep where that Maja had her kittens

As Anderman explains (op. cit.; 299), complementizers are present with complex conjunctions to ensure that the preposition is perceived of as a 'sentence preposition' -- a subordinating conjunction. This is equivalent to our claim that the complementizer is present with complex conjunctions to disambiguate their function and clarify syntactic relations.

In Chapter 1 we saw that, according to Anderman, all subordinate clauses are generated via the NP node, and we accepted her description of subordinate clauses as complex NPs. This sort of analysis can account for the parallel behaviour of examples (16)(a)-(b) below, where the (a) sentence contains a complex NP preceded by a complementizer, while the (b) sentence contains a simple NP preceded by a simple preposition:

(16)(a) Trots att han var sjuk, gick han till jobbet
Despite that he was ill went he to work
'Despite the fact that he was ill he went to work'
(16)(b) Trots sin sjukdom gick han till jobbet
Despite his illness went he to work
'Despite his illness he went to work'

Observations like these thus prompted Andersson, L-G. (op. cit.) to analyze combinations of preposition + complementizer as "complex conjunctions".
Similar conjunctions also exist in English. In (17)(b) below the simple preposition of (17)(a) has been deleted, rendering it a 'sentence preposition', i.e. making it introduce a subordinate S (Anderman, op. cit.; 300):

(17)(a) Because of her illness she could never work
(17)(b) Because she was ill she could never work

Many simple prepositions, however, cannot be converted into conjunctions in this way, and Anderman suggests that this may be on account of the fact that prepositions are not acceptable before that- clauses in English (ibid.).

In German and French such polyfunctional morphemes also occur, functioning either as prepositions or, when followed by complementizers, as conjunctions.¹ However, French requires that a pronoun ce should intervene between preposition and complementizer, while German suffixes the preposition to a pronoun (see Anderman, op. cit.; 301 ff for more detailed discussion, and below for further discussion of the use of pronouns with complementizers). In older and more stylized forms of German, however, pronouns were absent from such complex conjunctions and today certain (few) relics remain of a preposition followed immediately by dass (cf Anderman, op. cit.; 302):

(18)(a) FRENCH          Preposition          Conjunction
     par       by           par ce que        because
     dès       since             dès que        as soon as
     depuis    since             depuis que    since

(18)(b) GERMAN          Preposition          Conjunction
     (a) wegen  because (of)  deswegen dass  because
     (b) trotz  in spite (of) trotzdem dass  although
     (c) auf    on, upon       auf dass      so that
     (d) bis    till, to       bis dass      until

Thus, we see that all the languages mentioned share the characteristic of using polyfunctional morphemes to introduce subordinate

¹For further discussion of such polyfunctional elements in German see Chapter 5, Section II.
clauses. When used as a conjunction the presence of the complementizer is required to provide a clear signal of the subordinate status of the clause it is introducing, thereby also disambiguating the function of the preposition. We have further seen that in Swedish the complementizer may be optionally used with single morpheme conjunctions as an extra marker of status. This is a further function of the complementizer which can optionally give reinforcement to the signal provided by the primary marker, that is, the conjunction. In the next section we will see that other elements exist which perform exactly this function vis-à-vis the complementizer itself. Whenever polyfunctionality is a potential cause of ambiguity, we shall see that certain markers may be used to provide reinforcement of the primary signal and disambiguate the function of the clause, acting as an ancillary device for the clarification of syntactic relations. It is to these elements that we now turn our attention.

II. Ancillary Markers of Syntactic Status

Anderman (op. cit.; 325) has suggested that all of those languages in which the V/2 CONSTRAINT is operative (Haiman, 1974), are languages which make the main/subordinate clause distinction. According to the V/2 CONSTRAINT, the verb must appear in second position in the sentence. Hence, in an example like (10) (b) above, repeated below in (19), where the subordinate S precedes the main clause, Subject-Verb Inversion must take place in order to leave the verb in second place in the sentence:

(19) Varför Ture inte kommer, vet ingen
     Why Ture not comes, knows noone
     'Why Ture isn't coming, noone knows'

Below, it will be seen that the operation of the V/2 CONSTRAINT is a potential source of ambiguity, since occasionally it can cause, e.g. Subject-Verb Inversion to be confusible between a direct statement and a yes-no question. Whenever a subordinate clause precedes a main clause, ambiguity is potentially involved in the latter, and it is in such cases that clear surface marking is usually required.
Moreover, there are other constructions of a similar type, though not involving the use of complementizers, where the operation of the V/2 CONSTRAINT causes perceptual difficulty. Hammarberg and Viberg (1975; 28) have pointed out that there are instances in Swedish where word order cannot be relied on to provide an unequivocal signal of the main/subordinate clause distinction. In such cases, they argue, the distinction can be maintained by inserting so-called 'placeholders', like da (then) and så (so). These placeholders are, according to Hammarberg and Viberg, markers which may optionally appear in the surface of the sentence to clarify the sentence grammatical relations obtaining (ibid.). In our terms, they signal whether we are dealing with an instance of inversion caused by the operation of the V/2 CONSTRAINT (as in (20)(b)), or a yes-no question (as in (20)(c)). Example (20)(a) demonstrates the possibly ambiguous version of this sentence minus extra markers (Hammarberg, Viberg, ibid.):

(20)(a) Om man bryter mot trafikreglerna, måste man bota?/
If one breaks against the traffic laws, must one pay a fine
= EITHER: 'If one breaks the traffic laws must one pay a fine?'
OR: 'If one breaks the traffic laws, one must pay a fine.'

(20)(b) Om man bryter mot trafikreglerna, då måste man bota
If one breaks against the traffic laws then must one pay a fine
= ONLY 'If one breaks the traffic laws then one must pay a fine'

(20)(c) Om man bryter mot trafikreglerna, måste man bota
If one breaks against the traffic laws must one pay a fine
då?
then?
= ONLY: 'If one breaks the traffic laws, must one then pay a fine?'

Of course, intonation helps to signal the status of the clause in question - rising intonation signals a question, falling intonation a statement - but since the use of these optional markers is at least as common in spoken Swedish as in written Swedish, if not more so, this suggests that the need is felt for a more explicit signal, or perhaps an earlier signal than intonation can provide.
The operation of the V/2 CONSTRAINT is not restricted to Swedish, however, and our proposed classification of place holders as surface markers of syntactic status gains strong support when we observe that in Dutch and German, where the V/2 CONSTRAINT is also operative, there exist clearly identifiable devices for marking these distinctions, which behave in a remarkably similar way to da and sa in Swedish. In these languages, the difference between main and subordinate clauses is signalled consistently by using verb-final order in subordinate clauses, while preserving SVO order in the main clause:

**GERMAN**

(21)(a) Ich mag dich
S V O
I like you

(21)(b) Ich mag dich, weil du immer so hilfsbereit bist
S O V
I like you because you always so helpful are

'I like you because you are always so helpful.'

**DUTCH**

(22)(a) Ik heb zwavelstokken
S V O
I have matches

(22)(b) Ze wisten niet, dat het meisje een groot geluk beleefde
S O V
They knew not that the girl a great happiness felt

'They didn't know that the girl was very happy'

That German also uses markers of subordination corresponding to Swedish da and sa can be seen from the following examples incorporating dann/so (then/so):

(23)(a) Wenn wir keine Tickets bekommen, können wir nicht
If we no tickets get can we not
nach Hamburg fliegen? /

to Hamburg fly

= EITHER: 'If we don't get any tickets, can't we fly
to Hamburg?'

OR: 'If we don't get any tickets, we can't fly
to Hamburg.'
(23)(b) Wenn wir keine Tickets bekommen, können wir dann nicht
If we no tickets get can we then not
nach Hamburg fliegen?
to Hamburg fly
= ONLY: 'If we don't get any tickets, can't we then fly

to Hamburg?'

(23)(c) Wenn wir keine Tickets bekommen, dann/so können
If we no tickets get then so can
wir nicht nach Hamburg fliegen
we not to Hamburg fly
= ONLY: 'If we don't get any tickets, then we can't fly
to Hamburg.'

Duden (1973; 581) also points to the disambiguating function
of these markers. In fact, sentences are cited where the difference
between the main and subordinate clause is marked solely by the
presence of these 'correlates' (place holders) (ibid.):

(24) Kannst du es nicht alleine recht machen, dann mache es
Can you it not. alone properly do then do it
wenigstens so, dass...
at least so that
'If you can't do it properly on your own, then at least do
it in such a way that...'

That this function of dann (in 24) is analogous to the function
of the primary markers of syntactic status can be seen clearly
from the following example, also from Duden, where main and subordinate
clause are differentiated solely by word order (ibid.):

(25) Warf er das Schwert von sich, er war verloren (Schiller)
V S S V
Threw he the sword from himself, he was lost
'If he threw the sword away he would be lost'

Duden adds that sentences like the following, with neither
a dann/so correlate nor word order distinction (nor, one assumes,
a conjunction like *wenn (if)*), should be avoided because of their syntactic obscurity (ibid.):

(26) *Will ein Besitzer ein Grundstück veräußern, hat er
V   S  V   S
Wants an owner a piece of land to sell has he
eine Meldung zu machen
a report to make
'If an owner wishes to sell a plot of land he has to make a report'

(27) Will ein Besitzer ein Grundstück veräußern, dann hat
Wants an owner a piece of land to sell then has
er eine Meldung zu machen
he a report to make
'If an owner wishes to sell a plot of land, then he has to make a report'

Hence we see that surface markers of syntactic status are available in German for the clarification of syntactic relations. However, although these markers are clearly similar in function to the primary markers of subordination in German (i.e. complementizers and SOV word order), they are, like the Swedish markers above, usually only OPTIONAL devices, secondary in function to the primary markers, which are obligatory signals. For this reason, I shall refer to particles like dann and so as ANCILLARY MARKERS of subordination. Moreover, while the primary markers mark the clause in which they appear as subordinate, the presence of the ancillary markers normally serves to signal that the clause in which they appear is a main clause, thus INDIRECTLY marking the preceding (ensuing) clause as subordinate:

(28) In dem Fall hat er eine Meldung zu machen
In that case has he a report to make
'In that case he has to make a report'
Perhaps it is for this reason that Hammarberg and Viberg (1979; 33) refer to such elements as 'place holders'.

In the light of these observations, it would seem plausible to refer to a clause as subordinate just in case it has been subjected to the operation of primary markers of subordination or of a combination of primary and ancillary markers, or occurs in combination with a main clause containing ancillary markers of syntactic status. We shall use this description as a preliminary, working definition of subordinate clauses, but we shall have cause to modify it later on in this study (cf. Chapter 5, Section II).

Apart from those elements already discussed, other elements can be seen to function as markers of syntactic relationships within the sentence. It is to these related elements that we now devote our attention.

Hammarberg and Viberg (1979) have noted for Swedish and other related languages that the presence of dummy elements is often required to establish and maintain certain grammatical relations that could not otherwise be expressed unambiguously in surface structure. They claim that the development of dummy elements reflects an increasing reliance on word order in these languages to express specific syntactic relations. As we have already seen, it is languages with exactly this dependence on word order, notably

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1It is important that the term 'platshallare' be distinguished from the German term 'Platzhalter' (cf. Hartung, 1964), the latter translated by e.g. Beedham (1979) as placefiller, although other translations exist (cf. Scaglione, 1981; 148). Though not completely unrelated, it must be stressed that 'platshallare' and 'Platzhalter' do not refer to the same phenomena. To my knowledge, the term 'Platzhalter' is never used to describe such ancillary markers as dann and so in German. For this reason, I have chosen to refer to 'platshallare' as placeholder and 'Platzhalter' as placefiller throughout, although other literature is confusing on this point (cf. below, Ch. 5, Section II).
e.g. German, Dutch, Swedish, Danish and Norwegian, which make consistent use of dummy elements. Hammarberg and Viberg's examples from Swedish illustrate this reliance on word order and dummy elements (notably personal pronouns) to establish and maintain clear-cut grammatical relations (ibid.; 27-28):

(29)

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>QUESTION</th>
<th>STATEMENT OR QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Subject Pronouns</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Han springer</td>
<td>Springer han?</td>
<td>Springer</td>
</tr>
<tr>
<td>He runs</td>
<td>Runs he</td>
<td>Runs</td>
</tr>
<tr>
<td>'He is running'</td>
<td>'Is he running?'</td>
<td></td>
</tr>
<tr>
<td><strong>B. Dummy Subject</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Det regnar</td>
<td>Regnar det?</td>
<td>Regnar</td>
</tr>
<tr>
<td>It rains</td>
<td>Rains it</td>
<td>Rains</td>
</tr>
<tr>
<td>'It is raining'</td>
<td>'Is it raining?'</td>
<td></td>
</tr>
<tr>
<td>b. Det kommer någon</td>
<td>Kommer det någon?</td>
<td>Kommer någon</td>
</tr>
<tr>
<td>There comes someone</td>
<td>Comes there someone</td>
<td>Comes someone</td>
</tr>
<tr>
<td>'There's someone coming'</td>
<td>'Is there someone coming?'</td>
<td></td>
</tr>
<tr>
<td>c. Det var kul att Olle</td>
<td>Var det kul att Olle</td>
<td>Var kul att Olle</td>
</tr>
<tr>
<td>It was nice that Olle</td>
<td>Was it nice that Olle</td>
<td>Was nice that Olle</td>
</tr>
<tr>
<td>kom</td>
<td>kom?</td>
<td>kom</td>
</tr>
<tr>
<td>came</td>
<td>came?</td>
<td>came</td>
</tr>
<tr>
<td>d. Det var Olle, som kom</td>
<td>Var det Olle, som kom?</td>
<td>Var Olle som kom</td>
</tr>
<tr>
<td>It was Olle that came</td>
<td>Was it Olle that came?</td>
<td>Was Olle that came</td>
</tr>
</tbody>
</table>

**C. Pronominal Copy after Dislocation**

- Änglar, dom finns
  - Änglar, finns dom?
  - Änglar finns
- Angels, they exist
  - Angels, exist they?
  - Angels exist
- 'Angels (really) do exist'
  - 'Do angels (really) exist?'

**D. MAN = one/they you**

- Man maste arbeta
  - Mäste man arbeta?
  - Mäste arbeta
- One must work
  - Must one work?
  - Must work

**E. VARA = be Ha = have**

- Olle är glad
  - Är Olle glad?
  - Olle glad
- Olle is happy
  - Is Olle happy?
  - Olle happy
- Olle har en bil
  - Har Olle en bil?
  - Olle en bil
- Olle has a car
  - Has Olle a car?
  - Olle a car
F. The pro-verb göra = do

Arbetar gör han som en hel karl?  Arbetar han som en hel karl?
Works does he like a real man?

'Does he work like a real man?'

Beundrade Kalle gjorde alla?  Beundrade Kalle gjorde alla?
Admired Kalle did everyone Admired Kalle everyone?

'Everyone certainly admired Kalle'

EITHER: 'Did everyone admire Kalle?'

OR: 'Did Kalle admire everyone?'

(1) (Note that even the syntactic function of the NP changes in this clause if the dummy element is omitted – object NP becomes subject)

Hammarberg and Viberg point out that all the above constructions incorporate dummy syntactic elements which are essential to the correct interpretation of their function: without them, it becomes impossible to tell whether we are dealing with a statement or a question, as the examples in the right hand column demonstrate (ibid.).

The link between the development of dummy syntactic elements and the signalling of yes/no questions by inversion was first suggested by Beckman (1934). Beckman links the simultaneous reduction of the inflectional system of Romance and Germanic languages with the disappearance of certain constructions. He suggests that one might not unreasonably assume that the development of certain syntactic innovations, not found in Gothic or Latin but now common to the two genealogically distinct groups of the Romance and Germanic languages, might possibly constitute a means of compensating for lost inflectional constructions.

These common constructions include the emergence of dummy pronominal subjects (e.g. Latin pluit v. French il pleut (it is raining); impersonal subjects (French on, German man (one)); Extraction processes (Clefting and Pseudoclefting) and the use of Subject-Verb Inversion in the formation of yes-no questions. He relates the emergence of dummy and impersonal subjects to the development of these processes, and in particular to the use of inversion to signal a yes-no question. He notes that these syntactic innovations are now common to an area which is geographically definable, but which is not consistent with dividing lines between genealogical language groups, i.e. Germanic and Romance, and subsumes these common constructions under the heading "West European Syntax".
Lockwood (1968; 169) also refers to the development of semantically "empty" pronouns as a French-West Germanic innovation, giving still further weight to Beckman's observations.

As we mentioned above, Anderman (op. cit.; 325) suggests that those languages in which the V/2 CONSTRAINT is operative all use surface markers to distinguish between main and subordinate clauses. Looking at the example from Swedish in (30) below, we recall that where the main clause is preceded by a subordinate clause, triggering Subject-Verb Inversion in the matrix, it is particularly important to provide an unequivocal signal that the first S is subordinate (cf. Anderman, op. cit.; 325-67). Thus, in example (30), the att- (that)-clause is marked subordinate by the presence of the complementizer and the position of the negative inte, which is in typical subordinate clause position for Swedish. Moreover, extra marking is provided in this instance by the use of a fronted object pronoun det, which signals clearly that the VS order in the matrix is an inversion caused by the operation of the V/2 CONSTRAINT, and not by question formation (see Anderman, ibid. for further discussion):

(30)

Att det inte nu var den här fru B., det tänkte jag
That it not now was this Mrs. B, that thought I
inte på
not about
'I didn't think that it wasn't this Mrs. B after all'

In other words, in this sentence the pronoun det acts in a similar way to da in sentence (20) above, in that it reinforces the main clause status of the clause in which it appears. We must therefore include this element in our set of ancillary markers and, moreover, as we shall see below, it would also appear that head nouns have a function closely related to that of det in example (30). Their presence in the surface structure of a sentence helps to disambiguate syntactic relations, reinforcing the function primarily carried out by the complementizer.
III. The Use of Head Nouns and the Determiner Node Theory

In this section we shall be taking a look at the use of pronominal head nouns in several of the languages under discussion. It will be seen that their use in a language is dictated by language-specific rules which have extremely important implications for the basic syntax of the language in question. In particular it will be seen that the LIKE FORM CONSTRAINT (Radford, 1974) is a crucial factor in determining whether a language uses pronominal head nouns (see below for definition of this constraint). However, the question which languages use pronominal head nouns is of course secondary to the basic question why head nouns are used in the first place. Anderman (op. cit.) provides us with a most enlightening answer to the question, one which is consistent with our contention that certain superficially unimportant elements play an essential role in the signalling of basic grammatical relations.

Anderman (op. cit.; 23) points out that in Swedish subject complements in sentence-initial position, the presence of a preceding pronoun is preferred. In other words, (31)(a) is preferred to (31)(b) in this language (ibid.). Comrie (1972, 150) has similarly made the claim that the presence of the demonstrative pronoun to before subject complements in this position (as in (32)(a)) is also preferred in Russian:

(31)(a) Det (där) att hon alltid vill stanna hemma förvånar mig
      The there that she always wants to stay at home surprises me
      'It surprises me that she always wants to stay at home'

(31)(b) ?Att hon alltid vill stanna hemma förvånar mig
      That she always wants to stay at home surprises me

(32)(a) To, čto Volodya ne ljubit viski, stranno
      That that Volodya not likes whisky is strange

(32)(b) Čto Volodya ne ljubit viski, stranno
      That Volodya not likes whisky is strange
      'It is strange that Volodya does not like whisky'
In German, however, pronominal head nouns of this type are not found with subject clauses in sentence-initial position (Anderman, op. cit.; 163):

(33)(a) *Das, dass er krank ist, ist sicher
   That that he ill is is certain
(33)(b) Dass er krank ist, ist sicher
   That he ill is is certain

Similarly, pronominal head nouns are not found with sentence-initial clauses functioning as subjects in English:

(34) *That that he came annoyed me.

With prepositional complements, however, German does make use of a pronominal element to which it affixes the preposition (ibid.; 162):

(35)(a) Er ist stolz darauf, dass sein Vater General ist
   He is proud of that his father general is
(35)(b) *He is proud of that that his father is a general

(35)(b) shows that this is not the case with English prepositional complements, however. Anderman links the absence of pronominal head nouns from non-oblique complements in German with the total absence of pronominal head nouns in English (cf. the gloss to (31)(a) and (33)(a)). She suggests that their presence may be unacceptable on account of euphonic factors. The use of a pronoun in these languages would involve the apparently unacceptable uninterrupted sequence of two identical morphs (the complementizer dass and pronoun das in German, and that and that in English) (ibid; 163 ff). Anderman cites independent evidence of the fact that German does not tolerate the appearance of two adjacent identical morphs in surface structure. Radford (1974) has shown that in German comparative constructions the same principle appears to apply, filtering out
sentences like (36)(a) and replacing the first incidence of als by denn as in (36)(b) (ibid.; 17):

(36)(a) *Goethe ist bekannter als Schriftsteller als als
Goethe is better known as a writer than as
Naturwissenschaftler
a scientist
(36)(b) Goethe ist bekannter als Schriftsteller denn als
Goethe is better known as a writer than as
Naturwissenschaftler
a scientist

Radford refers to this phenomenon as the "LIKE FORM CONSTRAINT" (ibid.). Anderman suggests that this same constraint is at work in (34) and (35)(b) in English and (33) in German, since these examples similarly involve uninterrupted sequences of pronoun and complementizer (Anderman, op. cit.; 164). In the German sequence of (33)(a), on the other hand, the preposition intervenes between pronoun and complementizer, rendering the sentence acceptable. Aijmer (1967) has shown that in object position in English the omission of the complementizer of subordinate clauses often occurs when the demonstrative that appears in the matrix clause, a fact which she ascribes to euphonic factors (ibid.; 17). It would also appear to be the case in German that object complements do not occur with pronominal heads, as in the case of subject comple­ments like (33)(a), so that a consistent pattern of behaviour emerges in these languages, which clearly supports the existence of the LIKE FORM CONSTRAINT. Seuren has suggested in discussion (LAGB Conference, Surrey, 1980), that this sort of constraint is common to many languages. He pointed to a similar constraint in Dutch which prevents the juxtaposition of e.g. two occurrences of er (it), although they might be strictly speaking "grammatical" in this position, as was the case with the German comparative construction in (36) above.
Further corroborative evidence is also provided by the fact that German native speakers react most unfavourably to the um combination in (37)(b) below, offered as a translation of the English example in (37)(a):

(37)(a) Being too proud to ask for help is the surest way to total failure

(37)(b) *Wenn man zu stolz ist, um Hilfe zu bitten, wird man ohne Zweifel total versagen

The important question still remains, however, why do languages like Russian, Swedish and German\(^1\) need to use pronominal head nouns in this way. Anderman (op. cit.; 168) notes that in two languages which require pronominal head nouns in certain instances, i.e. Swedish and Spanish, the pronoun preceding the complement is identical in phonetic form to the definite article (Spanish el, Swedish det). The fact that these two elements, the definite article and pronominal head noun, are identical in those languages where both are in use, leads Anderman to suggest that the function of the pronoun vis-à-vis the complex NP might be similar to that of the definite article vis-à-vis the simple NP. For this reason she proposes that the underlying structure in (38)(a) might well be ascribed to the complex NP by analogy with the underlying structure of the simple NP in (38)(b) (ibid.):

\[
\begin{align*}
(38)(a) & & (38)(b) \\
\text{Det} & & \text{Det} \\
\text{NP} & & \text{NP} \\
\text{S} & & \text{N} \\
\text{[+Def]} & & \\
\end{align*}
\]

\(^1\)For a more detailed account of the use of head nouns in some other languages see Anderman (op. cit. Chs. 2-3).
Anderman argues that the Determiner node in (38)(a) serves to make the complex NP more similar to the simple NP in underlying structure, and suggests that this greater degree of similarity is required whenever an S occurs in the syntactic position normally occupied by a simple NP (ibid.). While this Determiner Sister node of the S functions solely to render the subordinate clause more 'noun-like', it is not always realized in surface structure. Although at first this might appear tantamount to suggesting that with e.g. German non-oblique complements and all complements in English the Determiner node is never realized in surface structure, Anderman suggests that this observation can be rationalized if we observe the behaviour of Determiners in general. Simple nouns frequently appear either with or without definite articles, depending on language-specific rules. For example, in German, proper nouns occasionally occur with definite articles, particularly in colloquial speech:

(39) Der Johann kommt
    The Johann is coming

Similarly, language-specific rules dictate the presence v. absence of definite articles with common nouns. For example, German abstract nouns must appear with a definite article, while their English counterparts must not:

(40) So eben ist das Leben
    Such is the life

(41) Such is ø life

Anderman notes that a complex NP cannot be used in any other way than as a definite NP, and as such is similar to proper nouns, which are the simple nouns occurring most frequently without a definite article in English. As we have seen, this is not the case in German, and even in English, names of rivers are in fact preceded by a definite article: the Thames, the Tweed, etc. (ibid.; 171). Dahl (1976) has suggested that proper nouns like John etc. have ø definite article in English because they are used exclusively in a definite sense. For the same reason, Anderman argues that there is no need for a surface determiner with complex NPs in English (ibid.). Moreover, the absence of
surface realizations of the determiner with complex NPs can also be accounted for in this language in terms of the LIKE FORM CONSTRAINT, which rules out the use of the pronoun that may be used to fill the Determiner node of the complement, as we have previously seen (ibid.). Hence, Anderman argues, the complex NP can "get away with" not having a surface realization of its Determiner node as easily as a proper noun can get away without realizing its definite article in surface structure (ibid.; 172).

We mentioned above that the realization of pronominal elements in the surface structure of a sentence is dictated by language-specific rules. Returning to our examples in (31)(a) and (32)(a), repeated below in (42) and (43), we see that the pronominal head noun is preferred in Swedish and Russian:

\[(42) \text{Det, att hon alltid vill stanna hemma, förvånar mig}\]
That that she always wants to stay at home surprises me

\[(43) \text{To, Æto Volodya ne ljubit viski, stranno}\]
That that Volodya not likes whisky is strange

Anderman suggests that the need for a pronominal head noun in these and similar positions may well be linked with Kuno's (1973) suggestion that there is a constraint on incomplete noun phrases in sentence-initial position. In other words, it might be argued that in these languages the "incompleteness" of the subordinate clause or complex NP is focused upon since it is in 'exposed' sentence-initial position. Hence Swedish would also show a preference for (44)(a), when another type of complex NP, the infinitival clause, appears in sentence-initial position, rather than (44)(b), which is a grammatical but "less well-liked" sentence (Anderman, op. cit.; 177):

\[(44)(a) \text{Det (där) att springa omkring och handla är inte}\]
The there to run around and shop is not
\[\text{speciellt roligt}\]
especially fun

\[(44)(b) \text{Att springa omkring och handla är inte speciellt roligt}\]
To run around and shop is not especially fun
Now, according to Anderman's Determiner Node Theory, the pronominal head noun of the example above is required to mark the clause it precedes unequivocally as a complex NP. In accordance with this argument, I should like to suggest that, since such pronominal head nouns signal the subordinate status of the embedded sentence, they should be included in that category of markers of subordination which we have termed ancillary markers of subordination. This classification is of course totally compatible with Anderman's analysis, since it represents an alternative way of stating that the pronominal element functions to mark the complex NP as subordinate in status.

Furthermore, pronominal head nouns display a characteristic which is typical of ancillary markers in that their presence in the surface structure is optional so long as the subordinate status of an S is sufficiently obvious (as with example (43)(a)-(b), where (b) is not considered unacceptable, though (a) is preferred). Whenever the subordinate status of the S is in doubt, however, their presence in the surface structure is obligatorily required. Taking Anderman's 'noun-like' analogy further, we could say that the ancillary marker, or head noun, is required in those positions where there would normally be a simple NP and it therefore functions to clarify basic grammatical relations within the sentence. Thus, in English, German, French and Swedish, for example, where subject NPs normally precede the verb in declarative sentences, subordinate clauses either require extra marking, as in the Swedish examples above, or are completely blocked, as in English and German, where the LIKE FORM CONSTRAINT prevents the use of pronominal head nouns as we saw in (34) and (33)(a) above. Where subordinate clauses are found in 'exposed position' in German and English, other, non-pronominal markers are used, as we shall see below in Chapter 3.

There is, however, a large class of predicates that are not normally found with simple NP objects. Anderman shows that after verba dicendi, putandi and sentiendi, no marking of the subordinate status of the ensuing clause is normally required since these verbs are usually followed by an S, not a simple NP object, and therefore do not need to be made to appear similar to simple NPs.
After predicates normally occurring with NP objects, however, the same conditions apply with regard to ancillary markers that apply with complex NPs acting as subject: optional markers may be used to clarify the status of the subordinate S. The difference in underlying structure is captured by Anderman, who assigns the structure in (45)(b) to the complements of *verba dicendi* etc., as opposed to the structure in (45)(a), which is the structure assigned to the complements of the majority of verbs (ibid., 178):

(45)(a) \[ NP \quad \text{Det} \quad S \quad [+\text{Def}] \]

(45)(b) \[ NP \quad S \]

In other words, we see here that no Determiner Sister node is postulated for the complement of *verba dicendi*, *putandi* etc. If a subordinate S appears in a position normally filled by an S and not by a simple NP, as is the case with these predicates, then there is no need for this subordinate S to display the characteristics of a simple noun phrase (see Anderman, op. cit. for further evidence to support this analysis).

Another related element to these pronominal markers is to be found in the German combination *da(r) + preposition* (cf example (35) above) which is obligatorily required with complements governed by a preposition whenever the preposition is retained. The combination of preposition + complementizer is not allowed in German unless some sort of 'insulation' is provided, or in other words, unless a pronominal element is present to prevent an uninterrupted sequence of preposition and complementizer. Thus, example (46)(a) is considered unacceptable in German, while (b) is acceptable,
since it contains the combination da(r) + preposition:

(46)(a) *Ich freue mich auf, dass ich demnächst nach Amerika fahre
I look forward refl. to that I soon to America go
Amerika go

(46)(b) Ich freue mich darauf, dass ich demnachst nach Amerika fahre
to America travel
'I am looking forward to the fact that I am soon going to America'

The presence of this combination in surface structure makes it clear that a subordinate clause is about to follow, and for this reason, we may include da(r) + preposition in the group of ancillary markers that we have so far isolated for German (i.e. dann and so etc. see above). The combination da(r) + preposition is the sole instance of a pronominal head noun used in this language and its function is of course related to the use of pronominal head nouns which function as ancillary markers in other languages (cf. Anderman (1978) discussed above in Chapter 2, Section III). Due to the operation of the LIKE FORM CONSTRAINT, head nouns only occur with prepositions in German, and thus the combination da(r) + preposition is the only instance of a pronominal head noun functioning as an ancillary marker in this language. (For further discussion, see Chapter 3, Section IV). In the meantime, we may conclude that it is further evidence for the fact that languages have special surface markers at their disposal which serve to clarify and maintain clear-cut syntactic relations.

IV. Further Evidence for the Importance of Maintaining Unambiguous Syntactic Relations.

One of the major points we have raised in this Chapter is that the operation of the V/2 CONSTRAINT is a potential source of syntactic ambiguity and requires a language to provide extra marking in order to clarify basic syntactic relations. Kuno (1974)
has in fact suggested that languages whose basic word order creates
inherent difficulties develop syntactic processes and constraints
to avoid such problems of perception. In his analysis of the
position of relative clauses and conjunctions he makes two basic
assumptions: firstly, that centre-embedding and conjunction juxtaposition
cause perceptual difficulties, and secondly, that languages embody
devices to minimize patterns that cause perceptual difficulty
(ibid.; 118). On the basis of several of the universal tendencies
observed by Greenberg (1963), and of Lehmann's basic principle
of placement for modifiers (1973), Kuno asks, amongst other questions,
why relative clauses in SOV languages appear before their head
nouns, but after them in VSO languages (op. cit.; 118). Another
question posed is why conjunctions appear clause-finally in SOV
languages, but clause-initially in VSO languages (ibid.). His
treatment of such questions in terms of typology and perceptual
strategy is very interesting and enlightening and provides, as
we shall now see, supporting evidence for our claim that languages
need to demonstrate straightforward grammatical relations, and
embody certain (often subtle) devices for the preservation of
syntactic clarity. Kuno's basic conclusion to the questions posed
is that, since the effect of centre-embedding and conjunction
juxtaposition is to cause perceptual difficulties, particular
word order patterns are adopted in the languages concerned in
order to guarantee that centre-embedding and conjunction juxtaposition
occur as infrequently as possible (ibid.).

As an illustration Kuno argues that sentences like (47)(a)
and (b) are unacceptable in English, since they involve multiple
centre-embedding, while (48)(a) and (b) are tolerated because
they involve right embeddings (ibid.; 119):

(47)(a) *The cheese [the rat [the cat chased] ate] was rotten
(47)(b) *That [that [the world is round] is obvious] is dubious
(48)(a) The cat chased the rat [that ate the cheese [that was
rotten]]
(48)(b) John thinks that [Mary believes that [the world is
flat]]
Similarly, (49) is acceptable in English because it contains multiple left-embeddings (ibid.):

(49) [[[John's brother]'s wife]'s friend came to see me

In Japanese leftward branching is very common, although centre-embedding also causes perceptual difficulties in this language (ibid.). Kuno contends that centre-embedding probably reduces comprehensibility universally because of "limitation in the human capacity of short term memory" (ibid.; 120). In other words, he contends that the reason why (47)(a) is difficult to understand is because the hearer must remember three predicates, \( VP_1 \), \( VP_2 \) and \( VP_3 \), and link them with the cat, the rat and the cheese, respectively.

In (48)(a), he notes, "after having received the cat chased the rat, the hearer does not expect that a relative clause will follow which, in turn, contains another similar relative clause" (ibid.). Similarly, he argues that in sentence (49) the speaker is not aware that the first NP he hears, John's, is the most embedded of three successive NPs, which leads him to conclude (ibid.):

"Therefore, he has no reason to burden his temporary memory with the prediction that John's, which he has just received, will be followed by NP_1's, NP_2's, N and VP in that order".

On the basis of these observations Kuno assumes "without explanation" (ibid.; 121) that it is a universal of human language that centre-embedding, as opposed to left- or right-embedding, hinders speech comprehension (ibid.). It is for this reason, Kuno claims, that such structures are avoided and languages adopt basic patterns which guarantee their avoidance. I believe, however, that there are other, more obvious and general reasons for intolerance of centre-embedding, in view of the observations made above, namely that languages need to be able to distinguish clearly between basic syntactic elements and their functions. In fact, it would seem to me that Kuno assumes this fact throughout his analysis. We shall discuss these points further below.

Two other important observations are made by Kuno in this connection. Firstly, he examines the prenominal participial constructions used in Modern German, which is SOV in subordinate clauses,
and SVO in main clauses. Below are his examples (ibid.; 122-3):

(50) (a) die Fische
    the fish (pl)
(50) (b) die [Plankton]-fressenden Fische
    'the plankton-eating fish'
(50) (c) die [den Plankton]-fressenden Fische
    'the plankton-eating fish'
(50) (d) der [[Plankton]-fressende Fische]-essende Mensch
    'the plankton-eating fish eating man'
(50) (e) ?*der [die [Plankton-fressenden Fische]-essende Mensch
(50) (f) *der [die [den Plankton]-fressenden Fische]-essende Mensch

In (c), the object of the participial construction, Plankton, modifying the succeeding head noun (Fische), has its own article. (50) (d) shows the recursive nature of the participial construction formation. It involves the centre-embedded NP, Plankton-fressende Fische, and is a perfectly acceptable construction. Example (50) (e), however, contains two centre-embeddings, and is not readily comprehensible. The situation is similar with (50) (f), where den Plankton is centre-embedded in die fressenden Fische and again in the entire NP. Kuno:

"It seems that this double centre-embedding is responsible for the incomprehensibility of (50) (e) and (f)" (ibid.).

Kuno observes that German participial constructions are prenominal and verb final. Subordinate clauses in German are SOV, but despite this, relative clauses in subordinate, as well as main clauses, always follow their head noun. This fact, according to Kuno's analysis, guarantees the occurrence of centre-embedding in subordinate clauses (ibid.; 123). Kuno suggests that it is to alleviate this situation that German has developed highly productive, prenominal, verb-final participial constructions, consistent with the SOV word order of subordinate clauses, as seen in other SOV languages, e.g. Japanese (ibid.).

There would appear to be diachronic evidence to support this claim. Lehmann (1971) observes that the consistent placing of

\[\text{\textsuperscript{1}}\text{My numbering.}\]
the verb in clause-final position in subordinate clauses can be traced to the sixteenth century, although it did not gain universal currency until the eighteenth century. He points out that the prenominal participial construction is one of the syntactic developments of New High German, and places its development chronologically after the establishment of SOV word order in subordinate clauses (ibid.).

Thus, it would appear that basic word order relations have far-reaching implications for the development of, and ultimately, the perception of syntactic relations, and influence the language concerned to such an extent that it develops specific structural configurations as a result of its basic word order.

Now, while Kuno's observation is indisputable, that multiple centre-embedding is the cause of perceptual confusion, as the above examples clearly illustrate, one essential question remains: why does it reduce comprehensibility? Kuno's suggestion that it causes intolerable strain on the short-term memory is at the present time beyond substantiation, since very little is known about the way memory functions. There are, however, other, less intangible reasons, some of which we have discussed above with reference to the West European languages in particular. Kuno argues that (47)(a) is unacceptable because the hearer has to remember three separate VPs: chased, ate and was rotten. I feel, however, that his second, apparently to him more minor observation about this sentence is more crucial to an understanding of why these constructions are relatively incomprehensible. He states, namely, that after having remembered these VPs the hearer then has to link each predicate with its appropriate NP:

(51)(a) *The cheese the rat the cat chased ate was rotten

In other words, the sentence is unacceptable because basic syntactic relations are difficult to discern. In fact, if we were to link the relevant subject, verb and object of these three Ss diagrammatically, we would see quite clearly exactly how much
Moreover, the fact that we have three adjacent NPs in surface structure, only one of which (cheese) is not a candidate for the domination of all three adjacent VPs, must surely exacerbate the perceptual problems involved from the point of view of semantic selection restrictions (cf. Hammarberg and Viberg, 1979; 17; and Bever and Langendoen, 1972).

It is also interesting to note here that example (50) (repeated below in (52)) also incorporates three adjacent definite articles whose relation to the nouns they determine is equally complicated as far as reference is concerned:

(52) *der die den Plankton-fressenden Fische-essende Mensch

It would be even more confusing to add the 'object-of' relations to this diagram than it was in (51)(b)!

The confusion is not alleviated here by the fact that the determiners themselves have little specific semantic content which might otherwise help to pair off the subject, verb and object in example (51). In (51), for example, it would be to the hearer's advantage to know that rats usually eat cheese, while in (52) there are no such straightforward semantic cues available to facilitate processing.

This juxtaposition of "grammatical formatives with little semantic content" (Kuno, op. cit.; 123, footnote 5) also affects the comprehension of sentences like (47)(b) (repeated below in (53)):

(53) *That that the world is round is obvious is dubious
This sentence begins with two adjacent occurrences of the complementizer that, which, as we have seen, is a configuration which English does not allow, due to the operation of the LIKE FORM CONSTRAINT. Kuno himself argues that this "conjunction juxtaposition" causes perceptual difficulties, especially when two clauses of the "same shape and function" are involved (as in (53)) (ibid.; 125). In (54) below, he argues, the most deeply embedded clause is of a "different shape" from the immediately higher S, rendering the sentence appreciably better than (53):

(54) ?That for the world to be round is obvious is dubious.

No real explanation, except that it is the effect of "conjunction juxtaposition", is offered for this phenomenon (ibid.; 128). In the light of what we have previously observed regarding the LIKE FORM CONSTRAINT, I feel that its effect might well be the major reason behind the perceptual difficulty involved in processing examples like (53). In fact, I cannot agree with Kuno that (54) is much better than (53) in terms of grammatical acceptability, since the juxtaposition of two "similar shaped" (ibid.) VPs at the end of (54) seems unacceptable to me for very similar reasons. That Kuno is subconsciously alluding to phenomena akin to the LIKE FORM CONSTRAINT can be seen from the following examples, where he argues that the (b) sentences are more acceptable than the (a) sentences because the conjunctions are separated from each other by an intervening element:

(55)(a) *?John did it because, because she thought he should, Mary urged him to
(55)(b) ?John did it because Mary, because she thought he should, urged him to
(56)(a) *?If, if the sun is round the moon is also round, a shark would be a mammal because a whale is a mammal
(56)(b) ?If the moon, if the sun is round, is also round, a shark would be a mammal because a whale is a mammal
There is, however, a further factor involved here. In my ideolect the (b) sentences are still not appreciably better than the (a) sentences, because of the pervading obscurity of the basic syntactic relations obtaining. Note, however, that if we add a dummy pronoun or place holder like then to the (a) examples, a modicum of clarity is salvaged from the sentence:

(55)(c) ?John did it because Mary, because she thought he should, she urged him to
(56)(c) ?If, if the sun is round the moon is also round, then a shark would be a mammal because a whale is a mammal

In (55)(c) Mary appears in the first S and reappears as a pronominal copy (basically a 'dummy' pronoun) in the final S of the sentence, clarifying at least the relation 'subject-of'.
In (56)(c) the presence of the overt marker then emphasizes the fact that the clause in which it appears is a main clause, thereby at least clarifying the status of one clause.

One clear fact emerges from Kuno's analysis, and that is that multiple embeddings cause perceptual difficulties by blurring the basic syntactic relations of the sentence. These difficulties may be exacerbated by "conjunction juxtaposition". Kuno concludes that languages incorporate devices to minimize the possibility of such constructions arising. English, French, German, Swedish and certain other West European languages have adopted a basic SVO word order which, according to Kuno's analysis, causes great problems of speech perception as far as embedded clauses are concerned (ibid.; 129). Since they are like SOV languages, the subject appearing to the left of the verb, and like VSO languages in that the object appears to the right of the verb, they cause difficulties of perception in the subject position by having clause-initial conjunctions. (In fact, even if they had clause-final conjunctions they would still cause perceptual difficulty on the object position) (ibid.). For this reason, Kuno contends, certain syntactic devices have developed, mainly ones which operate on the subject position, to cope with centre-embedded structures (ibid.). Subject Raising and Extraposition apply very frequently on subject position in SVO languages in this way. Thus, corresponding to (53), we have
the acceptable sentence in (57) (ibid., 130):

(57)(a) That it is obvious that the world is round is dubious
(57)(b) It is dubious that it is obvious that the world is round

In (a), Extraposition has applied to the sentential subject of the embedded clause, resulting in the failure of two adjacent incidences of that to occur. In (b), Extraposition has applied to the matrix sentential subject of the sentence in (a). Here syntactic relations are perfectly clear and no 'piling up' of "similar shaped" elements occurs.

Kuno points to some interesting problems posed by a language like German. This language is basically SVO in main clauses and SOV in subordinate clauses, but it is also like a VSO language in that relative clauses appear postnominally and subordinate clauses are marked clause-initially (ibid.). Subordinate clauses are therefore guaranteed of centre-embeddings and juxtaposition of conjunctions. We saw above that German has developed prenominal, verb-final participial constructions to avoid this situation as far as possible. Kuno also notes that Extraposition is very frequently used in subordinate clauses in German for the same reasons.

(58)(a) *Ich denke, dass dass die Erde rund ist, deutlich ist
I think that that the earth round is clear is
(58)(b) Ich denke dass es deutlich ist, dass die Erde rund ist
I think that it clear is that the earth round is
'I think that it is clear that the earth is round'

(59)(a) *Ich denke, dass Maria, dass die Erde rund ist, glaubt
I think that Maria that the earth round is believes
'I think that Maria believes that the earth is round'
(59)(b) Ich denke, dass Maria (es) glaubt, dass die Erde rund ist
I think that Maria it believes that the earth round is
Ich denke, dass Maria, um Johann zu sehen, nach New York gefahren ist.

'I think that Maria has gone to New York to see Johann.'

Other examples of unacceptable sentences arising from the incorrect application of Extraposition are given below:

(61) *Es muss auch die kleinen Gewerkschaften, die durch ehrenamtliche Gewerkschaftsfunktionäre ihre Arbeit führen, unterstützen.

'It must also support the small trades unions whose work is done by honorary officials.'

(62) *Seine Aufgabe ist, Jugendkriminalität zu verhindern zu versuchen.

'His job is to try to prevent juvenile deliquency.'

(63) *Er dachte, dass es nicht richtig war, dass alle Arbeiter später in den Betrieb zu kommen gezwungen waren.

'He thought that it wasn't right that all the workers were forced to come to the factory later.'

(64) *Mit einem stabilen Geld kann man dann die Wirtschaft stärker wieder aufzubauen beginnen.

'With a stable currency one can begin to rebuild a stronger economy.'

\(^1\) I have slightly altered Kuno's glosses.
In all of the above examples the lack of Extraposition has once again caused the 'piling up' of verb phrases, which results in the blurring of syntactic relations.

What we can judge from these observations is that German cannot be termed rigidly verb-final in subordinate clauses, since Extraposition and postposition of purpose phrases is permitted, as in e.g. (60)(a), in order to clarify grammatical relations. In fact, according to Kuno, "the language might be almost unspeakable if it adhered rigidly to SOV word order in subordinate clauses (that is, if Extraposition and postposition of certain phrases could not apply in subordinate clauses) and if it did not have prenominal participial clauses" (ibid.; 131). The point to be made here, I think, is that German has developed SOV word order in subordinate clauses and this convention has established itself well enough to allow e.g. participial constructions to develop. However, at the same time the interaction of word order in main clauses with SOV order in subordinate clauses, coupled with the operation of the V/2 CONSTRAINT, creates certain syntactic configurations which are potentially ambiguous and could result in the blurring of grammatical relations. In order to counteract these confusing situations, German, like other West European languages, and in particular those in which the V/2 CONSTRAINT is still operative, has developed specific syntactic devices for the clarification of basic syntactic relations. Amongst these are the use of complementizers in subordinate clauses, the use of ancillary markers of various types, and certain Movement Transformations, such as e.g. Extraposition.

It is interesting to note Kuno's observation that there are SOV languages which do not mark relative clauses in clause-final position, the superfluity of these markers being based on the crucial distinction that these languages are STRICTLY SOV in subordinate clauses, although they need not necessarily be strictly SOV in main clauses (ibid.; 133). As an example of this, Kuno quotes Turkish, which is not a rigid SOV language, since objects can appear after verbs in matrix clauses, but where in relative clauses the participial form of the verb ALWAYS appears in clause-final position. This means that, because the participial form always appears in clause-final position, it unambiguously signals
the end of a relative clause and obviates the need for additional markers (ibid.). Even here it would seem to me that the overriding consideration is the difference in status between main and subordinate clause constructions: the matrix S may display word order patterns that are not strictly SOV, PROVIDED THAT the subordinate clause remains strictly SOV in order, thus clearly defining the syntactic status of each individual S.

According to Kuno, there is no VSO language which is rigid enough not to need relative pronouns to the left of the S. However, it is interesting to see that the rule for the deletion of relative pronouns in Standard English comes pretty close to providing an illustration of the principle that totally strict word order nullifies the requirement for overt markers of syntactic status. In English, Kuno observes, relative pronouns can only be deleted when the subject of the relative clause appears clause-initially (ibid.; 134):

(65)(a) This is the problem that noone paid any attention to
(65)(b) This is the problem ø noone paid any attention to
(66)(a) This is the problem that, unfortunately, noone paid any attention to
(66)(b) *This is the problem ø unfortunately noone paid any attention to

Moreover, the same holds true for the deletion of the complementizer that with sentential complements:

(67)(a) John said that he will stay home tomorrow
(67)(b) John said ø he will stay home tomorrow
(68)(a) John said that tomorrow he will stay home
(68)(b) *John said ø tomorrow he will stay home

These observations lead Kuno to conclude that "in English, clause-initial conjunctions can be deleted, if ever, only when the first constituent in the clause is the subject. This is a very natural constraint, because, otherwise, clause-initial boundaries would be very difficult to identify" (ibid.; 134, footnote 6).

While I do not entirely agree with Kuno's observation (see below, Chapter 4, Section I for further discussion of such examples), I must agree that perceptual strategies interact with basic word
order to such an extent that if the status of a clause or element is unclear, the marking system of the language develops new ways of clarifying it.

Kuno has shown that the system of relative clause formation in English does not demand the appearance of a surface relative marker if the syntactic relations within the clause are self-evident, but that overt markers are required in cases where their absence would create preceptual confusion. In a similar fashion, prenominal participial constructions do not require relative pronouns in German, presumably because of the very rigid verb-final and verb-initial constraints involved, which allow of no exceptions (ibid.; 134):

(69)(a) a cigar-smoking man
(69)(b) *a cigar-smoking who man
(70)(a) a man smoking a cigar
(70)(b) *a man who smoking a cigar

Thus, we see that basic constraints on the word order of a sentence, and in particular relatively powerful constraints like the V/2 CONSTRAINT, and, indirectly, the LIKE FORM CONSTRAINT, which interact with the basic word order of a language, may be said to have influenced the development of the marking system of the language in which they are operative. Languages can be said to have developed in such a way that they avoid perceptual confusion whenever possible, using surface markers where needed, although these become redundant when relations within the sentence are sufficiently clearly expressed, as in examples (69)-(70).

Another analysis which confirms our findings is that of Haiman (1974), in which the V/2 CONSTRAINT is claimed to have caused dummy elements to develop. We have seen throughout this Chapter that the operation of the V/2 CONSTRAINT certainly does demand that grammatical relations be overtly marked, since otherwise perceptual confusion could arise. Our interpretation of the effect of the operation of the V/2 CONSTRAINT on grammatical relations, however, would appear to differ from that of Haiman, who claims that the use of 'dummy' elements developed in order to satisfy the V/2 CONSTRAINT. Example (30) above, repeated below in (71), can easily demonstrate the inaccuracy of this claim. This sentence contains a 'dummy' element det, even though without it, the V/2 CONSTRAINT would be satisfied, since the verb would be in second
position. With it, the V/2 CONSTRAINT in its strictest application must in fact be considered to have been VIOLATED, since two elements—a clause and a 'dummy' element—precede the verb, and not one, as the constraint dictates:

(71) Att det inte nu var den här fru B., det tänkte jag inte på
    That it not now was this Mrs. B., that thought I not of
'I didn't think that it wasn't this Mrs. B., after all'

According to Haiman, the use of pronominal subjects in 'type A languages' (cf. Perlmutter, 1971) (i.e. those languages in which the V/2 CONSTRAINT applies or did once apply) developed out of a need to satisfy the V/2 CONSTRAINT and keep the verb in second position in the sentence. Thus, in English we have he/she drinks, in German er/sie trinkt, while in Spanish, where the V/2 CONSTRAINT does not apply, we have bebe = he drinks or she drinks. Anderman (op.cit.) provides evidence from German and Swedish, however, which demonstrates that pronominal subjects are not present merely to satisfy the V/2 CONSTRAINT. In both languages, for example, the pronominal subject of the sentence must be repeated in the second clause of a coordinate construction if the verb is preceded by an adverbial (ibid.;328):

(72)(a) Han gick på bio och fortsatte sedan hem
    He went to the cinema and continued then home
(72)(b) Han gick på bio och sedan fortsatte han hem
    He went to the cinema and then continued he home
(72)(c) *Han gick på bio och sedan fortsatte hem
    He went to the cinema and then continued home
(73)(a) Er ging ins Kino und ging danach nach Hause
    He went to the cinema and went then home
(73)(b) Er ging ins Kino und danach ging er nach Hause
    He went to the cinema and then went he home
(73)(c) *Er ging ins Kino und danach ging nach Hause

In the (b) sentences of (72)-(73), inversion is triggered off by the V/2 CONSTRAINT. In (a) and (c), however, we can see that Haiman's hypothesis is in doubt: in (a) the adverbial occurs
after the verb in the second clause and no subject pronoun is required to make the sentence grammatical. In (c), on the other hand, the adverbial precedes the verb and a subject pronoun is required, but this pronoun occurs AFTER the verb, so that it can in no way be said to satisfy the V/2 CONSTRAINT in this case. Once again, we can provide a more satisfactory explanation of these phenomena if we argue that the real reason for the use of such pronominal elements is to clarify the status of the clause. In German, NEG and adverbials occur before the verb in subordinate clauses on account of the SOV order (Anderman, op.cit.;330):

(74) (a) Er erwachte danach
He awoke after that
(MAIN CLAUSE: SVO ORDER -- ADVERBIAL FOLLOWS V)

(74) (b) Er sagt, dass er danach erwachte
He says that he after that awoke
(SUBORDINATE CLAUSE: SOV -- ADVERBIAL PRECEDES V)

(74) (c) Er liess einen Schrei aus und danach erwachte er
He let a scream out and after that awoke he
'He let out a scream and then he awoke'

(74) (d) *Er liess einen Schrei aus und danach erwachte
He let a scream out and after that awoke

In (74)(d) the subject of the clause is missing and the adverbial precedes the verb, creating a word order sequence which is typical of subordinate clauses. The presence of the subject in (74)(c) prevents this from happening, however, since it signals clearly that we are dealing with a main clause in which Subject-Verb Inversion has taken place to keep the verb in second position after the adverbial (Anderman, ibid.). Anderman also observes that a similar situation arises in Swedish, where it is the position of the adverbial, not of the verb, which is crucial to the maintenance of the main/subordinate clause distinction. As we can see in example (72)(c), the absence of the pronominal subject creates just such difficulties since the adverbial occurs before the verb, a characteristic of Swedish subordinate clauses. In (72)(b), however, the presence of the subject indicates that inversion has been triggered by the V/2
CONSTRAINT in a main clause. Anderman provides further examples from Swedish and German (q.v.) which show that the use of dummy personal pronouns is NOT dictated by the need to satisfy the V/2 CONSTRAINT, but in order to satisfy the need to clarify basic syntactic relations (ibid.).

Despite this difference in emphasis between our analysis and that of Haiman's, however, we must agree that the V/2 CONSTRAINT has important implications for word order, and that because of its operation, syntactic elements have developed which form part of a comprehensive marking system designed to maintain clear-cut grammatical relations.

This Chapter has discussed the function of complementizers and other markers of syntactic status and leads us to conclude that in general complementizers are PRIMARY markers of subordinate status. In German, verb-final order must also be considered a primary marker of subordinate status, in view of the fact that it is obligatory, whenever a complementizer or subordinating conjunction appears in surface structure. We shall be discussing the function of verb-final order in German in Chapter 3 below.

A major source of syntactic ambiguity has been identified in the operation of the V/2 CONSTRAINT, since occasionally, Subject-Verb Inversion is ambiguous between the operation of this constraint after the fronting of a constituent, and the inversion involved in forming a yes-no question. It is in such cases of potential ambiguity that extra marking in the form of elements like dann/so (then/so) is used in the languages in which the V/2 CONSTRAINT is (or has been) operative. In other words, we have seen that complementizers and SOV word order must be considered the primary, but not the only markers of syntactic status.

We have named the extra signals under discussion ANCILLARY markers, since they are used whenever other markers -- conjunctions, word order and intonation -- cannot be relied on to establish clear syntactic relations. These ancillary markers are usually optional signals, but are occasionally required obligatory, when without them the syntactic relations obtaining within the sentence are obscured.
Several elements other than particles like *dann* and *so* may be classed as ancillary markers. Indeed, we shall be adding to the inventory as this study progresses. For instance, we shall be examining the nature and function of the pronominal element *da(r) + preposition* in German, which, as we have seen, is the only form of pronominal head noun German permits to function as an ancillary marker. In Chapter 4, it will further be seen that one of the functions of the subjunctive in German would also appear to be as a marker of syntactic status.

We also mentioned briefly in this Chapter that the type of matrix verb used in a sentence conditions to some extent the use of pronominal head nouns (cf. above, p. 74). In other words, we have mentioned that the class of predicates consisting of *verba dicendi, putandi* and *sentiendi* are less likely to occur with pronominal head nouns than other types of verbs. The behaviour of subordinate clauses dominated by *verba dicendi etc.* differs in many ways from that of clauses dominated by other matrix verbs, and for this reason, we shall be returning to this class of predicates in Chapter 4, when we discuss Reported Speech in German.

All these observations about the marking of syntactic relations beg the question *why do we need to mark them?* The answer clearly is that marking is required in order to ensure that basic syntactic and grammatical functions are transparent, and ambiguous constructions are avoided. Hammarberg and Viberg (1979) have shown that surface markers developed in order to clarify 'sentence grammatical function', and Beckman (1934) has shown that this is particularly important in those languages which, like Swedish, German and English, lost most of their inflections, thereby becoming increasingly reliant on word order for the maintenance of basic syntactic relations and the clarification of grammatical functions.

Our claim that the use of such surface signals is motivated by a need to clearly express syntactic relations gains further support from the analysis of relative clauses and complementizers by Kuno (1974). We have seen that, according to Kuno's analysis, wherever ambiguity seems unavoidable because of inherent properties of basic word order patterns, rules and constructions are developed to minimize perceptual confusion. Thus, for example, in German, Extrapolation and participial constructions are primarily used for the avoidance of syntactic ambiguity.
In the next Chapter we shall be looking at subordinate clauses in German in particular, and special attention will be paid to the behaviour of dass-clauses. We shall be examining the marking system of German in greater detail, and we shall be addressing the question why this language, which has retained much more of its inflectional system than e.g. English or Swedish, still relies on extra overt surface markers for the maintenance of transparent grammatical relations. We shall see in the course of the next three Chapters that German is a particularly interesting language on which to carry out a study of subordination, especially in view of the claims made by the studies of English subordination mentioned in Chapter 1. It will be shown that German provides an answer to many of the essential questions raised in that Chapter, in particular concerning the tolerance versus intolerance of certain clause types to Movement Transformations, and concerning the question why we need to mark clauses subordinate at all.
0. Introduction

In the preceding two chapters we discussed general characteristics of subordinate clauses. We concluded that if we posit a COMP node in the underlying structure of subordinate clauses we can satisfactorily account for the differences in their behaviour from that of main clauses (cf. Chapter 1, Section I). We noted that the COMP node may or may not be filled in the surface structure by any one of the repertoire of complementizers a language has at its disposal, and called these sentence-initial markers PRIMARY MARKERS OF SUBORDINATION.

We subsequently posited another class of surface markers of syntactic status, which we termed ANCILLARY MARKERS. These markers include a relatively wide variety of morphemes, as we saw in Chapter 2. Ancillary markers are usually optional elements, their presence only being obligatorily required to reinforce the subordinate status of the ensuing/preceding clause, should this be left in doubt by the primary markers. We noted that the V/2 CONSTRAINT may cause potential syntactic ambiguity in those languages in which it is operative, since it may e.g. sometimes be difficult to judge whether Subject-Verb Inversion has taken place to satisfy this constraint in a main clause where an element has been fronted, or whether we are dealing with a straightforward yes-no question construction (cf. Chapter 2, Section II). In such cases of doubt, ancillary markers can be used to clarify the syntactic relations obtaining within the sentence.

All discussion hitherto has largely been concerned with the basic characteristics of subordinate clauses in general. We shall now take a closer look at the language-specific rules that apply to German, bearing in mind a fundamental question posed in the introduction to this study: why does German, which uses two primary markers of subordination (i.e. complementizers and verb-final order, see below) also use various types of ancillary marker for the
clarification of grammatical relations? Moreover, why does a language which still has inflections need other markers to disambiguate sentence relations?

In the light of our earlier observations about primary and ancillary markers of syntactic status, the nature of matrix verbs of the dicendi, putandi type and the operation of the V/2 CONSTRAINT, we shall attempt to provide a more adequate description of German dass-clauses than has hitherto been offered by traditional grammars. Such an analysis will require a re-examination of traditional terms such as 'subordinate clause', 'reported speech', etc. and the discussion of these topics will continue into Chapters 4 and 5.

In the present Chapter we shall be examining the function of dass as a complementizer in German, together with the inextricably linked function of verb-final order as a marker of subordination. In other words, we shall first be concentrating on the primary markers of syntactic status in German. We shall subsequently turn our attention to the ancillary markers used in German, particularly the role of head nouns and those markers we have briefly discussed in the context of 'place holders' (see above, Chapter 2, Sections II-III). One of the most interesting markers to be discussed is the combination da(r) + preposition, which would appear to be unique to German in the function of a head noun to oblique complements, as we mentioned in Ch. 2 above. The operation of the LIKE FORM CONSTRAINT will be seen to influence the use of this combination (cf Radford, op. cit. and above, Chapter 2, Section II).

Other surface markers which function to clarify syntactic relations will also be examined. In particular, it will be seen that the several functions of what is traditionally referred to as the 'pronoun' es, a source of considerable problems to grammarians (cf Leys, 1979; Cowan-Groves, 1979 and Duden, 1973), can be clarified if we accept both Anderman's (1978) Determiner Node Theory and Radford's (1974) LIKE FORM CONSTRAINT. It will prove necessary in so doing to distinguish clearly between the es/das of Right Dislocation and the es of Extraposition, as well as other functions of es (cf. below, Section VI).

In Chapter 2 we mentioned briefly that, while the operation of the LIKE FORM CONSTRAINT prevents the use of pronominal head
nouns with subject and object complements in German, other types of head noun may be used in these positions. These are lexical head nouns, and we shall be discussing their function in some detail in Section VIII. It will be seen that, contrary to the analysis of Esau (1973), the behaviour of German subordinate clauses cannot adequately be explained in terms of the effects of an underlying lexical head noun. In particular, it will be seen that the use of the subjunctive in German subordinate clauses is not dictated by the presence of a lexical head noun in underlying structure, as Esau has suggested, following Kiparsky and Kiparsky (1969). Nor is it influenced solely by semantic notions of 'assertion' and 'presupposition' (cf. Hooper and Thompson, 1973). Instead, it will be argued, the use of the subjunctive depends to a significant extent on the 'degree of subordinateness' displayed by the clause in question. The concept 'degree of subordinateness' will be explained in the text below.

Since an analysis of the use of the subjunctive is necessarily linked with an examination of the function and form of Reported Speech in German, we shall continue our analysis of this special kind of dass-clause in Chapter 4.

I. General Characteristics of DASS-clauses in German

Our previous discussion of the general characteristics of subordinate clauses introduced by complementizers in a number of West European languages (cf. Chapters 1 & 2) has demonstrated that German dass-clauses share some basic similarities with their English and Swedish equivalents. For example, having established that the basic differentiating characteristic between main and subordinate clauses in English and Swedish is the presence of the COMP node in the underlying structure of subordinate clauses (cf. Chapter 1, Section I), we saw that German, too, provides strong evidence of such a node. In German the complementizer
dass (that) appears obligatorily whenever perceptual strategies demand it, as was the case in English and Swedish:

(1)(a) *I didn't like John came in late
(1)(b) *Ich sah das Mädchen war hübsch
       I saw the girl was pretty
(1)(c) *Jag förstod inte de kom för sent
       I understood not they came too late

In all the above cases the subject of the subordinate clause can be interpreted as the object of the main clause verb, and for this reason some sort of surface marker is required to clarify syntactic relations:

(2)(a) I didn't like John coming in late
(2)(b) Ich sah, dass das Mädchen hübsch war
       I saw that the girl pretty was
(2)(c) Jag förstod inte att de kom för sent
       I understood not that they came too late
       'I didn't understand that they came late'

Sentence (2)(a) is an example of a gerund construction in English. The presence of the non-finite verb form in this sentence means that there is absolutely no doubt about the syntactic function of the NPs appearing in it. This is just one of the ways in which the sentence hierarchy can be clarified in English, where a that complementizer may also be used to mark syntactic status. Alternatively, an infinitival clause may be used, which once again obviates the danger of confusion about which verb is the main verb of the sentence, since the verb in the subordinate clause is clearly marked as such by being in non-finite form. The same type of infinitival form is also available in German and Swedish:

(3)(a) I liked to go and visit the Smiths
(3)(b) Ich mochte es, die Schmidts zu besuchen
       I liked it the Smiths to visit
(3)(c) Jag älskade att vara hos mina föräldrar
       I loved to be at my parents' (house)
In all the above sentences, the infinitive form of the verb establishes unequivocally the subordinate status of the S in which it appears.

The Swedish example in (2)(c) above manifests the use of the complementizer att to mark the subordinate status of the clause. We note that its appearance in this example is all that is required to make the unacceptable sentence in (1)(c) grammatical. The German example in (2)(b), on the other hand, contains not one, but two modifications of the ungrammatical version in (1)(b). Not only does (2)(b) display a complementizer, i.e. dass, it also has the verb of the subordinate clause in sentence-final position. This is an example of another essential characteristic of subordinate clauses in German: whenever the complementizer appears in surface structure, the word order of the subordinate clause is always verb-final. That this is an essential distinction can be seen in (4) and (5) below, where the verb remains in clause-internal position, producing an ungrammatical sentence despite the fact that the complementizer is present:

(4) *Man behauptet, dass es sind im elften, zwölften und dreizehnten Jahrgang zwei Gruppen zu sehen. One says that there are in the 11th, 12th and 13th year two groups to see
'They say that in the 5th form, lower and upper sixth two groups are to be found'

(5) *"Es besteht ein Gesetz, das vorliegt, dass für einen Betrieb darf man nur eine Gewerkschaft haben. There exists a law which stipulates that for one factory may one only one union have
'There is a law which stipulates that only one union is allowed for each factory.'

From the above examples it can be seen that whenever the complementizer appears in surface structure, verb-final word order is obligatory. Example (6) below demonstrates that verb-final word order is only required when the clause is preceded by a complementizer or subordinating conjunction and not a COORDINATING conjunction.
Example (7), on the other hand, shows that verb-final word order is unacceptable when the complementizer is not realized in surface structure:

(6) *Nach der Währungsreform konnten die Schwarzmärkte nicht funktionieren, denn alle Leute hatten damals nur 40 DM und die Lebensmittelkarten keinen Wert mehr hatten. 

'The black markets could not function after the currency reform because everybody had only 40 marks and ration cards were no longer of any value.'

(7) *Er meinte, in der Zeit von 6.30 bis 9 Uhr die meiste unbrauchbare Arbeit abgeliefert wird. 

'He said the most useless work is done between 6.30 and 9 o'clock.'

That verb-final word order is an 'automatic concomitant' (Chvany, 1973; 266) of the appearance of a complementizer in surface structure, even when the subordinate clause is interrupted, can be seen from the following examples:

(8) *Die Vorteile der heutigen Schulerziehung sind, dass bevor man in die Hochschule geht, besonders in den unteren Klassen, kann die Schule den Schülern Spass machen. 

'The advantages of today's education are that before one goes to university and particularly in the lower forms, school can be fun to the pupils.'
A colleague remarks that the first alarm signals that a child in the school overtaxed is are behaviour changes.

'A colleague remarks that the first signs that a child is overtaxed at school are changes in behaviour.'

He also said that whatever was undertaken in the interests of the factory was also in the interests of the individual worker.

The general picture given by the above examples is hence that whenever a clause in German - interrupted or not - contains a complementizer in surface structure, verb-final word order is obligatory, i.e. verb-final word order is an automatic concomitant of the appearance of a complementizer in surface structure.

That this is the case with subordinate clauses introduced by other subordinating conjunctions other than the general subordinator dass can be seen from the following examples which are unacceptable because they contain a subordinating conjunction but do not display the obligatory verb-final word order:

'Dissatisfaction can arise because for the duration of an agreement they may not make any other demands.'
(12) Nach Meinung des Sprechers sei es ein verkehrter Ausdruck  
According to the speaker is it an incorrect expression  
gewesen, weil ein Hamster sorgt für die Überwinterung  
been because a hamster prepares for the hibernation  
und sammelt Nüsse  
and collects nuts  
'According to the speaker the expression was incorrect because  
a hamster prepares for hibernation by collecting nuts.'  

(13)*Dieses System unterscheidet sich vom britischen System  
This system differs refl. from the British system  
da in Grossbritannien gibt es viele verschiedene Betriebe  
since in GB are there many different factories  
'The system differs from the British system because there  
are many different factories in Great Britain.'  

(14)*In der BRD werden die Arbeiter eines Betriebes in einem  
In the FRG are the workers of a factory in one  
Tarifvertrag eingeschlossen, während in GB machen die  
wage agreement included while in GB make the  
Gewerkschaften verschiedene Verträge.  
trade unions different agreements  
'In the Fed. Rep. the workers of one factory are included  
in one wage agreement while in GB the unions make different  
agreements'  

Thus we can say that there are two primary characteristics  
of subordinate clauses in German: the presence of the complementizer  
or subordinating conjunction and verb-final word order.¹  

In Chapter 2, Section I, we mentioned the fact that Swedish  
has no gerund construction and that it uses att-(that)-clauses  
in places where in English a gerund would be used. The same would  
appear to be true of German:  

(15) Ich mag es nicht, dass John immer so spät nach Hause kommt  
I like it not that John always so late home comes  
'I don't like John always coming home so late'  

¹ See Chapter 5, Section II for further discussion.
However, as we also saw above (Chapter 2, Section I), Swedish has developed the use of two complementizers, *att* and *som*, owing possibly to the fact that it has no means of expressing subordination by the use of gerund constructions (cf. Anderman, op. cit. 315). It will be remembered that *att* is the complementizer of finite verb complements in Swedish, while *som* is the complementizer of relative clauses (ibid.). The same would not appear to be true of German, however, and a brief look at the use of the complementizer in German will illustrate this.

II. The use of DASS as a complementizer in Modern German

Following Klima (1964) and Geoghegan (1975), Anderman (op. cit.; 252 ff.) shows that the *that* of relative clauses in English is not a relative pronoun, but rather a 'subordinating particle', or what Bresnan (1972; 43) classified as a complementizer. One of the most generally agreed characteristics of the *that* of relative clauses is that it cannot be preceded by a preposition, while pronouns can:

(16)(a) The car *that* we drove in was very old
(16)(b) The car *which* we drove in was very old
(16)(c) *The car in that we drove was very old*
(16)(d) The car *in which* we drove was very old

Geoghegan (op. cit.) has traced the development of the use of relative clause *that* and suggests that *WH + that* was used as a relative clause introducer until the interrogative established itself unambiguously as a relative clause marker, when the deletion of *that* became obligatory:

(17)*The car which *that* we drove in was very old

She therefore suggests that the *that* which introduces a relative clause is not a relative pronoun, but a subordinating particle (ibid.; 31).

The link between the general subordinating function of the *that* of relative clauses and the *that* of subordinate clauses containing a finite verb has been noted by several researchers e.g. Emonds

1 See Chapter 5, Section II for further discussion.
(1970, 1976) and Bresnan (op. cit.), who observes that many languages other than English use a relative clause introducer which is identical in phonetic form to the complementizer of subordinate clauses (ibid.; 43).

Following Ljung (1973), Anderman demonstrates that Swedish, like English and many other languages (cf. Mauger, 1955; Munthe, Fahlin, 1957; Corbett, private communication) forms relative clauses either by deleting an embedded NP and realizing the complementizer in surface structure, as in (18)(a)-(b) below in English, or by replacing the shared NP with a WH word, which results in no surface structure realization of the complementizer, as in (19)(a)-(b) (ibid.; 254):

(18)(a) The car [COMP I drove the car] was green
(18)(b) The car that I drove was green
(19)(a) The car [COMP I drove the WH car] was green
(19)(b) The car which I drove was green

Amongst the languages which demonstrate this (or a very similar) two-tiered system of relative formation are Swedish, French and possibly Russian (ibid.). German, on the other hand, differs markedly from these languages with regard to relative clause formation.

According to Jung (1966) the origin of the relative pronoun in German was the demonstrative pronoun der, die or das (ibid.; 348):

(20)(a) Es war einmal ein kleines Mädchen. Das hiess
There was once a little girl. That was called Rotkäppchen
Little Red Riding Hood
(20)(b) Es war einmal ein kleines Mädchen, das Rotkäppchen hiess.
There was once a little girl that R.R.H. was called 'There was once a little girl who was called Little Red
Riding Hood'

Hence we see that relatives in German obviously did not follow the development of relatives in English. As with other languages, however, German has two forms of relative clause available. Apart from the type illustrated above, the interrogative pronouns welcher,
welche, welches are used as relative pronouns, and have been in use in German since the fifteenth century (ibid.):

(21)(a)  Der Arbeiter, welcher der Sache seiner Klasse ergeben war
        'The worker, who was committed to the cause of his class...'

Perhaps one reason why more than one system of relative clause formation is available in a language might be that this fulfills stylistic needs. In German this would appear to be the case, for example, since, as Jung points out (ibid.), the use of the WH-pronoun in (21)(a) avoids repetition as in (21)(b), which is both stylistically undesirable, and, in our terms, in violation of the LIKE FORM CONSTRAINT:

(21)(b)  ?Der Arbeiter, der der Sache seiner Klasse ergeben war

However, although one must necessarily conclude from this brief discussion that the complementizer dass is only ever realized as the complementizer of predicate complements in German, it is nevertheless interesting to note that diachronic data suggest that the facility for realizing dass with relative clauses would appear to have existed at an earlier stage in a related construction (Paul et. al., 1975; 449):

(22)(a)  mir hat ein man den lip genomen, daz nie schoner man en wart
        'of me has a man the life taken, that never finer man ever was
Paul refers to this sort of dass-clause as an 'erläuternde (explikative) Bestimmung' (ibid.). It would appear to me to display similarity in function to a relative clause, and hence, it would appear that the mechanism for the realization of the complementizer in relative clauses might well have been available at an earlier stage of German. The fact that it did not survive, however, suggests that the use of demonstrative and interrogative pronouns is preferred. Perhaps the main reason for this obvious difference from English and Swedish is that German retained much more of its inflectional system; these pronominal markers are therefore also able to signal gender and number, and are probably deemed more powerful deictic elements than 'neutral' introductory morphs like dass.

Thus, if we adopt the analysis of relatives favoured by e.g. Bresnan (1972), Anderman (1978) and Ljung (1973), etc., we see that German forms its relatives only by pronominalizing a complex NP into either welch- or der/die/das:

(24) (a) Das Auto [COMP ich kaufte das Auto] war grün
The car I bought the car was green
(24) (b) Das Auto, das ich kaufte, war grün
The car that I bought was green
(24) (c) Das Auto, welches ich kaufte, war grün
The car which I bought was green

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1 I am very grateful to Peter Thurlow for his assistance with these glosses.
This is equivalent to saying that in German relatives the complementizer is never realized in surface structure; instead, a pronoun (either a demonstrative pronoun or WH (strictly speaking W-pronouns in German, but we shall use the standard English term WH throughout)) appears in surface structure. The COMP node acts as a trigger for SOV word order, however, one of the major observable differences between main and subordinate clauses in German, so that even if no complementizer is realized in surface structure, the justification for the COMP node is undeniable.

We have seen, then, that the complementizer dass functions as the complementizer of subordinate clauses which display a finite verb in sentence-final position. Relative clauses are like other subordinate clauses in that they also display verb-final order, so that they may be assigned a COMP node in underlying structure, although German prefers not to have a complementizer in the surface structure of these constructions. Instead, two types of pronominal element are available - der, die, das and welcher, welche, welches.

In this section we have been examining the primary markers of subordination in German, namely the complementizer dass and its automatic concomitant, verb-final word order. We have seen that whenever the complementizer is realized in surface structure verb-final word order is obligatory. In Chapter 2, Section II, however, we mentioned that primary markers of subordination (in particular complementizers) are the main, but not the only markers of syntactic status. Moreover, we have seen that primary markers alone are not always able to give a sufficiently clear signal of the subordinate status of a clause, so that occasionally, ancillary markers are required for the clarification of syntactic relationships. It is to these ancillary marking devices that we now turn our attention.

III. The Use of Place Holders as Ancillary Markers of Syntactic Status

An essential characteristic of German syntax is that the V/2 CONSTRAINT (Haiman, 1974, cf. above Ch. 2) is operative in this language. According to this constraint, it will be remembered, the matrix verb must occupy second position in the sentence.
Hence, whenever a subordinate clause precedes a main clause in German, Subject-Verb Inversion must take place in the matrix clause:

(25)  
\[ \text{Da die anderen nicht spielen wollten, konnten wir nicht} \]
\[ \text{V S} \]
\[ \text{Fussball spielen} \]
\[ \text{football play} \]
\[ \text{'Because the others didn't want to, we couldn't play football'} \]

We have seen that the operation of the V/2 CONSTRAINT can sometimes produce perceptually confusing configurations which may be countered by the use of place holders (ancillary markers) to clarify syntactic status (cf. Chapter 2, Section II). The confusion usually arises when inversion takes place, because of the polyfunctional nature of inversion in German, which is also used to form yes-no questions. If we compare the word order in examples (26) and (27) below with that of the subordinate clause in (25) above, we can see that the underlined inverted elements constitute a question formation, although they are superficially identical in word order:

(26)  
\[ \text{Können wir mit nach Australien fahren?} \]
\[ \text{Can we with to Australia go?} \]
\[ \text{V S} \]
\[ \text{'Can we go with you to Australia?'} \]

(27)  
\[ \text{Ist diese Dame deine Frau?} \]
\[ \text{Is this lady your wife?} \]
\[ \text{V S} \]

In cases of such perceptual ambiguity, place holders may be used as ancillary markers to clarify what type of construction is involved. For example, (28)(a) could either be a question or a conditional, while (28)(b) and (c) are not ambiguous, since
the presence of an ancillary marker - in this case the place holder dann - signals that (28)(a) is a question while (28)(b) is a conditional:

(28)(a) Wenn die Hotels früher aufmachen, brauchen wir nicht früh loszufahren? 
If the hotels earlier open need we not early to leave
EITHER = 'If the hotels open earlier, don't we need to leave early?'
OR = 'If the hotels open earlier, we don't need to leave early'

(28)(b) Wenn die Hotels früher aufmachen, dann brauchen wir nicht früh loszufahren 
If the hotels earlier open then need we not early to leave
ONLY = 'If the hotels open earlier then we don't need to leave early'

(28)(c) Wenn die Hotels früher aufmachen, brauchen wir dann (auch) nicht früh loszufahren? 
If the hotels earlier open need we then also not early to leave?
ONLY = 'If the hotels open earlier, then don't we need to leave early (too)'

It must be noted here, however, that in German, intonation also plays a part in disambiguating the function of such constructions. Rising intonation usually indicates a question, falling intonation a statement. Nevertheless, place holders such as dann and auch must be regarded as significant signals of syntactic function, which work hand-in-hand with the primary marker, i.e. the conjunction wenn, in the case of (28) above, and with other markers, e.g. intonation, to clarify syntactic relations. Interestingly, this characteristic of ancillary markers differentiates them further from complementizers, since, as (20)(c) demonstrates, more than one ancillary marker can appear in a clause at once, while complementizers are constrained in that only one of them may appear in a clause at any one time (cf Bresnan, 1972).
Moreover, as can be seen from the examples above, this group of place holders is made up of various morphemes (e.g. dann (then), auch (also), doch (intensifier), ja (yes) (intensifier), so (so) etc.). Indeed, looking at these ancillary markers, especially those like so and doch, we must realize that English does not always have direct equivalents which are used in exactly the same way, although it does use some place holders, as the glosses to (20)(b) and (c) demonstrate.

Such particles are traditionally considered to be 'difficult to translate' from German to English. Perhaps one reason for this is that they really should not feature in the English translation at all in many cases, since their function as ancillary markers is not required, owing to the fact that English word order does not usually create such ambiguity. We shall be discussing this and related points in Ch. 5 below.

Not only would it appear that German uses more of these place holders than English, moreover, but it would also appear that other surface dummy elements are used for the disambiguation of syntactic relations. One of these, the combination da(r) + preposition, is not found in either English or Swedish in this capacity. It would therefore seem appropriate to take a close look at the derivation and function of this element in German, and examine its place within the general marking framework of this language. We begin with a discussion of its derivation.

IV. The Derivation of the Combination DA(R) + preposition

In the introduction to this Chapter we noted the major distinguishing characteristic of subordinate clauses in German: they display SOV word order whenever the complementizer is realized in surface structure, providing evidence of an underlying COMP node. We classed verb-final order and the presence of a complementizer in surface structure as primary markers of syntactic status. We suggested in the section above, furthermore, that the use of ancillary markers of syntactic status is also common to German. These ancillary markers are, we have claimed, usually (but not always) optional elements which are used to help disambiguate potentially ambiguous syntactic configurations. They comprise
various types of morpheme, as we also saw in the above section. In the following sections, we will extend the range of ancillary markers of German to include pronominal and lexical head nouns. The combination da(r) + preposition, for example, has been seen to be an element which carries out a function very closely related to pronominal head nouns whenever it is found in conjunction with dass (cf. Chapter 2, Section III). It would seem to provide an unequivocal signal that what is about to follow is a subordinate clause governed by the preposition which is suffixed to da(r), as can be seen from the following example:

(29) Meine Mutter freut sich darauf, dass ich morgen wieder nach Hause fahre.
My mother looks forward to refl. that I tomorrow again home go
'\textit{My mother is looking forward to the fact that I am coming home again tomorrow.}'

Pütz's (1975) analysis of elements like darauf, darüber, dazu, etc. is based on the observation that in German no combination of preposition + es is found in surface structure. He argues that a Rewrite Rule exists for German, which states:

(30) \[ \text{prep + underlying es} \rightarrow \text{da(r) + preposition} \quad (\text{e.g. darüber, darauf etc.}) \]
- when it appears in surface structure (ibid.; 64).

His analysis presupposes that in the underlying structure of certain complement constructions in German (see below for specific types) there is an underlying element, es, which manifests itself as da(r) whenever it appears in combination with a preposition (ibid.; 67).

There is, however, scant evidence for such an analysis of da(r) + preposition. In fact, the strongest evidence against it is the observation made by Pütz himself, i.e. that es never
appears in surface structure preceded by a preposition. In other words, examples like the following are ungrammatical:

(31) *Meine Mutter freut sich auf es, dass ich morgen wieder nach Hause fahre.

'My mother is looking forward to it that I am going home again tomorrow.'

It is extremely unsatisfactory to posit an underlying element which never appears in surface structure, so that we must attempt to find a more satisfactory alternative description of these combinations. Pütz's treatment of the derivation of da(r) + preposition in complex sentences assumes that an underlying it is present which is deleted obligatorily if the sentence does not undergo Extraposition (Pütz, op. cit., 67). He therefore observes that a sentence like (32)(a) is not acceptable as a terminal string in German:

(32)(a) *Es, dass er gekommen ist, ist wirklich erstaunlich.

Instead, Pütz claims, German deletes the es whenever the sentence is not Extraposed as in (32)(b), while (32)(c) is an example of the acceptable extraposed version:

(32)(b) Dass er gekommen ist, ist wirklich erstaunlich.

(32)(c) Es ist wirklich erstaunlich, dass er gekommen ist.

'It is really astonishing that he come is'

'It is really astonishing that he has come'
By way of contrast, Pütz cites the following example from Norwegian, which he claims is a language where what he interprets as the equivalent to underlying es (i.e. det) may be present in the surface structure, even though the subordinate clause has not been extraposed. Below Pütz's own German glosses are given, and will be seen to be the equivalents to (32)(a) and (32)(c) above (ibid., 63):

(33)(a) Det er virkelig forbausende at han er kommet
Es ist wirklich erstaunlich dass er ist gekommen
It is really astonishing that he is come
(33)(b) Det, at han er kommet er virkelig forbausende
Es dass er ist gekommen ist wirklich erstaunlich
It that he is come is really astonishing

Pütz argues for similarity between German and Norwegian underlying structure by citing the following examples. The (a) sentence in (34) contains the element darauf which Pütz claims is a surface realization of preposition + underlyng es, and is obligatorily present, despite the fact that the subordinate clause is not in extraposed position (ibid.):

(34)(a) Ich werde mich darauf, dass Peter mich mit seinem
I shall me darauf on that Peter me with his
Auto rechtzeitig abholt, nie wieder verlassen
'Punctually collects never again rely.'
'(I shall never again rely on Peter to pick me up on time in his car')
(34)(b) *Ich werde mich, dass Peter mich mit seinem Auto
rechtzeitig abholt, nie wieder verlassen
Compare also the following examples, where the (a) sentence is less tolerable than the (b) sentence, which contains the element da(r) + preposition:

(35)(a) ??Auf der anderen Seite gibt es Schüler, die sich bemühen, einen Studienplatz zu bekommen.

'On the other hand are there pupils who try a study-place to get'

(35)(b) Auf der anderen Seite gibt es Schüler, die sich darum bemühen, einen Studienplatz zu bekommen.

With examples like (36), where the subordinate clause is in extraposed position, the appearance of da(r) + preposition is optional, since the sentence is acceptable in both versions, i.e. with darüber in (36)(a), and without, as in (36)(b):

(36)(a) Ich habe mich sehr darüber gefreut, dass Peter mich gestern besucht hat.

'I was very pleased about the fact that Peter visited me yesterday'

(36)(b) Ich habe mich sehr gefreut, dass Peter mich gestern besucht hat.

'I was very pleased that Peter visited me yesterday'

This example and the Norwegian example above constitute the body of Plütz's evidence for underlying es and against the alternative analysis of Extraposition proposed by e.g. Langendoen (for English, 1969) and Bierwisch (for German, 1966). They, on the other hand, argue that es (it) is transformationally inserted into the surface
structure of an extraposed sentence. Since $\text{da(r)} + \text{preposition}$ appears even when a sentence is not extraposed, Pütz argues, as in the case of (34)(a), Extraposition cannot dictate the absence versus presence of $\text{es}$ and its 'derivatives' in German surface structure (ibid.).

However, it will be shown below that an analysis of Extraposition which assumes the transformational insertion of a dummy $\text{es}$ element is in fact capable of describing the behaviour of $\text{es}$, and indeed $\text{da(r)} + \text{preposition}$, in a much more satisfactory way. Such an analysis is suggested by Anderman, who analyses pronominal elements in front of subordinate clauses as determiners (cf. Chapter 2, Section III) and argues that the use of pronominal head nouns is a language-specific phenomenon (ibid.; 166). We recall that Swedish, like Russian, and indeed like Norwegian, prefers a subordinate $S$ to appear more 'noun-like' in exposed sentence-initial position. This is achieved by the presence of a pronominal head noun in surface structure (ibid.). Unlike in German, the pronominal head noun and complementizer in these languages are different morphemes (det and att, respectively, in Swedish; to and $\text{čto}$ in Russian) (ibid.). With subordinate clauses in subject position in Swedish and Russian the presence of the pronominal head noun is preferred, while with Russian prepositional complements their presence is obligatorily required (ibid.):

**SWEDISH**

(37)(a) ?Att hon alltid vill stanna hemma förvånar mig
That she always wants to stay home surprises me

(37)(b) Det, att hon alltid vill stanna hemma förvånar mig
That that she always wants to stay home surprises me

**RUSSIAN**

(38)(a) ?$\text{čto}$ Volodja ne ljubit viski stranno
That Volodja not likes whisky is strange

(38)(b) To, $\text{čto}$ Volodya ne ljubit viski stranno
That that Volodya not likes whisky is strange
German, on the other hand, does not allow pronominal head
nouns to appear with subordinate clauses in subject and object
position, although the pronoun does occur with clauses governed
by a preposition taking the genitive or dative case, in constructions
where the preposition is suffixed to the pronoun, as in (41) (ibid.;
163):

(39) (a) *Das, dass er krank ist, ist sicher
That that he ill is is certain
(39) (b) Dass er krank ist, ist sicher
That he ill is is certain

(40) (a) *Die anderen mögen das nicht, dass Maria mir immer hilft
The others like that not that Maria me always helps
(40) (b) Die anderen mögen nicht, dass Maria mir immer hilft
The others like not that Maria me always helps
... 'The others don't like Maria always helping me'

(41) (a) Er überzeugte sich davon, dass er ein erfolgreicher
He convinced himself da+prep that he a successful
Lehrer war
teacher was
'He convinced himself that he was a successful teacher'
(41) (b) *Er überzeugte sich von, dass er ein erfolgreicher Lehrer war

We have seen above (Chapter 2, Section III) that the reason
why German does not favour pronominal head nouns with subordinate
clauses in subject and object position is because they are phonetically
identical to the complementizer dass. They would therefore cause
a violation of the LIKE FORM CONSTRAINT, which we know is operative
in German, as it also is in English, which for this reason never
uses pronominal head nouns (Anderman, op. cit., 162-5). In example
(41) (a), however, the pronominal head noun is attached to the
preposition which therefore intervenes between pronoun and complementizer,
preventing a violation of the LIKE FORM CONSTRAINT. In other
words, we can say that language-specific constraints allow German to realize the Determiner node only in the case of subordinate clauses preceded by a preposition, where the preposition can prevent two adjacent occurrences of an identical morph appearing in surface structure. There appears to be ample evidence in the history of the development of German complex sentences to support the claim that German tends to avoid the duplication of morphological material in adjacent position in the surface structure. A brief look at the development of dass-clauses suffices to demonstrate this claim.

V. The Development of German DASS-Clauses

The origin of the complementizer of subordinate clauses in German is generally considered to be the nominative and accusative neuter singular of the demonstrative pronoun das (Müller, Frings, 1959; 169). It is generally accepted that the simple sentence configuration represented in (42)(a) is the origin of the complex sentence type exemplified in (42)(b):

(42)(a) Ich weiss das: er kommt
I know that he comes
dem. pro.
'I know that: he is coming'

(42)(b) Ich weiss, dass er kommt
I know that he comes
COMP
'I know that he is coming'

"Vom Althochdeutschen ausgesehen, ist im ersten Satzgefüge thaz eindeutig Demonstrativ-Pronomen, da die Zäsur hinter thaz liegt; im zweiten Satzgefüge dagegen eindeutig Konjunktion, da die Zäsur vor thaz liegt".¹ (Müller, Frings, op. cit.; 12-13).

¹"From the point of view of Old High German thaz in the first configuration is clearly a demonstrative pronoun, since the caesura is behind thaz; in the second configuration, however, thaz is clearly a conjunction, since the caesura is in front of thaz".
In other words, from matrix final position where the demonstrative pronoun originally provided cataphoric reference to the following clause, *das* gradually began to be associated with the clause which followed it. The clause boundary shifted from directly behind the *das* to directly in front of it ("Verschiebung der Satzgrenze," ibid.). Jespersen (1910) has suggested the term "metanalysis" for this sort of shifting of sentence boundaries.

The development of the demonstrative pronoun into a subordinating conjunction (complementizer) was a gradual one, and the transition in function is still traceable today in sentence pairs like (43)(a)-(43)(b), although nowadays the difference in status of the clause is marked consistently by the clause-final position of the finite verb of the subordinate clause (ibid.; 170):

(43)(a) Glauben kannst du *das* ich *werde es nie* vergessen  
Believe can you that I shall it never forget  
'You can trust that I shall never forget it'

(43)(b) Glauben kannst du, *das* ich *es nie vergessen* *werde*  
Believe can you that I it never forget shall

In accordance with the opinion that the conjunction *thaz* was originally a nom./acc. singular of the neuter demonstrative pronoun, Müller, Frings (op. cit.) regard the original syntactic function of *thaz* clauses to have been "representations of" subject and object clauses. These first occurred with "die Verben des Sagens, Denkens und Glaubens" (lit. the verbs of 'saying', 'thinking' and 'believing', i.e. *verba putandi* and *decendi* etc. (cf. Chapter 2, Section III above, and below for further discussion).

Complex sentences originally occurred in two types of construction. For the sake of clarity we shall refer to them here as type 1 and type 2 constructions. In type 1 constructions the pronoun

\[\text{\underline{-------------}}\]

\[1\text{See Chapter 5, Section II for further discussion.}\]
disappears from the matrix and is found in the function of a subordinating particle (complementizer) in the subordinate clause:

(44) iu sol verbieten got, und allen minen vrienden, daz you shall forbid God and all my relatives that si deheinen spot an mir armer üeben¹ they any mockery against me poor practise 'May God forbid you and my relatives to mock me'

(Der Nibelung Nøt,12i8; 2)

(45) mir ist beide liep und herzechlœcen leit daz er mic to me is both pleasure and heart-felt suffering that he me ie gesach ever saw 'It has been a cause of both pleasure and suffering of the heart that he ever caught sight of me'

(Des Minnesangs Frühling, 187; 12)

In type 2 constructions the loss of the pronoun daz is compensated for by the (re)emergence of a demonstrative pronoun in the matrix of the complex, so that the type 2 construction contains both a demonstrative pronoun and a complementizer, and as such can allow fronting to be carried out for the sake of emphasis (Müller, Frings; op. cit.):

(46) Dat sagetun mi unsere liuti..., dat Hiltibrant haetti That said to me our people that Hildebrand was called min fater my father 'They told me that my father was called Hildebrand'

(Hildebrandslied, 17)

In fact, if fronting of the demonstrative pronoun does not take place, the resulting construction contains a combination

¹I am grateful to Peter Thurlow for his assistance with these glosses.
of two identical morphs in adjacent position on the surface structure:

(47)  si bekanten daz, daz her ein gesicht gesehn hatte
they perceived that that he a vision seen had
'They noticed that he had seen a vision'

Because of this duplication, the pronoun eventually disappeared
and the type 1 construction reappeared, resulting approximately in:

(48)  Sie merkten, dass er ein Phantasiebild gesehen hatte
They noticed that he a vision seen had

Sometimes when the pronoun and complementizer did appear
together the difference in function was signalled orthographically:

(49)  Di muete daz, das sie daz volk also larten
They endeavoured that that they the people in that way taught
'They endeavoured to teach the people in this way'
(Tschirch, 1975; 50)

However, the consistent difference in spelling between the
demonstrative pronoun and the complementizing morpheme is an orthographic
convention which did not gain universal currency until the sixteenth
century (Ebert, 1978; 26). Medieval German used daz for both
demonstrative pronoun and complementizing morphemes in the same
way that Modern English uses that (Lockwood, 1968; 22).

It would appear that occasionally the neuter of the personal
pronoun ez would appear in the matrix of such complex constructions
(Paul et al., 1969; 448):

(50)  mën herre iz uns verbôt, daz wir iht gâbe naemen
my lord it us forbade that we your gift take
'My lord forbade us to take your gifts'
(Der Nibelung Nôt, 1489; 3)
This would appear to have been a purely optional use of the personal pronoun, but it posed very few problems as far as euphonic factors were concerned since it is lexically and phonologically distinct from the complementizer.

Lexical head nouns were also found with the complementizer, apparently as a means of avoiding constructions like (51):

(51) sprah..thaz, thaz
spoke that that

(52) Kennzeichnend ist der Umstand, dass
Characteristic is the circumstance that

This type of construction appears to have occurred quite frequently, since it was felt that there was a need for a demonstrative in the matrix to lend deictic force to the ensuing complement. In order to avoid duplication of morphs, the demonstrative pronoun was gradually replaced by a noun which was capable of representing the complement, and the dass-clause eventually became subordinated to such a lexical head noun (Müller, Frings; op. cit.; 174).

These head nouns apparently serve to supply cataphoric reference only and would appear to be semantically "empty", since they can be interchanged to a large extent without affecting the meaning of the sentence, or they can be left out altogether:

(53)(a) Kennzeichnend ist die Tatsache, dass...
Characteristic is the fact that
(53)(b) Kennzeichnend ist, dass...
Characteristic is that...

It is also evident that this is the case in view of the observation that the neutral Ding, Sache (thing) frequently were used to carry out this function in Medieval German (ibid.; 175):

(54) Ni drostet iuih in thiu thing thaz iagilih ist edeling
Not comfort yourselves in this thing that each is nobleman
'Do not draw comfort from the fact that you are both noblemen'

(Otfrieds Evangelienbuch, 1, 23, 45. hrsg. von Oscar Erdmann, Halle, 1882)
Thus we see that, being semantically 'empty' and serving primarily to provide deictic reference to the ensuing clause, lexical head nouns and pronouns were interchangeable in Medieval German. In Modern German, constructions have developed which trace their origins back to examples like (53) above:

(55)(a) Die Gelehrten waren einig in der Ansicht, dass
the learned were agreed in the view that
(Thomas Mann, Buddenbrooks)

(55)(a) could also be expressed in Modern German in paraphrase, without using a lexical head noun:

(55)(b) Die Gelehrten waren einig, dass
The learned were agreed that

Moreover, a third possibility exists, where a pronoun may fill the position of the head noun, in which case it is attached to the preposition which may also be retained:

(55)(c) Die Gelehrten waren darin einig, das

The third alternative, a very common construction in Modern German, is the same type of construction as in (41)(a) above, which, we recall, is the only type of subordinate clause construction with a realization of a pronominal element in surface structure. We recall that the LIKE FORM CONSTRAINT prevents the realization of das immediately preceding the complementizer, unless a preposition is suffixed to the pronoun, preventing an uninterrupted sequence of two identical morphs. However, if we now consider examples (56) and (57), there would appear to be a pronominal element es
in the surface structure of particular types of subject and object clauses:

(56)(a) Paul bedauert, dass Peter kommt  
Paul regrets that Peter is coming  
(56)(b) Paul bedauert es, dass Peter kommt  
Paul regrets it that Peter is coming  
(57)(a) Dieser Anruf bedeutet, dass Peter kommt  
This call means that Peter is coming  
(57)(b) *Dieser Anruf bedeutet es, dass Peter kommt  
This call means it that Peter is coming

Example (56)(b) shows quite clearly that the pronominal form, derived from the neuter accusative singular of the personal pronoun, is tolerated in surface structure. (57)(b), on the other hand, cannot tolerate the presence of es in surface structure. The question therefore poses itself, why are pronominal elements tolerated or even obligatory in some types of construction and blocked in others. Moreover, we must clarify the relationship between es and das in complex sentences, since their status has important implications for our treatment of German syntax.

VI. The Function of ES and DAS in German Complex Sentences

Our proposed analysis of pronominal elements in German complex sentences leads us to suggest, in contrast to Pütz, that underlying certain complex sentences in German is not the element es, but the element das.

If, for example, we take a look at Pütz's Norwegian sentence, repeated below in (59), and compare it with the Swedish example in (37)(b), repeated below in (58), we should rather propose that the glosses in German be those in (60)(b), and not those in (60)(a), as Pütz proposes, for the reasons given below. In other words,
we would suggest that this particular occurrence of det be translated by das and not es as Pütz suggests:

\[(58)\] Det att hon alltid vill stanna hemma förvånar mig
That that she always wants to stay at home surprises me

\[(59)\] Det att han er kommet er virkelig forbausende

\[(60)(a)\] *Es, dass er ist gekommen ist wirklich erstaunlich
\[(60)(b)\] das, dass er ist gekommen ist wirklich erstaunlich
That that he is come is really astonishing

Hence we would argue that das is the element from which such structures derive, not es. While disagreeing with Pütz's analysis, however, we would agree that he makes a very important observation when he notes that there is an 'underlying element' involved with subordinate clauses governed by a preposition taking the genitive or dative case, which manifests itself in the combination da(r) + preposition (Pütz, op. cit.; 64-7). In contrast to Pütz, however, I should like to argue that this underlying element is not es, but das, whose presence is blocked before subordinate clauses in subject and object position by the LIKE FORM CONSTRAINT, but which is tolerated in derived form when in combination with a preposition governing the subordinate clause. This fact would explain why we prefer the glosses in (60)(b) above to those in (60)(a).

Our proposal gains support from the observation made by Anderman (cf. above, Chapter 2, Section III), that in Spanish and Swedish, where pronominal head nouns are used in front of subordinate clauses in subject and object position, the pronominal head noun is identical in form to the definite article (ibid.; 168). This link between the definite article and pronominal head noun, we recall, led Anderman to suggest that the function of the definite article vis-à-vis the simple NP may well be paralleled by the function of the pronoun preceding subordinate clauses (ibid.; 170, cf. Chapter 2, above). Her proposed underlying representations of the subordinate clause (complex NP) by analogy with that of the
simple NP are given below in (61) (a) and (b):

(61) (a)  \[
\begin{array}{c}
\text{NP} \\
\text{Det} \\
\text{N}
\end{array}
\]  (61) (b)  \[
\begin{array}{c}
\text{NP} \\
\text{Det} \\
\text{S} \\
[+ \text{Def}]
\end{array}
\]

We recall that the presence of the Determiner Sister Node to S in (61) (b) serves to make the subordinate S more similar to the NP in underlying structure, but that this Determiner is not always realized in surface structure (Anderman, op. cit.; 170). In our discussion of Anderman's Determiner node analysis in Chapter 2 we also noted that Determiners of simple nouns and complex NPs are identical in phonetic form (e.g. det and det in Swedish), in those languages where they are in use (ibid.). It is therefore interesting to note that the definite article das in German is identical in phonetic form to the element which would be candidate for the pronominal head noun, were it not for the fact that the operation of the LIKE FORM CONSTRAINT precludes subject and object subordinate clauses from appearing with a pronominal head noun in this language. It is thus but a small step to the suggestion that what actually underlies the combination da(r) + preposition with subordinate clauses governed by a preposition in German is not es, as Pütz would suggest, but some form of the demonstrative pronoun das.

This proposal appears to be supported by data from older forms of German. Paul et al. (1975) cite examples of the combination preposition + das + dass in Middle High German as well as examples
where the preposition is followed immediately by dass:

(62) nu muoz ich fröide noeten mich dur daz ich b[i
now must I to be joyful force myself in order that I part
\*der welde si\[
of society may be

'Now I must force myself to be joyful for the sake of society'

(63) die soltu nu kern zu gotes dineste ... uf they ought you now to turn to God's service in order
daz du mugest gewissen was du dar mit habes gewunnen\[^1\]
that you may make sure what you there by have gained

'These you ought now to turn to God's service in order that you may make sure of what you have gained thereby'

(uf daz = auf dass = damit = so that/ in order that)

(64) daz wart umbe daz getän, daz Darius selbe sëge that was for that done that Darius himself would see\[^1\]

'That was done for that reason that Darius himself would see'

(ibid.; 442)

(65) si engetet ez nie wan umbe daz daz si mich noch wil she would have done it not except for that that she me still wishes
tersuochen baz
to subject to further tests\[^1\]

'She would never have done (do) it, except for this reason, that she wishes to subject me to yet further tests'

(ibid.; 449)

Instances of dar followed directly by a preposition but not yet affixed to it are also found (ibid.; 442):

(66) dar umbe hat er sich genant daz...
that for has he himself named that...

\[^1\]I am grateful to Peter Thurlow for his assistance with these glosses.
Lockwood (1968) explains that New High German da (there, then) incorporates two older words, an adverb of place MHG da, OHG dâr (there) and an adverb of time, OHG, MHG do (then), pointing out that they both belong to the demonstrative stem (ibid.; 226). The former, he claims, is a very old formation with the local -r suffix, while the latter "is most probably the acc. fem. sing. of the demonstrative pronoun (Gothic dã) giving a literal meaning 'that', some such word as 'time' being understood." (ibid.). He proceeds to point out that, though both words had from the earliest records a well established subordinating function, da was more typically used as a relative (ibid.; 226-7). Lockwood then explains that by the close of the middle period these two words were generally confused, owing to a widespread change from â to ã, which took place in the spoken language over much of the High German area, so that for a time both do and da could be found. Eventually however, following the literary tradition, da was confirmed as the recognized standard throughout (ibid).

He continues: "This is not to say the two words had not already, to some extent, drawn together semantically before they were confused phonetically. The form da had, in fact, made incursions into the territory of dã. Thus, in Medieval German, da(r)nach had a temporal sense: OHG (Notker)

(67) sã Dioterih ..Ôtaccheren..sâr dara nâh ersluog
'when Theodoric shortly afterwards slew Odoacer' (ibid.).

He also goes on to point out that the relative use of da in connection with a noun denoting a period of time made this form the equivalent of a temporal conjunction, so that da is found with the meaning and function of dã (ibid.). Thus we see that da developed from some sort of demonstrative form, and that the temporal conjunction da and the adverb of place da are manifestations of the same stem. It would appear that, since the LIKE FORM CONSTRAINT ruled out the use of the combination prep + das + dass, and since German eventually rejected the appearance of prepositions before unmediated dass-clauses, the prefixing of da or dar to the preposition developed as a means of insulation, thereby signalling a subordinate clause governed by a preposition taking an oblique case.
Schulz and Griesbach (1976; 153) call the prefixes in combinations like darauf "pronominal adverbs" and explain that they are used "wenn sich präpositionale Ausdrücke auf Sachen, Begriffe, oder Sachverhalte beziehen" (ibid.).

Thus, we may conclude that the da(r) + preposition is indeed pronominal in status, although it derives not from the pronoun es, as has been suggested by Pütz, but das, the demonstrative.

We might further determine the function of the combination da(r) + preposition on the basis of the principle that elements governed by the dative and genitive case are more 'marked' than elements governed by the accusative and nominative (and plural elements are more marked than singular elements - cf. Bierwisch (1967)). As we stated above, the appearance of preposition + es is usually unacceptable in Modern German. With masculine and feminine pronouns referring to persons, a combination preposition + pronoun is often found, however, particularly with accusative and dative cases and most often in Modern German, especially with an extraposed prepositional object:

(68) Der Otto war gestern wieder im Fernsehen. Wir haben uns fast kaputtgelacht über ihn

The Otto was yesterday again on television. We have almost silly laughed at him

'Otto was on tv again yesterday. We laughed ourselves silly at him'

(69) Meine Mutter war neulich bei mir. Ich habe ein Geschenk bekommen von ihr

'My mother called to see me recently. I got a present from her'

Compare the following sentence from written German, where the pronoun refers to an inanimate object (der Schwarzmarkt - the black market) of masculine gender, and has not been contracted with the preposition to form daran (ex. (70)(a)). Similarly, in (71)(a), von dem (i.e., preposition and neuter pronoun in dative
case) has not been contracted to *davon*, thus producing an unacceptable sentence:

(70)(a) *Wenn es aber nötig gewesen wäre, z.B. Medikamente zu kaufen, If is but necessary been was eg medicines to buy
hätte ich zweifellos an ihm teilgenommen had I doubtless in it part-taken
'But if it had been necessary to buy medicine, for example, I would have taken part in it.'

(70)(b) Wenn es aber nötig gewesen wäre, z.B. Medikamente zu kaufen, hätten ich zweifellos *daran* teilgenommen

(71)(a) *Auch hatten die Betriebsräte wenig Erfahrung von den, Also had the stewards little experience of that
was der Arbeiter in diesem Betrieb eigentlich meint what the worker in this factory actually thinks

(71)(b) Auch hatten die Betriebsräte wenig Erfahrung davon, was der Arbeiter in diesem Betrieb eigentlich meint.
'Even the stewards had little experience of what the worker in this factory thinks'

It is possible that the neuter form might be used with a preposition if the neuter pronoun has clear anaphoric reference, but I have never seen this with a pronoun governing the accusative case. In most cases where *es* refers to a specific object, i.e. where it has anaphoric reference, the form *das*, i.e. the demonstrative pronoun, or a combination *da(r) + prep* occurs in surface structure (cf. (72)(b) below.). This suggests, in agreement with the implications of Bierwisch's (op. cit.) analysis, that the singular neuter personal pronoun *es*, being the 'least marked' form of the pronoun, is not
'marked' enough to refer to an element which has already been mentioned:

(72)(a) *Aber 1949, als das Tarifvertragsgesetz eingeführt wurde,
But 1949 when the wage agreement law in-brought was
waren manche Gewerkschaftler gegen es
were many trades unionists against it
(72)(b) Aber 1949 als das Tarifvertragsgesetz eingeführt wurde,
waren manche Gewerkschaftler dagegen.
'But when in 1949 the law on wage agreements was brought in, many trade unionists were against it.'

These observations are, moreover, consistent with Bolinger's (1970a) analysis of complex sentences with subordinate clauses preceded by it in English, compared with those subordinate clauses without it. He demonstrates that in certain examples it is a pronoun with anaphoric reference, referring to a subject already broached (ibid.; 59). In other words, it has to refer to some topic which has already been introduced, otherwise the sentence becomes unacceptable, as in the (a) examples of (73)-(74) below (ibid.; 57-9):

(73)(a) *I understand it that the election hurt them
(73)(b) I can understand it, that the election hurt them
(74)(a) ?I believed it that the election hurt them
(74)(b) Not for a moment did I believe it that the election hurt them

In other words it would seem that the appearance of it before a that clause depends on the appropriateness of anaphoric reference. Anderman (op. cit.; 127) states that in its function as a pronoun which establishes anaphoric reference, the it of these sentences mirrors sentences like (75) where a simple NP has been Right Dislocated:

(75) I like them, the Smiths
Here the pronoun them precedes the simple NP and establishes reference of a similar type to the Right Dislocated complex NPs (ibid.). Thus, in contrast to the true 'dummy' it of extraposed constructions, the it of Right Dislocation replaces an NP and has true pronominal status, establishing cataphoric reference with the displaced NP. Bolinger explains the difference by assigning anaphoric it to the set of pronouns which includes he, she and they (op. cit.; 57).

It is also interesting to note that the object es in German cannot appear in sentence-initial position, but must always become das:

(76)(a)  İst der Stefan schon da?  Das weiss ich nicht.
          Is Stefan already there?  That know I not.
          OBJ.
(76)(b)  İst der Stefan schon da?  *Es weiss ich nicht.

This use of das suggests that it might sometimes be used not as a proper demonstrative, in opposition to dies (this), but in "a neutral way" (Kuroda, 1969). Kuroda points out that English that could also be used in this way, being in this function much like it the pronoun, and the the determiner (ibid.). He notes that in certain contexts this neutral character of that is more perceptible. For example, it cannot receive extra stress and must be substituted for by that in the context under extra stress:

(77)(a)  *I know it
(77)(b)  *It I know
(77)(c)  I know that
(77)(d)  That I know

Similarly, it cannot be modified by a prepositional phrase (ibid.):

(78)(a)  *Let his fate and it of his poor wife be remembered
(78)(b)  Let his fate and that of his poor wife be remembered

That in (78)(b) is considered by Kuroda to be another instance of neutral that. In German a similar condition would appear
to obtain; *es cannot be modified by a prepositional phrase, while 
das can:

(79)(a) *Sein Schicksal und es seiner Frau dürfen wir alle in Gedacht 
    haben 
    'We must all remember his fate and it of his wife'

(79)(b) Sein Schicksal und das seiner Frau dürfen wir alle in Gedacht haben

Another option is available in German with constructions
of this type - the more specific demonstrative form dasjenige,
(derjenige, diejenige, diejenigen) may be used, which has greater
force in that it is not a neutral form but a demonstrative which
incorporates the gender and case features of the noun modified
by the prepositional phrase. This would lend force to the suggestion
that das is used here as a 'neutral' form, made by Koruda (op. cit.).

In his analysis of Rightward Movement Transformations, Pütz
makes a distinction between two types, Right Dislocation and Extraposition
(ibid.; 59). His favoured analysis of Extraposition, as we have
seen, is that an example like (80)(a) below incorporates an underlying
element *es, which underlies the Extraposed sentence in (80)(b),
and this underlying element is deleted whenever the subordinate
clause is not extraposed, as in (80)(c):

(80)(a) *Es, dass seine Mutter immer noch seine Wäsche tut, ist
    einfach erstaunlich
    'It is simply astonishing that his mother still does
     his washing'

(80)(b) Es ist einfach erstaunlich, dass seine Mutter immer noch
    seine Wäsche tut
    'It is simply astonishing that his mother still does
     his washing'

(80)(c) Dass seine Mutter immer noch seine Wäsche tut, ist einfach
    erstaunlich
    'That his mother still does simply
     astonishing'
However, Pütz also points out that an alternative analysis of Extraposition has been proposed (Langendoen, 1969), according to which extraposed elements are copied at the end of the clause in which they are contained, and the original element is replaced by it (Pütz, op. cit. 58). In other words, (81) is the underlying structure of an extraposed subject clause, while (82) is a representation of the derived structure (ibid.; cf. Langendoen, op. cit.; 43):

(81)

```
S
  NP
  VP
that the president of the ladies' auxiliary is really bald
```

(82)

```
S
  NP
  VP
  S
  it
  comes as no surprise to many people
that the president of the ladies' auxiliary is really bald
```

That **it** which is **INSERTED** into the sentence is generally considered to be a 'dummy' element, i.e. one which is semantically 'empty'. A similar analysis of Extraposition has been proposed for German by Bierwisch (1966). In other words, we might interpret the *es* of Extraposition as a 'dummy' pronominal element without semantic content, which acts as a replacement for an *S* that has been moved to the right in the sentence. Below we shall argue that this latter description is infinitely more acceptable than the former. Right Dislocation is explained by Pütz as being an operation which moves both 'Sentence NPs' and simple NPs to the right behind the boundary of their original clause (Pütz, op. cit.; 59). During this operation the extraposed NP leaves a 'Pro-Element' in the original position of the NP and this "Pro-Element" retains, according to Pütz, only the necessary gender and number
features of the NP it replaces (ibid.). Adopting the formulation proposed by Ross (1967; 236), Pütz gives the following representation of the Right Dislocation operation (ibid.):

\[
\begin{align*}
(83)(a) & \quad X - \begin{bmatrix} \text{NP} \\ \text{-Pro} \end{bmatrix} - Y \\
1 & \quad 2 \quad 3 \\
(83)(b) & \quad \begin{bmatrix} 1 \\ 2 \\ +\text{Pro} \end{bmatrix} \quad \begin{bmatrix} 3 \# \ 2 \end{bmatrix}
\end{align*}
\]

Sentences (84)-(85) are cited by Pütz as examples of Right Dislocation:

(84)  Ich habe ihn noch nie GESEHEN, meinen Vater
       I have him still never seen, my father
       'I still haven't seen him, my father'

(85)(a) Ich sage nicht, dass ich Peter verleumdet habe
       I say not that I Peter slandered have
       'I don't say that I've slandered Peter'

(85)(b) ?Ich sage es nicht, dass ich Peter verleumdet habe
       I say it not that I Peter slandered have
       'I'm not saying it, that I've slandered Peter'

(85)(c) Ich SAGE es ja auch gar nicht, dass ich Peter verleumdet habe
       I say it yes also not at all that I Peter slandered have
       'But I'm not saying it, am I, that I've slandered Peter'

Pütz makes the observation that distinct intonation patterns are linked with each of these two constructions, claiming that with Right Dislocation the stress is always on the verb or predicate of the clause behind which the Right Dislocated NP has been moved, the displaced NP itself always being without stress (ibid.). With extraposed complex NPs, on the other hand, Pütz claims that the NP that has been moved to the right of the sentence may be stressed. Thus in example (86), the (a) sentence is considered an instance of Right Dislocation, while the (b) sentence is classed

\[\text{---------------------------}\]
\[1^\text{My glosses and translations.}\]
as Extraposition and would be considered unacceptable by Pütz as an instance of Right Dislocation, presumably since the wrong element receives stress here (ibid.):

\[(86)\]

\(\text{(a) }\) Ich Wünsche es ja auch gar nicht, dass Peter schon geht

'I wish it yes also not at all that Peter already goes

'But I don't WANT Peter to go so soon'

\(\text{(b) }\) Ich Wünsche das ja auch gar nicht, dass Peter

I wish that yes also not at all that Peter

schon geht

already goes

Thus Pütz has characterized Right Dislocation as being different from Extraposition in that it has different intonation, and that the es which appears in Right Dislocated structures is substitutable by das, while the es of Extraposition is not.

This overall characterization of the differences between these two Rightward Movement Transformations is supported by the analysis proposed by Anderman (op. cit.; 108 ff). However, certain rather anomalous conclusions drawn by Pütz with reference to the nature of es and das, and in particular his conclusions about Extraposition, will be seen to be clarified if we adopt Anderman's analysis of these two transformations. Moreover, Anderman's analysis also provides motivation for the use of each type of construction, as well as providing a more clearly defined structural profile of these transformations, as we shall now see.

VII. A Reanalysis of Rightward Movement Transformations

Anderman's analysis of Rightward Movement Transformations in English will be seen to apply more adequately to a description of these transformations in German than Pütz's proposed analysis. Basically, we shall see that, contrary to the analysis proposed by Pütz, the es/it of Extraposition is a true 'dummy' element, inserted into the sentence at some stage in its derivation to represent or 'fill the place' of the rightward moved S node. The es/das - it/that of Right Dislocation, on the other hand, will be shown to be a representation of a true NP element (i.e. subordinate clause NP), which is also a 'dummy' to some extent,
but differs from the true 'dummy' es/it of Extraposition in that it provides anaphoric reference and can in certain instances be substituted for by a lexical head noun (e.g. the fact in English). This in turn suggests that the es/das of Right Dislocation would appear not to be a complete 'dummy' element.

Anderman has suggested (op. cit.; 110) that in e.g. Swedish and Russian, sentence-internal subordinate clauses are not felt to be as 'exposed' as they are in sentence-initial position, so that they do not need a pronominal head noun to render them more similar to a NP element. For this reason the pronominal head noun is not realized in this position in these languages, allowing the subordinate clause to resume its status as an S. As such, it can be attached to the VP node of the sentence as a sister constituent to the verb. This process, Anderman claims, is true Extraposition (ibid. 28; cf. also Comrie, 1972; 138 and diagram below).

However, the demonstrative pronoun may optionally act as a pronominal head noun to subordinate clauses which have been removed from sentence-initial position, and when this occurs the presence of the pronoun makes it possible to attach the subordinate clause higher up the tree (i.e., as a NP node, see diagram below). In such cases the subordinate clause becomes a Right Dislocated NP (ibid.). This is equivalent to saying that there are two distinct processes in operation when we are dealing with a subordinate clause which has been moved to the right of the sentence.

In English the difference may be signalled orthographically by the presence of a comma before the subordinate clause in Right Dislocated constructions:

(87)(a) It annoyed me that he was still there (Extraposition)
(87)(b) It annoyed me, that he was still there (Right Dislocation)

The most significant distinguishing feature, however, or in other words, the main perceptual distinction in English, is the pause occurring between the first and second parts of the sentence in Right Dislocation constructions. Huddleston (1971)
discusses this phonological distinction, basing his analysis on the findings of Halliday (1963):

(87)(a)' I it annoyed me that he was still there
(87)(b)' I it annoyed me, that he was still there

(87)(a)' is characterized by the tone I, so that (87)(a)' is the typical intonation pattern for (87)(a) and (87)(b)' is the typical pattern for (87)(b). There is a fall on there in (87)(a)' and a fall on noyed in (87)(b)' with a slight rise on there (cf. Huddleston, op. cit.).

Thus (89)(a) below is the structure underlying the extraposed construction of (87)(a) and (89)(b) is the structure underlying the Right Dislocation construction in (87)(b), both of which sentences can be derived from (88):

(88) That he was still there annoyed me

\[
\begin{align*}
(89)(a) & \quad S \\
& \quad NP \\
& \quad \quad V \\
& \quad \quad \quad NP \\
& \quad \quad \quad \quad S \\
& \quad \quad \quad \quad it \\
& \quad \quad \quad it \\
& \quad \quad \quad annoyed me \\
& \quad \quad \quad that he was \\
& \quad \quad \quad still there
\end{align*}
\]

\[
\begin{align*}
(89)(b) & \quad S \\
& \quad NP \\
& \quad \quad V \\
& \quad \quad \quad NP \\
& \quad \quad \quad \quad S \\
& \quad \quad \quad \quad that he was \\
& \quad \quad \quad \quad still there \\
& \quad \quad \quad \quad NP \\
& \quad \quad \quad \quad NP \\
& \quad \quad \quad it \\
& \quad \quad \quad it \\
& \quad \quad \quad annoyed me \\
\end{align*}
\]

From the diagrams we see that Extraposition involves the deletion of the pronominal head noun of the complex NP, allowing it to resume its status as an S. It is motivated by the tendency
to move "heavy" constituents to the right in the sentence (documented by i.a. Lightfoot (1975) and Murray (1974)). Right Dislocation does not entail the deletion of the pronominal head, however, and it would seem that this transformation is similar to the process that moves simple NPs to the right of the sentence for the sake of emphasis (Anderman, ibid.), as in example (90), where the simple NP, the Smiths, has been shifted to the right:

(90) I like them, the Smiths

Examples (91)(a)-(b) show how Right Dislocation can apply to both simple NPs and subordinate clauses:

(91)(a) I discussed it with George, your birthday party
(91)(b) I discussed it with George, that you want a birthday party

Anderman captures the essential distinction between Right Dislocation and Extrapolation in a very straightforward way. The former is motivated by semantic factors and can only occur in environments where the establishment of anaphoric reference is appropriate. Extrapolation, on the other hand is motivated by syntactic factors in certain instances (op. cit.; 130). In English, for example, this happens in order to remove that- and infinitive-clauses from sentence interior position, since they are constrained from appearing in this position - unlike gerund clauses, which behave like ordinary NPs (ibid.):

(92)(a) *I find that she is so helpless annoying
(92)(b) I find it annoying that she is so helpless
(93)(a) I find it difficult to swim
(93)(b) *I find it difficult to swim
(94)(a) *I find her being so helpless annoying
(94)(b) I find her helplessness annoying

Thus, we see that confusion may arise whenever syntactic conditions demand the removal of a constituent, since a pronoun has to step in and fill the empty place, resulting in a construction
which is potentially ambiguous between an instance of Right Dislocation or of Extraposition. As Anderman remarks, however, if the (b) sentences in (92)-(93) above had the characteristic phonological break of dislocated noun phrases, they would be analysable as Right Dislocated structures (ibid.; 131).

The problem of potential ambiguity between Right Dislocation and Extraposition is particularly acute in German, according to Anderman, because of the incomplete shift from SOV to SVO in this language (ibid.; 133). In the simple tense in German the Direct Object follows the verb:

(95)  
Ich sehe sie  
I see her  
S V DO

The same order is kept when a subordinate clause is the object of the main verb (ibid.; 134):

(96)  
Ich verstehe, dass er momentan in Italien ist  
I understand that he at the moment in Italy is  
S V DO

With compound tenses, however the DO precedes the past participle:

(97)  
Ich habe Sie verstanden  
I have you understood  
S V DO PP

When the object of a verb in a compound tense is a subordinate clause, it is moved to the right of the sentence and often an optional object marker appears in the form of an es (it), allowing
the matrix clause to conform to the order SV DO V, as in example (97) above (ibid.):

(98)(a) Ich habe dass er momentan in Italien ist verstanden  
I have that he at the moment in Italy is understood  
S Aux DO V  
(98)(b) Ich habe (es) verstanden, dass er momentan in Italien ist  
I have it understood that he....  
S V DO V  

Hence we see that in German Extraposited sentences an optional es may be inserted, which is motivated by syntactic factors, thus giving two optional versions as in (99)(a) and (b) below, where, however, only (99)(b) may be given a Right Dislocation interpretation (ibid.; 135);

(99)(a) Ich habe verstanden, dass er momentan in Italien ist  
(99)(b) Ich habe es verstanden, dass er momentan in Italien ist  

We have thus isolated the crucial distinction between Right Dislocated and extraposited constructions in German. The es which appears with extraposited object clause constructions is an optional marker without anaphoric reference, motivated on purely syntactic grounds. The es of Right Dislocated constructions is motivated by semantic differences and refers to the ensuing clause. This crucial difference can be seen in other ways. In fact, the claim that sentences containing a stressed constituent underlie instances of Right Dislocation helps explain our interesting fact about the appearance of the pronoun es in the surface structure of rightward moved subordinate clauses in subject position in German. When the matrix verb is preceded by a fronted element (e.g. object),
German leaves out the so-called subject pronoun *es*, which is otherwise needed as a dummy element to fill the subject position:

(100)(a) Es ist wichtig, dass du hingehest
       It is important that you there go
       'It is important that you go there'
(100)(b) Wichtig ist, dass du hingehest
       Important is that you there go

However, when the adjective *wichtig* receives particular stress, the subject *es* may not be omitted, or the sentence becomes ungrammatical:

(100)(c) *Wichtig ist, dass du hingehest*

It must be noted that the constituent that receives particular emphasis here presupposes a contrast with some element from a previous sentence, e.g.:

(100)(d) Es ist nicht Schade, dass du hingehest. Wichtig ist es,
       It is not a pity that you there go. Important is it
dass du hingehest
       that you there go

In other words, this construction presupposes anaphoric reference. The pronominal element is therefore not entirely a syntactic dummy, as is the *es* of (100)(a), and can therefore not be omitted as in (100)(b) (ibid.; 116).

This discussion of the status of *es* in these examples would suggest that the pronominal subject of extraposed structures in German is different in syntactic status from that of Right Dislocated structures. Anderman explains this difference in status by suggesting that the pronominal subject of extraposed constructions replaces an S constituent, whereas in the case of Right Dislocation it replaces a NP constituent. In other words, German actually marks

---

1Kirkwood, Private Communication (cf. Anderman, op. cit.; 116).
the difference in status of the pronominal element es in surface structure by making the inclusion of es in the surface structure of extraposed constructions optional in certain constructions and making the inclusion of the 'dummy' obligatory in constructions where it replaces an NP constituent, i.e. with Right Dislocated clauses (ibid.; 117). Anderman also cites some very interesting evidence from French which would suggest that there is a similar distribution in this language (ibid.).

We would thus conclude, in agreement with Pütz, that there are two types of Rightward Movement Transformations which, as he also rightly claimed, are similar in nature but are not identical when applied to subordinate clauses. Pütz and Anderman (op. cit.) combine to explain the distinct nature of each transformation, both on the grounds of basic intonational distinctions and topic-comment relations (Pütz, op. cit.; 60), and on syntactic grounds (Anderman, op. cit.).

Furthermore, Anderman's description demonstrates quite clearly the difference in nature between the es of Extraposition and the es of Right Dislocation, which is substitutable by das. We have seen that the former es is a purely syntactic 'dummy', inserted into the sentence to fill the place of a rightward moved (extraposed) S element, and that this element is essentially 'empty'. The es of Right Dislocation, on the other hand, is a dummy pronominal element which does indeed have semantic import - it provides anaphoric reference and can in some cases be substituted for by a lexical head noun.

It now also becomes apparent from the discussion above that the da(r) element of the combination da(r) + preposition followed by a dass-clause is unrelated to an inserted es of Extraposition or indeed an underlying es element. We have seen that the analysis which assumes Extraposition to derive from a sentence with an underlying es must be rejected on the grounds that this es never appears before a complex NP in surface structure. Instead, we have argued that the it of Extraposition is an inserted dummy syntactic element which is a completely separate entity from the es of Right Dislocation and the da(r) of da(r) + preposition which appears with complements governed by a preposition. Our conclusions about the nature of da(r) are based on Anderman's Determiner Node
Theory (cf., above) and we maintain that the da(r) of combinations da(r) + preposition is in fact the only permissible realization of the underlying Determiner Node in German, since the LIKE FORM CONSTRAINT proscribes the appearance of a pronominal head noun with subject and object clauses. The prefixation of das in its derived form da(r) to the preposition enables a preposition to appear in front of the dass-clause, since it provides syntactic insulation for an otherwise unacceptable combination of unmediated preposition + dass, and at the same time, the preposition intervenes between pronominal head and subordinate clause, preventing an unacceptable duplication of identical morphs. The es/das of Right Dislocation, on the other hand, has been seen to have nothing to do with extraposed clauses or clauses which are the objects of prepositions, as Pütz seems to imply. This es/das is also a dummy pronoun, but it is not semantically empty, unlike the es of Extraposition. Instead, it has definite anaphoric reference, as we have seen, and refers to a 'known' referent. For this reason it is not constrained in its appearance and can appear with any matrix verb in the correct syntactic environment (i.e., whenever anaphoric reference is established). As we shall see below, this element can occasionally be substituted for by a lexical head noun in English. The usual lexical head noun used in such environments in English is the fact. The commonly accepted analysis of the presence versus absence of this head noun is put forward by Kiparsky and Kiparsky (1969). This analysis has, however, been subject to criticism from other linguists, particularly with regard to subsequent treatments of subordinate clauses in German, and is therefore worthy of closer scrutiny in this work.

VIII. The Use of Lexical Head Nouns

As we saw in the section above, English never uses pronominal head nouns with subordinate clauses, preferring instead to use a lexical head noun, particularly the fact. This led Kiparsky and Kiparsky (1969) to analyse subordinate clause constructions in English into two main classes:

1. those which follow a so-called "factive" verb or predicate which can be preceded by the lexical head noun the fact in surface structure, and
2. those after so-called "contentive", or "non-factive" predicates, which never appear with lexical head nouns (ibid.; 396).

The Kiparskys' proposed underlying representations for each type of subordinate S are given in (102)(a) and (102)(b) respectively:

\[(102)(a) \quad \text{Factive:} \quad \quad (102)(b) \quad \text{Non-factive:} \]

\[
\begin{array}{c}
\text{NP} \\
\text{fact} \\
\text{S}
\end{array}
\quad \quad \quad \quad
\begin{array}{c}
\text{NP} \\
\text{S}
\end{array}
\]

The verbs which they class as "non-factive" fall generally into the group of predicates which we have classed as verba dicendi, putandi, and sentiendi (see above, Chapter 2, Section III). Moreover, the underlying structures proposed by Kiparsky and Kiparsky will immediately be recognized as very similar to those we have adopted from the analysis of Anderman (op. cit.; 179), repeated below in (103)(a)-(b):

\[(103)(a) \quad \text{NP} \quad \quad (103)(b) \quad \text{NP} \]

\[
\begin{array}{c}
\text{Det} \\
\text{S}
\end{array}
\quad \quad \quad \quad
\begin{array}{c}
\text{S}
\end{array}
\]

[+Def]

In other words, Kiparsky and Kiparsky attempt to explain in terms of the semantic criterion of 'factivity' those observable differences in behaviour between different types of that-clauses which Anderman has explained in syntactic terms. Not surprisingly, Anderman objects to the Kiparskys' analysis on several grounds. The main objection is that there is no evidence anywhere to suggest that lexical material like the fact is present in underlying structure, when it does not appear in surface structure (ibid.; 190). Moreover, in looking at other languages like Swedish and Russian, (cf. Comrie, op. cit.; 134) we find that the use of their equivalents to the fact in written or spoken languages either produces highly unnatural sounding sentences, or indeed produces sentences which are not synonymous with versions without the fact (cf. Anderman, ibid.; 180). Another major objection to the Kiparsky analysis is that in certain cases, they claim, the "underlying" lexical head noun
pronominalizes into it. This analysis of it as a pronominal realization of an underlying lexical head noun deserves more thorough discussion, since it has led to at least one German analysis in terms of the "factivity" criterion.

Esau (1973) suggests that in German the equivalent to the lexical head noun the fact, i.e. die Tatsache, appears much less commonly than its English counterpart and often sounds far less natural than the German equivalent without die Tatsache (ibid. 193). Thus (104)(b) is a far more natural sounding sentence of German than (104)(a):

(104)(a) *Die Tatsache, dass Frauen doch nicht so gut Auto fahren wie Männer, ärgert die Frauenbewegung.*

'The fact that women not so well car-drive as men annoys the women's movement'

(104)(b) *Dass Frauen nicht so gut Auto fahren wie Männer, ärgert die Frauenbewegung.*

'That women can't drive as well as men annoys the women's movement'

However, Esau claims that since there are a few cases where die Tatsache is acceptable before a dass-clause in German it cannot be ruled out as an element in underlying structure, and following the Kiparskys he therefore divides German predicates into two categories, factive and non-factive, on the basis of their eventual acceptability with the lexical head noun die Tatsache in surface structure. In other words, although Esau apparently has even less evidence of the use of lexical head nouns in German, he nevertheless chooses to take over the description proposed by the Kiparskys for English.

Apart from the distinction made between subordinate clauses preceded by die Tatsache and those without, Esau also claims that a division exists between "other combinations" (ibid.; 198), i.e., presumably also with nominalizations, as in (105). Claiming that die Tatsache is realized as a surface genitive when the ensuing
subordinate clause has been nominalized, he cites the following sentences as examples of this division (ibid.):

(105)(a) Die Tatsache seines unmöglichlichen Benehmens stimmte die Mutter traurig
The fact of his impossible behaviour made his mother sad

(105)(b) Die Tatsache seines ewigen Unterbrechens geht mir allmählich auf die Nerven
The fact of his eternal interruption goes me gradually on the nerves
'The fact of his continual interruption is gradually getting on my nerves'

(105)(c) Er bereut die Tatsache seines Ehebruchs nicht
He regrets the fact of his divorce not
'He does not regret the fact of his divorce'

(106)(a) *Die Tatsache seines Unfalls scheint mir
The fact of his accident seems to me

(106)(b) *Meine Frau erdenkt sich die Tatsache ihres Kochens
My wife plans the fact of her cooking

(108)(a) Sein unmögliches Benehmen stimmte die Mutter traurig
His impossible behaviour made his mother sad

(108)(b) Sein ewiges Unterbrechen geht mir allmählich auf die Nerven
His eternal interruption gets gradually on my nerves

(109)(a) Er bereut seinen Ehebruch nicht
He regrets his divorce not
'He does not regret his divorce'

(108)(a) *Sein Unfall scheint mir
His accident seems to me

(108)(b) *Meine Mutter erdenkt sich ihr Kochen
My mother plans her cooking

(108)(c) *Er glaubt seinen grossen Verlust
He believes his great loss

What Esau fails to mention, however, is that examples (105)(a)-(c) are much more natural sounding without die Tatsache, as we can see in examples (107)(a)-(c) below. Moreover, examples (106)(a)-(b) are just as unnatural-sounding without die Tatsache, suggesting another basis for their unacceptability (cf. (108)(a)-(c)).

(107)(a) Sein unmögliches Benehmen stimmte die Mutter traurig
His impossible behaviour made his mother sad

(107)(b) Sein ewiges Unterbrechen geht mir allmählich auf die Nerven
His eternal interruption gets gradually on my nerves

(108)(a) *Sein Unfall scheint mir
His accident seems to me

(108)(b) *Meine Mutter erdenkt sich ihr Kochen
My mother plans her cooking

(108)(c) *Er glaubt seinen grossen Verlust
He believes his great loss
We are clearly dealing here with an analysis which is superimposing observations about ENGLISH subordinate clauses onto GERMAN data, where they are inadequate to account for syntactic behaviour. If we reinterpret Esau's data in the light of Anderman's analysis, however, we can more adequately account for the facts:

i. that certain predicates in German cannot be followed by a lexical head noun in surface structure, and

ii. that many of the strictly speaking grammatical occurrences of lexical head nouns produce a sentence which is unnatural-sounding, and

iii. that the examples in (105)-(108) above exhibit certain anomalous behaviour patterns as far as the use of lexical head nouns is concerned.

We have suggested that unlike Swedish, English and Russian, where there would appear to be a constraint on "incomplete noun phrases" appearing in sentence initial positions (cf. Ch. 2, Section III), German does not appear to need any form of determiner for subordinate clauses appearing in this position. If we look closely at examples (105)(a)-(c), we see that here, syntactic insulation in the form of a head noun appears to be provided in a context where it is not needed, i.e. with an element which already has NP status, which is hardly economic, and probably therefore affects the grammaticality of these sentences. As far as subordinate clauses in object position are concerned, we have argued that there are two types of matrix predicate in German - one which takes a direct S object, which we have seen consists of predicates of the verba dicendi type (cf. above), and the other which takes NP objects. We have further suggested that the LIKE FORM CONSTRAINT rules out the use of pronominal head nouns with subordinate clauses in subject and object position, and that German therefore does not use a das pronominal element in these positions. Now, we have also seen that with certain predicates the subordinate S in object position is preceded by an es. This, we have argued, is either the es of Extraposition which may be inserted whenever a subordinate clauses is moved to the right; alternatively we may be dealing with the es of Right Dislocation which is a pronominal dummy, obligatorily inserted when a subject already broached, or in other words, one which
refers back, has been moved to the right. This es may be replaced by the demonstrative das (cf above, Section VI), which may be used when anaphoric reference is established. According to Esau, however, sentences like the following (a) sentences contain an es which "must be considered a proform of the lexical head of the complement, whether this lexical head noun is die Tatsache or perhaps some other noun" (ibid.; 210-211):

(109) (a) Der Mann bereut es, dass er nach Berlin gefahren ist
'The man regrets it that he to Berlin travelled is

(109) (b) Der Mann bereut, dass er nach Berlin gefahren ist
'The man regrets the fact that he went to Berlin'

(110) (a) Das Mädchen versteht es nicht, dass sie ihren Vater nicht sehen darf
'The girl understands it not that she her father not see may

(110) (b) Das Mädchen versteht nicht, dass sie ihren Vater nicht sehen darf
'The girl does not understand that she may not see her father'

What Esau claims, then, is that the (a) versions of the above examples contain an optional es which is a "reduced form" of die Tatsache (ibid.). Examples (111)-(113) below, on the other hand, may not, according to Esau's description, feature an es in surface structure (ibid.):

(111) *Der Junge glaubt es, dass er die Schule schwänzen kann
'The boy believes it that he the school cut can

(112) *Ich weiss es, dass der Regenbogen mehrfarbig ist
'I know it that the rainbow multicoloured is

(113) *Der Fahrer behauptet es, dass er den Wagen nicht gesehen hat
'The driver asserts it that he the car not seen has
In other words, according to Esau's analysis, one type of es in German is the proform of the lexical head noun and is restricted to appearing optionally with so-called factive verbs (this he calls the 'factive es') (ibid.; 212). There is also, Esau claims, another, different type of es which he calls the "expletive es". He exemplifies the "expletive es" as follows, where the (b) sentence with es is an alternative form to the (a) sentence without (ibid.; 211):

(114) (a) Dass er zu Hause ist, ist möglich
That he at home is is possible
'That he is at home is possible'
(114) (b) Es ist möglich, dass er zu Hause ist
It is possible that he at home is
'It is possible that he is at home'
(115) (a) Dass ich ihn nicht mehr sehen werde, ist wahrscheinlich
That I him not more see will is probable
(115) (b) Es ist wahrscheinlich, dass ich ihn nicht mehr sehen werde
It is probable that I him not more see shall
'It is probable that I shall not see him again'

The 'expletive es' differs from the 'factive es' according to Esau, in that it is not a proform of the lexical head of the complement. The difference, he claims, may be demonstrated for German with a verb such as erwarten (to expect) which is 'ambiguous with regard to factivity' (ibid).

(116) (a) Ich habe es erwartet, dass er zum Essen da ist. Sonst
I have it expected that he to the meal there is. Otherwise
kommt er nie, aber wenn es etwas zu essen gibt, lässt
comes he never, but when there something to eat is, lets
es er sich sehen
er refl see
he refl see
'I expected it, that he would be at the meal. He never
comes otherwise, but whenever there is (some) food on
the go, he turns up'
Esau claims that the introduction of the "factive es" in (116)(b) completely changes the meaning of (116)(a). Hence, he argues, the proposition in the dass-clause of (116)(a) is presupposed to be true by the speaker, while in (116)(a), he claims, the presupposition is that it is not true (ibid.).

However, there are several disturbing inconsistencies in Esau's description which merit closer examination.

Firstly, since we have repeatedly argued that there is little justification for the assumption of an underlying lexical head noun which, according to Esau's theory must undergo obligatory pronominalization in the vast majority of cases, we must reject Esau's claim that the es of non-extraposed subordinate clauses like (116) must be considered a "proform of the lexical head of the complement, whether this lexical head noun is die Tatsache or perhaps some other Noun" (ibid.; 210-211).

Moreover, it is difficult to see how the pronominalized form of a neuter feminine singular noun like die Tatsache can ever be realized as a neuter proform, i.e. es, a fact which we shall be returning to below.

Returning to the examples in (111)-(113), therefore, we must argue that Esau's claim that these predicates cannot appear with es in surface structure is too strong. Provided that anaphoric reference is established, es may indeed appear after these predicates,
as can be seen from examples (117)-(119) below, where the es is the es of Right Dislocation:

(117) Der Junge glaubt es ja dass er die Schule schwänzen
The boy believes it yes that he the school cut
kann. (Er zweifelt aber nur daran ob es der
can. He doubts though only dar+prep if it the
Mühe wert ist)
trouble worth is
'The boy believes it that he can play truant from school. He just doubts whether it's worth the trouble'

(118) Ich weiss es (doch) dass der Regenbogen mehrfarbig
I know it of course that the rainbow multi-coloured
ist (will diesen aber ganz schwarz mahlen)
is want this one but all black to paint
'Of course I know that the rainbow is multi-coloured, but I want to paint this one all black'

(119) Der Fahrer behauptet es, dass er den Wagen nicht gesehen
The driver claims it that he the car not seen
hat. (Der Anwalt dahingegen meint, dass er dieses Faktum
has. The lawyer however thinks that he this fact
ganz verschweigen soll)
completely suppress should
'The driver is claiming that he didn't see the car. The lawyer, on the other hand, thinks he should suppress the fact'

Just as there are different types of es and das in German, depending on the syntactic environment in question, so there would also appear to be different types of lexical head noun available for use in clearly defined functions. Hartung (1964) discusses the use of lexical head nouns in German, separating them into two major categories. Firstly, he describes a particular set of abstract lexical head nouns which are characterized by their occurrence with a definite article only. He names this set of lexical head nouns 'Quasinominalisierungen' (Quasinominalizations) (ibid.; 68), claiming that their primary syntactic function is to "point forward to the clause which follows them" (ibid.).
That their function is primarily cataphoric and only marginally, if at all semantic, is strongly supported by the fact that they may be omitted, as in examples (120)(b) and (121)(b) below (ibid.; 79):

(120)(a) Die Tatsache, dass er gekommen ist, stört mich nicht  
The fact that he come is bothers me not  
'The fact that he came does not bother me'
(120)(b) Dass er gekommen ist, stört mich nicht  
That he come is bothers me not  
'That he came does not bother me'
(121)(a) Er vergass den Umstand, dass die Zuhörer seine Ansichten nicht kannten  
He forgot the circumstance that the listeners his views not knew  
'He forgot the fact that the listeners did not know his views'
(121)(b) Er vergass, dass die Zuhörer seine Ansichten nicht kannten  
He forgot that the listeners his views not knew

In the analysis we are adopting, "Quasinominalisierungen" may also be classed as ancillary markers of subordinate status of the 'place holder' variety, since they optionally provide a clearer signal of the subordinate status of the clause to which they serve as a lexical head noun. By contrast, the second type of head noun which Hartung discusses is those abstracts like Feststellung (assertion, observation), which have parallel constructions with related verbs, as in (122)(a)-(b)(ibid.). Unlike Quasinominalizations, the omission of this type of head noun causes the meaning of the sentence to change, as in (122)(c), so that these abstract head nouns cannot be classed as 'empty', optional elements:

(122)(a) Seine Feststellung, dass die Sonne scheint, ist richtig  
His assertion that the sun shines is correct
(122)(b) Er hat festgestellt, dass die Sonne scheint  
He has asserted that the sun is shining
(122)(c) Dass die Sonne scheint, ist richtig  
That the sun shines is correct
In other words, whereas the head noun of the subordinate clause in (122)(a) is an obligatory element, the lexical head nouns which Hartung has dubbed 'Quasinominalisierungen' are in fact semantically empty. They appear in those syntactic environments where the LIKE FORM CONSTRAINT rules out the use of a pronominal head noun. Alternatively, with subordinate clauses governed by a preposition governing the dative or genitive case where, as we saw above (Section IV), the pronoun may appear in combination with the preposition, such lexical head nouns appear optionally and have parallel forms as in (123) (Esau, op. cit.; 218):

(123)(a) Der Verbrecher rasiert sich aus dem Grunde nicht, um 
not mistaken to be
'The criminal does not shave for the reason that he does not want to be mistaken for someone else'

(123)(b) Der Verbrecher rasiert sich deshalb nicht, 

um nicht verkannt zu werden

(123)(c) Der Verbrecher rasiert sich nicht, um nicht verkannt zu werden

'the criminal does not shave in order not to be mistaken for someone else'

However, according to Esau's (op. cit.) analysis, the lexical head noun der Grund in (123)(a) is replaced in (123)(b) by one of a number of possible 'proforms' (ibid.; 218). The absence of any head noun or proform in (123)(c) is accounted for by Esau by assuming that in this sentence there is zero realization of

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1These examples are from Esau (op. cit.), with my glosses added. German speakers react most unfavourably to these sentences, however, claiming they are perceptually confusing because of the multiple negatives involved. Syntactically speaking, however, they are adequate for the exposition of the point under discussion, which is why I decided to keep them in the original.
the underlying lexical head noun (ibid.). We have stated on numerous occasions that the greatest objection to such an analysis is that it is based on the assumption of an underlying head noun which does not ever appear in a sentence like (123) (c). As we have repeatedly said, there is no evidence at all to suggest that a lexical head noun underlies a sentence in which it is not realized in surface structure. The present analysis, however, can be readily adapted to account for three variations in (123), without creating any such problems. In (123) (b), some sort of syntactic insulation is required to separate preposition and infinitive marker, in which case a "pronominal combination" with an appropriately modified form of das is used (da(r), or the inflected version des, with the preposition wegen which requires a genitive form). The alternative to (123) (b) is to use a lexical head noun as in (123) (a) to intervene between preposition and subordinate clause. Unlike the pronoun in (123) (b), however, the lexical head noun is a lexical item, and as such it must be present in underlying structure, since morphological material cannot be inserted during the derivation of a sentence (Chomsky, 1965; 146).

Example (123) (c) is explained in the framework of Anderman's analysis, if we say that the prepositional node is pruned whenever there is no preposition in underlying structure, leaving no Determiner node to be filled (ibid.; 186). This is equivalent to saying that, if there is no pronominal head noun preceding the dass-clause then Preposition Deletion must apply obligatorily, since language-specific rules dictate that a combination of preposition + complementizer is unacceptable (ibid.; 236):

(124) (a) Er ärgert sich darüber, dass er nicht eingeladen wurde
He annoys refl. pro+prep that he not invited was
'He is annoyed at the fact that he was not invited'

(124) (b) Er ärgert sich, dass er nicht eingeladen wurde
He annoys refl. that he not invited was
'He is annoyed that he wasn't invited'
Thus Anderman's description would appear adequate to explain the differences between alternative constructions and to provide some sort of motivation for these alternatives, without having to resort to the assumption of underlying elements and semantic criteria which would not appear to apply with any consistency. Subordinate clauses governed by prepositions may be described in terms of the Determiner node being filled by a pronominal head, upon which the pronoun attaches to the preposition. If the pronominal head is absent, however, the transformation Preposition Deletion must apply, because otherwise an unacceptable combination of preposition + complementizer would result. The Determiner node may, in the case of subordinate clauses governed by a preposition, be filled either by this pronominal head or by a lexical head noun, thus providing a true alternative construction in this instance. Furthermore, as we stated above, Esau's analysis must be rejected as counter-intuitive on the grounds that he argues that lexical head nouns are pronominalized into da(r) + preposition. A sentence like
(126)(a) has two possible candidates for underlying lexical head nouns in accordance with Esau's description, as demonstrated in (126)(b)-(c):

(126)(a) Er prahlt darüber, dass seine Mutter Schuldirektorin ist
'He boasts about the fact that his mother is a head-mistress'

(126)(b) Er prahlt über die Tatsache, dass...

(126)(c) Er prahlt über den Umstand, dass

Since the first of these lexical head nouns is feminine and the second is masculine, it would appear more than difficult to relate them to a pronominal element like the one in (126)(a), which, according to Esau, is derived from a *neuter* pronoun. If we accept Anderman's analysis, however, according to which subordinate clauses preceded by pronominal head nouns have parallel versions with lexical head nouns, and may be used as alternative constructions, then the difference in gender between a lexical head noun like *die Tatsache* and a pronominal head noun like *es/das* is not at issue (Anderman, op. cit.; 187). We are not dealing with elements that "derive" from one another, but are dealing with alternative realizations of the Determiner node. Furthermore, as we stated above, Chapter 3, Section III, it would appear that the use of lexical head nouns with the complementizer was also found in earlier forms of German as a means of avoiding a combination of two like forms, so that Anderman's analysis would also seem to be supported by diachronic evidence.

In connection with his analysis of German, based on the assumption of an underlying lexical head noun with subordinate clauses, which is replaced by a proform in certain positions, Esau also claims that the anticipating proform *da(r) + preposition* is particularly
common with Purpose Clauses, even if the matrix does not normally take a preposition (ibid.; 250):

(127) Er hat es darum gemacht, damit du ihn endlich
He has it da+for done so that you him finally
in Ruhe lässt
in peace leave
'He did it so that (for the purpose that) you finally leave him in peace'

According to this analysis, the most frequently occurring combinations of da(r) + preposition are darum, dafür and dazu. Esau suggests that these proforms might be regarded as evidence for an underlying lexical head noun with the subordinate clause expressing purpose. ("Otherwise we would either have to assume a copying transformation that would copy the purpose clause and then be realized as a proform in the matrix sentence, or posit a placeholder, as is done by Hartung (1964)" (ibid.).) Esau provides the following examples which he claims demonstrate his theory (ibid.; 250-251):

(128) Der Mann erhielt das Brot zu dem Zweck, dass er
The man receives the bread for the purpose that he
seine Kinder damit ernähre
his children with it feed

(129) (a) Der Mann gab dem Jungen das Geld dafür, dass
The man gave the boy the money da + prep that
er seiner Mutter ein Geschenk kaufen konnte
he his mother a present buy could
'Ve did it so that (for the purpose that) you finally leave him in peace'

(129) (b) Der Mann gab dem Jungen das Geld für den Zweck dass...
for the purpose

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1"place holder" here = place filler. Cf. Chapter 2 Footnote
1 p. 63
In Esau's opinion, then, the above sentences are semantically equivalent and derive from a common underlying structure in which the presence of a lexical head noun is assumed (ibid.). While the similarity of these sentences cannot be questioned, the suggestion that $da(r) + \text{preposition}$ is a proform of the expressions $zu\ dem\ Zweck$ and $f\u00fc\ den\ Zweck$ must be rejected on the same grounds on which we rejected his other analyses of $da(r) + \text{preposition}$. As we showed above, the pronominal form $das$ can only appear in surface structure in German to insulate prepositions from complementizers. We saw that with subordinate clauses governed by a preposition, lexical head nouns provide an alternative construction to the use of the pronominal head noun. We have also stated that with subject and object clauses the appearance of lexical head nouns is the only possible realization of the Determiner node because the LIKE FORM CONSTRAINT rules out the use of a pronominal head in these constructions. However, as we saw, and as Esau himself claims, parallel sentences without lexical head nouns in these positions are usually considered more natural in German. I can therefore find no argument to support the suggestion that the combination $da(r) + \text{preposition}$ should be considered a proform of an underlying lexical head. The extremely dubious nature of Esau's claim is heightened when he goes on to suggest a reason why we do not find a preposition $um$ used with a lexical head noun related to the combination $darum$, which is found in German complex sentences, especially purpose clauses. Esau argues that $darum$ is probably a "fossilized form that served as a proform for an archaic $um\ des\ Grundes\ willen$, or some similar expression which has become in Modern German $aus\ dem\ Grunde$" (ibid.). No evidence is produced to support this conjecture, and I have been unable to find any such evidence myself, so that we must state again the obvious difficulty involved in postulating an underlying element which never appears (or has appeared) in surface structure.

Hence we must reject Esau's analysis of German, which attempts to explain the behaviour of subordinate clauses in terms of an underlying lexical head noun. We must conclude that there is no evidence for an underlying lexical head noun that is either
pronounalized into es or realized as a 'proform' da(r) + preposition in certain cases. If, on the other hand, we adopt the Determiner node analysis, bearing in mind that the LIKE FORM CONSTRAINT is operative in German, we can more adequately explain the function and behaviour of es, das, and the combination da(r) + preposition in relation to German subordinate clauses.

In summing up the analyses of subordination we have been looking at in this Chapter, it would appear that there is one point on which Anderman's (op. cit.) and Pütz's analysis converge, i.e. the importance of the nature of the matrix verb in determining the behaviour of subordinate clauses. It will be seen below that this point also has some bearing on Esau's misconception that underlying German subordinate clauses of one type is a lexical head noun which is equivalent to the fact, while other types of lexical head noun supposedly underlie other types of subordinate clauses. Let us begin by looking at some of the differences in behaviour between clauses embedded by verba dicendi, putandi and sentiendi and those with other matrix verbs which, as we recall, differ in underlying structure. The former type take a direct S complement (Anderman, op. cit.; 207) and with the latter a Determiner node is present in underlying structure, as represented in (103)(b) and (a) above, repeated below in (130)(a) and (b) respectively:

(130)(a) \[
\begin{array}{c}
NP \\
\textbf{S} \\
\end{array}
\]

(130)(b) \[
\begin{array}{c}
NP \\
\textbf{Det} \\
\textbf{S} \\
\end{array}
\]

Both Anderman (op. cit.; 188) and Pütz (op. cit.; 75) explain independently that Subject Raising is not possible with a sentence NP that dominates another element apart from S. Both also show, moreover, that this is not compatible with the Kiparskys' view that it is the "factive" nature of these predicates that blocks Subject Raising. In
fact, both independently show that Subject Raising is indeed possible with some of the predicates which must be classed as "factive", as in (131) and (132) below (Pütz, op. cit.; 73; Anderman, op. cit.; 205):

(131)(a) Peter weiss, dass er bei seinen Freunden gut aufgehoben ist
Peter knows that he with his friends well looked upon is
'Peter knows that he is well in with his friends'\(^1\)

(131)(b) Peter weiss sich bei seinen Freunden gut aufgehoben
Peter knows refl with his friends well looked upon
'Peter considers himself well in with his friends'\(^1\)

(132)(a) I believe that John is a fraud
(132)(b) I believe John to be a fraud

(Pütz, ibid.)

Moreover, Pütz has pointed out that Subject Raising does indeed occur with some verbs in German, in particular hören, fühlen, etc., even when they are used in a so-called "factive" sense (op. cit.; 76):

(133)(a) Ich habe nicht gehört, dass er gekommen ist
'I have not heard that he come is
'I didn't hear that he came'

(133)(b) Ich habe ihn nicht kommen hören
'I have him not coming heard
'I didn't hear him coming'

(133)(b) is an alternative construction to (133)(a) and must be considered "factive". Thus, Pütz concludes "die von den Kiparskys vorgeschlagene Analyse (kann) nicht gänzlich stimmen" (ibid.) (i.e. that the analysis proposed by the Kiparskys cannot be totally correct).

Another characteristic of German predicates which is much more satisfactorily explained in terms of the Determiner Node Theory than the Kiparskys' theory, is that, whereas other predicates must be followed by dass-clauses, *verba dicendi*, *putandi* and *sentiendi*
generally allow unmediated subordinate clauses in Modern German (Pütz, op. cit.; 75-77):

(134) Willy weiss, keiner hat Recht
Willy knows no one has right
'Willy knows no one is right'

(135) Franz sagt, Rainer kann nichts, Rainer meint, Franz irrt
Franz says Rainer knows nothing Rainer thinks Franz is wrong

(136)(a) *Willy bedauert, er kennt Herbert so gut
'Willy regrets he knows Herbert so well'

(137)(a) *Adolf beklagt, er ist kein Spanier
Adolf laments he is no Spaniard

(137)(b) Adolf beklagt, dass er kein Spanier ist
Adolf laments that he no Spaniard is
'Adolf laments (the fact) that he is not a Spaniard'

Anderman explains that with verba dicendi etc., subordinate clauses function syntactically as object NPs to the matrix verb, but are not required to be noun-like because these predicates do not display the frequency of occurrence with lexical nouns that is found with other transitive verbs. In other words, since these predicates are more frequently followed by a sentence, unmediated subordinate clauses are allowed, since their syntactic status as direct S objects is beyond doubt. Anderman captures this difference by suggesting the underlying structures in (138)(a) and (b) for such true S complements (ibid.; 207):

(138)(a) NP
\[ \text{S} \rightarrow \text{COMP} \rightarrow \text{S} \]

(138)(b) NP
\[ \text{S} \rightarrow \text{COMP} \rightarrow \text{S} \]

The unmediated subordinate clauses of (134) and (135) would thus have the underlying structure of (138)(b). As shown by (138)(b), the absence of the Determiner node leaves the COMP node without syntactic insulation and as a result omission of the complementizer is possible.
Subordinate clauses preceded by an underlying Determiner node, on the other hand, are insulated and hence the complementizer cannot be omitted, as in (136) and (137)(a) above (ibid.; 209-10).

English supplies further evidence that the complementizer is omitted more frequently with subordinate clauses exhaustively dominated by NP. The omission of that is ruled out with constructions like (138)(b), where in addition to the Determiner node, the N provides extra insulation (ibid.):

(139) *The fact he is ill distressed me

Moreover, an analysis of the frequency of occurrence of that with object clauses undertaken by Aijmer (1967) shows that that is omitted most frequently after those verbs which are predominantly verba dicendi, putandi and sentiendi (ibid.; 37).

Pütz points out also that there is evidence from other parts of German syntax that subordinate clauses which incorporate an underlying Determiner node (to use our terminology) cannot omit dass in surface structure (ibid.; 78):

(140) Das Glück, dass Peter viel Geld gewonnen hat, hat ihn für die Sorgen des kleinen Mannes blind gemacht
'Peter's luck in winning lots of money has blinded him to the troubles of the little man'

(141) *Das Glück, Peter hat viel Geld gewonnen, hat ihn für die Sorgen des kleinen Mannes blind gemacht
'The luck, he won a lot of money has blinded Peter to the troubles of the little man'

(142) *Die Eigenart vieler Leute, sie essen kein Fleisch, betrübt den Metzger
'The peculiarity of many people they eat no meat depresses the butcher'

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1 My glosses and translations.
Compare these examples with (143) where the subordinate clause follows a matrix of underlying structure (138)(a) and the unmediated subordinate S is permitted:

(143) Peters Behauptung, Paul sei krank, hat uns nachdenklich gestimmt
Peters assertion Paul is ill has us pensive made
'Peter's assertion that Paul is ill put us in a pensive mood'.

The lack of syntactic insulation resulting from the absence of the Determiner node appears to have further important implications for the syntax of German. According to the Kiparskys' analysis, (ibid.; 394) "factivity" blocks the subjunctive in German, while it is optional with "non-factives". They quote the following examples as evidence for this claim (ibid.):

(144) Er behauptet dass die Erde flach sei (ist)
He asserts that the earth flat is is
SUBJ

"He asserts that the earth is flat"

(145) Er versteht, dass die Erde rund ist (*sei)
He understands that the earth round is SUBJ

The matrix of (144) is a so-called non-factive verb and the matrix of (145) is a factive verb. Esau (op. cit.; 201) rejects the Kiparskys' claim that the factivity v. non-factivity distinction is the key to the use of the subjunctive in German, however. As counter-evidence he cites the following examples where the subjunctive is blocked even though the predicates in the matrices are non-factive (ibid.; 201):

(146) Es ist möglich, dass er zu Hause ist (*sei)
It is possible that he at home is SUBJ

(147) Es ist wahrscheinlich, dass die Erde rund ist (*sei)
It is probable that the earth round is SUBJ

(148) Ich glaube, dass der Mann krank ist (*sei)
I believe that the man ill is SUBJ

My glosses and translations.
Kiparsky and Kiparsky have argued, however, that a further distinction can be made between types of non-factive subordinate clauses, namely between

(149) (a) WHAT THE SPEAKER BELIEVES TO BE TRUE
(149) (b) WHAT THE SPEAKER ASSERTS TO BE TRUE

Examples (146)-(148) all fall into the category (149) (a), so that the rule would appear to present itself, according to the Kiparskys' analysis, that when the dass-clause contains a proposition that the speaker believe to be true, no subjunctive is possible, while the subjunctive is possible when the dass-clause contains a proposition that the speaker asserts to be true, as in (150) (Esau, op. cit.; 202):

(150) Die Frau erklärt ihrem Sohn, dass der Schnee weiss ist (sei)
The woman explains to her son that the snow white is is SUBJ
'The woman explains to her son that the snow is white'

However, on considering further evidence, Esau is forced to reject even an analysis which differentiates between factives and two sub-groups of non-factives (op. cit.; 203), since the following examples do not behave according to the characteristics supposedly pertaining to the group they belong to within a factivity framework:

(151) Er sagte, dass sein Vater nicht zu Hause ist (sei)
He said that his father not at home is is SUBJ
'He said that his father is (was) not at home'

(152) Er behauptet, dass sie nicht kommt (komme)
He asserts that she not comes is SUBJ
'He said that she is not coming'

(153) Er glaubte, dass sie ihn nun endgültig aus dem Haus
He believed that they him now finally out of the house
thrown have is SUBJ
'He believed that they had finally thrown him out of the house'
(154) Er nimmt an, dass ich das Buch nicht gelesen habe (hätte)  
He presumes that I the book not read have SUBJ  
'He presumes that I have not read the book'  

(155) Er wünschte, dass er Millionär (*ist) wäre  
He wished that he a millionaire is SUBJ  
'He wished he were a millionaire'  

(156) Er wünscht, dass man ihn endlich in Ruhe liesse (*lässt)  
He wishes that one him finally in peace leave INDIC  
'He wishes that they would finally leave him in peace'  

(157) Der Bauer befahl dem Knecht, dass er den Kuhstall ausmisten  
The farmer ordered the lackey that he the cowshed muck out  
sollte (*soll) should INDIC  
'The farmer ordered the lackey to muck out the cowshed'  

(158) Die Mutter sagte, dass die Kinder nicht immer auf die  
The mother said that the children not always on the  
Bäume klettern sollten *(sollen)  
trees climb should INDIC  
'The mother said that the children shouldn't always be  
climbing the trees'  

Now, while Esau prefers an analysis based on the operation  
of semantic properties such as [+Assertion] [+Wish], [-Belief]  
and [+Command] (ibid.; 204), I should like to suggest that there  
is a less cumbersome description of the operation of the subjunctive  
rule based on the Determiner Node Theory. It seems more economic  
to talk in terms of a theory which accounts for basic syntactic  
differences on the grounds of particular structural properties  
than to talk in terms of cumbersome and often unspecific or unspecifiable  
semantic features. Moreover, when we take into account analyses  
of other, related languages, notably Swedish and English, we shall  
see that there are basic overriding psychological considerations  
involved in an analysis of the use of the subjunctive and Reported  
Speech, which seem to hold to a greater or lesser extent across  
linguistic boundaries. The interplay of psychological factors  
with basic structural characteristics may prove to be of particularly  
great importance to the production, comprehension and acquisition
of such constructions, particularly with regard to the use v. non-use of the subjunctive. It therefore would seem worthwhile to discuss such constructions at greater length, which we shall do in Chapters 4-5 below.

In this Chapter we have examined the function of primary and ancillary markers of subordination in German. We have seen that constraints specific to German, i.e. the V/2 CONSTRAINT and the LIKE FORM CONSTRAINT, affect the tolerance of pronominal head nouns in this language to the extent that the only pronominal realization of the Determiner node permissible in the surface of a German sentence is the combination da(r) + preposition. As in English and Swedish, the behaviour of complements governed by a verb of 'saying', 'thinking' or 'believing' in German have been seen to be quite different from that of complements embedded by other types of verb. However, we saw that this is not due to the fact that there is an underlying LEXICAL head noun in the deep structure of subordinate clauses which are embedded by a verb other than a verb of 'saying' 'thinking' or 'believing', as Esau (1973) suggests. Nor has it anything to do with an underlying pronoun es, as Pütz (1975) suggests. In particular, we have argued that the notion 'factivity' has little to do with the use of the subjunctive in German (cf Kiparsky and Kiparsky, 1969). Instead, we have suggested that the Determiner Node Theory (Anderman, 1978) can help us to explain the differences in behaviour between complements embedded by these two groups of verbs (i.e. verba dicendi etc. v. other verbs). In the next Chapter, we shall be examining the function of the subjunctive in German in greater detail within the context of Reported Speech, a particular type of dass-clause which most clearly shows the difference between clauses embedded by verba dicendi and other types of subordinate clause.
CHAPTER 4

REPORTED SPEECH IN MODERN GERMAN: A REAPPRAISAL

0. Introduction

The description of Reported Speech in German has always been problematic, perhaps because, as we shall see below, there would at first glance appear to be many ways of reporting speech in this language. We suggested in the preceding Chapter that German has an extremely comprehensive system of markers which it uses to clarify syntactic relations. In the present Chapter we shall be reexamining the role of some of the traditional markers of Reported Speech in an attempt to more adequately describe the function of each particular type of marker. However, our first task will be to try and ascertain what exactly Reported Speech is, that is to say, how it is constructed and how it differs from Direct Speech. In so doing, we shall attempt to distinguish those markers which differentiate Indirect Report from other types of subordinate clause construction in German. Once isolated, we shall endeavour to ascertain exactly how the absence versus presence of these features affects the sentence as a whole. For example, we shall be asking the question whether the use of the subjunctive versus the indicative affects the meaning and function of the sentence. In order to characterize such essential features, a considerable reinterpretation of the terms 'Direct Speech' and 'Reported Speech' will prove necessary. We shall propose a relative shift in the traditional approach to the function of the subjunctive and other markers of Reported Speech so that the traditional treatment of Indirect Speech in German, most often given in terms of semantic function, will be reinterpreted in terms of the syntactic function of marking elements. The interesting facts which will come to light in this description of Indirect Speech will provide the basis for Chapter 5, the concluding chapter, where we discuss the overall differences between German and other languages with regard to subordinate clauses and the tolerance of Movement Transformations.
I. The Nature of Reported Speech

In order for a thought, opinion, belief, etc. to be reported, someone has to think it in the first instance. An utterance like (1)(a) is commonly agreed to be an independent statement which may be spoken, written or thought by a person A:

(1)(a) I hate lodgers

Sentence (1)(b), on the other hand, would be classed as speaker S reporting the opinion of speaker A to listener(s) L:

(1)(b) Tom said, "I hate lodgers".

This form of report which is dependent on the matrix said is classed by Hammarberg and Viberg (1976) as DIRECT REPORT, as distinct from the alternative form of report in (1)(c), which they term INDIRECT REPORT (ibid.; 1), basing their classification on observable differences in form:

(1)(c) Tom said that he hates lodgers.

Certain differences in form between Direct and Indirect Report are immediately obvious from these examples. The most striking difference is the absence of that from (1)(b) and its presence in (1)(c). Moreover, the deictic reference has changed in (1)(c).

In the subordinate clause in (1)(c) the third person is used, referring to the third person involved in the conversation, i.e. A, who hates lodgers. In (1)(b), on the other hand, the words of A are directly reported, so that the original reference, emanating from A himself, remains unchanged.

Other types of utterance (questions, thoughts, beliefs, etc.) can be reported in similar ways, with a similar division into Direct versus Indirect Report. The crucial distinction here is that Indirect Report involves subordination, which entails certain other adjustments determined by deictic reference, while Direct Report does not involve either of these but merely the direct rendering of the original utterance. The following examples of
indirectly and directly reported statements and questions illustrate these differences (cf. Hammarberg and Viberg, ibid.).

(2) Non-reported Question, i.e., original utterance:
Did Christina ever marry?

(3)(a) Direct Report
Paul asked me, "Did Christina ever marry?"

(3)(b) Indirect Report
Paul asked me if Christina ever married.

(4) Non-reported Statement, i.e., original utterance
Local rents are very high

(4)(a) Direct Report
The councillor explained to the meeting, "Local rents are very high".

(4)(b) The councillor explained to the meeting that local rents are very high.

The following analysis will concentrate on those Indirect Reports that comprise a reported statement, or in other words, those that involve a that or dass clause.

A first, crucial distinction has been made here, then, that the traditional notion "Reported Speech" must be further subclassified into "Direct Report" and "Indirect Report", in order to account for primary differences in syntactic form and status. "Direct Report" involves no subordination or deictic changes, while its counterpart "Indirect Report" involves (at least) two processes. For this reason it seems appropriate to afford special attention to this type of sentence in an analysis of subordination.

Hammarberg and Viberg (op. cit.; 2) regard Indirect Report not as a syntactic class, but as a functionally defined sentence type. They see "no clear borderline between Indirect Report and other types of hypotactic sentences" (ibid.), choosing to concentrate their analysis of subordination on sentences governed by verbs of "saying" (say, tell, ask, report, write, etc. (ibid.)) and "thinking" (think, believe, assume, know, remember, etc.) "since these sentences are constructed exactly like reported actual speech in Swedish and present the same learning problems" (ibid.). Now, while agreeing with their choice of sentence types on which to
concentrate, i.e., sentences governed by matrices of the *verba
dicendi, putandi* type which, as we have seen, show markedly different
behaviour from other matrix verbs, I cannot agree with their general
categorization of Report without qualification. Hammarberg,
Viberg (op. cit.; 1) have stated that:

"Report is, however, not a syntactic class, but rather a functionally
defined sentence type".

Now, while I must concur that Indirect Report constitutes
a functionally defined sentence type -- i.e. a sentence which
has the function of reporting a thought, statement, belief, feeling,
etc., I must necessarily also regard it as syntactically distinct,
in view of our earlier comments about the difference in underlying
structure between a clause embedded by one of the *verba dicendi*
- and those embedded by other matrices. If we take into account
their differences in underlying structure (i.e. *verba dicendi*
have the underlying structure in (5)(b) and not (5)(a)) (Anderman,
op. cit. 179), we must necessarily consider Indirect Report as
a different syntactic class from other sentence types dominated
by other types of matrix verb. However, I do not regard these
two characteristics as mutually exclusive or incompatible, but
merely as necessary distinctions to be maintained in the present
analysis.

Thus we have isolated two important distinctions to be made
when considering Indirect Report. Above we stated that Indirect
Report is a subordinate clause construction which may involve
deictic changes. We must now add that the behaviour of the subordinate
clause involved in this type of construction differs from that
of other types of clause in that the clause is dominated exclusively
by the NP node, as in (5)(b). Because of this difference, this
type of subordinate clause can undergo transformations which are blocked by the Determiner node of constructions of type (5)(a), e.g. Neg-transport and Subject Raising, since type (5)(b) clauses lack the syntactic insulation of the Determiner Sister Node (cf. Chapter 2, Section III). We shall discuss the implications of the differences in the tolerance to Emphasizing Movement Transformations below (Section III), and in the wider context of Chapter 5.

Translated into real terms, the general distinctions between clauses embedded under *verba dicendi* and other clauses are then subject to language-specific conditions, as we saw in Chapter 3. Since the aim of the present Chapter is primarily to isolate and describe the characteristics of Indirect Speech in German, we shall now concentrate on the language-specific rules operative in this language, drawing comparisons with other languages when this seems to contribute to a fuller description of German.

Consider the following five alternative constructions in German:

(6)(a) Er sagte: "Ich bin nicht mitgegangen"
He said I am not with-gone
'He said, "I did not go with them".'

(6)(b) Er sagte, er ist nicht mitgegangen
He said he is not with-gone
'He said he did not go with them'

(6)(c) Er sagte, er sei nicht mitgegangen
He said he is not with-gone
'SUBJ
'He said he did not go with them'

(6)(d) Er sagte, dass er nicht mitgegangen ist
He said that he not with-gone is
'He said that he did not go with them'

(6)(e) Er sagte, dass er nicht mitgegangen sei
He said that he not with-gone is
'SUBJ
'He said that he did not go with them'

From the glosses of the above sentences we can see that German makes slight differences in these constructions which English
does not. Hammarberg and Viberg (op. cit.) have studied the means employed by a number of languages to construct Indirect Report. These devices include the use of complementizers, changes in word order, the use of the Subjunctive and deictic adjustments, and most, if not all are present in the five German examples above. We shall now look at each of these features in turn and attempt to isolate their function within the sentence, contrasting where necessary the effect of their absence versus presence on the sentence.

II.a. Word Order and the Complementizer DASS

In our analysis of subordination in German we have argued that verb-final word order must be considered a primary marker of subordination (cf. Chapter 2, Section I). Examples (6)(d) and (e) above both manifest the presence of verb-second word order in the reported clause. Examples (6)(a)-(c), on the other hand, have SVO word order in the reported clause, which, as we also saw in Chapter 2, is the word order of main clauses. Moreover, sentences (6)(d) and (e) are introduced by the complementizer dass, while (6)(a)-(c) are not. We have also seen that without the complementizer dass, verb-final word order is unacceptable in the reported sentence. The following alternatives are therefore unacceptable in German:

(7)(a)    *Er sagte, er nicht mitgegangen sei
  He said he not with-gone is
   SUBJ
(7)(b)    *Er sagte, er nicht mitgegangen ist
  He said he not with-gone is
(8)(a)    *Er sagte, ich nicht mitgegangen sei
  He said I not with-gone am
   SUBJ
(7)(b)    *Er sagte, ich nicht mitgegangen bin
  He said, I not with-gone am

Similarly, verb-final word order is an automatic concomitant of the appearance of the complementizer dass in surface structure, as in (6)(d)-(e) above, (cf. Chapter 3), so that the sentences in (9)-(10) below must normally be regarded as ungrammatical.
We shall return to this point below:

(9)(a) *Er sagte, dass er sei mitgegangen  
He said that he is with-gone  
'He said that he went with them'

(9)(b) *Er sagte, dass ich sei mitgegangen  
He said that I am with-gone  
'He said that I went with them'

(9)(c) *Er sagte, dass er ist mitgegangen  
He said that he is with-gone

(9)(d) *Er sagte, dass ich bin mitgegangen  
He said that I am with-gone

(10)(a) *Man behauptet, dass es sind im zwölften Jahrgang zwei  
One says that there are in the 12th year two  
gruppen zu sehen

(10)(b) *Man behauptet, dass es seien im zwölften Jahrgang  
One says that there are in the 12th year two  
Gruppen zu sehen

Hence we can say that the primary markers of subordination in German, the complementizer dass and verb final order, are present in examples (6)(d)-(e) and absent from (6)(a)-(c). Since, according to our analysis of the term "subordinate clause" in German (cf. Chapter 3, Section I), it is one which is introduced by a COMP node and which displays verb final order, (6)(d) and (6)(e) ought to be classed as subordinate clauses, while (6)(a)-(c) must be dismissed as such, since the primary markers are absent from the reported clauses of these sentences. Hammarberg and Viberg (ibid.) have stated that Direct Report does not involve either subordination or deictic changes. We can therefore dismiss example (6)(a) above from our analysis of Indirect Report, since it clearly has all the features of Direct Report and none of Indirect Report. The question still remains, however, how do we class (6)(b) and (c), which are clearly not subordinate in status according to our definition, but which
have undergone deictic changes? Moreover, can we really class (6)(e) and (6)(f) as equivalent examples of Indirect Speech, when in (6)(e) the verb in the subordinate clause is in the indicative, while in (6)(f) it appears in the subjunctive? Before considering the use of the subjunctive in these sentences, let us first take a closer look at examples (6)(b) and (c) from the point of view of word order and the presence v. absence of the complementizer.

Sentences (6)(b) and (c) are examples of what Bresnan (1972) and Anderman (op. cit.; 204) call "unmediated complements". Pütz (op. cit.; 75-7) shows that verba dicendi etc. allow unmediated complements in German as a rule, while those verbs to which we have assigned the underlying structure in (5)(a) do not (ibid.; 75-7):

(11) Paul behauptet, Peter ist krank
    Paul asserts Peter is ill
(12) Franz sagt, Rainer kann nichts, Rainer meint, Franz irrt
    Franz says Rainer knows nothing, Rainer claims Franz is wrong
(13)(a) *Peter bereut, er ist nicht dagewesen
    Peter regrets he is not there-been
    'Peter regrets he was not there'
(13)(b) Peter bereut, dass er nicht dagewesen ist
    Peter regrets that he not there-been is
    'Peter regrets that he was not there'
(14)(a) *Adolf beklagt er ist kein Spanier
    Adolf deplores he is no Spaniard
    'Adolf deplores he is not a Spaniard'
(14)(b) Adolf beklagt, dass er kein Spanier ist
    Adolf deplores that he no Spaniard is
    'Adolf deplores (the fact) that he is not a Spaniard'

As we saw above, the tolerance of such constructions after verbs of "saying", "thinking", and "believing" can be explained in terms of verbs which predominantly co-occur with Ss and hence do not require the noun-like complements which are needed by verbs which govern subordinate clauses with the structure in (5)(a) (Anderman, op. cit., 205; cf. above Chapter 2, Section III).
The absence of the Determiner node in the underlying structure of verbs in the dicendi, putandi, sentiendi categories leaves the COMP node without syntactic insulation and as a result, omission of the complementizer is possible. However, the Determiner node is present before subordinate clauses after matrix verbs of other types, providing syntactic insulation and preventing the omission of the complementizer dass, as with examples (13)(a) and (14)(a) above (ibid.; 209-10). Sentences (6)(b)-(c) are subordinate clauses governed by a verb of "saying" and allow unmediated complements as an optional alternative to the construction with dass. This is equivalent to saying that sentence (6)(b) is an optional alternative to sentence (6)(e), while sentence (6)(c) is an optional alternative to sentence (6)(f). Most traditional grammars would agree with this explanation (cf. Duden 4 (1973) p. 580: "Eingebettete Sätze ohne Einleitewort werden besonders oft für dass-Sätze...verwendet, weil sie geschmiediger sind als diese"). (=Embedded clauses without a conjunction are often used in place of dass-clauses because they are less cumbersome).

Thus, our interpretation of these sentences is that those without dass and verb-final order in the reported clause are in fact optional alternative constructions to those with. But where does this leave our definition of a subordinate clause and of Indirect Report, if we say that sentences (6)(b) and (c) are instances of Indirect Report and yet have none of the primary markers of subordination, which status we said was an essential distinguishing feature of Indirect Report? We have already hinted at the fact that the status of Indirect Report is less than clear-cut, but before we can resolve this question we must first discuss the use of the subjunctive in these sentences in the hope that it might shed some light on the "special status" of (6)(b) and (c).

II.b. The Use of the Subjunctive in Indirect Report

Any description of Reported Speech in German must take into account the function of the subjunctive. This is particularly important, because, generally speaking, there is no agreement on the exact nature and function of the subjunctive. Duden (1973;
751-2) gives the following description of the functions of the indicative and the subjunctive:

"INDIKATIV = Wirklichkeitsform. Der Indikativ drückt aus, dass das mit der entsprechenden Verbform genannte Geschehen oder Sein tatsächlich und wirklich ist oder als tatsächlich und wirklich hingestellt, als gegeben angesehen wird."

('Indicative = Form expressing reality. The Indicative implies that the event or state expressed by the appropriate verb form is a fact and is real, or has been presented as a fact and real, and is considered "given".')

"KONJUNKTIV = Möglichkeitsform. Der Konjunktiv dient dazu, eine Aussage als Wunsch oder Begehren, als nur vorgestellt und irreal, oder als eine ohne Gewähr vermittelte Aussage eines anderen herzustellen."

(='Subjunctive = Form expressing doubt, possibility. The Subjunctive serves to communicate an utterance as a wish, a desire, or as imaginary and unreal, or as a reported statement for which the reporter assumes no responsibility."

In other words, according to Duden, the main function of the indicative is semantic in nature – namely, it expresses that an event, opinion or statement is 'given', 'real', 'true', or 'factual'. The subjunctive, on the other hand, has primarily a two-tiered semantic function: it can suggest that a statement or event is of doubtful credibility, or it can be used to pass on an utterance without comment on its credibility. Whilst including two other important functions of the subjunctive, that it is also used to express a wish or desire, Duden chooses not to mention in its glossary of technical terms, from which these extracts are taken, any SYNTACTIC function of the subjunctive. It would appear, however, that the subjunctive is a true ancillary marker of subordination in the sense that we have been using the term throughout this study, as we shall now see.
According to our characterization of ancillary markers of subordination, they can be viewed as optional devices in most cases, unlike e.g. complementizers and verb-final word order in German, which are obligatory signals of subordination and are therefore referred to as primary markers (cf. Chapter 2, Section I). However, as we saw in Chapter 2, there are particular occasions when the use of ancillary markers becomes obligatory. We have already discussed the ancillary markers dann and so which become obligatory whenever the word order of the conditional sentence cannot unambiguously mark syntactic status (as in (15)(a)), but which are optional when the primary markers (i.e. the conjunction and the word order) establish unequivocally the syntactic relations within the sentence, as in (16):

(15)(a)* Wenn du mit nach Amerika fahren willst, musst du schon heute beginnen, Geld zu sparen./?
If you wish to America travel want to must you already today begin money to save
EITHER: 'If you want to go with them to America, must you start saving money today?'
OR: 'If you want to go with them to America, you must start saving money today.'

(15)(b) Wenn du mit nach Amerika fahren willst, dann musst du schon heute beginnen, Geld zu sparen
If you wish to America travel want to, then must you already today begin, money to save

(16)(a) Wenn du nicht mitgehest, gehst du nicht mit
If you not with-go go you not with
'If you're not coming, you're not coming'

(16)(b) Wenn du nicht mitgehest, dann gehst du eben nicht mit
If you not with-go, then go you just not with
'If you're not coming, then you're just not coming'

Thus, we see that provided that there is sufficient signal from the primary markers, an ancillary marker like dann may be used optionally to provide syntactic reinforcement of the status of the clause. It MUST be used obligatorily, however, if the
primary markers (i.e. usually word order) fail to establish unequivocally the syntactic relationships within the sentence.¹

It would appear that apart from any semantic function, the subjunctive might also fulfill a similar syntactic function with regard to Indirect Report. It may be used optionally to confirm the dependency relationship between a reported clause and the matrix, as in (6)(b) and (6)(e) (repeated below in (17)(a) and (18)(a); cf. (6)(a) and (6)(d), repeated below in (17)(b) and (18)(b)). In (19)(a), however, it must be used obligatorily, since the status of the reported clause in (19)(b) (particularly in spoken German) is ambiguous between an independent, Direct Report and a dependent, Indirect Report:

(17)(a) Er sagte, er sei nicht mitgegangen
       He said he is not with-gone
       'He said he did not go with them'

(17)(b) Er sagte, er ist nicht mitgegangen
       He said he is not with-gone
       'He said he did not go with them'

(18)(a) Er sagte, dass er nicht mitgegangen sei
       He said that he not with-gone is
       'He said that he did not go with them'

(18)(b) Er sagte, dass er nicht mitgegangen ist
       He said that he not with-gone is
       'He said that he did not go with them'

(19)(a) Nie wieder werden sie das machen, (")
       Never again will they that do
       'Never again will they do that, he said'

(19)(b) Nie wieder würden sie das machen, sagte er
       Never again would they that do
       'Never again would they do that, he said'

¹Cf. Chapter 5, Section II for further discussion.
Moreover, if we front the reported clause in (17)(b), the use of the subjunctive becomes obligatory, since the sentence now lacks an initial signal of dependency in the matrix verb:¹

(20)(a)?(“) Er ist nicht mitgegangen, (”) sagte er
   He is not with-gone said he
   'He did not go with them, he said'
(20)(b) Er sei nicht mitgegangen, sagte er
   He is not with-gone said he
   SUBJ
   'He did not go with them, he said'

It is interesting to note that although Duden does not list this subordinating capacity of the subjunctive in Indirect Report amongst its primary functions, lip-service is paid to this use, albeit peripherally (Duden, op. cit.; 109-10):

"Der Indikativ findet sich relative häufig in abhängigen Sätzen mit Einleitewort, weil durch das Einleitewort die grammatische Abhängigkeit genügend deutlich gemacht wird:

(21) Er sagte, dass er an einem Buch **schreibt**²
    He said that he on a book writes
    INDIC
    'He said that he is writing a book'
(22) Er hat gefragt, ob er den Kranken **besuchen darf**²
    He has asked whether he the sick person visit may
    und was er ihm mitbringen kann
    and what he him with-bring can
    'He asked whether he could visit the patient and what
    he might take with him'

¹From the point of view of perceptual strategies this is hardly surprising. It is interesting to note that only 20% of all subordinate clauses appear initially in German, while 80% appear finally (Duden, op. cit.; 634).
²My numbering and glosses.
"Man sollte auch hier immer dann den 1. Konjunktiv setzen, wenn beim Indikativ unklar bleibt, dass indirekte Rede vorliegt,"¹

(i.e. whenever the use of the Indicative leaves any doubt that we are dealing with Indirect Speech, Subjunctive I should always be used).

Hence we might say that the use of the subjunctive in Indirect Report is of a related nature to that of other ancillary markers of subordination: it may optionally be used to underscore the syntactic dependency between the reported clause and the matrix, and MUST be used whenever this relationship is in doubt.

In connection with this function of the subjunctive it is of interest to note that there are two forms of the subjunctive in German. Subjunctive I, formed for the most part from the stem of the present tense of the verb, and Subjunctive II, formed for the most part from the stem of the past tense. Occasionally these forms of the subjunctive overlap with the Indicative forms so that, for example, the 1st person singular and 3rd person plural are identical in the Present Indicative and in Subjunctive I with the verb haben (to have) (i.e. habe and haben, respectively). Similarly, Subjunctive II and Past Indicative coincide in e.g. 3rd person plural of siegen (to win, conquer) (i.e. siegten in both instances).

Now, according to Duden, Indirect Speech should be in Subjunctive I PROVIDED that its forms are clearly recognizable as subjunctive and not interpretable as indicative (ibid.; 109). In Subjunctive I, however, only the following forms are clearly subjunctive:

i. 3rd person singular of all verbs (er habe (he has); er liebe, (he loves); träge (carries), all subjunctive - cf. er hat, liebt, trägt (indicative))

ii. the forms of sein (to be) (ich sei, wir seien (I am, we are, subjunctive), v. ich bin, wir sind (I am, we are, indicative))

iii. 1st person singular of modals (ich dürfe, könne, möge etc. (I might, could, might, subjunctive), cf. ich mag, kann, darf (I may, can, may, indicative))

iv. 1st person singular of wissen (to know) i.e. ich wisse (I know, subjunctive) cf. ich wisse (I know, indicative). (ibid.; 109, footnote 3).

¹My underlining.
The following sentences, then, exemplify this use of Subjunctive I in its unambiguous form: (ibid.):

(23) Er sagte, dass es Zeit sei zum Schlafengehen (Weiss)
He said that it time was to sleep-go
'Subj
'He said that it was time to go to sleep'

(24) (Der AA Chef sagte): Bei Takt und Verständnis werde kein Partner den anderen in wichtigen Entscheidungen überstimmen wollen (Der Spiegel, 1966)
'The AA boss said: No partner with tact and understanding would want to overrule the other on important decisions'

(25) Der Pilger diskutiert nicht darüber, ob er Christus begriffen habe oder nicht ob es eine unsterbliche Seele gebe
'The Pilgrim does not discuss whether he has understood Christ or whether there might be (such a thing as) an immortal soul'

It would appear that, if an overlapping form of Subjunctive I is used, the possibility of two-fold ambiguity might arise. Either the sentence might be mistaken for Direct Report, as in example (26)(a) below, or it might be taken as a comment by the otherwise indicated, glosses throughout are mine.
actual speaker S and not as a report of an utterance by the original speaker A, as in (24)-(28) below (ibid.; 109-10):

(26)(a) ?Ich habe das umsonst gemacht, sagte Hans
I have that in vain done said Hans

INDIC/SUBJ

EITHER: "I've done that in vain", said Hans'
OR: 'I'd done that in vain, Hans said.'

(26)(b) Ich hatte das umsonst gemacht, sagte Hans
I have that in vain done said Hans

ONLY: 'I had done that in vain, Hans said.'

(27) Karl erzählte mir, er wolle das Haus, das er von seinem
Karl told me he wanted the house that he from his
Vater geerbt hat, verkaufen
father inherited has to sell

'Karl told me he wanted to sell the house he inherited
from his father'

(28) Der Pilger diskutiert nicht darüber ob er Christus
The Pilgrim discusses not da+prep if he Christ
begriffen habe oder nicht ob es eine unsterbliche Seele
understood has or not if it an immortal soul
gabe, und was noch mehr dergleichen Fragen sind
is and what other similar questions are

(Nigg)

'The pilgrim does not discuss whether he has understood
Christ or whether there might be an immortal soul, and
whatever other such questions there are'

Hence we see that the subjunctive has a disambiguating function in certain sentences, but that Subjunctive I can also lead to another type of ambiguity in that if the form used overlaps with an indicative form, the function of the clause it appears in might be obscured.
In such cases Subjunctive II is used to clarify the status of the S as an Indirect Report (ibid.; 109):

(29)(a) Bernhard (sic) Shaw...hat einmal gesagt: Die Menschen wüssten einfach nicht, was dies Wort Kommunismus bedeute; sie würfen es ihrem Gegner an den Kopf, wie streitsüchtige Vorstädter einander tote Katzen Übern Zaun würfen (F. Wolf).

Bernard Shaw has once said the people knew simply not what this word communism means they throw it their opponent at the head like angry provincials one another dead cats over the fence throw

'Bernard Shaw said: 'People simply didn't know what the word Communism means; they threw it in the face of their opponents like angry provincials threw dead cats at one another over the garden fence.'

(29)(b) ?Bernhard Shaw hat einmal gesagt: (n)Die Menschen wissen einfach nicht, was das Wort Kommunismus bedeutet; sie werfen es ihrem Gegner an den Kopf, wie streitsüchtige Vorstädter einander tote Katzen Übern Zaun werfen (').

Bernard Shaw has once said The people knew simply not what the word Communism means they throw it to their opponent at the head like angry provincials one another dead cats over the fence throw

Example (29)(a) is clearly an Indirect Report of the words of Bernard Shaw, while (29)(b) is ambiguous between a Direct and an Indirect Report, or an Indirect Report with direct comments by the present speaker. This would seem equivalent to saying that in (29)(a) the presence of the subjunctive serves as a syntactic marker of the dependence of the indirect, reported clause on the matrix, which thus incidentally strengthens the semantic connection of the utterance with the subject of the matrix clause, i.e. Bernard Shaw in this case. As we stated above, traditional descriptions of the subjunctive
interpret its function from a semantic point of view, saying that it implies "the impossible", "improbable" or that it implies "ausdrückliche Nicht-Übernahme der (normalerweise bei einer Aussage angenommenen) Gewähr für die Richtigkeit" (Glinz, 1965; 110). Now, while this cannot be denied, it is, in my opinion, not the whole truth about the function of the subjunctive in sentences of this type. Indeed, this type of semantic interpretation does not cover all the instances of Indirect Report possible, since it cannot possibly account for the use of the subjunctive with certain types of reported question. The subjunctive cannot tell us anything or negate anything about the truth value, credibility or reliability (cf. die Gewähr) of something which is already a de facto expression of uncertainty etc. In other words, you cannot support or question the intrinsic truth value of a question:

(30) Kämen sie erst morgen Mittag, fragte Hans?
    Come they first tomorrow noon asked Hans
    '"Aren't they coming till tomorrow afternoon", asked
    Hans'

(31) ?Kommen sie erst morgen Mittag, fragte Hans
    INDIC

It seems to me that the sole function of the subjunctive in the above example is to signal that an Indirect, not a Direct Report is being made. And since this function is undeniably similar to that of the other ancillary markers of syntactic status we have hitherto discussed, the subjunctive must surely be a candidate for inclusion in our list of ancillary markers. The point to be made here is, I think, that the presence of the subjunctive is not a remarkable thing, if we consider that at least part of its function is to emphasize that what is being said in the reported S is subordinate to, or dependent on the matrix clause. This is surely only a different way of saying that the use of the subjunctive allows the speaker to pass on information without commenting on the truth value of that utterance he is reporting. The use of the subjunctive in this function seems to me to be a subtle marker of subordinate status, and by stressing the dependent status of
the clause it simultaneously achieves the effects quoted in Duden (op. cit.) and Glinz (op. cit.).

Moreover, I feel that it would be more accurate to single out the use of the INDICATIVE in sentences like (17)(b) and (18)(b) for special consideration (repeated below in (32) and (33), respectively:)

(32) Er sagte, er ist nicht mitgegangen
He said he is not with-gone
'He said he did not go with them'
(33) Er sagte, dass er nicht mitgegangen ist
He said that he not with-gone is
'He said that he did not go with them'

The choice of the use of the subjunctive v. indicative in example (33) seems to be made primarily on semantic grounds. Since the reported clause is marked unequivocally as dependent, Indirect Report by the complementizer and verb-final word order, the semantic contrast true versus untrue seems the most salient reason for using the indicative as opposed to the subjunctive. The use of the subjunctive in this sentence is truly optional. The indicative tells us that the speaker probably agrees with the content of the subordinate clause, while the subjunctive version does not. Remarkably, then, in this instance, the use of the indicative appears to provide more information about the relationship between the reported clause and the matrix than the use of the subjunctive. By contrast, sentence (30) cannot be said to use the indicative v. the subjunctive in this way, since there are no primary markers of subordination in the reported clause of this sentence. In fact, the only way the reported clause differs from its Direct Speech equivalent (example (34)) is that deictic adjustment of person and verb form has been made:

(34) Ich bin nicht mitgegangen
I am not with-gone
'I did not go with them'

It therefore seems appropriate to consider the sentence in (29) in the light of the following discussion of deictic adjustment.
II.c. Deictic Adjustment

According to Hammarberg and Viberg (1976; 9) "deictic adjustments such as shift of tense, person, or place reference are (in a way) only secondary markers of indirectness". A basis for the interpretation of any deictic reference has to be given by the context and/or by "morpho-syntactic means" like word order, use of introductory morphemes and shift of mood (ibid.). Once the context and syntactic environment are provided, however, "the deictic markers strengthen the contrast between the direct and the indirect form, and the extent to which a language uses deictic adjustment tells us something about the importance of the direct/indirect dichotomy in that language" (ibid.).

Three main adjustments must be made when expressing Indirect Report:

1. Time (often referred to as "sequence of tenses")
2. Place
3. Person

These are straightforward: then becomes now, or vice versa; here becomes there, and the person is adjusted according to the relation to the speaker. Examples, where appropriate, will be given below.

c.l. Time

English and Swedish are amongst the languages in which the sequence of tenses distinguishes Direct from Indirect Report (cf. Hammarberg and Viberg (ibid.)). Hence, where the indicative/subjunctive dichotomy can create the distinction in German, the sequence of tenses can in certain instances create the same distinction in English and Swedish. Compare, for example, the English translation of (24)(a) and (b) above, where only the tense adjustment creates the distinction between Indirect Report and speaker S's comment.
It is commonly agreed, however, that the sequence of tense system no longer functions with any consistency in German Indirect Report:

"Dabei sind Konjunktiv I und Konjunktiv II nicht verschiedene Zeitformen, die innerhalb eines Systems zueinander in Opposition stehen, sondern sie unterscheiden sich vornehmlich in der modalen Aussage, ... so etwa der Konjunktiv I als Kennzeichnung der indirekten Rede vom Konjunktiv II als Ausdruck des nur Vorgestellten u.ä."¹

(Duden, op. cit.; 117)

As we saw in Section B above, any distinction made between Subjunctive I and Subjunctive II is usually dependent on whether the form of Subjunctive I clashes with the Indicative form, thereby causing confusion about the direct v. indirect nature of the report. According to Duden, the time at which the utterance was made or will be made is recoverable from the introductory clause and from the context (i.e., er sagt (he says); er hat gesagt (he has said/he said); er wird sagen (he will say) etc.) (ibid.; 110).

The following schema (Fig. 1 on the following page) demonstrates temporal relations in Indirect Report in German (ibid.; MY TRANSLATION):

¹Subj. I and Subj. II are not different tenses standing in opposition to one another within a tense system. Rather they differ primarily in modal expression, i.e. e.g. Subj. I marks Indirect Speech while Subj. II expresses the imaginary etc.
FIG. 1
"REFERRING TO THE TIME AT WHICH AN UTTERANCE WAS MADE"

<table>
<thead>
<tr>
<th>Past and Completed</th>
<th>Actually Happening</th>
<th>Not Yet Begun</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subj I(^1) of haben (to have) or sein (to be) + past participle</strong></td>
<td><strong>Subjunctive I</strong></td>
<td><strong>Subjunctive I(^1)</strong></td>
</tr>
<tr>
<td>(35) Er sagte, er sei damals nach Berlin gefahren</td>
<td>(38) Er sagte, er schreibe gerade an einem Buch presently on a book 'He says (said) he is presently working on a book'</td>
<td>(41) Er versichert(e) mir, er komme nächste Woche zu mir comes next week to me 'He assures (assured) me he will come to me next week'</td>
</tr>
<tr>
<td>(36) Er sagte, er habe das Buch gelesen</td>
<td>(39) Er hat gesagt, er lese gerade presently 'He said he has read the book'</td>
<td>(42) Er hat gesagt, er fahre demnächst nach Köln immediately to Cologne 'He said he is going to go to Cologne immediately'</td>
</tr>
<tr>
<td>Past and Completed</td>
<td>Actually Happening</td>
<td>Not Yet Begun</td>
</tr>
<tr>
<td>--------------------</td>
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<td>---------------</td>
</tr>
<tr>
<td>Subj $i^{1}$ of haben (to have) or sein (to be) + past participle</td>
<td>Subjunctive I</td>
<td>Subjunctive $i^{1}$</td>
</tr>
<tr>
<td>Er wird behaupten, er habe damals gewonnen</td>
<td>Er wird sagen, dass er kein Geld habe 'He will say that he won at that time'</td>
<td>'He will say that he has no money'</td>
</tr>
</tbody>
</table>

(40) Er wird sagen, dass er kein Geld habe 'He will say that he has no money'.

(43) Er versicherte, er werde morgen kommen 'He assured he would come tomorrow'.

$^{1}$or Subjunctive II, according to the criteria named in Section B above.
An important point to note here is that the tense expressed by the context in such sentences does not correspond exactly to sequence of tense differences. Thus, there can be no straightforward comparison with English, e.g. that Subjunctive I expresses the present and future tense while Subjunctive II expresses past tenses, i.e. the fact that Subjunctive II forms are similar to past tense indicative form -- e.g. wäre (subj. II) v. war (past tense indicative) 3rd pers. sing. of sein (to be) -- has no bearing on the meaning of the time Subjunctive II expresses. According to Duden, the use of Subjunctive II instead of Subjunctive I basically creates a feeling of remoteness or uncertainty which is not intended. Sometimes communication is not even impaired to this extent. In fact the use of Subjunctive II of certain verbs which have e in the Indicative and ä in Subjunctive I is preferred in German, especially in spoken German, since these verbs have an ä in Subjunctive II and are consequently more overtly "subjunctive-sounding" (ibid.; 113).

(44) Sie sagten, ich lase (cf. ich lese = indic/Subj. I)
They said I am reading
SUBJ II

The most important deictic adjustment to be made in German as far as time is concerned are in the time adverbs e.g. heute (today), morgen (tomorrow), dann (then) and jetzt (now) etc.:

(45)(a) DIRECT
Ich werde mich morgen krank melden
I shall me tomorrow sick report
'I shall report sick tomorrow'

(45)(b) INDIRECT
Fritz sagte, er würde sich heute krank melden
Fritz said he would himself today sick report
"Fritz said he would report sick today"
(46)(a) DIRECT
Du bist heute sehr unhöflich gewesen
You are today very impolite been
'You have been very impolite today'

(46)(b) Ihre Mutter sagte, dass ich an dem Tage sehr unhöflich
Her mother said that I on that day very impolite
gewesen sei
been am
'Her mother said that I had been very impolite on that day'

(46)(c) INDIRECT
Ihre Mutter sagte, dass ich heute sehr unhöflich geswesen sei
Her mother said that I today very impolite been am
'Her mother said that I have been very impolite today'

Sentence (46)(c) obviously does not have the same meaning
as (46)(b), and would be considered unacceptable if it were meant
to refer to an utterance made by speaker A on a previous occasion.

c.2. Place

In changing from Direct to Indirect Report, place reference
may, when necessary, be shifted by adjusting place adverbials:

(47)(a) DIRECT
Hier im Walde gibt es schöne Veilchen
Here in the wood are there beautiful violets
'Here in the woods there are beautiful violets'

(47)(b) INDIRECT
Er meinte, dass es dort im Walde schöne Veilchen gäbe
He said that there there in the wood beautiful violets were
'He said that there are beautiful violets there in the woods'

Place adverbials hence reinforce the indirect nature of the
report, placing it in the appropriate locative context.

c.3. Person

In Germanic and Romance languages, it is common to make deictic
adjustment for person, when reading a Direct Statement as Indirect
Report. However, there are languages which do not make the same
adjustments, or at least do not make them obligatorily. Hammarberg
and Viberg (op. cit.; 15) cite Japanese and Persian as examples of languages which appear to rely on such adjustments to a limited degree (ibid.).

Failure to adjust for person would of course create obvious perceptual confusion in German, as far as isolating the intended referent of the clause is concerned. However, personal pronoun adjustment would also appear to fulfill a less obvious function with regard to Indirect Report, one which has important implications for our analysis.

We recall the sentence in (32) (repeated below in (48)) which featured a reported clause which displayed no primary or ancillary markers of subordinate status:

(48) Er sagte, er ist nicht mitgegangen
    He said he is not with-gone
    'He said he didn't go with them'

As we mentioned above, the only change made to the original utterance by speaker A here is the adjustment of verb and personal pronoun to the third person. This change is obligatory in written or spoken German since its absence would once again cause confusion of reference. The question remains, then, is (48) an instance of Indirect Report, and therefore a subordinate clause construction merely on the strength of the shift of person and comma intonation? Can we really talk about a subordinate clause construction when we have so few markers of subordinate status? Consider, moreover, the following example from Duden in which the reported clause "zwar durch ein Komma als abhängig vom Hauptsatz gekennzeichnet, aber als direkte Rede geformt ist" (ibid.; 113) (i.e. is marked as dependent on the matrix by the comma, but is formed as Direct Speech):

(49) Haben die Leut' nicht erzählt, der Deichhauptmann ist vorbeigeritten auf'n Schimmel, Mama? (Halbe)
    'Didn't they tell you, the dike-reeve rode by on a white horse, mama?'
Example (49) has only comma intonation, as we see, and not even person shift to mark it as Indirect Report. Now, if we agree with Hammarberg and Viberg (op. cit.) that the main distinguishing feature of Indirect Report is that it entails a subordinate clause, and if we agree that a subordinate clause is a clause featuring primary or ancillary markers of subordination or a combination of both (cf. Ch. 2), then we must question the classification of sentences like (44) and (45) as instances of Indirect Report, since all these features are absent. Figure 2 below gives us an overview of exactly which combinations of markers of subordination may occur in German, showing that examples like (48) and (49) are relatively and completely free of these markers, respectively, while examples like (17)(b) show all the markers of subordination available:

\[\text{Cf. Chapter 5, Section III for further discussion.}\]
<table>
<thead>
<tr>
<th>Figure 2</th>
<th>COMP</th>
<th>VERB</th>
<th>SUBJ</th>
<th>NCTIVE</th>
<th>DEIXIS</th>
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</thead>
<tbody>
<tr>
<td>Ia Die Leute haben erzählt, er ist</td>
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<tr>
<td>The people have said he is</td>
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<td>nicht vorbeigeritten</td>
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<td>not by-ridden</td>
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<td>'The people said he did not ride by'</td>
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<td>Ib Er sagte, &quot;Ich bin nicht vorbei-</td>
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<td>He said I am not by-</td>
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<td>geritten&quot;</td>
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<td>'He said, &quot;I did not ride by&quot;.'</td>
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<td>Ic Er sagte, er ist nicht vorbei-</td>
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<td>Id Er sagte, er sei nicht vorbei-</td>
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<tr>
<td>He said he is not by</td>
<td>SUBJ</td>
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<td>He said that he not by-</td>
<td>SUBJ</td>
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<td>'He said that he did not ride by'</td>
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</table>

1Where "Er ist nicht vorbeigeritten" (He did not ride by) corresponds to the original, non-reported utterance made by die Leute (the people), the subject of this sentence.
Thus, we see that as far as "degrees of subordinateness" (cf.
Chapter 2) are concerned, (i)(a) and (i)(b) above must be considered
to have 0 degree of "subordinateness" and be therefore classed
as main clauses, since they display none of the features normally
associated with subordinate clauses. Sentences (i)(e) and especially
(i)(f), on the other hand, display a high degree of "subordinateness",
featuring both of the primary markers of subordination we have
isolated, i.e. the presence of the complementizer and its automatic
concomitant, verb-final word order. They must therefore be classed
as subordinate clause constructions, and as such may be ranked
as instances of Indirect Report, in accordance with the description
proposed by Hammarberg and Viberg (1976). Sentences (i)(c) and
(i)(d) are clearly not in this category, as they do not display
any of the primary markers of subordination. They do, however,
possess some characteristics normally associated with Reported
Speech, i.e., the use of the subjunctive and/or deictic adjustments.
Hence they are clearly way down on any scale of "subordinateness",
and, as we shall discover below, display a close affinity with
main clauses. That they are clearly embedded under a verb of
"saying", or "reporting", however, is undeniable, enabling the
finer semantic distinctions regarding truth values so eagerly
expounded by e.g. Hooper and Thompson (op. cit.; cf. Chapter 1
above) and many of the traditional grammarians (cf. Duden, op.
cit.; Glinz, 1965) to be maintained within the sentence. However,
as we have noted, the function of such ancillary markers (deictic
adjustment and the subjunctive) is also undeniably syntactic in
nature, so that the marriage of syntactic and semantic properties
is clearly demonstrated in constructions of this type. The unique
status of constructions like (i)(c) and (i)(d) lead Emonds (1976;
24-5, footnote 3) to refer to them as instances of "mixed indirect
discourse". For the sake of consistency with the terminology
adopted from Hammarberg and Viberg (1976) we shall henceforth
refer to these constructions as instances of "Mixed Indirect Report".
This type of Indirect Report is unlike that of examples (i)(e) and (i)(f) in that Emonds characterizes the reported sentence as a root S (i.e., main clause, cf. Chapter 1, Section III). In it, the verb is in second position, and certain Movement Transformations may occur which may not occur in Indirect Report (ibid.):

**INDIRECT REPORT**

(50) Er sagte, dass er krank sei

He said that he is ill

SUBJ

'He said that he was ill'

(51)(a) *Er sagte, dass gestern er nach Hause gekommen sei

He said that yesterday he came home

SUBJ

'He said that yesterday he came home'

(51)(b) *Er sagte, dass mich sie geschlagen habe

He said that me she hit

SUBJ

MIXED INDIRECT REPORT

(52) Er sagte, er sei krank

He said he is ill

SUBJ

'He said he is ill'

(53)(a) Er sagte, gestern sei er nach Hause gekommen

He said yesterday is he home come

'Said, yesterday he came home'

(53)(b) Er sagte, mich habe sie geschlagen

He said me has she hit

SUBJ

'The said she hit me'

---

1 That quotation marks are not naturally to be contemplated as markers of subordination is clear. People tend not to quote people consciously when speaking and the tendency to use expressions like "quote-unquote" or "and I quote" is by direct analogy with the written language. Cf. Barbara Partee (1973; 411, footnote 2).
Thus it would appear that we are dealing not with two but with three more or less clearly definable types of construction in Reported Speech in German. The first type (Fig. 1 (i) (a) and (i) (b)) is DIRECT REPORT, where the reported sentence displays none of the primary or ancillary markers of subordinate status and which might or might not be introduced by quotation marks in the written language. The second type of report we refer to as INDIRECT REPORT. This type of report displays the primary and certain ancillary markers of subordination, which is equivalent to saying that the reported clause is "truly" subordinate. This type of Reported Speech construction differs from the first type in that it does not allow certain Movement Transformations to apply in the reported (subordinate) clause, and is exemplified in Fig. 1 (i) (e) and (i) (f) above. The third type of reported speech construction we refer to as MIXED INDIRECT REPORT (cf. Fig. 1 (i) (c) and (i) (d)). This type of report differs from DIRECT REPORT in that it does not display the primary markers of subordination, while it may well display the ancillary markers of subordination, in particular the use of the subjunctive and deictic adjustments. It differs from INDIRECT REPORT in that it allows certain Movement Transformations which INDIRECT REPORT does not, although it does NOT allow ALL the Emphasizing Movement Transformations normally associated with DIRECT REPORT, i.e. main clauses.

These observations about "degrees of subordinateness" appear to be confirmed by the analysis of the use of the subjunctive in Indirect Speech in German proposed by Jäger (1971).\(^1\)

Jäger classifies instances of Reported Speech according to their "degree of determination". Thus, example (54) below is triple-determined, according to Jäger's classification, since it contains a reporting clause, a conjunction, and a subjunctive verb form. Sentence (55) is double-determined, in that it contains a relative clause and a subjunctive verb form, and sentence (56)

\(^1\)It is interesting to note that, despite suggestions to the contrary (cf. Neuhoff, 1959), Jäger's data show that the subjunctive is not becoming "obsolete". Of 3,720 unambiguous verb forms in indirect speech, he found only 544 (15%) were indicative forms. Of the rest, 57% (2,123) were subjunctive I forms and 27% (1,044) Subjunctive II (ibid.; 76, 87, 132).
is singly-determined, containing a verb in the subjunctive mood (ibid.; 75-76).

(54) Hermann sagte mir gestern, dass er heute pünktlich kommen werde.

'Hermann said to me yesterday that he today punctually would come.'

(55) Hermann sagte mir gestern, er werde heute pünktlich kommen.

'Hermann said to me yesterday he would today punctually come.'

(56) Hermann hatte nichts einzuwenden. Er werde heute pünktlich kommen.

'Hermann had no objections. He would come on time today.'

The parallels between Jäger's analysis and our own are clear.¹ Those sentences he calls singly-determined are equivalent to those to which we have ascribed the lowest degree of "subordinateness". Those which Jäger describes as "triple-determined" are equivalent to those sentences to which we have ascribed the highest degree of "subordinateness". Indeed, Jäger's singly-determined reported clause in (56) provides an excellent example of an ancillary marker (i.e., the subjunctive) used OBLIGATORILY, since, as (57) shows, without it the sentence can be interpreted as Direct Speech:

(57) Hermann hatte nichts einzuwenden. Er wird heute pünktlich kommen.

'Hermann had no objections. He will come on time today.'

¹cf. also Paul (1920) who suggests that clauses differ in 'degrees of dependence', and may be 'logically' dependent on the matrix, rather than 'grammatically' dependent.
In the above example, the second sentence is not recognizable as dependent on Hermann. Only with the subjunctive, as in (56), is it recognizable as Indirect Report.

Although Jäger's analysis concurs with our proposed description of Indirect Speech in German, Jäger does NOT regard shift of deictic pronouns and adverbs as constitutive of indirect speech (ibid., 31-74). This is of course in contrast to Hammarberg and Viberg's analysis, discussed above (Section III.c.), although they do regard deictic changes as only "secondary markers of indirectness", as the quotation in that section shows. Such shifts are felt to be more "incidental" in nature, or in other words, they do not play such an obvious role in the marking of Reported Speech as, for example, the use of the subjunctive. Within the context of the analysis proposed in this study, we might say that such shifts are obviously ancillary markers - alone, they cannot ever unambiguously mark a statement as subordinate to a matrix verb of 'saying', 'thinking' or 'believing', in contrast to the subjunctive, which, as examples (56)-(57) demonstrate, may act as the sole marker of dependent status.

One final point that Jäger makes which would appear to support our analysis of Indirect Report in German concerns ambiguity. Jäger's statistics show that the higher the degree of "determination" his sentences show, the greater the number of ambiguous Subjunctive I/Indicative forms are to be found. We recall that a rule-of-thumb guide to the use of the various forms of the verb is that whenever a form of Subjunctive I is identical to (and confusable with) the indicative, the use of Subjunctive II is preferred. Jäger shows that the use of ambiguous Indicative/Subjunctive I forms is particularly frequent in triple-determined sentences, while hardly any ambiguous and no indicative forms were to be found with singly-determined sentences. These observations are in complete accord with our analysis, since they would appear to be based on perceptual considerations. There is obviously more flexibility involved with triple-determined predicates than with singly-determined clauses, since the former are unequivocally marked as subordinate to a verb of 'saying' by the complementizer and SOV word order, while the latter are dependent on the subjunctive form for clarity
of function. Interestingly, Paul (1920; 175) also links the use of the subjunctive with a feeling of subordinateness, thus supporting the inclusion of the subjunctive in our group of ancillary markers.

Thus we have seen that a clear distinction cannot be drawn between main and subordinate clauses in the case of certain predicates. Instead, there would appear to be varying degrees of 'subordinateness' involved in German, which are determined by perceptual strategies. Whenever the status of a reported clause is determined sufficiently clearly, a certain relaxation of the more rigorous general rules occurs, such as the occurrence of an ambiguous Subjunctive I/Indicative form. This observation is in complete contrast to assertions made by Emonds (1976) and Ross (1973), who argue that the type of transformations allowed determines the status of a clause. In the next section I shall be arguing that this criterion is also dependent on factors of the kind discussed above.

III. The V/2 CONSTRAINT, Movement Transformations and the Status of Clauses in German

In the section above we saw that there are three types of Reported Speech in German — Direct Report, Indirect Report and Mixed Indirect Report, and we mentioned briefly that they all differ in the range of Emphasizing Movement Transformations they allow. In this section we shall see that Direct Report incorporates none of the markers of subordination we have isolated in this work, and that, being therefore a main clause construction, it allows all the Emphasizing Movement Transformations normally associated with main clauses (cf. Emonds, 1976). Indirect Report differs from Direct Report in that it displays primary and ancillary markers of subordination and allows only some of the Emphasizing Movement Transformations normally associated with main clauses to apply. The third type of report we have isolated, i.e. Mixed Indirect Report, differs from Indirect Report in that it is distinguished by ancillary markers only, and permits certain of the Emphasizing Movement Transformations precluded from the subordinate clause constructions of Indirect Report. In other words, we shall attempt to determine which transformations are and are not allowed in these different types of construction, thereby ascertaining what the implications of this tolerance versus intolerance are for a general characterization of subordination.
It will be seen that in constructions of the Indirect Report type i.e. in truly subordinate clauses, while certain transformations are indeed precluded, they make up only a small subset of the Emphasizing Movement Transformations which otherwise are tolerated in subordinate as well as main clauses in German. It will also be seen that the tolerance v. intolerance of these transformations is inextricably linked with the marking system displayed in the clause, and that there are obvious links between which transformations are excluded from and which markers are present in the clause. This analysis therefore differs in focus from the analyses of Ross (1973) and Emonds (1970) who both basically make the same basic contention, namely, that the transformations allowed or disallowed by a clause mark the status of that clause. In this section we shall be arguing that this criterion is not completely reliable, and that there are basic syntactic differences in main and subordinate clauses which affect the transformations that these clauses allow.

We saw above in Chapter 2, Section I that the V/2 CONSTRAINT is operative in German (Haiman, 1974). This constraint dictates that in declarative main clauses the verb must occupy second position. It would seem that any Emphasizing Movement Transformation may apply in German main clauses, provided the V/2 CONSTRAINT is observed and the verb is not removed from its canonical second position. In other words, we might say for German main clauses that any Emphasizing Movement Transformation may apply, provided that:

a) no more than one element precedes the verb
b) syntactic relations within the clause are not obscured

\[
\begin{array}{cccc}
0 & V & S & X \\
\end{array}
\]

(54)(a) Den Joachim wollte ich gestern einladen
Joachim wanted I yesterday to invite

\[
\begin{array}{cccc}
X & V & S & 0 \\
\end{array}
\]

(54)(b) Gestern wollte ich den Joachim einladen
Yesterday wanted I Joachim to invite

\[
\begin{array}{cccc}
S & V & X & 0 \\
\end{array}
\]

(54)(c) Ich wollte gestern den Joachim einladen
I wanted yesterday Joachim to invite
The sentences in (54)(a)-(c) demonstrate that almost any element - subject, object, adverbial - may occupy the sentence-initial position. (54)(d) below shows that only one element may be fronted at a time, since otherwise the V/2 CONSTRAINT is violated:

(54)(d)  *Ich gestern wollte den Joachim einladen
         I yesterday wanted Joachim to invite
(54)(e)  *Gestern ich wollte den Joachim einladen
         Yesterday I wanted Joachim to invite

Note that the first part of the English gloss to (54)(e) is acceptable, since more than one element may precede the verb in this language. We must also remember that the V/2 CONSTRAINT does not apply in English, although it once apparently did so (Haiman, op. cit.). We shall return to this important observation below.

Swedish is similar to German in that the V/2 CONSTRAINT is operative in main clauses in this language, too, although, as we shall see below, there are certain fundamental differences in tolerance of Emphasizing Movement Transformations in these two languages:

(55)(a)  Igår såg vi "Gone with the Wind" på biografen
         Yesterday saw we "Gone with the Wind" at the cinema
(55)(b)  Vi såg "Gone with the Wind" på biografen igår
         We saw "Gone with the Wind" at the cinema yesterday
(55)(c)  "Gone with the Wind" såg vi igår på biografen
         "Gone with the Wind" saw we yesterday at the cinema

Note that in all these languages certain combinations of adverbials may appear before the verb, although in the case of German and Swedish they may do so only if they can be construed

---

1 But see Bean (1976) for an interesting alternative analysis of the development of English word order patterns.
as one (complex) adverbial phrase. Hence (56)(a) and (57)(a) are acceptable, while (56)(b) and (57)(b) are not:

(56)(a)  Igår på biografen såg vi "Gone with the Wind"  
Yesterday at the cinema saw we "Gone with the Wind"  
\'Yesterday at the cinema we saw "Gone with the Wind"\'

(56)(b)  *Gone with the Wind igår såg vi på biografen  
"Gone with the Wind" yesterday saw we at the cinema

(57)(a)  Gestern um acht Uhr wollte ich den Joachim einladen  
Yesterday at eight o'clock wanted I Joachim to invite

(57)(b)  *Gestern zum Mittagessen wollte ich den Joachim einladen  
Yesterday to dinner wanted I Joachim to invite

In subordinate clauses, i.e. those clauses marked with primary and ancillary markers of subordinate status, on the other hand, certain Emphasizing Movement Transformations, i.e. those which Emonds (1976) terms Root Transformations, are also allowed, albeit with clearly defined limitations. It has been argued in many works (e.g. Firbas, 1971; Kirkwood, 1969; Thompson, 1978) that German, is a language which can vary the position of its syntactic elements for particular emphatic effect, provided that a few basic word order constraints are respected, or in the words of Thompson (op. cit.), German is to some extent a Functional Word Order Language. This would appear to be the case in the sentences below, where certain of the Movement Transformations classed by Emonds (op. cit.) as Root Transformations are in fact permissable in the subordinate clause:

(58)(a)  Dass morgens um neun Uhr die Kirchenglocken  
That in the morning at nine o'clock the church bells  
klingen ärger die Schuldirektorin  
ring annoys the headmistress

\'The fact that the church bells ring every morning at nine o'clock annoys the headmistress\'
The above transformations all have one property in common: they shift the emphasis in the sentence. Hooper and Thompson (1973) have argued, as Emonds himself has (ibid.), that all Root Transformations are emphasizing devices, and I submit that the type of Transformation under discussion here for German is also to be subsumed under the heading of 'Emphasizing Movement Transformations' (and hence Root Transformations). The implications of this submission are clear, in that it adversely affects Emonds' claim that Root Transformations apply only in main clauses, and therefore also questions the use of the application of Root Transformations as a test of clause status. We shall discuss the implications in greater detail below. Meanwhile, the fact that these transformations have the function of emphasizing clausal elements links in an interesting way with those sorts of Emphasizing Movement Transformations which are precluded from applying in German subordinate clauses, as we shall now see.
In subordinate clauses in German, unstressed pronominal objects, including the reflexive pronoun \textit{sich} cannot precede the pronominal subject:

(59)(a) *Die Studenten waren der Meinung, dass sich er in
dieser Frage durchsetzen sollte
'The students were of the opinion that refl. he in
this question assert should

(59)(b) *Der Leonard sagte, dass mich sie nie gemocht hat
'Leonard said that me she never liked has

Similarly, neither time nor place adverbs may precede the pronominal subject, while they may precede an expanded NP subject:

(60) *Er sah ein, dass gestern er nicht mit nach Hause
hätte kommen dürfen
'He understood that yesterday he not with home
had come be allowed

(61)(a) *Er sagte, dass in den Garten sie gerannt sei
'He said that into the garden she run is

(61)(b) Er sagte, dass in den Garten ein goldhaariges Mädchen
gerannt sei
'He said that into the garden a golden-haired girl
ran is

(c.f. Green, op. cit.; 393)
(62)(a) Er sah, dass im Garten ein Wasserturm stand
He saw that in the garden a water tower stood
'He saw that in the garden a water tower stood'

(62)(b) Er sah dass ein Wasserturm im Garten stand
He saw that a water tower in the Garden stood
'He saw that a watertower stood in the garden'

(62)(c) *Er sah, dass im Garten er stand
He saw that in the garden he stood

(62)(d) Er sah, dass er im Garten stand
He saw that he in the garden stood
'He saw that he stood in the garden'

(63)(a) ?*Brigitte schreibt ihrer Freundin, dass gestern es viel
Brigitte writes to her friend that yesterday it much
geregnet hat, aber dass heute der Regen aufgehört hat
rained has but that today the rain stopped has

(63)(b) Brigitte schreibt ihrer Freundin, dass es gestern
Brigitte writes to her friend that it yesterday
viel geregnet hat, dass aber heute der Regen
much rained has that but today the rain
aufgehört hat
stopped has

'Brigitte wrote to her friend that it rained at lot yesterday, but that today the rained has stopped'

That this is also the case with other types of adverb and
adverbial phrase can be seen from the following unacceptable examples:

(64)(a) Ich hätte nicht am Schwarzen Markt teilgenommen,
I would have not in the black market taken part
aufgrund dass meiner Meinung nach es nicht moralisch
for the reason that in my opinion it not morally
recht ist
right is
From the above examples, then, we see that unstressed pronominal elements and adverbial phrases of time, place, etc., cannot precede the pronominal subject of German subordinate clauses. This is a logical restriction, since these transformations are all Emphasizing Movement Transformations, and as such their application to unstressed elements is inappropriate. The very nature of an unstressed element demands that it be in non-emphatic i.e. basic word order position, so that in such a case the canonical order for subordinate clauses, i.e. SOV, may not be permutated. From a slightly different point of view this restriction also proves logical - as the unstressed pronoun or adverbial is moved into an inappropriately emphatic position at the beginning of the clause, so the pronominal subject is automatically placed to the right in the sentence, i.e. it also assumes an inappropriately emphatic position.

With expanded NP elements, however, and in particular longer phrases with greater communicative weight, and therefore especially with indefinite NPs (cf. Firbas; 1966; Kirkwood, 1969; etc.), emphasis is indeed appropriate, so that the basic SOV order for subordinate
clauses might well be changed, provided that syntactic relations within the sentence are not obscured:

(66) Es ist natürlich zu erwarten, dass bei einem atomaren Krieg auch ein paar Politiker werden sterben müssen.
'It is of course to be expected that in an atomic war even a few politicians will have to die.'

(67) Ich sah, dass im Garten kein einziger Grashalm wuchs.
'I saw that in the garden not a single blade of grass was growing.'

(68) Dass zwischen Freunden solcher Neid besteht, enttäuscht mich sehr.
'It disappoints me that there is such envy between friends.'

These observations about the appropriateness v. inappropriateness of Movement Transformations in German subordinate clauses link back in an interesting way to what we said above about German being a Grammatical Word Order (GWO) language (Thompson, 1978). German would appear to be to some extent a GWO language in that it relies on word order in certain instances to maintain syntactic relations (e.g., difference between main and subordinate clause; difference between inversion in main clause because of a direct question anticipating a yes/nor answer and inversion in main clause caused by operation of the V/2 CONSTRAINT; cf. above, Chapter 2, Section I). We also stated in Chapter 2 that, provided certain word order constraints are observed, German can then move particular elements of the sentence for the sake of emphasis, or, in other words, German can optionally apply Movement Transformations. In other words, in terms of Thompson's (1978) classification German must be considered partly a Pragmatic Word Order (PWO) language and partly a GWO language.

This mixed function of word order in German has obviously great implications for any attempt to produce a general characterization
of subordination in this language. The two all-important considerations with regard to German word order are, I submit, that:

1. the Grammatical Word Order function overrides. In other words, any optional Emphasizing Movement Transformation may only apply in German provided that basic syntactic relations do not become obscured

2. all optional Emphasizing Movement Transformations are subject to basic word order constraints, depending on which clause they apply to:
   a. the V/2 CONSTRAINT is operative in main clauses
   b. in subordinate clauses the verb must appear in clause-final position

Thus, a rule explaining conditions affecting the application of Emonds' (1976) Root Transformations in German main and subordinate clauses might be as follows:

(I) (a) PROVIDED that basic word order constraints are observed (i.e. the V/2 CONSTRAINT in main clauses and the constraint dictating verb-final order in subordinate clauses introduced by a complementizer dass or subordinating conjunction), and

(b) PROVIDED that basic syntactic relations remain transparent and

(c) PROVIDED that in a subordinate clause the element moved into a non-basic position for emphasis is appropriate to receive that extra stress, (i.e. that no unstressed pronominal object or time/manner/place adverbial precedes the pronominal subject, displacing the pronominal subject of the subordinate clause to the right, where extra stress is inappropriate)

then

Emphasizing Movement Transformations (Root Transformations) may optionally apply to either main or subordinate clauses in German.
These observations make it quite clear that Emonds' (op. cit.) suggestion that the application of Root Transformations is limited to main clauses only is too powerful. Since Emphasizing Movement Transformations may indeed apply in both main and subordinate clauses in German, provided that certain constraints are observed, it would be incorrect to say that their non-application in a clause is a signal of subordinate clause status. Of course, owing to the number of constraints applying in subordinate clauses in German, less Emphasizing Movement Transformations apply to this type of clause than to main clauses. However, this is of course not equivalent to the statement that if an Emphasizing Movement Transformation does not apply, we are dealing with a subordinate clause.

In this study we have discussed the nature of main and subordinate clauses. We have seen that those clauses which display the characteristics of main clauses do indeed tolerate more so-called Root Transformations. We saw that this was also true in the case of 'emancipated' or 'elevated' clauses governed by *verba dicendi, putandi*, etc., where the *dass* complementizer has not been realized and where ancillary markers of subordination mark only the dependency relationship between the reported $S$ and the matrix verb of 'saying' (cf. above, Section III). However, it transpires that even in unequivocally subordinate clauses, i.e. those displaying primary and ancillary markers of subordination, Emphasizing Movement Transformations of the type Emonds classes as Root Transformations may still be tolerated, provided that the three constraints listed in (I) above are observed. We must therefore reject the claim that the application of Root Transformations is a criterion for judging clause status in German. The most we can predict from the application of Root Transformations in this language is, perhaps, that the more freely they apply, the more likely it is that we are dealing with a main clause but our own characterization of a subordinate clause as being one which displays primary (+ ancillary) markers of subordinate status would appear more adequate to describe the distinction between main and subordinate clauses, and would appear to find support in the analysis of Jäger (1971).

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1 Indeed, we shall conclude in Chapter 5, Section II that clauses displaying both primary markers are the only "truly" subordinate clauses in German.
Moreover, the third general constraint on the application of Root Transformations in German clauses, i.e. (I)(c), may provide us with some kind of answer to the question we asked right at the beginning of this study, namely, why German requires so much marking of subordinate status, i.e. complementizers, verb-final order and ancillary markers. As we have noted, in both main and subordinate clauses in German certain basic word order constraints are to be observed. However, as we see from (62)(c) there are additional constraints which apply in the case of subordinate clauses only. It could well be, then, that subordinate clauses are marked in German to indicate that these extra constraints apply.1

Root Transformations apply to both main and subordinate clauses in German. However, different constraints apply in each type of clause, which is one motivation for positing a COMP node with subordinate clauses and not with main clauses (cf. discussion in Chapters 1 and 3 above and Anderman, 1978). It might be said that the primary markers signal that the V/2 CONSTRAINT cannot apply in the subordinate clause, but that other constraints do, namely obligatory verb-final order with clauses displaying a complementizer, and the constraint on unstressed pronominal objects and adverbial elements with a subordinate clause displaying a pronominal subject. Perhaps the reason why it has been difficult to state why German subordinate clauses are marked the way they are is that the presence of the complementizer marks a MINUS feature, i.e. [-OPERATION OF THE V/2 CONSTRAINT], as well as the extra restrictions on the application of the optional Movement (Root) Transformations discussed.1 To put this another way, we might say that in German main clauses NO marking of clause status is required, because V/2 CONSTRAINT applies rigidly. As we said above, Kuno (1974; 133) suggests that wherever a word order rule applies consistently, no marking is required. Nor is there a need to mark for any restrictions on Emphasizing Movement Transformations in the main clause, because, provided that the V/2 CONSTRAINT is observed and syntactic relations do not become obscured, all Movement Rules may optionally apply in these clauses.

1See Chapter 5, Section II for further discussion.
The question still remains, why did Emonds posit Root Transformations as a possible universal feature of main clauses alone? The answer may lie, I believe, in the fact that he apparently assumed that rules which indisputably apply in English might also automatically apply in other languages. Indeed, Thompson (1978) argues that it was not surprising that an analysis of the syntax of English should come up with a large number of transformations which produce strings conforming to the canonical SVO order (i.e. Emonds' Structure Preserving Transformations), while producing only a small number of transformations which produce non-canonical strings (i.e. Root Transformations), and whose application is severely restricted, primarily on the grounds that syntactic relationships may not become obscured (ibid; 31-2). Now, two important points present themselves for consideration here. Firstly, the V/2 CONSTRAINT does not apply in English, and, secondly, because of the loss of inflections, English is almost totally reliant on word order for the maintenance of syntactic relations. Or, to put this in the words of Thompson, English is a very strong Grammatical Word Order language (ibid.; 23-4). Hammarberg and Viberg (1975) also noted the importance of word order in English, not only for the maintenance of NP-V-NP relationships, but also for the marking of particular sentence types - i.e. interrogative v. declarative etc. (cf. above, Chapter 2, Sections I and II). Perhaps, then, it is for this reason that Root Transformations are so restricted in their application in English. Since syntactic relations become obscured if Root Transformations are permitted to apply to subordinate clauses, their application is severely restricted in these clauses, so that Emonds is justified in claiming that for English the application of Root Transformations may be regarded as a marker of main clause status. In fact, the only time Root Transformations are allowed to apply in subordinate clauses in this language, it would appear, is when the element moved - usually an 'extra-nuclear' element or 'non-immediate constituent adverbial' - cannot possibly cause
confusion as to the subject - verb - object relationships within
the sentence (Emonds, op. cit.; 31-35).

(69) *Are you aware (of the fact) that poetry we try not to
memorize?
(70) *Do you think socialist theory many Czechs would deny?
(71) *A love for clothes that just as surprising was also
  got him into debt

Cf.

(72) In each hallway hangs a large poster of Lincoln
(73) Among the guests were John and his family
(74) They are planning to destroy the old church under which
  are buried six martyrs.

(Ibid.; 37-8).

In contrast to English, we have said, German allows Root
Transformations in both main and subordinate clauses as a general
rule, and it is only in clearly definable situations (see above)
that they are constrained from applying. For this reason, we
have argued, the application of Root Transformations cannot be
regarded as a reliable signal of main clause status in German.
We also noticed that German is really a "mixed function" language,
in terms of its word order. While its status as a Grammatical
Word Order language overrides, i.e. the maintenance of clear-cut
syntactic relations takes priority over what Thompson would call
"pragmatic" considerations, and provided that the basic word order
constraints are observed, German can move its sentence elements
for pragmatic purposes (cf. Thompson, op. cit., 19ff, and above,
Chapter 2). Perhaps the main reason why this is so is that German
has retained some of its inflections, enabling relationships such
as "subject-of", "object-of", etc. to be signalled by morphological
endings, and not solely by word order. We have seen in Chapters
2, 3, and 4 that the polyfunctionality of certain word order config-
urations can lead to ambiguity in this language, so that ancillary
markers are employed to clarify syntactic relations where the
primary markers fail to do so. Thus we see that German has developed
a comprehensive system of markers to clarify syntactic relations,
and that, as we saw in previous Chapters, each marker fulfills
a real need in the language. Indeed, what superficially may be interpreted as an unnecessarily cumbersome machinery for the maintenance of syntactic relations - complementizers, word order, inflections, ancillary markers - has been shown to be one where each particular type of marker fulfills one (or more) particular function(s). This in turn allows the word order to be used not purely for the clarification of grammatical relations, but also allows it to fulfill pragmatic functions, and one logical result of this is that more Movement Transformations, i.e., Root Transformations, are permitted in this language.

Thus we might summarize by saying that German data seem to provide little support for any definition of subordinate clauses couched solely in terms of the transformations they allow or do not allow. In complete contrast to the analysis proposed by Emonds (1976) and Ross (1973), this brief look at German has shown that the application of Emphasizing Movement Transformations is subject to syntactic constraints which are independent of any straightforward main/subordinate clause dichotomy. In fact, the degrees of "subordinateness" of certain predicates cannot be measured in terms of this "either - or" distinction. In any case, it is clear that the application of Root or Emphasizing Movement Transformations in German clauses is considerably less restricted than in English, provided that certain language-specific constraints are observed. In Chapter 5 we shall be looking more closely at the mixed function of German word order, and we will see that the observations made in this Chapter are well supported by empirical data.
O. Introduction

In the previous chapter we analysed Reported Speech constructions into three types. Direct Report is essentially a main clause construction and tolerates all the Emphasizing Movement Transformations normally associated with main clauses. Indirect Report is a subordinate clause construction displaying primary and/or ancillary markers of subordination, and allows only a limited selection of Movement Rules. Finally, Mixed Indirect Report bears ancillary markers of subordination only and permits some of the Movement Transformations precluded from the subordinate clause constructions of Indirect Report. In other words, we saw in Chapter 4 that the degree of subordinateness displayed by a clause affects its syntactic behaviour.

We also mentioned that certain general and other constraints specific to German apply to restrict the application of Movement Transformations in this language. Provided these constraints are not violated, however, Emphasizing Movement Transformations may apply in both main and subordinate clauses in German. For this reason, we rejected the analysis for German according to which the non-application of Root Transformations is a marker of subordinate clause status (Emonds, 1976). In the present Chapter we shall be questioning the validity of the 'Structure-Preserving Framework' (Emonds, op.cit.) as a criterion for the judgment of word order function in any language other than English, for which it was originally constructed. In Russian, for example, Chvany (1973) shows that the Structure-Preserving Framework is inadequate to predict and describe the movement of sentence elements, since Russian, unlike English, is not dependent on strict SVO patterns for the maintenance of clear syntactic relations. For similar reasons, we shall suggest that the
Structure-Preserving Framework is inadequate to predict and describe the behavior of clauses in German, since the function of word order in this language is different from the function of word order in English.

Having ascertained that a purely syntactically based analysis is inadequate to explain and predict the behavior of clauses in German, we must then ask what are the specific conditions and constraints that affect the tolerance of Emphasizing Movement Transformations in main and subordinate clauses in this language. In particular, we shall be attempting to ascertain to what extent German word order can be termed Grammatical Word Order, and to what extent Pragmatic Word Order (Thompson, 1978). In so doing, we shall modify the analysis of German subordinate clauses by Dunbar (1979), which attempts to explain and predict the tolerance of Main Clause Phenomena (Green, 1976; cf. Chapter 1, Section II) in terms of purely "pragmatic" criteria. We recall from our discussion of subordination in Chapter 1 that Hooper and Thompson's (1973) analysis of the applicability of Emphasizing Movement Transformations was rejected for English, since this analysis, based on notions of "asserted" versus "presupposed" predicates, failed to predict with any consistency the tolerance of Emphasizing Movement Transformations in subordinate clauses. Dunbar's analysis of German, while providing certain interesting insights into the Pragmatic Word Order Function of German, involves similar pitfalls, and an alternative, syntactically based interpretation of his data will be given, consistent with the analysis of subordination adopted in this thesis. It will emerge, as predicted in Chapter 1, that no purely "grammatical" or purely "pragmatic" approach is adequate to explain and predict the behavior of subordinate clauses in German, and in particular their tolerance of Emphasizing Movement Transformations.

Our conclusion will be that German is indeed a truly MIXED FUNCTION word order language (cf. Thompson, 1978) and as such, allows of freer application of Emphasizing Movement Transformations than does English, an extreme Grammatical Word Order language. On the other hand, it is less of a Pragmatic Word Order Language than e.g. Czech, due to constraints imposed upon the application
of Emphasizing Movement Transformations which are largely a result of the overriding importance of unambiguous grammatical relations in German. What superficially seems like a redundant marking system, the use of morphological markers, complementizers and word order plus the use of various other ancillary markers, can hence be seen to fulfill important individual and composite functions.

As a result of our observations, we propose a modification of our proposed definition of the term "subordinate clause" for German in Chapter 2. It will be seen that those clauses which according to our framework can be called "truly" subordinate clauses display both a complementizer/subordinating conjunction and verb-final order. However, an 'intermediate' range of constructions exists which are neither "truly" main nor "truly" subordinate clauses, and which we choose to subsume under the heading of "dependent" clauses. These will be recognized as clauses governed by verba dicendi, putandi etc. which we discussed in Chapter 4 above.

We conclude this study with a general discussion of the implications of our findings for a theory of word order in German. In particular, we shall see that the effect of the basic word order in German, coupled with the polyfunctional nature of its clause-introductory morphemes, demands the comprehensive system of marking which we have discussed in this study.

I. Emphasizing Movement Transformations and the Function of German Word Order

A major observation to be made about the application of Emphasizing Movement Transformations in subordinate clauses in German is that these transformations are subject not only to general syntactic constraints like the V/2 CONSTRAINT, but also to the logical constraints regarding stress and emphasis. This is an important factor in our conclusion that the non-application of Emphasizing Movement Transformations in German clauses is not necessarily a reliable indicator of their subordinate status.

Interestingly, Chvany (1973) has suggested that Emonds' (1970) "Structure-Preserving Framework" (Chvany, op. cit.; 252) cannot provide a dependable diagnostic for subordinate clause status in Modern Russian. In this language, she argues, most of the analogues to English 'root' processes operate quite freely in subordinate...
clauses (ibid.; 257). In substantiating this claim, Chvany makes several significant points about the Pragmatic Word Order (PWO) function of subordinate clauses in Russian, which must be classed as a relatively high order PWO language, in terms of the classification proposed by Thompson (1978), though not as high as e.g. Czech. Some of her observations may prove enlightening with regard to the Pragmatic Word Order function of German and hence merit further discussion at this stage.

Chvany claims that all of the so-called Root Transformations involve what Schachter (1973) called "foregrounding and backgrounding" of elements. This claim is consistent with our treatment of Root Transformations as Emphasizing Movement Transformations. It would appear that Russian provides a semantic hierarchy in the "backgrounded" i.e. unstressed part of a sentence (cf. German examples in (1)-(4) below) and Chvany introduces two informal terms - "secondary foregrounding" and "secondary backgrounding" in this context (ibid.; 257).

What Chvany seems to be discussing is the fact that in the subordinate and therefore automatically "backgrounded clause", not every element bears the same amount of stress, or is equally important to communication. The terms "secondary foregrounding" and "secondary backgrounding" can therefore serve a useful function in describing informally the pragmatic consequences of applying Emphasizing Movement Transformations to subordinate clauses. In these terms we might describe the function of such Movement Transformations in subordinate clauses as lending relative degrees of emphasis to material which is already backgrounded to the matrix clause.

Chvany argues that, unlike English which can only use heavier stress to 'shift the focus' from an originally foregrounded element, both optional stress patterns and movement of elements can be used to achieve the same effects in Russian, which does not have such a relatively fixed word order in "backgrounded" clauses (ibid.; 258). The same would appear to be true of German. Although there are certain restrictions on the several backgrounding-foregrounding processes in subordinate clauses, there would appear to be fewer restrictions on word order movement within these clauses than in English. However, it must be added that it is not always easy to distinguish whether "secondary foregrounding" or "backgrounding"
is in operation in the subordinate S, as we shall see with examples (4)(a)-(c) below. In those examples the movement of a pronominal or adverbial element to the left in the clause automatically displaces the subject to the right in the clause. Nevertheless, the concept of "secondary foregrounding/backgrounding" is a convenient general term to describe informally the pragmatic processes involved in the movement of sentence elements in a subordinate clause.

With expanded NP elements in German, and in particular longer phrases with greater communicative weight, and especially therefore with indefinite NP phrases (cf. Firbas, 1966; Kirkwood, 1969; etc.), such "secondary foregrounding/backgrounding" is indeed possible, so that the basic SOV word order for subordinate clauses might well be changed, provided that syntactic relations within the sentence are not obscured:

\[(1)(a) \text{ Es ist natürlich zu erwarten, dass bei einem atomaren Krieg auch ein paar Politiker werden sterben müssen.} \]
\[\text{'It is of course to be expected that in an atomic war even a few politicians will have to die.'} \]

\[(1)(b) \text{ Es ist natürlich zu erwarten, dass auch ein paar Politiker bei einem atomaren Krieg werden sterben müssen.} \]
\[\text{'It is of course to be expected that even a few politicians will have to die in an atomic war.'} \]

\[(2)(a) \text{ Dass zwischen Freunden solcher Neid besteht, enttäuscht mich sehr.} \]
\[\text{'It surprises me that there is such envy between friends.'} \]

\[(2)(b) \text{ Dass solcher Neid zwischen Freunden besteht, enttäuscht mich sehr.} \]
\[\text{'It disappoints me greatly that between friends there is such envy.'} \]

\[(3)(a) \text{ Ich sah, dass im Garten kein einziger Grashalm wuchs.} \]
\[\text{'I saw that in the garden not a single blade of grass was growing.'} \]
(3)(b)  Ich sah, dass kein einziger Grashalm im Garten wuchs 'I saw that not a single blade of grass was growing in the garden'

With expanded NP subjects and objects, even the pronominal object might be moved for reasons of emphasis (cf. Voyles, 1978: 9):

(4)(a) Marie bedauerte, dass der alte vertrottelte Professor
Marie regretted that the old senile professor
sie gestern in der Stadt überfahren hat
her yesterday in town runover has
'Marie regretted that the senile old professor ran her over in town yesterday'

(4)(b) Marie bedauerte, dass sie der alte vertrottelte Professor
gestern in der Stadt überfahren hat
'Marie regretted that the senile old professor ran her over in town yesterday'

(4)(c) ?Marie bedauerte, dass gestern in der Stadt der alte
vertrottelte Professor sie überfahren hat
'Marie regretted that in town yesterday the senile old professor ran her over'

In all the above examples, the movement of elements in the subordinate clause produces exactly the kind of "secondary foregrounding/backgrounding" effect which Chvany (op. cit.) demonstrates for Russian, so that the emphasizing function of Movement Transformations in German subordinate clauses is clearly supportable.

The question remains, then, to what extent do PRAGMATIC factors affect the tolerance of Emphasizing Movement Transformations in subordinate clauses in German? It will be our contention that pragmatic considerations are extremely important to any adequate description of German word order in terms of the Emphasizing Movement Transformations it allows. However, as we shall demonstrate below, it is undoubtedly true that, important as it may be, this pragmatic function of German word order is not as dominant as the Grammatical Word Order function, which would appear to override. In other words, Emphasizing Movement Transformations cannot apply to produce
shifts of emphasis in any German clause if, as a result, the basic syntactic constraints applying in this language would be violated. Amongst these constraints is the V/2 CONSTRAINT in main clauses, and the constraint that dictates that the verb in a clause introduced by a complementizer or subordinating conjunction must be in clause-final position. The general overriding constraint of course would appear to be that clear-cut grammatical relations must be maintained within the sentence. Linked with this is a further general constraint dictating the acceptability of Emphasizing Movement Transformations. This constraint is 'pragmatic' in the most basic sense, since according to it, any element in a subordinate clause which is moved into a non-basic (i.e. non-SOV) position must be appropriate to receive extra stress. It is for this reason, for example that, as we saw above, no unstressed pronominal subject or time/manner/place adverbial may precede the pronominal subject of the subordinate clause, since this would automatically displace it to the right in the sentence, where the resultant extra emphasis would be inappropriate (cf. Chapter 4, Section II).

Dunbar (1979) has carried out an analysis of subordinate clause word order in German on the basis of what he calls 'pragmatic' factors. In particular, his study constitutes an attempt to determine whether, like in Modern English, German subordinate clauses containing an 'assertion' tolerate Main Clause Phenomena (cf. Green, 1976 and discussion in Chapter 1, Section II above) more easily, and are judged more felicitous, than complements containing "presupposed" information (Dunbar, op. cit.; 98). We have already dismissed the claim that "asserted" complements in English tolerate Main Clause Phenomena more easily than "presupposed" complements, and in particular Hooper and Thompson's (1973) analysis based on these notions (cf. Chapter 1, Section II). However, as we shall see below, Dunbar's data support the analysis of German we are proposing in this study, and therefore merit closer attention at this point.
One of the major points which Dunbar makes is that certain "asserted" subordinate clauses tolerate verb-second order, while those containing "presuppositions" do not (ibid.; 99):

USE OF MAIN CLAUSE ("v/2") ORDER

(5)(a) Ich glaube, ich habe meinen letzten Winter in Madison gesehen
'I think I've seen my last winter in Madison'

(5)(b) Ich hoffe, ich habe meinen letzten Winter in Madison gesehen
'I hope I've seen my last winter in Madison'

(5)(c) Ich bereue, ich habe meinen letzten Winter in Madison gesehen
'I regret I have seen my last winter in Madison'

In terms of the analysis proposed in the present thesis, however, such an observation must be objected to on two important grounds. First of all, it seems illogical to state that any "subordinate clause" displays verb-second order, since verb-second order is main clause order only, and since, according to our analysis, a subordinate clause is one which displays the primary markers of subordination, i.e. a complementizer and verb-final word order. We shall discuss this point further below.

Secondly, we have already dismissed Hooper and Thompson's (1973) analysis of differences in the tolerance to Main Clause Phenomena on the grounds of "presupposition" versus "assertion" (Chapter I, Section II). We recall that this type of analysis cannot reliably account for such differences in English, and indeed when we exemplify some of the other Main Clause Phenomena which
Dunbar attempts to analyse in this way, we shall see that similar inconsistencies are involved in German (ibid.; 98-99):

ADV PREPOSING

(6) (a)  Ich glaube, in der Kanne gibt's noch Kaffee
         I believe in the pot there's still coffee
       'I think there's some coffee left in the pot'

(6) (b)  *Ich bedaure, in der Kanne gibt's keinen Kaffee mehr
         I regret in the pot there's no coffee more
       'I regret there's no more coffee in the pot'

(7) (a)  *Ich nehme wohl an, hier kommt er selber!
         I assume here comes he himself
       'I assume here he comes himself!'

(7) (b)  *Es freut mich, hier kommt er selber!
         It pleases me here comes he himself
       'I am pleased here he comes himself!'

(7) (c)  *Es freut mich, dass hier er selber kommt!
         It pleases me that here he himself comes
       'I am pleased that here he comes himself!'

VERB TOPICALIZATION

(8) (a)  Ich glaube, heiraten will er nicht
         I believe to marry wants he not
       'I believe he does not want to marry'

(8) (b)  ?Seine Eltern behaupten, heiraten will er nicht
         His parents claim to marry wants he not
       'His parents believe he does not want to marry'.

(8) (c)  ??Seine Eltern bedauern sehr, heiraten will er nicht
         His parents regret much to marry wants he not
       'His parents regret very much, he does not want to marry'.

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1 My glosses and translations
(8)(d) *Ich bereue sehr, geheiratet habe ich nie
I regret much married have I never
'I much regret I have never married'*

(8)(e) *Ich bereue sehr, dass geheiratet ich nie habe
I regret much that married I never have
'I much regret that I have never married'*

LEFT/RIGHT DISLOCATION

(9)(a) Ich glaube, dieser Lump, der hat nie in seinem Leben
I believe this layabout he has never in his life
'was geschafft!
something done
'I think this layabout has never done a day's work in
his life!'

(9)(b) Ich bedaure, dieser Lump, der ist weg von der Arbeit
I regret this layabout he is away from the work
gelaufen
run
'I regret this layabout, he's always run away from work'

EMBEDDING VERBS APPEARING AS SUPPLEMENTARY AFTERTHOUGHTS

(10)(a) So 'was würde er nie erlauben, behauptet er
Such a thing would he never allow claims he
'He'd never allow such a thing, he claims'

(10)(b) So 'was würde der Karl nie erlauben, glaube ich
Such a thing would the Karl never allow believe I
'Karl would never allow such a thing, I think'

(10)(c) ?So 'was würde der Karl nie erlauben, bedaure ich
Such a thing would the Karl never allow regret I
'Karl would never allow such a thing, I regret'
SUBJECT-OBJECT INVERSION

(11)(a) Ich glaube, dieses Buch hast du nie gelesen
I believe this book have you never read
'I believe this book you have never read'

(11)(b) ??Ich glaube, dass dieses Buch du nie gelesen hast
I believe that this book you never read have
'I believe that this book you have never read'

(11)(c) *Es tut mir wirklich leid, dass dieses Buch du nie gelesen hast
It makes me really sorry that this book you never read have
'I am really sorry that this book you have never read'

USE OF MODAL PARTICLES SUCH AS aber, doch etc.

(12)(a) Ich glaube, er hat aber sehr abgenommen
I believe he has really much weight lost
'I think he's really lost a lot of weight'

(12)(b) Ich glaube, dass er aber sehr abgenommen hat
I believe that he really much weight lost has
'I think that he really has lost a lot of weight'

(12)(c) *Ich finde es merkwürdig, dass er aber sehr abgenommen hat
I find it remarkable that he really much weight lost has
'I find it remarkable that he really has lost a lot of weight'

As Dunbar himself points out, not all "assertive" matrix verbs tolerate so-called Main Clause Phenomena with the same degree of ease and regularity as does glauben (cf. (5)(a)) (ibid.; 100). Moreover, and more importantly, some logically "presupposed" complements seem to be receptive to certain Main Clause Phenomena, e.g. Adverb Preposing is tolerated after bedauern (regret) in (6)(b). These observations are reminiscent of the criticism of Hooper and Thompson's analysis by Green (1976), which we also discussed in Chapter 1, Section II. The parallel continues when we note Dunbar's observation that the verb bedauern, like regret and resent in English, can
embed an S containing either "old" or "new" information (i.e. either a "presupposed" or an "assertive" complement) (ibid.):

(13)(a)  Ich bedaure, die Vase ist gebrochen
          I regret the vase is broken
(13)(b)  Ich bedaure, dass die Vase gebrochen ist
          I regret that the vase broken is
          'I regret that the vase is broken'

In (13)(a), Dunbar claims, the subordinate clause contains new information and is therefore asserted, while (b), he suggests, is 'probably topic', i.e. the subordinate clause is presupposed or "old" information (ibid.). Now, obviously such an analysis is at the very least, cumbersome, particularly in view of the fact that this data can be given a simple alternative explanation in terms of the analysis of German which we are proposing.

Sentences (9)(a)-(b), which Dunbar classes as examples of Right Dislocation, are also explainable in terms of the nature of the matrix verb's effect on their behaviour. In (9)(a) the subordinate clause is embedded under glauben, which can take an unmediated S complement, while in (9)(b), the matrix requires a 'noun-like' complement, because it has the underlying structure of (5)(a) in Chapter 4, Section I, repeated below in (14)(b), so that the Dislocation process is blocked with this verb.

(14)(a)  NP      (14)(b) NP
          S

In Chapter 4, Section I we suggested that verbs with the underlying structure in (14)(a), i.e. verba dicendi etc., are the verbs of Reported Speech. Their complements tolerate Emphasizing Movement Transformations more easily, the less markers of subordination they display, and vice versa. Many of Dunbar's examples can be explained more satisfactorily in terms of the analysis of Reported Speech given in Chapter 4. For example, Dunbar claims that glauben embeds Main Clause Phenomena more easily than other verbs, because, in his terminology, it embeds asserted, or "new" information. However,
in all the examples of so-called Main Clause Phenomena quoted except (12)(b), the clause embedded under *glauben* contains no complementizer *dass*. We know that verb-final order is an automatic concomitant of the realization of *dass* in German subordinate clauses, so the fact that these clauses without *dass* have the verb in second position is not surprising. In other words, verb-second order is obligatory in these clauses which are embedded under a verb of 'believing' like *glauben* when the complementizer is not realized in surface structure. Hence, the clause cannot be considered a "truly" subordinate clause in this instance. The fact that these clauses also tolerate other Main Clause Phenomena, like the Emphasizing Movement Transformations Adverb Preposing and Verb Topicalization, is not surprising, since the embedded clauses are only very loosely connected with the matrix verb *glauben*, and behave like main clauses. Verbs like *bereuen* (regret), on the other hand, do not tolerate Main Clause Phenomena in their embedded clauses with quite such ease, because they are like (14)(b) in underlying structure and cannot therefore take unmediated complements (cf. Anderman, op. cit. and above, Chapter 2, Section III for discussion).

On a similar note, we can explain the unacceptability of (10)(c) above in terms of insufficient marking, another of the syntactic phenomena we have previously discussed (Chapter 2, Section III). I would say here that the reported clause has been placed unmarked in sentence-initial position, where it causes perceptual confusion, since it appears to be the main clause of the sentence when in fact it is dependent on *bedauern*, a verb which is like (14)(b) in underlying structure, and requires its complements to be more 'noun-like'. That this is indeed the case can be demonstrated by making certain adjustments to (10)(c). If we add a clear marker of subordination, *dass*, the word order in the embedded S automatically becomes SOV, and the non-expanded NP is placed directly after the complementizer, in accordance with the constraints obtaining in German subordinate clauses discussed above. Sentence (10)(c) then becomes completely acceptable, as we can see from example (15):

(15) Dass der Karl so 'was nie erlauben würde, bedaure ich

That the Karl such a thing never allow would regret I

'I regret that Karl would never allow such a thing'
And finally, we can explain in terms of our analysis an example like sentence (11)(b) where Subject-Object Inversion cannot take place, because as we saw above (Chapter 4, Section III), there is a constraint in German which dictates that no element may intervene between the complementizer and the unstressed pronominal subject, since this automatically displaces it to the right, whereby it automatically acquires inappropriate emphasis.

Hence we can easily account for Dunbar's data syntactically, thus avoiding the problems associated with predicting the tolerance of so-called Main Clause Phenomena on semantic grounds. Instead of looking at whether the subordinate clause is "presupposed" or "asserted", a process which we have seen is unreliable even for English, we must first ascertain whether we are dealing with a "truly" subordinate clause, then we must take into account the nature of the matrix verb involved, and finally we must consider the general constraints applying to German subordinate clauses, whenever we attempt to describe and predict their behaviour.

Although Dunbar's pragmatic-based analysis of the tolerance of Main Clause Phenomena in subordinate clauses does not add anything substantial to the analysis of German proposed in this study, he does make certain interesting observations about related phenomena. In particular, he produces interesting data on certain Pragmatic Word Order functions of German which would appear to support our analysis. It is to these data that we now turn our attention.

Dunbar makes some interesting observations regarding the syntactic process of Exbraciation (from German Ausklammerung, literally 'unbracketing'). These observations link in an important way with our discussion of Kuno's (1974) analysis of Extraposition in German in terms of perceptual strategies (cf. Chapter 2, Section IV). In particular, we shall see that the "unnaturalness" which Dunbar associates with Exbraciation in subordinate clauses can be explained in terms of the overriding constraint in German that syntactic relations within the sentence remain clear.
First of all, let us consider the term Exbraciation. According to Dunbar, "the sentence brace construction refers to the imaginary "braces" set up by two parts of the predicate in a German sentence", i.e. the finite verb on the one hand and the "infinitive, participle, separable prefix (or, to an extent also the direct object, predicate nominative/adjective, or the verbal complement)" on the other hand (ibid.; 35). "In the case of subordinate clauses with V(erb)-F(inal) order, the brace is comprised of the subordinating element to the left and the finite verb on the right: ich glaube nicht, dass er es gekauft hat." (ibid.; 66, footnote 18). (I believe not, that he it bought has -- 'I don't believe that he bought it').

Dunbar adds that "throughout the history of German, the brace construction has been and continues to be violated. This is done, not infrequently, by placing material as a sort of "afterthought" outside the braces (always to the right of the rightmost brace)" (ibid.; 35). This procedure is termed by Dunbar as Exbraciation, following Vennemann (1974), and we give examples of this process below in (18)(a) and (b).

The extraction process Exbraciation will be recognized as similar to Extraposition in that it moves an element out of the sentence brace, usually to the right of the rightmost bracket. Now, although these processes Exbraciation and Extraposition are very close, they differ in that Exbraciation involves the movement of any element, though usually an adverbial phrase or noun phrase, while Extraposition, as we recall from our discussion of Kuno (Chapter 2, Section IV), would appear to involve the movement of a whole clause from its canonical position within the sentence brace. Neither process would appear to involve anaphoric reference, in contrast to Right Dislocation (cf. Chapter 3, Section VII):

(16)(a) *Ich meine, dass dass er nicht kommt, ein gutes Zeichen ist.  
I think that that he not comes a good sign is  
'I think that that he isn't coming is a good sign'

(16)(b) Ich meine, dass es ein gutes Zeichen ist, dass er nicht kommt  
I think that it a good sign is that he not comes  
'I think that it is a good sign, that he isn't coming'
Sentence (17)(a) below is an example of Exbraciation in a main clause, while (17)(b) exemplifies Exbraciation in a subordinate clause (Dunbar; 92):

(17)(a) Es ist so schmutzig gewesen in der Weinstube
It is so dirty been in the wine bar
'It was so dirty in the winebar'
(17)(b) Es hat mich gewundert, dass es so schmutzig gewesen
It has me surprised that it so dirty been
ist in der Weinstube
is in the wine bar
'It surprised me that it was so dirty in the winebar'

The alternative word order for these sentences would be:

(18)(a) Es ist in der Weinstube so schmutzig gewesen
It is in the wine bar so dirty been
'It was so dirty in the winebar'
(18)(b) Es hat mich gewundert, dass es in der Weinstube so
It has me surprised that it in the wine bar so
schmutzig gewesen ist
dirty been is
'It surprised me that it was so dirty in the winebar'

It seems that a number of German speakers feel that the first alternative is more common and more felicitous than the second. The essential difference between the two is that the first type of sentence is more common in the spoken language while the second is more common in written German. Exbraciation would appear to be an extremely important syntactic process in German. While there is little evidence to suggest that it is a Main Clause Phenomenon,
i.e. restricted in its application to main clauses only, Dunbar suggests that it does seem to occur "less frequently in clauses containing old information than in clauses containing new information" (ibid.):

(19) (a) Na was! Hast du einen Brief von Oskar gekriegt?¹
What! Have you a letter from Oskar received?
'I say! Have you received a letter from Oskar?'

RESPONSE:

(19) (b) Ja, du weisst doch, dass ich einen Brief von Oskar gekriegt habe!
Yes, you know of course that I a letter from Oskar received have
'Yes, you know very well that I got a letter from Oskar!'

(19) (c) Ja, du weisst doch, dass ich einen Brief gekriegt habe von Oskar!
Yes you know of course that I a letter received have from Oskar
'Yes, you know very well that I got a letter from Oskar!'

Now, according to Dunbar, this restriction on the application of Exbraciation is to be expected, since "one function of unbracketing and moving out of V-F order is ... to redefine topic" (ibid.; 92). In other words, Dunbar claims, Exbraciation is used to specify exactly what the speaker is talking about, and if the speaker and hearer both know what the speaker is talking about (e.g., that Oskar sent the letter in (19) (a)-(b) above), then it is unnecessary to specify the topic, thus rendering (19) (c) less acceptable than (19) (b). The other function of Exbraciation (as a means of disturbing verb-final order) in the subordinate clause is, Dunbar claims, to "rhematize" a certain element, and is only possible if a clause

¹My numbering and glosses.
is strictly "old", presupposed information (ibid.). Once again, then, this would explain why (19)(c) is unacceptable, because it would be inappropriate to make Oskar the rheme of the sentence, since he constitutes "old" information within the "pragmatic context" of this sentence. It is, of course, possible to restate Dunbar's case simply in terms of our own description of German. Since the function of Exbraciation would in general appear to be the removal of an element from canonical position, thereby simultaneously clarifying and emphasizing it, the element moved must be capable of receiving the extra stress involved, otherwise the sentence sounds unnatural as in (19)(c).

Dunbar divides Exbraciation into two types — "Explanatory Exbraciation", which is basically the movement of adverbials and other non-"necessary" sentence material (ibid.; 29), and "Supplementary Exbraciation", or "Rhematic Exbraciation", which is basically the movement of "necessary sentence material". The example in (19)(c) above would presumably be an example of Explanatory Exbraciation. Supplementary Exbraciation, which is very uncommon, especially in subordinate clauses (cf. Behaghel, 1926; 54), sounds very unnatural indeed if the clause contains only presupposed information, according to Dunbar (ibid.; 94). He cites the following amongst his examples of Supplementary Exbraciation (ibid., 93-4):

(20)(a) Vom Dach oben ist auf einmal gefallen ein schwerer, dicker Stein
'Suddenly from the roof above fell a large heavy stone'

(20)(b) *Ich glaube, dass vom Dach oben auf einmal gefallen ist ein schwerer, dicker Stein
'I believe that from the roof above suddenly fell a large heavy stone'
(21)(a) In einer hohen Burg hat einmal gelebt ein junger Prinz
In a tall castle has once lived a young prince
'In a tall castle there once lived a young prince'
(21)(b) *Die Alten sagen uns, dass in einer hohen Burg einmal
The old say to us that in a tall castle once
gelebt hat ein junger Prinz
lived has a young prince
'The old folk tell us that in a tall castle there once
lived a young prince'

It would appear that (20)(a) is permissible, according to
Dunbar's analysis, because ein junger Prinz (a young prince), an
indefinite NP, is "new information" in this main clause. As we
said above, Dunbar suggests that Supplementary Extraciation is
particularly unnatural in subordinate clauses, which is presumably
the reason Dunbar proposes for the unacceptability of (21)(b).
However, as we stated above, some of Dunbar's observations are
restatable in terms of the constraints discussed in the present
thesis. If we take another look at Kuno's analysis of Extraposition,
(ibid., 1974), we will note that perceptual strategies and
basic word order also play a part in determining the acceptability
versus unacceptability of Extraciation in German sentences.

We recall that Kuno (1974) argued that Extraposition and
related syntactic mechanisms may well have developed in order to
avoid perceptual difficulties inherent in the word order systems of
languages like English and German (cf. Chapter 2, Section IV, for
details). Hence, Extraposition developed in German as a means of
clarifying syntactic relations in examples like (58)-(59)(a) above,
(Chapter 2, Section IV), repeated below in (22)(b) and (23)(b):

(22)(a) *Ich denke, dass dass die Erde rund ist, deutlich ist
I think that that the earth round is clear is
'I think that the earth is round is clear'
(22)(b) Ich denke dass es deutlich ist, dass die Erde rund ist
I think that it clear is that the earth round is
'I think that it is clear that the earth is round'
We recall that Kuno remarks that German cannot be termed rigidly verb-final in subordinate clauses, since Extraposition of Ss and postposition of purpose phrases is permitted in order to clarify syntactic relations. He maintains that "the language might be almost unspeakable if it adhered rigidly to SOV word order in subordinate clauses (that is, if Extraposition and postposition of certain phrases\(^1\) could not apply in subordinate clauses)" (ibid.; 131). I would submit that the type of Exbraciation which Dunbar is referring to in examples (20)-(23) is exactly this sort of 'postposition of certain phrases' for the clarification of syntactic relations. This sort of Exbraciation is, especially in the spoken language, a simple way of clarifying syntactic relations and facilitating perception whenever the sentence brace (Satzklammer) of subordinate clauses causes potential confusion to the hearer. The natural result of moving elements to the right in the sentence in this way, beyond the verbal boundary of the subordinate clause, is that extra stress is automatically lent to the postposed element, which is perhaps one reason why Dunbar associates a feeling of assertion with unbracketed elements. Another natural result of postposition of this type is that perceptual confusion is caused if "essential material" e.g. the subject of the clause, is moved beyond the verbal boundary of the subordinate clause, since the speaker is possibly misled into believing that the verb marks the boundary of the essential part of the clause. What follows in an acceptable sentence which has undergone Exbraciation in the subordinate clause is usually an adverbial of time or place or a prepositional phrase of some sort. The fact that ein junger Prinz may be unbracketed in the main clause construction in (35)(a) is less surprising,

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\(^1\) My underlining.
since main clauses of this type are easier to process in that only one verbal phrase, one subject and one prepositional phrase are involved. Exbraciation is presumably used in this example more for the purpose of emphasis than for the clarification of syntactic relations.

In summing up this point, then, we might say that extraction processes in German fulfill two main functions. On the one hand, they can be used for the clarification of syntactic relations, i.e. their Grammatical Word Order function, which is often necessitated by the potential perceptual confusion caused by German basic word order. On the other hand, however, these transformations may be used in an emphasizing function, i.e., a Pragmatic Word Order function, which is a natural consequence of such an operation, since movement to the right, and particularly movement out of canonical position in subordinate clauses, automatically creates emphasis. Thus, such extraction processes provide another example of the Mixed Function of German word order. Once again, however, we have had cause to stress a vital general principle of German word order. Clarity of grammatical relations is imperative within this language, and no transformation can be used to effect changes in emphasis, if in so doing perceptual confusion is caused.

Thus we see that Dunbar's observations about Exbraciation in main v. subordinate clauses in German support our analysis of such extraction processes, which is based on Kuno's (1974) treatment of Extrapolation, and takes into account the interaction of perceptual strategies and basic word order patterns.

A further point made by Dunbar raises a very interesting question about the polyfunctional nature of weil (because), particularly in spoken German. He cites Vennemann (1973a) who argues that the "Satzklammer" (i.e., "sentence brace") will eventually disappear from usage altogether, quoting as evidence some examples of so-called Exbraciation which are tolerated in colloquial spoken German:

"As a matter of fact, there are strong tendencies in Modern Colloquial German to use main clause word order in subordinate clauses; constructions such as the following are quite normal, at least
among young speakers: Ich konnten nicht mitkommen, weil ich hatte Kopfschmerzen ... Ich kenne jemand, der hat schon vor zehn Jahren in Afrika Urlaub gemacht (Vennemann, 1973a, 5)" (i.e., 'I couldn't come because I had a headache' ... 'I know someone who went on holiday to Africa ten years ago').

Dunbar points out an interesting similarity between the two sentences cited above. In both instances, weil is substitutable for by denn and the resultant verb-second word order (ibid.; 94). In sentence (24) below, on the other hand, weil cannot be substituted for by denn, and the word order is obligatorily verb-final (ibid.):

(24) Er verprügelt seine Frau nicht, weil er sie liebt
He beats his wife not because he her loves
'He does not beat his wife, because he loves her'

In this sentence, there is a causal relationship between the two clauses, while in Vennemann's examples, the clauses are separate, or merely loosely linked by the comma alone. These sentences would therefore suggest that weil in German has two functions — either as a coordinating or a subordinating conjunction. This is a very interesting observation, in view of our previous discussion of the polyfunctionality of certain conjunctions in Chapter 1, Section II. We recall Andersson's (1973) contention that in Swedish certain conjunctions can either introduce a coordinate or subordinate S, so that a sentence like (73)(a) in Chapter 1 (repeated below in (25) (may be ambiguous) (ibid.;20):

(25) Robin studerar inte lingvistik därför att han är intresserad av språk.
Robin studies not linguistics therefore that he is interested in languages

My translations
In one interpretation of (25) the causal relation between the two clauses is negated — i.e. there is some other reason why Robin is studying linguistics. In the second reading, Robin is not studying linguistics precisely for the reason that he is interested in languages, so that in this latter interpretation, only the matrix clause is negated. Now, if we were to replace the därför att in (25) with the coordinating conjunction ty, only the second interpretation of the sentence would be possible, the second clause being perceived as a main S. Moreover, if we add an adverbial, alltid, to the sentence in (25) it must appear in main clause position in the second interpretation, while in the first interpretation it would assume the position of adverbials in subordinate clauses. Only in the (a) version in (26) below (i.e., the version with a subordinate clause), would the realization of the auxiliary ha (have) be optional, as it is in all Swedish subordinate clauses:

(26) (a) Robin studerar inte lingvistik därför att han alltid
because
(har) varit intresserad av språk
has been interested in languages

(26) (b) Robin studerar inte lingvistik [därför att han [ty [har (*ϕ)]

Thus we see that a conjunction which normally functions as a subordinating conjunction may appear in a coordinating capacity in Swedish. However, as we pointed out in Chapter 1, Section I this does not mean that the rules operating in a subordinate clause are violated more freely in the spoken language, as pointed out by Teleman (1967). It simply means that the characteristics of a subordinate S are only absent when the S is perceived of as a main clause (cf. Anderman, op. cit.; 341). What we have here is a de facto main clause functioning as such after a particular type of polyfunctional conjunction.
I submit that in the German example in (24) we have a parallel sentence to the Swedish example under discussion. In other words, we do not have an instance of a clause which has undergone Exbraciation in (24), but instead we have a clause which is introduced by the polyfunctional element weil in its coordinating function, thus requiring verb-second word order.

The important thing to note here is that, since verb-final order is the order of subordinate clauses in German, the causal version of (24), i.e. the truly subordinate clause, must have verb-final order. The non-causal version of (24) on the other hand, where weil is substitutable for by the coordinating conjunction denn, must display verb-second order, the order of main clauses in German. By analogy with A-B Andersson's (1973) analysis of polyfunctional conjunctions, we are thus able to provide a structural explanation for the so-called differences of "tolerance of V-2 order".

Thus we might say that Vennemann's observation about the tendency "among young speakers" to use SVO in main and subordinate clauses is open to radical reinterpretation: "the young" would appear to be no more tolerant of SVO after weil in a subordinate clause; they simply perceive weil as a polyfunctional conjunction - of which there are many other examples in German (cf. below, Section II) - and mark the clause according to its function in any one particular context.

An important difference between German and Swedish syntax must be emphasized at this juncture, however, and it is one which we will have cause to pursue still further in our final discussion in Section II. Swedish, of course, cannot use word order to disambiguate the function of polyfunctional conjunctions in the way that German can. In other words, whereas in (24) the verb in clause-final position signals that the conjunction is appearing in its function as a subordinating element, the Swedish example cannot do so. Instead, Swedish varies the position of its Neg particle and adverbials, or makes the usually optional realization of the
auxiliary in the dependent clause obligatory, as in (26)(b). However, not all sentences contain Neg or adverbials, and since the dropping of the auxiliary is not an invariable rule, even with "truly" subordinate constructions in Swedish, the disambiguating power of such markers is weak in comparison to the signals provided by German verb placement. Since verb-final order is obligatory with German subordinate clauses introduced by a complementizer or subordinating conjunction, i.e. with "truly" subordinate clauses, and since the word order of main or coordinate clauses is always verb-second, the system in German is a potent signal of clause status. This is an extremely important function of German word order, and we shall discuss it in greater detail in Section II.

Incidentally, this analysis of weil in German as a polyfunctional element is also supported by the fact that, just as we showed in Chapter 2, Section II, surface markers can be used optionally with weil to reinforce its status as a subordinating conjunction. For example, the adverb gerade can be used to strengthen the subordinating (directly causal) function of weil although it cannot be used with weil in its coordinating function:

(27) (a) Er verprügelt seine Frau nicht, gerade weil er sie liebt
         "He does not beat his wife, exactly because he loves her"
(27) (b) *Er verprügelt seine Frau nicht, gerade denn er liebt sie
         "He does not beat his wife, exactly for he loves her"

Thus we might conclude that one function of word order in German is to disambiguate polyfunctional conjunctions. This observation has important consequences for our description of subordinate clauses in German and will be discussed below in Section II.

Another illustration of the effect of syntactic constraints on German syntax is provided by the behaviour of subordinate clauses in German which are embedded by a negative main clause. Following Delbrück (1919), Dunbar shows that, while (28)(a) and (b) are
acceptable in German, this freedom of choice is not permitted with (29)(a)-(b), where the main clause is negated (Dunbar, op. cit.; 103):

(28)(a) Ich denke, es wird so werden
I think it will so become
'I think it will turn out like that'

(28)(b) Ich denke, dass es so werden wird
I think that it so become will
'I think that it'll turn out like that'

(29)(a) Ich denke nicht, dass es so werden wird
I do not think that it so become will
'I do not think that it'll turn out like that'

(29)(b) *Ich denke nicht, es wird so werden
I don't think it will so become
'I don't think it'll turn out like that'

Dunbar adds the following possible and impossible combinations (ibid.):

(30)(a) Es wird so werden, denke ich
'It'll turn out like that, I think'

(30)(b) Dass es so werden wird, denke ich schon
'That it'll turn out like that, I'm quite sure'

(30)(c) Dass es so werden wird, denke ich nicht
'That it'll turn out like that, I don't think'

(30)(d) *Es wird so werden, denke ich nicht
'It'll turn out like that, I don't think'

My glosses and translations.
Now, according to Dunbar, the clause *es wird so werden* is asserted when embedded under a positive main clause *ich denke*, and hence main clause word order can be used, but the same clause constitutes presupposed, "old" information when embedded under the negated *ich denke nicht* and as such can no longer have the so-called "assertative" verb-second word order (ibid.; 103-4). However, once again there is a parallel syntactic explanation for this phenomenon.

Anderman (op. cit., 216 ff) discusses a closely related phenomenon in English, known as Neg-transportation, within the context of the Determiner node analysis, and makes certain observations which also have bearing on the German examples cited. She discusses Lindholm's (1969) analysis, and observes that Neg-transportation is allowed by verbs whose complements pronominalize into *so*, but not by those that take *it* (cf. Cushing, 1972; 202). Thus, while the verb *think* can occur in the two synonymous sentences of (31), *suggest* (in (32)) cannot (Cushing, ibid.):

(31)(a) I don't think that generative semantics is a fruitful endeavour
(31)(b) I think that generative semantics is not a fruitful endeavour
(32)(a) I don't suggest that you should abandon lexicalism
(32)(b) I suggest that you should not abandon lexicalism

As Anderman points out, *think* is a verb which can take 'S-like' complements which lack the insulation of the Determiner node, while *suggest* takes only complements with the Determiner node in underlying structure. Thus *suggest* can neither pronominalize into *so*, nor undergo Neg-transportation, as the example above shows (ibid.; 221).

It is those verbs which can take both complement types which are particularly interesting from the point of view of Neg-transportation. Depending on the sense in which these verbs are used, they pronominalize into either *it* or *so* (Anderman, ibid.). Thus, for example, the verb *guess* takes *so* when it means *suppose*, as we
can see in example (31) above. When used in this sense the verb also allows Neg-transportation (Cushing, op. cit.; 202):

(33)(a) I don't guess I'll bother doing any more generative semantics
(33)(b) I guess I won't bother doing any more generative semantics

When guess is used with its 'more pronounced lexical meaning' (cf. Aijmer, 1967; 71), however, in the sense of 'make a guess', etc., it pronominalizes into it, as is shown in (34). When it is used in this way, Neg-transportation is blocked as in (35) below, where (a) and (b) are not synonymous (ibid.):

(34) He thought that I didn't know that it was Lakoff who invented generative semantics but when he asked me I guessed it.

(35)(a) When he asked me which of them invented generative semantics
I did not guess that it was Lakoff
(35)(b) When he asked me which of them invented generative semantics
I guessed that it was not Lakoff

It would appear that similar factors are at work in the German examples in (42)-(44) above. Denken is a member of the group of verbs we have called verba putandi, and like the group of such verbs cited for English, it would appear that it may be used either with 'less'or 'more pronounced lexical meaning'. When it is used with 'more pronounced lexical meaning', as with (29)(a) above, repeated below in (36), it appears to need a more 'noun-like' complement, and hence, the complementizer and verb-final order appear in surface structure:

(36) Ich denke nicht, dass es so werden wird
I think not that it so become will
'I don't think it'll turn out like that'
Moreover, when the verb is used with 'more pronounced lexical meaning', Neg-transportation is not tolerated; i.e. (36) above is not synonymous with (37) below:

(37) Ich denke, dass es nicht so werden wird

'I think that it won't turn out like that'

Thus, we have once again been able to propose a structural explanation for phenomena which Dunbar chooses to discuss in semantic terms.

One final aspect of subordinate clause behaviour which Dunbar discusses in terms of "pragmatic function" is the effect of grammatical person in the main clause on subordinate clause word order (ibid.; 104). According to his analysis, clauses with verb-second word order are judged far more felicitous if embedded by a matrix verb in the first person, as in (38)(a) below, than those embedded by verbs in the third person, as in (38)(b). Moreover, this latter type is apparently greatly improved by changing the word order in the embedded sentence to verb-final order (and presumably, adding a complementizer! (BAF)), as in (38)(c) (ibid.):

(38)(a) Ich glaube, die Frau ist nicht da

'I believe the woman is not here'

(38)(b) Er glaubt, die Frau ist nicht da

'He believes the woman is not here'

(38)(c) Er glaubt, dass die Frau nicht da ist

'He believes that the woman is not here'

Now, Dunbar's explanation for this phenomenon is that "in such a sentence the main clause can more easily become (or be interpreted as) the main assertion, if the subject is something other than first person" (ibid.). To support his claim, he suggests that a speaker is more likely to be supportive of an assertion which he believes than one which he is reporting someone else to believe, "and in the latter situation a dass-clause is the preferred construction" (ibid.; 104-5). He does not, however, offer any concrete
explanation for why a *dass*-clause is preferred in such a situation, which is something that can be explained if we adopt the analysis of Reported Speech from Ch. 4, as we shall see below. Instead, Dunbar draws parallels between the analysis of the tolerance of e.g. fronting of elements for English, discussed by Green (1976, see above Chapter 1, Section II), and his analysis of similar constructions in German. As we recall from Chapter 1, Green shows that the fronting of elements in English can only occur if the speaker feels supportive enough of the content to be assertive about it, as the following examples show (Green, op. cit.; 386):

(39)(a) John says that standing in the corner is a man with a camera, and I think he's right
(39)(b) *John says that standing in the corner is a man with a camera, but I think he's wrong

According to Dunbar, the situation is similar in German, where there is an "assertion-based constraint on V-2 order";¹ not only in the case of German, but also with other verbs which he classes as 'assertive embedding verbs' (ibid.; 105):

(40)(a) Ich nehme an, du hast das Essen mitgebracht
       I assume you have the food with-brought
       'I assume you've brought the food with you'
(40)(b) ?Er nimmt an, du hast das Essen mitgebracht
       He assumes you have the food with-brought
       'He assumes you've brought the food with you'
(40)(c) Er nimmt an, dass du das Essen mitgebracht hast
       He assumes that you the food with-brought have
       'He assumes that you've brought the food with you'
(41)(a) Ich schätze, das sind 45 Stück
       I estimate that are 45 pieces
       'I estimate there are 45'

¹ i.e., verb-second order
Moreover, Dunbar also suggests that the "presupposing type of embedding verbs" show a sort of hierarchy for tolerance of verb-second order depending on the grammatical person of the main clause subject (ibid.; 105-6):

(42)(a) ?Ich bedaure, der Kaffee ist schon kalt
   I regret the coffee is already cold
(42)(b) ??Er bedauert, der Kaffee ist schon kalt
   He regrets the coffee is already cold
(42)(c)  Er bedauert, dass der Kaffee schon kalt ist
   He regrets that the coffee is already cold

Now, once again, we have explained some of these phenomena in terms of the division of matrix verbs into two distinct types. The verbs in examples (40)(a)-(c) and (41)(a)-(c) above are verbs of the dicendi, putandi, sentiendi-type, and as such tolerate unmediated complements. On the whole these examples are much more acceptable than those in (42)(a)-(c), which belong to the type of verbs which display a Determiner node in underlying structure, and do not therefore tolerate unmediated complements. We recall that whenever the complementizer is not realized in German, the verb automatically assumes the second position in the sentence, since verb-final order is an automatic concomitant of the appearance of the complementizer. Hence (42)(c) and (40)-(41)(c) must have verb-final order, while the (a) and (b) examples must not. Indeed I would contend that the examples in (42)(a)-(b) which Dunbar finds questionable should really be classed as totally unacceptable.
However, there is an interesting point to be made here, namely, that the grammatical person of the verb in the matrix of (41) and (42) undeniably has an effect on the relative acceptability of verb-second order in the ensuing clause. Dunbar suggests that some recent studies by Kuno (1975, 1976; Kuno and Kaburaki, 1977) on the effect of "speaker empathy" on English syntax might provide a clue to why this should be the case. "Speaker empathy" is the term used by Kuno to describe from whose point of view the speaker is talking (1975; 321; 1976; 433), and to denote "the speaker's identification, in varying degrees, with a participant or event" (1976; 431). Hence, in the following examples there is, according to Kuno, a definite hierarchy in terms of speaker empathy (ibid.; 1976; 431-2):

(43)(a) John hit his wife
(43)(b) John hit Mary
(43)(c) Mary was hit by John
(43)(d) Mary's husband hit her

Thus, according to this analysis, while (a) above shows little speaker empathy with Mary, (b), (c) and (d) show progressively more empathy with her (cf. Dunbar, op. cit.; 106).

Kuno suggests that we give syntactic prominence to a person with whom we are empathizing (ibid., 1975; 324):

(44)(a) *John's sister and he went to Paris
(44)(b) ?*His sister and John went to Paris
(44)(c) John and his sister went to Paris

Furthermore, conflicting empathy foci are constrained from appearing in the same sentence:

(45) *John's wife was hit by him (ibid.; 1975; 322)
(46) *Then, Mary's husband hit his wife (ibid.; 1976; 432)

(cf. Dunbar, op. cit., 107)
Dunbar suggests that similar observations can be made about the sentences governed by glauben in (38)(a)-(c) above. He claims that we are definitely empathizing more with ich (I) than with er (he) so that the sentence in (38)(a) with main clause first person subject "can more readily be given (assertative) syntactic prominence by means of V-2 word order" (ibid.). If we use main clause word order in the clause governed by er as in (38)(b), then we "lend that clause too much prominence" (ibid.). Dunbar continues: "It is as if we were willing to be so affirmative about the statement as to lend it the assertional prominence of our own statement, which is not likely to be the case" (ibid.). He therefore suggests that there is an extent to which the speaker's willingness to accept an embedded clause statement as his own affects the degree to which verb-second order is tolerated (ibid.).

These facts would appear to be corroborated by supporting evidence from those sentences in German which involve second and third person main clause subjects (ibid.; 107-8):

(47)(a) Du weisst doch, ich habe ihn nie gesehen
     You know of course I have him never seen
     'But you know, don't you, I've never seen him'
(47)(b) Er weiss (doch), ich habe ihn nie gesehen
     He knows of course I have him never seen
     'He knows, doesn't he, I've never seen him'

Thus verb-second word order in the clause governed by wissen is tolerated much more easily if the verb is in the second person, than in the third, which Dunbar suggests is no surprise in view of the following observation by Kuno:

"(It) is easier for the speaker to empathize with himself (i.e. to express his own point of view); it is next easiest for him to express his empathy with the hearer; it is most difficult for him to empathize with the third party, at the exclusion of the hearer or himself" (Kuno, 1976; 433).
Other researchers have apparently claimed that the same hierarchies which Kuno postulates for speaker empathy also exist with regard to 'topicality', a notion which Kuno claims has inherent "speaker empathy" (e.g., Givon, 1976-152-3; Kuno, 1976; 427 and Kuno and Kaburaki, 1977; 656). In connection with this, Dunbar adds that, in judging the acceptability of verb-second clauses governed by e.g. ich glaube v. er glaubt, another 'discourse factor', namely topicality and topic-switch plays a role. He argues that in a sentence like (38)(a) above, which is embedded by ich glaube, the ich-referent is not likely to have been the 'central topic of conversation' (ibid., 110). In the sentence embedded by er glaubt, however, "there has definitely been discussion of the er-referent, or he exists in the speaker/hearer's consciousness, otherwise the pronoun could not be used. The clause ich glaube is, in Langacker's terms, not part of the 'objective content' of the sentence, but rather meant as a sentence-qualifier, not to be asserted" (ibid.).

These observations would appear to be in complete accord with the syntactic analysis we are proposing for German. As we saw above in Chapter 4, clauses which are governed by verba dicendi, putandi, sentiendi and analogous predicates can assume different degrees of 'subordinateness', marked by the absence v. presence of primary and/or ancillary markers of subordination, and dependent upon exactly how closely governed by the matrix verb the speaker would like them to be. It would appear that those verbs which Dunbar calls 'assertive embedding verbs' (ibid.; 105) correspond exactly to verba dicendi, putandi etc. The difference in tolerance of clauses with main clause word order depending on the grammatical person of the verb, which Dunbar claims is explainable in terms of topicality and assertion v. presupposition, might therefore also be explained in terms of the "degree of subordinateness" displayed by the clause. For example, (38)(a) above (repeated below in (48)(a) may be classed as an instance of MIXED INDIRECT REPORT, in our terminology (see above, Chapter 4, Section I).

As such, it displays none of the primary markers of subordination in the reported clause, which is only loosely connected to the clause containing the verb of saying, and behaves almost exactly like a truly main clause in that it allows certain Emphasizing
Movement Transformations to apply. In terms of assertion, we can say that such a construction contains two assertions, one clause behaving no less like a main clause than another:

\[(48)(a) \quad \text{Ich glaube, die Frau ist nicht da} \]
\[\quad \text{I believe the woman is not here} \]
\[(48)(b) \quad \text{?Er glaubt, die Frau ist nicht da} \]
\[\quad \text{He believes the woman is not here} \]

Sentence \((38)(b)\) above, on the other hand (repeated in \((48)(b)\)) is less acceptable than \((48)(a)\) because it displays one more marker of subordination; namely the referent of the non-reported, original utterance, i.e. \(ich\) has been changed to \(er\) (he), thus demonstrating a greater degree of 'subordinateness', or dependence of the reported clause on the matrix, which therefore causes this degree of unacceptability:

\[(49) \quad (?)Er glaubt, die Frau ist nicht da \]
\[\quad \text{He believes the woman is not here} \]

Note that if we change the tense in this sentence, we can use the subjunctive as an extra marker of dependency, rendering the sentence not only more acceptable, but also as the most common form of Reported Speech in German:

\[(50) \quad \text{Er glaubte, die Frau sei da gewesen} \]
\[\quad \text{He believed the woman is here been} \]
\[\quad \text{SUBJ} \]
\[\quad \text{'He believed the woman had been here'} \]

In terms of assertion, then, we might say that the main assertion of this clause is dependent on the matrix and must be marked as such, otherwise perceptual confusion will arise as to 'speaker empathy' .. such a sentence as \((50)\) without the subjunctive might in running text be misconstrued as 'author comment', a function of Reported Speech which we discussed in Chapter 4 above,
Section II. That this marking is essential is demonstrated in the third alternative of this sentence where primary markers of subordination are present, rendering the sentence completely acceptable:

(51) Er glaubt, dass die Frau nicht da ist  
He believes that the woman not here is  
'He believes that the woman is not here'

It would appear then, that we are able to give an alternative structural explanation for the effect of the person of the matrix verb on the behaviour of the clause it governs, in terms of 'degrees of subordinateness'. The clause which follows ich glaube (i.e., (48)(a)) bears neither primary nor ancillary markers of subordination and is therefore the 'least subordinate' version. Sentence (48)(a), which follows er glaubt, presents a problem because it is not sufficiently marked to clarify its dependent status. Sentences like (50), where the matrix verb is in the third person singular and where the verb in the second clause is in the subjunctive, are a commonly accepted form in German, because the subjunctive acts as a sufficiently clear signal of subordination. The sentence (51) which also displays the matrix form er glaubt is completely acceptable, because primary markers of subordination are present to clarify the dependent status of the reported clause on the matrix verb of 'believing'.

The difference between the three in terms of "assertion" is that alternative (49) clearly consists of two "assertions", both with main clause status. Alternative (50) on the other hand, an unacceptable form, is confusable between a reported statement dependent upon the matrix, and two main clauses, so that unless it is given extra marking in the form of a subjunctive marker for the verb in the subordinate S, or primary markers in the form of complementizer and verb-final order, it is unacceptable. However, we recall that this construction is in fact used widely in German for the purpose of 'author comment' in Reported Speech (see Chapter 4, Section II, for discussion).

In this section we have attempted to provide a syntactic explanation for a number of the so-called Main Clause Phenomena discussed for German by Dunbar (1979) in terms of semantic and pragmatic criteria. We have seen that, provided we make a clear
distinction between *verba dicendi*, *putandi*, *sentiendi* and other types of verb, we can explain many of the differences in tolerance of phenomena such as so-called "V-2 word order in embedded clauses". Dunbar, I believe, also sees a distinction between verb types, since he discusses the syntactic behaviour of clauses governed by "assertive embedding verbs" (i.e. our *verba dicendi* type, which can allow unmediated complements and therefore also verb-second clauses) versus those governed by the 'presupposing type of embedding verbs' (ibid.; 105-6). However, I feel that Anderman's (1978) Determiner node theory has enabled us to capture Dunbar's observations in a simple and consistent way. Moreover, as we have seen above, if we discuss some of the subordinate clauses in terms of 'degrees of subordinateness', we can successfully predict which clauses are more likely to tolerate other so-called Main Clause Phenomena.

One point we must stress here again is that our analysis would never allow us to think of verb-second order as a main clause phenomenon in a subordinate clause, as Dunbar suggests. Verb-second order is indicative of main clause status in German, while verb-final order and the use of a complementizer or subordinating conjunction are both required to mark a clause as "truly" subordinate. We would call those clauses which display verb-second order and appear in combination with a matrix verb like *glauben*, *meinen* etc. clauses with a low degree of "subordinateness" or dependence or, alternatively, clauses with a high degree of independence, noting that they behave exactly like main clauses if they feature no ancillary markers of syntactic status (cf. Chapter 4 above).

This examination of Dunbar's German data has shown that, while it may be possible to account for many aspects of German syntactic behaviour in terms of semantic properties and pragmatic criteria, this is neither the only description possible, nor is it fully adequate to explain the German data at hand. We have seen throughout this discussion that German syntax can be described either in terms of its Grammatical Word Order function, or of its Pragmatic Word Order Function, or both. We have further seen that psychological constraints also can be shown to affect German syntactic behaviour. These findings are in complete agreement with the framework of analysis
we outlined in Chapters 1 through 4. Observable data speak clearly of the Mixed Function of German word order and the overriding importance of unambiguous syntactic relations.

Finally, a major observation has emerged from our discussion in this section. The position of the verb in German clauses can disambiguate the function of a polyfunctional conjunction like weil. This is a feature of German which, as we have seen, is not shared by a language like Swedish. In the following section, we shall see that this observation about German word order might well be the key to the question why so many types of syntactic markers are used in German.

II. Concluding Remarks

Throughout this discussion of subordination in German we have concentrated almost exclusively on properties of clauses introduced by the complementizer dass. However, a recent review of theories of German word order (Scaglione, 1981) raises some extremely interesting points about the interaction of other conjunctions and connectives with word order patterns in German, which not only support and reinforce the analysis we are proposing, but also shed light on two of the central questions posed in this thesis: namely, how would we define the term "subordinate clause" for German, and secondly, why does German use both morphological devices and word order to mark the status of clauses? By way of conclusion, I therefore consider it worthwhile to take a look at some of the remarks made in Scaglione's survey, and in so doing, we shall find it appropriate to summarize and discuss the implications of the most important findings of the present study.

In Chapter 3, Section II, we argued on both synchronic and diachronic grounds that dass is the complementizer of finite verb complements in German. We also argued that verb-final order is an automatic concomitant of the appearance of this complementizer in surface structure and suggested that these two features constitute the primary markers of subordination in German. However, we have also seen that the order of clauses introduced by dass is not always strictly speaking SOV, but that certain elements may be
moved from their canonical position, depending on the clarity of grammatical relations within the sentence. Indeed, they may even be Extrapolated or Extricated, either for the purpose of clarification of syntactic relations (cf. examples from Kuno, 1974) or for the purpose of emphasis (cf. examples from Dunbar, 1979) or for both these reasons. Nevertheless, we have seen and must stress here again, that such deviations from the canonical SOV order are strictly constrained in German (cf. Chapter 4, Section II).

In discussing the ancillary markers used in German we noted a different type of variation in word order in clauses that are loosely linked with or dependent upon a matrix clause (cf. Chapter 3, Section II). For example, we recall that Duden (1973) discourages the use of word order alone to express the dependency relationship implicit in conditionals, as in example (26) above (Chapter 2, Section II), repeated below in (52)(a). Instead of VSO+VSO order, it was argued, some sort of surface signal of the dependency relationship between one clause and the other is required, as in (52)(b). Better still, a clearly subordinating conjunction and SOV order can be used to express this relationship, as in (52)(c):

(52)(a) *Will ein Besitzer ein Grundstück veräußern, hat er eine Meldung zu machen
Wants an owner a plot of land to sell has he a report to make
(52)(b) Will ein Besitzer ein Grundstück veräußern, dann hat er eine Meldung zu machen
Wants an owner a plot of land to sell then has he a report to make
(52)(c) Wenn ein Besitzer ein Grundstück veräußern will, hat er eine Meldung zu machen
If an owner a plot of land to sell wants then has he a report to make
'If an owner wants to sell a plot of land, (then) he has to make a report'
However, in this instance Duden appears to be talking in prescriptive terms only, and in fact constructions such as (52)(a) do sometimes occur in German. Hence we must conclude that the word order in this type of clause is not always SOV, but may be VSO, even if SOV order + complementizer is preferred. As a consequence of this we must say that the order of elements in non-main clauses in German is not always SOV. Now, amongst others, Weinrich (1964) has argued that the word order of non-main clauses in German is not always verb-final, but that instead the verb can appear in any position in the clause but verb-second position. Other authors (e.g. Maurer, 1926) talk in terms of a general rule of Nichtzweitstellung (i.e. other than verb-second position) for verbs in the dependent clause. This is indeed an interesting observation, since it would appear to support our tentative claim above (Chapter 4, Section III) that the presence of the complementizer in a subordinate clause in German signals that the V/2 CONSTRAINT is not operative in that clause, and that the Subject-Verb Inversion of main clauses does not take place.

This fact links in an interesting way with the claim made by Scaglione that it is typical of German that so many particles are at the same time coordinating and subordinating conjunctions, prepositions and sometimes also adverbs, often not without some degree of confusion (ibid.; 160). Of course this is simply another way of expressing the fact that German is rich in polyfunctional elements which are potential sources of perceptual confusion, as we discussed above (Chapter 5, Section I, and Chapter I, Section II).

Scaglione proceeds to cite the following examples of polyfunctionality (provided verbally by Vennemann) (ibid.):

(53)(a)  Maria nahm die Pille, trotzdem sie schwanger war
        Maria took the pill despite+pron she pregnant was

(53)(b)  Maria nahm die Pille, trotzdem war sie schwanger
        Maria took the pill despite+pron was she pregnant
In (53)(a), "trotzdem is a subordinating conjunction meaning "even though" and carrying XV construction", while in (b) "trotzdem is adverbial-coordinating, meaning 'nevertheless' and carrying VX construction" (Scaglione, ibid.). We note that in (53)(b) Inversion takes place after trotzdem, which is to my mind a clear indication that the V/2 CONSTRAINT is operative in this clause. Since the V/2 CONSTRAINT applies only to main clauses in German (cf. Haiman; 1974), we must conclude that (53)(b) is a main clause and that trotzdem is "adverbial coordinating" in this instance. Since the Inversion rule applies consistently in main clauses, there is no need in an example like (53)(b) for any other marker, according to the principle we discussed in Chapter 2, Section IV. Following Vennemann, Scaglione points out that weil, obwohl, obgleich, da, denn, während, etc. and even der, die, das (the relative pronoun/demonstrative) also have varied functions within German sentences (ibid.).

In the light of our discussion of polyfunctional elements in Chapters 1 and 2, this comes as no surprise to us. Indeed, we have suggested that in order to disambiguate the function of such elements, German has developed a comprehensive system of primary and ancillary markers. In fact, elsewhere Scaglione himself supplies incidental evidence of an ancillary marker disambiguating the function of Inversion in a non-main clause.

Quoting Fleischmann (1973; 29), he provides the following example (ibid.; 175):

(54) Er fiel beinahe um vor Müdigkeit, hatte er doch zwei Nächte nicht geschlafen. 'He almost collapsed with exhaustion; indeed, he hadn't slept for two nights.'

Scaglione comments that the doch in sentence (54) would "fall off" if the clause were "transformed" into "an end-verbal Gliedsatz introduced by da or weil" (ibid.). In our terms, we could say
that if an unambiguous conjunction like da or weil were used with SOV order, then doch would not be needed to clarify the status of the clause in which it appears, resulting in:

(55) Er fiel beinahe um vor Müdigkeit, da er zwei Nächte
    He fell almost over with tiredness since he two nights
    nicht geschlafen hatte
    not slept had
    'He almost collapsed with exhaustion, since he hadn't slept for two nights'

In tracing the history of theories of German word order, Scaglione cites numerous grammarians who point out that because of the weak distinctions between adverbs and conjunctions in German, and because of the weak subordinating power of conjunctions in this language, verb-final word order developed in subordinate clauses as a means of marking them distinct from main clauses (cf. e.g. Delbrück, 1911; Erdmann, 1886; 195; Weinrich, 1964; 21 1-37 etc.). This suggestion is supported by e.g. Vennemann, who claims that, while it is usual that languages develop their conjunction system to strengthen their ability to produce complex sentences, German "was unable to create a clear enough system of subordinating particles. Under these circumstances, word order was called upon to fill an additional role, that of marking subordination by applying an effective double standard, that is, by introducing a clear separation in word order structure between main and subordinate clauses" (quoted by Scaglione, op. cit.; 160).

These comments link in a very interesting fashion with our observations in the previous section about the disambiguating function of German word order vis-à-vis polyfunctional clause-introductory elements like weil. We recall that verb-final order is used to mark a polyfunctional element like weil clearly as a subordinating conjunction, and verb-second order occurs when the conjunction appears in its coordinating function.

If we contrast the situation in German with that in Swedish, taking up the point we raised about the disambiguating function of word order in Section I above, certain interesting facts come to light about the nature of German syntax.
Anderman (op. cit.; 321) suggests that Swedish developed the use of two complementizers for the clarification of syntactic function (cf. Chapter 2, Section I above and Anderman, ibid., for detailed discussion). Hence, for example, the complementizer att is used with complex conjunctions in Swedish to signal the subordinating function of an element like trots (det) att (despite the fact that):

\[(56) \quad \text{Trots (det) att han är mycket nervös, är han en bra skådespelare}
\]

'Despite the fact that he is nervous, he is a good actor'

This use of att parallels the function of dass in German with complex conjunctions like trotzdem dass:

\[(57) \quad \text{Trotzdem dass er sehr nervös ist, ist er ein guter Schauspieler}
\]

'Despite the fact that he is nervous, he is a good actor'

However, the parallel stops here. As can be seen from example (58)(b) below, Swedish cannot delete the complementizer following det, whereas German can delete dass, using trotzdem alone as a subordinating conjunction, as in (59)(b):

\[(58)(a) \quad \text{Trots det är han en bra skådespelare}
\]

\[(58)(b) \quad \text{*Trots det han är mycket nervös, är han en bra skådespelare}
\]
In other words, because Swedish has no reliable signal like verb-final word order, the complementizer is required to clarify the function of the clause-introductory morpheme. We recall that in certain instances, Swedish can distinguish subordinate clause word order by the placement of the Neg particle and adverbials. However, it is not always possible to use such signals, as we stated above in Section I, so that the use of the complementizer is used obligatorily in Swedish to clearly mark the subordinating function.

The point to be stressed here is, I think, that both languages appear to have so-called 'weak', or, better, polyfunctional clause-introductory morphemes. While Swedish would appear to have undergone paradigmatic change, developing the use of two complementizers for the disambituation of certain syntactic functions, German would appear to have chosen another method of resolving this problem. In other words, German has undergone syntagmatic change (cf. Martinet, 1964; 168), in that it has adapted its rules of word order to provide a reliable signal of clause status and simultaneously to disambiguate the function of polyfunctional conjunctions. Surely this is the answer to the question why German uses both morphological markers and word order to signal clause status. Since the morphological markers, i.e. conjunctions, are polyfunctional in nature, and thereby automatically 'weak' in the sense of Vennemann (op. cit.), word order rules are also required to disambiguate the function of these morphological markers and clarify the status of the clause they are introducing.

From the above observations we ought therefore to conclude that when determining the status of any clause in German, two factors must always be taken into account: the nature and function of any introductory morpheme (e.g. adverb, complementizer, coordinating conjunction etc.) and the position of the verb.
These observations of course have important implications for our characterization of subordinate clauses in German. We recall that in Chapter 2 we used the following working definition of the term subordinate clause:

"We refer to a clause as subordinate just in case it has been subjected to the operation of primary markers of subordination or of a combination of primary and ancillary markers, or occurs in combination with a main clause containing ancillary markers of syntactic status". (p. 63).

We are now able to modify this definition to cover the important distinction between clauses that are "truly" subordinate and those which we choose to refer to as "dependent" clauses. In so doing, we shall also be able to further define the function of ancillary markers of syntactic status.

It would seem that only clauses which display a complementizer or subordinating conjunction and verb-final order constitute unequivocal subordinate clauses in German. This type of clause, as we have seen, tolerates only a limited number of Movement Transformations, their application being subject to strict constraints. They only exceptionally tolerate e.g. Extraposition and Exbraciation, subject to the overriding constraint that grammatical relations within the sentence remain clear. They also differ from main clauses in that the V/2 CONSTRAINT is not operative in subordinate clauses, and we have suggested that the complementizer or subordinating conjunction marks exactly this characteristic. In between these two obviously different types of clause, where we can indeed talk of a main/subordinate clause dichotomy, there is however a range of clauses which are to a greater or lesser degree "dependent" on another clause. As we saw in the preceding Chapter, this is often the case with clauses governed by dicendi, putandi, sentiendi-type verbs. In that Chapter, we discussed the fact that such clauses may differ in their "degree of subordinateness", which seems to be roughly proportional to the number of ancillary markers present in the clause. Characteristic of this type of clause is that it tolerates more Emphasizing Movement Transformations than
"truly" subordinate clauses, but relatively less Movement Transformation than main clauses. Thus, as we discovered in Chapter 4, a clause dependent on one of the verbs of "saying" etc., which incorporates a verb in the subjunctive, is probably less likely to tolerate all the Movement Transformations that would be tolerated by a dependent clause incorporating a verb in the indicative mood.

In other words, what we have here is a kind of hierarchy, which though by no means clear-cut, nevertheless shows reliable tendencies at each point on the scale: the more obviously subordinate a clause is, the less likely that clause is to tolerate Emphasizing Movement Transformations, and vice versa.

However, we must also recall that our study has shown that basic grammatical and psychological constraints affect the tolerance any German clause displays towards Movement Transformations. This characteristic, we have argued, is a consequence of the fact that German is partly a Grammatical Word Order language (Thompson, 1978). However, provided that grammatical relations do not become obscured, German may move the elements of the sentence - both in main and subordinate clauses - for the sake of emphasis, reflecting the fact that this language is also a Pragmatic Word Order language. Hence, any realistic description of German syntax must take into account the status of the clause in question (usually dependent on the nature of the matrix verb), the basic psychological and grammatical constraints operating within the clause, and the appropriateness versus inappropriateness of stress to any element moved within the clause (i.e. what are generally considered to be "pragmatic" factors).

That we should reach such a conclusion should come as no surprise in view of the fact that the basic word order of German main clauses is different from that of subordinate clauses (i.e. SVO v. SOV respectively), and in view of the fact that German has a relatively high proportion of polyfunctional elements and syntactic configurations. It would seem that the potential syntactic confusion caused by the Mixed Function of German word order necessitated the development of a comprehensive system of markers aimed at the disambiguation of particular configurations. One spin-off of this is that German has a comprehensive machinery for
the expression of semantic relations, as we saw during our discussion of the application of Emphasizing Movement Transformations in Chapters 3 and 4 above, and this is perhaps the reason why several researchers (cf. the Prague School, and e.g. Dunbar, 1979) have attempted to describe the behaviour of German word order in terms of "Pragmatic Function".

However, at the other extreme, the Grammatical Word Order function of German has led linguists like Ross (1973) and those following Emonds (1976) to attempt to analyse German word order in terms of purely syntactic criteria. This approach is understandable, of course, since it was made by analogy with English, a highly Grammatical Word Order language which relies on word order for the maintenance of basic grammatical relations. Moreover, the Grammatical Word Order function of German word order could easily be considered by some to be the more important function, since it clearly overrides any Pragmatic Word Order function, so that the focusing of attention on this aspect of German syntax is not entirely unjustified, although it would have as limited success as any monodimensional approach.

Interestingly, Vennemann (1971) criticises the simplistic approach of Transformational Grammar to the problem of German word order. The accepted approach is based on the assumption that German has an underlying order of SOV and that a transformation moves finite verbs into second position in main clauses. Vennemann argues that this is a simplistic analysis which characterizes German as a simple language, which, of course, it is not. The erroneous prediction implicit in any such analysis is, according to Vennemann, that German may revert to a pure SOV language by losing one Movement Transformation.

Vennemann's theory of "natural generative grammar", on the other hand, "assumes German to be an SVO language with very many complicated rules arranging all constituents in an unnatural order. The theory predicts that German will develop into a purely SOV language by replacing its unnatural serialization rules with natural ones" (ibid.; 46-77).

\(^1\) Where "natural" corresponds to its basic language type (BAF).
Now, obviously, the quote from Vennemann makes several extremely strong claims about German word order and the limitations of a transformational generative grammar approach to the description of German syntax. While I do not think it pertinent at this juncture to address the particulars of Vennemann's comment, I feel that the present analysis allows me to endorse a weaker version of Vennemann's objection. It would seem that, unlike English, German has not developed into a "straightforward" word order type. We have seen that its word order fulfills a mixed function, and that there is a major difference in the word order of main clauses from that of subordinate clauses. Furthermore, we have discovered that any approach which attempts to account for the behaviour of German word order (or, weaker still, to capture the difference between main and subordinate clauses in German) in terms of a straightforward main versus subordinate clause dichotomy (or root versus non-root clause, or presupposed versus asserted clause, or marked versus unmarked order, etc.) is not likely to account adequately for German data. The fact is that German is a complex, Mixed Function Word Order language with both very general and very specific constraints on word order patterns. Hence, it is at best highly optimistic to base any analysis of German syntax on any one particular level (syntactic, semantic, psychological, pragmatic, etc.). Instead, all of these levels must be considered in any attempt to describe and predict the behaviour of any type of clause, as predicted in Chapter 1 of this study (Green, 1976).
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