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THE SEQUENTIAL ORDERING OF NON-VERBAL CONSTITUENTS IN ENGLISH AND GERMAN SENTENCES
SUMMARY

Part One

The task of Part One is to outline the historical background from the latter part of the 19th century and to establish a theoretical basis for the subsequent investigation in Part Two.

Chapter I:

Chapter 1 reviews the work on sentence organization of 19th and early 20th century scholars. The notions 'psychological subject' and 'psychological predicate', 'logical subject' and 'logical predicate', which they introduce are closely looked at and a clear distinction made between what is meant by the descriptive term 'psychological' on the one hand, and 'logical' on the other. It is noted that use of these terms does not always correspond to a distinction of separate notions, which suggests a confusion of levels of analysis which are later clearly distinguished from each other.

Chapter II:

In the first section of Chapter II the discussion presented in Chapter I is taken up again in the context of the approach of linguists of the Prague tradition, who sought to establish a more neutral linguistic theoretical framework as a basis for their investigations into the structure and organization of sentences. This approach has come to be known as 'functional sentence perspective' (FSP). The contributions of various scholars to the theory of FSP are outlined and the distinction between various levels of analysis suggested in Chapter I further clarified. In the second section reference is made to the works of the German linguists Ammann, Boost and Drach. These are reviewed in the light of the discussion so far and various criteria relevant to the sequential ordering of elements are distinguished.

Part Two

This part presents a detailed analysis of the various criteria relevant to the sequential ordering of non-verbal constituents in English and German sentences.

Chapter III:

Word order is analysed in terms of grammatical function and syntactic cohesion. A detailed analysis of the notion of syntactic cohesion is given and the relevance of this principle in determining the sequential ordering of elements investigated in detail in the light of a large corpus of neutral linguistic material from English and German. A number of different grammatical sentence types are looked at and basic types postulated as instances of the 'syntactic
norm' ('syntaktische Ruhelage'). Explication of these is sought in terms of underlying configurations of semantic categories realized on the level of surface structure by various combinations of grammatical categories. This led to an important distinction being made between sentences which in the basic type manifest the basic neutral order dative-accusative and others where the relative order accusative-dative constitutes the syntactic norm, depending on the semantic class of verb and the 'syntactic meanings' of the nuclear constituents.

Chapter IV:

Semantic criteria are discussed and word order investigated in different types of sentences in terms of usual configurations of semantic categories. Semantic relations are related to the notion of syntactic cohesion and to the level of thematic structure. Special attention is paid to sentence patterns in German which manifest initial positioning of a surface dative constituent. Two basic configurations of case categories were found to have this particular surface structure realization. An analysis of high probability English equivalents reveals that English consistently makes use of the passive construction to achieve similar distributions of semantic categories.

Chapter V:

The task of Chapter V is to investigate what modifications the basic sentence patterns undergo with the operation of contextual criteria. The notions of contextual dependence and 'givenness' are examined and the importance of distinguishing varying degrees of contextual dependence in accounting for the sequential ordering of contextually recoverable elements pointed out. Special reference is made in this respect to the function of the initial position in German sentences and the criteria which determine its selection. Consideration is also given to the interaction of the various criteria, especially to situations where they are in conflict and the regularities and restrictions operative under such circumstances investigated. Reference is made to the so-called 'sentence bracket' in German and the extent to which this remains intact against the manipulation of sentence elements in adapting sentences to particular contexts.

Conclusion:

The various criteria are briefly reviewed and the main points emphasised. The notion recently put forward by some linguists of 'natural constituent structure' and 'natural serialization' are referred to and related to the concept of syntactic cohesion and hierarchical dependency relations discussed in Chapters III and IV. The relevance of the notion of 'natural serialization' for English and German is briefly investigated from the point of view of the basic ordering of nuclear constituents and adverbial categories.
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PART ONE

HISTORICAL BACKGROUND
CHAPTER I

PSYCHOLOGICAL AND LOGICAL APPROACHES TO WORD ORDER

1. PSYCHOLOGICAL APPROACHES TO WORD ORDER

Von der Gabelentz

There was a tendency in the latter part of the nineteenth and early twentieth century for linguists to analyse word order in psychological terms, or in other words to look upon word order as a psychologically determined system. To the traditional terms 'grammatical subject' and 'grammatical predicate' were added the terms 'psychological subject' and 'psychological predicate'. In the field of German linguistics this trend owed much to the researches of von der Gabelentz (1869: 376ff.; 1875: 129ff.; 1901: 365ff.).

Von der Gabelentz's analysis is based on the assumption that any human communication is, from the point of view of its linguistic expression, bipartite in structure. In von der Gabelentz's own words: "Ich glaube, hierzu gehört ein Doppeltes: erstens, daß man des Anderen Aufmerksamkeit (sein Denken) auf etwas hinleite, zweitens, daß man ihn über dieses Etwas das und das denken lasse; und ich nenne das, woran, worüber ich den Angeredeten denken lassen will, das psychologische Subject, das, was er darüber denken soll, das psychologische Prädicat" (1869: 378).

It is clear from the above statement that von der Gabelentz's
analysis of the structure of sentences is directly linked to the thought process in the mind of both speaker and listener. The aim of the speaker is to transfer a thought or 'complete idea' ('Gesamtbild' or 'Gesamtvorstellung') to the mind of the listener. The linguistic form of this mental image consists of a 'psychological subject' and a 'psychological predicate'. This formal division is a reflection of a psychological dichotomy: the psychological subject expresses what the speaker is thinking about, the psychological predicate the extension of this thought in the mind of the speaker, the essential part of the communication.

Von der Gabelentz shows that even 'primitive', formally unstructured utterances are relevant to his analysis, since these are only complete and understandable as utterances if the listener is aware of formally unexpressed ideas from the circumstances which occasioned the utterance. For example, to denote a feeling of pain it suffices to utter the cry "Au" for "ich leide, empfinde Schmerz". To understand the complete idea behind the cry the hearer assigns to it a bipartite structure: Jemand leidet Schmerz. Similarly, the exclamation "Herrlich!" is only meaningful as a complete utterance if the listener interprets it as Etwas ist herrlich. For every psychological predicate there is a psychological subject, which if unexpressed, is recoverable from the situation out of which the utterance emerged. If this were not possible, communication from a person A to a person B would break down. As von der Gabelentz explains: "Je enger also die Beziehungen zwischen den Menschen sind, je gemeinsamer und beschränkter ihr geistiger Gesichtskreis ist, je deutlicher sich den Umständen nach ihr gemeinschaftliches Interesse
Having established that structurally complete sentences are bipartite in structure, von der Gabelentz investigates the ordering of subject and predicate. His conclusion is as follows: "Offenbar ist es dies, daß ich erst dasjenige nenne, was mein Denken anregt, worüber ich nachdenke, mein psychologisches Subject, und dann das, was ich darüber denke, mein psychologisches Prädicat, und dann wo nöthig wieder Beides zum Gegenstande weiteren Denkens und Redens mache" (von der Gabelentz, 1901: 369f.). Such an ordering of elements in the act of communication would appear to be a reflection of the movement of thought in the mind of the speaker. Organizing his material in this way the speaker causes a parallel movement in the mind of the listener. Von der Gabelentz gives the following examples as illustration:

(1) Der 16. März ist mein Geburtstag

In both (1) and (2) the element in initial position is both grammatical and psychological subject and what follows grammatical and psychological predicate. Yet, as von der Gabelentz goes on to show, if an adverbial phrase is substituted for der 16. März in (1) and (2), e.g. gestern or vor drei Tagen the same ordering of elements as in (1) and (2) is possible, yet only Geburtstag can function as grammatical subject, cf.
In both (3) and (4), the elements in first position function as psychological subject, as in (1) and (2), but only in (4), not in (3), is it also grammatical subject. The psychological dichotomic structure, which von der Gabelentz regards as basic to every sentence, may conflict with the traditional bipartition into grammatical subject and predicate. Consequently, he clearly distinguishes psychological subject and predicate from their expression in terms of grammatical elements. Regarding the ordering of grammatical subject and predicate as opposed to psychological subject and predicate, von der Gabelentz writes: "Die Stellung jener beiden psychologischen Haupttheile des Satzes ist meines Erachtens naturgemäß die, daß das Subject zuerst, das Prädicat zu zweit steht. Diese Anordnung bildet hinsichtlich der entsprechenden grammatischen Kategorien in allen mir bekannten Sprachen die Regel, für die psychologischen ist sie ein Gesetz, das, wie mir scheint, keine Ausnahme zuläßt" (1869: 379). The following pair of examples are quoted to illustrate this 'law' that the psychological subject precedes the psychological predicate:

(5) Mit Speck fängt man Mäuse.

(6) Mäuse fängt man mit Speck.

Compare also:

(7) Man fängt Mäuse mit Speck

(8) Man fängt Mäuse mit Speck

(9) Man fängt Mäuse mit Speck.

In (5) and (6) the initial element functions as psychological subject, what follows functions as psychological predicate. I shall comment
more fully on the order psychological subject-psychological predicate later. For the moment it should be noted that in (7) the psychological subject does not occupy first position in the sentence. Depending on the stress assigned to Speck and Mäuse respectively, both may function as psychological predicate irrespective of the position they occupy in the sequence of elements. In (8) Mäuse is psychological predicate (underlining denotes the element carrying the heaviest stress), in (9) it is Speck.

As well as discussing the order in which the psychological subject and predicate occur in the sentence, von der Gabelentz also relates subject and predicate to accent placement. Discussing the validity of the traditional view of Latin and Greek grammars that: "je wichtiger, bedeutsamer ihm ein Glied der Rede sei, je schärfer er es betone, desto weiter rücke er es nach vorn. Und dann spare er wohl noch ein besonders wichtiger Satztheil, um den Hörer in Spannung zu erhalten, bis an's Ende auf. Anfang und Ende des Satzes seien die vorzugsweise betonten Stellen", he writes: "... ein Schein der Berechtigung ist ihr nicht abzusprechen. Denn erstens ruht natürlich ein gewisser Nachdruck auf demjenigen Theile der Rede, der als ihr Thema vorangestellt wird, also auf dem psychologischen Subjecte. Zweitens bleibt die Aufmerksamkeit des Hörers bis an's Ende gespannt, und erst mit dem letzten psychologischen Prädicate, dem abschliessenden befriedigt. Und drittens und hauptsächlich giebt es in der Rede sehr häufige Fälle, wo das erste Satzglied zweifellos der Hauptton trägt" (1901: 33). Here, von der Gabelentz seems to be making the claim that there are two points of stress in
the sentence, these coinciding with the psychological subject and predicate respectively, the latter being more heavily stressed than the former. Consequently, the most prominent position in the sentence is the end position, this being the normal position occupied by the psychological predicate.

Von der Gabelentz's analysis has been discussed under three headings: (i) the bipartite division of the sentence into psychological subject and psychological predicate; (ii) the order in which these appear in actual sequence; and, (iii) the stressed positions in the sentence in relation to the psychological subject and predicate. He is clearly right to distinguish between a grammatical and a psychological analysis of sentence structure. The following English and German sentences illustrate the importance of this distinction:

(10) Mir ist kalt
    PSY SUBJ PSY PRED

(11) I am cold
    PSY SUBJ PSY PRED

(12) Ihm steht eine harte Zeit bevor
    PSY SUBJ PSY PRED

(13) He is in for a rough time
    PSY SUBJ PSY PRED
It is evident from a comparison of the sentences (10) - (13) that the only bipartite structure common to all is the psychological one. The sentence opening elements in all four sentences function as psychological subject, but only in (11) and (13), i.e. in the English sentences, are these elements also grammatical subject. Moreover, (10) provides further support for von der Gabelentz's theory, since this sentence has no grammatical subject. Consequently, it would appear that whereas a sentence does not necessarily require a grammatical subject, it does require a psychological subject if it is to be structurally complete. Yet, the issue is possibly not as simple as this, since examples such as:

(14) Es regnet It is raining

(15) Es schneit It is snowing

are difficult to analyse in terms of a psychological subject and predicate division. It or es are clearly not psychological subject ('dasjenige, von dem die Rede ist', or 'was mein Denken anregt, worüber ich nachdenke' which von der Gabelentz also refers to as 'Thema' ('theme') (1875: 129; 1901: 373).) Even if these are interpreted as having the underlying structure:

(14a) Regen fällt Rain is falling

(15a) Schnee fällt Snow is falling

neither 'rain' nor 'snow' can be taken to be psychological subject. The only psychological subject which would seem to satisfy von der Gabelentz's criteria for his 'Thema' (theme) would be 'weather', or in other words the situation which occasioned the utterance, which is not explicitly mentioned. Yet it may be argued that it is to this that reference is being made in the case of utterances such as those
listed in (14) and (15) above. This being so, it is possible that von der Gabelentz would include such utterances with those incomplete exclamatory utterances discussed above. It would be quite possible in English to say:

(15b) Snow was falling.

If a division can be made here, it is that into grammatical subject and predicate. Snow is psychological predicate, it is the element that is most heavily stressed. Cf.:

<table>
<thead>
<tr>
<th></th>
<th>GR SUBJ</th>
<th>GR PRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>(15c) Snow was falling</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSY PRED</td>
<td></td>
</tr>
</tbody>
</table>

Sentence (15b) and the segmentation of it under (15c) above provides a counter-example to sentences (11) and (13) where the psychological and the grammatical division coincide. We shall see later that sentences in English containing a 'non-thematic' grammatical subject in initial position are not infrequent. This question has been discussed in detail by Firbas (1966); cf. also Kirkwood (1970: 36)

It is interesting here to observe that the Russian for

*it is raining* идёт дождь (literally, *goes rain*), where

is the element carrying the stress and follows the verb, thus occupying the position von der Gabelentz assigns to the psychological predicate. Similar examples can also be quoted for German. Cf.:

(16) Der Frühling kommt

(17) Es kommt der Frühling

(18) Spring is coming.

In (16) and (17) *der Frühling* would be both grammatical subject and
psychological predicate. Sentence (17) shows a similar distribution to the Russian sentence Nastupila vesna. By using a construction with the expletive es, German enables the psychological predicate to move towards the end of the sentence, a position which it should occupy according to von der Gabelentz. It should be noted at this point that only one sequence is possible in English: the sentence opens with spring, which is grammatical subject and psychological predicate. French makes use of the construction (19) Les cigares, je ne les aime pas to achieve the sequence psychological subject - predicate. Von der Gabelentz points out that a similar procedure is evident in Chinese. In Chinese chronicle narratives the regular order is to place expressions of time first, then expressions of place and then the subject of the event: "Es sind das so zu sagen drei Überschriften, die ein sich stufenweise verengendes psychologisches Subject darstellen: was geschah damals? was geschah damals dort? was geschah damals dort mit Dem und Dem?"

As far as the ordering of grammatical subject and predicate is concerned, von der Gabelentz may well be right. The English sentences (11), (13) and (18) support his view that as a rule the grammatical subject precedes the grammatical predicate. Yet, this varies from language to language; we shall see later that English tends more than German to place the grammatical subject at the beginning of the sentence. That there are no exceptions to the order psychological subject - predicate is clearly erroneous as sentence (20) shows:
(20) A wallet was found next to the body where wallet is the most heavily stressed element, which, as was pointed out above, is in von der Gabelentz's own terms the psychological predicate of the sentence.

Von der Gabelentz does, however, seem to make an exception in the case of emotive sentences of the type:

(21) Dir gilt das
(22) Wo warst du gestern abend? - Zu Hause war ich
(23) Ich wollte ihn belohnen; auszeichnen wollte ich ihn.

The importance of von der Gabelentz's analysis of stress is that he distinguishes two points of prominence. In doing so he anticipates a similar analysis to be found in later works, where these points of focus appear as primary and secondary accent. Furthermore, he establishes stress as a relevant criterion for the recognition of the psychological predicate.

Weil

The above analysis of von der Gabelentz's researches in many ways bears a striking resemblance to the work of Henri Weil (1844), whose book predates von der Gabelentz (1869) by twenty-five years. In the preface to the third edition of his book (1879), Weil correctly points out the following with regard to von der Gabelentz's researches: "Parmi les faits que ce linguiste a recueillis, je signale comme particulièrement intéressant ce qui concerne le rôle de la particule fa dans la langue japonaise. Quant aux vues
generales; au principe de l'ordre des mots, il ne dit rien que je n'aie pas expose vingt-cinq ans avant lui". It is assumed, however, that von der Gabelentz came to his conclusions independently, without the knowledge of Weil's work.

Weil discusses the organisation of utterance from the point of view of the listener, since it is out of regard for the hearer that the speaker presents his information in a certain way. "Il fallait d'abord que cet autre personnage auquel on voulait se communiquer fût placé au point de vue de celui qui parlait, il fallait qu'une parole d'introduction précédât la parole que l'on voulait énoncer, il fallait s'appuyer sur quelque chose de présent et de connu, pour arriver à quelque chose de moins présent, de plus nouveau ou d'inconnu. Il y a donc un point de départ, une notion initiale, qui est également présente et à celui qui parle et à celui qui écoute, qui forme comme le lieu où les deux intelligences se rencontrent; et une autre partie de discours, qui forme l'énonciation proprement dite. Cette division se retrouve dans presque tout ce que nous disons." (1844: 20). Weil holds, then, that a sentence contains a point of departure (an initial notion) and a goal of discourse. The point of departure represents 'known' or 'given' information and establishes a common basis for speaker and listener from which the speaker can develop his communication. This sequence given-new is mentioned by other linguists and will be dealt with in much greater detail later.

Weil illustrates his point by discussing the Latin sentence
(24) Romulus Romam condidit.

In Latin, various permutations of the word order of this sentence are possible; yet as Weil points out, each different permutation is motivated by the speaker's adoption of a point of departure - goal of discourse sequence. In the following three sentences:

(25) Idem ille Romulus Romam condidit
(26) Hanc urbem condidit Romulus
(27) Condidit Romam Romulus

the grammatical structure is the same: in each case the grammatical subject is Romulus, the object Rome. Yet, says Weil, each sentence communicates something different "parce-que ces éléments, tout en restant les mêmes, sont distribués d'une manière différente dans l'introduction et la partie principale de la phrase" (21). In (25) Romulus is the point of departure, the goal what he did, founded Rome. This town (= Rome) is taken as the point of departure in (26), the goal being was founded by Romulus.

Sentence (27) is more complex. It could appear in the context of a commentary on the founding of famous cities; having mentioned the founding of Thebes by Cadmus and Athens by Cecrops, one could then continue with (27). Here, according to Weil, the point of departure or initial notion is "l'idée de fondation". The idea of the founding of famous cities is indeed what occasioned the sentences about Thebes, Athens and Rome, yet in each individual case the point of departure, or theme in von der Gabelentz's terms, is the founding of a specific city, which in the case of (27) is the founding of Rome, and the goal of the communication is what is said about the
founding of Rome i.e. the person who founded Rome, Romulus. Rome is rendered thematic (cf. von der Gabelentz - 'what the speaker is talking about') not because it is already given or directly recoverable from the context, but because it is derivable by implication in the context of the founding of Thebes and the founding of Athens. This implied contrast may be expressed verbally in the following way: To continue our discussion of the founding of famous cities we could take Rome as a further example to Thebes and Athens. Rome was founded by Romulus. The context of "the founding of Thebes" and "the founding of Athens" occasions a further sentence of which the point of departure is "the founding of Rome". Consequently, I would represent the bipartite structure of (27) in the following way:

(27) Condidit Romam Romulus

point of departure/theme goal

What is also interesting in (27) is the order verb - object (Condidit Romam ...). Weil maintains that the different word order in sentences (25) - (27) corresponds to a change in the movement of thought. "La marche, les rapports de la pensée changent: voilà pourquoi la succession des mots doit changer aussi, car elle est l'image de la marche de la pensée". (21). If this is so, and it probably is, then the order Condidit Romam would be explainable in these terms. Cognitively, condidit precedes Romam and this cognitional movement would appear to be reflected in the order of elements in the sentence. This would also be in keeping with the above analysis with regard to Romam being a thematic element.
Condidit is the wider, more general point of departure and appears first in sequence; Romam is the specific theme of the sentence and follows condidit, but precedes Romulus, which is the goal of the communication.

Weil points out that in modern languages the order of elements is not so susceptible to permutation and that the sentence opening element is often the grammatical subject. Yet, there is a tendency to make the grammatical subject express the point of departure, "car déplacer les mots, serait déplacer les idées" (1844: 28).

The most obvious way this is achieved in English is by using a passive construction. A possible English equivalent to (26) would be

(28) This town was founded by Romulus.

This is not the only possibility, however. Cf.:

(29) Romulus founded this town
(30) It was Romulus who founded this town.

Only in (28) does English approximate to Latin order in (26). The construction used in (30) serves equally well to give prominence to Romulus. In (29) stress is the only indicator of the goal of the utterance. In German, on the other hand, a similar distribution to that of (26) can be achieved by permuting word order in an active sentence.

(31) Diese Stadt hat Romulus gegründet.

Word order is only one means by which thought can be expressed in language. Take, for example, the equivalent English sentence to (27).
(32) (Thebes was founded by Cadmus) Rome was founded by Romulus. Rome precedes founded in actual sequence, yet this does not lead to a different interpretation to that of (27). The interpretation is the same, namely "founded was Rome by Romulus". Similarly, sentences (16) - (18) and (28) - (30) are interpreted the same way. There are other markers a language may use to express the speaker's thought process. For example, definite and indefinite determiners can indicate the point of departure and goal of utterance. A definite determiner is more likely to introduce given information than an indefinite determiner. Compare:

(33) A letter arrived yesterday
(34) The letter arrived yesterday
with the possible German equivalents:

(35) Gestern kam ein Brief an
(36) Der Brief kam gestern an.

English word order is nevertheless often susceptible to psychological factors as indicated by the frequent use of the passive construction as shown in (28) above, and also constructions of the type it was ...

(30). These and other means will be discussed in greater detail later.

Wegener

The researches of another German linguist, Wegener (1885) also predate the work of von der Gabelentz. Wegener also posited a notional division of the sentence into two parts as distinct from the traditional grammatical division into subject and predicate. The example he uses to illustrate this is

(37) Der Verein Concordia feiert am 7. Juni sein Stiftungsfest im Saale der Vereinigung zu Berlin.
Wegener gives the following analysis of (37). The core of the communication ('Kern der Mitteilung') is the location of the event im Saale der Vereinigung zu Berlin. The rest of the sentence serves only to make the communicative core understandable. It has an 'expository' function, and Wegener chooses the term 'exposition'. What follows the exposition is the logical as distinct from grammatical predicate; the two do not necessarily coincide, since the grammatical subject can express something new ('das Neue') and the grammatical predicate something known ('das Bekannte') as in:

(38) Dein Vater hat es gesagt.

Wegener's logical subject is equivalent to von der Gabelentz's psychological subject. By logical Gabelentz is referring to relations of a different nature. Wegener himself admits that logical subject is often understood as the agent of an action or instigator of an event ('das handelnde subject') and for this reason adopts the term exposition, Gabelentz's psychological subject.

A further discussion of logical relations between sentence constituents will be reserved for the next section.

It is the function of the 'exposition': "die Situation klar zu stellen, damit das logische Prädicat verständlich wird. Die Situation ist der Boden, die Umgebung, auf der eine Thatsache, ein Ding u.s.f. in die Erscheinung tritt, doch auch das zeitlich vorausliegende, aus dem heraus eine Thätigkeit entsprungen ist, namentlich die Thätigkeit, welche wir als Prädicat aussagen, und ebenso gehört zur Situation die Angabe der Person, an welche die Mitteilung gerichtet ist" (Wegener, 1885: 21). Apart from this linguistically
expressed situation of an action or event, the exposition, Wegener also refers to what he calls 'Situation der Anschauung' which often renders a full 'exposition' superfluous. For example, Das ist eine Linde is understandable in a certain situational context. In other words, it is clear from the context of situation what the referent is. The need for a linguistic exposition decreases, the more information relevant to the utterance is supplied by the context of situation. In a given situation the exclamation vortrefflich! is understood as Dieser Wein ist vortrefflich. If the referent 'wine' is not inferable from the context of situation then a full linguistic exposition is required. "Je klarer und vollständiger die Situation durch die Anschauung gegeben ist, um so weniger sprachlicher Mittel bedarf es" (Wegener, 1885: 27). The criteria Wegener uses to identify the logical (= psychological) predicate from the exposition is stress. Sentence (29) above shows that stress is sometimes the only factor that distinguishes the core of the communication from the rest of the sentence elements. There are also other means, as illustrated in (30). Wegener also makes this point with reference to French and German: "Dieses Mittel (stress) genügt vollständig das logische Prädicat hervortreten zu lassen, und doch findet sich in den modernen Sprachen, speziell dem Französischen und Deutschen, das Bestreben, auch durch grammatische Construction den betonten Satzteil hervortreten zu lassen." He gives the following examples:

(39) Caesar war der erste, der dies that
(40) Caesar war es, der das als erster that
(41) Sein Bruder war es, mit dem er kam.
(42) Es war Nacht, als er zurückkehrte
(43) Es ist lange her, seit ...
The construction c'est ... que ... ; c'est ... qui ... in French serves likewise to single out the stressed element. This construction is examined by other linguists and will be discussed in the light of their findings later. Wegener makes the following points about this construction: (1) The tendency for the logical predicate to appear at the beginning of the sentence; (2) the tendency to make the logical predicate the grammatical predicate of the sentences; (3) it occasions the reversal of the normal order where the grammatical predicate is preceded by the grammatical subject. Wegener considers the psychological reasons for placing the psychological (his logical) predicate in initial position: "..., das logische Prädicat ist ja das den Sprechenden am meisten Interessierende, es ist im Augenblick die stärkste Vorstellung in ihm, es steht durchaus im Vordergrunde des Bewußtseins und drängt eben darum am stärksten zur Mitteilung ... Es ist daher nur natürlich, daß der naive Mensch die Expositionselemente erst nach dem Prädicat ausspricht". (1885: 33)

Richter

This latter point is taken up by Richter (1920: 20) "Naturgemäß war die ursprünglichste Form der Mitteilung die rein persönliche. Also rücksichtslose Anordnung der Vorstellungsglieder, so weit die Gesamtvorstellung überhaupt gegliedert wurde. In dieser Mitteilungsform war jedenfalls das Wichtigste am Anfang ...". This is opposed to the more neutral 'objective' word order which is the result of the speaker organizing his utterance with regard for the listener. "Er wird die Zergliederung der Gesamtvorstellung in dem Satz so vornehmen, daß er nicht dasjenige zuerst sagt, was ihm persönlich zuerst in den
Blickpunkt des Bewußtseins kommt, sondern dasjenige, von wo aus der Hörer am bequemsten fortschreitet." (1920: 17).

In an earlier work Richter distinguishes between an emphatic and a neutral sequence of elements (1903: 46f.).

(44) Karl ist nicht abgereist
(45) Abgereist ist Karl.

Sentence (45) is emphatic and contradicts the neutral statement contained in (44) that "Karl has not departed". An investigation of the structure of a neutral sentence shows: "dass das erste Wort - zumeist das Subjekt - ein schon bekanntes, an das früher erwähnte anknüpfendes, die Aussage hingegen das neu hinzukommende Gedankenelement ausdrückt, so daß die Rede fortwährend vom Bekannten zum Neuen für den Sprecher - vom Bekannten zum Unbekannten für den Hörer - fortschreitet." It follows from this that the element placed in initial position will be one which establishes a link with the previous sentence. The most obvious way to achieve this link is to make the element expressing the 'main idea' in the previous sentence the theme of the next sentence. Richter gives the following examples:


(47) Ich war bei X. Dort ist noch alles in der grössten Unordnung.

"Dort, die Bücher (quos) sind in diesen Sätzen das Thema, wovon weiter gesprochen werden soll, so gut wie in einem anderen Satze das grammatische Subjekt, und aus diesem Grunde, weil sie zur Anknüpfung
dienen, nicht etwa weil sie im Vordergrunde des Interesses stehen, werden sie an dem Anfang besetzt. ... man unterscheidet also - psychologisch genommen - im Satze dasjenige, worüber man den Hörer zum Denken auffordert = das Them, und dasjenige, was er über dieses Thema denken soll, die eigentliche Mitteilung, die die Aufmerksamkeit des Sprechenden vor allem fesselt, die so recht den Kern und Zweck seiner Rede bildet, die dominierende Vorstellung." (1903: 47f.)

In her later work (1920) she reiterates what she means by 'Anknüpfung' as distinct from 'Hauptvorstellung', it is the topic ('Gegenstand') of the sentence. Any element can have this function irrespective of its grammatical function. "Während im grammatischen Sinne nur das Subjekt, d.h. das im Nominativ stehende Satzglied, "der Gegenstand ist, von dem etwas ausgesagt wird", ist psychologisch jedes Satzglied geeignet, Gegenstand der Mitteilung zu sein." (1920: 22).

Wundt

Richter's analysis owes much to the work of Wundt, primarily a psychologist, whose interest in making explicit the principles governing the functioning of cognition in humans led him to the study of human language as a means of acquiring knowledge about the mind. The term 'dominierende Vorstellung' was taken over by Richter from Wundt, though she disagreed with Wundt's analysis in certain respects, putting forward valid criticisms of Wundt's findings.

According to Wundt, the act of natural speech is to be analysed
in terms of the underlying cognitive process or processes preceding it. An utterance is the linguistic expression of a mental image or general impression ('Gesamtvorstellung'). Simultaneous cognition is transformed in speech into a sequential string of structurally related segments. Wundt is concerned with showing that the ordering of these constituents of the sentence reveal certain regularities of a logical and psychological nature. For the moment, I shall be concerned primarily with Wundt's psychological analysis, reserving discussion of his views on the logical structure of sentences for the next section.

Wundt claims that word order is determined by psychological relations, in so far as the ordering of sentence constituents is not bound by a hard and fast traditional rule of obscure historical origin. Yet, as Wundt rightly points out, the fact that the syntactic structures that express psychological relations may have different forms in different languages does not mean that we can assume a corresponding difference in the underlying psychological interpretation. All we can say is that in such cases word order is less dependent on psychological motives. Word order which is dependent on psychological motives Wundt equates with 'free' word order, since it is not fixed by traditional rule and thus more susceptible to psychological factors. Wundt quotes Latin and Greek as examples of languages whose word order is more dependent on psychological factors than say German or English, "for in these languages (i.e. Latin and Greek) the force of tradition on the positioning of words is less. Word order is much freer, thus it can more easily follow momentary
prevailing psychological themes. It is possible, then, to test in an experimental way the psychological significance of various word orderings by virtue of this capacity for free variation." (Wundt, quoted in translation by Blumenthal, 1970: 28). Wundt proceeds to analyse the possible permutations of the Latin sentence Romulus condidit Romam and concludes on the basis of this that the words follow each other according to the degree of emphasis on the concepts, the strongest emphasis being naturally on the concept that forms the main content of the statement. This, he says, is also first in the sentence. In many cases it is the subject of the sentence, in others it can be the verb or the object.

Wundt assesses the psychological significance of this law as follows: "word positions do not first appear in the centre of consciousness as they are added to the sentence, but rather in a sense they are there from the beginning in the preceding whole impression as a less apparent psychological theme that has a determining influence on attention. The theme is successively apperceived in an order that reflects its emphasized aspects. The speaker confronts his cognitive configuration just as a perceiver faces a complex external object where he first perceives those parts that make the strongest impression on his attention, so long as there are no other distracting events. Where there is free word ordering the principle of positioning is simply a special application of the general psychological principle of the successive apperception of aspects of a whole according to their proportionate effect on cognition." (Wundt, quoted in translation from Blumenthal, 1970: 29).
Wundt's views on the significance of psychological factors for determining word order call forth the following comments and criticisms. Firstly, to refer to word order that is dependent on psychological motives as 'free' is clearly contradictory. This is pointed out by Blümel (1909: 520) who writes: "Das heisst aber doch nicht anderes, als dass in diesen beiden sprachen die wortstellung ganz besonderes von psychologischen gesetzen, also doch von gesetzen, abhängig ist. 'Im grammatischen sinne frei' ist doch nicht dasselbe wie 'schlechthin frei'; abensowenig kann eine grammatisch gebundene wortstellung frei heissen, soweit sie nicht mit der psychologischen gliederung übereinstimmt."

Secondly, Wundt's claim that the element which constitutes the dominating concept frequently claims the first position in the ordering of the sentence constituents is at variance with what has been proposed by other linguists. The preceding survey of the findings of von der Gabelentz, Weil, Wegener and Richter shows that the dominating impression, or to use von der Gabelentz's term, the psychological predicate, tends in a neutral speech situation not to open the sentence, but rather to close it. What Wundt is really describing when he writes "Die Wortfolge entspricht der Vorstellungsfolge, daher gehen die Redeteile voraus, die das Gefühl am stärksten erregen und die Aufmerksamkeit am meisten fesseln" (Wundt, quoted in a footnote by Richter, 1903: 50) is the sequence of elements in emotive sentences in German. That English differs from German in this respect has already been pointed out in the light of example (20) above.
Finally, Wundt's analysis of the various permutations of the Latin sentence *Romulus condidit Romam* is confused and inconsistent with his own conclusions as given above. Wundt maintains that the significance of the differences between the following three simple Latin sentences:

(48) Romulus condidit Romam - (type 1)
(49) Condidit Romam Romulus - (type 2)
(50) Romam condidit Romulus - (type 3)

is revealed when we look for the underlying interrogative sentences which correspond to (48), (49) and (50) respectively. These he gives as:

(48a) Who was Romulus?
(49a) What happened then?
(50a) What was founded?

Wundt's analysis is as follows: "We can then see that the three principal types are answers to questions whose object in each case is one of the three concepts contained in the simple sentence. If the question concerns the subject of the sentence, then type 1 is the appropriate form: "Who was Romulus?" answer: "Romulus was the founder of Rome" (*Romulus condidit Romam*). If on the other hand the verbal predicate is the object of the question, then type 2 results: "What happened then?" answer: "The founding of Rome by Romulus" (*condidit Romam Romulus*). If, finally, the question concerns the object of the statement, then type 3 results: "What was founded?" answer: "Rome" (*Romam condidit Romulus*)." (Blumenthal, 1970: 29)

Let us examine more closely how Wundt analyses the questions in terms of 'what the question concerns' or 'the object of the
question'. He says (48a) is about 'Romulus', he says that in (49a) the verb 'condidit' is the object of the question and that in (50a) the question concerns 'Romam'. Now the object of each question 'Romulus', 'condidit' and 'Romam' respectively each occupy initial position in their respective sentences. Yet, 'Romulus' in (48) is actually mentioned in the question and is therefore a known entity. The question is in a sense 'about' Romulus but the information the question is eliciting, i.e. 'the object of the question', is what Romulus did or who Romulus was (the object of the question being the identity of Romulus - Romulus was the founder of Rome). Thus a more appropriate question would be what did Romulus do? or which city did Romulus found? or who was Romulus?, the 'object of the question' being the element answering the wh-element of the question. This is indeed what Wundt himself implies for (49) and (50). The inconsistency of Wundt's analysis, then, lies in his confusion of what the object of the question actually is and its position in the sequence of elements in the corresponding statement. Whilst his sequencing of elements in (48) is in accordance with the neutral order psychological subject - psychological predicate or given - new, Romulus being a known entity, in (49) and (50) the ordering is reversed. To complicate matters further, I should add at this point that the ordering of elements in a sentence which forms an answer to a question does not necessarily correspond to the normal neutral sequence of elements, e.g. Welche Stadt hat er gegründet? - the answer one might give here would be Rom hat er gegründet or simply Rom. Similarly, (48) or the English statement Romulus founded Rome could correspond to an underlying question Who founded
Rome? answer: Romulus founded Rome, Romulus did or simply Romulus.
Wer hat Rom gegründet? answer: Romulus (hat Rom gegründet). In the case of the complete statement being given as the answer to a question (i.e. without anaphoric substitution or deletion) then word order may be overridden by stress. Cf.:

(51) Which city did Romulus found? - Romulus founded Rome

In both (51) and (52), the object of the question is represented by the wh-element in the corresponding underlying question (which city?: Rome; who?: Romulus) and is the psychological predicate, carrying the heaviest stress in the answer whatever position it may occupy in the sequence of elements.

Paul

Another linguist who was concerned with analysing the sentence as a cognitive process was Paul, though his analysis differs from Wundt's in fundamental respects. In fact their different psychological interpretations of language led to a heated academic dispute, centered on the nature of sentence production from the point of view of the accompanying mental processes in the mind of the speaker. Paul's theory is often referred to as the synthetic theory, whilst Wundt's is known as the analytic theory. Ammann (1962: 139) sums up the difference in their respective positions as follows, adding his own comment about the importance of the hearer:

"Für Wundt war der Satz 'der sprachliche Ausdruck für die willkürliche Gliederung einer Gesamtvorstellung in ihre in logische Beziehungen zueinander gesetzten Bestandteile' (Völkerps I 2 S.240), und Pauls
entgegengesetzter Standpunkt räumt doch auch dem in Bewußtsein des Sprechenden sich vollziehenden Vorgang die erste Stelle ein: 'Der Satz ist der sprachliche Ausdruck, das Symbol dafür, daß sich die Verbindung mehrerer Vorstellungen oder Vorstellungsgruppen in der Seele des Sprechenden vollzogen hat, und das Mittel dazu, die nämliche Verbindung der nämlichen Vorstellungen in der Seele des Hörenden zu erzeugen' (Prinzipien 4 S.121). Was bei Wundt gar nicht ausdrücklich in der Definition zur Geltung kam und bei Paul erst im Nachsatz ausgesprochen wurde, die Rücksicht auf einen Hörenden, rückt neuerdings mehr in den Vordergrund; ... ".

Regarding the actual linguistic structure of sentences, Paul shares the view of the other linguists referred to above that the sentence consists of two parts, a subject and a predicate. The psychological subject is the idea that is first present in the mind of the speaker. This is then joined by a second idea, the linguistic expression of which is the psychological predicate. Paul distinguishes between grammatical and psychological subject and predicate, pointing out that any element can be psychological subject or predicate whatever its grammatical form. Yet he observes a tendency for this distinction to be eliminated by making the grammatical subject and predicate coincide with the psychological subject and predicate. In many languages the psychological subject may appear in the nominative, i.e. in the form of the grammatical subject, moving towards the front of the sentence, and then be taken up again pronominally later in the sentence, its form being then grammatically determined. Paul gives the following as illustrative examples:
(53) He that can discern the loveliness of things, we call him poet (Carlyle)

(54) Cette confiance, il l'avait exprimée.

(55) Tous ces crimes d'état qu'on fait pour la couronne, le ciel nous en absout.

(56) Ach, der heiligste von unsern Trieben, warum quillt aus ihm die grimme Pein? (Goe.).

This tendency is even more apparent when constructions which formerly contained a psychological subject which was not grammatical subject, i.e. in another case other than the nominative, have become changed so that the psychological subject and the grammatical subject coincide. English is rich in such examples; the one Paul quotes is:

(57) Me was given a book
(58) I was given a book.

Passive sentences regularly allow the direct object of the active sentence to appear as grammatical subject in passive sentences. English, however, has developed a step further allowing the noun phrase of prepositional phrases to be preposed as grammatical subject, the prepositions appearing at the end of the clause. Paul quotes the following examples:

(59) The tailor was seldom talked of
(60) They were never taken notice of.

In German the prepositional phrase may be preposed in its entirety:

(61) Mir wurde ein Buch geschenkt
(62) Vom Schneider wird selten geredet / ist selten die Rede
(63) Auf sie wurde nie geachtet.
Paul discusses various criteria for determining psychological subject and predicate. The first criterion he mentions is that of stress. "Im isolierten Satze ist das psychologische Prädikat als das bedeutsamere, das neu hinzutretende stets das stärker betonte Element" (Paul, 1909: 126). "Amscharfsten von den übrigen Gliedern des Satzes sondert sich zunächst das psychologische Präd. ab als das wichtigste, dessen Mitteilung der Endzweck des Satzes ist, auf welches daher der stärkste Ton fällt" (283). Paul then proceeds to discuss the constituents making up the rest of the sentence from the point of view of stress, giving as illustrative examples the sentences:

(64) Marie hat Zahnschmerzen
(65) Fritz pflegt sehr schnell zu gehen.

The psychological predicate in (64) is Zahnschmerzen, in (65) sehr schnell, each carrying the heaviest stress. The element in each sentence carrying the next highest stress is the psychological subject proper, Marie and Fritz, the rest of the sentence serving to form a link between subject and predicate. "Neben dem psychologischen Prädikate kann sich aus den übrigen Satzgliedern eins als eigentliches psychologisches Subj. besonders herausheben, welches dann dem Prädikate an Wichtigkeit und demgemäß auch an Tonstärke am nächsten steht. Die übrigen erscheinen dann als Bindeglieder, welche die Verknüpfungsweise näher bestimmen" (284). This analysis foreshadows later developments in two ways: Paul's 'Bindeglied' appears in the work of the Czech linguist Firbas as 'transition'; secondly, the stress carried by the psychological subject proper is referred to in recent works as secondary accent as opposed to primary accent which is carried by the psychological predicate.
A second criterion Paul mentions for recognizing the psychological predicate is word order. At this point he criticizes von der Gabelentz’s assertion that there are no exceptions to the sequence psychological subject – psychological predicate, quoting the case of languages where tradition has reserved the initial position in the sentence for the grammatical subject, which, as we have seen, does not necessarily have to coincide with the psychological subject, but can in fact be the psychological predicate. Thus the need to distinguish between grammatically and psychologically determined word order. Wundt also made this point. The examples Paul gives where the psychological predicate precedes the psychological subject are:

(66) Ein Windstoss ergriff das Blatt und weg war es
(67) Müller scheint ein verständiger Mann zu sein. – Ein Esel ist er
(68) "Was ist Meier?" – "Kaufmann (ist er)".

In (66) weg is the psychological predicate, in (67) it is ein Esel. These are all examples of emotive word order. Furthermore, (68) is an example of how an underlying question can serve to identify the psychological predicate. Paul also explains here why in such a context the psychological predicate tends to be first in sequence: "Der Subjektsbegriff (in the psychological sense) was zwar immer früher im Bewußtsein des Sprechenden, aber indem er anfängt zu sprechen, kann sich der bedeutsamere Prädikatsbegriff schon so in den Vordergrund drängen, dass es zuerst ausgesprochen und das Subjekt erst nachträglich angefügt wird. Dies kommt häufig vor, wenn der Subjektsbegriff schon vorher im Gespräch da gewesen ist, vgl. die
angeführten Beispiele. Dann hat auch der Angeredete in der Regel, während er das Prädikat hört, schon das dazu gehörige Subj. im Sinne, welches daher auch manchmal eben so gut wegbleiben kann" (127).

By way of qualification I would assign the stress to war in (66) and not weg. Compare:

(69) Ein Windstoss ergriff das Blatt und weg war es
(70) Ein Windstoss ergriff das Blatt und trug es davon
(71) A gust of wind seized the sheet of paper and away it went
(72) A gust of wind seized the sheet of paper and blew it away.

Similarly, word order is also a relevant criterion for recognizing the psychological subject. This is often an anaphoric demonstrative occupying initial position in the sentence. "Denn eben weil es zurückweist, vertritt es diejenige Vorstellung, von der in der Seele des Sprechenden und des Angeredeten ausgegangen wird, woran das weitere als etwas neues angeknüpft wird. Vgl. ich traf einen Knaben, den fragte ich; - dem sagte ich; - bei dem erkundigte ich mich; - darüber war ich erfreut. Oder ich ging nach Hause, da fand ich einen Brief; ich sah ihn am Sonntag zum letzten Male, damals sagte er mir. Oder Fritz war gestern bei mir; diesen Menschen möchte ich immer zum Hause hinaus werfen; aber ich muss Rücksicht auf seine Familie nehmen; aus diesem Grunde kann ich es nicht." (284)

A further element that often functions as psychological subject is the adverbial. Paul mentions adverbs of time, place and reason: e.g. morgen Abend will ich dich besuchen (287). Some classes of adverbs, on the other hand, function more frequently as psychological
predicate, the verb being a transitional element between subject and predicate: e.g. *Karl ist langsam* (286). It is difficult, as Paul points out, to give an absolute classification of adverbial determinants in these terms. I shall return to the problem of adverbial classification and word order in a later chapter.

A further point Paul makes about the psychological subject is that it may in an actual speech situation be deleted which is not true of the psychological predicate. In such cases where the psychological subject is not expressed linguistically, it can be derived from the context. Some examples of the anaphoric deletion of the psychological subject have already been discussed above with reference to the question-answer situation. In other cases, the situation can provide the psychological subject. This has already been pointed out in the discussion of Wegener's findings.

Apart from stress and word order, languages often use special constructions as a means of singling out the psychological predicate. Paul gives the following examples to illustrate this point: "*Vgl. Christen sind es, die es getan haben oder von denen man es verlangt; engl. 't is thou that robbst me of my Lord; franz. c'est moi qui etc. - franz. c'est à vous que je m'adresse; engl. it is to you, young people that I speak - was ihn am meisten ärger, war ihre Gleichgültigkeit; engl. what I most prize in woman, is her affections, not her intellect - franz. il fut le premier à rompre le silence."* (285)
A further example of this is the use of the verb *tun* in German: e.g. *verbieten tut es niemand*. One might also add here the English construction of the type *what is ...*. This and other constructions are discussed by Kirkwood (1970: 12) together with German equivalent structures. Some of the examples he gives are:

(73) What is important is the realization that sentences have deep structures.

   The important thing is the realization that ...

(74) Wichtig ist die Erkenntnis, daß Sätze eine Tiefenstruktur haben.
2. LOGICAL APPROACHES TO WORD ORDER

Throughout Section 1 a clear distinction was made between the so-called grammatical and psychological subject and predicate. Some of the linguists discussed in the first section of this chapter also introduce the notion of 'logical' subject and predicate. It is to this logical analysis that I shall devote Section 2 of Chapter I, which will be a survey of the various interpretations of the terms logical subject and predicate, for the common use of the same term by various linguists does not mean that their analysis is in any way uniform. As Jespersen (1963: 147ff.) points out the terms psychological and logical subject and predicate are used by various writers to refer to totally different concepts.

Wundt

Three notions of subject are discussed by Wundt, the grammatical, psychological and logical subject. His definition of the sentence (quoted above) refers to the components of the sentence being 'set in logical relations to one another'. Some of the consequences of this definition are discussed by Bever (1971: 158f.). The 'logical' relations holding between the sentence-parts remain the same whatever grammatical transformations a sentence undergoes, whether this involves mere changes in word order or a change in the grammatical subject-predicate relation. "If I change the sentence 'Caesar crossed the Rubicon' into the form of 'The Rubicon was crossed by Caesar', has the subject 'Caesar' thereby become the object and conversely has the former object, 'The Rubicon', become the subject?
Or if I say 'the crossing of the Rubicon was carried out by Caesar' has the original predicate now changed into the subject?" (Wundt 259 quoted by Bever, 1971: 159). To overcome this difficulty, Wundt distinguishes between various notions of subject: "If one maintains that in the two sentences 'Caesar crossed the Rubicon' and 'The Rubicon was crossed by Caesar' the subject has changed, then one has thereby assuredly lost sight of the 'subject' in the Aristotelian sense as that which undertakes the predicate and has replaced it with the behavioural viewpoint, namely that the 'subject' must be the topic. The acting person in both cases naturally is Caesar. But he is the topic of the action only in the first and not in the second sentence. The first is a statement about Caesar, the second about the Rubicon." (Wundt 260-261 quoted by Bever, 1971: 159).

Wundt's analysis of the various subject-notions is represented in (75) and (76) below:

(75) Caesar crossed the Rubicon

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GR SUBJ
LOG SUBJ
PSY SUBJ

(76) The Rubicon was crossed by Caesar

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GR SUBJ
LOG SUBJ
PSY SUBJ

The criterion for singling out the logical subject is semantically relevant - it is the actor or agent of an action in a sentence having the notional pattern actor-action-goal. Much the same analysis of the logical subject was put forward by Sweet (1891). Sweet's
position has recently been taken up by Halliday (1970). He writes (1970: 158f.): "Certain problems that have arisen in the history of the investigation of subject and predicate provide an insight here. A sentence such as (26i) presents no problem in this respect: my mother is clearly subject and the rest predicate. But in (26ii) there seem to be three candidates for the status of subject, these beads, my mother and I:

(26i) my mother gave me these beads
(26ii) these beads I was given by my mother.

The solution was to recognize different kinds of subject. For Sweet, my mother was 'logical subject', I was 'grammatical subject'; these beads came to be known as 'psychological subject'. In (26i), all three coincide. The notion of subject conflates three distinct roles which, although they are typically combined into one element, are nevertheless independent of one another." (158-159)

Paul

Paul, unlike Wundt, does not discuss the logical subject as a separate notion, distinguishing it clearly from other notions of subject; he rather links it with the notion of psychological subject, speaking of "ein Gegensatz zwischen dem psychologischen (logischen) Verhältnis der Satzglieder und ihrem rein grammatischen Verhältnis (282). Wundt also hints at a possible psychological interpretation of the logical internal relations among the sentence-parts: "The logical and the psychological do not constitute a union with separable components; rather the logical relations among the sentence-members are primarily psychological: logic has abstracted them from
the psychological course of thought, in order to investigate their
cr mons in their particular and most perfectly isolated form." (260
quoted by Bever, 1971: 159) To do full justice to Paul's analysis,
however, it should be pointed out that he does indicate a similar
'logico-semantic' interpretation of the subject-predicate relation
when he writes: "Wir sind jetzt gewohnt dem Verhältnis des Subjekts
dem Predikat einen engern Sinn unterzulegen. Ist das Predikat ein
Nomen, so verlangen wir für die normale Satzbildung, dass dasselbe
entweder mit dem Subjekt identifiziert werde, oder dass es den
weiteren Begriff bezeichne, welchem der engere des Subjekts
untergeordnet wird, oder dass es eine Eigenschaft angebe, welche
dem Begriffe des Subjekts inhäriert." (Paul, 1909: 125) To the
logical relation actor-action mentioned above, Paul adds the further
logical patterns of identity of subject and predicate; class
inclusion; and, assignment of a quality or property to the subject.
He also shows that the sequence Wein - Tisch indicates a logical
structure expressing the action of putting an object in a place.
This could also express the location of an object in a place, and
conversely, Tisch - Wein could convey the notion of existence of
an object in a place, the different ordering of elements implying
a different logical relation.

Von der Gabelentz

Von der Gabelentz also implies that there is a connection
between word order and the logical relations holding between elements
when he makes the point that constructions where the subject of the
sentence tends to be placed after the verb in sequence often have
A verb belonging to a particular semantic class. "Auch das ist öfter zu beachten, dass Sprachen, die sonst das Verbum hinter das Subjekt setzen, die umgekehrte Reihenfolge gestatten, wenn das Verbum ein Inerscheinungtreten oder Sinnfälligwerden anzeigt. Der Sinneseindruck ist dann psychologisches Subjekt, und der Urheber, das grammatische und logische Subjekt, wird davon ausgesagt." (1901: 36)

Steinthal

A logical interpretation of the subject-predicate relation is also presented by Steinthal (1885: 197ff.). The foundation of Steinthal's logical subject-predicate analysis is his distinction between sentence and proposition. A single subject-predicate relation constitutes a proposition; a sentence, on the other hand, can contain more than one proposition, or what amounts to the same thing, more than one subject-predicate relation. Wundt's binary analysis of the simple declarative sentence recalls this basic logical supposition: "Since the declarative sentence can be viewed logically as a judgment, the concepts of subject and predicate may be directly applied to it. One can then view the relation between subject and predicate as the expression of the fundamental principle in the structuring of the mental configuration underlying the sentence. Because this structure is a binary one the subject and predicate designate the major segments into which the expression divides. And thus the expressions remain distinct in a simple sentence." (Wundt, quoted in translation from Blumenthal, 1970: 24) But Wundt gives the following warning about the confusion that has
arisen through equating the logical components of a judgment with the grammatical constituents of a sentence: "Among the unfortunate results that came about through the mixture of logical, grammatical, and psychological points of view, there is hardly one that has brought more confusion to the understanding of the real facts of language than the transfer of the logical components of the judgment to the division of grammatical constituents in sentences." (Wundt, quoted in translation from Blumenthal, 1970:24). Steinthal also makes the point that the grammatical subject-predicate relation is not always a reflection of the logical subject-predicate relation.

Steinthal shows that the sentence: **dieser blühende Baum muß Früchte tragen** contains two judgments, or in other words, two predications - "d.h. dieser Baum blüht und folglich muß er Früchte tragen"; blühend in the attributive relation in **der blühende Baum**, like blüht in **dieser Baum blüht** is the logical predicate, **Baum** the logical subject. The logical subject **Baum** is 'activated' by the process **blühen**. "Ist der blühende Baum nicht das sprachliche Abbild der Substanz **Baum** und seine Thatigkeit **blühen**, in welcher jene Substanz lebendig wird?" (Steinthal, 1885: 196). Similarly, an objective relation like **er blüht herrlich** contains two judgments: **er blüht** and **sein Blühen ist herrlich**. "Hier bemerken wir aber sogleich den Unterschied, daß das Urteil nur aus Subject und Prädicat besteht und keine anderen Elemente in sich schließt; der Satz hingegen noch das Attribut und das Object als neue Prädicate hinzufügt, so daß wir im Satze mit einem Attribute das Subject und zwei Prädicaten, und im objectiven Satzverhältnisse das Prädicat,
obwohl es Prädicat des Subjects bleibt, dennoch zugleich sich selbst in ein Subject verwandeln sehen, wie obiges Beispiel lehrt."
(Steinthal 1883: 197). Furthermore, a sentence may contain three judgments: der liebevolle Vater erzieht (seine Kinder) mit Strenge. His analysis of this sentence in grammatical and logical terms runs as follows: "Hier haben wir drei Urtheile. Das Attribut ist hier wichtiger, als das eigentliche Prädicat, es ist das logische Prädicat eines Urtheils: der Vater ist liebevoll. Eben so ist mit Strenge ein wichtigeres Prädicat, also das eigentliche, und macht das Urtheil aus: sein Erziehen ist mit Strenge. Nun können wir aber ohne Mühe noch deutlicher machen, wie wir in liebevoll ein grammatisches Attribut und doch ein Prädicat; in erzieht ein logisches und grammatisches Prädicat und doch zugleich logisches Subject haben. Namlich wir brauchen nur zu sagen: der Vater, welcher seine Kinder liebt, giebt eine Erziehung, welche streng ist, oder erzieht so, wie es streng ist.

Steinthal goes on to show how the grammatical representation of a sentence often appears to misrepresent the logical subject-predicate relation. He takes the following sentences to illustrate this:

(77) Wenn das Auge brechende Medien hat, so kann es sehen; oder:
(78) Weil das Auge u.s.w.;
(79) Wenn das Auge sehen soll, so muß es brechende Medien haben.
In all three sentences (77) - (79) the logical subject is brechende Medien, the logical predicate is sehen; "denn der letztere Begriff wird an den ersten geknüpft; oder, um mit Trendelenburg zu reden:
in den ersten beiden Sätzen wird der Begriff: **brechende Medien** haben lebendig in der Thätigkeit: **sehen**; und im dritten Satz wird der Begriff **sehen** thätig und wirksam in Schöpfung **brechender Medien**.

Das logische Verhältnis, denke ich, ist hier unläugbar. Aber der grammatische Ausdruck hat die Sache ganz anders dargestellt.

Die Sprache kann eine der Logik entsprechende Wendung nehmen: **brechende Medien ermöglichen dem Auge das Sehen**; hier ist grammatisch und logisch dasselbe Subject. Dasselbe drückt man aus durch: **vermöge brechende Medien sieht das Auge**. Das logische Subject muß doch wohl noch dasselbe sein, aber das grammatische weicht von ihm ab."

(Steinthal, 1889: 199).

Let us examine at this point Steinthal's concept of logical subject and predicate. The criteria Steinthal mentions are:

(1) what is more important - "das Attribut ist hier wichtiger, als das eigentliche Prädicat, es ist das logische Prädicat des Urtheils" (187); (2) linking of one idea to another - "der Begriff, an welcher der andere geknüpft wird, ist das Subject, der welcher angeknüpft wird, das Prädicat" (198); (3) the activation of the logical subject by the logical predicate - "A wird lebendig in der Thätigkeit B"; and (4) he says that however the sentence is represented grammatically, the logical subject remains the same.

Examining sentences (77) - (79) again in the light of the above criteria, it is difficult to distinguish Steinthal's logical subject and predicate from the notions of psychological subject and predicate discussed in Section 1. In (77) and (78) **brechende Medien** is the
topic or psychological subject of the sentence, *sehen* the psychological predicate. Cf.:

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>PSY PRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>(80) Vermöge brechende Medien sieht das Auge</td>
<td></td>
</tr>
<tr>
<td>(81) Brechende Medien ermöglichen dem Auge das Sehen</td>
<td></td>
</tr>
</tbody>
</table>

In (79), the situation is reversed; *sehen* becomes psychological subject or topic, *brechende Medien* psychological predicate. It is difficult to classify *Auge* in the above sentences with either analysis, logical or psychological and I shall return to this later when the theoretical framework has been sufficiently extended to explain the roles of all the constituents in these sentences.

For the present it can be noted that in terms of the semantic interpretation of the logical subject mentioned above, *Auge* would be the logical subject. This would apply to all sentences (77) - (81) and thus satisfy criterion (4) above: "Das logische Subject muß doch wohl noch dasselbe sein, aber das grammatische weicht von ihm ab." (199)

Moreover, Steinthal's discussion of sentences (82) - (85) below lends support to the above argument that Steinthal's logical subject is very much what has been called psychological subject by other scholars.

(82) Das Eisen leitet ihn
(83) Elektricität wird von ihm geleitet
(84) Wie befindet sich Herr N.? Der Blitz hat ihn getroffen
(85) Wem gehört dieses Buch? Es gehört Herrn N.
According to Steinhthal, *ihn* in (82) is logical subject: "Vom Eisen sollte nichts prädicat werden, nicht von ihm sollte beurtheilt werden, sondern vom Blitze; folglich ist *ihn* das logische Subject" (Steinhthal, 1885: 199). Sentences (83) and (84) are interpreted in the same way: *ihm* and *ihn* are for Steinhthal the logical subjects of their respective sentences, his criterion being 'wovon die Rede ist'. His analysis of (85) is then remarkably inconsistent. He writes: "Die beiden Dative sind die beiden Subjecte dieser Sätze; denn an sie soll ein anderer Begriff angeknüpft werden, nicht die Person an das Buch; oder, nach Trendelenburg, der Begriff dieser Person wird lebendig und thätig im Besitzen des Buches" (Steinhthal, 1885: 199).

If, as Steinhthal says, *ihn* is logical subject in (84), then the corresponding element in (85) is *es*, referring to *Buch* in the interrogative sentence. It is clearly inconsistent to argue that the logical subject is *ihn* in (84) and *Herrn N.* in (85). If the criterion used is 'what is predicated about what', or 'what one is talking about', which as one suggested way of determining the logical subject would surely be applicable to all sentences (82) - (85), then it is arguable that one is predicating about *ihn* in (84) and about *Buch* in (85), not about *Herrn N.* Again, it can be noted that the criterion 'what is predicated about what' is really one for locating the psychological, not the logical subject.
CHAPTER II

TOWARDS A MORE NEUTRAL LINGUISTIC ANALYSIS OF WORD ORDER

1. CZECH STUDIES IN WORD ORDER

Mathesius

In Chapter I, consideration was given to the analyses of sentence structure and organization put forward by 19th and early 20th century scholars. These were largely based on psychological considerations and this is reflected in the terms they used to label the segmented parts of sentences: terms such as 'psychological subject' and 'psychological predicate'. Between the two wars these problems began to be studied by Czech scholars, particularly by Mathesius, who, although he derived much from these earlier works, sought to establish more neutral and purely linguistic criteria for his investigations into the structure and organization of sentences. Mathesius' approach has come to be termed 'functional sentence perspective' (FSP). FSP is concerned with the information structure of the sentence. To denote the communicative units of the utterance the terms 'theme' and 'rheme' have been used. These relate to the terms 'psychological subject' and 'psychological predicate'; the use of the term 'theme' for 'psychological subject' has already been referred to in Chapter I.

The development of the notion of FSP by Mathesius was to a large extent inspired by the ideas of Weil. Mathesius gained many insights
from Weil's monograph; he developed many of Weil's ideas further and his adoption of the notion of FSP is an attempt to establish new and more precise methods of linguistic research. A brief appraisal of Mathesius' work in the light of Weil's ideas is given by Firbas (1964; 1970). One of his most significant contributions is his inquiry into the role played by FSP in determining the sequence of elements. Such an approach to the study of word order is no longer psychologistic, but an attempt at a description of natural language in neutral linguistic terms. Mathesius (1928: 61ff.; 1929: 202ff.) shows the relevance of the notion of FSP to modern English. He begins by discussing the function of the grammatical subject in English. He mentions two functions of the grammatical subject, one being predominant in any one language. "Entweder bezeichnet das grammatische Subjekt den Urheber der durch das Prädikatverbum ausgedruckten Handlung, oder aber das Thema der durch das Prädikat ausgedruckten Aussage. Ein Vergleich des Englischen z.B. mit den slawischen Sprachen zeigt deutlich, daß im Englischen die thematische Funktion des grammatischen Subjektes besonders stark hervortritt. Das Deutsche steht mittwegs zwischen dem Englischen und den slawischen Sprachen, so daß es in bezug auf das Englische auch als gutes Vergleichsmaterial dienen kann." (1929: 202)

The tendency of the grammatical subject to express the theme of the sentence corroborates Weil's view that the restrictions on the permutability of the sequence of elements operative in a given language increases the frequency of thematic subjects. One of the means English may employ to make the subject-predicate order conform to the theme-rheme sequence is the passive construction. Mathesius seeks support
for his claim that the development of the passive in Modern English is motivated by the thematic function of the grammatical subject by comparing English passive sentences with possible equivalent non-passive German sentences. He further points out that the passive is not restricted to constructions where the subject is 'directly affected by the action'. The grammatical subject may be only 'indirectly affected by the action': I have been told, Man hat mir gesagt (1928: 63). This latter kind of passive embraces two other kinds of passive construction: the 'possessive passive' and the 'perceptive passive'. The possessive passive is used with the verbs to have and to get followed by an object and a predicative participle:

(86) Everywhere he had crowds hanging on his lips.

A German equivalent sentence (Kirkwood, 1970: 39):

(87) Überall hingen ihm Menschenmengen an den Lippen

shows clearly the difference in sentence organization between the two languages. The perceptive passive contains a verb denoting perception, e.g. to find, to feel, to see, to catch followed by an object and predicative participle.

(88) Upon examination of these I found a certain boldness of temper growing in me.

Another construction Mathesius discusses is the impersonal construction in Modern English. He refers to the conversion in Middle English of impersonal constructions to personal ones. He gives the following examples:

(89) I am sorry to hear

(89a) Es tut mir leid zu hören
(90) I am warm enough
(90a) Es ist mir warm genug
(91) Still he found it very pleasant to talk to Idsbeth
(91a) Doch war es ihm ein Vergnügen mit Idsbeth zu sprechen
(92) She found it extremely difficult to say exactly what it was
(92a) Es fiel ihr äußerst schwer, genau zu sagen, was es war.

In the above example sentences the grammatical subject expresses the theme, this construction allowing the theme to precede the 'proper enunciation' (psychological predicate) which is characteristic of what Mathesius calls the 'objective sequence of elements' as opposed to the 'subjective order' where the enunciation is made first followed by the theme. This observation leads Mathesius to draw the following conclusion about the sequence of elements in Modern English: "If in Modern English the word order has become stabilized, so that the subject, as a rule, precedes the predicate, and if, on the other hand, the grammatical subject in Modern English has come to have a clearly thematic function, it is evident that the two changes combined tend towards the stabilization of the objective order subject-theme: predicate-enunciation in Modern English" (1928: 66)

The above discussion shows how Mathesius endeavours to point out the means by which English reconciles the requirements of FSP with those of grammatical structure. This does not mean, however, that Mathesius considers that FSP has the leading role in the 'hierarchy' of English word order principles (Mathesius refers to the hierarchy of all word order principles, the hierarchy being determined by the mutual relation of the principles, i.e. by the extent to and the manner in,
which they operate; cf. Firbas, 1964: 111). In English, he finds that it is primarily the grammatical principle that determines the sequence of elements and points out that this principle often works counter to the requirements of FSP, since there are not enough of the kind of means discussed above to put all non-emotive English sentences into a theme - enunciation order. This causes Mathesius to seriously question the susceptibility of English to FSP, though, as will be made clear presently, word order is only one means of FSP and other criteria need to be taken into consideration.

Mathesius (1939, quoted by Daneš, 1970) defines the 'starting point' of the utterance (=theme) as "that which is known or at least obvious in the given situation, and from which the speaker proceeds", whereas the 'core of the utterance' is "what the speaker states about, or in regard to, the starting point of the utterance". In a further paper (1942, referred to by Daneš, 1970) he defines the 'foundation' (or theme) of the utterance as something "that is being spoken about in the sentence", and the 'core' as what the speaker says about this theme. This latter unit is usually referred to by linguists of the Prague tradition as the rheme of the sentence. Daneš (1970) points out that these two definitions of theme and rheme indicate two different aspects of FSP:

1. known (given) information – unknown (new) information;
2. theme ('starting point of the utterance') – rheme ('core').

Here Daneš refers to a third aspect of FSP:

3. different degrees of communicative dynamism (CD).

Distinction 3. has been introduced by Firbas and may be viewed as
a refined analysis of aspect 2. "Instead of a strict bipartition of
the 'information-bearing structure' of the sentence (...) we arrive
at an uneven distribution of CD over the sentence, assigning various
degrees of thematicity, or rhematicity to different sentence elements"
(Daneš, 1970). The thematic and contextual aspects of FSP have also
been pointed out by other linguists and different conceptions of the
theme have been proposed. Before taking a look at these, however,
I shall review the work of Firbas in this field.

Firbas

Firbas' notion of CD produces the following analysis of FSP:
"The principle of FSP (...) causes the sentence to open with thematic
and close with rhematic elements. Very roughly speaking, thematic
elements are such as convey facts known from the verbal or situational
context, whereas rhematic elements are such as convey new, unknown
facts. Strictly speaking, thematic elements are such as convey facts
that constitute the communicative basis of the sentence, such as
contribute least towards the development of the discourse and
consequently convey the lowest degree(s) of communicative dynamism (=CD)
within the given sentence. Rhematic elements, on the other hand, are
such as contribute most towards the development of the discourse and
consequently convey the highest degree(s) of CD within the given
sentence. In regard to the varying intensity of CD we find that the
thematic and the rhematic elements, i.e. the theme and the rheme, are
usually linked up by means of transitional elements (i.e. the transition).
The word order that observes, or is at least in accordance with, the
principle of FSP naturally places these elements between the theme and
the rheme (e.g. The situation (theme) has become (transition) quite
dangerous (rheme))" (Firbas, 1964: 112).

Mathesius' definition of the theme as the 'starting point of the
utterance' is at variance with Firbas' conception of theme which, on
the basis of the varying degrees of CD carried by the sentence elements,
he defines as "the element(s) carrying the lowest degree of CD within
the sentence" (1966: 276). Defined in this way, the theme need not,
as Firbas points out, occupy the initial position in the sentence and
thus constitute the 'starting point' of the utterance. I shall return
to this problem of the theme and the sentence opening element at a
later stage. It suffices here to make clear that the two need not
necessarily coincide. Nor does the theme necessarily convey only known
information as Mathesius suggests. Firbas points this out clearly
when he writes: "The theme is constituted by the sentence element (or
elements) carrying the lowest degree(s) of CD within the sentence. It
follows from this definition that the theme need not necessarily convey
known information or such as can be gathered from the verbal or
situational context. It can convey even new, unknown information.
The essential feature of the theme is the lowest degree of CD, not the
conveyance of known information" (1966: 272). However, elements that
are derivable or recoverable from the context, both verbal and
situational, i.e. those elements which mark a sentence for contextual
dependence, are always thematic irrespective of the position they
occupy within the sentence. The following English sentences quoted by
Firbas illustrate the difference between his and Mathesius' conception
of the theme.
A haze hovered over the prospect

A girl broke a vase.

In German, sentences of this type would be organized as follows:

Am Horizont stand ein dämmerig' Dunst
Ein Mädchen hat eine Vase Zerbrochen.

In (93) the theme is over the prospect (this expression conveys information that is known from the previous context and has the effect of 'dedynamizing' the position in which it occurs). Unlike the German sentence (95) the theme is not identifiable as the sentence opening element. It is this factor regarding the sequence of elements in English that led Mathesius to comment on the insusceptibility of English to FSP. In Firbas' terms, the ordering of elements in English is less susceptible to the 'basic distribution of CD', according to which elements are positioned in a consistent theme-transition-rheme sequence. Unlike Mathesius, Firbas distinguishes between FSP and the basic distribution of CD, word order being only one means of FSP. Other means, e.g. context and semantic structure may determine the distribution of the degrees of CD within the sentence and these may work counter to the basic distribution of CD. According to Firbas (1966: 243) sentence (93) is to be interpreted in the same way as example A girl came into the room. Both show how language-specific criteria (e.g. the principle of grammatical function, according to which elements follow a consistent SV(0) order) can work counter to the basic distribution of CD so that the sentence opens with the rheme and closes with the theme. The degrees of CD carried by the corresponding elements in (93) and (95), however, remain the same. The German sentence (95), unlike the English equivalent, displays the sequence theme - transition - rheme. In both
sentences the adverbial element carries information which is either known or recoverable from the context, it constitutes least to the development of the communication and is in consequence thematic.

Semantic criteria are also relevant: "The novelty, and hence contextual independence, signalled by the non-generic indefinite article becomes especially apparent if the contextually independent subject is accompanied by such verbs or verbal phrases as come, come into view, come on the scene, come in, come up, appear, to present oneself, to take place, to arise and a number of others (...). These verbs or verbal phrases undoubtedly imply or even explicitly express 'appearance - a kind of coming into existence - on the scene' (i.e. the scene created by the narrow, ad hoc context at the moment of utterance) or simply 'existence' on this scene. It is natural that attention should be concentrated rather on the person or thing appearing or existing on the scene than on the appearance or existence itself. The subject will therefore carry a higher degree of CD than the verb. If the rest of the sentence conveys known information or merely states the scene, the subject even becomes the rheme of the sentence (A girl came into the room)" (1966: 243). In the sentences (94) and (96), there is no contextually dependent element. Firbas offers the following analysis: "Although the subject conveys new information and is accompanied by a non-generic indefinite article, it is evidently not rhematic. This is because it is not linked up with a verb of 'appearance or existence on the scene', but with a verb of action (....) and with a substantival object expressing the goal (object) of the action, both the verb and the object conveying new information. Under
the circumstances it is natural that attention should be concentrated less on the agent and more on the goal of the action. It is, therefore, the object, not the subject that becomes the rheme of the sentence" (1966: 243).

Beneš

Other Czech linguists (Beneš, Daneš) have also distinguished between different levels of analysis in their work on FSP. Much of Beneš' work is concerned with analysing the organization of German sentences from the point of view of FSP. His analysis of the initial element in German sentences (1964: 9) helps to clarify the confusion arising out of Mathesius' conception of theme. Recognizing, in agreement with Firbas, the need to distinguish between theme and sentence opening element, Beneš assigns to the initial element the function of 'basis'. He writes: "Unter Basis wird hier der Ansatz verstanden, der als Ausgangspunkt der Mitteilung unmittelbar an den Kontext anknüpft, die Spannung (Erwartung) erweckt und die Mitteilung in einer vorausbestimmten Richtung lenkt" (1964: 9). It will become clear that this distinction between 'basis' and 'theme' is particularly relevant to the organization of contextually dependent utterances in German (cf. Kirkwood, 1969: 89).

In a more recent article (1970), Beneš, referring to Dokulil and Daneš, discusses a more abstract level of analysis which may be regarded as underlying the thematic organization of actual utterances: 'ein statisches semantisches Schema'. On this static level of semantic structure a particular combination of semantic categories produces in
some languages a 'semantic word order' as opposed to a 'grammatical word order' resulting from a particular combination of grammatical categories: "Wie in einigen Sprachen für Kombinationen bestimmter grammatischer Kategorien eine bestimmte grammatische Wortfolge existiert, so gibt es in anderen Sprachen – wie z.B. im Tschechischen – eine semantische Wortfolge als stabiles Schema für Kombinationen bestimmter semantischer Kategorien, die einen bestimmten „Sinn“ haben" (1970: 1021).

As types of sentences which reveal a particular combination of semantic categories which have a particular meaning ("Sinn"), Beneš mentions existential and locative sentences. "So unterscheidet sich z.B. die Äußerung mit dem semantischen Sinn: „Lokalisierung eines Gegenstandes“ von der Äußerung mit dem semantischen Sinn: „Vorkommen eines Gegenstandes in einer bestimmten Situation“ im Tschechischen nur durch die Wortfolge: Kniha je na stole (Das Buch liegt auf dem Tisch) – Na stole je kniha (Auf dem Tisch liegt ein Buch). Im Französischen und Englischen dient dagegen zu dieser Unterscheidung eine besondere Konstruktion: Il y a un livre sur la table, There is a book on the table" (1970: 1023). It is interesting to mention here the possibility of using the verb have in Modern English to 'foreground' the thematic locative element table in: The table has a book on it by moving it to initial position (cf. Kirkwood; 1969a; 1973).

Daneš

Daneš (1966) distinguishes three levels of syntactic analysis:

1. the level of grammatical structure of the sentence;
2. the level of semantic structure of the sentence;
3. the level of thematic organization of the utterance.
Daneš claims that much confusion in the discussion of syntactic problems can be avoided if the above levels are taken into account. He substantiates this view by showing how Chomsky's analysis of the sentences

(97) John is easy to please
(98) John is eager to please

requires a more explicit distinction between the grammatical and the semantic level. It appears that Chomsky uses the notion of "grammatical relation" in an ambiguous way. He states that, in the case of (97), "John is the direct object of please (the words are grammatically related as in 'This pleases John')", while, in the case of (98), John "is the logical subject of please (as in 'John pleases someone')" (Chomsky, 1962: 518). The terminology used here ('direct object', 'grammatically related', 'logical subject') reveals the confusion of notions. As Daneš points out, Chomsky is correct in saying that in (97) John and please are related as in This pleases John, but wonders why he should call this relation a grammatical one, since it has nothing to do with the formal grammatical properties of the given sentence. Chomsky's use of the adjective 'logical' in the case of (98) shows clearly his own confusion of levels or his apparent unwillingness to differentiate between a grammatical and a semantic level in syntax. It is also worth noting that possible German equivalent sentences of (97) and (98) have different 'surface' representations corresponding to the different semantic structures underlying the two sentences:

(99) Es ist leicht, Hans zuzufriedenzustellen
(100) Hans bemüht sich, anderen zu gefallen.

Sentences (97) - (100) further illustrate an important aspect of the difference between the grammatical and the semantic level. Whereas
the semantic categories, being extra-linguistic, seem to be universal, or nearly so, the grammatical categories, such as subject, are bearers of a linguistic function in a given system, their autonomy revealing itself in the diversity of languages (cf. Danes, 1966: 227).

The relational grammatical structure of the sentence is represented by the grammatical sentence pattern (GSP). I shall go into the importance of the GSP for word order at a later stage. It suffices here to introduce the concept and differentiate it from its counterpart on the semantic level, the semantic sentence pattern (SSP). Danes gives as one of the most common GSPs in English the pattern \( N_1 \rightarrow VF \rightarrow N_2 \), the elements of the pattern being word classes, the relation of dependence and word order. Danes (1966: 56) defines the relation between GSP and SSP as follows: "The GSP does not only combine, but at the same time it converts the particular lexical meanings into another type of meaning, on a higher level of abstraction; these meanings might be called syntactic meanings and characterized as the generalization of lexical meanings contained in the sentence, accomplished by the relational structure of the underlying GSP. Thus we might say that in the sentence My father is writing a long letter, the items (my father, is writing, (a long) letter display the syntactic meanings of 'actor', 'action', and 'goal', respectively." Such a configuration of syntactic meanings he calls a SSP.

Associated with the third level, that of the thematic organization of utterance, is the communicative sentence pattern (CSP). The neutral CSP is characterized by a theme - rheme sequence, the marked, non-neutral pattern by a rheme - theme sequence.
2. GERMAN STUDIES IN WORD ORDER

In Section 1 of Chapter II, I have traced in broad outline the approach of linguists of the Prague tradition. This has taken the discussion out of a specifically German context. On the other hand, it serves, firstly to show how the psychologistic approaches of the nineteenth and early twentieth century linguists discussed in Chapter I were taken up and further developed into a neutral linguistic theory of utterance by linguists of the Prague tradition, and secondly to introduce concepts which will be discussed further later, whilst providing a wider context for evaluating some German-specific contributions to word order studies, to which this section of the present chapter will be devoted.

The trend of thought that was initiated by von der Gabelentz was continued by H. Ammann, whose ideas were in turn taken up and further developed by K. Boost. Boost also refers to the work of E. Drach, who for his part refers neither to von der Gabelentz nor to Ammann, though his approach is not dissimilar in important respects. Drach's work predates that of Boost by eighteen years, but at least from the point of view of terminology, Boost is more obviously influenced by the tradition of linguistic analysis of the German linguists discussed in Chapter I. It seems appropriate, therefore, to review the contributions of these linguists in the following order: Ammann, Boost, Drach.
Ammann used the term 'theme' for what was referred to by other linguists as 'psychological subject' as early as 1911. He also uses the two terms 'Gegenstand' and 'Inhalt' for theme and rhyme respectively. He takes the example sentence Herr N.N. ist erkrankt and explains how its bipartite structure in terms of subject and predicate is a reflection of the nature of communication from the point of view of speaker and listener:

\[
\begin{array}{ll}
\text{GR SUBJ} & \text{GR PRED} \\
(Herr N.N.) & (ist erkrankt) \\
'dem Hörer schon bekannt' & 'dem Hörer noch unbekannt' \\
'alt' & 'neu' \\
'das dem Sprechenden und Hörer gemeinsam Gegebene' & 'das, was der Sprechende dem Hörer zu geben hat' \\
\end{array}
\]

At this point, he seems to be equating grammatical subject with theme, and grammatical predicate with rhyme, but does not in fact do so. "Daß psychologisches und grammatisches Subjekt, psychologisches und grammatisches Prädikat nicht immer zusammenfallen, ist unwesentlich; worauf es allein ankommt, ist, daß der Begriff der Mitteilung an sich schon auf etwas hindeutet, wovon die Rede ist (Subjekt) und auf etwas, was davon gesagt wird (Prädikat) - auf Gegenstand und Inhalt der Mitteilung" (1928: 140). The theme (or 'Gegenstand') represents information which is derivable from the situation or recoverable from the preceding context, as opposed to the rhyme (or 'Inhalt') which is non-recoverable: "Was dem Sprechenden und dem Hörer gleicherweise gegeben ist, kann nicht den Inhalt einer Mitteilung bilden"; and further, "Sinnlich Gegenwärtiges kann nicht den Inhalt einer Mitteilung bilden" (1928: 147).
Two aspects of Ammann's analysis require further discussion:

1. his distinction between sentence and utterance ('Satz': 'äußerung');
2. his criterion of 'Gegenwärtigkeit' of the theme, and 'Nichtgegenwärtigkeit' of the rheme.

A primary aspect of Ammann's approach is that it is based on the social character of the speech act: "Die Rede ist in erster Linie Mitteilung an einen Hörer, und somit muß auch die typische Form der Rede aus den Bedingungen der Mitteilung heraus verstanden werden: der Satz ist eine Erscheinung des sprachlichen Verkehrs unter Menschen, in dem allein die Sprache zur vollen Wirklichkeit sich entfaltet" (1928: 140). Communicative function should determine our conception of the nature of the sentence. Illustrative sentences such as the one quoted by Wundt 'Die Wiese ist grün' are often, Ammann maintains, difficult to contextualize; they lack a 'motivating' situation which transforms them into actual utterances ('reale Äußerungen'): "In dem Augenblick aber, wo ich den Satz als Einheit der von Mensch zu Mensch gesprochenen Rede, als reale Äußerung betrachte, erhebt sich die Frage, wie der Sprechende dazu kommt, sich so zu äußern, kurz die Frage nach der Motivierung der Äußerung" (1928: 142F.). The specific situation in which an utterance is made is indeed an important factor with regard to the particular surface form of an utterance. Ammann's claim, however, that only illustrative instances of utterances which suggest a 'specific motivating situation' ('eine bestimmte motivierende Situation') or immediately call forth a specific

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1 Term referred to by Dahl (1969), translated from a Czech term used by Adamec
consitution ('einen szenischen Rahmen') from which the utterance emerges are of relevance, neglects an important level of linguistic analysis which is an important factor in determining the sequence of elements in sentences. I am referring here to particular configurations of semantic categories which have a certain generalized meaning outside a particular context (cf. Beneš, Daneš above). It may well be such a level of analysis Ammann has in mind when he writes: "Der Satz als Ausdruck des Gedankens trägt seinen Sinn in sich, die Frage nach dem Sinne eines solchen Satzes ist demnach durchaus eindeutig, der Sinn haftet am Satze, gleichviel wo und wann und von wem er gedacht, ausgesprochen, geschrieben, gebildet oder gelesen wird" (1928: 142). Also, since he does ascribe to the utterance ('äußerung') 'einen speziellen Sinn' (144), he does seem to be opposing the generalized or potential meaning of the sentence to the specific or actual meaning of the utterance.

A few illustrative examples will help to clarify this point:

(101) Die Wiese ist grün
(102) Die Wiese ist wieder/noch grün
(103) Die Wiese ist auch grün.

Sentences (102) and (103) differ as utterances because underlying them are two different semantic sentence patterns which express different generalized or potential meanings. Expressed in terms of grammatical categories these could be represented as follows:

(102a) NP + V + ADJ
(103a) ADJ + V + NP.

Other sentences discussed by Ammann are also relevant here (1928: 254):
Here the same semantic (or 'logical') relation could be expressed by replacing the second noun by a predicative adjective (cf. Kirkwood 1973: 50):

(105) Die Bakterien gehören zu den Pilzen.

(106) Bakterien sind pilzartig.

The sentences (104) - (106) are similar from the point of view of underlying semantic structure to (102a) above. In (102), to a member of a set of objects A is assigned a feature B. Similarly, in (104) and (105) to a set of objects A is assigned a characteristic B.

In (103), on the other hand, to a feature A is assigned an object B. A similar interpretation would also be possible in the case of the following sentences:

(107) Zu den Pilzen gehören auch Bakterien
(108) Pilzartig sind auch Bakterien.

In (107) and (108) the sequence of elements in (105) and (106) are reversed corresponding to the sequence of the categories in the underlying representation (103a).

An important point regarding the reversability of such relationships is made by Kirkwood (1973: 49ff.). Referring to sentence (106) above he writes: "The relation between the two nouns is not one of equality, i.e. A = B as in London is the capital of Great Britain, but of class inclusion, B being a wider concept under which A is subsumed. The same 'logical' relation between the two nouns could be expressed by use of a predicative adjective in place of the second noun, i.e. *Bakterien sind pilzartig*, where the noun 'Bakterien' refers to
a particular set of objects in which are found qualities characteristic of the general class referred to as 'pilzartig'. In a relatively context-free situation (i.e. in a definition) the more particular term will be the point of departure of the cognitional act, the communicative purpose of the prediction being the assignment of a set of objects (what we are now talking about) to a class, i.e. given A, A is to be identified as belonging to the class B. The sequence of elements is then not reversible; it has a 'logical' or 'semantic' function, i.e. that of class inclusion as in London is a large city."

Ammann goes some way to distinguishing sentences with different 'meanings' when he discusses sentences such as:

(109) Dieser Mann ist tapfer
(110) Dieser Mann ist ein Held

and,

(111) Bismarck ist der Gründer des Deutschen Reiches.

The sequence of elements in (109) and (110) he explains in terms of the fact that the subject in each sentence is 'determined', whereas the predicate is 'non-determined'. Regarding (111) he writes: "im Falle der Ineinsetzung zweier determinierter Elemente (Bismarck ist der Gründer des Deutschen Reiches) fehlt, abgesehen von der verschiedenen Weise der Determination, das Moment der Unumkehrbarkeit" (1928: 254). Yet the reason for the reversibility of (111) is rather explainable in terms of its semantic structure rather than by the criteria of which constituent(s) is(are) determined. Also, if Bismarck is the theme, (111) is in fact then not reversible, but only potentially so should the thematic status of the constituents be changed. Furthermore, the
sequence of (109) is also reversible according to the rhematic status of the grammatical subject and the thematic status of the contextually dependent predicative adjective, cf. Tapfer sind auch Frauen, Tapfer ist auch die Frau. What is needed here is the separation of the criteria of what is determined, and the semantic structure of the sentence, or in Danes' terms, a distinction of two different levels of analysis, the thematic and the semantic, without, however, denying the relation between the two levels. When Ammann writes: "Der Sinn dieser Unumkehrbarkeit aber ist der, daß der Weg der Erkenntnis von a zu b weiter führt, daß wir von a ausgehend, zu b fortschreiten, a als b er kennen, von a auf b schließen" (254), he could attribute the direction of the cognitional process to the actual communicative intention as reflected by a particular configuration of categories. It is in this context that the 'Richtung des Fortschreitens der Erkenntnis' (255) becomes meaningful. In an appropriate context the direction of the cognitional process can be reversed. This can be represented as an abstraction in the form of configurations of semantic categories in which the sequence of categories in the one pattern is a reversal of the sequence of categories in the other. The fact that one sequence, one particular SSP, could be regarded as being more 'basic' i.e. less marked for contextual dependence or presuppositions is another factor to be taken into consideration. I shall return to this later. It is clear for example that the sequences

(112) Tapfer sind auch Frauen
(113) Tapfer ist auch die Frau

are marked for contextual dependence. In terms of their generalized meanings, it may be said that the two pairs of sentences (109), (110)
and (112), (113) represent two different directions of the cognitional process each of which can be represented in terms of a particular configuration of semantic categories.

Kirkwood (1973: 51) considers sentences (104), (106), (107) and (108) to be equivalent logically, but says that they differ from the point of view of thematic structure. Cf.

\[
\begin{align*}
(114) & \quad \text{T} \quad \text{R} \quad \text{T} \quad \text{R} \\
& \quad \text{A ist pilzartig} \quad \text{B ist pilzartig} \\
(115) & \quad \text{T} \quad \text{R} \quad \text{R} \quad \text{T} \\
& \quad \text{A ist pilzartig} \quad \text{B ist auch pilzartig} \\
(116) & \quad \text{T} \quad \text{R} \quad \text{T} \quad \text{R} \\
& \quad \text{A ist pilzartig} \quad \text{Pilzartig ist auch B.}
\end{align*}
\]

In (116) the thematic element 'pilzartig' is brought to front position by applying a theme shift.

These sequences are indeed related, but underlying (104) and (106) on the one hand, and (107) and (108) on the other, are two different logical perspectives which are an abstraction of the different perspectives in terms of thematic organization, i.e. the difference in thematic structure is reflected in semantic terms by different configurations of categories which in turn correspond to two different directions of the cognitional process. What I am arguing here is that the sequence of semantic categories is meaningful. That is why (103a) is the corresponding underlying structure to (103) and not (102a), though both in (102) and (103) the sequence of the lexical items Wiese and grün are the same. Here the semantic and thematic difference between (102) and (103) is expressed by accent placement, not by the sequence of elements as in (107) and (108).
In so far as the pairs of sentences discussed above have different
generalized 'meanings', they are not equivalent. Viewed in such a way
these sentence patterns serve as a useful abstraction of actual
utterances in terms of the sequence of categories in the underlying
semantic representation. The two need not, of course, coincide, as is
clear from sentences (103) and (115) above. Other criteria often
determine the sequence and this may mean that the direction of the
cognitional act is not directly reflected by the surface sequence of
elements. Other factors, however, such as accent placement and markers
of contextual dependence (e.g. the particle auch) ensure correct
interpretation.

A similar dichotomy between two related semantic sentence patterns
is evident in the case of existential and locative sentences. Cf.

(117) The book is on the table
(118) Das Buch liegt auf dem Tisch
(119) There is a book on the table
(120) Auf dem Tisch liegt ein Buch.

(117) and (118) have the 'meaning' 'location of an object in a place',
which is represented by the pattern:

(121) NP + V + LOC;

(118) and (119) have the 'meaning' 'existence of an object in a place',
which is represented by the pattern:

(122) LOC + V + NP.

These syntactic 'meanings' have been discussed in detail by Beneš (1970)
The second point which requires some clarification is Ammann's criterion of temporal and spatial 'Gegenwärtiges' as a means of distinguishing theme ('Gegenstand') and rheme ('Inhalt'). Ammann takes the sentence:

(123) Dieser Brief ist gestern angekommen

and writes: "Hier bildet also das nichtgegenwärtige Moment des Zeitpunktes der Ankunft den 'Inhalt' der Mitteilung über den gegenwärtigen 'Gegenstand' " (1928: 149). This would mean that gestern would be rheme and carry the primary accent. In this particular instance, however, it is the element Brief that receives the primary rhematic accent. This is discussed by Kirkwood (1973: 44) who compares the following sentences:

(124) This letter arrived yesterday
(125) The letter arrived yesterday
(126) The letter arrived yesterday.

In (124) letter carried what has been called 'information focus'. This can be explained in terms of the semantic category of the verb - a verb expressing the notion of 'emergence on the scene' (cf. Firbas, 1966a: 243). In (125), on the other hand, yesterday receives the rhematic accent, the difference between (124) and (125) being explainable in terms of the particular deixis conveyed by the demonstrative and the definite article respectively - in (125) letter, accompanied by the definite article represents information that is recoverable from the preceding context. In (126) letter carries primary accent, but has contrastive meaning and is 'marked' in terms of information focus (cf. Halliday, 1967).

Another sentence quoted by Ammann in this context is:
(128) Auf dem Tische stand eine Vase mit Blumen
where both objects are 'gegenwärtig'. Two criteria resolve the
difficulty here: that of communicative dynamism and that of the
semantic structure of the sentence as a means of FSP, cf. Firbas.
The presence of the indefinite article is also a relevant factor.
If eine Vase is replaced by die Vase the sentence will have a different
'communicative sense'. This change will also be reflected in a
modification of the surface structure of the sentence in both English
and German:
(129) Die Vase mit Blumen stand auf dem Tisch
(128a) There was a vase of flowers standing on the table
(129a) The vase of flowers was standing on the table.

Boost

A study of the theme - rheme structure of the German sentence is
also to be found in Boost (1955), who derived much from the work of
Ammann. Boost, like Ammann, stresses the involvement of the listener:
"Wir finden den Satz gestellt zwischen den Sprechenden und den
Aufnehmenden, und dieses "inter-esse", dieses Dazwischensein wirkt sich
in verschiedener Hinsicht aus, wobei beim Sprechenden immer die
Rücksichtnahme auf den Aufnehmenden vorliegt" (1955: 10). Only when
the person to whom the communication is addressed is taken into account,
is it meaningful to discuss sentence structure in terms of the
communicative intention of the speaker. The aim of the speaker is to
create in the mind of the listener a similar complex of ideas to his own.
(Wundt proposes a similar analytic process, though he disregards the
involvement of the listener.) There exists between speaker and listener
a certain 'tension' based on the different extent of their knowledge:

"Die Spannung zwischen Sprecher und Hörer erwächst aus der verschiedenen Situation, in der sich beide befinden. Der Sprecher 'weiß', was er sagen will, der Hörer 'weiß es noch nicht' " (1955: 18). This tension, Boost argues, is reflected in the structure of the German sentence, which he calls a 'Spannungseinheit'. The beginning of the sentence marks the creation of the tension between speaker and listener, which is only resolved at the end of the sentence when the difference in the extent of the respective knowledge of speaker and listener is removed. This is the 'Grundgesetz' of German sentence structure: "Der deutsche Satz hält die mit dem Setzen des ersten Wortes erzeugte Spannung nach Möglichkeit bis zuletzt aufrecht und löst sie am Schluß" (1955: 17).

The sentence opening element functions as the 'Ausgangspunkt', the point of departure of the sentence, which is a common basis for speaker and listener and from which the communication can develop. This Boost calls the 'Thema', the rest of the sentence is the 'Rhema'. The theme represents "was wir eine Gegebenheit nennen, eine eindeutig determinierte Vorstellung" (1955: 28). Boost quotes Ammann at length in his section on 'Der Satzbeginn (Das Thema)' and credits him with having introduced the concept of theme (1911) and having ascribed to it the status and function which it has in the sentence. It is worth recalling here that Richter used the term 'Thema' as early as 1903. The 'Rhema', the rest of the sentence is "das Neumitzuteilende, der höchste Mitteilungswert" (1955: 81).

Sentence opening elements are often adverbs of spatial and temporal deixis: "Als solch gemeinsamer Besitz sind Vorstellungen anzusehen, die

The important criterion here is that "jeder Satz ein Element enthalten muß, das sowohl dem Sprecher als auch dem Hörer eindeutig gegeben ist und von dem aus die Orientierung der Ordnung im Satz erfolgen kann, eine 'Gegebenheit' "(23). A further point Boost makes is that sentences which do not contain a determined element can still be accounted for in this way:

(130) Ein Jüngling liebt ein Mädelchen
(131) An einem unfreundlichen Novembertage wanderte ein armes Schneiderlein.

In these sentences the elements Jüngling and Novembertage are 'Gegebenheiten' in so far as the speaker selects them as a basis for his communication. They appear as sentence opening elements signalizing
to the speaker that the communication is about a certain Jüngling or Novembertag. These are characteristic of sentence opening elements of a discourse.

Boost distinguishes between the grammatical structure of the sentence and its thematic structure, which he calls the 'Sinn-Ebene' and discusses the importance of this distinction for the sequence of elements: "Hier stoßen wir auf den Grund unserer sog. 'freien Wortstellung', frei gegenüber den grammatischen Kategorien in ihrer beliebigen Verwendung innerhalb ihres Rahmens, sehr gebunden jedoch, wie wir sehen werden, wenn auch bei großer Variationsmöglichkeit, auf der Sinn-Ebene" (1955: 30). This 'Überlagerung des Grammatischen durch die Sinn-Ebene' Boost regards as implicit in Drach's segmentation of the sentence into Vorfeld - Mitte - Nachfeld (see next section).

Boost shows how the thematic structure of questions and declarative sentences relate. The situation is the reverse of that in declarative sentences:

(132)  Wer (T) / hat das Buch gefunden (R)?
(133)  Das Buch (T) hat Hans (R) gefunden.

The rheme of the question becomes the theme of the answer; the rheme of the answer is the hitherto unknown person or object. Boost rejects, however, the sequence

(134)  Hans (R) hat das Buch gefunden

as an appropriate answer to (132), but this sequence is quite permissible if Hans receives primary accent. There are situations where, in German as well as English, the initial element may carry the
primary accent and constitute the rheme of the sentence without
necessarily being contrastively or otherwise emphatically stressed.
This will be discussed further later.

Boost goes on to show how the theme consistently occupies initial
position in a textual example consisting of 9 sentences:

(135) 1. An dem schonen Flusse, ... ,/ erhebt sich eine
weitgedehnte Erdwelle und verliert sich, selber wohlbeaut,
in der fruchtbaren Ebene.

2. Fern an ihrem Fuße / liegt ein Dorf, welches / manche
große Bauernhöfe enthält, und

3. über die sanfte Anhöhe / lagen vor Jahren drei prächtige
lange Äcker weithingestreckt, gleich drei riesigen Bändern
nebeneinander.

4. An einem sonnigen Septembermorgen / pflügten zwei Bauern
auf zwei dieser Äcker, und zwar auf jedem der beiden
äußersten;

5. der mittlere / schien seit langen Jahren brach und wüst
zu liegen, denn,

6. er / war mit Steinen und hohem Unkraut bedeckt und

7. eine Welt von gegliigelten Tierchen / summte ungestört
über ihm.

8. Die Bauern aber, welche zu beiden Seiten hinter ihrem
Pflug gingen, / waren lange, knochige Männer von ungefähr
vierzig Jahren und verkündeten auf den ersten Blick den
sicheren, gutbesorgten Bauersmann.

9. Sie / trugen kurze Kniehosen ...

Sentence 7. in (135) is, however, not in conformity with the otherwise
theme - rheme distribution. This is also pointed out by Firbas in his
review of Boost (1958: 51).

Boost's analysis also runs into difficulties when applied to
languages such as English, where it is quite 'normal' for the rheme to
occupy sentence initial position if it is expressed by the grammatical subject. What Boost does say about English and the romance languages is that the theme, if not expressed by the grammatical subject, is placed outside the sentence and thus formally separated from the rest, the rhematic part of the sentence, e.g.

(136) Yesterday, I bought a book
(137) Hier, j'ai acheté un livre.

In his review of Boost, Firbas indicates problems which arise from adopting positional criteria as a means of determining the theme and rheme of utterances. He points out the difference between Boost's conception of theme as opposed to that of the linguists of the Prague tradition. According to Firbas, the theme as carrier of the lowest degree of communicative dynamism, is not bound to any one position in the sentence. Boost, on the other hand, calls the element occupying initial position in the sentence theme. The rest of the sentence he calls rheme. As Firbas shows, in the sentences:

(138) Mein Nachbar hat einen Weinstock vor seinem Haus
(139) Gestern half er mir

neither vor seinem Haus nor er are rhematic. Both these elements are, according to Firbas, theme proper. Furthermore, Boost's sentence (135–7.), as made clear above, shows a rheme - theme and not a theme - rheme distribution. In this sentence, it is the initial element that introduces new information, the remaining elements being recoverable from the context. Boost's conception of theme as that which is 'known' on the one hand, and that which occupies clause initial position on the other, runs into difficulties here.
It is, however, important to point out, as Firbas also does in his review, that Boost, in identifying theme with the initial position in the sentence, is highlighting the special function which the initial element of a sentence may fulfil (cf. Beneš's term 'basis'). Boost also says that not all the elements in the sentence have the same communicative value ('Mitteilungswert') and that this is reflected in the position of elements in the sentence. The element which has the highest communicative value is positioned as close as possible to the end of the sentence. Boost also points to another factor which influences the position of elements - that of the closeness of the relationship of certain elements to the verb (these like the elements carrying the highest degrees of communicative value, i.e. the rhematic elements, strive towards the end of the sentence). There are thus two factors which need to be taken into account: (1) the principle of syntactic cohesion; and (2), the varying degrees of communicative value carried by the sentence elements (cf. Firbas).

The question of syntactic cohesion will be examined in detail in the following chapter. It is useful, however, as an introduction to the problem, to summarize briefly here Boost's approach to it. He says the following about the influence of the verb on the positioning of elements: "Es schickt in den Fällen, in denen es überhaupt möglich ist, das, was ihm zugehörig ist, an das Satzende" (1964: 40). Boost lists at this point the elements which he considers to be linked to the verb in this way. He divides sentences into two categories: 'Sätze mit Rahmen' and 'Sätze ohne Rahmen'. Elements capable of forming this bracket with the finite form of the verb are: (1) finite verb forms; (2) modal auxiliary
verbs; (3) what he calls 'Prägung'; (4) what he calls 'Direktivum' or 'Syndetikon'; and (5), the negative nicht.

(3), (4) and (5) require further comment. An element which falls into the category 'Prägung' has the following three characteristics:

1. Das das Prädikat bildende Verb unterliegt einer neuen Sinngebung,
2. diese neue Sinngebung wird – bei einfacher Zeit – durch ein Element hervorgerufen, das sich am Satzende befindet, 3. der Satz bedarf zu seiner Sinnerfüllung unbedingt dieses Elementes; er bleibt bis dahin gespannt, und zwar erreicht die Spannung vor diesem lösenden Element ihren Höhepunkt" (1964: 42). Comparing the following sentences:

(140) Das Mädchen trug ein weißes Kleid
(141) Das Mädchen trug ein schönes Gedicht ... vor

Boost shows how the element vor produces a new verb with a different meaning to the simple verb tragen. Other examples of this are:

(142) Wir nehmen die Fabrik sofort ... in Betrieb
(143) Seine Absicht stand ... fest.

In each case the element in question occupies end position in the sentence: "Dieses letzte Satzglied prägt dem Prädikat seinen besonderen Charakter auf, verleiht ihm den geeigneten Sinn und schließt gleichzeitig den Satz" (43). In cases where a finite verb form ends the sentence, these elements occupy pre-final position:

(144) Der Schüler hat ein schönes Gedicht vor getragen
(145) Wir haben die Fabrik sofort in Betrieb genommen.

'Direktivum' refers to elements traditionally termed directional adverbs. The sequence of elements in the sentence
(146) Ich lege das Buch auf den Tisch.

clearly shows the syntactic influence of directional adverbs on sentence position as against that of the communicative value carried by the respective sentence elements since the sequence

(147) Ich lege auf den Tisch ein Buch.

is not normal, although Buch carries the highest degree of communicative value, i.e. is the rheme of the sentence: "Ich lege auf den Tisch ein Buch", wie es gemäß den Mitteilungswerten heizen müßte, kann man nicht sagen, trotzdem 'ein Buch' nicht determiniert ist, während 'auf den Tisch' eine determinierte und damit spannungsmäßig geringwertigere Vorstellung darstellt, 'auf den Tisch' beansprucht in seiner Verbinding mit 'legen' die Endstellung im Satz" (44). In the case of these directional adverbs we have yet another element that is closely related to the verb and like the other elements above occupies a position at or as near the end of the sentence as possible. This distinguishes it from other adverbial elements.

Finally, boost includes the negative nicht among the elements capable of forming the bracket together with the finite verb. Taking, as he does, the distance of these elements from the finite verb as a measure of their syntactic closeness, nicht takes up fourth position in the hierarchy after (1) the infinite verb forms, (2) 'Prägung', and (3) directional adverbs. This is shown in the following sentences:

(148) Ich habe das Buch nicht gekauft
(149) Der Schüler trägt das Gedicht nicht vor
(150) Wir haben die Fabrik nicht in Betrieb genommen
(151) Ich habe das Buch nicht auf den Tisch gelegt
(152) Ich lese das Buch nicht.
In what Boost calls 'der rahmenlose Satz', the elements which carry the highest communicative value go to the end of the sentence. This is, however, problematical, since it is not clear that these sentences are so obviously 'rahmenlos' as opposed to those discussed above, in which syntactic criteria determine the sequence of elements. Boost takes the sentences:

(153) Ich schenke dem Kind den Apfel
(154) Ich schenke den Apfel dem Kind
(155) Ich schenke dem Kinde einen Apfel
(156) Ich schenke den Apfel einem Kinde.

Difficulties arise for Boost with sentences (153) and (154), where both dative and accusative objects are determined. This is because he fails, unlike Drach whom he criticizes, to include the accusative object amongst those elements which form the sentence bracket with the finite verb as in the examples above. Drach claims that the accusative object is more closely linked to the verb than the dative object. Boost's criticism of Drach centres around the sentences

(157) Wir fangen morgen Fische
(158) Wir fangen Fische erst morgen / nur mit dem Netz.

Boost gives (158) as a counter example to Drach's sentence (157). The point to note here is that erst and nur function as what Firbas calls 'Wertverleiher' (1958: 53) which indicate that the element they qualify has the highest communicative value. That is why this element appears in sentence final position in Boost's examples. Otherwise Fische closes the sentence in accordance with the syntactic criteria. This principle of syntactic cohesion is central to the present analysis and will be taken up and examined in greater detail in Chapter III.
A final point of some importance which Boost raises at the end of his book is the question of emphatic sentences, referring here to Drach whose analysis will be presented in the following section. Boost also criticizes Pfleiderer who gives as an example of emphasis the sentence (159) \( \text{Nach Berlin fahre ich.} \)

As Boost rightly claims here, the sequence of elements in this sentence corresponds to the principle of communicative value — the element with the highest communicative value is \text{ich} and this is placed at the end of the sentence in conformity with the neutral theme — rheme distribution. However, the explanation here is not quite so simple, since sentence (159) is non-neutral. It is in fact a special case and concerns the situation in which the personal pronoun can in fact be the rheme of the sentence and appear at the end. This is not the normal position in which it occurs. This would normally be a thematic element and appear early in the sentence, cf.:

(160) I'm going to Berlin
(161) Ich fahre nach Berlin.

Possible English equivalents of (159) would be:

(162) I'm going to Berlin (I'm here is heavily stressed)
(163) I'm the one who is going to Berlin (not ...)
(164) It's me who is going to Berlin (not ...)

Pfleiderer's argument is, however, quite relevant here, and Boost corroborates this when he writes: "Richtig dagegen ist seine Meinung, daß das Ausdrucksbedürfnis nach einer Abweichung von der als normal empfundenen Wortfolge drängt" (80). This is in fact the case in sentence (159). Of course, and Boost is quite correct in making this point, this deviation from the 'normal' sequence of elements usually
finds expression in the permutation of the neutral theme – rheme sequence which results in a rheme – theme sequence. Boost gives as examples two sentences from Drach and two from Pfleiderer:

(165) Bestraft muß er werden (Drach)
(166) Der Teufel soll ihn holen (Drach)
(167) Die Augen möchte ich ihm auskratzen (Pfleiderer)
(168) Nie werden wir ihm wiedersennen (Pfleiderer).

"Die Abweichung von der üblichen Wortstellung bewirkt nun tatsächlich eine besondere Heraushebung, die über die hinausgeht, die sonst zu erzielen wäre: Er muß bestraft werden. Es soll ihn der Teufel holen. Ich möchte ihm die Augen auskratzen. Wir werden ihn nie wiedersehen" (81).

The important point here is that there is a deviation from what is regarded as the norm. This is equally true of (159) and (165) – (168). The first position in (165) – (168) is only of significance here in so far as the emphatic element would not normally have appeared there in a neutral speech situation. What has happened is that the norm has been reversed. It is interesting to note also the relative unimportance of positional criteria in English, where position of elements does not have the same significance and emphasis is signaled by emphatic accent alone (162) or some lexical construction (163), (164).

Drach

Drach's approach is, at least superficially, different from Boost's; it is not so obviously part of the same tradition, though both works converge in important respects, or at least arrive at similar conclusions from different conceptual starting points.
Drach sets out to describe the structure of the main clause, the key to the character of which he sees as the verb, or rather the finite form of the verb, because of its fixed position in the sentence: "Die Personalform des Prädikates (Verbum finitum) im Aussage-Hauptsatz steht unverrückbar in Mittelstellung" (1963: 16). He states further: "Das Verbum finitum ist der standfest Angelpunkt, um den herum der Satz sich aufbaut und gliedert" (16). This part of the sentence Drach labels the 'Mitte', preceding it is the 'Vorfeld', following it the 'Nachfeld'. The implications of this segmentation immediately become clear when one compares it to the traditional division of sentences into grammatical subject and grammatical predicate: "Die Reihenfolge Subjekt = Prädikat festzulegen, wie die herkommliche Schulbetrachtung versuchte, ist möglich im modernen Französisch, aber nicht im Deutschen. Weder das Subjekt noch die Objekte und Bestimmungen haben hier eine feste regelgebundene Stellung. Jeder der oft bemachten Versuche, aus der grammatischen Funktion die Wortfolge abzuleiten, führst zu unlöslichen Widersprüchen. Nicht die grammatische Funktion des Wortkörpers entscheidet über die Stellungsbeziehungen, sondern die Denkfunktion des Wortinhaltes" (17). Here Drach is clearly talking about what Boost refers to as 'Mitteilungswert'.

This function of word order leads Drach to set up two plans for the organization of the main clause, one which applies to an emotive, one which applies to a neutral speech situation. He writes: "Es ist eine alte Erkenntnis der Sprachkunde, daß bei der Satzentstehung das gefühls- und willensmäßig Hochgetriebene nach vorne drängt. Es springt am stärksten und vordringlichsten im Bewußtsein auf, überrennt alle
logischen und zweckhaften Erwägungen, setzt sich an die Spitze. Man kann - mutmaßlich in allen Sprachen - das Vorfeld geradezu als die Ausdruckstelle bezeichnen. Im Nachfeld mag dann folgen was beiläufig, und von weniger starken Gewalten emporgetrieben, den Gedanken vollendet. Ebenso bekannt ist eine Gegenfaktur: das geordnete zielgerichtete Denken schreitet vom Gewißten zum Gesuchten, vom Bekannten zum Unbekannten, vom Ausgang zum Ergebnis: solcher Denkablauf kommt notwendig dazu, das Ziel in das Nachfeld zu verlegen. Genau ebenso verfährt, wer mit Absicht klären, belehren, überzeugen will. Er empfindet, daß die letztgehörten Worte beim Hörer am festesten einschlagen, am längsten haften: mit zweckbewußter Absicht setzt er den stärksten Trumpf ans Ende" (17). In the latter case, Drach calls the 'Nachfeld' the 'Eindruckstelle'.

The 'Vorfeld' contains the elements which are already known or which establish the link to the preceding context, or which give the setting for the core of the communication. These two representations of emphatic and neutral sequences respectively are shown in fig. 1 (Drach, 1963: 18).

As examples of pattern I, Drach gives the following sentences (elements most heavily stressed are underlined):

(169) (Ich hatte lange verzweifelt gewartet); **endlich** kam die ersehnte Nachricht

(170) **Bestraft** muß er werden!

(171) Der **Teufel** soll ihn holen!

**fig. 1**

<table>
<thead>
<tr>
<th>I. VORFELD</th>
<th>MITTE</th>
<th>NACHFELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ausdruckstelle (gefühls- oder willenswertiges Sinnwort)</td>
<td>Geschehen (Personalf orm des Verbs)</td>
<td>Ergänzungen und Erläuterungen</td>
</tr>
</tbody>
</table>
Represented in terms of theme and rheme, the sequences would be:

I. RHEME / TRANSITION / THEME

II. THEME / TRANSITION / RHEME

and as examples of II:

(172) Nach langwierigen Untersuchungen erging das Urteil

(173) All dies lehrt uns Christen die Bibel.

Apart from the finite verb, whose position is fixed, all the other elements can occur in the 'Vorfeld' or in the 'Nachfeld' in accordance with situations I and II above: "Ein gefühls- oder willensgeladenes Sinnwort erscheint im Vorfeld, in Ausdruckstelle; ein gedankliches oder lehrhaftes im Nachfeld, in Eindruckstelle" (19).

Drach also implies varying degrees of communicative value in so far as he sub-divides the 'Nachfeld'. In the 'Nachfeld', the actual communicative core ('Sinnwort') comes at the end, whereas elements with lesser degrees of communicative value ('weniger denkwichtige Glieder') occupy the area between the finite verb and the communicative core.

A further contribution of Drach's is his discussion of the German sentence bracket construction ('Unklammerung'). He explains this
phenomenon in the following way: "So oft ein Gefüge-Inhalt durch fortschreitendes Denken mit näher bestimmt wird, öffnet sich selbst das engste Gefüge und umklammert den Neubestand $\left(\frac{1}{2a} + \sqrt{b} + \frac{1}{2a}\right)$. Die Gefüge Artikel + Substantiv, Hilfsverb + Nominalform, transitives Verb + Objekt, Verb + Adverb werden geöffnet und als Klammern um ihre Bestimmung gelegt. Die Wortgruppe das Haus wird weiter gedacht zu das schöne Haus; mit Mühe zu mit großer Mühe; er hat geschlafen zu er hat gut geschlafen; wir fangen Fische zu wir fangen morgen Fische; ich habe mich sehr gefreut zu ich habe mich sehr über das Buch gefreut" (38).

Drach gives the following further examples of what elements can form the sentence bracket in declarative sentences: (1) the compound verb forms; (2) verb + noun and verb + infinitive of another verb; (3) verb + adverb. Under (2) he includes the following examples: Klage erheben, ernst nehmen, in Betrieb nehmen, leid tun, kennen lernen. This is an expansion of what Boost calls 'Prägung'. Not only does the verb acquire a new meaning, as Boost suggests, but the whole structure acquires a new meaning, the individual parts sacrificing their original autonomy: "Bei den Fügungen mit Substantiv oder Adjektiv zeigt die Rechtschreibung deutlich, daß in dieser 'Dauerehe' auch das Nomen etwas von seiner ursprünglichen Selbstherrlichkeit aufgeben muß und sich durch seine Bindung an das Verb allmählich zum Ad-Verb umwandelt. Aus nach Hause, bei Seite, zu Wege, zu Grunde, wird nachhause, beiseite, zuwege, zugrunde" (53). In the case of the above structures the closeness of the relation of the verb to the rest of the syntagm is quite evident.

Returning to Drach's segmentation of the 'Nachfeld', the consequence
of the above is clear. These elements which are closely linked to the verb go to the end of the sentence, forming the so-called sentence bracket, into which the remaining elements are placed according to their communicative value. Consequently, the position immediately following the finite verb is communicatively the weakest, the least 'dynamic'. This Drach refers to as the 'Schwächstelle'. This is frequently occupied by adverbials of time and place as opposed to other types of adverbial constituents such as directional adverbs (cf. Boost's Direktivum). Drach points out that adverbial constituents vary considerably in the closeness of their relation to the verb. I shall deal with adverbial categories in detail in a later chapter. Drach writes: "Je mehr eine adverbiale Bestimmung zum Geschehen in wesenhafter Sinnbeziehung steht, desto mehr neigt sie dazu, als Zielpol das Nachfeld unklammern zu helfen. Je beiläufiger sie dem Satzganzen zugeordnet ist, desto mehr neigt sie dazu, im Innern des Nachfeldes oder im Vorfeld zu erscheinen" (64). This relationship between the sentence opening and the immediate post-finite position in the sentence will also be investigated.

The phenomenon that elements which are hierarchically close are from the point of view of sentence position distant is summed up by Drach in the phrase "je verb=näher, desto klammerfähig!" (66). This does not only apply to the above mentioned fixed phrases ('feste Verbindungen') and adverbial elements such as adverbs of direction, but also to objects. "Auch bei den Objekten ist eine Abstufung der Verbbbezogenheit zu erkennen. Am engsten ist sie zwischen transitivem Verb und Akkusativobjekt. ..."

Engel

A more recent work on German word order by U. Engel (1970) is very much in the Drach tradition. Engel's plan of the structure of German sentences is an expanded version of Drach's as shown in fig. 1 above. This is represented as fig. 2 below. This is made up of various positional areas or zones which he calls 'Stellungsfelder'. The slot before the finite verb is called, analogous to Drach's analysis, the 'Vorfeld'. It precedes the verbal bracket ('Verbalrahmen') and is characterized by the feature that it can only be occupied by one constituent,

(174) In dieser Lage / hatte / ich keine andere Möglichkeit mehr.

To the right of the verbal bracket is the 'Nachfeld'. The term is taken from Drach, but not the concept. Only certain constituents can appear in this slot, though the number is not restricted to one as is
the case with the pre-finite verb slot ('Vorfeld'), cf.:

(175) Ich / habe / drei Päckchen / gemacht / für euch / diesmal.

Inside the bracket is the 'middle zone' ('Mittelfeld'). This can include, at least in theory, an infinite number of constituents.

Engel differentiates between what he calls 'inner bracket' ('innerem Rahmen') and verbal bracket ('verbalem Rahmen').

The constituents Engel discusses which, from the point of view of positional criteria, are relevant to the 'inner bracket' are the 'Prädikative'. He lists the following together with example sentences (38):

Praepositionalia; (prepositional objects)
statische Adverbialia; (adverbial complement of place)
Richtungsadverbialia; (adverbial complement of direction)
Numerabilia; (predicative nominal)
Comparabilia; (predicative adjective)

(More traditional terms are given in brackets)

**fig. 2**

<table>
<thead>
<tr>
<th>Vorfeld</th>
<th>Verbum Finitum</th>
<th>Mittelfeld</th>
<th>Innerer Rahmen</th>
<th>Zwischenfeld</th>
<th>Verbal-Rahmen</th>
<th>Nachfeld</th>
</tr>
</thead>
</table>

(176) Der glaubt nicht mehr / an große Worte /
(177) Wanda lebt / in West Berlin /
(178) Gina geht / ins Ausland /
(179) Liebermann ist Stabsfeldwebel /
(180) Liebermann ist / krank /
The characteristic feature of these 'Prädikative' is their relative tendency to occupy certain positions in the sentence - they are relatively less susceptible to permutation than are the other sentence constituents, the '(freie) Situativa' and 'Casualia' (free sentence adverbials and case objects). The 'Casualia' can appear in the 'Vorfeld' but not in the 'Nachfeld'; the 'Situativa', on the other hand, can appear in both these positions.

Engel makes an important point about the verbal bracket. He argues that although it is not always realized:

(181) Bei uns gibt es heute Spaghetti,
as opposed to:
(182) Bei uns hat es heute Spaghetti gegeben,
it is nevertheless potentially there. To illustrate this he gives the following sentences:
(183) Bei uns gibt es Spaghetti heute
(184) Bei uns hat es Spaghetti gegeben heute
(185) Bei uns hat es Spaghetti heute gegeben.
Sentence (183) can be interpreted in two ways depending on whether heute is considered to be outside the verbal bracket, that is in the 'Nachfeld', or immediately inside the verbal bracket, in which case it would be contrastively stressed, as in:
(186) Bei uns gibt es Spaghetti heute (und nicht erst morgen)
in which case the perfect tense form would be (185).

This permutability of elements leads Engel to discuss what he calls a 'normal' order of elements. He further illustrates this by referring
to sentences with an accusative and a dative object. He writes:
"Der Satz Ich habe dem Mädchen den Stuhl angeboten enthält im Mittelfeld zwei Casualia, die gemäß der Normalfolge angeordnet sind (...) . Das Akkusativobjekt ist, lediglich durch die Stellung, etwas stärker hervorgehoben als das Dativobjekt. Eine Umstellung zu Ich habe den Stuhl dem Mädchen angeboten bewirkt, daß nun das Dativobjekt hervorgehoben wird, und zwar eher etwas stärker als zuvor das Akkusativobjekt - offenbar, weil hier gegen eine wirklich 'normale' Abfolge verstoßen und damit ein kontrastiver Effekt erzielt wird" (1970: 61). Such permutations of elements are relevant to other constituents. This need not, of course, amount to one of the elements being emphatically or contrastively stressed. The resulting sequence may be quite neutral as would have been the case above had dem Mädchen been changed to einem Mädchen: Ich habe den Stuhl einem Mädchen angeboten. This is a confirmation of the susceptibility of German to the principle of FSP. Engel points out that there is a need for a distinction between permutability according to the varying degrees of communicative value carried by sentence elements and a departure from the 'normal' sequence of elements when he writes: "Für Casualia und (rechte) Rahmenelemente gilt also Übereinstimmend die Regel, daß das jeweils nachfolgende (rechts stehende) Element stärker hervorgehoben ist als das vorhergehende (links stehende). Oder generativ formuliert: Soll im Mittelfeld ein Casualia oder Prädikativ gegenüber einem anderen Casualia oder Prädikativ hervorgehoben werden, so wird es diesem nachgestellt. Überdies ist, wie schon angedeutet wurde, festzustellen, daß dieser Hervorhebungseffekt etwas stärker ist, wenn von der Normalfolge abgewichen wird" (1970: 62). Engel differentiates between
a 'normal' and a contrastive, emphatic sequence of elements (neutral, unmarked as opposed to non-neutral, marked). What he does not do is distinguish between syntactic and thematic criteria both of which may result in a 'neutral' sequence of elements. His term 'normal' therefore requires further qualification.

Engel's approach raises certain other questions. His analysis is essentially based on observational positional criteria which requires far greater functional differentiation. The following provides some examples of this. Discussing the 'Verbalrahmen' and 'innerer Rahmen' from a positional point of view, he says that inner-bracket elements normally precede verbal-bracket elements, giving as an example:

(187) Ich habe lange auf dich gewartet.

He goes on to say that only in a few cases can a further element appear between these two, as in:

(188) Eugen ist sehr traurig über euch gewesen.

In such a case the element in question (in this case über euch) is, according to Engel directly dependent on the preceding inner-bracket element (traurig). It occupies the usually empty slot called the 'Zwischenfeld'. These elements are by no means purely 'Zwischenfeld'-elements and can always appear before the inner-bracket element. Engel omits to mention that in some cases elements 'normally' occupy this position between the two bracket elements. This is the case with certain predicative adjectives as in the following examples:

(189) Er ist reich an Erfahrung
(190) Er ist frei von Sorgen
(191) Er ist stolz auf seine Leistung.
I shall be discussing the position of predicative adjectives in Part II and give these examples here merely to shed more light on the nature of the problem.

Secondly, other elements than the ones referred to above can occupy the 'Zwischenfeld'. In some of these cases the question of dependency on the preceding element may not apply, cf.:

(192) Der österreichische Bundeskanzler hat sich gegen das Verlangen der sozialistischen Partei s c h a r f ausgesprochen.

Furthermore, the criteria for the occupation of the 'Zwischenfeld' may be more systemic then Engel suggests. Comparing (192) with the following sentence:

(193) Der österreichische Bundeskanzler hat sich scharf gegen das -Verlangen der sozialistischen Partei ausgesprochen (,...)

the difference, I would suggest, is one of thematic organization; in (192), the rheme is constituted by the elements scharf ausgesprochen; in (193), by gegen das Verlangen der sozialistischen Partei. This explanation is also confirmed in the following example where the element darauf refers cataphorically to the following daß - clause, this constituting the rheme of the sentence:

(194) Die oben beleuchteten Probleme machen uns nachdrücklich darauf aufmerksam, daß ...

Similar word order permutations are also evident in English, cf.:

(195) Yet in London, in Bonn and above all in Paris, he was not deflected from his purpose of very sincerely pursuing friendly relations

In (195) and (196) the rheme is friendly relations / freundschaftliche Beziehungen. In (197) and (198) this element is thematic and precedes the adverb, which, in Engel's terms, occupies the 'Zwischenfeld'.

(197) He always pursued friendly relations very sincerely / with sincerity

(198) Er hat sich um freundschaftliche Beziehungen immer sehr aufrichtig bemüht.

A further point to note in these sentences is that the prepositional object, when thematic, can appear at the beginning of the sentence in German:

(199) Gegen das Verlangen der sozialistischen Partei hat er sich scharf ausgesprochen

(200) Um freundschaftliche Beziehungen hat er sich immer sehr aufrichtig bemüht

(201) Darauf machen uns die oben beleuchteten Probleme nachdrücklich aufmerksam.

Another situation where an element may occupy the 'Zwischenfeld' is in the case of structures of the type Anlaß geben zu. An example taken from Engel's own text is:

(202) Dies gibt Anlaß zu einer kurzen Erörterung des Begriffes "Normalfolge".

A similar example would be:

(203) Hier lege ich zunächst nur den größten Wert auf die Feststellung, daß ...
In both cases the element following the noun phrase is rhematic.

It seems in the light of the above that thematic criteria are relevant to the explanation of the occupation of the 'Zwischenfeld'. I leave the question of syntactic dependency (both in the case of Anlaß geben zu and traurig sein über) open for the time being.

The inadequacy of Engel's approach lies, to a large extent, in his disregard for the principle of thematic organization which is needed to explain the dynamic aspects of word order. Engel tries to do this with a basically static model, which derives its dynamic capacity from the existence of the slots 'Vorfeld', 'Mittelfeld', 'Nachfeld' and the interaction between these (under certain conditions some elements occupy the pre-finite verb position, immediate finite verb position or they appear later in the 'Mittelfeld'). One weakness of this analysis lies in classifying some elements as 'middle' - elements ('Mittelfeldelemente') e.g. the Casualia together with the Situativa! Engel does state that Casualia share similar positional features with some of the Prädikative, e.g. Numerabilia: "Den Casualia stellungsverwandt sind die Numerabilia ("Gleichsetzungsnominative"). Soweit sie in pronominaler Form auftreten (...), können sie bei den nurpronominalen bzw. definiten Casualia mitbehandelt werden. Das substantivische (und fast immer indefinite) Numeranile zeigt allerdings abweichende Stellungseigenschaften" (1970: 46). Engel gives the examples:

(204) Onkel Franz ist es seit letzten September
(205) Ist er das denn doch noch geworden?

The following sentences are also quoted from Engel (the oblique strokes and elements in brackets have been added):
Ihr habt eben deswegen tatsächlich / keine Zeit /
Für diese Sache bedarf es (deswegen tatsächlich) / deiner Hilfe /
Er hätte immerhin eigentlich sogar / Minister / werden sollen.

In (206), (207) and (208) both the objects and the predicative noun are capable of forming the pre-verbal bracket (cf. also the above discussion of Boost and Drach regarding the bracket formation capacity of the accusative object). It is also not clear why Engel separates the prepositional objects from the other objects. Furthermore, to class the objects ('Casualia') together with the free sentence adverbials ('Situativa') is unfortunate. The objects and prepositional object have more positional features in common than the objects and the sentence adverbials do. These distinctions will be dealt with more fully in Chapter III.
PART I  (CHAPTERS I AND II)

SUMMARY

The task of this section is to give a brief summary of the analysis outlined in Chapters I and II and also to make some supplementary remarks on additional but related material.

The two sections of Chapter I were concerned with psychological and logical approaches to sentence organization on the part of some late 19th and early 20th century linguists. The discussion centred around the discussion of the notions psychological subject and predicate and logical subject and predicate. It was seen to be useful to separate psychological and logical categories as being relevant to two distinct levels of linguistic analysis - a distinction not really made explicit by these early approaches. The analysis was made even more confused and difficult since some linguists did not distinguish between logical and psychological categories (cf. Weil, Paul), whilst others used the term logical subject for the notion referred to by other linguists as psychological subject (cf. Wegener, Steinthal).

The main point of confusion, however, concerned Wundt's analysis of psychological subject and psychological predicate and the positions these occupy in the sequence of elements. His position with regard to the psychological subject is far from clear. He says that the element standing in the focus of attention frequently claims first position in the sequence of elements. This may be so, especially in the case of
German, if one understands by this a deictic element (e.g. an adverb of spatio-temporal deixis) or some other kind of thematic element which functions as 'basis' - the point of departure from which the communication may develop. This is what von der Gabelentsz and Paul understand by the notion of psychological subject, what Weil understands by 'notion initiale', 'point de départ', what Richter understands by 'Thema', 'Gegenstand', and what Wegener and Steinthal understand by logical subject. Wundt, on the other hand, suggests that this element is the 'dominating concept' ('dominierende Vorstellung'). Kirkwood (1973) has discussed Wundt's confusion of what he calls 'focus of interest or attention' with 'information focus'. He writes: "Wundt has failed to distinguish between the element or elements in the focus of attention or interest, and what is brought into focus by being related to the former. It is the latter that carries information focus and constitutes what Wundt refers to as 'der Hauptinhalt der Aussage', or as Halliday puts it, 'the body of the message'. In terms of communicative dynamism this is the element that contributes most to the further development of the communication. Consequently, Wundt is unable to distinguish between neutral, unmarked sequences and non-neutral, marked sequences" (1973: 414).

I shall pursue Kirkwood's distinction between 'focus of attention' and 'information focus' a little further, since these notions are basic to the distinction between theme and rheme and also to the distinction between thematic elements, where one is selected and 'brought into focus' to function as 'thematic basis'. Kirkwood illustrates the distinction between focus of attention and information focus by referring to the motive for the use of the passive in English.
When active sentences with transitive verbs are passivized, the goal of the action is made thematic basis and a theme - rheme perspective is achieved. The passive is also a means of foregrounding a thematic element expressing certain semantic categories such as beneficiary, experiencer, patient. Kirkwood gives the following examples:

(209) I was given a book
(210) John was injured in the leg.

The element in initial position is in the focus of attention, information focus lies on the agent if expressed (e.g. by my mother), otherwise it lies on the process. Kirkwood also points to have-constructions as a means of foregrounding a locative element:

(211) He had his watch stolen
(212) A watch was stolen from him.

Such a sequence of elements as (212) would not normally be found in the corresponding German sentence, where a thematic element would be selected for the sentence opening, thus allowing the rheme to follow the verb in a consistent theme - rheme sequence:

(213) A book was found on the floor
(214) Auf dem Boden wurde ein Buch gefunden.

If the object of the verb is thematic, it is quite possible to foreground it in German simply by putting it in first position:

(215) Der Vorschlag wurde von dem Ausschuß zurückgewiesen
(216) Den Vorschlag hat der Ausschuß zurückgewiesen.

The motivation in English for the use of the passive in such cases is to avoid the marked order of elements which initial position of the object leads to. Thus, Kirkwood concludes, the motivation for the use of the passive in German will be different from the motivation for its
use in English. It may simply be a means of leaving the agent unspecified as in Ihm wird geholfen, Mir wurde ein Buch geschenkt. Kirkwood also points out a means of avoiding the use of the passive in German with a function verb and nomen actionis: Der Brief kommt zur Verlesung, Das Buch kommt, gelangt zur Ausgabe (zum Verkauf).

Implied in the three notions of subject - grammatical, logical and psychological - are three distinct levels of linguistic analysis, which are later made more explicit in Section 1 of Chapter II where the approaches of the linguists of the Prague tradition are briefly reviewed. I do not propose to elaborate further on these levels of analysis at this stage as this will form an important part of the discussion in Part II. What I wish to point out here is that other linguists than those mentioned in Chapter II have presented analyses of thematic organization, some of which are based on different conceptions of the theme to those commonly put forward by the linguists of the Prague tradition.

Terms which are frequently used for theme and rheme are 'topic' and 'comment'. These are discussed in Lyons (1971). He ascribes the terms topic and comment to Hockett for notions referred to by Sapir. Lyons writes: "Sapir was merely repeating the traditional view when he said: 'There must be something to talk about and something must be said about this subject of discourse... The subject of discourse is a noun... No language wholly fails to distinguish noun and verb, though in particular cases the nature of the distinction may be an elusive one.' In this passage, Sapir implicitly defines the subject as the person or
thing about which something is said, and the predicate as the statement made about that person or thing. But this is only one of the ways in which subject and predicate have been defined by grammarians. Since we shall also be considering some of these other definitions, we will adopt Hockett's now widely accepted terminology for the notions referred to by Sapir: we will call the person or thing about which something is said the topic, and the statement made about this person or thing the comment" (1971: 334f.). Lyons also quotes Hockett at this point: "The most general characterization of predicative constructions is suggested by the terms 'topic' and 'comment' ...: The speaker announces a topic and then says something about it. Thus John ran away; That new book by Thomas Guernsey I haven't read yet. The oblique stroke in the sentences used as examples indicates the major constituent-structure break. In English and the familiar languages of Europe, topics are usually also subjects and comments are predicates: so in John ran away. But this identification fails sometimes in colloquial English, regularly in certain special situations in formal English, and more generally in some non-European languages." (Hockett, quoted from Lyons, 1971: 335).

Lyons makes two points with regard to the passage quoted from Hockett. Firstly, the syntactic notions subject and predicate are distinguished from topic and comment, though they frequently, according to Hockett, coincide with topic and comment. Secondly, Hockett appears to imply that the topic precedes the comment. Regarding the first point, it is recalled that Mathesius commented on the tendency of the subject in Modern English to express the theme. When this is not the case in
English the second point does not apply, though it would normally do so in German, cf.:

(217) Agreement was reached in Northern Ireland last week
(218) In Nordirland wurde vorige Woche Einigkeit erzielt
(219) Some new principles of responsibility to the environment were established at the Stockholm conference last week
(220) Auf der Stockholmer KonferenZ wurden vorige Woche einige neue Grundsätze hinsichtlich unserer Verantwortlichkeit gegenüber der Umwelt aufgestellt.

Lyons also makes the point that the topic comment distinction is frequently glossed, though not by Hockett, in terms of what is given and what is new, and points out that the statement John ran away can be interpreted in different ways applying the given-new criterion:

(221) John (C) ran away (T)
(222) John (T) ran away (C)
(223) John ran away (C).

The explicit or implicit questions underlying (221), (222) and (223) would be:

(221a) Who ran away?
(222a) What did John do?
(223a) What happened?

In the case of (213) only the past tense is contextually predictable (i.e. given) and all the rest of the sentence is new. Lyons also argues that typically the utterance John ran away would not be used in reply to an explicit question in which either John or ran away was given.

The answers to (221a) and (222a) would rather be

(221b) John (did)
(222b) He ran away.
Lyons concludes that: "In English, and possibly in all languages, the
given-new criterion finds its principal application, not in the
determination of the syntactic structure of sentences, but in the
establishment of the conditions of deletability and pronominal
substitution in the 'situationally-bound', elliptical utterances of
connected discourse" (1971: 336).

Here Lyons is making what Danes (1970: 2) regards as a necessary
distinction between two basic aspects of FSP, i.e. the contextual and
the thematic ones. He refers to Halliday at this point: "Most distinctly
and consequently the said distinction has been pursued by Halliday: in
the broad area of 'theme' he distinguishes two simultaneous structures
of text: (1) "information focus" (given-new), and (2) "thematization"
(T - R). The former determines the organization of text into discourse
units, the latter frames each clause into the form of a message about
one of its constituents". Halliday summarizes this distinction as
follows "... while 'given' means 'what you were talking about' (or
'what I was talking about before'), 'theme' means 'what I am talking
about' (or 'what I am talking about now')" (Halliday, 1967: 212).

Halliday also calls the theme the 'point of departure', a term also
used by Mathesius but in connection with 'known information'. Theme -
rheme and given - new need not coincide, but may do so as in:
(224) These houses were built by my grandfather
where the initial element is both given and theme. This is the case in
the 'unmarked' form. Halliday writes: "The functions 'given' and 'new'
'are, however, not the same as 'theme' and 'rheme'. The two are
independently variable (...). But there is a relationship between them
such that in the unmarked case the focus of information will fall on something other than the theme; it will fall at least within the rhyme, though not necessarily extending over the whole of it" (Halliday, 1967: 205). In the sentence

(223) It was this house my grandfather built

the theme is it was this house. This is also the focus of the message, that which is represented by the speaker as being new, textually non-recoverable information. (The function 'given' is used for information which is recoverable from the preceding context.) A detailed discussion of the complexity of the notions 'given' and 'new' is to be found in Daneš (1970: 4ff.).

The segmentation of (224) and (225) above in terms of the notions theme and rhyme and given and new throws light on an important, indeed basic, difference between Halliday's conception of the theme and that of the linguists of the Prague tradition. For Halliday, the theme is 'what comes first in the clause' (1967: 212). It is 'what is being talked about, the point of departure for the clause as a message' (212), and in the 'marked' case may convey new information. If the theme is associated with the function given this is the unmarked case. The theme in Firbas' definition is, as pointed out above, not tied to a particular position in the sentence. It is the element carrying the lowest degree of communicative dynamism, that element which contributes least to the development of the communication. This is usually a contextually dependent element. However, contextual dependence though a usual is not a necessary criterion for the determination of the theme. In a context-free situation the theme may convey new information, although
it will be the element carrying the lowest degree of communicative
dynamism in the sentence. A sentence given by Firbas to illustrate
this is

(226) A girl broke a vase

where neither noun phrase is contextually dependent. In such a case
the semantic structure of the sentence determines the thematic function
of the sentence elements.

The difference in Halliday's and Firbas' approach is best
illustrated by the following sentences showing the thematic structure
which each of them would assign to it:

(227) The declaration of the Stockholm conference established

some important new principles ...

(228) Some important new principles were established at the

Stockholm conference.

I - Halliday's analysis

<table>
<thead>
<tr>
<th>theme</th>
<th>rheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) the declaration...</td>
<td>established some important new principles</td>
</tr>
<tr>
<td>given</td>
<td>new</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>(ii) some important new principles were established at the St'holm Conf.</td>
<td></td>
</tr>
<tr>
<td>new</td>
<td>given</td>
</tr>
</tbody>
</table>

(i) is an example of the unmarked case (the association of theme
with 'given')

(ii) is an example of the marked case (the association of theme
with 'new').
II - Firbas' analysis

<table>
<thead>
<tr>
<th>theme</th>
<th>transition</th>
<th>rheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>the declaration... established some important new principles</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>rheme</th>
<th>transition</th>
<th>theme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(ii) some important new principles were established at the Stockholm Conf.

In (i) and (ii) theme and rheme are determined by use of articles and contextual dependence (or semantic structure in a context-free situation).

Positional criteria are not relevant to Firbas' approach, though in German the sequence of elements would in a neutral speech situation be in a consistent theme - rheme perspective. Possible German equivalents of (227) and (228) above, if analyzed in Halliday's terms, show the difficulty of applying his criteria for determining theme and rheme when explaining the sequence of elements. In the following sentences:

(229) Die Deklaration stellte neue Grundsätze auf
(230) Auf der Konferenz wurden neue Grundsätze aufgestellt.

Halliday would assign the function of theme to both Deklaration and Konferenz (as opposed to declaration and new principles in (227) and (228) respectively). He would also assign both sentence opening constituents the function given; both would be examples of the unmarked case. In the light of this one might argue that in German given precedes new, which, although this is frequently the case, would only apply when an element in a given sentence could be recovered from the context and assigned the function given. As Firbas points out this is not necessarily the case. In a context-free situation what he calls theme can express new information. In German this element would come first.
in the sequence of elements in accordance with the semantic criteria, e.g.

(231) Ein Mädchen fährt nach einem fremden Land.

The conception of theme proposed by Halliday is not dissimilar from that proposed by Boost (see above) and Travniček (cf. Firbas, 1966: 268f.)

Another linguist who has criticized the given-new criterion is Dahl (1969). He suggests that the analysis of the sentence into topic - comment, theme - rheme is often restricted to mere labelling of elements in accordance with the criteria given and new. Dahl is of the opinion that much would be gained from "a better understanding of the difference between the physical manifestation of the sentence and its underlying structure." (1969: 7).

Dahl begins his discussion of FSP or 'ASB theory' ('Actual Sentence Bipartition') as he calls it, by referring to Adamec's segmentation into 'foundation' and 'nucleus'. He gives the following definitions in English translation. "Foundation is the part of the sentence that is given, known or wholly evident and that functions as a point of departure for the conveying of the actual information." "Nucleus is that part of the sentence in whose relation to the foundation the actual information is to be found." (Adamec, quoted by Dahl, 1969: 8). These definitions recall the previously discussed distinction between point of departure, focus of attention and information focus. Nevertheless, Dahl regards these as insufficient. What he is criticizing is the statement 'is given, known or wholly evident'. He takes the following
sentences to illustrate his point:

(232) A tiger is a dangerous animal
(233) Somebody came in.

It is true that it is difficult to assign the notion 'given' to elements in these sentences. (232) can nevertheless be accounted for in FSP theory. In Firbas' terms, (232) is accountable for since *tiger* is preceded by the generic indefinite article which renders that element thematic: "The non-generic, but not the generic, indefinite article always marks its substantive as contextually independent, i.e. as conveying new, unknown information." (Firbas, 1966: 245). In a context-free situation the semantic structure of the sentence is also relevant to its thematic structure (i.e. that of class inclusion as in *A rose is a flower*).

Consider also (233). In sentences of this type, i.e. where there is a verb expressing 'emergence or appearance on the scene', Firbas would argue that the person or thing emerging would carry a higher degree of communicative dynamism than the verb. Kirkwood (1973: 436) gives the following examples:

(234) The sun was shining
(235) The rain came on
(236) Snow was falling

and writes: "In such cases, the predicative element carries a lower degree of CD than the noun: it expresses a characteristic feature of the referent expressed by the noun, is collocationally predictable, and serves to introduce the referent into the focus of attention (cf. Es schien die Sonne, Es begann der Krieg). Such verbs may express
in addition to their specific semantic content the notions of existence or emergence, and the existing or emerging person or thing carries a higher degree of CD than the notion of existence or emergence." (436) Compare in this respect possible German equivalents of (233):

(237) Jemand kam herein
(238) Es kam jemand herein.

Dahl introduces the relevant notion of presupposition. He takes the sentences

(239) Whom did you see? I saw my brother

and states: "In the second sentence, the topic is said to be I saw. Here we are evidently dealing with another type of 'givenness', the 'givenness' of a fact, namely 'I saw somebody'. We see that we are here coming close to the concept of presupposition, which has been much discussed recently in generative grammar. We might say that the topic in sentences of this type (...) corresponds to that which is presupposed by the speaker. Then, however, we have to say that the topic is not I saw but I saw X. Here we see a weakness of the traditional ASB theory: by just labelling the words of the sentence as topic and comment one will not be able to find out the essential relations of the underlying structure" (Dahl, 1969: 9).

The discussion of some German approaches in Section 2 of Chapter II brought out certain aspects of word order studies which gain greater significance in a specific German context. Apart from thematic criteria, Drach and Boost raised the problem of syntactic closeness to the verb which imposes on German sentences their
characteristic bracket construction through the separation in sequence of hierarchically close constituents. This problem of syntactic cohesion will be further investigated in the following chapter.

Having included syntactic criteria, it is now possible to distinguish four criteria which are relevant to the present investigation: grammatical, syntactic, semantic ('logical') and thematic ('psychological'). I propose to deal with each of these criteria separately and then to investigate under what conditions they are in agreement and under what conditions they work counter to one another. In the latter case it will be necessary to ascertain which principle determines the sequence of elements i.e. which principle is dominant over the rest. The characteristic SVO sequence in Modern English is a clear example of a grammatically dominant word order. Apart from more obvious connections between grammatical and syntactic criteria, on the one hand, and semantic and thematic, on the other, I hope to throw some light on the interplay of these various means in the light of a large corpus of material from neutral German prose.
PART TWO

MAIN PART
CHAPTER III

THE GRAMMATICAL PRINCIPLE (SVO) AND SYNTACTIC COHESION

1. THE GRAMMATICAL PRINCIPLE

An analysis of the order of elements in German which takes into account various levels of analysis is found in Flämig (1964). Flämig establishes three criteria:

(1) grammatical function, i.e. the positioning of elements according to their grammatical function (cf. SVO in Modern English);

(2) syntactic cohesion ('syntaktische Bindung ans Verb', 'Verbnähe'), which concerns the 'hierarchical order' of elements in the constituent structure of the sentence and the reflection of this in the linear sequence of elements;

(3) communicative function of elements, according to which elements are assigned to positions in the utterance on the basis of their information content ('Mitteilungswert', cf. Firbas' degree of communicative dynamism).

The relevance of the above principles is already clear from the account given in Part I. I propose to investigate each in greater detail in this and subsequent chapters and to add others to the list. The semantic structure of the sentence and the need to look beyond the sentence boundary at the text as a whole already suggest themselves in what has gone before. The relevance of semantic criteria will emerge from a combination and extension of (1) and (2) above; textual criteria are very much a part of (3).
In German, word order has less of a grammatical function than in English since the grammatical function of elements is formally more clearly marked. Flämig writes: "Die kasusunterscheidende Funktion der Gliedstellung wird im Deutschen nur dann relevant, wenn eine Kasusunterscheidung mit morphologischen Mitteln oder nach dem Satzsinn nicht möglich ist" (1964: 335). In the following example sentences, where neither subject nor object are formally marked, the first noun phrase is interpreted as subject, the second as object:

(1) a. Die Tochter liebt die Mutter  
   b. Die Mutter liebt die Tochter
(2) a. Das Kind ärgert die Katze  
   b. Die Katze ärgert das Kind
(3) a. Moskau hat Peking zu einem neuen Kurs ermuntert  
   b. Peking hat Moskau zu einem neuen Kurs ermuntert  
   c. Zu einem neuen Kurs hat Peking Moskau ermuntert  
   d. Zu einem neuen Kurs hat Moskau Peking ermuntert.

When the case of the noun phrase is clearly marked, however, the subject may follow the object in sequence in accordance with its communicative value. Compare

(4) The girl asked the boy
(5) Das Mädchen fragte den Jungen
(6) The boy was asked by the girl, It was the girl who asked the boy
(7) Den Jungen fragte das Mädchen.

Non-initial position of the grammatical subject is also possible on the basis of grammatical congruence between subject and finite verb:

(8) Die Kinder liebt die Mutter
(9) The children are loved by the mother
Die Mutter lieben die Kinder
The mother is loved by the children

The non-initial position of the grammatical subject as in (5), (7), (8) and (10) is motivated by thematic criteria. In each case the subject, being the element with the highest communicative value, functions as rheme and is assigned a position at the end of the clause thus achieving a consistent theme - rheme perspective. A similar distribution is achieved in English by the use of the passive construction.

The semantic congruence between elements also renders identification of subject function independent of the sequence of elements:

Kaiser Franz Josef steht der Lorbeer bis zum Hals. Sein marmornes Standbild auf der Treppe der Hofburg umrankt Immergrün in blauen Plastikeimern

Diese Geschichten lesen alle Mädchen gerne
Sozial einheitlichere Gruppen bilden zur Zeit die Studenten
Die Waffen wollen jetzt auch die größten Pessimisten strecken.

Where it is not clear on the sentence level which elements function as subject reference may be made to the context. In

Diese Entscheidung der viel erörterten Frage traf jetzt das Bundesverwaltungsgericht

the direct object is thematic and opens the sentence. Diese Entscheidung refers back to the preceding sentence (anaphoric reference). It is clear from the context what the sentence is about, i.e. the taking of
a decision. Without this contextual reference this sentence could be ambiguous, especially if the perfect tense were substituted for the imperfect tense. In such a case the verb treffen might be interpreted as a semantically 'full' verb as opposed to a function verb in the verbal unit eine Entscheidung treffen. Two interpretations of (17) Diese Entscheidung hat X getroffen are possible depending on the semantic interpretation of the verb. One interpretation might be an answer to an underlying question Wer hat diese Entscheidung getroffen?, the other to a question Wen hat diese Entscheidung getroffen? In the former case X would be subject, the person taking the decision, in the latter case X would function as object, the person affected by the decision. Similar sentences to (17) are 

(18) Die Professoren N und M regten die Dissertationsthemen an 
(19) Die Dissertationsthemen regten die Professoren N und M an 
(20) ? Kriege regen die Fachleute an 
(21) ? Die Fachleute regen Kriege an 
In (18) and (19) die Professoren could be either those responsible for the topics, or those affected by the topics, cf. jemanden anregen, ein Thema anregen. (20) and (21) are possibly less open to ambiguity due to the questionability of the collocation einen Krieg anregen. 

The grammatical function of word order as a means of avoiding ambiguity is illustrated in the following textual example:

(22) In seiner Tiefe (des alkovenartigen Gelaßes) befand sich ein mit dünmem blassen Stoffe bedeckter Diwan. Zur Rechten bewahrte man ein verhängtes Büchergestell, ... Zur Linken war
ein weiß gedeckter Tisch aufgeschlagen, ... Im Vordergrunde des Alkovens jedoch erhob sich, ..., auf einem flachen Podium eine vergoldete Gipsäule, deren Kapitäl von einer blutrotseidenen Altardecke überhangen wurde. Und darauf ruhte ein Stapel beschriebenen Papiers in Folioformat: Daniels Proklamationen. Eine helle, mit kleinen Empirekränzen bedruckte Tapete bedeckte die Mauer; Totenmasken, Rosenkränze, ein großes rostiges Schwert hingen an den Wänden; ...

(22) consists of a set of existential sentences which for the most part manifest a neutral theme - rheme perspective - the locative element being thematic precedes the grammatical subject (= rheme) in a consistent LOC + V + NP sequence

(22) i In seiner Tiefe befand sich ...
   ii Zur rechten gewahrte man ...
   iii Zur Linken war ...
   iv Im Vordergrunde erhob sich ...
   v Darauf ruhte ...

until, that is, the sentence

vi Eine helle Tapete bedeckte die Mauer
   rheme
   theme

where the grammatical subject (rheme) precedes the object (theme). In this sentence the departure from the neutral theme-rheme sequence as manifest in i-v is motivated by the otherwise possible ambiguity regarding the distinction of grammatical function.

The occurrence of departures from the neutral theme - rheme sequence in literary examples of this type is pointed out by
Kirkwood (1973: 153ff.) who refers to the stylistic implications of examples from literary contexts. In such a case two (or more) sentences may have a distinct parallelism in terms of thematic structure, i.e. rheme – theme. Kirkwood gives the example (23) Stille herrschte im Hause. Nur der Wind war hörbar and points out that in the second sentence a possible theme – rheme sequence could be achieved, e.g. Hörbar war nur der Wind/Hören konnte man nur den Wind (hörbar being thematic by way of semantic inference from the first sentence), but this sequence, although it would be more directly cohesive thematically, would lose the special effect of the parallelism. The same applies to vii in (22) (22) vii Totenmasken, Rosenkränze ... hingen an den Wänden.

The development of the structural use of word order in Modern English away from the inflected forms of Old English is discussed in Fries (1940). Fries restricts his analysis to two grammatical forms: the actor – action – goal construction and modifier – noun construction. In both cases he argues that the 'taxemes of selection' (inflected forms) have been lost during the course of the historical development of English thereby increasing the functional load of positional criteria. His statistics indicate that the position following the verb had become the fixed position for the accusative object probably by the beginning of the 15th Century, certainly before 1500. He also discusses the position of the dative object when accompanied by an accusative: "By Early Middle English the position of the dative-object in relation to the accusative-object seems to have become a clear pattern. In about four-fifths of the instances the dative-object precedes the
accusative-object. As the accusative-object comes increasingly to be placed after the verb, the dative-object also appears after the verb but before the accusative-object" (Fries, 1940: 305). He sums up the general position at approximately the middle of the 15th Century as follows: "In the actor - action - goal construction the position for words expressing the goal (the ending-point or object) has become pretty thoroughly fixed as after the verb. Accusative- and dative-objects are distinguished by the fact that the dative-object, when present, precedes the accusative-object. This positional relation of the two classes of objects had existed for several centuries. Most important is the fact that by this time no nouns functioning as accusative-objects or as dative-objects precede their verbs. The position before the verb, cleared of the presence of formally distinct accusative- and dative-objects, becomes in itself the distinguishing feature of the form-class of nominative expressions. The position before the verb becomes the territory of the actor (the starting-point or subject), the position after the verb becomes the territory of the goal (the ending-point or object); both exercise the "pressure of position" upon the function of all substantives standing in each territory" (1940: 306).

Nouns standing in front of impersonal verbs, formerly with clear dative-case inflectional forms became interpreted as subjects, and nouns following verbs which formerly had the clear inflectional forms of subjects, standing in object position, became interpreted as objects. Compare

(24) The knight liked it right noght
(25) Me wäs gegiefen an boc = I was given a book
(26) Men nedede no help = They needed no help.
The historical development towards this 'grammaticalized' order of elements in English is not matched by the same development in German, at least in so far as Modern German has retained a case system which allows such sequences as

(27) Ihm gefällt das nicht
(28) Mir wurde ein Buch geschenkt.

It is, of course, a question of degree since a fixed SVO order and the tendency to form grammatical subjects from an oblique case such as a dative are not as such peculiar only to Modern English (cf. the forms mihi est and habeo in Latin).

The claim that the position of the subject before the object in sequence represents a universal characteristic of language has been made by Greenberg (1963). Greenberg maintains that with regard to the relative order of S, V and O in declarative sentences, there are three common types: VSO, SVO and SOV. The remaining three of the six mathematically possible relative orders of S, V and O, i.e. VOS, OSV and OVS do not, he says, occur at all, or are at least excessively rare. (Note, however, the neutral sequence OVS in German: dieses Buch hat mir meine Mutter geschenkt!) Greenberg's first universal thus reads: "In declarative sentences with nominal subject and object, the dominant order is almost always one in which the subject precedes the object" (1963: 77). Referring to Greenberg, Jakobson points out that in Russian all six mathematically possible orders of nominal subject, verb and nominal object occur: "The sentence, 'Lenin cites Marx', can be rendered as SVO (Lenin citiruet Marks'a), SOV (Lenin Marks'a citiruet), VSO (Citiruet Lenin Marks'a), VOS (Citiruet Marks'a..."
Lenin); OSV (Marksa Lenin citiruet), and finally OVS (Marksa citiruet Lenin); yet only the order SVO is stylistically neutral, while all the 'recessive alternatives' are experienced by native speakers and listeners as diverse emphatic shifts. SVO is the only word order initially used by Russian children; and in a sentence like Mama ljubit papu 'Mama loves papa', if the order of words is inverted - Papu ljubit mama, small children are prone to misinterpret it: 'Papa loves mama', as if one had said, Papa • ljubit mama. Correspondingly, Greenberg's first universal could be restated as follows: In declarative sentences with nominal subject and object the only or neutral (unmarked) order is almost always one in which the subject precedes the object' (Jakobson, 1963: 268f.). The same point about the role of the relative positions of S and O at the initial stages of a child's syntactic development is also made in Slobin (1966: 133f.).

Further evidence that the sentence initial position of the grammatical subject represents a basic order is provided by Hays (1958). He shows that the order of subject and object in Russian is an adequate criterion for distinguishing between them when other differentia are lacking. In 22,000 occurrences only 56 instances of 'true ambiguity' were recorded. Of these 56, the subject preceded the object 52 times. The sequence of elements in the remaining four instances is VOS:

(29) i. calls (V) attention (O) the presence (of...) (S)
   ii. has (V) place (O) a state (S) - a state occurs
   iii. has (V) place (O) a rule (S) - a rule occurs
   iv. has (V) place (O) a decrease (S) - a decrease occurs.
The sequences in (29) do not contradict the hypothesis, but serve to throw light on the complex factors which determine element sequence. It is difficult to see how they could be regarded as ambiguous. Hays speaks of the 'idiomatic nature' of the verb-object pair. What he means is that the verb and object together form a verbal complex and in such a case the object is clearly recognizable as such. The importance of the VOS pattern above is that it illustrates the relevance of other criteria in determining the order of elements: all four examples reveal a consistent theme - rheme sequence, the subject being rhematic in each case. Furthermore, the criterion of semantic structure is also relevant here. Sentences (ii) - (iv) are clearly existential sentences in which the subject, representing the person or thing in existence or coming into existence, consistently appears in sentence final position.

The level of semantic structure is also relevant to the sequence of elements in English. In the case of existential sentences, the subject, being a rhematic element, is regularly placed after the verb. Kuno (1971) makes the claim that in SVO languages the basic order in existential sentences is that of

\[ \text{LOCATIVE} + \text{VERB(existence)} + \text{NP(indef.)} \]

where NP(indef.) denotes the 'things that exist'. This has been shown for German by Kirkwood (1969, 1969a, 1973). Kirkwood points to "a relationship between the semantic structure of existential-locative sentences as a configuration of semantic categories and what might be called a cognitional order, i.e. the order in which states and processes are apperceived. In the communicative act the cognitional
process is presented in a way which reflects the perspective in which the states and processes are perceived. In German there is an obvious correlation between the cognitional order and the linear sequence of elements. To the sphere of an element in the focus of attention realized by a locative expression is related a person or thing existing in or emerging from this sphere, which is realized by the grammatical subject. This is the element that is brought into focus by being related to the sphere of the element already in focus, to what Firbas has referred to as the ad hoc, narrow context" (Kirkwood, 1973: 184).

It is this sequence of elements that Kirkwood refers to as the 'basic type'. He gives the following examples (1973: 143f.)

(30) Viele Studenten standen vor der Universität
(31) Jemand war in jedem Zimmer
(32) Vor der Universität standen viele Studenten
(33) Es standen viele Studenten vor der Universität
(34) In jedem Zimmer war jemand
(35) Es war jemand in jedem Zimmer
(36) Many (of the) students were standing in front of the university
(37) Someone was in every room
(38) There were many students standing in front of the university
(39) There was someone in every room

and concludes that "in existential sentences at least, English word order shows an (unusual) susceptibility to FSP" (cf. Kuno, 1971: 349).

This indicates clearly that in sentences of this type criteria other than the grammatical principle are operative in determining the linear sequence of elements.
Brinkmann (1962: 489ff.) indicates the low relevance of the grammatical principle in one type of sentence and its high relevance in another type of sentence when he makes a distinction between 'Vorgangssätze' and 'Handlungssätze'. He writes: "Der Vorgangssatz wird geneigt sein, das Geschehen aus den Umständen zu entwickeln und darum mit ihnen beginnen; der Handlungssatz dagegen kann jederzeit aus sich selbst; d.h. mit einem Subjekt beginnen." In the 'Vorgangssatz' the initial element outlines the situation in which the event takes place - "Das grammatische Subjekt ist dann nicht Ausgangspunkt sondern eher Ziel" (Brinkmann, 1962a: 357). Sentences expressing goal-directed action frequently presuppose an agent; the agent thus precedes the action in linear sequence resulting in the actor - action - goal pattern. Since the agent is realized by the grammatical subject and since also, being presupposed, it is thematic (leaving aside the possibility of contextual modification) the principles determining the order of elements are seen to operate 'in harmony' in the case of sentences of this type:

(40)  Hans kaufte ein Buch  
John bought a book

grammatical  S  V  O  
semantic  actor  action  goal  
thematic  theme  rheme

The outcome of the common, and often conflicting, tendency of both the grammatical subject and the theme to occupy the initial position in the linear sequence of elements may be different from
language to language depending on the degree of susceptibility of a particular language to FSP on the one hand, and the extent to which word order in a particular language is pre-determined by grammatical rule on the other. The dominant role of the grammatical principle resulting in the fixed SVO sequence in Modern English is well documented (cf. Mathesius, Firbas, Kirkwood). I have already mentioned this above, quoting examples which show that the grammatical principle need not always run counter to the principle of FSP. In other words, within the scope of the grammatical principle a certain susceptibility to FSP may reveal itself. Compare

(41) My mother (R) gave me this book
(42) This book was given to me by my mother (R)
(43) It was my mother (R) who gave me this book
(44) The person/one who gave me this book was my mother (R)
(45) There were deep shadows around his eyes
(46) His eyes had deep shadows around them
(47) Dieses Buch hat mir meine Mutter geschenkt
(48) Um seine Augen lagen tiefe Schatten.

Only (41) opens with a rhematic element. (42) – (46) show how English may compensate for its lack of freedom in manipulating the order of elements whilst at the same time not violating the grammatical principle. In (42) and (46) the object and locative respectively are realized by the grammatical subject through the use of the passive construction in the one case, and the verb have in the other. (43), (44) and (45) also display the SV pattern in so far as it and there function as formal subjects. The structural pressure on a language such as English to conform to the SVO pattern does not always lead
to such compensatory procedures. Compare

(49) It has not worked. American doubts have been aroused

(50) Das funktionierte nicht. Es meldeten sich amerikanische Zweifel

(51) Another letter followed (There followed another letter)

(52) Es folgte ein neuer Brief.

In German, on the other hand, a deviation from the neutral theme - rheme sequence leads to a non-neutral or marked order of elements. Compare the following with their neutral equivalents (50) and (52)

(53) Amerikanische Zweifel meldeten sich

(54) Ein neuer Brief folgte.

Brinkmann (1962: 491) writes: "Der Beginn mit dem Subjekt gibt einen neuen Einsatz (wenn als Subjekt nicht ein Pronomen, sondern ein Substantiv steht), vor allem im Vorgangssatz. So ist es im Eingang der Erzählung Gertrud von le Forts. Die Umgebung des Königspaares schlägt vor, Anne de Vitré holen zu lassen, damit sie dem Prinzen das Schlummerlied singe. Danach heißt es: König Johann (der bis dahin noch nicht erwähnt war) erschrak bei diesem Vorschlag. Das ist ein neuer harter Einsatz; der mögliche Anschluß (Bei diesem Vorschlag erschrak König Johann) wird vermieden. Ob also ein Satz mit dem Subjekt beginnt oder nicht, das hängt zunächst von der Art des Satzes ab. Ein Satz wie Aus den weißen Bruchstellen der Äste tropfte schon ... hellgelbes Harz kann nicht anders beginnen, jedenfalls nicht, wenn der Blick von den Ästen ausgeht. Das Subjekt erscheint dabei als Ergebnis." Brinkmann's notion of 'harter Einsatz' would seem to apply to (53) and (54) above. The markedness of such sequences is signalled by heavy or emphatic accent on the initial
element. This would be the case in Brinkmann's example if the rheme were to introduce the sentence as in:

(55) Harz tropfte aus den Bruchstellen der Äste

but it is not true for

(56) König Johann erschrak bei diesem Vorschlag.

In (56) the primary rhematic accent is not located on König Johann but on erschrak, despite Brinkmann's point that the king is mentioned for the first time. König Johann is recoverable from the context ('die Umgebung des Elternpaares') and 'brought into focus' as thematic basis, the focus of information being on erschrak, i.e. his response or reaction to the suggestion which is in turn explained:

(57) König Johann erschrak bei diesem Vorschlag - er fürchtete sich, Anne de Vitre rufen zu lassen, denn er dachte an seinen letzten Einfall bei den Bretonen, an ihre verbrannten Städte und zerstampften Felder, vor allem dachte er an ihren jungen Herzog, ..., den er bei jenem Einfall geraubt und zu Rouen mit eigener Hand ermordet hatte. Er erwiderte daher, er wisse längst, die Bretonen seien immer noch heidnische Zauberer, er selber sei ein guter Christ und wolle nichts mit ihren Schlummerliedern zu tun haben.

König Johann is in a position of prominence - that of thematic basis, which is in keeping with the further development of the text in (57). There is too great a difference between thematic basis and foregrounded rheme for both to be accommodated under the notion of 'harter Einsatz'.

The question of what constitutes a marked point of departure and the initial position of a rhematic subject requires some clarification.
The grammatical subject will normally carry primary accent when it occurs together with a verb of low semantic content. The thematic status of a verb like e.g. *kommen* with little lexical meaning of its own constrasts sharply with that of verbs with fuller lexical meaning. Compare

(58) Der Briefträger kam
(59) Dieses Paket ist heute angelangt
(60) Hans erkrankte
(61) Der Mai ist gekommen. Die Bäume schlagen aus

(underlining indicates primary accent placement)

In (58), (59) and the first sentence in (61), the verb expresses emergence and has little lexical meaning of its own; in (60) and the second sentence in (61) it expresses a state or entry into a state. Consequently, the verbs *kommen* and *gelangen* carry low degrees of CD and *Briefträger*, *Paket* and *Mai*, the person or thing arriving on the scene, are rhematic and carry primary accent. *Erkranken* and *ausschlagen*, on the other hand, with fuller lexical meaning, rank higher in terms of the degrees of CD they carry; they are rhematic and carry primary accent.

In the above example sentences (58) - (61) the degree of CD carried by the various constituents is in accordance with their role in the semantic structure of the sentence. If the degree of CD carried by an element is lower (or higher) in an actualized context than if it were determined only by its role in the semantic representation and if the position of that element in linear sequence remains unchanged then a marked sequence results, as in
(62) Hans erkrankte
(63) Die Bäume schlagen aus.

A marked effect is also achieved if der Briefträger in (58) is substituted by say ein Fremder. Compare

(64) Ein Fremder kam

with the more neutral sequence

(65) Es kam ein Fremder.

A similar pair of sentences would be

(66) Ein Paket ist für ihm angelangt
(67) Es ist ein Paket für ihn angelangt.

In both (64) and (66) the element in initial position constitutes what Brinkmann calls 'harter Einsatz' - hence the construction with es in (65) and (67). The difference between (58) and (59) on the one hand, and (64) and (66) on the other, would seem to relate to the context or situation in which the utterances might appear. In (58) and (59) we have a case of the exophoric use of the definite article - the referent is identifiable in the context of situation. There is no such reference in (64) and (66).

In a specific context it is usual for the rheme to occupy a neutral rhematic position at or near the end of the sentence as in

(68) Dann kam nämlich meine Mutter

where dann serves to situate the utterance in a context. Dann is a marker of contextual dependence in that it points to the next step in the linear chain of events. It constitutes therefore the natural point of departure.
2. SYNTACTIC CRITERIA

In this section I propose to examine in detail the relevance of syntactic criteria in determining the sequence of elements in German. Whereas word order in Modern English conforms to a 'grammatical norm', the sequence of elements in Modern German is determined, under certain conditions, by syntactic criteria. The syntactic principle operates to establish a 'syntactic norm' ("syntaktische Ruhelage", Flämig, 1964), according to which the closeness of the relation of an element to the verb determines the position of that element in the linear sequence. This applies mainly to 'nuclear constituents', i.e. elements relevant to the subcategorization of the verb (cf. syntactic or base component in transformational generative grammar), verbal complement or valency dependent elements (cf. the notion of valency).

Syntactic Hierarchy and Valency

For German the concept of valency (Tesnière, 1953, 1959) has been most exhaustively treated by Helbig (1965, 1971), but cf. also Abramow (1971), Admoni (1970), Erben (1966), Flämig (1971), Fourquet (1971). According to this concept the verb opens up a restricted number of positions in the sentence which may or must be filled, and these together constitute the sentence nucleus. A distinction is made between nuclear constituents and non-nuclear constituents such as adverbials of time, place, manner and reason which are only loosely associated with the sentence nucleus. In this way, valency implies a syntactic hierarchy among sentence elements:
Valency-dependent elements are more closely related to the verb than adjuncts. By applying the notion of valency a finite set of valency models (cf. Erben's (1966) 'Grundmodelle', Grebe's (1966) 'Grundformen' and Danes's (1966) notion of 'Grammatical Sentence Pattern' (GSP) which he refers to as an 'utterance-making device') can be derived. The positions opened up by the verb may be determined quantitatively and qualitatively. The verb determines the number and type of its complements. Verbs may be categorized as one-place, two-place and three-place. Verbal complements include objects (including prepositional objects); adverbial complements i.e. adverbs of direction and with certain verbs, adverbs of time and place; predicative nominals and adjectives; and also the grammatical subject. Later the positions opened up by the verb will be determined in terms of semantic or case categories and their relative degree of syntactic cohesion to their respective verbs will be investigated in detail. For the time being I shall list some valency models and draw some observations relating to the relevance of the notion of valency to the sequence of elements.

\[ \text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Präd}} \]

(1) Hans ist seit meiner Kindheit mein bester Freund

\[ \text{NP}_{\text{Nom}} + V + \text{ADV}_{\text{Präd}} \]

(2) Diese Bestrebungen sind aus dreierlei Gründen notwendig

---

1. Key to abbreviations used:

- \( \text{NP}_{\text{Nom}} \) = grammatical subject;
- \( \text{NP}_{\text{Akk}} \) = accusative object;
- \( \text{NP}_{\text{Dat}} \) = dative object;
- \( \text{NP}_{\text{Gen}} \) = genitive object
- \( \text{NP}_{\text{Präd}} \) = predicative nominal;
- \( \text{ADV}_{\text{Dir}} \) = directional adverb;
- \( \text{ADV}_{\text{Loc}} \) = adverb of place;
- \( \text{ADV}_{\text{Temp}} \) = adverb of time;
- \( \text{PO} \) = prepositional object.
(3) Hans kaufte gestern in Berlin ein Buch

(4) Hans hilft jeden Tag seinem Vater

(5) Der Bundeskanzler gedachte gestern zum ersten Mal des Jahrestags der Beendigung des Krieges

(6) Hans wartet am Bahnhof auf seinen Freund

(7) Die Westdeutschen bestehen in ihrer Definition eines wiedervereinten Deutschlands auf die Grenzen von 1937

(8) Hans fährt morgen in aller Frühe nach London

(9) Hans wohnt seit Jahren mit seiner Frau in London

(10) Diese Sitzungen dauern ohne Ausnahme mindestens drei Stunden

(11) Die Meinungsumfragen sagen schon seit einigen Wochen der Labour-Partei Siegeschancen voraus

(12) Der Außenminister hat hinsichtlich der Waffenstillstand-verletzungen am Suezkanal die Russen bewusster Täuschung beschuldigt

(13) Herr M. lehrt jeden Tag seine begabtesten Schüler die deutsche Sprache

(14) Der Premierminister hat nach langem Überlegen den Abgeordneten von seinen Verpflichtungen entbunden
(15) Die politisch nicht gebundenen Studentenvertreter verhelfen jetzt in früher kaum gekanntem Umfang der politischen Linken zu erheblichem Einfluß

\[ \text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Dat}} + \text{PO} \]

(16) Die Regierung verhandelt schon seit einigen Wochen mit den Großmächten über den Friedensvertrag

\[ \text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Akk}} + \text{ADV}_{\text{Dir}} \]

(17) Hans hat im vorigen Jahr seinen Wohnsitz nach London verlegt

\[ \text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Dat}} + \text{ADJ}_{\text{Präd}} \]

(18) Dieser Kongreß ist nach wie vor jeglichem Interventionismus abhold

\[ \text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Gen}} + \text{ADJ}_{\text{Präd}} \]

(19) Amerika ist in diesen Tagen des weltweiten Wächteramtes müde

\[ \text{NP}_{\text{Nom}} + V + \text{PO} + \text{ADJ}_{\text{Präd}} \]

(20) Die Studenten sind seit der Großen Koalition mit Politik und Gesellschaft in der Bundesrepublik unzufrieden

\[ \text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Dat}} + \text{PO} + \text{PO} \]

(1) - (20) illustrate that the hierarchical order of elements in terms of cohesion with the verb is manifest in the actual sequence of elements. Valency dependent elements which are more closely related to the verb than adverbial adjuncts follow the latter in sequence. This separation of closely related constituents in declarative sentences, producing what may be called the 'sentence bracket' ('Satzklammer', 'Satzrahmen') is a characteristic feature of German. This type of sentence structure contrasts with the linear progression characteristic of English. Firbas (1964: 112) refers to the 'principle of coherence of members' which manifests itself by "not permitting to insert other qualifications between
two sentence elements to which it is applicable". This recalls Admoni's 'Kontaktstellung' - 'das unmittelbare Nebeneinanderstehen der zusammengehörenden Elemente', an important means of expressing syntactic functions in English, as opposed to 'Distanzstellung' - 'wenn zwei inhaltlich zusammengehörende Satzteile ... ihrer Stellung nach voneinander getrennt sind' (1962: 376ff.)

In another article Admoni (1962: 161ff.) stresses that the bracket construction in German is by no means to be regarded in terms of an imposition from above i.e. from the written norm on the spoken language; it constitutes one of the basic syntactic regularities of German sentence structure. Admoni refers to Möller (1964, 1965) who writes: "Es gibt keinen größeren Irrtum, als zu glauben, die Rahmenbildungen seien vornehmlich Eigenart der Schriftsprache und der von ihr beeinflußten Redeformen. Nein, gerade das Mündlichste vom Mündlichen, die Umgangsrede in ihrer schnoddrigen Spielart, zeigt deutlich die Tendenz zur Rahmung" (1964: 89). As illustration Möller quotes a spoken text of which the following is an abstract:

(21) "... finden Sir nicht, unser Liebhaber war heute wieder groß in Form"

"?"

"Ich meine, er hat in solchen Rollen allerhand los!"

"?"

"Also, verstehen Sie, er kriegt das Heldenmaßige so ganz natürlich 'raus. Natürlich gibt er manchmal auch ein bißchen an, aber mein Bruder sagt auch, dem
What is important and at the same time explanatory here is the function of this type of construction: it serves to locate the element with the highest communicative value in sentence final or, depending on the type of clause and thus the position of verbal forms, immediate pre-final position. This may be a basic motivation behind the tendency to form verbal complexes 'Streckverben', 'Funktionverbfügungen' of the type 'Glauben schenken' for glauben; 'Gefallen finden' for gefallen. Compare

(22) Die Studenten schenkten dem Forscher Glauben
(23) Die Studenten glaubten dem Forscher
(24) Die Deutschen finden an einer ironisch-saloppen Wortwahl Gefallen
(25) Den Deutschen gefällt eine ironisch-saloppe Wortwahl

Fläzig (1964: 340) makes an interesting point with regard to the positioning of elements according to their syntactic relation to the verb i.e. without the operation of contextual criteria and the communicative value of the nuclear constituents. He writes: "Dabei ist anzunehmen, daß die Stellungsregeln aufgrund der syntaktischen Bindung ans Verb also eine grammatische Abstraktion, eine Verallgemeinerung des Stellungsprinzips nach dem Mitteilungswert anzusehen sind". This would suggest that the elements which are closely related to the verb in the hierarchy of constituents are communicatively more dynamic than extra-nuclear elements. It would also suggest a relation between the syntactic norm, semantic
structure (SSP) or semantic representation (cf. Sgall) and thematic structure in so far as (1) the relation of the nuclear constituents to the verb is basically to be determined in terms of semantic criteria (see below) and in so far as (2) the semantic structure of the sentence determines the distribution of the degrees of CD in the sentence in the absence of contextual criteria. This point will be taken up again at a later stage.

I also propose to discuss the grammatical models (1) - (20) above in greater detail later in this chapter as part of a detailed explication of syntactic cohesion. However, as a basis for subsequent discussion I shall point out certain features with regard to syntactic hierarchy which emerge from the example sentences above. The line of argumentation so far, concerning a possible link between syntactic cohesion and the actual sequence of elements, suggests a further factor if it is extended to the valency models of three-place verbs. What I am referring to is the possible hierarchical order among valency-dependent elements themselves in terms of cohesion with the verb. This has been implied for dative and accusative objects by Bierwisch (1966: 35ff.) and Heidolph (1964: 101ff.) but requires further explication (see below).

In the instances of three-place verbs above i.e. (11) - (20), the following sequences of nuclear constituents in post-finite position occur:
In (13) and (16) the co-occurrence of two constituents of the same category suggests that there is a need to look beyond the surface forms and seek explanations and relations in the underlying structure. Leaving aside (13) and (16) for the time being, the following tentative ordering of surface hierarchies suggests itself in the light of the above sequences:

(26) \( \text{NP}_{\text{Dat}} \text{ NP}_{\text{Akk}} \text{ NP}_{\text{Gen}} \text{ PO \ ADV}_{\text{Dir}} \text{ ADJ}_{\text{Präd}} \)

or possibly rather,

(26) \( \text{NP}_{\text{Dat}} \text{ NP}_{\text{Akk}} \{ \text{NP}_{\text{Gen}} \} \{ \text{ADV}_{\text{Dir}} \} \{ \text{PO} \} \{ \text{ADJ}_{\text{Präd}} \} \)

since \( \text{NP}_{\text{Gen}} : \text{PO} \) and \( \text{ADV}_{\text{Dir}} : \text{ADJ}_{\text{Präd}} \) do not co-occur. This is not insignificant since many \( \text{PO} \) constituents were \( \text{NP}_{\text{Gen}} \) constituents originally. Compare:

(27) Der Premierminister hat den Abgeordneten von seinen Verpflichtungen entbunden

(28) Der Premierminister hat den Abgeordneten seiner Verpflichtungen entbunden
Table 1 illustrates this tentative systemic ordering of surface categories and the manifestation of this in the actual sequence of elements, where ___ indicated constituent co-occurrence:

<table>
<thead>
<tr>
<th>NP_{Dat}</th>
<th>NP_{Akk}</th>
<th>NP_{Gen}</th>
<th>PO</th>
<th>ADV_{Dir}</th>
<th>ADJ_{Präd}</th>
<th>(VERB)</th>
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Table 1

Reading:

each category combination represents a consistent linear progression; there is no instance of a doubling-back, i.e. a switch in progression direction

The relative cohesion of nuclear constituents to their respective verbs can also be tabulated as suggested in Table 2 below, where each X represents the combination of a constituent in the left-hand column with a constituent in the horizontal axis:

\[ \text{The horizontal axis represents the hierarchization of nuclear categories. For a discussion of the end position of the verb see the section on generative description.} \]
Reading:
the longer the distance in a left-right progression before
an $X$, the higher the degree of syntactic cohesion between
that constituent in the left hand column and its
respective verb and the greater the force for
topological displacement of verb and nuclear constituent
in actual sequence

The manifestation of this ordering of surface categories in
linear sequence can be further tested by investigating the relative
positioning of elements where there are three surface nuclear
constituents in the predicate field. Compare
(29) Die Politiker versuchen den Studenten den politischen
    Wind aus den Segeln zu nehmen
(30) Sie hatten mir ein Bett in das Wohnzimmer gestellt
(31) Ich bin meinen Mitarbeitern großen Dank schuldig
(32) Hans ist seinen Mitschülern an Fleiß überlegen
In valency theory there is disagreement on the quantitative valencies of the verbs in (29) - (34). Erben (1965: 165f.) talks of four-place verbs with corresponding valency models as e.g.

(35) Karl legte seinem Freund die Hand auf die Schulter

(36) Karl schleuderte dem Jungen den Handschuh ins Gesicht.

Helbig, on the other hand, denies the existence of four-place verbs "da der Dativ ohne weiteres weggelassen werden kann, ohne daß der strukturelle Bestand des Satzes gefährdet wird" (Helbig, 1965: 12).

The criterion, however, is not that the dative can be left out, but that it is adnominal. Compare the following English and German examples:

(37) Die Schwester verband dem Patienten die Hand
(38) The nurse put the patient a bandage on his hand
(39) The nurse put a bandage on the patient's hand
(40) Die Sonne schien den Häusern auf die Dächer
(41) Die Sonne schien auf die Dächer der Häuser
(42) The sun shone on the roofs of the houses
(43) *The sun shone the houses on the roofs

The non-occurrence of (43) in English shows that this 'adnominal locative' is not always promoted to a primary constituent in surface structure. Other examples of this are:

(44) He struck him in the face with the glove
(45) He struck his face with the glove
(46) He laid his hand on his friend's shoulder
(47) *He laid his friend his hand on the shoulder
He threw the ball into the lady's face
He threw the lady the ball in the face
He hit the lady in the face with the ball

In German complication may arise out of the ambiguity of surface datives. The sentence

Monika bringt ihrem Vater den Brief an den Zug
could be interpreted as meaning either for or to her father, i.e. either 'Dativus commodi' or indirect object (cf. Isačenko, 1965: 20f.). Isačenko distinguishes between the surface dative expressing the indirect object, the 'Dativus commodi', the 'Dativus possessivus' and the 'Dativus respectivus':

Peter reichte dem Mann die Hand / seine Hand
Peter verband dem Mann die Hand / die Hand des Mannes -
respetivus
Peter schrieb dem Mann einen Brief / an den Mann -
indirect object

Whatever underlying relation may be expressed by the surface dative, it must be pointed out that if it is promoted to a major constituent ('respectivus'/ 'possessivus') or appears in the dative case rather than as a prepositional phrase (indirect object/ 'commodi') the position of that constituent in the sequence of elements is that normally assigned to a surface dative, cf. (29) - (32). It is indeed an important aspect about word order, that although some explanations
may be sought on the level of underlying structure (these will be discussed in detail later), other criteria may relate purely to the surface structure. This may also be illustrated with regard to the positioning of some prepositional phrases. Compare

(57) He gave the man the book
(58) He gave the book to the man
(59) He wrote the man a letter
(60) He wrote a letter to the man
(61) Er schrieb dem Mann einen Brief
(62) Er schrieb einen Brief an den Mann
(63) Hans hängt ein Bild an die Wand
(64) Hans behängt die Wand mit Bildern

In the above sequences (57) - (64) the prepositional phrase, when present, follows the accusative object. (63) and (64) are particularly interesting in this respect. In (63) the sequence of elements is in accordance with the hierarchical ordering outlined above, i.e.

\[ \text{NP}^\text{Nom} + \text{V} + \text{NP}^\text{Akk} + \text{ADV}^\text{Dir} \]

whereas in (64) the syntactic hierarchy is not reflected in the order of elements. However, it may well be that the positioning of prepositional phrases has implications for the thematic structure of the sentence. Note also the deletability of the prepositional phrase in (64)

To conclude the discussion on surface-reflected syntactic hierarchy, the relative positioning of three relational constituents in the predicate field, as in examples (29) - (34) above, can be tabulated as follows:
The relative ordering of constituents as illustrated in columns 3, 2 and 1 of Table 3 is significantly in line with the readings of Tables 1 and 2 above. Furthermore, the elements occurring in each respective column are relatively homogeneous both from the point of view of their degree of closeness to the verb and their 'syntactic meanings'. In 1, only ADVDir and ADVPräd are present. The verbal force of ADVPräd is clearly evident (cf. schuldig sein - schulden).

The high degree of closeness of the relation of these constituents to the verb will be discussed in detail subsequently. The constituents in column 2 have similar syntactic meanings underlying the diversity in surface form. The same applies to the constituents in column 1 (cf. patient, beneficiary etc.). It is in this light that the superficiality of surface cases becomes meaningfully apparent. The nuclear constituents in 3 are clearly distinguishable from those in 2 in terms of their 'syntactic meanings'.

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1 Numbers 1, 2 and 3 indicate hierarchy of closeness to verb, 1 being the highest in the hierarchy. VF = finite verb. (VERB): arguments for end-position of the verb will be discussed subsequently.

2 Term used by Daneš, 1966
Tables 1, 2 and 3 will be revised in the light of further evidence. The preceding reference to 'syntactic meanings' of nuclear constituents indicates the type of argument that can be applied. The influence and effect of the operation of contextual criteria on the above sequences will also be investigated. For example, the hierarchical progression

\[ NP_{\text{Dat}} + NP_{\text{Akk}} + V \]

will not necessarily be reflected in linear sequence after the operation of contextual criteria. Compare:

(65) Hans hat dem Kind ein Buch geschenkt
(66) Hans hat das Buch einem Kind geschenkt
(67) Das Buch hat Hans einem Kind geschenkt
(68) Dem Kind hat Hans ein Buch geschenkt

In terms of Table 1, only (65) gives a linear reading. (66), (67) and (68) all reveal doubling-back progressions:

Systemic hierarchical order:

\[ NP_{\text{Nom}} + VF + NP_{\text{Dat}} + NP_{\text{Akk}} + V \]

(65')

Progressions in (66), (67) and (68) taking (65) as base:

(66')

(67')

(68')
The configuration in (65') corresponds to the syntactic norm. (66') differs from (67') and (68') in that the latter two cases involve the pre-position of the constituents $NP_{Akk}$ and $NP_{Dat}$ respectively. It would seem that the diagramatic representations (67') and (68') indicate what is referred to on the level of thematic structure as 'topicalization' or 'thematic foregrounding'.

**Syntactic Hierarchy in a Generative Description**

The distinction between nuclear and extra-nuclear constituents and its significance in the representation of the constituent structure of the sentence is also relevant to a transformational generative approach. In a generative description the valency-dependent, nuclear elements correspond to the elements relevant to the subcategorization of the verb (cf. Chomsky, 1965: 101ff.). Sequences or 'strings' of words which differ in terms of constituent distribution may be closely related on the level of underlying structure, or 'deep structure' (to use Chomsky's term), if the same syntactic relations hold between the given constituents. This is true of the strings in the quadruple

(69) a. Hans hat dem Kind ein Buch geschenkt  
    b. Hans hat das Buch einem Kind geschenkt  
    c. Das Buch hat Hans einem Kind geschenkt  
    d. Dem Kind hat Hans ein Buch geschenkt

Only (69a) which represents the syntactic norm reflects the constituent structure in terms of syntactic cohesion in the linear structure. This can be illustrated by labelled bracketing:

(69a) $(NP_{Nom} + (NP_{Dat} + (NP_{Akk} + V)))$
The constituent structure of (69b), (69c) and (69d) is the same as that of (69a) although the order of elements in the linear structure is different in each case.

Changes in word order do not affect the relations that hold between the given constituents. A permutation on the level of linear structure is not accompanied by a change in the grammatical function of the constituent involved. Thus only one structural description is needed to account for the constituent structure of all the strings in quadruple (69).

Conversely, sentences which in terms of their linear structure appear to be constituent-parallels may, in fact, have divergent underlying structures. Compare Chomsky's well-known pair

(70) John is easy to please
(71) John is eager to please

For a discussion of these and Daneš’s criticism of Chomsky's approach see the section on Daneš, Chapter II.1 above.

Bierwisch (1966) takes account of this possible non-equivalence factor by arguing that sentences should be represented on two levels: on the level of constituent structure ('Formationsebene'), and on the transformational level ('Transformationsebene'). The level of constituent structure consists of a system of rewrite rules which he calls 'Formationsregeln' ('formation rules', Chomsky's 'phrase structure rules') which generates deep structures and defines the grammatical relations that are expressed in the deep structure (and
which may be obscured in the surface structure). It is the function of formation rules, then, to account for syntactic relations of the type discussed above. Transformational rules, on the other hand, account, among other things, for variations in word order. It should be noted that the application of T-rules is by no means arbitrary - they operate only under certain conditions. Compare the following pairs of English and German sentences as illustration of the application of T-rules:

\[(72)\] Hans hat mir zu Weihnachten ein Buch geschenkt
\[(72a)\] John gave me a book for Christmas

\[(73)\] Hans hat mir das Buch zu Weihnachten geschenkt
\[(73a)\] John gave me the book for Christmas.

In the two German sequences the difference in word order is the result of the application of a T-rule, the motivation being the operation of contextual criteria. These also motivate the operation of an article selection rule and an accent placement rule. In English the T-rules assign the appropriate article and accent, but no word order permutation rule is applied.

Chomsky claims that the system of rewrite rules that constitute his 'categorial component' should carry out two distinct functions. He writes: "The branching rules of the base (that is, its categorial component) define grammatical functions and grammatical relations and determine an abstract underlying order" (Chomsky, 1965: 136), cf. also pages 123f. Bierwisch also attaches importance to the ordering of elements in the terminal string when he writes: "Da auch im Formationsteil den auftretenden Elementen eine bestimmte Reihenfolge zugeordnet wird, ergibt sich die Notwendigkeit, daß wir eine
Reihenfolge der Elemente für grundlegend ansehen müssen, daß wir also eine Endkette ableiten, aus der die übrigen Sätze durch Permutationen hervorgehen. Diese Endkette muß vor allem die Bedingung erfüllen, daß sie die syntaktischen Beziehungen möglichst einfach darstellt, ... Eine solche Endkette kann durchaus zunächst eine fiktive Reihenfolge enthalten, die in keinem Satz wirklich auftritt" (Bierwisch, 1966: 34).

The claim that the order of elements in the terminal string may be fictitious is justified in so far as the first function of the FS-rules, that of defining the constituent structure of the sentence, has to take precedence. Closely related constituents should be closely grouped in the underlying representation and the motivation to generate a terminal string in which the order of constituents corresponds to a possible or normal occurring order should not lead to a misrepresentation of the hierarchical structure underlying the linear structure. The question as to what arrangement of underlying categories is optimal for German is unproblematic as far as the relational constituents are concerned in so far as the syntactic norm is a direct reflection of underlying syntactic relations. With regard to the verb, Bierwisch argues a case for considering the underlying position of the verb to be sentence-final by noting that (i) separable prefixes, which are most closely linked to the verb, and nonfinite verb forms occur sentence finally, (ii) the verb in subordinate clauses and infinitive constructions is clause-final. Similar claims that the underlying sentence structure for German is SOV rather than SVO have been made by other linguists (cf. Bach, 1962: 266; Esau, 1973: 41ff.).
Ross (1970) asserts that the underlying order for German is SVO. It should be pointed out that Ross' evidence in support of an underlying SVO order is confined to his particular analysis of gapping and that gapping represents the only evidence on which his SVO hypothesis rests. Furthermore, a reanalysis of Ross' gapping paper by Maling (1970: 135-43) leads to the conclusion that Ross' account of gapping is incorrect and that the underlying structure order of German should be SOV. Maling regards the gapping process as a property of surface structure and seeks therefore to further substantiate her claim in terms of the deep structure ordering of dative and accusative objects and the verb. The conclusion Maling arrives at reads as follows: "Unless one denies the generalization and the relevance of unmarked order in syntax, German must be an SOV language" (1970: 142).

Bierwisch sets up the following formation rules:

(F1) Satz \rightarrow (I)S
(F2) S \rightarrow Nom_0 + VP
(F3) VP \rightarrow HV + Aux
(F4) HV \rightarrow (VE) (Pv) Vb
(F5) VE \rightarrow (Advb) (Obj)
(F6) Obj \rightarrow \begin{cases} (Nom_2) (Nom_1) \\ Nom_3 \end{cases}

which may be explained in verbal terms as follows:

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1 Ross' claim that the underlying order for German is SVO is also supported by Lehman (1971). Note, however, that Lehmann does point out that Modern German is an inconsistent SVO language.
(F1) : (I) is an optional element to distinguish various sentence types; e.g. imperative, question and declarative sentences

(F2) : S is expanded on the assumption that all German sentences consist of a grammatical subject and a predicate

(F3) : VP is expanded into a carrier of tense and mood ('Aux') and the 'main verb complex' which includes all the remaining constituents plus the verb

(F4) : HV is expanded into Vb which dominates the verb and certain constituents which are syntactically close to the verb, VE - a complex of further verbal complements and Pv - the node introducing particles of negation and affirmation

(F5) : VE is expanded into both adverbial adjuncts e.g. time, place and manner and an object node

(F6) : Obj is expanded to enable the generation of five different object combinations - (1) strings without objects, (2) those with an accusative object, (3) those with a dative object, (4) those with both an accusative and dative object, (5) those with a genitive object. This rule does not generate accusative - genitive object combinations; the genitive in such a combination is generated by one of the possible expansions of Vb.

Taking the following derived sentence as an example

(74) Morgen wird Peter den Brief bestimmt erhalten

the rules (F1) - (F6) generate an underlying structure as represented by the following phrase marker:
In a review article on Bierwisch's work, Hale (1966) points to certain inconsistencies relating to the motivations underlying Bierwisch's analysis and their actual application as reflected in the formation rules he devises. The revision suggested by Hale relates to the position of Pv, Advb and Vb in the underlying representation. He reasons his argument as follows:

(a) Pv: applying the notion of 'distance' to Pv, Hale points out that the position assigned to it in the underlying string is not the position that Pv normally occupies since any expansion of Pv seems possible with just about any expansion of VE or Vb. This is not the case with VE and Vb with respect to each other since expansions of VE and Vb include categories relevant to the subcategorization of the verb and are therefore closer to each other than Pv is to either of them, yet all three are dominated by the same node HV and furthermore Pv separates VE and Vb. Pv should thus be more distant from Vb than VE in the underlying representation.
In fact, in terms of constraints on expansion, Pr is similar to Aux and should be no closer to Vb than Aux is.

(b) Advb : considering again the notion of distance, (F5) expresses the claim that Obj is closer to Advb than it is to Vb, yet here too Advb and Obj are subject to divergent cooccurrence constraints - Advb consists only of adverbials that can occur in any sentence regardless of the expansion of Vb. This being the case Advb would appear to have about the same 'distance' from Vb as Pr and Aux.

(c) Vb : the above repositioning of Advb and Pr in the underlying representation amounts to a distinction between categories relevant to the subcategorization of the Vb and those which can occur irrespective of verb class. Extending this notion to Vb, it seems plausible to include the nuclear constituents relevant to the expansion of Vb (these include among others adverbs of direction, place and time and prepositional objects) together with the objects dominated by the node Obj in a continuous syntactic frame dominated by the node that dominates the major category to be subcategorized. This is illustrated in the following fragment phrase marker

\[ \text{fig. 4} \]

\[
\begin{array}{c}
\text{... HV ...} \\
\text{Nom}_1 \quad \text{Nom}_2 \quad \text{Acc} \quad V
\end{array}
\]

Such an underlying structure may be generated by the following rules which Hale proposed to replace (F1) - (F6):
(1) \( \text{Satz} \rightarrow I(S) \)

(2) \( S \rightarrow \text{Nom} + \text{VP} \)

(3) \( \text{VP} \rightarrow (\text{Advb}) (\text{Pr}) \text{HV} + \text{Aux} \)

(4) \( \text{HV} \rightarrow \begin{cases} (\text{Nom}_1) \\ (\text{Nom}_2) \\ \{\text{Acc}\} \\ \{\ldots\} \end{cases} \)

(where ... indicates omission of options under the expansion of HV for the sake of clarity; Acc is the symbol Bierwisch adopts to represent the category directional adverb)

Hale's revision, as he himself points out, can be supported in terms of various motivations suggested by Chomsky. It is important in that it faithfully translates syntactic relations, which Bierwisch defines in terms of the notion of 'closeness', into a set of rules that generate underlying structures. As Hale writes: "The notion of 'closeness' which we extracted from Bierwisch, then, has its fuller interpretation in terms of what subcategorizes what in deep structure" (1966: 310).

---

It is expedient at this point to illustrate the representation of syntactic relations in the underlying structure in the form of branching-tree diagrams. I shall begin by juxtaposing a Bierwisch-type phrase marker with a Hale-type phrase marker for the derived sentence (75) Jeden Tag bringt die Mutter ihren Sohn in die Schule.

I then propose to proceed to a further revision of the already revised formation rules and to discuss the motivations for doing so. There are basically two points I wish to make: (1) the question of a hierarchical order among relational constituents (nuclear elements) themselves in terms of cohesion with the verb; (2) the position of the grammatical subject in the underlying structure hierarchy of elements.

Bierwisch (1966: 35ff) relates the position of a nuclear constituent in the linear structure with its closeness, in terms of syntactic cohesion, to the verb. In a sentence without contrastive or emphatic accent, he states that "die Satzglieder um so näher am Satzende stehen, je enger sie zum Verb gehören. Das Akkusativobjekt, das aus vielen intuitiven, aber explizierbaren Gründen als näherees Objekt gilt, folgt normalerweise dem Dativobjekt, das als ferneres oder indirektes Objekt gilt. Richtungsangaben, die besonders eng zum Verb behöre, müssen noch hinter dem Akkusativobjekt stehen". He takes the sequence $NP_{Dat} + NP_{Akk} + ADV_{Dir}$ to be the basic, neutral order of elements. He does not go into the explicable reasons, yet a number of other linguists support this view. Heidolph (1964: 101ff.)
fig. 5

Bierwisch-type p-marker

Die Mutter jeden Tag ihren Sohn in die Schule bringt $\emptyset$

fig. 6

Hale-type p-marker

Die Mutter jeden Tag ihren Sohn in die Schule bringt $\emptyset$
also argues that the order $NP_{\text{Dat}} + (NP_{\text{Acc}} + V)$ is fundamental for German. He supports this view by the observation that in nominalizations of verb phrases containing both objects, the accusative object invariably becomes a genitive attribute immediately following the verbal noun, and the dative object is transformed into a prepositional phrase in which the selection of the preposition is not determined. The following are given as illustrative examples

1 2 3
(76) das Anhängen des Wagens an den Zug

1 2 3
(77) die Erstattung der Reisekosten für Tagungsteilnehmer

where the superscript numbers 1, 2 ... indicate the degrees of closeness of relation to the verb, these progressing in linear fashion from left to right. Hartung (1966: 24ff.) also takes account of syntactic hierarchy in terms of varying degrees of closeness of constituents to the verb. He, like Hale, criticizes Bierwisch's PS-rules "da sie zu Stammbäumen führen, in denen alle Objekte und die Mehrzahl der Adverbialbestimmungen auf jeweils einen gemeinsamen Knoten zurückgehen und damit als geschlossene Komplexe neben dem Verb erscheinen. Die linguistische Erfahrung besagt jedoch, daß die Satzstruktur weniger durch die Beziehungen der Objekte untereinander charakterisiert ist, als vielmehr durch die Beziehungen zwischen den verschiedenen Objekten und dem Verb. Diese Beziehungen können eng oder weniger eng sein und z.B. in einer streng festgelegten Reihenfolge der Objekt und Verb gesagt wurde, gilt bis zu einem gewissen Grad wahrscheinlich auch für das Verhältnis der Mehrzahl der Adverbialbestimmungen zum Rest des HV-Komplexes" (Hartung, 1966: 24f.)
In the light of the above evidence it would seem desirable to formulate the PS-rules in such a way as to represent the hierarchical relations between various objects, adverbial complements and the verb. I propose the following tentative set of rules to account for this, whereby I concentrate on the hierarchy in the string

\[ NP_{\text{Dat}} + (NP_{\text{Akk}} + (ADV_{\text{Dir}} + v)) \]

1. \( S \rightarrow NP_{\text{Nom}} + \text{Predicate Phrase (PDP)} \)
2. \( \text{PDP} \rightarrow (\text{Adv}) \text{ Nucleus} + \text{Aux} \)

\[ \begin{cases} \text{V} \\ NP_{\text{Dat}} + \left\{ \begin{cases} \text{Ncl}^* \\ \text{V} \end{cases} \right. \\ NP_{\text{Akk}} + \left\{ \begin{cases} \text{Ncl}^{**} \\ \text{V} \end{cases} \right. \\ ADV_{\text{Dir}} + \text{V} \end{cases} \]

3. \( \text{Ncl} \rightarrow \left\{ \begin{cases} \text{NP}_{\text{Akk}} + \left\{ \begin{cases} \text{Ncl}^{**} \\ \text{V} \end{cases} \right. \end{cases} \right. \)

4. \( \text{Ncl}^* \rightarrow NP_{\text{Akk}} + \left\{ \begin{cases} \text{Ncl}^{**} \\ \text{V} \end{cases} \right. \)

5. \( \text{Ncl}^{**} \rightarrow ADV_{\text{Dir}} + \text{V} \)

The above rules generate any of the following strings:

i. \( NP_{\text{Nom}} + V \)
ii. \( NP_{\text{Nom}} + NP_{\text{Akk}} + V \)
iii. \( NP_{\text{Nom}} + NP_{\text{Dat}} + V \)
iv. \( NP_{\text{Nom}} + ADV_{\text{Dir}} + V \)
v. \( NP_{\text{Nom}} + NP_{\text{Dat}} + NP_{\text{Akk}} + V \)
vi. \( NP_{\text{Nom}} + NP_{\text{Akk}} + ADV_{\text{Dir}} + V \)
vii. \( NP_{\text{Nom}} + NP_{\text{Dat}} + NP_{\text{Akk}} + ADV_{\text{Dir}} + V \)
The p-marker for a derived sentence such as Bierwisch's example (78) Der neue Schüler hat seinem Freund das gesuchte Buch in die Tasche gesteckt would have the following form

If the above p-marker is compared with the corresponding p-marker generated by Hale's proposed rules, it will be evident that the difference lies in the hierarchical representation of the nuclear constituents \( NP_{Dat} \), \( NP_{Akk} \) and \( ADF_{Dir} \). It may also be noticed that the above p-marker retains one valid feature of Bierwisch's original rules which Hale does not observe in his revision – i.e. the hierarchical distinction between Obj and the verbal complements (e.g. \( ADV_{Dir} \)) relevant to an expansion of Vb (expressed in terms of Bierwisch's notation). What is of course observed throughout is the hierarchical distinction between Advb and Obj.
I now propose to discuss the position of the grammatical subject $\text{NP}_S$ and the validity of the notions 'subject' and 'object' in underlying structure. A consistent application of the notion of valency calls into question the traditional bipartition of the sentence into grammatical subject and grammatical predicate. The question which presents itself here is to what extent the grammatical subject should be assigned a special position in the sentence. In terms of the above discussion on hierarchical constituent structure the grammatical subject, being a relational constituent, would appear to be closer to what I have called 'nucleus' than say elements relevant to the expansion of Advb. Indeed, it is surely relevant to the expansion of nucleus itself and this ought to be represented in the underlying structure. Fourquet (1959, 1970, 1971a, 1971) seems to accept this in his 'hierarchy of complexes'. An example often cited by him is

\begin{eqnarray*}
\text{(79)} & \text{Dann} / \text{schlagen} / \text{die Studenten} / \text{Herrn Professor} / \\
& \text{die Fenster} / \text{ein}
\end{eqnarray*}

He refers to the syntagmatic or abstract structure ('syntagmatische Struktur', 1971: 13f.) of the sentence to which he assigns the graphic representation

\begin{figure}
\centering
\includegraphics[width=0.5\textwidth]{fig8.png}
\caption{Diagram of constituent structure.}
\end{figure}
He explains this structuring in the following way: "Wir nehmen an, daß nur ein Satzglied $G_1$ mit dem Verb (genauer dem Verblexem) eine Konnektion eingeg; diese Konnektion ergibt einen Komplex $K_1$; an diesen fügt sich nur ein zweites Glied $G_2$ an, das also nicht mehr mit dem Verb, sondern mit einem das Verb enthaltenden Komplex verbunden ist, und so weiter" (1971: 12). This structuring can also be represented as: $(G_n .... (G_1 K))$.

Fläming (1971) also refers to the varying degrees of cohesion between the valency dependent elements and the verb. Pointing to Fourquet's representation he writes: "Gerade diese differenzierte Hierarchie der satzinternen Struktur vermag das Valenzmodell in der bekannten Form nicht angemessen abzubilden, während etwa das Satzmodell einer Konstituentenstruktur-Grammatik dem offensichtlich - zumindest in den Grundzügen - besser gerecht zu werden vermöge.

(Reference made to Bierwisch, 1966 in a footnote) Demgegenüber kann ein solches Modell nur mittelbar die Valenzbeziehungen zwischen Verb und Ergänzungsbestimmungen abbilden, besonders die Beziehung zwischen Verb und Subjekt, das bei zahlreichen Verben spezifischen Selektionsbeschränkungen unterliegt, wird nicht deutlich" (Fläming, 1971: 112).

With the exception of the subject, which I am dealing with here, the syntactic hierarchic relations between verb and relational constituents are accounted for in my proposed PS-rules above and these are clearly represented in the accompanying p-marker. It now remains for the subject to be accounted for in the underlying representation in terms of its position in the syntactic hierarchy.
A further factor in relation to $\text{NP, S}$ also needs to be taken into account. It cannot be maintained that the subject constitutes an homogeneous category. In English, for example, $\text{NP, S}$ can express syntactic meanings which in other languages do not regularly assume this function. Compare

(80) I am cold
(80a) Mir ist kalt
(81) I am freezing
(81a) Mich friert / ich friere
(82) I am hungry
(82a) Mich hungert / ich hungere
(83) This extensive renunciation of force also includes the mutual obligation ...
(83a) Unter diesen umfassenden Gewaltverzicht fällt auch die gegenseitige Verpflichtung ...
(84) The report also touches upon issues which are perhaps deserving of greater attention
(84a) Im Bericht werden auch Fragen berührt, die vielleicht größere Aufmerksamkeit verdienen
(85) This attitude is the only possible attitude that fosters tolerance
(85a) Nur durch diese Einstellung kann sich Toleranz entwickeln
(86) He has no friends left to appeal to
(86a) Ihn sind keine Freunde geblieben, an die er sich um Hilfe wenden könnte
(87) Their pockets were simply bursting with watches, rings and jewellery. Their wallets were stuffed with notes.
(87a) Aus ihren Taschen quollen die Uhren, die Ringe, die Schmucksachen. Ihre Brieftaschen platzten vor Geldscheinen.
A comparison of the above pairs of examples shows that no universal property is to be assigned to \( \text{NP}, S \) in deep structure. The notion 'subject of' would appear to be more relevant to the surface structure representation than to the underlying structure and there seems to be a need to recognize a deeper and more universal layer of structure in accounting for relational constituents and the relations holding between these and their respective verbs. Nor is it a question of differences between various languages: no constant value may be attached to the grammatical subject in either English or German in terms of the syntactic meanings it can express and it is precisely these meanings that indicate otherwise often covert relations holding between constituents. It would appear that significant semantic relations may be represented in different languages differently. Thus, sentences with language-specific surface representations may reveal universal (or more universal) deep structures which can be expressed in terms of semantic notions or semantic-syntactic categories.

It was such observations relating to semantically relevant relational constituents in underlying representations that prompted Fillmore (1968) to question the linguistic validity of the notions 'subject' and 'object' and conclude that a distinction between the two as a basis for representing the constituent structure of sentences is irrelevant for deep structure analysis. If it is so, then, that subject and object are not regularly applicable to underlying structure representation, Fillmore may well be right in
posing that we have to recognize a deeper and more universal layer of structure, i.e. that other relational constituents other than subject and object must be taken as basic (cf. Fillmore, 1968: 17). Fillmore proposes that nuclear constituents should be represented in terms of semantic-syntactic categories or 'cases' as he calls them such as 'Agent', 'Instrumental', 'Dative' (later 'Experiencer')^1, 'Object', 'Locative'. Each verb is assigned a case frame, the selection of cases depending on the character, i.e. semantic class of the verb. Each case occurs only once in a given sentence. In valency terms, the positions opened up by the verb may be determined in terms of semantic or case categories - e.g. give/geben combines with the semantic categories Agent, Object, Beneficiary which may be expressed in surface structure as subject, object and indirect object/dative object respectively.

Relational constituents may be regarded as semantically relevant slot fillers which are translated into categorial constituents in the formation of the surface structure. It is at this stage that one case category is assigned subject function and, as the above examples (80) - (87) show, subject selection may vary from language to language. In the German examples included in this set the subject expresses the semantic notions of Patient or Experiencer (80), (81), (82) and (86); Locative (83), (84) and (87) and Source in (85). Source represents the inanimate force causally

^1 cf. Fillmore, 1969
involved in a state or process (cf. Babcock, 1972; Kirkwood, 1973). To some extent subject selection is related to historical development. In English the process of subject selection is far advanced in so far as fewer restrictions than in German seem to operate here. This would seem to be explainable in terms of the predominant influence of the grammatical principle in Modern English. It is interesting to note in this respect that similar signs are observable in Modern German: cf. the type *mich friert / hungert / dürstet* where the complement of a one-place verb may be realized by the nominative case, *ich bin hungrig / durstig, ich habe Hunger / Durst*.

A comparison of English and German in terms of the syntactic meanings that the subject can express highlights the function of word order. What is striking about the pairs of English and German sentences (80) - (87) is that they manifest similar configurations of semantic categories. This aspect of word order will be looked at in greater detail in the following chapter.

Fillmore's deep structure consists of the constituents *proposition (P)* and *modality (M)*. P is expanded as a verb and one or more case categories; it is a tenseless set of relationships involving verbs and nouns. M includes such modalities as sentence negation, tense, mood and aspect. This may be represented in rule form in the following way:

i. \( S \rightarrow M + P \)

ii. \( P \rightarrow V + C_1 + C_2 + \ldots + C_n \)
There is no notional case subject, since the notion 'subject of' has no semantically constant value attached to it. The sentence is not built up from the traditional subject-predicate configuration. It is the choice of verb that determines the structure of the sentence.

In adopting a Fillmore-type approach a way offers itself to group all the relational constituents (one of which will finally be subjectivized as surface subject) together. Yet in doing so, we are back to a non-hierarchized underlying structure. The solution which suggests itself is to map Fillmore's approach onto the underlying structure proposed in fig. 7 above. This would produce the following underlying representation for a string consisting of the case categories Agent, Beneficiary, Object:

fig. 9

---

I derive the notion Op (Operator) from Seuren (1969) which in some respects is not dissimilar from Bierwisch's category I.
Syntactic cohesion and the Sequence of Elements

This section will be devoted to an analysis of the relevance of the notion of syntactic cohesion as a factor determining the sequence of elements. The discussion will be based on a large corpus of illustrative examples of certain sentence types. As above, I am concerned here primarily with element sequence prior to the operation of contextual criteria. Context boundness also has an important influence on the position of elements; the resultant word order is determined by the interrelation between various criteria. A discussion of the interplay of the various means will be reserved for a later chapter. Here the neutralization of contextual criteria makes it possible to isolate syntactic criteria and investigate their relevance for element order independent of other criteria. By a neutralized context I mean independence from a preceding context, i.e. first sentence eligibility. Before proceeding to review and expand upon the valency models discussed at the beginning of this chapter, a few formal and theoretical remarks relating to the notion of syntactic cohesion would appear to be relevant.

It can be observed that the position of infinite verb forms in German is sentence-final. The position of separable prefixes also appear in sentence-final position, thus indicating that elements closely bound to the verb also occur in final or immediate pre-final position:

(88) Der Abgeordnete ging zur Opposition über

(89) Der Abgeordnete ist zur Opposition übergegangen.

This reflection of inherent cohesion in topological distance is more conclusive with regard to non-verbal elements in the case of the
so-called 'Verbzusatz'. In the following examples

(90) Ich fahre Rad - bin radgefahren

(91) Die schon erwähnte Neigung zu paralleler Reihung macht auch vor den präpositionalen Attributen nicht halt (cf. Halt finden)

(92) Nehmen Sie morgen an der Sitzung teil?

(93) Zwischen Göttern und Königen hat eine besondere Beziehung statt, an der die Beherrschten keinen Teil nehmen

(94) Er sieht aus wie das, was er ist, ein britischer Diplomat, und er vertritt eine Tradition, die den Vereinten Nationen bitter not tut.

(95) Der gleiche Konflikt tritt auch bei der Rassenfrage zutage

(96) Er hat eine Versöhnung zwischen ihnen zustande gebracht

there is a clear tendency for a noun, entering into a close association with a verb, to lose its nominal features ('nounness'). This is further indicated by the use of nicht in negated sentences (cf. nicht teil: keinen Teil). Similar characteristics are to be observed in the case of the so-called 'feste Verbindung' (FVG) ('verbo-nominal complexes') - indeed, the boundary here is a fluid one, cf. zutage treten: zum Vorschein kommen. In the following example Stellung in the combination Stellung nehmen + zu retains its overt noun features in respect of its capital letter and formal independence but not necessarily in respect of negation and adverbial qualification:

(97) Ich möchte dazu (keine / nicht) (positiv / sachlich)

Stellung nehmen.

The rank order of the de-nominalizing or verbalizing process would appear to be as follows:

(1) qualification by adverb instead of adjective and negation expressed by nicht instead of kein;
(2) replacement of nominal capital by small letter;
(3) prefixing.

In the syntactic norm the noun phrase or prepositional phrase entering into a verbal complex with a semantically weak verb (NP\_FVG; PP\_FVG) will take up final (or immediate pre-final) position in the sequence of elements, and any constituent dependent on the complex will precede the latter in sequence. Permutations of this syntactic norm may be motivated by contextual criteria and I leave this discussion open until the operation of these criteria are investigated. I shall briefly review various FVG-structures and relate these to the order of elements.

\[
\begin{align*}
\overline{NP} + V_f G_f
\end{align*}
\]

(98) Der Gedanke des Zivilschutzes hatte im Bewuβtsein der Bevölkerung zumindest vorübergehend erheblich Schaden gelitten
(99) Sie müssen immer ausreichend Spannung haben
They must always be sufficiently tensioned.

The above complex may open up a relational slot to be filled by e.g. a dative or prepositional object.

\[
NP_{Dat} + \overline{NP} + V_f G_f
\]

(100) Wir messen einer Konferenz große Bedeutung bei
We attach a great deal of importance to a conference
(101) The white Rhodesians have found that they are able to defy the world and get away with it
Die weißen Rhodesier haben festgestellt, daß sie der Welt die Stirn bieten und damit durchkommen können.
Magnifizen machen von ihrem Hausrecht Gebrauch
Man hielt A. für einen Pragmatiker, weil er aus einer
langen Erfahrung Nutzen zog.

The above examples may be assigned the following structure in terms
of syntactic cohesion which is directly reflected in the actual
sequence of elements

fig. 10

\[ \text{PO} + \sum^{\text{NP}_{\text{FVG}}} + \text{V} \]

Soziale Probleme kommen heutzutage nicht zur Sprache
Es ist immer noch Zeit für Smith, die Rhodesier und
Wilson zur Vernunft zu kommen.

As with the type \[ \sum^{\text{NP}_{\text{FVG}}} + \text{V} \] the prepositional type may also open
up positions to be filled by other constituents.

\[ \text{NP}_{\text{Akk}} + \sum^{\text{PP}_{\text{FVG}}} + \text{V} \]

Amerikanische Liberale führen ihr Rassenpolitik ins Feld
Das Angebot einer Diskussion über Berlin soll die sowjetische
Bereitschaft zur Entspannung auf die Probe stellen
The offer to discuss Berlin is designed to put Soviet
readiness to relax tension to the test

\[ \text{NP}_{\text{Dat}} + \text{NP}_{\text{Akk}} + \sum^{\text{PP}_{\text{FVG}}} + \text{V} \]

Der Premierminister brachte der Bevölkerung die Gefahr
ihrer Selbstgefährlichkeit zum Ausdruck
Das sowjetische Außenministerium hat gestern eine Reihe westlicher und osteuropäischer Botschafter von der bevorstehenden Reise Kossygin's in Kenntnis gesetzt.

The sequence of elements in the examples (108) - (109) suggest the following underlying hierarchical representation where the nuclear constituents are labelled in terms of case categories. This solution would seem the more suitable since no semantically constant value may be attached to the surface structure constituents: \( NP_{\text{Akk}} \) which is present in both (108) and (109) expresses the case category Experiencer in (109) and Object in (108).

![Diagram](image)

A test of the cohesion of the FVG is the predictability of the nominal element: though often being placed at the end of the sentence its occurrence reveals a high degree of predictability due to its function as an essential feature of the meaning of the complex and the restrictions on the occurrence of another constituent. A few examples will illustrate this in which the nominal element is omitted:

(110) Eine Konferenz von Linguisten und Vertretern angrenzender Fächer hat zu den Gedanken Whorfs im ganzen positiv genommen

(111) ... durch die Aufforderung an die Bundesregierung von der ihr eigenen Gesetzesinitiative ... zu machen
Das macht auf den Jungen doch ________

Hierauf legt vor allem die amerikanische Richtung ________

The slot fillers are easily predicted: (110) Stellung; (111) Gebrauch;
(112) Eindruck and (113) Gewicht/Wert. In certain cases it may be
possible to apply a substitution test, whereby the complex can be
expressed by a single lexical item. A few examples are: Gültigkeit
haben : gelten; eine Entscheidung treffen (fällen) über : entscheiden
über; Verwendung finden : verwendet; in Ordnung bringen : ordnen;
zur Anwendung gelangen : angewandt werden. This is often reflected in
English probable equivalents: die Stirn bieten : defy; Kapital
schlagen aus : capitalize on; Anklang finden bei : appeal to;
Ausdruck finden in : be reflected in.

These arguments relating to the high degree of cohesion between
verb and nominal element in complexes of this kind also apply to other
relational constituents, particularly directional adverbs and valency-
dependent adverbs of place and time. These constituents are all
essential extensions of the meaning of their respective verbs. Verbs
like legen, setzen, stellen, fahren have much in common with the
'function verbs' of the verbo-nominal complexes. Here too the degree
of predictability of occurrence is high: the constituents co-occurring
with these verbs are essential meaning markers - e.g. legen in Bier
legen is distinguished from legen in auf den Tisch legen by the
relational constituent with which it co-occurs, also Auto fahren,
nach London fahren.

It is also possible in some cases to apply the substitution test
to the complex $\text{ADV}_{\text{Dir}} + V$ as was indicated above for the FVG. Many examples suggest themselves in English. Compare:

- to put into boxes/crates : to box/crate
- to put into bottles : to bottle
- to put into cans : to can
- etc ...

Similar instances may be quoted for German where the substitution of a directional adverb may be accompanied by the attachment of a verbal prefix to the verb as in:

- einäschern : in Asche legen (Häuser, eine Leiche)
- eingipsen : in Gips legen (das Bein, ein gebrochenes Glied)
- einheimsen : nach Hause bringen (Lorbeeren, Geld, Vorteile)
- einballieren: in Ballen verpacken (Kaffee, Baumwolle)
- einbinden : in einen Einband legen (Buch)
- eindeutschen: in die deutsche Sprache übernehmen (Wort, Ausdruck)
- einkapseln : in eine Kapsel einschließen (Medikamente)
- einballieren : in Ballen verpacken (Kaffee, Baumwolle)
- einbinden : in einen Einband legen (Buch)
- eindeutschen: in die deutsche Sprache übernehmen (Wort, Ausdruck)
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- einbinden : in einen Einband legen (Buch)
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- eindeutschen: in die deutsche Sprache übernehmen (Wort, Ausdruck)
- einkapseln : in
the verb than does $N_{Akk}$ which may co-occur with $ADV_{Dir}$. Here, as above, the actual sequence of elements, the syntactic norm, manifests this abstract ordering. Compare

(114) Er legte das Buch (vorsichtig / nicht) auf den Tisch

(115) Er zog den Brief aus seiner Tasche

(116) Er zog aus dieser Erfahrung großen Nutzen.

In (114) the constituent $N_{Akk}$ precedes $ADV_{Akk}$ in sequence. It is important to note that even when $N_{Akk}$ functions as rheme in a contextually dependent situation this ordering would normally remain unchanged, as in (117):

(117) Er hat ein Buch auf den Tisch gelegt.

The positioning of adverbs *vorsichtig* and the negative particle *nicht* also points to the cohesion of verb and $ADV_{Dir}$. (115) and (116) compare the sequencing of elements where the prepositional phrase *aus seiner Tasche* functions as $ADV_{Dir}$ and *aus dieser Erfahrung* as $PO$ dependent on the verb complex *Nutzen ziehen*. Permutations of this syntactic ordering are possible in a contextually dependent situation, yet with restrictions such as is indicated in (117) above.

The relative positioning of $N_{Dat}$ and $N_{Akk}$ have been much commented on. I have already referred to Drach (1963), Boost (1955), Bierwisch (1966) and Heidolph (1964). Staal (1967) reports that the investigations of Western Sanskritists point to certain 'preferential, traditional, habitual or, at least most frequent arrangements' of elements which include the relative order $N_{Dat} - N_{Akk}$ (cf. Staal, 1967: 51, 57, 60). Kirkwood (1969, 1973) also makes certain observations supporting the assumption that the neutral sequence is
dative + accusative. Where both objects are either indefinite or
definite (i.e. equally determined) the order will be that in which
dative precedes accusative. Compare

(118) Er gab einem Kind ein Buch / hat einem Kind ein Buch geschenkt
(119) Er gab dem Kind das Buch / hat dem Kind das Buch geschenkt

With the operation of contextual criteria NP_\text{Akk} may be thematic and
move to or towards the front of the sentence and NP_\text{Dat}
(contextually independent) will move to or towards the end. Compare

(120) Er hat das Buch einem Kind geschenkt
(121) Das Buch hat er einem Kind geschenkt

If the subject is contextually independent it may move to or towards
the end of the sentence if NP_\text{Akk} occupies initial position as in (122)

(122) Das Buch hat dem Kind ein junger Mann geschenkt.

The sequence

(123) \text{Ein junger Mann} hat dem Kind das Buch geschenkt

is marked for emphasis or contrast. Note also that if \text{ein junger Mann}
is contextually independent and does occupy initial position carrying
emphatic or contrastive accent, then the order of NP_\text{Dat} and NP_\text{Akk}
holds and not the reverse. Compare

(124) \text{Ein junger Mann} hat dem Kind das Buch geschenkt
(125) *\text{Ein junger Mann} hat das Buch dem Kind geschenkt

The position of dem Kind in (125) would normally only be possible with
emphatic accent on Kind (Kind being contextually dependent) as in

(126) Hans hat das Buch dem Kind geschenkt

but in (125) two elements qualify for this status and emphatic or
contrastive accent can only fall on one of them. A similar situation
occurs if geschenkt were to carry the accent. Compare
Halliday (1970: 335) distinguishes between unmarked and marked information structure. He claims that, in the unmarked instance, the new element comes last in the information unit, giving as examples:

(130) George takes his wife to the movies
(131) George takes his wife to the movies
(132) George takes his wife to the movies
(133) George takes his wife to the movies

In the unmarked case the highest degree of CD will be carried by the directional adverb. This is reflected in the actual sequence of elements and in the placement of the primary accent in (133), corresponding to the German sequence

(134) Hans geht mit seiner Frau ins Kino

where the criterion of syntactic cohesion and that of the relative degree of CD are in harmony. Halliday states that in (130) - (132) each presupposes certain contexts. (133), on the other hand, "presupposes nothing. It is not necessarily the 'answer' to anything at all; it may just be the beginning of a discourse. This is the sense in which it is unmarked. The unmarked form is unique in that it does not require that any element should be recoverable". In terms of the present analysis, it would seem that Halliday's unmarked case represents the case in which the criterion of syntactic cohesion operates to determine the sequence of elements in German.
The analysis proposed by Sgall (1972, 1972a, 1973) is relevant in this context. Sgall (1973: 45) proposes a distinction between 'communicative importance', determined by the roles of the participants in the semantic structure, and 'communicative dynamism', referring to the actual hierarchy of elements in a sentence, be it in accordance with the scale of communicative importance (as in the first or basic layer), or affected by deviating influence of context or situation (as in the second layer). In sentences not presupposing any context the distribution of CD is determined by the semantic structure of the sentence, i.e. "the hierarchy of CD is in accordance with a hierarchy determined directly by the roles of individual participants in the SR (semantic representation) of the sentence: for instance, the actor precedes the objective (goal) in Harry saw an EXPLOSION. Men read BOOKS. Many arrows hit the TARGET" (Sgall, 1973: 45). The scale of CD does not always correspond to the scale determined by the roles of the participants as the examples Sgall gives indicate: Books are read by MEN. An explosion was seen by HARRY. Sgall, like Halliday, also speaks of an unmarked case. Taking the example John writes poetry he writes: "This sentence has an unmarked ordering (...): John (1) writes poetry (2). But if there is an additional presupposition such as Somebody writes poetry, or, in other terms, if poetry (and not John) has been referred to in the preceding context, we get the marked ordering poetry (2) write John (1), ..." (Sgall, 1972: 286) This may be realized by the passive in English: Poetry is written by John. Note that Sgall is using 'marked' when actual sequential ordering is not in accordance with the systemic ordering.
In Sgall ( ), the systemic ordering of participants is related to the linear sequence of elements in sentences without topicalization (i.e., without the operation of contextual criteria). This investigation leads to the assumption that the systemic ordering for Czech and English is: Agentive, Dative, Objective, Direction, which is in line with the hierarchical order of elements in terms of syntactic cohesion. In the following illustrative examples no element is necessarily topicalized:

(135) I gave a boy an APPLE
(136) I told a colleague of mine about a new BOOK
(137) Fred sent me a letter to BERKELEY

whereas the following sentences manifest topicalizations of objective

(138) I gave an apple to a BOY
(139) I told a COLLEAGUE of mine about the new book

In (135) neither boy nor apple are contextually bound, whereas (138) presupposes that apples are given by the context.

It would appear, then, that there is a relation between the order of elements as expressed in the syntactic norm and the absence of presupposed contexts. Without the operation of contextual criteria, the actual sequence of elements will reflect a systemic hierarchical order which is determined by the semantic roles of the nuclear constituents. This assumption will now be examined in the light of a wide selection of sentence types.
Two-place verbs

\[ NP_{Nom} + V + NP_{Akk} \]

The most obvious type of sentence with this structure is that displaying the actor - action - goal pattern. In the absence of presupposed contexts the goal will carry the highest degree of CD. It is also the element most closely linked to the verb.

(140) Bundeskanzler Kiesinger wird am Montag in Berlin eine Ministerbesprechung leiten

(141) Einem Bericht zufolge unternehmen amerikanische Piloten zur Zeit in Kalifornien Probeflüge.

In English the primary accent also falls on the accusative objects

(142) The Federal Chancellor will chair a ministerial meeting in Berlin on Monday

(143) American pilots are at present carrying out test-flights in C.

In a contextually dependent situation other constituents could be assigned the primary accent, but then the sentences would be marked for certain presuppositions. For example, if the primary accent were to be located on the locative adverbial Berlin or Kalifornien the presuppositions might be formulated as The Federal Chancellor will chair a meeting somewhere in the case of (142) and American pilots are carrying out test-flights somewhere in the case of (143). This may also be represented in the form of a question - answer test.

Where is the Chancellor chairing a meeting? - In Berlin. In such a situation meeting is no longer contextually independent, but contextually bound. In German this would have an influence on the order of elements, resulting in a permutation of the syntactic norm, since in Berlin would follow eine Besprechung in sequence, as in:
(144) Er wird eine Besprechung in Berlin leiten.

The actor - action - goal pattern is not the only semantic structure that this surface representation may express. Compare

(145) Hans verursachte die Krankheit

(146) Hans ertrug die Krankheit.

In (145) Hans is Agent, in (146) Experiencer. Subjects may in some cases also express Locative meaning; cf. Teil II in (147):

(147) Im 1. Kapitel des Teil I werden nacheinander Ausgaben und Editionen von A, B, ... bewertet. Teil II enthält Beobachtungen zum Archetypus.

Substituting case categories for surface grammatical categories we get: A + V + O; E + V + O; L + V + O. The verb to have in English may enter into the case frames - E + O and = L + O: John has a book. The table has a book on it. For the thematic implications of have see Kirkwood (1973), Lyons (1971: 388ff.).

 NP_Nom + V + NP_Dat

Verbs governing the dative may also occur in different semantic sentence patterns. We may again distinguish between agentive and non-agentive subjects. The following are a few examples of sentences with agentive subjects:

(148) Das Parlament hat einem neuen Vertrag zugestimmt

(149) Die Politiker wohnen heute einer wichtigen Verhandlung bei

(150) 1962/63 wie 1958/59 hatte die französische Regierung sogar befürchtet, daß Amerikaner und Briten östlichem Druck nachgeben würden.

From the point of view of word order; the above are similar to the
sentences with accusative object and agentive subject. The primary
accent is located on the object. The same applies in English:

(151) The French Government feared that the Americans and the
British would succumb to Eastern pressure

The dative object, if contextually dependent, may occupy initial
position allowing another element, e.g. the subject to move to or
towards the end of the sentence - the latter being contextually
independent and rhematic:

(152) Der Verhandlung wohnte auch ein Beobachter der deutschen
Botschaft in Moskau bei.

In some cases the same verb may have an agentive or non-agentive
subject. Such verbs include begegnen, dienen, folgen. Some examples
are:

begegnen

(153) Die Regierung mußte im vorigen Jahr einem Notstand begegnen

(154) Überall begegnet einem hier eine reizvolle Mischung von
alt und neu
dienen

(155) Hans dient seit Jahren zwei Herren

(156) Ein Beamter dient dem Staat

(157) Einem Programm zur Säuberung und zur Neuordnung der
Gesellschaft dienten Euthanasie, Sterilisierung,
Umsiedlung und Germanisierung.

(158) Dem Gedanken der Förderung des Qualitätsstrebens dienen
eine Reihe von Vorschriften, die ...
folgen

(159) Hans folgte ohne Zögern seiner inneren Stimme
(160) Dem Mord in der Phantasie folgt die Angst
(161) Der landwirtschaftlichen Siedlung folgte die Industrialisierung

In the above examples, there would appear to be a relation between agentivity and the order of elements. In sentences with an Agent, i.e. (153), (155), (156) and (159), the order of elements in the syntactic norm is A + V + O. The initial position of O is only possible in a specific context and would presuppose the recoverability of O from the preceding context. Again this presupposition of context may be illustrated by the question and answer test: Wer mußte im vorigen Jahr einem Notstand begegnen? Wer dient dem Staat? Wer folgte ohne Zögern seiner inneren Stimme? A textual example of the order O + V + A is:


In sentences without an agent it would seem that the dative object may more readily move to the beginning of the sentence, depending possibly on the case frame of the verb. Compare

(163) Ws Zusätze mögen den Kriterien der Literaturhistoriker nicht immer standhalten

(164) Seinen eigenen Zusätzen fehlt der schneidende, lakonische Tonfall Büchners.
In (163) and (164) there would appear to be, underlying the surface
divergence of case distribution, a common configuration of semantic
categories with object appearing in final position. I shall be
returning to this question in the following chapter.

A common configuration of semantic categories with verbs
governing surface datives is E + O, where the category E is expressed
by the surface dative. A few examples are:
(165) Den Gründerstudenten behagte die Rolle, die sie innerhalb
dieser neuartigen Universitätsverfassung spielen durften
(166) Dem Präsidenten Hallstein gilt die Dankbarkeit der Europäer
(167) Liberalen Amerikanern war Großbritanniens Klassenstruktur
zuwider
(168). Den Russen schien an einer Regelung gelegen zu sein
(169) Keinem Kind, das eine Katze beim Ohr gezogen hat, nützt
wirklich die beliebte Reaktion der Eltern: "Was würdest du
sagen, wenn man dich am Ohr ziehen würde".

English equivalents manifest the same configuration of categories
though in the surface structure the dative is replaced by the
grammatical subject in conformity with the fixed SVO order of
Modern English:
(170) The students liked the role ...
(171) President Hallstein is due / has the gratitude of the
Europeans
(172) Liberal Americans disliked British class structure
(173) The Russians seemed anxious to get something settled
(174) No child who ever lived really benefited from the
time-honoured parental reaction to pulling the cat's
tail, 'How would you like it if someone pulled your ear?'

Other two-place verbs will be discussed in the light of
configuration of case categories in the next chapter. What has
emerged from this investigation of verbs governing accusative and
dative objects if (1) that there is no direct correlation between
surface category and underlying semantic (case) category, (2) that
there would seem to be an argument in favour of a distinction between
active and recessive sentences and the order of elements, (3) that
there is a tendency in terms of configurations of case categories for
the object to be located in final position (cf. A + V + 0, E + V + 0,
L + V + 0).

I shall now resume discussion of the manifestation of the
abstract notion of syntactic cohesion in the sequence of elements.
This is best investigated where there is more than one nuclear
constituent in the predicative section of the sentence.

Three-place Verbs

\[ \text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Dat}} + \text{NP}_{\text{Akk}} \]

The sequence \( \text{NP}_{\text{Dat}} \rightarrow \text{NP}_{\text{Akk}} \) represents the neutral (unmarked) sequence.
The relative closeness of the two constituents to the verb are in
such a case manifest in the actual sequence of elements. This is the
syntactic norm. This can be verified by the presupposition and
primary accent placement test: a given sequence of elements manifests the syntactic norm if it presupposes no context and has the primary accent located on the element most cohesively linked to the verb or verbal complex. The following are examples of the syntactic norm where the constituent NP_Dat precedes NP_Akk:


(176) Alle Abgeordneten schulden M. und N. aufrichtigen Dank.

(177) Die Eltern bringen in ihrer Unwissenheit dem Kind Schuldgefühle bei.


The above illustrative examples yield the following basic configuration of categories: A + V + E + O. E, the animate being affected by the action, may be extended to include institutions, countries and the like. The same holds for A, the animate instigator of an action or process.

(179) Ich spreche der Familie unseres früh abberufenen Kollegen H. Sch. und der Fraktion der Sozialdemokratischen Partei Deutschlands im Deutschen Bundestag die herzliche Teilnahme des ganzen Hauses aus.

(180) In den frühen Morgenstunden ließ London den europäischen Regierungen eine Note überreichen, in welcher der britische Standpunkt zum EWG-Beitritt dargelegt wurde.
Keine Regierung wollte den Frieden opfern, nur um Deutschland die freie Verfügung über seine westlichen Grenzgebiete vorzuenthalten.

In some cases, however, the corresponding element to E in the above examples cannot be included under E; though the relation 'affected' still pertains, the feature +animate does not. The problem is merely one of categorial designation: I tentatively suggest the case category AFFECTED (abbreviated AFF) which could perhaps subsume E.

Compare

Breschnjew dauerte es nach Chruschtschows Abhalterung volle fünf Jahre, bis er der sowjetischen Außenpolitik seinen eigenen Stempel aufdrückte

... ein Ganzes, das Kraft seiner Struktur einer Vielheit - Ordnung und Halt verleiht

Wo es der Lehrplan zeitlich erlaubt, wird der Literatur große Aufmerksamkeit bewidmet

The relative position of direct and indirect objects in English is relevant to the concept of syntactic cohesion and its manifestation in the sequence of elements. Confusion arises with regard to the degree of syntactic cohesion between these two nuclear elements (i.e. direct and indirect objects) and the verb and their neutral or unmarked positioning in the sequence of elements in so far as there would appear to be two word order possibilities: indirect object - direct object and direct object - indirect object, the verb preceding both objects in each case. Compare

He gave a girl a book

He gave a book to a girl.
An argument for regarding (185) as the basic order is that the primary accent falls on book which is in line with the basic unmarked case discussed above. (186) would normally be interpreted with primary accent on girl which underlines the thematic motivation behind this word order. Furthermore, the argument for regarding (185) as the basic type is strengthened in view of the fact that positional criteria suffice to differentiate between grammatical function which would seem to point to a word order norm. Kufner (1962: 43) points to this structural differentiation which he illustrates by inserting nonsense words as objects as in

(187) He gave the tove the wabe
(188) He gave the wabe the tove

where the second object is interpreted as the direct object in each case.

Historical arguments also appear to confirm this basic order.

Maling (1970: 141) suggests that the order of elements in Old English (OE) corresponds to the present position in Modern German as regards the type of sentence under discussion. It is assumed that the position of the verb in OE is sentence-final; thus the sequence dative + accusative + verb in OE reflects the principle of closeness of relation to the verb as in Modern German. The development from OE to ME (Middle English) is interesting in this respect as it is at this point that I would tend to disagree with Maling, or at least wish to qualify her analysis. Maling regards the direct - indirect object order in Modern English as the basic order. The source of the problem lies in the movement of the verb from sentence-final or predicate-final to predicate-initial position which is a feature of the development from
OE to ME. Maling's argument is that this change in the position of the verb has brought about a consequent reordering of the predicative constituents such that the accusative object, formerly following the dative object and standing next to the verb, followed the verb towards the front of the predicate. This is how, she claims, the Modern English dominant order of Direct object - indirect object arose - an ordering which was rare in OE. Maling refers to Einenkel (1916) to support her claim about the reordering of the OE dative + accusative + verb norm. Einenkel's statement on the issue is interesting in that he refers to the concept of syntactic cohesion, yet with modification in terms of 'constituent length' ('Umfang'), which I believe may be a key to a possible solution. Einenkel writes (1916: 186-7): "Von der me. Zeit an beginnen die nachgestellten Bestimmungen sich je nach der Enge ihrer Beziehung zu dem vorausgehenden Verbum sowohl als nach ihrem jeweiligen äußeren Umfange unter sich zu ordnen. Das erste Moment, wohl das wichtigere, wirkt dahin, daß dem Verbum zunächst Akkusativobjekte, dann Dativobjekte nachgeschickt werden, welchen letzteren die etwa übrigen adv. Bestimmungen folgen. Von dieser Ordnung wird im allgemeinen nur da abgewichen, wo eines der ersteren Elemente eines der letzteren an Umfang bedeutend überwiegt, in welchem Falle die letzteren den Vorrang erhalten". I shall investigate the claim regarding the relevance of syntactic cohesion in the light of illustrative examples distinguishing between the relative order of nuclear constituents and non-nuclear adjuncts on the one hand, and the relative order of the nuclear constituents themselves on the other.
As far as adverbial adjuncts are concerned, the claim would appear to be true. It recalls the above-mentioned 'principle of coherence of members' (Firbas, 1964: 115) and the notion of 'Kontaktstellung' (Admoni, 1962: 376-80), cf. also Kirkwood, 1969: 87.

(189) I am relying on your support at the meeting
(190) I am waiting for my friend at the station
(191) I have been to London several times this year
(192) He is going home tomorrow

In the syntactic norm, stress (indicated by underlining) would be assigned to the nuclear constituent, being more closely linked to the verb than the adjunct. This is also the element which is topologically closest to the verb. Thus the neutral interpretation of Chomsky's sentence

(193) He decided on the boat on the train

is

(194) He decided to go by boat (or: to buy the boat) when he was on the train

i.e. the order of elements is PO + Advb and not Advb + PO. The German equivalents of (189) - (192) above reveal a 'mirror-image' ordering of the English sentences:

(195) Ich habe mich auf der Sitzung auf deine Unterstützung verlassen
(196) Ich wartete am Bahnhof auf meinen Freund
(197) Ich bin in diesem Jahr mehrere Male in London gewesen
(198) Er fährt morgen nach Hause

In both English and German, however, the criterion of syntactic cohesion would seem to apply, the difference in surface organization being
explainable in terms of the different position of the verb in the two languages, in German it is predicate-final, in English predicate-initial.

Turning now to the relative positioning of the nuclear constituents with respect to one another, the criterion of syntactic cohesion, if applied to other relational constituents other than direct and indirect objects, e.g. directional adverbs, reveals some degree of inconsistency, if, that is, we accept Maling's basic order - i.e. direct object - indirect object. If the position of the direct object next to the verb and before the indirect object is to be taken as basic and a reflection of syntactic cohesion, then it would follow that in the case of a directional adverb and direct object occurring together the directional adverb, being syntactically more cohesive, would precede the direct object in sequence as in

(199) He put on the table the book yesterday
the German being
(200) Er hat das Buch gestern auf den Tisch gelegt
and not
(201) He put the book on the table yesterday
which is, however, the normal recurring order. There are, however, other factors to be taken into consideration, as Einenkel points out. His criterion of element amplitude recalls Behaghel's 'Gesetz der wachsenden Glieder (1932: 6) - "es besagt, daß von zwei Gliedern, soweit möglich, das kürzere vorausgeht, das längere nachsteht". This principle may help to explain the positioning of prepositional phrases as opposed to non-prepositional nominal constituents. There may also be a relation between this and Firbas' criterion of the
relative degree of CD carried by the various elements.

A combination of both these factors may explain the position of the 'to + NP' indirect object constituent in Modern English, as in

(202) John gave (the) flowers to a girl

which presupposes John gave flowers to somebody (cf. question-answer: Q - To whom did John give flowers?, A - to a girl). It would also appear, and that is why I suggest a combination of factors, that the 'to ...' indirect object form is also possible when the direct object is rhematic and carries the primary accent, as in

(203) John gives flowers to his sister every week

as opposed to

(204) John gives his sister flowers every week

I would argue that (203) represents a 'grammatical norm', possibly accountable for in terms of Flämig's 'abstraction' criterion (an analogous situation to the 'syntactic norm'). In German, the same 'grammatical norm' in the case of the an + NP_Akk dative-substitute would seem less relevant, since if this element is thematic it may precede a rhematic NP_Akk constituent:

(205) Im vorigen Jahr hat N. an seinen Vater lange, verwirrende Briefe geschrieben

(206) Die SED hatte an die Delegierten des SPD-Parteitages in Dortmund offene Briefe gerichtet, die von der SPD sämtlichen Delegierten ausgehändigt wurden.

It is worth noting also, perhaps, that, as is evident in the last example sentence, there is formal, if not functional, similarity between these forms and directional adverbs and this may or may not have a bearing on the positioning of these elements in the sentence.
In the basic type, however, (i.e. the syntactic norm), it is possible to distinguish between directional adverbs and dative-substitutes. Compare:

(207) N. put a book on the table every day
(208) N. gave his father a book every year
(209) N. gave a book to his father every year

Applying the presupposition and accent placement criteria, in the syntactic norm primary accent falls on table in (207) and book in (208) and (209). Since as a general rule the relational constituent carrying primary accent follows other relational constituents in sequence, I would regard (208) as being more basic than (209), the latter being rather a grammatical norm than a syntactic norm. Apart from the position of adjuncts, there is, to some extent, a similarity in the positioning of elements of the syntactic norm in English and German. In this respect it may well be that Maling's 'consequent reordering of the other VP constituents' following the movement of the verb from VP-final to VP-initial position during the course of the development from OE to ME was not as consistent as her claim suggests.

As a final remark on the relative sequence of direct and indirect object in English, or to use the case categories suggested above Affected (indirect object), Object (direct object), there is another means of achieving the case configuration A + V + AFF + O and of obviating the 'to ...' dative-substitute. Compare

(210) The Federal Government will submit new proposals to the Federal Parliament (next week)
The Federal Government will present the Federal Parliament with new proposals (next week) where the sequence Affected + Object is achieved by changing the surface structure from direct object - indirect object (Object - Affected) to direct object - prepositional object (Affected - Object). In German the configuration AFF + 0 is achieved by the surface order dative + accusative,

Die Bundesregierung wird dem Bundestag neue Vorschläge machen.

Other English examples where the order AFF + 0 is achieved are:

The editor of the book has prefaced his collection with an introduction

Der Herausgeber des Bandchens hat seiner Kollektion eine Einführung vorausgeschickt

The people of Great Britain have entrusted a Labour Government with the fate of the Nation

Die Bevölkerung Großbritanniens hat einer Labour-Regierung das Schicksal der Nation anvertraut.

It is interesting to note that the surface representation NP_{Akk} + PO also occurs in German as a basic type.

The sequence NP_{Akk} + NP_{Dat} occurs in German but this is marked for presuppositions; it is a permutation of the syntactic norm motivated by a particular communicative intention. Compare

Der Wissenschaftsrat hat am Freitag den ersten Teil seines Gesamtplanes zur Förderung der Wissenschaft dem Bundespräsidenten übergeben

Damit vertraute er die Führung der deutschen Politik einem Manne an, der ...
(219) Ohne nach der Annexion der Tschechoslowakei auch nur
eine kurze Pause einzulegen, wandte Hitler sein
Interesse Polen zu.

In (217) - (219) the dative object expresses the actual information
to be conveyed and thus functions as rheme which motivates its
movement towards the end of the sentence, i.e. the permutation of
the neutral unmarked order $NP_{Dat} + NP_{Akk}$. In (217) the Gesamtplan
zur Förderung der Wissenschaft is recoverable from the preceding
context and hence thematic. All the elements except for the
Bundespräsident are presupposed. (217) could be regarded as an
answer to the question: To whom has the Science Council presented
the first part of the plan? or What has the Science Council done with
the plan?, (the question test being employed to point out the
presupposed items). The answer, the non-contextually bound item, is
the Federal President (or in the case of the second question:
presented (it) to the Federal President). In (218) the information
to be conveyed is the description of the person responsible for
conducting German politics which is the function of the relative clause
dependent on einem Manne, der. Every item in this sentence is
recoverable from the immediately preceding context: Am 30. Januar
1933 ernannte Reichspräsident von Hindenburg (er) Adolf Hitler (einem
Mann ...) zum Reichskanzler (vertraute die Führung der deutschen
Politik an). In (219) Hitler's Annexion der Tschechoslowakei
presupposes interest in certain territories, one of these (= die
Tschechoslowakei) being named. The new information and hence rheme
is the specification of a second territory, Poland.
In the above examples the relation of the dative element to the verb is not the most cohesive one. It is, on the other hand, communicatively the most important element being contextually independent, the other elements being contextually bound. These sentences are marked for certain presuppositions which explains the departure of the order of elements from the syntactic norm. In so far as such sequences are felt to be departures from a given norm they are in fact an indication that a norm exists.

\[ \text{NP}^{\text{Nom}} + V + \text{NP}^{\text{Akk}} + \text{NP}^{\text{Dat}} \]

There is a class of verbs which take both an accusative and a dative object where the dative object regularly follows the accusative object in sequence. A few examples will illustrate this.

\textit{aussetzen} (jemanden/etwas (Akk) etwas (Dat) aussetzen)

(220) N. hat einen Freund dem allgemeinen Spott ausgesetzt
(221) Man sollte tropische Pflanzen der Feuchtigkeit aussetzen.

In each case the accusative object expresses the category Affected (AFF) and as such its position in actual sequence is in line with the position of this category in the examples cited above.

\textit{unterwerfen} (jemanden/etwas (Akk) etwas (Dat) unterwerfen)

(222) N. war bemüht, einen unabhängigen Staat seinen politischen Zielen zu unterwerfen.

In (222) the accusative again expresses the semantic category AFF, the configuration of cases being A + V + AFF + O. It is worth noting that if the agent is deleted by making the verb reflexive, the accusative object will become the grammatical subject as in
Die Adverbialen unterwerfen sich dem Gesetz der Nachstellung.

\[ \text{ausliefern (jemanden/etwas (Akk) etwas (Dat) ausliefern)} \]

\[ \text{entwinden (jemanden (Dat) etwas (Akk) etwas (Dat) entwinden)} \]

The configuration of semantic categories is again \( A + V + \text{AFF} + 0 \). There is also the possibility of using the 'an ...' dative substitute in surface structure:

\[ \text{Die Regierung hat heute den Beschluß gefaßt, geflüchtete Verbrecher an den Heimatstaat auszuliefern.} \]

\[ \text{Entwinden is an interesting case in that it represents the dative-accusative and the accusative-dative type. Compare:} \]

\[ \text{Die Polizei entwand einem Verbrecher die Pistole} \]

\[ \text{Die Organization X ist bemüht, unterdrückte Völker in aller Welt der Allmacht des Despotismus zu entwinden} \]

\[ \text{Das Volk hat sich der Allmacht des Despotismus entwunden.} \]

In (226) there is a correspondence between the sequence dative-accusative and the sequence of case categories AFF + 0. In (227) and (228), on the other hand, the semantic category AFF is expressed by the surface accusative. In such a case the accusative precedes the dative in surface structure. The important point about the word order in these sentences is that the same configuration of semantic categories is common to all, that of \( A + V + \text{AFF} + 0 \). Note also that (229) is similar to (223) after reflexivization.
There is another class of verbs which in surface structure takes two accusative objects. The similarity between the two NP_{Ak} constituents is a superficial one since both objects stand in a different relation to the verb. Here too there is a difference between the two objects in terms of the underlying semantic categories they express and the positions these occupy in the sequence of elements. Compare

(230) Herr N. lehrt seine Schüler die deutsche Sprache

(231) Herr N. bringt seinen Schülern die deutsche Sprache bei

As indicated in (231) the case frame of lehren is A, AFF, 0J7.

A similar case is presented by the verb kosten

(232) Das kostete mich (mir) viel Geld.

Grebe (1966: 489) writes: "Da sich das Sprachgefühl gegen die Hinzufügung zweier Akkusativobjekte zu einem Verb wehrt, weicht man auch in diesen Fällen immer wieder auf die allgemein übliche Grundform mit Dativ- + Akkusativobjekt aus". He quotes the following as illustration:

(233) Lange hatte er scheinbar vergeblich sich bemüht, ihn zu belehren, ihm die Sprache zu lehren

(234) Und dieses Zögern kostet seinem Sohn das Kaiserreich und ihm selbst die Freiheit

(235) Das kann mir den Hals kosten

(236) Es kann dir das Leben kosten.

Grebe also points out that the use of the dative case in the passive construction is also quite established:

(237) Mir ist Dankbarkeit gelehrt worden
This pattern is restricted to very few verbs in Modern German and alternative constructions exist in some cases. I have already pointed this out above, referring to the examples

(238) Der Premierminister hat den Abgeordneten seiner Verpflichtungen entbunden

(239) Der Premierminister hat den Abgeordneten von seinen Verpflichtungen entbunden

With some verbs the genitive only remains in fixed expressions. Cf.:

(240) Er belehrte ihn eines Besseren

with

(241) Er belehrte uns über die wahre Sachlage.

In these examples the common denominator again seems to be the configuration of semantic categories which is the typical basic type A + V + AFF + 0. This is also manifest in the case of the verb beschuldigen (jemanden einer Sache) which from the point of view of syntactic relations may be compared with the verb vorwerfen (jemandem etwas); the two verbs share common case frames which are realized in surface structure by divergent grammatical categories. Cf.

(242) Der amerikanische Außenminister hat die Russen bewusster Täuschung beschuldigt

(243) The American Secretary of State has accused the Russians of deliberate deception

with

(244) Der Außenminister hat den Russen bewußte Täuschung vorgeworfen

(245) The Secretary of State charged the Russians with deliberate deception.
Compare further the verbs berauben and rauben from this point of view, where one opens up positions in surface structure for the constituents NP_{Akk} + NP_{Gen}, the other positions for the constituents NP_{Dat} + NP_{Akk}:

(246) Angst um die Zukunft des Kindes verleitet Erwachsene dazu, das Kind seines Rechtes auf Spiel zu berauben

that is

(247) Erwachsene berauben das Kind seines Rechtes auf Spiel (A + V + AFF + O)  

(248) Erwachsene rauben dem Kind das Recht auf Spiel (A + V + AFF + O).

The following example also illustrates the occurrence of the case category source instead of the category agent:

(249) Die Haltung der Senatoren und Abgeordneten beraubt die Nixon-Doktrin ihres Kerns (S + V + AFF + O)

The hierarchy can be tested for presuppositions and accent placement in the way described above. Location of primary accent on the accusative element presupposes a specific context. The sentence

(250) Erwachsene berauben das Kind seines Rechtes auf Spiel

presupposes a specific context in which all the constituents except Kind are contextually bound. It is also worth recalling that Bierwisch includes the genitive object in the expansion of his category Vb - "ein enger zum Verb gehörender Teil" (cf. Bierwisch, 1966: 40, 44, 47, 85).

NP_{Nom} + V + NP_{Akk} + :PO

This pattern has already been referred to in connection with the sequence NP_{Akk} + NP_{Gen} - a relation was established between the constructions
(1) $NP_{Nom} + V + NP_{Akk} + NP_{Gen}$

and

(2) $NP_{Nom} + V + NP_{Akk} + PO$.

Since (1) is also related to the pattern

(3) $NP_{Nom} + V + NP_{Dat} + NP_{Akk}$

it is not surprising that (2) should be found to relate to (3) also.

All three surface types may manifest the underlying case configuration

$A + V + AFF + O$. It should be pointed out, however, that although the

three surface types may, in some cases, have underlying them a common

semantic sentence pattern other criteria may apply in terms of surface

permutations of the basic order, i.e. that under the operation of

contextual criteria surface structure representations such as (1), (2)

and (3) may be subject to divergent restrictions on the permutation of

their respective constituent categories. A common underlying case

configuration does not necessarily mean that surface representations

of this underlying structure will manifest corresponding sequences of
categories in a given context. A discussion of the divergent positional

criteria relating to the various grammatic categories (e.g. genitive

object, prepositional object) will be reserved for a later chapter since

this presupposes the operation of contextual criteria, both verbal and

situational.

A few examples of the type with $NP_{Akk} + PO$ are:

(251) Die Studenten haben die Regierung um eine Erhöhung ihres

       Stipendiums gebeten

(252) N. versuchte, die Tschechen zur Annahme solcher Bedingungen

       zu veranlassen
(253) Die Einwohner bringen den Bürgermeister zur Übergabe der Stadt an den Feind
(254) N./ (Die Umstände) zwang(en) M. zu einem weiteren Versuch
(255) N./Die Not drängte M. zu einer Entscheidung
(256) Ein im Grunde autoritaires Verhalten dient dazu, den Wähler von tatsächlicher politischer Macht, von politischem Einfluß abzudrängen

An analysis of the above sentences in terms of their underlying structure points to the configuration of case categories A (or: S) + V + AFF + 0. In each case the accusative object expresses the case category AFF. In (251) die Regierung is the entity at which the request of the students is directed, it is the receiver of the request. In terms of semantico-syntactic structure bitten belongs to the same category of verbs as jemandem etwas abbeteln / abfordern / abverlangen (cf. von jemandem etwas verlangen).

The verbs in sentences (252) - (255) i.e. veranlassen, bringen, zwingen and drängen belong to Fillmore's category of verbs like force and persuade which are insertable into the frame \[ S + D + A \] where D stands for DATIVE (cf. AFF), and S for embedded sentences, which Fillmore limits to the case element 0 (Fillmore, 1968: 28). Thus the example sentences (252) - (255) have in common the frame feature \[ A + AFF + 0 \], which is indicated also by the related verbs jemandem etwas aufzwängen / aufdrängen. It may, of course, be argued that sentences such as
(257) N. drängte M. zu einer Entscheidung
and

(258) N. drängte M. eine Entscheidung auf

are not synonymous and therefore not paraphrases of each other.

Consider the category expressed by M. in (257) and (258). In (258) M. is affected by a decision already taken, whereas M. in (257) is affected by being urged by the agent N. to take a decision. It may, therefore, be argued further that it is exactly this difference in the way in which an entity is affected that is brought out by the difference in surface structure, i.e. the difference in grammatical categories in

(257') NP_Nom + V + NP_Akk + PO

and

(258') NP_Nom + V + NP_Dat + NP_Akk.

Yet, on the other hand, the constituent NP_Akk in (257') does not correspond to NP_Akk in (258'): in (257) it realises the semantic category AFF, in (258) the category O. The constituents NP_Akk and NP_Dat in (257) and (258) respectively have more in common in terms of their relation to the verb than do NP_Akk in (257) and NP_Akk in (258).

I would therefore argue that any distinction one could make between NP_Akk in (257) and NP_Dat in (258) is not sequence-relevant. From the point of view of case category and relative positioning (AFF + O), NP_Akk in (257) corresponds to NP_Dat in (258) and PO in (257) corresponds to NP_Akk in (258).

Furthermore, the type NP_Nom + V + NP_Dat + PO also exists, e.g.:

(259) In Berlin unternimmt die Obrigkeit alles nur erdenklich Mögliche, um der Gerechtigkeit zum Sieg zu verhelfen.

Comparing (257) with (259) we get
In the light of (260) and (261) it would appear that M. in each case is affected in precisely the same way, yet in (260) M. is realized by the grammatical category NP\textsuperscript{Akk} and in (261) by the grammatical category NP\textsubscript{Dat}. In each case M. expresses the case category AFF.

In some cases it may be the constituent PO that expresses the semantic category AFF. Then the PO precedes the other relational constituent in sequence, e.g.:

(262) N. erwartet vom M. gute Leistungen
(263) N. erwartet gute Leistungen von M.
(264) N. verlangt von M. gute Leistungen
(265) N. verlangt gute Leistungen von M.

In the syntactic norm the constituent NP\textsuperscript{Akk}, in this case Leistungen, carries primary accent. Location of primary accent on M., as in (263) and (265) presupposes contextual recoverability of N. verlangt gute Leistungen. Some other examples of this type are:

- an/unter jemanden etwas austeilen
- von/über jemanden etwas hören
- an jemanden etwas liefern
- mit jemandem etwas tauschen
- an/unter jemanden etwas verteilen
- über jemanden etwas verhängen
The syntactically close relation between the constituent \( \text{ADV}^{\text{Dir}} \) and the verb has been commented on above. In the case of the above type the directional adverb, being an essential amplification of the meaning of the verb, follows the accusative object in sequence. It also carries primary accent in a contextually independent situation. This is illustrated by the following examples:

(266) N. hat ein Buch auf den Tisch gelegt
(267) N. hat seinen Wohnsitz nach London verlegt
(268) ..., er lege das Schicksal des tschechischen Volkes in die Hände des Führers des Deutschen Reiches
(269) N. setzte Drohung mit Gewalt an die Stelle der Methode der Verhandlung.

I have mentioned above that even if the accusative element functions as rheme, carrying primary accent, the order \( \text{NP}^{\text{Akk}} \) + \( \text{ADV}^{\text{Dir}} \) will normally remain unchanged. The claim which \( \text{ADV}^{\text{Dir}} \) asserts to this position in the sequence of elements is also indicated by the position of certain adverbs after the constituent \( \text{NP}^{\text{Akk}} \) but before \( \text{ADV}^{\text{Dir}} \) as in:

(270) ..., er lege das Schicksal des tschechischen Volkes vertrauensvoll in die Hände des Führers des Deutschen Reiches
(271) N. hat eine zerstrittene Partei geeint an die Macht gebracht und führt sie nun geeint in die Opposition.

In case terms this type represents the pattern A + V + O + L.

The more detailed analysis of certain sentence types in the latter part of this chapter suggests some revisions of the tentative systemic
ordering which was set up earlier. It was found, for example, that in some cases the constituent PO preceded the constituent NP_{A\k} in the syntactic norm, also in a few cases NP_{Dat} also precedes NP_{A\k}. What does appear to represent a fundamental order even in these cases is the sequence of case categories AFF + O. This would suggest that a systemic ordering of relational constituents is best expressed in terms of underlying semantic categories rather than in terms of surface grammatical categories. It has, however, also been suggested that in some cases surface form (e.g. prepositional phrases) may be sequence-relevant. This will be investigated later.

The analysis in terms of case category configurations suggests a distinction from the point of view of word order between active and recessive clauses. In sentences where an agent was not present two basic types were distinguished i.e. AFF + V + O and L + V + O. These will be looked at in greater detail in the following chapter.

In the case of active sentences the following case configurations were established: A + V + O, A + V + AFF + O, A + V + O + L. It was also seen that in some sentences the category source could replace the agent. The category instrumental (I) may also be included here, cf.: (272) John has opened many doors (273) John’s attitude has opened many doors (274) John’s device has opened many doors. These categories also require further discussion. The analysis so far suggests the following hierarchy of categories: A, AFF, O, L, where L is the syntactically most cohesive element. It should be pointed out
that Helbig (1973: 117f.) establishes a different hierarchy which he expresses in terms of surface cases. Helbig writes: "Nach der Aufschlüsselung der Kasusfunktionen allein von der Valenz her könnte es scheinen, als ob alle Kasus sich syntaktisch völlig gleich in ihrer Bindung an das Verb verhielten. Es gibt jedoch eine gewisse Hierarchie der verschiedenen Kasus in ihrer Beziehung auf das Verb, die folgende Reihenfolge in der Bindungsfestigkeit erkennen läßt: Nominativ - Akkusativ - Dativ/Genitiv." His claim that the subject ranks highest in the hierarchy is based on the surface structure congruence between grammatical subject and finite verb. A counter-argument is suggested by Tarvainen (1973: 25) when he writes "... es (das Subjekt) kann nur als Mitspieler des finiten Verbs fungieren, während die anderen Mitspieler auch beim Infinitiv erhalten bleiben (Der Lehrer gibt dem Schüler das Buch → dem Schüler das Buch geben; Ich wohne in der Stadt → in der Stadt wohnen). Es gilt also nicht, wie die anderen Satzglieder, als Mitspieler des "ganzen" Verbs, sondern nur seiner satzkonstituierenden finiten Form". This recalls the 'do it/so' proverbialization test for verb-phrase constituency: John put the book on the table → Peter did so too (or: John did it carefully). Such criteria would seem to separate the subject from the other relational constituents and the verb, thus indicating a low degree of cohesion.

Helbig's argument supporting the claim that the accusative object follows the nominative in verb-cohesion hierarchy is primarily based on the observation that a dative or genitive object may be deleted when they co-occur with an accusative. He gives the examples
(275) Die Mutter näht ihr ein Kleid
   Die Mutter näht ein Kleid
   *Die Mutter näht ihr

(276) Ich klage ihn des Verbrechens an
   Ich klage ihn an
   *Ich klage des Verbrechens an.

According to Helbig's criteria divergent hierarchical relations would
have to be assigned to the corresponding elements of the following pairs
of sentences which is inconsistent with the analysis presented here, cf.:

(277) N. hat die Russen bewußter Täuschung beschuldigt

(278) N. hat den Russen bewußte Täuschung vorgeworfen

(279) N. hat das Kind des Geldes beraubt

(280) N. hat dem Kind das Geld geraubt.

Helbig does not mention the constituents PO and ADV\textsubscript{Dir} in his hierarchy.
It is, in certain contextual circumstances, possible to delete ADV\textsubscript{Dir}
as in:

(281) N. will morgen fahren

yet this would not seem to be just cause to deny it its high-rank
position in the hierarchical ordering.
CHAPTER IV

WORD ORDER AND SEMANTIC STRUCTURE

Fillmore (1968: 60) remarks: "The variables that determine or constrain the freedom of word order in the languages of the world are very likely to have many important connections with the case structure of sentences; but this is an area which I have not examined at all". This chapter will be devoted to a detailed investigation of this relation between case categories and the order of elements.

Fillmore's conception of the case structure of the sentence as consisting of a verb and one or more noun phrases, each associated with the verb in a particular case relationship relates to Daneś level of semantic structure which is represented by what he calls the 'semantic sentence pattern' (SSP), a configuration of the 'syntactic meanings' of the nouns in a sentence each of which depends on the properties of the particular finite verb (Daneś, 1968: 56). The level of semantic structure also relates to what Halliday (1970a: 146) calls the 'ideational function' of language which concerns the way the speaker's experience of the real world is organized linguistically. Discussing the expression of processes, Halliday distinguishes a number of functions or 'roles' which represent the parts that the various persons, objects or other classes of phenomena may play in the process concerned. For example, the sentence

(1) Sir Christopher Wren built this gazebo

contains three roles: an 'actor', a 'process' and 'a goal'.
Similarly, the participant roles in

(2) I've given Oliver a tie

are 'actor' I, 'goal' tie, and the recipient of the object 'beneficiary' Oliver. Halliday also refers to these roles as 'logical subject', 'logical direct object' and 'logical indirect object' respectively. Compare Danes' account of the level of the semantic structure of the sentence: "From our conception of the sentence (...) it follows that it is only the linguistic relevant generalizations of concrete lexical meanings that enter the semantic structure of the sentence, not the concrete meanings themselves. Such generalizations possess the form of abstract word-categories (e.g. living being, individual, quality, action), or of relations between these categories (e.g. action as feature of an individual). From an analytic point of view, the sentence structure is based on that kind of relations that is sometimes called 'logical' (...); these relations are derived from nature and society and appear to be essential for the social activities of man. E.g.: actor and action; the bearer of a quality or of a state and the state; action and an object resulting from the action or touched by it, etc." (1966: 226).

Danes (1966) distinguishes three levels within syntax:

(a) the level of the grammatical structure of the sentence
(b) the level of the semantic structure of the sentence
(c) the level of the organization of the utterance.

The formal grammatical structure of the sentence is represented by the grammatical sentence pattern (GSP), one of the most common in English being \( N^1 \) (Subj.) \( \rightarrow \) VF \( \rightarrow \) \( N^2 \) (Obj). Danes points out that
"there is, in a given language, no biunique correlation between the set of GSP's (...) and of SSP's" (1970: 409). The analysis of a number of sentences based on the above GSP reveals a variety of 'syntactic meanings' arranged in several different SSP's of which the actor-action-goal pattern is only one. Danes adduces the following sentences to indicate the 'polysemy' of GSP:

(3) i. The farmer killed the duck
   ii. John repairs his car
   iii. Mary wrote a poem
   iv. He dug a hole
   v. Mary studied mathematics
   vi. She plays tennis
   vii. John met Mary
   viii. John likes music
   ix. John excelled the other players

which manifest the following combinations of syntactic meanings (semantic categories) which are determined by the semantic category of the verb:

i. actor - patient ('affected object')
ii. actor - patient ('affected object')
iii. actor - result ('effected object')
iv. actor - result ('effected object')
v. actor - specification
vi. actor - specification
vii. bearer - ?complex event (process-object)
viii. bearer of attitude - object of attitude
ix. comparand - (comparative) background.
Although Daneš' semantic structure relates to the notion of sentence types resulting from a particular array of case categories proposed by Fillmore, there are differences in their approaches. Fillmore claims that his sentence types have universal validity, whilst Daneš speaks of 'language-specific semantic structure' (1968: 60). Daneš claims that "the grammatical structure (GSP), being the very linguistic means of expression, necessarily has a back-effect on the presentation (interpretation) of the communicated cognitive content" (1968: 60). This 'back-effect' of a grammatical form reveals the hierarchical superiority of that form in language: "e.g. since the center (core) of the set of sentences based on the GSP N₁ → VF → N² is occupied by sentences of the semantic class 'goal-directed action', the shared grammatical form (GSP) simulates the same semantic structure even with other, peripheral sentences based on this GSP, but displaying a different semantic character" and thus in Daneš' example:

(4) The concert excelled our expectations.

the GSP has a 'back-effect' on the semantic interpretation producing a 'simulated SSP' as distinct from the 'underlying SSP': "the underlying semantic relations are 'styled' as if 'the concert' were an 'actor' having performed an 'action', the goal of which was 'our expectations'. It is mainly the impossibility to formulate a question containing the categorial verb do (attesting the semantic character of 'action') that leads us to the assumption that sentences of this type have a different underlying semantic structure, based on the relational meaning of the verb" (1968: 63).

It may be that this back-effect phenomenon is more pronounced in
a language such as English where the set of GSPs is restricted by the fixed SVO order. In such cases it may be possible to distinguish an important word order function here in so far as Modern English may make use of this back-effect, or generate 'simulated' SSPs to achieve a distribution of content in keeping with a neutral theme-rheme sequence. Consider the following examples:

(5) The first conference did not include any representatives of the Empire of India

(6) The negotiations included 7 delegates from Germany

(7) The Gaullists have set up a private group of their own which so far includes only Frenchmen

(8) His recent publications include the following books

(9) The plan involves the cooperation of 3 experts

(10) Today's demonstration in Hyde Park involved 300 students.

In the sentences (5) - (10) the grammatical subject is not confined to agent-function, yet simulates that role. The 'simulated SSP' of 'goal-directed action' enables the 'underlying SSP' to be expressed linguistically in such a way that the theme appears in sentence-initial position and the rheme sentence-final position. This is possible in German without simulation, since there are fewer restrictions on the permutability of elements in the GSP which may then more directly reflect the underlying SSP as in:

(11) An jener ersten Konferenz nahmen keine Vertreter des Kaiserreichs Indien teil

(12) An den Verhandlungen nahmen 7 Deligierte aus Deutschland teil

(13) Die Gaullisten allerdings haben ihre eigene Gruppe gebildet, der bisher nur Franzosen angehören
(14) Zu den neueren Veröffentlichungen As gehören die Bücher ...

(15) An der Ausführung des Planes wirken 3 Experten mit

(16) An den heutigen Demonstrationen in Hyde Park nahmen

300 Studenten teil.

A difference between Daneš' and Fillmore's approach is also indicated in their analysis of the verbs *like* and *please*. Considering the sentences

(17) John likes music

(18) Music pleases John

Daneš claims that the difference between them cannot be described simply by reverting the order of the semantic items in the underlying SSP. (17), he maintains, has quite a different type of SSP underlying it than (18). In (18), *music* is presented as the 'source(cause)' of John's pleasure, whereas in (17) *music* is the 'object of attitude'. In case terms (17) and (18) would be assigned the following underlying structures:

(17a) AFF + V + O
(18a) S + V + AFF

Fillmore (1968: 30) argues, on the other hand, that *like* and *please* each have the case frame feature +\( \square - 0 + D \); they differ only in their subject selections. The distinction indicated by (17a) and (17b) is also evident in the German sentences

(19) I like x

(20) x pleases me

(21) Mir gefällt x

(22) x macht mir Freude.
Kirkwood (1973: 85) points out that sentences such as

(23) The book pleases him

will 'naturally' give way to

(24) The book gives him pleasure

"where the communicatively important element 'please' is nominalized and moves into end position by means of a 'function verb'. This is a means English may resort to of moving the less dynamic pronoun towards the front of the sentence". The same holds for German:

(25) Das Buch erfreut ihn

(26) Das Buch macht ihm Freude.

Beneš also discusses the arrangement of semantic categories and links this to thematic organization. He writes (1970: 1021): "Nach unserer Meinung wäre es aber auch möglich, dieses semantische Satzschema als sprachliche Formel für den thematischen und aktuellen Aufbau der Äußerung aufzufassen und somit auch schon für einen Aspekt der FSP zu halten". There is also a relation between sentence linearity as reflected in the semantic and thematic structure of the sentence on the one hand, and the normal or natural order of phenomena as they occur in extra-linguistic reality: "Eine bestimmte Anordnung von semantischen Kategorien im statischen Satzschema ergibt sich schon aus der Gebundenheit der sprachlichen Mitteilung an das zeitliche Nacheinander, aus der Notwendigkeit, die simultan und vieldimensional existierende außersprachliche Wirklichkeit mit Hilfe sprachlicher semantischer Kategorien in lineare Zeitfolge umzusetzen" (1970: 1021). Experience of extra-linguistic reality is converted into a particular combination of semantic categories such that for some languages there
exists a 'semantic word order' as an established pattern for certain combinations of semantic categories: "wie in einigen Sprachen für Kombinationen bestimmter grammatischer Kategorien eine bestimmte grammatische Wortfolge existiert, so gibt es in anderen Sprachen — wie z.B. im Tschechischen — eine semantische Wortfolge als stabiles Schema für Kombinationen bestimmter semantischer Kategorien, die einen bestimmten 'Sinn' haben" (1970: 1021). In the dynamic organization of the utterance, either the 'ready-made' pattern is selected or is modified according to the context. As Kirkwood (1973: 104) points out, English is less susceptible than Czech, and German, to contextual modification of the established pattern by means of the positioning of elements, but may avail itself of certain constructions to achieve a sequence of elements in accordance with the requirements of FSP. Thus in the case of existential-locative sentences of the type (27) Im Garten sind Bäume
displaying the configuration of categories

\[ \text{ADV}_{\text{Loc}} + V + \text{OBJ.} \]

English has the established pattern

there + be + indef. NP + \text{ADV}_{\text{Loc}}

as in

(28) There are trees in the garden.

In accordance with contextual requirements, the locative element may be moved to initial position as in

(29) The garden has trees in it.

Kirkwood (1973: 105) notes that the FSP of the sentences (28) and (29) in terms of the distribution of degrees of CD is the same or very similar, the difference being that in (29) a thematic element has been foregrounded by means of the 'have' construction.
The notion of SSP as a reflection of our experience of objective reality thus produces a 'basic word order' from which other word orders may be derived. In certain situations, there may be agreement between grammatical, semantic and thematic patterns, e.g. SVO, actor - action - goal and theme - transition - rheme. When this is not the case, then either grammatical or semantic criteria will determine the order of elements. In English it is normally the former, in German the latter. In a contextually independent situation, sentences such as

(30) A boy liked a girl

will naturally be interpreted by a reader or listener as actor - action - goal, subject - verb - object, theme - transition - rheme on the semantic, grammatical and FSP level respectively as Firbas suggests when he writes: "Owing to the presence of the non-generic indefinite articles, they could open narratives or constitute complete single messages. It is certainly remarkable that a reader or hearer will most naturally interpret them as actor - action - goal, subject - verb - object, theme - transition - rheme sequences on the semantic, the grammatical and the FSP level respectively. It is evident that it is first and foremost sentence linearity that, particularly in regard to the nouns, signals the mentioned order of functions. But what is of particular interest is why in absence of semantic and grammatical signals and any dependence on preceding context sentence linearity signals just the mentioned orders. The explanation seems to be quite simple. Being a very primitive (though efficient) means, sentence linearity cannot but reflect the normal and natural order of phenomena as occurring in extra-linguistic reality. Initiating an action the actor necessarily exists before it. Only after it has started, the action can reach or affect its goal or produce some altogether new object.
('A potter made a vessel'). The communication develops along the same line. The degrees of CD rise accordingly and the intonation centre falls on the object, expressing the goal of the action. The sequence displays the basic distribution of CD. The way the grammaticalized core of Modern English word order has become established is certainly not at variance with the nature and the requirements of FSP. The conclusion suggests itself that it could not be otherwise, for FSP serves the communicative purpose of the sentence. On the basic instance level, i.e. on the level of complete contextual independence, the grammaticalized order SVO is in full harmony with the basic distribution of CD" (Firbas, 1970: 19f.).

Admoni (1970: 248ff.) also refers to the relation between our experience of extra-linguistic reality and a basic word order as represented by various basic sentence patterns. Admoni calls these basic patterns 'logical-grammatical sentence types' such as 'Arbeiter arbeiten', 'Arbeiter fällen Bäume', 'Die Rose ist eine Blume', 'Die Rose ist schön', 'Er ist im Garten', 'Ich habe Angst/Geld'. Such sentence types, Admoni suggests, do not merely represent formal grammatical distinctions. They express a 'point of view' ('Einstellung') which has acquired general validity in the language concerned as opposed to a particular point of view taken by the speaker in a specific speech situation which may lead to changes in the formal structure of the sentence, e.g. choice of a different construction, manipulation of word order, (cf. the above discussion of Beneš' usual word order configurations as reflections of relations and situations in objective reality and contextual modification of these 'ready-made' patterns on the level of the dynamic organization of the utterance).
There is a relation between the point of view of the speaker and the grammatical structure of the sentence which has found expression in the 'logical-grammatical sentence types'. Admoni writes: "Die logisch-grammatischen Satztypen drücken eben auch eine Einstellung des Sprechenden aus, aber eine solche Einstellung, die in der betreffenden Sprache verallgemeinert und allgemein gültig wurde, weil sie in spezifischen Formen, die von der Eigenart des Sprachbaus der betreffenden Sprache bestimmt sind, wesentliche und für den Menschen lebenswichtige Beziehungen und Sachverhalte der objektiven Welt zum Ausdruck bringt. In nackten Satz, bei gerader Wortstellung und normaler, ruhiger Stimmführung, ohne irgendwelche Einwirkung von seiten der Situation oder des Kontexts, erscheint der durch den Subjektsnominativ ausgedrückte Begriff eben als das 'psychologische Subjekt' (das 'Thema', das 'Bekannte'), das durch das grammatische Prädikat als das 'psychologische Prädikat' (das 'Rhema', das 'Neue') bestimmt wird, wobei das Prädikat eben als der wichtigere Teil der Mitteilung auftritt. So wird der Erzeuger eines Vorgangs durch diesen Vorgang selbst, ein besonderer Begriff durch einen allgemeineren charakterisiert, und der Gedanke sowohl des Sprechenden als auch des Hörenden bewegt sich von dem, was charakterisiert werden muß, zu dem, wodurch die erste Satzkomponente charakterisiert wird" (Admoni, 1970: 249).

Admoni goes on to point out that the point of view of the speaker may, in an actual speech situation, come into conflict with the 'normal' predicative form. The point of departure may then not be expressed by the subject ('Subjektsnominative') but by another element, e.g. an adverbial of time as in 'Morgen gehe ich in die Bibliothek' as an answer
to the question 'Und was tun Sie morgen?'. Similarly, the rhematic segment of the sentence need not coincide with the grammatical predicate: a possible answer to a question such as 'Wann fahren Sie nach Berlin?' is 'Nach Berlin fahren wir morgen' where the rheme is expressed by the adverbial, this being the information not contained in the question. The above contextual examples - the context being introduced by way of a preceding question - illustrate how languages with relatively free word order may resort to the permutability of sentence elements to express a particular point of view of the speaker with regard to the cognitive content of the sentence. Admoni also states that the conflict between the 'normal' sentence forms and the point of view of the speaker leads to the creation of new 'logical-grammatical sentence types' such as the passive form (cf.: 'Der Violinist spielt noch einen Walzer', 'Ein Walzer wird noch von dem Violinisten gespielt', 'Einen Walzer spielte noch der Violinist').

It is important to note here that in a relatively context-free situation the grammatical subject need not express the point of departure (theme), although it regularly does so. This calls into question Admoni's 'normal predicative form' which, it would appear, has without exception 'subject nominative' in sentence-initial position, since there are sentence types which do not regularly or naturally manifest initial position of the grammatical subject. Admoni, for example, includes sentences of the type 'Er ist im Garten' but not of the type 'Im Garten sind Bäume' among his basic types, yet it would not appear to be meaningful to regard such sequences as being in any way in conflict with whatever one establishes as the 'normal' type. In so far
as the subject expresses the semantic category agent, no problems or conflicts emerge. However, in sentence types without an agent, the grammatical subject may express the category object which in terms of the usual configuration of semantic categories occupies final position. I have pointed out above that whereas the order

\[ \text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Dat}} \]

is basic for certain configurations of categories, as in

(31) Hans folgte seiner inneren Stimme \((A + V + O)\),

the order

\[ \text{NP}_{\text{Dat}} + V + \text{NP}_{\text{Nom}} \]

is basic if \(\text{NP}_{\text{Nom}}\) expresses the category 0 rather than the category A, as in

(32) Dem Mord in der Phantasie folgt die Angst.

The sequence of elements in (31) and (32) is in accordance with the requirements of FSP in a neutral speech situation. Both sentences manifest the neutral theme—rheme sequence of elements. This is also evident from possible English equivalents of German sentences of the type illustrated in (32). In cases where the grammatical subject is rhematic rather than thematic, as is often the case in sentences of this type, there is a conflict in English between the positioning of elements according to the grammatical principle (SVO) and the neutral sequence of elements in terms of the relative positioning of theme and rheme—theme preceding rheme in the unmarked case. In such a situation English often resorts to the passive construction which allows the rhematic grammatical subject of the active sentence to be placed after the finite verb, the object of the active sentence being assigned the function of
The relation between the participant roles expressed by noun phrases and passivization in English is mentioned by Lyons who makes the following point about the difference between active and passive sentences in English: "it is quite clear that the greater 'naturalness' of one rather than the other depends upon the kind of noun phrase or nouns that occur as the underlying subject and object, whether they are definite or indefinite, whether they refer to human beings or things, etc" (Lyons, 1970: 94). He suggests that

(37) John was reading a book

is more 'natural' than

(38) A book was being read by John.

The explanation would seem to be that of thematic organization. A book in (38) would tend to be the element to which one would assign the primary accent since it conveys new information. This interpretation would seem to be confirmed if the indefinite article were to be replaced by the definite article, as in

(33) Dem deutschen Einzelhandel droht eine Strukturkrise
(34) The German retail trade is threatened by a structural crisis
(35) Dem Streit war ein Vorfall vorausgegangen
(36) The conflict was preceded by an incident.

(34) and (36) illustrate how English is able to compensate for the restrictions placed upon it by the SVO order. This is only one of several possibilities which will be discussed later in this chapter in the light of further German examples in which word order is determined by the participant role of the relational constituents.
(39) The book was being read by John
where the book conveys known information, information focus falling on the person reading the book i.e. John, the motivation for the passive construction being to place John at the end of the sentence in keeping with the theme - rheme sequence referred to by Firbas as 'the basic distribution of communicative dynamism'. The same distribution of content can be achieved in German by permuting the sequence of elements, as in

(40) Das Buch hat Hans gelesen
das Buch constituting the thematic basis of the sentence. (40) represents the neutral, unmarked sequence of elements in German as opposed to

(41) Ein Buch hat Hans gelesen
which manifests a non-neutral or marked sequence of elements, the element carrying new information, the rheme, preceding the thematic section of the sentence. In the following pair of sentences quoted by Lyons

(42) John was hit by a car
(43) A car hit John
it is (42), the passive sequence that constitutes the neutral form; John, the person affected, constitutes the basis of the sentence, a car, the information to be conveyed, functions as rheme and selection of the passive enables this element to be placed at the end of the sentence, again in keeping with the neutral theme - rheme sequence. German equivalents illustrate once again the function of word order in German; in German the motivation for the permutation of the sequence of elements is matched in English by the adoption of the passive construction. Both languages manifest a similar distribution of
communicative dynamism, though this is achieved by different means, cf.:

(44) Hans hat ein Auto überfahren

(45) Ein Auto hat Hans überfahren.

(45), like (41), where an element conveying new information occupies
initial position, represents the marked form.

The role of the passive in the thematic organization of the
utterance is also referred to by Halliday (1970s: 153). He quotes the
following examples:

(46) The gift pleased her / she was pleased by (with) the gift

(47) She liked the gift / the gift was liked by her.

The passive in (46) is more natural than the passive in (47), the reason
being that the passive is a means of bringing the element governed by
'by' into prominence as the focus of information. In (47) the 'by'
element by her "tends to be the 'given' element in the situation (she
must have been referred to already in the text), and thus does not
appropriately carry such prominence" (Halliday, 1970: 153). Were the
'by' element in such a case to be communicatively more dynamic, on the
other hand, the passive would be felt to be more natural, as in:

(48) The gift is liked by all my friends.

A further point concerning the use of certain constructions
according to which element carries information focus is made by
Kirkwood (1973: 85). He suggests that a sentence such as

(49) The book pleases him

will more 'naturally' give way to

(50) The book gives him pleasure.
Kirkwood compares the German sentences

(51) Das Buch erfreut ihn
(52) Das Buch macht ihm Freude

where the communicatively important element 'please' is nominalized and moves into end position by means of a 'function verb'. This is a means both English and German may resort to of moving the less dynamic pronoun towards the front of the sentence.

Returning to the discussion of the passive in English, there would seem to be, on the basis of the above analysis, two functions each relating to a different level of analysis. The first function relates to the level of the semantic structure of the sentence and illustrated by sentences (34) and (36) above. These are instances of relatively context free sentences where the grammatical subject expresses the category 0 ('Object') rather than the category A ('Agent'). 0 being generally communicatively more dynamic than the category A naturally moves into end position. In German this is achieved by element sequence; there are for sentences of this type established semantic sentence patterns manifesting the configuration of categories

\[ \text{AFF} + V + 0 \]

expressed in (33) by the grammatical pattern

\[ \text{NP}_{\text{Dat}} + V + \text{NP}_{\text{Nom}}^* \]

In English, on the other hand, the same syntactic meaning cannot be expressed by the grammatical pattern German adopts since the restrictions that the order SVO imposes on Modern English do not permit this order of grammatical categories. The natural solution is the use of the passive construction here which manifests the required configuration of
semantic categories, yet at the same time does not violate the established SVO order on the level of surface structure:

\[
\begin{align*}
\text{NP}_{\text{Nom}} & + \ V_{\text{pass}} + \text{by} + \text{NP} \\
\text{AFF} & + \ V \ + \ O.
\end{align*}
\]

In such situations the use of the passive in Modern English relates directly to the level of semantic structure of the sentence.

A second function of the passive construction in Modern English relates to the level of the organization of the utterance. With the operation of contextual criteria an element which is generally not in a position of prominence on the level of semantic structure (e.g. the category 'Agent') may in a particular context represent the actual information to be conveyed. In German, this element is brought into prominence by permuting the word order: a rhematic element expressing the category 'Agent' is simply moved from sentence-initial to sentence-final or pre-final position, cf.:

(53) Hans hat ein Buch gelesen

(54) Das Buch hat Hans gelesen.

Once again, a natural English equivalent to (54) is a passive sentence:

(55) The book was read by John.

Alternatively, English may foreground the rheme by resorting to a construction such as:

(56) It was John who read the book.

In all cases, sentences (54), (55) and (56) represent contextual modifications of the underlying semantic sentence pattern

\[ A + V + O \]

expressed in a contextually independent situation in both English and
German by the grammatical pattern
\[ NP_{Nom} + V + NP_{Ack} \]

In the context of a discussion of word order and the level of semantic structure it is relevant to recall here the analysis proposed by Sgall (1973) and in particular what he calls the 'first layer of TCA' "referred to as the basic distribution of CD or as the scale of communicative importance, (which) is determined by the semantic structure of the sentence (...) and appears, among others, in sentences not presupposing any preceding context (or situation)" (Sgall, 1973: 19). In the basic layer, the hierarchy of communicative dynamism (CD) is in accordance with a hierarchy determined directly by the roles of individual participants in what Sgall refers to as the 'semantic representation' (SR) of the sentence. For example, the actor precedes the object (goal) as in

(57) Harry saw an explosion
(58) Men read books.

But in

(59) An explosion was seen by Harry
(60) It was Harry who saw an explosion
(61) Books are read by men
(62) Men read books

the actor (or experiencer) carries information focus. In such cases the scale of CD does not coincide with the scale or hierarchy determined by the roles of the participants. Here Sgall makes an important terminological distinction between 'communicative importance' and 'communicative dynamism': he uses the term 'communicative importance'
when referring to the hierarchy determined by the roles of the participants in the SR of the sentence; the term 'communicative dynamism', on the other hand, is reserved for the actual hierarchy of elements of a sentence, be it in accordance with the scale of communicative importance as in the first or basic layer, or affected by the influence of context and situation as in the second layer, where the degree of CD of a constituent may be lower or higher than if it were determined only by its syntactic role in the semantic representation of the sentence.

Sgall summarizes the relation between CD and communicative importance as follows: "There are, ..., two possibilities as to the relationship between the amount of CD carried by individual members of sentences and their communicative importance: (1) CD and communicative importance are in accordance; this may occur both on sentences no member of which is contextually bound and in those where all contextually bound members have a lower degree of communicative importance than the contextually non-bound members (e.g. if the actor, the verb and the indirect object are bound and the direct object is non-bound). (2) The two scales may differ; this occurs when a contextually bound element A has a higher communicative importance than some other element B that is contextually non-bound; we speak then about the second layer of TCA (...), and we say that A is topicalized: An apple was given to a boy by CHARLES. A boy was given an apple by CHARLES. Here the objects have a lower degree of communicative dynamism but a higher degree of communicative importance than the actor" (Sgall, 1973: 47).

From the roles of the participants in the SR of the sentence, and their position in the linear sequence (which in the 'first layer' is
determined by the degree of 'communicative importance' of the sentence elements in accordance with their respective roles), Sgall establishes a 'scale of communicative importance' or 'systemic ordering of participants'. In the preceding chapter this ordering in terms of communicative importance was found to relate to the hierarchy of elements in terms of their closeness to the verb (syntactic cohesion). The remainder of this chapter will be devoted to a further study of these relations on the basis of a wider sample of sentence types, these being determined in terms of various possible configurations of semantic (case) categories. In doing so, I propose to pursue a differentiation with regard to sentence type indicated in Chapter III, i.e. a subdivision into active and non-active sentences.

The Semantic Structure of Active Sentences

Under the heading 'active sentences' I shall include: (1) sentences where the category Agent is present (agent being the person from whom the action proceeds, the initiator of the action); (2) sentences involving the category Instrument (the means by which an action initiated by an agent is carried out); (3) sentences with the category Source (or Cause) (the inanimate force independently responsible for, causally involved in an action or process expressed by the verb, the source from which an action or process emanates). A distinction between and discussion of the categories Instrument and Source is to be found in Babcock (1972) and Kirkwood (1973).

The grammatical and semantic structure of sentences with an agent
present was discussed in some detail in the preceding chapter. In
terms of usual configurations of categories the following patterns
emerged: (1) A + V + O, (2) A + V + AFF + O, (3) A + V + O + L.
These basic semantic patterns may be expressed by a variety of
grammatical patterns. Some of these are

(1) A + V + O

\[
\begin{align*}
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Akk}} & \quad \text{(N. kaufte ein Buch)} \\
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Dat}} & \quad \text{(N. folgt seinem Freund)} \\
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Gen}} & \quad \text{(N. gedachte des Jahrestages)} \\
\text{NP}_{\text{Nom}} + V + \text{PO} & \quad \text{(N. kämpfte gegen Ungerechtigkeit)}
\end{align*}
\]

(2) A + V + AFF + O

\[
\begin{align*}
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Dat}} + \text{NP}_{\text{Akk}} & \quad \text{(N. hat einem Mädchen Blumen geschenkt)} \\
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Akk}} + \text{NP}_{\text{Dat}} & \quad \text{(N. hat einem Freund dem Spott ausgesetzt)} \\
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Akk}} + \text{NP}_{\text{Akk}} & \quad \text{(N. lehrt einen Jungen Deutsch)} \\
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Akk}} + \text{NP}_{\text{Gen}} & \quad \text{(N. beraubte das Kind seines Rechtes)} \\
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Akk}} + \text{PO} & \quad \text{(N. hat einen Freund um Geld gebeten)} \\
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Dat}} + \text{PO} & \quad \text{(N. verhilft einem Freund zu einem Erfolg)}
\end{align*}
\]

(3) A + V + O + L

\[
\begin{align*}
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Akk}} + \text{ADV}_{\text{Dir}} & \quad \text{(N. hat ein Buch auf den Tisch gelegt)}
\end{align*}
\]

The order of elements in the above patterns relates to and is
a reflection of our experience of objective reality. This is a situation
in which the sentence is interpreted as subject - verb - object, actor -
action - goal, theme - rheme. Sentence linearity, as Firbas (1970: 19f.)
points out, reflects the normal and natural order of phenomena as
occurring in extra-linguistic reality; the actor, initiating an action, exists before the action and the goal is only reached after the action has started. In Firbas' terms, such sequences display the basic distribution of CD, the degrees of CD rising as the sentence progresses so that the highest degree of CD is carried by the object, expressing the goal of the action. This is in line with Sgall's proposal (1967: 216f.) that there is a relation between the notion of actor or agent and that of theme as the natural point of departure in the sentence; the Agent represents a notion which is 'given' (or which is presented as 'given') and which is further characterized or specified by the grammatical predicate. Here linear sequence appears as a "deep word order" (Sgall, 1973: 46), where the left-to-right order of elements conveys directly the hierarchy of 'communicative importance' (systemic ordering) as determined in the SR of the sentence by the semantic structure proper, i.e. the interrelations between the verb and its participants.

In Chapter III, I sought to explain the relative ordering $AFT + O$ and $O + L$ in the patterns set out above in terms of the notion of syntactic cohesion and related this to Sgall's scale of communicative importance. A further aspect was the expression of these underlying hierarchies in terms of grammatical categories in surface structure, which to some extent may reflect systemic ordering (e.g. dative - accusative, accusative - directional adverb). An interesting class of verbs proved to be those which produced basic word order patterns manifesting the surface order accusative-dative which with other verbs is an occurring sequence only in a contextually dependent situation.
where the accusative element is derivable from the context or situation and where the dative object represents new information, as in

(63) N. schenkte einem Jungen ein Buch ('syntactic norm')

(64) N. schenkte das Buch einem Jungen (contextually dependent).

As examples of the class of verbs which take both an accusative and a dative object where, in the absence of contextual criteria, the dative object regularly follows the accusative object in sequence, I listed the verbs aussetzen, unterwerfen, ausliefern, entwinden. Some of the examples quoted were

(65) N. hat einen Freund dem allgemeinen Spott ausgesetzt

(66) N. war bemüht, einen unabhängigen Staat seinen politischen Zielen zu unterwerfen

(67) N. lieferte einige kleine europäische Staaten und Volksgruppen der politischen Willkür Moskaus aus

(68) Immer mehr muß das Volk den Kirchen und ihren Organen, den Pfarrern, entwunden werden.

The explanation I proposed was motivated by expressing the order of elements in terms of semantic (case) categories. The configuration of categories I suggested as underlying the surface order accusative-dative were AFF + 0. Another possible approach might be to interpret the underlying configuration of semantic categories as being 0 + L. This argument might run as follows: if A is exposed to B, A is located in the sphere of B, directed towards B (or, as in (68) directed away from B). This is interesting in so far as it suggests a relation between the configurations AFF + 0 and 0 + L (where L is a directional locative); the hierarchy between AFF and 0 in the configuration AFF + 0 would seem to correspond to the hierarchy between 0 and L in the configuration 0 + L.
Other categories which appear to be 'close' to the category 'Agent' in the systemic ordering of participant roles in sentences of the type under discussion are the categories 'Instrument' and 'Source'/’Cause'. The sentences I adduced above to show the relation between the categories 'Agent', 'Instrument' and 'Cause/Source' were:

(69) John has opened many doors
(70) John's attitude has opened many doors
(71) John's device has opened many doors.

Babcock (1972: 30f.) makes an important distinction between the category 'Instrumental' and the category 'Cause': "Instrumentals are at the service of Agents, whether or not the sentence contains one, but Cause phrases are INDEPENDENT sources of activity" (Babcock, 1972: 31).

Babcock claims that in Fillmore (1968) the instrumental is defined as the participant causally involved in the verbal activity and thus encompasses both 'means-relations' and 'source' or 'cause' relations.

Babcock gives the following examples:

(72) The hammer broke the window
(73) John broke the window with a hammer
(74) John did that out of frustration
(75) Frustration made John do that

which she analyses with reference to Fillmore's account. She writes: "The difficulty with Fillmore's account of Instrumentals SEEMS to lie in his constraint on Instrumental subjects: the Instrumental can be chosen as transitive subject just in case there is no Agentive in the frame. This constraint reflects the fact that the means-Instrumental is inactively related to the Agentive and actively related to the Verb. And it turns out to be limited in its application to just those
Instrumentals that are means rather than causes. Phrases of the latter type may be selected as subjects in the presence of an Agentive, and they are actively related to the Agentive" (Babcock, 1972: 30f.). Thus in (72) the Instrument is actively related to the verb and object, and in (73) it is inactively related to the Agent. In (74) and (75), on the other hand, the participant causally involved in the activity is actively related to the Agent.

Kirkwood (1973: 357) indicates that the difference in case relationship is formally expressed in the sentences

(76) The door was opened by (*with) the boy
(77) The door was opened with (*by) the key
(78) The door was opened by (*with) the wind.

The use of by with the categories agent and source is an indication that they themselves are responsible for carrying out the action identified by the verb. The Instrument, on the other hand, is in a means relationship with the Agent (specified or unspecified) and this is indicated by the use of with as opposed to by in (77). A further formal indication of the means relationship expressed by the Instrument is the possible use of the verb use in English. Lakoff (1968) quotes the sentences

(79) Seymour sliced the salami with a knife
(80) Seymour used a knife to slice the salami

and suggests that they have a common deep structure. In terms of semantic categories (79) and (80) have the structure A + I + O, the marker for Instrument being expressed by the auxiliary use in (80) and the preposition with in (79). In the English sentences the thematic
structure is not necessarily indicated by the order of elements in the surface representation: (79) and (80) may both be interpreted in a way in which the rheme is expressed by the Instrument (knife) or by the Object (salami). As Kirkwood (1973: 359) points out, the difference in arrangement of thematic elements is significant in sentences of this type: in (79) - interpreting knife as thematic and salami as rheme proper - the thematic Instrumental is moved to the end and backgrounded; in (80) it is moved towards the front of the sentence in the function of direct object of use. This contrasts sharply with the state of affairs in German sentences of this type, where the sequence of elements is an indication of the thematic interpretation. Compare

\[ \begin{array}{ccc}
T & T & R \\
(81) & N. & hat \ mit \ dem \ Messer \ die \ Wurst \ geschnitten \\
T & T & R \\
(82) & Mit \ dem \ Messer & hat \ N. \ die \ Wurst \ geschnitten \\
T & T & R \\
(83) & N. & hat \ die \ Wurst \ mit \ dem \ Messer \ geschnitten \\
T & T & R \\
(84) & Die \ Wurst & hat \ N. \ mit \ dem \ Messer \ geschnitten. \\
\end{array} \]

In German a rhematic Instrument moves towards end position as in (83) and (84). The thematic nominal elements move towards the front of the sentence, the element occupying the position preceding the finite verb functioning as thematic basis. English will resort to accent placement to express thematic organization. Cf.:

\[ \begin{array}{c}
R \\
(85) & N. & cut \ the \ salami \ with \ the \ knife \\
R \\
(86) & N. & used \ the \ knife \ to \ cut \ the \ salami \\
R \\
(87) & N. & cut \ the \ salami \ with \ the \ knife \\
R \\
(88) & N. & used \ the \ knife \ to \ cut \ the \ salami. \\
\end{array} \]
Sentences (79) - (88) have been interpreted as contextually dependent, one of the categories Instrument or Object being thematic, the other rhematic. The contextual dependence of the thematic section of these sentences may be clearly expressed in terms of presuppositions:

(89) N. cut the salami with a knife/N. hat die Wurst mit einem Messer geschnitten

with primary rhematic accent placed on the Instrument (knife/Messer) presupposes

(90) N. cut the salami with something/used something to cut the salami.

If the presupposition were formulated as

(91) N. did something with a knife/used a knife to do something

the rhematic elements in

(92) N. cut the salami with a knife/N. hat mit einem Messer die Wurst geschnitten

would be cut the salami/die Wurst schneiden, the rheme proper being salami/Wurst. Such an interpretation makes it possible to determine the degree of CD carried by the Instrument and the Object in each case, but it reveals nothing about their respective communicative importance in the sense it is used in Sgall (1973) - i.e. their relative position in the systemic ordering. Considering the categories Agent, Instrument and Object, Sgall suggests that the Agent ranks lowest and that the Object ranks highest, the Instrument being thus assigned a position between these two in the hierarchy (cf. the list of basic participants in terms of the systemic ordering, (Sgall, 1973: 67)). Sgall's claim is that the contextually non-bound complements (cases, 'intentional participants') form a certain scale on the semantic level: "it can be
stated that the order of elements inside the focus (the contextually non-bound segment) is (...) given by the semantic roles of the participants in the sentence" (Sgall, 1973: 64). Thus what I have referred to above as the category AFF can only follow the category 0 in sequence if the 0 element is recoverable from the context (contextually bound). Sgall analyses a number of examples at this point where there are at least two contextually non-bound participants of the verb in the focus (cf. Sgall, 1973: 64ff.). Among these he quotes the following example in Czech and English which contains the categories Instrument and Object in the focus:

(93) Okopával motyškou ANGREBST

(94) He hoed with a hoe GOOSEBERRIES

and remarks, in a footnote (Sgall, 1973: 291): "We have left the Czech word order in the English translation ..., but the order ... gooseberries with a hoe is certainly more natural in English. We are not certain whether the intonation centre is placed on HOE in the primary case (i.e. if gooseberries is also non-bound); if so, this would mean that the hierarchy of semantic importance is not identical in English and in Czech, the instrument being in Czech less communicatively important than the objective." Perhaps it is not so much that English and Czech do not coincide in this point on the scale, but rather that there are language-specific reasons relating to the restrictions placed on the ordering of elements in surface structure in English which do not naturally allow the sequence of elements in (94). It would seem to me that it is not the case that the Instrument is communicatively more important in English than in Czech (or German) because of its sentence-final position in the sequence of elements. Take for example the following situation:
N. has locked himself out of his house which might be followed by a statement: N. breaks a window with a stone, a window with a stone being the new information (non-bound segment) not specified in the presupposition:

(95) (Situation: N. has locked himself out of his house)
(Presupposition: N. does something to get into the house)

N. breaks a window with a stone

or simply

(96) N. breaks a window.

In other words, in the given situation, the actual communication concerns what action N. took, which might be specified as break a window with a stone, or simply break a window. The specification of the Instrument is certainly new information, though it is not essential information; the 'breaking of a window' is however essential, it is the specification of the action indicated in the presupposition. In terms of the specification of N's action, the means used is peripheral rather than central; 'breaking the window' may be regarded as hierarchically outranking the means relation. This is also indicated in other possible linguistic representations of the presupposition. Compare:

(97) N. took a stone and broke a window with it
(98) N. used a stone to break a window
(99) N. picked up a stone and broke a window.

The order in which the categories Agent, Instrument and Object appear in sentences (97) - (99) corresponds to the order of events in extra-linguistic reality: N. present in the situation, acquires a means with which he subsequently performs an action. This is also reflected in the German sequence
In terms of syntactic cohesion, the object of the verb break is the constituent to which it is most closely related syntactically. Window is an essential amplification of the meaning of break. It is the verb + object combination that constitutes the action to which the Instrument actively relates. Compare

(101) The stone broke a window
(102) The stone broke
(103) The window broke
where (102) is only possible in the sense indicated in (104)
(104) X broke a stone
i.e. stone in (102) is in the same relation to the verb break as window in (101) and not as stone in (101). This can be further illustrated by adducing a different verb - object combination e.g.
(105) The stone tore the paper
where the Instrument cannot, because of the semantics of the verb, be conceived as a possible Object as in (102). Thus one can say
(106) The paper tore
but not
(107) The stone tore.
This does not, of course, mean that the Instrument is not closely related to the verb. Such a claim would certainly be false as there are co-occurrence restrictions on possible combinations of Instrument and verb. The non-occurrence of
is to be accounted for in terms of selectional restrictions between the verb and the Instrument which is evidence of a cohesive relation. However, as pointed out above, the relation between the verb and the Instrument is less cohesive than that between the verb and the category Object. The Instrument relates syntactically to the complex verb + Object: the Object relates directly to the verb. A further difference concerns the nature or quality of the relations of Object and Instrument to the verb: whereas the Instrument relates actively to the combination verb + Object, the Object is inactive in its relation to the verb. Furthermore, the Instrument is inactive in its relation to the Agent which would seem to indicate a close relation between the Agent and the Instrument which is further confirmation of the hierarchy proposed.

Similar arguments may be put forward to explain the position of the category Source (or Cause) in the hierarchy of participants. An indication of the proximity of the categories Agent and Source in the hierarchy is provided by certain features which they have in common in their relation to the rest of the sentence. It has been pointed out above that the categories Agent and Source are themselves responsible for carrying out the action identified by the verb. Consequently, in sentences of the type listed below either the Agent or Source category may be subjectivized and fronted, both representing the entity from which the action or process emanates. Compare:

\[(109) \text{ N. drängte M. zu einer Entscheidung }\]
\[\text{Die Not} \]

Other examples where the category Source is expressed by the grammatical subject are:
Die scheinbar rationale Bewegung wird der Substanz der Nation schweren Schaden zufügen.

Die Wirtschaftskrise und die chronische Arbeitsunfähigkeit des Reichstags hatten viele Deutsche in ihrer Gegnerschaft gegen die Republik bestärkt.

Dieser hundertfache Mord von Staats wegen öffnete vielen Deutschen die Augen.

Seine Bereitschaft, alles aufs Spiel zu setzen, gab ihm die Kraft unerhörter Entschlossenheit.

Der morgendliche Protestmarsch durch Karlsruhe erzeugte Empörung.

Dieses im Grunde autoritäre Verhalten erregt bei den Studenten Mißtrauen und Verachtung.

Diese Tendenzen sollten die Politiker veranlassen, neue Formen der Mitarbeit in der Politik, in der Gesellschaft, in den Parteien zu finden.

Seine Abdankung wegen seiner Heirat setzte seiner Regierungszeit nach nur zehn Monaten ein Ende.

Dies alles hat die Gesellschaft geschwächt.

Sentences (109) - (118) may be categorized as having the generalized meaning 'cause - effect'. They manifest the configuration of categories $S + V + (A F F +) 0$ which relates to the configuration $A + V + (A F F +) 0$ (actor - action - goal) in the manner discussed above. Both the actor - action - goal and the cause - effect patterns may be expressed by the grammatical pattern SVO and both manifest a neutral thematic organization, i.e. a theme - rheme sequence: the Source (including the category Agent as the 'source' of the action), as the force from which the action or effect proceeds, necessarily exists before it, it is in focus and thematic; the action or effect is then brought into focus by the initiator and is rhematic.
The semantic and thematic patterns cause-effect, theme-rheme need not, however, conform to the SVO order and it is the manifestation of this semantic pattern in surface structure that constitutes an important difference between the structures of English and German. I have already referred above to the distinct tendency in English to express the theme of the sentence by means of the grammatical subject. This also applies in the case of the category Source, which if thematic as above, will often be subjectivized providing the verb has or can be assigned the feature '+ causative'. Though this is also possible in German, as the above examples illustrate, there is another 'natural' expression of the cause-effect relation—i.e. the preposition of a causative prepositional phrase. This is discussed in detail in Kirkwood (1973: 33ff.). Some of the examples he adduces are

(119) The state of the nation has given rise to concern among the people

(120) There is concern among the people about the state of the nation

and their possible German equivalents

(121) Die Lage der Nation hat unter der Bevölkerung Beunruhigung ausgelöst

(122) Über die Lage der Nation herrscht unter der Bevölkerung Beunruhigung.

Proposed prepositional phrases as thematic basis as in (122) are not generally tolerated in English. Fronting of the Source category is achieved by using the causative verb give rise to in (119) which allows the Source element to be subjectivized and made thematic basis. This difference between English and German is further illustrated by Kirkwood
in terms of the case frames entered into by the verb show in English and the verb zeigen in German. Show appears to enter into two case frames: one involving the categories Agent, Experiencer, Object; the other the categories Source (or Locative) and Object. The following examples are compared:

(123) He showed me his new book (A + E + O)
(124) His face showed his disapproval (S (or L) + O)
(125) His disapproval could be seen on his face
(126) His disapproval could be seen from his face
(127) In seinem Gesicht spiegelte sich seine Missbilligung
(128) An seinem Gesicht erkannte man seine Missbilligung.

Kirkwood also points out that the category Source or Cause has locative implications: (125) makes explicit the locative implications of (124); the source implications are manifest in (126). The two possible interpretations are explicit in the German renderings (127) and (128). Regarding the German verb zeigen it is suggested that it also enters both case frames, but that it is perhaps more agent-oriented than show. In equivalent German sentences a more explicitly locative expression may be chosen, as in:

(129) In beiden Sprachen zeigt sich die Toleranz zum analytischen Sprachbau
(130) Both languages show (manifest) a tendency towards an analytic structure.

Some further examples of the tendency in English to resort to a lexicalized causative which enables the Source element to be subjectivized and made thematic basis are:
This decline in population in the cities has begun to create the same kind of social problems as the same pattern of movement in the great American cities.

An in itself insignificant incident gave rise to unrest.

His benevolence ran him constantly into debt.

This attitude is the only possible attitude that fosters toleration.

The Ballstein doctrine pledged the West German Government to break off relations with any country which recognized Herr Ulbricht's regime.

At least that raises the possibility ...

A recent analysis by GATT showed that ...

The Vietnam War alone often caused / led to / was responsible for student demonstrations.

The development of the relationship between the students and the SPD shows clearly how the politically active students became politically isolated.

This really reveals most clearly that ...

Possible German equivalents of (131) - (140) indicate the consistency with which German expresses the cause - effect pattern (the configuration of categories S + V + O) by the grammatical pattern prepositional phrase (source/cause) + verb + grammatical subject. Compare sentences (141) - (150):

Durch den Bevölkerungsschwund in den Großstädten entstehen allmählich die gleichen sozialen Probleme, wie sie eine vergleichbare Entwicklung in den großen amerikanischen Städten zur Folge hatte.

Durch einen an sich geringfügigen Vorfall wurden Unruhen ausgelöst.

Durch seine Hilfsbereitschaft hatte er fast ständig Schulden.
(144) Nur durch diese Einstellung kann sich Toleranz entwickeln

(145) Mit der Hallstein-Doktrin verpflichtete sich die Bundesregierung, die Beziehungen zu jedem Land abzubrechen, das Ulbrichts Regime anerkannte

(146) Damit ergibt sich zumindest die Möglichkeit, ...

(147) Aus einer kürzlich durchgeführten Analyse des GATT ging hervor, ...

(148) Allein am Vietnam-Krieg entzündeten sich oft die studentischen Demonstrationen

(149) An der Entwicklung des Verhältnisses zwischen Studenten und SPD wird deutlich, wie sehr die politisch engagierten Studenten politisch isoliert wurden

(150) An ihm läßt sich tatsächlich recht eindrucksvoll erkennen, was ...

To summarize briefly the above discussion of the order of semantic categories in active sentences, there would appear to be — on the basis of the instances adduced — three categories which show a clear tendency to move to the left of the configurations in which they appear. These are the categories Agent, Source and Instrument. The feature that they have in common is their active relatedness to the other participants which sets them apart from other categories such as Affected and Object which are inactive and show a tendency to move towards the right of their respective patterns. Yet just as the categories Affected and Object tend towards the right in accordance with a hierarchical scale (systemic ordering), AFF preceding 0 in the basic type, so too is it to be expected that the movement of the categories Source, Agent and Instrument towards the left also conforms to their respective positions in the hierarchy of participants. This may be illustrated by
reference to configurations in which these co-occur. Examples of sentences where the categories Agent and Instrument co-occur have been discussed above. There are also possible patterns manifesting co-occurrence of the categories Agent and Source, Agent, Source and Instrument. Compare:

(151) N. hat mit einem Messer Wurst geschnitten
(152) N. hat sich durch seine Hilfsbereitschaft in Schulden gestürzt
(153) N. hat aus Verzweiflung mit einem Stein eine Fensterscheibe eingeschlagen.

The sequence of elements in the sentences (151) - (153) points to the hierarchy Agent, Source, Instrument. The position of the category Instrument is clear: it is activated by the Agent, or as Babcock (1972) puts it, the Instrument is 'in the service of' the Agent. The specification of the Agent constitutes a constraint on the subjectivization of the category Instrument: the Instrument element in

(154) John opened the door with a key

may only be subjectivized when the Agent John is unspecified. It is possible to say

(155) The key opened the door

but not

(156) *The key opened the door by John.

The relative ordering of Agent and Source, on the other hand, is more problematic. Unlike the category Instrument, the Source element may be subjectivized in the presence of an Agent, as in

(157) Benevolence ran N. constantly into debt.

Furthermore, the Source element is in an active relation to the Agent
rather than the other way round. This is also evident in the possible paraphrase of (157)

(158) N.'s benevolence ran him constantly into debt (caused him to incur debts).

So in terms of what activates what, we get the following progression
(138) (where the direction of the active relation is indicated by the direction of the arrows):

\[
\text{SOURCE} \rightarrow (\text{AGENT} \rightarrow \text{ACTION})
\]

Benevolence causes (N. incurs debts)

i.e. a Source (benevolence) affects a person (N.) such that N. incurs debts, the Source element effects the action N. incurs debts. The left-to-right progression indicated here would appear to reflect the order of events in extra-linguistic reality: N. is the initiator of the action in so far as he is the one who through some action incurs debts, yet he only does so when he is affected or acted upon by a certain force. N. may be regarded as expressing the category Affected in relation to the element Source and the category Agent in relation to the Action.

This representation of the source - effect relation raises an interesting point about the relation between the order of events as they occur in reality, the order in which events and processes are apperceived and the actual linguistic presentation of these events. The progression from source to effect may be reflected in the sequence of elements as in

(159) Benevolence ran N. into debt.

On the other hand, the effect may be apperceived first, attention then being directed to the source

(160) John ran into debt on account of his benevolence.
Consequently, there would appear to be two possible sequences of categories, constituting two different semantic patterns corresponding to two different perspectives. Discussing verbs implying 'injury' or 'destruction' which are associated with the categories Source and Affected, Kirkwood (1973: 351) shows how either the Source element or the Affected element (which he refers to as Experiencer) may establish the thematic basis. The following examples are given as illustration:

with the Experiencer as thematic basis:

(161) Many people have died of the disease
(161a) Viele Leute sind an der Krankheit gestorben

with the Source as thematic basis

(162) The disease has killed many people
(162a) An der Krankheit sind viele Leute gestorben.

Kirkwood (1973) also considers configurations involving the categories Source and Locative such as

(163) The grass was wet with dew

where a state is related to a location and referred to a Source. He writes (1973: 336): "The significant thing about sentences like (163) is the actual sequence of semantic categories which would reflect the manner in which the situation is apperceived, i.e. it represents a cognitional order which relates to the thematic organization.

\[
\begin{array}{c|c|c|c|}
 & T^0 & & R^0 \\
\hline
\text{location of state} & \text{state} & \text{source or cause of state} \\
\hline
T^1 & & R^1 \\
\end{array}
\]

or in terms of determination

\[
\begin{array}{c|c|c|c|}
\text{determinandum 1} & \text{determinans 1} & \text{determinandum 2} & \text{determinans 2} \\
\end{array}
\]
i.e. a state determined by a Source or Cause is related to a location."

In such a situation the Source element appears to be more dynamic than the Locative with which it is associated. Comparing the following pairs of sentences:

\[
\begin{array}{ccc}
T & & R \\
\hline
(164) & The grass is wet with dew & \\
(165) & Dew made the grass wet & \\
(166) & John trembled with fear & \\
(167) & Fear made John tremble & \\
\end{array}
\]

Kirkwood (1973: 386) points out that the Source may be presented as rhematic as in (164) and (166) or as thematic as in (165) and (167). The resultant state is rhematic. The Locative element (including the Affected element John) is thematic in each case. "This would seem to be the case since the location of a state or process is a 'deictic element' or 'point of reference' which is already in focus, and it is from this element that the communication proceeds and to which it is related. ... The Locative element, to which the state or process is related tends to be thematic. This would help to explain the typically thematic function of other semantic categories, e.g. Agent, Experiencer. They represent typically the 'peg on which the message is hung' or 'what the sentence is about', and this typically thematic function is reflected in the surface realization of these categories, i.e. in the processes of subjectivization and fronting, or, in other words, their function as what I have called 'thematic basis' (Kirkwood, 1973: 387)."
The order of elements in sentences (164) and (166) above where the Source element is moved to the right in accordance with its rhematic status seems to be typical of stative (non-active) as opposed to active sentences. Sentences of this type express the resultant state or condition after the process or event is completed. In (164) and (166) the feature of the Source element as the causative force seems to be less pronounced than in the active sentences (165) and (167). From the point of view of the information they convey, (164) and (166) are specifications of an existing state, condition (or reaction), rather than specifications of the cause of a state or condition. The latter would be the case if the resultant state were contained in a preceding question, e.g. Why was the grass wet?, Why did John tremble?. In (164) and (166), however, the resultant state is also contained in the rhematic segment in which case the rheme expresses a condition rather than a cause. The information conveyed may be regarded as being roughly similar to that conveyed in (168) The grass was dewy / covered in dew, There was dew on the grass (169) John was terrified.

The dynamism of the Source element seems to be related to the extent to which it is perceived as being actively involved in an event. Compare

(170) Der Ausgang der Gespräche macht mir Sorgen

(171) Mir Macht der Ausgang der Gespräche Sorgen

(172) The outcome of the talks worries me / is worrying me

(173) I am worried by the outcome of the talks
Ich mache mir Sorgen über den Ausgang der Gespräche

I'm worried about the outcome of the talks.

In the sentences (170) - (173) the Source element is presented as being more actively involved in bringing about an effect than in (174) and (175). This is indicated also by the following possible paraphrases of (172) and (173)

(176) The outcome of the talks gives me cause to worry

(177) I am given cause to worry by the outcome of the talks whereas a corresponding rendering of (175)

(178) I am given cause to worry about the outcome of the talks appears to imply that there is another force which is causing worry as indicated by

(179) My intuition gives me cause to worry about the outcome of the talks.

This does not apply, however, to (177) so that

(180) *My intuition gives me cause to worry by the outcome of the talks

is not a possible sentence. The same test can be applied to sentences (164) and (166) above, cf.:

(181) A sudden shock caused John to tremble with fear

(182) Humidity made the grass wet with dew.

This difference regarding the force of the Source element corresponds to the difference in sentence type. (172) is an active sentence with (173) as its passive alternant. (175) on the other hand, is non-active, it describes a state. This would appear to have implications for the thematic status of the Source element which tends to be thematic in active sentences and rhematic in non-active sentences (unless it is rendered thematic by contextual dependence).
Verbs in German that are regularly associated with the category Source in rhematic function are 'zurückführen' and 'zuschreiben'.

Consider the following examples:

zurückführen

(183) N. führt die gegenwärtigen Schwierigkeiten auf Hartnäckigkeit zurück

(184) Ich führe diese Tatsache darauf zurück, daß ... 

(185) Diese Tatsache ist darauf zurückzuführen, daß ... 

(186) Die Gewerkschaften führen die Rezession auf die Weltwirtschaftskrise zurück

zuschreiben

(187) Ich schreibe die Erkältung dem feuchten Wetter zu

(188) Sie schreiben Mangel an Verständnis einem Gehörfehler zu

(189) Es wäre töricht, ihre Enttäuschung einer einzigen einfachen Ursache zuzuschreiben

(190) Die Konkurrenzfähigkeit der Bundesrepublik Deutschland ist den Preisunterschieden zwischen der Bundesrepublik Deutschland und der übrigen Welt zuzuschreiben

Sentences with zurückführen and zuschreiben appear on the surface as active sentences with an animate being expressed by the grammatical subject, but convey basically information about a state or condition which is related to a source or cause. They express the relation 'effect-cause' as opposed to the relation 'cause-effect'. In other words the order of elements in sentences (183) - (190) reflects the manner in which the situation is apperceived by the speaker which is the reverse of the order in which the situation actually came about. What is expressed is not what a Source effects or does but what the
Source of a particular effect is. The structure of these sentences may be described in terms of the following stages:

1. activity: The difference in price levels improves the competitive position of the BRD (source-effect).

2. perception: The competitive position of the BRD is due to the difference in price levels (effect-source).

3. affirmation: N. affirms his perception, i.e.
   N. attributes the competitive position of the BRD to the difference in price levels.

The resultant configuration of categories is A + V + O + S.

The Semantic Structure of Non-Active Sentences

Throughout the present chapter a relation has been referred to between word order expressed in terms of usual configurations of semantic categories and our experience of extra-linguistic reality. In the case of the sentence types discussed in the preceding section, the order of elements was seen to reflect the order in which actions occur. Sentences expressing goal-directed action frequently open with the grammatical subject expressing the agent of the action, which in the agent - action - goal pattern represents the source from which the action originates. In this sense the agent relates to what has been referred to as the category Source, the force from which the action or process proceeds; both Agent and Source are actively related to the activity expressed by the verb. The actor - action - goal pattern represents one way in which objective reality is apperceived and presented by means of linguistic form. Other ways of experiencing reality, e.g. in terms of states rather than actions, are also reflected formally in sentence structure. We may recall
here the distinction made by Brinkmann (1962: 489ff.) between 'Handlungssätze' and 'Vorgangssätze' which he explains in cognitional terms. Another example of a basic word order representing a 'cognitional order' is that of existential sentences. Kirkwood (1969, 1969a, 1973) and Kuno (1971) suggest that the basic word order of existential sentences is

\[
\text{Locative} + \text{V}_{\text{existence}} + \text{NP}
\]

where the linear sequence of elements reflects the order in which states are apperceived and thus represents a cognitional order. Some illustrative examples of this pattern are:

(191) Zwischen der Studentenschaft und der Regierung Spaniens herrscht Kriegszustand

(192) Über dem Strom lag leichter Nebel

(193) Über Maßnahmen zur Luftreinhaltung besteht zur Zeit mit den Ländern ein reger Gedankenaustausch.

The point of departure (thematic basis) in each of the examples (191) - (193) is constituted by the locative element which establishes a local sphere of reference to which is related the existence of a person or thing. The existence of a person or thing is asserted in relation to a local sphere of reference. This function of the locative element in existential sentences would appear to correspond to the function of the Agent in sentences expressing goal-directed action. This relation is pointed out by Kirkwood when he writes: "In semantic sentence patterns involving an agent, it is frequently the agent that is selected as thematic basis. In semantic sentence patterns involving a locative and a thing situated in or emerging from this location, it is, particularly in German, the locative expression that is selected as the thematic basis, the
existing or emerging thing, which expresses the rhyme of the sentence, being in this way moved from initial position. One could, of course, conceive of the agent of an action as the source from which the action proceeds and expressing a kind of locative. Both kinds of locative may be thought of as the natural point of departure of an action or process in a cognitional sense, that is to say, relating to judgments we make about our experience of objective reality. Indeed agentive subjects are frequently found in first position in the sentence, this represents what might be called a basic sequence of elements or what I have referred to as a cognitional order from which other orders are derived" (Kirkwood, 1973: 196f.). Thus we might say that an action is located in a local sphere of reference. Both represent the point of departure in terms of the cognitional process (apperception of objective reality) and linguistic presentation.

This direct correlation between cognition and formulation in German may not necessarily hold for English where the order of elements is fixed according to the SVO order and thus less susceptible to permutation in accordance with cognitional criteria. There is, of course, no problem with the actor - action - goal situation which has as its linguistic formulation the grammatical pattern SVO. Existential sentences, which in German manifest sentence-final position of the grammatical subject, expressing the existing object, are clearly in direct conflict with the established SVO order of Modern English. In order to express the semantic relations 'existence of a person or thing in a place' English does, however, have at its disposal a number of sentence patterns which enable the linguistic presentation to reflect the cognitional process within the constraints imposed on element permutability by the grammaticalized SVO order. Consider the following examples:
(194) In der Übersichtskarte stecken viele farbige Stecknadeln
(195) Es stecken viele farbige Stecknadeln in der Übersichtskarte
(196) Die Übersichtskarte ist mit verschiedenfarbigen Stecknadeln
gespickt
(197) There are many differently coloured pins stuck in the chart
(198) The chart has many differently coloured pins stuck in it
(199) The chart is stuck with many differently coloured pins.

The sequence of elements manifest in (194) reveals a direct correlation
in German between the cognitional order (expressed in terms of
configurations of semantic categories) and the surface grammatical
pattern (the language-specific linguistic formulation of the cognitional
process), cf.:

SSP: L + V + 0

GSP: ADV_\text{Loc} + V_{\text{exist}} + \text{indef NP}_{\text{Nom}}

This direct reflection of the cognitional process, formulated in terms
of the configuration of categories in the SSP, in surface order is not so
possible in English. The above GSP, in so far as it deviates from the
established grammatical norm of Modern English, does not represent the
most 'natural' linguistic formulation of the cognitive content in question.
The usual grammatical pattern for sentences of this type in English is
illustrated in (197)

GSP: there + be + indef NP + ADV_{\text{Loc}}

which also has a corresponding pattern in German as in (195)

GSP: es + V_{\text{exist}} + indef NP + ADV_{\text{Loc}}

The expletive there in English and the expletive es in German serves to
move the subject from initial position to a position following the finite
verb. There in English and es in German thus have features in common from
the point of view of their function in the thematic organization of sentences, but whereas there is explicitly locative, es is not. For a detailed discussion of the expletive there and reference to its possible origin see Kirkwood (1973). Another possible grammatical pattern in English is indicated by sentence (198). This involves the use of the verb have in existential sentences. This pattern may be represented in the following way

\[
\text{GSP: } \text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Akk}} + \text{ADV}_{\text{Loc}}
\]

There is also a corresponding pattern in German with the verb haben, though its distribution would seem to be less wide than its English counterpart (cf. Kirkwood, 1973: 187ff.). These are some of the examples quoted by Kirkwood (1973: 188f.) as illustration of the use of have in English and haben in German to express the notion of existence of an object in a place:

(200) Die Stadt Berlin hat einen Bären im Wappen
(201) In dem Wappen der Stadt Berlin ist ein Bär
(202) Der Stuhl hat ein Schild dran
(203) An dem Stuhl hängt ein Schild
(204) The city of Berlin has a bear in its coat of arms
(205) There is a bear in the coat of arms of the city of Berlin
(206) The chair has a notice on it
(207) There is a notice on the chair.

As doubtful or unacceptable uses of the haben-pattern in German he gives:

(208) The bottle has some wine in it
(209) *Die Flasche hat noch Wein drin
(210) The table has a book on it
(211) *Der Tisch hat ein Buch darauf.
Sentences (196) and (199) illustrate a further structural means whereby an element expressing the location of a state or process may be subjectivized and moved to first position as thematic basis. This means of foregrounding a thematic locative element is more restricted in its distribution than the other patterns discussed and the verbs appearing in this type of construction express more than the notion of existence.

A particular characteristic of the meaning of verbs occurring here appears to be the expression of the notion of quantity; hence the use in English of such verbs as teeming with, swarming with, crawling with, bristling with, packed with, bursting with, oozing with, gushing with, riddled with, etc.

Further examples in German are:

(212) Aus ihren Taschen quollen die Uhren, die Ringe, die Schmucksachen.
    Ihre Brieftaschen platzten vor Geldscheinen

(213) In dieser Stadt wimmelt es von Bettlern
    Diese Stadt wimmelt von Bettlern.

(214) Das Zimmer starrte vor Ungeziefer, vor/von Schmutz

(215) Die Arbeit strotzt von Fehlern

(216) Die Arbeit ist mit Fehlern gespickt.

Closely related to sentences expressing the 'existence of an object in a place' are sentences expressing the notion of 'emergence'. Here too there is evidence suggesting a relationship between the semantic structure of the sentence as a configuration of semantic categories and what has been called a cognitional order, i.e. the order in which states and processes are apperceived. In sentences expressing the notion of emergence of a person or object in a place the cognitional process is presented in a way which reflects the perspective in which the process is experienced in
objective reality. As was clearly evident in the case of the existential sentences already discussed, German reveals a close correlation between the cognitional order and the linear sequence of elements. This being the case, the order of elements in German is in accordance with the basic distribution of CD and there is no need to resort to a special construction to achieve a neutral theme-rheme sequence. Kirkwood explains the thematic structure of existential-locative sentences in the following way: "To the sphere of an element in the focus of attention realized by a locative expression is related a person or thing existing in or emerging from this sphere, which is realized by the grammatical subject. This is the element that is brought into focus by being related to the sphere of the element already in focus, to what Firbas has referred to as the ad hoc, narrow context. ... the theme or thematic elements are the least dynamic, more static, elements, they represent the sphere which is presupposed by the state or process which is related to it; they represent the source (spatio-temporal situation, agent of an action) from which the state or process is seen to emerge" (1973: 184f.). Some examples of sentence expressing the notion of emergence are:

(217) Aus der Ankunftshalle strömten mehrere Hundert Passagiere
(218) Dem Springer-Verlag entstammen mehr als zwei Drittel aller Zeitungen
(219) An den Artikeln 12 und 53a entzündet sich scharfe Kritik
(220) Auf dem Flugplatz entstand mäßiger Sachschaden
(221) In dieser akademischen Senatoriumsatmosphäre hat sich ein Herd der Unruhe entwickelt

which have the grammatical pattern

\[ \text{GSP: } \text{ADV}_{\text{Loc}} + \text{V}_{\text{emergence}} + \text{indef NP}_{\text{Nom}} \]
Sentences expressing the notion of emergence in English do not show a linear sequence of elements in conformity with the basic distribution of CD in so far as the thematic locative expression may follow the rheme. This is the case in the following possible English equivalent to (217) above:

(222) Several hundred passengers streamed out of the arrival hall.

Initial position of the indefinite noun in English is in such circumstances as in (222) quite usual and neutral. In German, on the other hand, initial position of the indefinite noun is always non-neutral or marked. Consequently the sequence of elements in

(223) Mehrere Hundert Passagiere strömten aus der Ankunftshalle

is not a usual neutral sequence in German. If, however, the entity emerging is definite and contextually dependent it may occupy initial position as thematic basis, as in:

(224) Die Passagiere (sie) strömten aus einer großen Ankunftshalle.

In (224) it is the people emerging who are thematic, in focus and the sphere from which they are emerging that is brought into focus as rheme.

English may avail itself of special constructions, however, to present the cognitional process in a way which reflects the perspective in which states and processes are perceived. Apart from the construction with the expletive there mentioned above, the thematic locative element may be subjectivized which enables it to be fronted and made thematic basis in conformity with the SVO principle. This has already been referred to above in the discussion of the category Source where examples were adduced to illustrate how English may resort to a causative verb and make the theme the subject. This could also apply to sentences (218) and (219). Compare:
(225) More than two-thirds of all newspapers originate from the 
Springer Publishing House
(226) The Springer Publishing House produces more than two-thirds 
of all the newspapers
(227) Sharp criticism arose over Sections 12 and 53a
(228) Sections 12 and 53a gave rise to/aroused sharp criticism.

A further category which is frequently made thematic basis as the 
entity to which a state or process is related is the category Affected 
(Experiencer, Beneficiary, Patient). This category denotes the animate 
being which is in some way 'affected' by the state or activity expressed 
by the verb. Like the category Locative, Affected serves as a sphere of 
reference in a cognitional sense and is correspondingly found in the 
function of thematic basis in the linguistic formulation of the 
cognitional process. As such it has locative implications: states and 
processes may be located with respect of animate beings. The Affected 
element, like the categories Agent and Locative, represents the sphere 
from which the communication proceeds.

This function of the category Affected as the natural point of 
deptarture in a cognitional sense and as thematic basis in the linguistic 
presentation of the cognitional process may also be exemplified by one case 
frame of the verb have in English. Above it was seen that the verb have 
can enter into the case frame \[ \text{L + V + O} \] e.g.
(229) There is a book on the table / The table has a book on it 
which expresses the configuration of semantic categories
\[ \text{L + V + O}. \]
The verb have in English may also enter into the case frame
\[ \text{AFF + O} \]. The basic configuration of categories is then
\[ \text{AFF + V + O} \].

Some examples of this pattern where the verb have occurs are:

(230) He had no time left for costly amusements

(231) The Russians have their big party congress coming up in March;

(232) He concedes that his outlook is conservative, but thinks that he may have a role as Edward the Innovator

(233) Family - that's an old word. It didn't always have the significance it has today

(234) Sir Alec Douglas-Home's visit to Paris yesterday has a certain symbolic importance in this sense

(235) But it may also have a deeper meaning

(236) The 'Länder' have extensive legislative powers

(237) The Federal Chancellor has the right to ...

(238) He has the task of ...

In the above sentences (230) – (238) the category Affected is expressed by the grammatical subject of the verb have. In German the person implicated in or experiencing a situation or state is regularly expressed in the dative case as the possible German equivalents below indicate, though the corresponding German verb haben with subjectivization of the Affected element as in English is also possible. Compare:

(239) Ihm blieb keine Zeit zu kostspieligen Zerstreuungen übrig

(240) Den Russen steht im März ihr großer Parteikongress bevor

(241) Er glaubt, daß seine Einstellung konservativ ist, aber er glaubt, daß ihm vielleicht eine Aufgabe als Edward der Neuerer zukommt
(242) Familie - das ist ein altes Wort. Nicht immer hatte es die Bedeutung, die ihm heute zukommt.


(244) Ihm kommt aber vielleicht eine tiefere Bedeutung zu / Er kann aber auch eine tiefere Bedeutung haben.

(245) Den Ländern stehen umfangreiche Gesetzgebungsbefugnisse zu.

(246) Dem Bundeskanzler steht das Recht zu, ...

(247) Ihm ist die Aufgabe zugefallen, ...

This type of construction with have is one means available to English of making the thematic category Affected subject and thematic basis of the sentence. There would appear to be greater motivation for the use of have (and other verbs with similar function) in English than for the use of haben in German, since German readily allows initial position of other elements than the grammatical subject such as datives and prepositional phrases. However language-specific the actual linguistic presentation may be, it is clear that underlying the surface form there is a common configuration of semantic categories representing a basic cognitional order determined by our apperception of objective reality. In such a situation the Affected element is characteristically thematic. In a contextually dependent situation the category Object may be rendered thematic by the context and the Affected element may then be in rhematic function as the following example illustrates:

(248) Dieses Recht steht nur dem Bundeskanzler zu.

Kirkwood (1973: 210) summarizes the thematic status of the initial element in sentences with have in the following way: "We have noted that have constructions are a means of foregrounding a thematic element and making
it the thematic basis and subject of the sentence, this element being in the case of inanimate subjects the location to which a state or process is related, or in the case of animate subjects the person non-actively involved (affected by) the state or process expressed by the predicate. We could extend the use of the term locative to include animate nouns, since in the instances discussed they denote the sphere of reference to which something is related."

Agent-oriented verbs occur in configurations of semantic categories which manifest in the basic type initial position of the Agent as the person from whom the action proceeds. Verbs not associated with the category Agent show a consistent tendency to occur in patterns which have either the category Locative or the category Affected in initial position both of which represent a general sphere of reference to which the state or process expressed by the predicate is related. These patterns, which may be represented by the following configurations of semantic categories

\[ A + V + 0 \] (active type)
\[ L + V + 0 \] (non-active type)
\[ AFF + V + 0 \] (non-active type)

may be regarded as basic in so far as they represent cognitional orders, i.e. they reflect the order in which states and processes are apperceived. A communicative act modelled on these patterns presents the cognitional process in a way which reflects the perspective in which states and processes are perceived. In German we have observed a consistent correlation between the linear sequence of elements in the linguistic formulation of the sentence and the cognitional order. English also shows a tendency to reflect the cognitional process in the actual
surface presentation of sentences though it is not always possible to achieve this directly in: the actual linear sequence of elements and in many cases a special construction is resorted to. The resultant effect is the same, it is only the means of achieving the effect that are different. A striking difference between English and German in terms of linguistic formulation is constituted by sentences which regularly and naturally manifest an oblique case (especially a surface dative) in first position in German which is obviously not a feature of the structure of Modern English. I now propose to examine a large corpus of material illustrating the initial position of a dative element in: the light of the above comments on the semantic structure of particular types of sentences. This will involve relating active to non-active sentences. Reference will also be made to the structure and presentation of equivalent English sentences.

A clear indication of the difference in: the semantic structure of active and non-active sentences is provided by an analysis of the different configurations in which a single verb may occur depending on whether it is interpreted as being agent-oriented or not. Certain verbs may be associated with more than one case frame, appearing accordingly in different patterns of which the following are some examples

**fallen**

(249) Das Kind fällt ins Wasser

(250) Unter diese Regel fallen alle durch alten Sprachgebrauch gefestigten Wortpaarungen, die ...

**treten**

(251) Das Kind trat in eine Pfütze
(252) Zu den beiden heutigen Weltmächten USA und UdSSR wird auf jeden Fall China treten.

kommen

(253) Das Kind kommt nach Hause.

(254) Ihm kam ein rettender Gedanke.

In the first sentence of each of the above pairs the verbs fallen, treten and kommen appear as agent-oriented verbs. This is indicated in the possible underlying question: What did the child do? The child is the sphere from which an action originates and is in focus. In (250), (252) and (254) on the other hand, the verbs are not associated with the category Agent, but with the categories Locative (or Affected) and Object: the element in first position represents a general sphere of reference to which an entity which exists or emerges is related. Possible English equivalents would seem to confirm this interpretation, where a similar word order may be achieved by subjectivization of the Locative element, cf.:

(255) This rule covers / includes

(256) Both the existing world powers USA and USSR will be joined by China.

(257) He thought of a solution.

begegnen

(258) Wir müssen drohendem Unheil begegnen.

(259) Die Regierung mußte im vorigen Jahr einem Notstand begegnen.

(260) Das machte es so schwer, seinen Aktionen angemessen zu begegnen.

(261) Überall begegnet einem hier eine reizvolle Mischung von alt und neu.

(262) Ihm ist ein Unglück begegnet.

(263) Uns begegnete bei diesem Menschen eine besorgniserregende Verständnislosigkeit.
Wir begegneten bei diesem Menschen einer besorgniserregenden Verständnisslosigkeit

Dieses Wort begegnet (uns) erstmalig bei Leibniz

Diesem Wort begegnet wir erstmalig bei Leibniz

Sentences (258) - (260) represent the basic order pattern for active clauses. Here the verb *begegnen* has the active meaning of *to take steps/measures/precautions against*, *to meet*, *to oppose*, *to counter*, *counteract* (cf. German *entgegentreten* discussed later). In (261) - (266), the animate being associated with *begegnen* is not the Agent, but rather the Affected to which a situation is related. This difference in semantic function is indicated formally in German by a dative element in first position as in (261) - (263). English equivalents might manifest subjectivization of the category Affected to achieve the same distribution of elements in keeping with the underlying semantic structure, e.g.:

(267) Everywhere we were confronted with / we found ...

(268) He has met with a disaster

(269) We came across / met / happened upon a worrying lack of understanding in this person.

This means of fronting through subjectivization is also employed in the German sentence (264) above which would appear to simulate an active construction to express an essentially non-active meaning. In (262), (268) in addition to the possibility of subjectivization and fronting of the Affected element there is the obvious option in English of placing a rhematic subject in initial position, as in

(270) A disaster has befallen him

which in German would produce a marked sequence of elements, cf.:
(271) Ein Unglück ist ihm begegnet.

In a particular context, on the other hand, the Object may be rendered thematic by contextual dependence in which case it moves consistently to first position in German as thematic basis as examples (265) and (266) illustrate.

drohen

(272) Rußland droht dem Westen mit Krieg

(273) Dem Westen droht Krieg

(274) Der Richter drohte ihm mit Gefängnis

(275) Ihm droht Gefängnis

(276) Dem deutschen Einzelhandel droht eine Strukturkrise

(277) Den Rohstoffquellen droht Erschöpfung

(278) Es droht ein Gewitter

(279) Der Himmel droht ein Gewitter

(272) and (274) represent the basic active type; (273), (275) - (279) represent the basic non-active type. In (273) and (275) - (277) the dative element expresses the 'affected sphere' which refers to something in the immediate focus of attention and to which is related the entity constituting the threat. Here, too, possible English equivalents indicate a relation between apperception and linguistic presentation:

(280) The West is threatened with war

(281) He is threatened with prison

(282) The retail trade is threatened with a crisis

(283) The resources of raw materials are threatened with depletion.

(280) - (283) indicate the possibility of using the passive in English to front an element which in the corresponding active clause is neither
Agent nor grammatical subject. As with (270) the active pattern is possible in English with primary accent located on the subject:

(284) War is threatening the West

(285) A crisis is threatening/is hanging over the retail trade

(286) A storm is threatening

(287) The sky is threatening a storm

(279) and (287) represent further examples of simulated active patterns to express a state which is present or imminent. A further option of which English may avail itself is the construction with there + be which also serves to bring out the locative implications of the Affected element. Compare

(288) There is a crisis threatening/hanging over the retail trade

(289) There is a great danger hanging over us

(290) Uns droht eine große Gefahr

(291) Über uns hängt eine große Gefahr.

folgen

(292) N. folgte ohne Zögern seiner inneren Stimme

(293) N. ist seinem Vater ins Exil gefolgt

(294) Die Frauen folgen der Mode

(295) Die Partei kann dem Kurs der Regierung nicht weiter folgen

(296) Dem Pogrom vom 8. und 9. November 1938 folgte ein Hagel von Gesetzen und Verordnungen, die ...

(297) Der Landung auf dem Mars werden in Kürze Landungen auf den äußeren Planeten folgen

(298) Auf das satz einleitende Glied folgt ein nicht unbetontes Wort

(299) Auf eine Ursache folgt eine bestimmte Wirkung

The verb folgen in (292) - (295) has the active meaning of nachgehen.
or gehorchen and the sequence of elements is characteristic of the basic type in both English and German i.e. actor - action - goal, subject - verb - object. In (296) - (299) folgen has the meaning nachfolgen, aufeinanderfolgen in a non-active sense. Here the basic pattern L + V + O is also adhered to, the dative or prepositional object constituting the sphere of reference to which something is related. The 'converse' of follow i.e. precede (voran-, vorausgehen) is associated with similar patterns.

vorangehen, vorausgehen

(300) N. geht M. (ihm) voran/voraus
(301) M. (ihm) geht nur N. voran/voraus
(302) Der Gipfelkonferenz wird eine Außenministerkonferenz vorausgehen
(303) Es ist seit Jahrhunderten Tradition, daß der Ehe eine Verlobungszeit vorausgeht
(304) Dem Vorstoß der arabischen Diplomaten in Paris war am Wochenende eine Pressekampagne in der französischen Öffentlichkeit vorausgegangen
(305) Dem Gebrauch einer Substantivgruppe geht die Bildung eines Kernsatzes im innersten Denkverlauf voran

Sentence (300) represents the basic active type with the animate being from whom the activity proceeds in first position. (301) is a contextual variant of the basic type. The person N. expressed by the grammatical subject represents new information in accordance with a presupposition Somebody precedes/goes ahead of M.; the elements precede and M. are contained in the presupposition and convey known information. The
communicative intention of (301) is the specification of 'someone', i.e. N, which is rhematic and moves towards the end of the sentence allowing a theme - rheme sequence to be achieved. Sentences (303) - (306) are characteristic of the basic type where the verb is associated with the case categories Locative and Object. As in the above examples the Locative constitutes a general sphere of reference to which an entity is related; the Locative is in focus and thematic, the Object refers to persons, things or events that are brought into the focus of attention by being related to the sphere of the Locative element and constitutes the rheme.

The semantic structure of sentences associated with verbs such as follow and precede requires further comment. The line I am adopting is that if these verbs are interpreted as being non-agent-oriented, then the basic type may be represented in terms of the following SSP and GSP respectively

SSP: \( L + V + O \)
GSP: \( \text{NP}_{\text{Dat}} + V + \text{NP}_{\text{Nom}} \)

In English the same SSP has as its most neutral linguistic formulation the passive form, though the active form with foregrounded rheme would appear to be tolerated to a greater extent in English than in German (leaving aside the situation with explicit questions which frequently elicit answers in which the information sought by the question (the rhyme of the answer) is foregrounded). Considering sentences (296) - (299) and (303) - (306), we readily note that possible English equivalents may consistently be formulated with the passive construction
The pogrom was followed by ...

The landing on Mars will soon be followed by ...

The sentence-opening element is followed by ...

A cause is followed by ...

Marriage is preceded by ...

The initiative of ... was preceded by ...

The use of ... is preceded by ...

Nixon's arrival was preceded by ...

The motivation behind the use of the passive construction is clearly to achieve a theme-rheme sequence of elements which is in turn a reflection of the perspective in which the cognitional process is apperceived.

Consider now the quadruples presented in Fillmore (1970) containing the verbs follow and precede:

(315) (a) Every Sunday follows a Saturday
       (b) Every Saturday is followed by a Sunday
       (c) A Sunday follows every Saturday
       (d) *A Saturday is followed by every Sunday

(316) (a) Every Saturday precedes a Sunday
       (b) Every Sunday is preceded by a Saturday
       (c) A Saturday precedes every Sunday
       (d) *A Sunday is preceded by every Saturday.

Here Fillmore is concerned with some unknown constraints relating to the occurrence of quantifying expressions which might account for the unacceptability of the last sentence in each quadruple. Kirkwood (1973: 396ff.) relates this problem to the thematic organization of the
utterance. Assuming that every, like the, is a definite determiner and will normally accompany a thematic element, he shows that, since the motivation behind the use of the passive in English is the foregrounding of a thematic element, the explanation of the non­occurring sentences quoted by Fillmore is that the passive is unmotivated from the point of view of thematic structure. The following examples are also adduced as further illustration of the claim that with follow and precede the passive is reserved for cases where the subject of the passive is to be made thematic basis (cf. Kirkwood, 1973: 399):

(317) The lecture was followed by a discussion

(318) *A lecture was followed by the discussion

(319) A discussion followed the lecture

(320) The discussion was preceded by a lecture

(321) *A discussion was preceded by the lecture

(322) A lecture preceded the discussion

The subject may be rhematic in the active construction, this being an instance of rhematic foregrounding which gives rise to a marked sequence of elements.

Sgall (1972) also takes up Fillmore's 'mysteries' and seeks to throw light on the problem in terms of his analysis of the semantic representation of the sentence (SR) and a set of rules which generate surface structure variants e.g. (b) and (c) in the quadruples (315) and
(316). Non-occurring variants, e.g. (d), are not generated by the rules. Sgall assumes that for the participants of every verb (cases, actants, arguments) a certain ordering is determined. This is the systemic ordering discussed above, i.e. the hierarchy of participants according to their communicative importance which is determined by their syntactic role in the basic, unmarked ordering. Communicative importance is to be distinguished from communicative dynamism or 'actual hierarchy' which may or may not be in accordance with the systemic ordering. In other words a distinction is made between systemic ordering and sequential ordering, both of these coinciding in the unmarked case.

Participants are assigned serial numbers reflecting their relative positions in the systemic hierarchy. Let us recall an example quoted earlier as illustration, i.e.:

poetry \( \left[ 2 \right] \) write John \( \left[ 1 \right] \).

Here poetry (Object) has a higher degree of communicative importance in the basic unmarked ordering than the Agent, yet precedes the Agent in the sequential ordering given here in the sense that it is lower in CD. This produces a marked ordering in Sgall's terms, i.e. in the sense that the systemic ordering and the actual hierarchy are not in accordance and would in English involve a passive as in

(323) Poetry is written by John.

But then in what sense is this realization by the passive marked considering the foregoing discussion of the function of the passive in English.

To return to our examples with follow and precede, Sgall assumes
the following semantic representations established according to the assumptions outlined above

(I) every Sunday \( \square^1 \) follow a Saturday \( \square^2 \)

(II) every Saturday \( \square^2 \) follow a Sunday \( \square^1 \)

(II') every Sunday \( \square^2 \) precede a Saturday \( \square^1 \)

The rules Sgall sets up (cf. Sgall, 197: 286) then apply to the primed strings, the unprimed strings do not fulfill the conditions necessary for an application of the rules and their corresponding surface structure is that marked by (a) in the quadruples (313) and (315). The variants generated by the rules are (b) and (c) but not (d).

What I am concerned with here is the above representation of the systemic ordering of participants with the verbs *precede* and *follow*. Sgall appears to take the sequential orderings

(324) Every Sunday follows a Saturday
(325) Every Saturday precedes a Sunday

as the unmarked cases, since it is precisely these that correspond to the SRs directly without the rules having to be applied. These would correspond to the German sentences

(326) Jeder Sonntag folgt einem Samstag
(327) Jeder Samstag geht einem Sonntag voran

which, on the basis of the discussion of the position of the surface dative as a Locative element presented above, do not correspond to the sequence of elements in the basic type. Sequences representing the basic type would be

(328) Jedem Sonntag geht ein Samstag voran
(329) Jedem Samstag folgt ein Sonntag
corresponding in English to
(330) Every Sunday is preceded by a Saturday
(331) Every Saturday is followed by a Sunday.
Sentences (324) - (327) are contextually dependent, whereas (328) - (331) are relatively context free. This may be illustrated in terms of preceding questions or presuppositions. Preceding questions to (324) and (325) might be formulated as
(324a) What does (is it that) every Sunday follow(s)?
(325a) What does (is it that) every Saturday precede(s)?
or in terms of presuppositions
(324b) There is something that every Sunday follows
(325b) There is something that every Saturday precedes.
(330) and (331) do not necessarily presuppose any context. The same applies to the German examples (326) - (329) mutatis mutandis. This may be further illustrated if the definite quantifiers - these normally serve as markers of contextual dependence - are replaced by indefinite determiners. Compare
(332) A Sunday follows a Saturday
(333) A Saturday precedes a Sunday
(334) A Sunday is preceded by a Saturday
(335) A Saturday is followed by a Sunday
and
(336) Ein Sonntag folgt einem Samstag
(337) Ein Samstag geht einem Sonntag voran
(338) Einem Sonntag geht ein Samstag voran
(339) Einem Samstag folgt ein Sonntag
I would argue that even in the absence of formal linguistic markers of contextual dependence sentences (332) - (333) and (336) - (337) are not natural statements outside a given context, which distinguishes them from (334) - (335) and (338) - (339). Compare the following juxtapositions:

(340) (a) An effect follows a cause
(b) An effect is preceded by a cause

(341) (a) A cause precedes an effect
(b) A cause is followed by an effect

(342) (a) Marriage follows engagement
(b) Marriage is preceded by engagement

(343) (a) Engagement precedes marriage
(b) Engagement is followed by marriage.

In each of the above pairs, the (b) forms represent the most natural statements in a contextually independent situation. The element in first position in these passive sentences may be interpreted as creating a context or sphere of reference to which something is related. This function is expressed more explicitly in German by a dative element or a prepositional phrase which have obvious locative implications.

Compare:

(344) (a) Eine Wirkung folgt auf eine Ursache
(b) Einer Wirkung geht eine Ursache voraus

(345) (a) Eine Ursache geht einer Wirkung voraus
(b) Auf eine Ursache folgt eine Wirkung

(346) (a) Eine Ehe folgt einer Verlobungszeit
(b) Einer Ehe geht eine Verlobungszeit voraus

(347) (a) Eine Verlobungszeit geht einer Ehe voraus
(b) Einer Verlobungszeit folgt eine Ehe.
An explanation why the (b) forms are more basic than the (a) forms in the above pairs may perhaps be sought in terms of what determines what in accordance with the particular perspective conveyed by the verb. This has implications for the criteria determining the position of participants in the systemic hierarchy and on the basis of this I propose to amend the numerical subscripts Sgall proposes in specifying the ordering of participants of the verbs follow and precede. This revision may also be extended to the other verbs which Sgall includes in the same context, i.e. develop out of/into and make out of/into (Sgall, 1972: 283-288; 1972a: 10ff.).

Expressed in terms of simplified semantic representations where the sequential ordering reflects the systemic ordering, the subscripts Sgall attaches to the participants of the verbs mentioned immediately above are:

\[
(\text{oak}_1 \text{ develop } \text{acorn}_2)^S \\
(\text{I}_1 \text{ make canoe}_2 \text{ log}_3)^S \\
(\text{Sunday}_1 \text{ follow Saturday}_2)^S \\
(\text{Saturday}_1 \text{ precede Sunday}_2)^S
\]

I shall seek to show that the basic type represents the manifestation of a particular relation which the verb determines between the participants. In the sentences

\((348) (a) \text{ Marriage follows engagement} \)
\[(b) \text{ Engagement is followed by marriage}\]

there is a relation between marriage and engagement which remains the same irrespective of the perspective in which the information is conveyed.
in terms of thematic organization, i.e. in this case this relation is indicated by the semantic categories L and O. Furthermore, this relation is such that one participant intrinsically qualifies the other through the verb and we might tentatively refer to this in terms of 'further determination' or 'specification'. In terms of the examples in (348), it might be assumed that given the perspective conveyed by the verb follow and participant engagement (=L) is 'further specified' by marriage (=O). Similarly, in the case of the verb precede, the roles of the participants and the direction of the further specification are reversed since the verb precede is a converse of the verb follow and conveys as such the converse perspective. The starting point is now marriage (=L) which is further determined or specified as the state which is preceded by another state, engagement. An analagous situation would appear to exist in the case of active clauses, e.g.:

(349) Die Frauen folgen der Mode

where Frauen are further specified by their action (=der Mode folgen). It is in this sense of a participant A being further specified by a participant B through the verb that participant A functions as a sphere of reference to which participant B is related.

In the light of the above it would seem that Sgall's systemic ordering of the participants associated with the verbs follow and precede only holds true in the case of sentences such as (349), i.e. in cases where one of the participants functions as Agent. Also assuming that the sequential ordering of elements in the basic type reflects the systemic ordering (for language-specific reasons this may require some qualification in the case of Modern English), I propose the following
sentences as examples of the basic type:

(350) Die Frauen folgen der Mode  
      } (basic active)
(351) Der Lehrer geht den Schülern voran  
      } (basic active)
(352) Der Ehe geht eine Verlobungszeit voraus  
      } (basic non-active)
(353) Der Verlobungszeit folgt die Ehe.  
      } (basic non-active)

Specifying the hierarchy in terms of numerical subscripts as above we get:

(Frauen\textsubscript{1} folgen\textsubscript{act} Mode\textsubscript{2}) S
(Lehrer\textsubscript{1} vorangehen\textsubscript{act} Schüler\textsubscript{2}) S
(Ehe\textsubscript{1} vorausgehen\textsubscript{n-act} Verlobungszeit\textsubscript{2}) S
(Verlobungszeit\textsubscript{1} folgen\textsubscript{n-act} Ehe\textsubscript{2}) S

Finally, I shall briefly review the situation with the verbs develop out of/into and make out of/into. Sgall (1972, 1972a) proposes that the sequential ordering in the following sentences is the one reflecting the hierarchy of participants:

(354) Every oak developed out of an acorn
(355) I made every canoe out of a log

corresponding to simplified semantic representations:

(oak\textsubscript{1} develop acorn\textsubscript{2}) S = 1972; (oak\textsubscript{2} develop :  
(I\textsubscript{1} make canoe\textsubscript{2} log\textsubscript{3}) S  

He names the participants as Actor (=1), Goal (=2) and Origin (=3).

\footnote{Sgall (1972a: 10) includes the Agent (=1) as an optional constituent associated with the verb develop. This raises a wider issue which Sgall alludes to (1973: 67) when he sets out his systemic ordering and suggests that some differentiation may be necessary according to individual verb groups.}
The position of the Agent is clear which leaves the cases Goal and Origin whose relative position to one another requires some clarification.

As a starting point, let us de-contextualize (354) and (355) by removing all formal linguistic markers of contextual dependence as above. This produces

(356) An oak developed out of an acorn
(357) I made a canoe out of a log.

Compare possible German equivalents

(358) Eine Eiche entwickelte sich aus einer Eichel
(359) Ich machte aus einem Baumstamm ein Boot
(360) Ich machte ein Boot aus einem Baumstamm.

Consider first of all the sentences (359), (360). (360) is only possible in a contextually dependent situation as indicated by the presupposition Ich machte aus etwas ein Boot, in which case all but the element aus einem Baumstamm is thematic. The sequential ordering in a contextually independent situation is the one given in (359), which suggests, then, the hierarchy: Agent = 1; Origin\(^1\) = 2; Goal\(^1\) = 3. The same applies to (358) which according to the basic type suggested here would have the formulation

(361) Aus einer Eichel entwickelte sich eine Eiche

which manifests the configuration of categories L(or S) + V + 0.

---

\(^1\) Cf. Kirkwood (1973) - using Source and Object of Result for what Sgall calls Origin and Goal - refers (390) to the hierarchy of elements in terms of cohesion with the verb, 'there being a closer relation between verb and Result than between verb and Source'. Becker (1971) refers to Objective (Source/Origin) and Factive (Goal/Result).
In English, language-specific criteria need to be taken into account. In (337) for example, there are language-specific factors which render the basic order Origin - Goal (or: Source - Result) unusual or less natural: we may recall the discussion in the previous chapter of 'Distanzstellung', which is characteristic of German, and 'Kontaktstellung', which is characteristic of English and which often results in sequential ordering not reflecting the basic distribution of CD. There is, however, an option open to achieve this in the construction (382) I made a log into a canoe which does reflect the hierarchy of elements (1 + V + 2 + 3) and corresponds also to the basic distribution of CD. Similarly, a possible equivalent to the German sentence (361) is (363) An acorn developed into an oak In the light of this evidence, Sgall's description of the forms active and V + out of as being 'primary, unmarked' and the forms passive and V + into as 'marked' (1972: 285) would appear to be inconsistent with his own hypothesis. Part of the confusion may lie in his failure to distinguish between the semantic structure of verbs such as write, which are agent oriented, and verbs such as follow and precede when used in their non-active sense.

I shall now proceed to discuss the semantic structure and linguistic presentation of sentences involving a set of German verbs which are associated with a dative element expressing a local sphere of reference when occurring in first position and which contain in their morphological structure a prefix with explicit locative features, e.g. verbs with the prefixes gegenüber-, entgegen-, zugrunde- etc.
Many of these verbs also enter into more than one case frame and consequently are associated with more than one semantic structure which, as above, has implications for the sequential ordering of elements.

gegenüberstehen

(361) Den Ideologen stehen die Pragmatiker gegenüber

(362) Dem Präsidenten Ford und seinem Metternich steht ein Kongreß gegenüber

(363) Einem etwas trockenen Hochmut, einem Ehregeiz und Niedrigkeit und Strebemühen standen andere Regungen gegenüber

(364) Der Auffassung von dem 'zufälligen' Charakter unserer Devisenüberschüsse steht die Ansicht gegenüber, die das dauerhafte und strukturelle Element unserer Außenhandels-situation betont

(365) Den geplanten Gesamtausgaben des Bundes im nächsten Haushaltsjahr in Höhe von 134,4 Milliarden Mark stehen Steuereinnahmen von rund 128,2 Milliarden Mark gegenüber

(366) Den Mitspielern oder valenzgebundenen Satzgliedern stehen die freien Angaben gegenüber

(367) Den auf Formalisierung aufgebauten Grammatiktheorien stehen die nicht-formalisierten gegenüber

(368) Den acht bürgerlich-nationalen Ministerern standen nur drei nationalsozialistische Minister gegenüber

(369) Einem belgischen Liberalen steht ein deutscher Sozialdemokrat gegenüber

(370) Dem emphatischen und harmonischen Tenor der Nato-Botschaft steht auf der anderen Seite die derzeitige Aktivität im Osten gegenüber

(371) Das Dilemma hierbei ist zum Teil politischer Art, denn den Einnahmen, die die britische Luftfahrtindustrie bei dem Airbus-Auftrag über die Hawker Siddeley-Gruppe erzielen würde, stehen gleiche Einnahmen durch die Rolls-Royce-Triebwerke bei der Tri-Star von Lockheed gegenüber.
Sentences (361) - (371) are characteristic of the basic type where the configuration of categories L + V + 0 or AFF + V + 0 is expressed by the grammatical pattern NP$_{\text{Dat}}$ + V + NP$_{\text{Nom}}$. In each case two elements - let us refer to these as A and B - are juxtaposed in a certain perspective. A is presented as 'given', or rather as creating a context or sphere of reference to which B is related in the perspective conveyed by the verb. Gegenüberstehen implies a 'contrast', 'comparison', 'opposition' or 'juxtaposition' which is realized by one element B being brought into focus and contrasted, opposed or juxtaposed to an element A which is in focus. A represents the sphere affected by the relation or the sphere to which the relation is directed. Thus in (361) the relation between A and B is such that A 'is counterbalanced by' B. Similarly, in (362) A (President Ford and his Metternich) 'are confronted with', 'have to contend with' B (opposition in Congress). In each case A is 'further specified' or 'acted upon' by B, it is 'exposed' to B. In terms of participant roles, A is a 'weaker', 'more passive' participant which might be translated as meaning less dynamic with regard to the degree of CD it carries on the level of thematic organization, or communicatively less important (in the sense this is used by Sgall, 1973) on the level of semantic structure. Conversely, B, by being brought into relation with A and 'further specifying' or 'acting upon' A, has a 'stronger', 'more active' participant role; it carries a higher degree of CD and a higher degree of communicative importance in accordance with the situation in the basic type.

It is significant that in terms of linguistic formulation it is
the grammatical category dative that expresses the sphere of reference represented by A, since it is the dative case rather than the nominative that has locative implications. It is also significant to note the linguistic presentation of possible English equivalents as an indication of the tendency to compensate for its inability to represent the respective functions of the various categories in the sequential ordering of surface case forms. Compare:

(372) President Ford and his Metternich are faced with/confronted with (have to contend with) a Congress, where the democratic Opposition is in a majority in both Houses.

(373) The emphatic and harmonious quality of the NATO message is matched by the current manoeuvrings in the East.

(374) The dilemma here is partly a political one with the value of the European Airbus order to the British aircraft industry through the Hawker Siddeley interest being balanced against the value to the industry through the Rolls-Royce engines in the Lockheed TriStar.

As in many of the instances quoted above, (372) - (374) illustrate the use and function of the passive in English to achieve a distribution of content in keeping with the desired communicative perspective which is achieved in German by permutation of the order of elements. It is interesting to note that other languages, e.g. Swedish, also reflect this basic cognitional order in the linear sequence of elements. Compare:

(375) Mot ideologerna står pragmatikerna (cf. 361)

(376) Mot förbundets planerade bruttoutgifter under nästa budgetår till ett belopp av 133,4 miljarder mark står skatteintäkter på i runt tal 128,2 miljarder mark (cf. 365)

(377) Mot de på formalisering uppbryggda grammatikteorierna står de  icke-formaliserade (cf. 367)

(378) Mot de åtta borgerligt-nationella ministrarna stod bara tre nationalsocialistiska ministrar (cf. 368)
Swedish, like English, has lost its surface case forms, yet does tolerate to a greater extent than English the preposition of prepositional phrases such as, for example, *mot* + NP in the above examples, the locative implications of which are obvious.

Gegenüberstehen is also associated with the active basic type. Cf.:

(379) Die Studenten stehen zur Zeit einer zunehmenden Verharschung der politischen und gesellschaftlichen Verhältnisse in der Bundesrepublik gegenüber

(380) N. hat der Gefahr furchtlos gegenüber gestanden

(381) Der politischen Repräsentanz dieses Staates und ihren Verantwortlichen stehen sie skeptisch gegenüber

(382) Alle entscheidenden politischen Studentengruppen stehen also den gegenwärtigen Parteien, den maßgeblichen Politikern mit äußerster Skepsis gegenüber.

(379) is characteristic of the basic type; (380) - (382) represent contextual variants, the dative element being recoverable from the preceding context and consequently thematic - note the thematic foregrounding of this element in (381). Since the subject is also contextually bound in (380) - (382), the primary rhematic accent is located on the verbal prefix gegenüber.

Compare further the following pairs of sentences:

(383) (a) Großbritannien steht zum gegenwärtigen Zeitpunkt vielen Problemen gegenüber

(b) Großbritannien stehen zum gegenwärtigen Zeitpunkt viele Probleme gegenüber

(384) (a) Die osteuropäischen Länder stehen mehr und mehr einem räumlich großen, industriell und landwirtschaftlich stark entwickelten westeuropäischen Markt gegenüber

(b) Den osteuropäischen Ländern steht ein räumlich großer, industriell und landwirtschaftlich stark entwickelter westeuropäischer Markt gegenüber.
In (383) and (384), the (a) forms represent formally the basic active type and the (b) forms the basic non-active type. As it stands sentence (a) may be regarded as a paraphrase of (b). This is also suggested by possible English equivalents. Compare:

(385) (a) Great Britain faces/is facing many problems at the present time
     (b) Great Britain is faced with many problems at the present time

(386) (a) The Eastern European countries face/are facing a spacious, industrially and agriculturally highly developed Western European market
     (b) The Eastern European countries are faced with a spacious, industrially and agriculturally highly developed Western European market.

The interpretation that suggests itself is that of the basic non-active type. It is perhaps relevant to recall at this point the 'back-effect' phenomenon referred to by Danes (1968: 60) which he understands as the effect that linguistic formulation (GSP) may have on the presentation or interpretation of the communicated cognitive content. The (a) forms above simulate the basic active type with the result that the Affected element is 'styled' as if it were an Agent. In these terms, the dative element may appear to be 'more exposed' to the situation than the nominative in the (a) forms which assume a more 'active' role. This being the case, a slight re-formulation of the (a) forms may lead to an active interpretation. Compare the following sentence with (383) (a) above:

(387) Großbritannien hat in letzter Zeit vielen Problemen mutig gegenübergestanden

and (388) with (385) (a):

(388) Great Britain has courageously faced many problems recently.

Compare also:

(389) Ford und Kissinger stehen der demokratischen Opposition im Kongreß mit zuversichtlicher Entschlossenheit gegenüber

(390) Ford and Kissinger are facing the democratic opposition in Congress with optimistic determination.
One differentiation test would appear to be the possible occurrence of an adverb of manner in the active type. A further test is substitution of the construction **sich etwas** (Dative) **gegenübersehen** (or **sich etwas gegenübergestellt sehen**) for **gegenüberstehen** which explicitly point to a non-active interpretation. Compare:

(391) (a) Dem neu gewählten und größtenteils neu besetzten Vorstand stand ein Defizit in Höhe von 515,4 Millionen DM gegenüber

(b) Der neu gewählte und größtenteils neu besetzte Vorstand sah sich einem Defizit in Höhe von 515,4 Millionen DM gegenüber

(or: sah sich einem Defizit ... gegenübergestellt)

(392) The newly elected and to a large extent reconstituted executive board was faced with a deficit of 515.4 million marks

(393) (a) Die britische Regierung sieht sich vielleicht in den kommenden Wochen oder Monaten einer sich rasch verschlechternden Situation in Ulster gegenüber

(b) Der britischen Regierung steht vielleicht in den kommenden Wochen oder Monaten eine sich rasch verschlechternde Situation in Ulster gegenüber

(394) The British Government may be faced with a rapidly deteriorating situation in Ulster in the coming weeks or months.

The co-occurrence of a manner adverb with **sich gegenübersehen** is not a possible combination as the following example shows:

(395) (a) *Die britische Regierung sieht sich in letzter Zeit vielen Problemen mutig gegenüber

(b) *The British Government has recently found itself courageously faced with many problems.

Nor does a manner adverb occur in the basic non-active type:
(396) (a) *Der britischen Regierung stehen in letzter Zeit viele Probleme mutig gegenüber

(b) *The British Government has recently been courageously faced with many problems.

entgegenstehen

(397) N. steht dem Plan unbeugsam entgegen

(398) Ich will deinen Wünschen nicht entgegenstehen

(399) Diese Schwierigkeiten stehen der Zusammenarbeit entgegen

(400) Dem politischen Willen zur europäischen Einheit stehen die zentrifugalen Kräfte und Bestrebungen entgegen, die ...

(401) In den meisten Ländern muß sich ein übersetztes Buch, wie andere Bücher auch, auf dem Markt durchzusetzen versuchen; dem steht jedoch normalerweise vom Anfang an eine Reihe von Schwierigkeiten entgegen.

(402) Den mageren Ergebnissen steht der große Kostenaufwand entgegen.

(397) and (398) represent the basic active type manifesting the configuration of categories A + V + O. (399) is a contextual variant of the non-active type, Schwierigkeiten is recoverable from the context (anaphoric reference) and moved to first position as thematic basis.

(400) - (402) are characteristic of the non-active basic type where the configuration of categories is I(or AFF) + V + O. Possible English equivalents again reflect the same order of categories, the linguistic formulation reflecting once again the function of the passive construction in English:

(403) The political desire for unity is opposed by those centrifugal forces and aspirations, which ...

(404) In most countries, a translated book has to take its chance on the market along with others, and it is normally handicapped from the start by a number of factors.
The meagre results are in marked contrast with the great expenditure.

entgegentreten

N. trat dem Feind mutig entgegen

Wir müssen dieser Unsitte energisch entgegentreten

Seiner verbrecherischen Politik versuchten sie wirksam entgegenzutreten

Mir treten in jeder Gesellschaft hinsichtlich meines sozialen Status, meines Familienstandes, meines Alters gewisse idées fixes entgegen.

entgegenkommen

Sie kamen uns mit Freundlichkeit entgegen

Wir bemühen uns, jedem Geschmack entgegenzukommen

Schon an der Tür kam uns das Geruch von Kohl entgegen

Mir kam ein seltsames Geräusch entgegen.

In every society, I am ascribed certain fixed characteristics

At the door we were met by the smell of cabbage

I was met by a strange noise, or: a strange noise met my ear.

In English, the sentence may open with the rhematic element as one of the alternatives in (416) indicates.

Certain verbs with entgegen are only associated with the active type. Some examples are:

Wir gehen engeren und lohnenden Beziehungen zwischen den beiden mächtigsten Nationen der Welt entgegen
(418) Erwachsene wirken dem Spieltrieb des Kindes entgegen

(419) Nixon will der Inflation durch Preisstopp entgegenwirken

Other three-place verbs are agent-oriented in the active type, but on passivization allow the dative element to be fronted thus simulating the basic non-active type. Compare

(420) N. hat einer neuen Arbeit von M. großes Interesse entgegengenbracht

(421) Einer neuen Arbeit von M. wird großes Interesse entgegengenbracht

(422) Viele Politiker und auch führende Militärs halten es für notwendig, einer Entwicklung des chinesischen Aggressions-potentials rechtzeitig eine Abwehr entgegenzustellen

(423) Einer Entwicklung des chinesischen Aggressionspotentials wird eine Abwehr entgegengestellt.

In (421) and (423) it is the Affected element, the least syntactically cohesive element after agent-deletion that is moved to first position as thematic basis effecting the configuration of categories AFF + V + 0 which is the basic semantic pattern for the non-active type. The structural similarity of the above German passive sentences with the basic non-active type may be further illustrated by comparing the examples in the following pairs:

(424) (a) Dem grammatischen System der Schriftssprache wird zuweilen das der Umgangssprache entgegengesetzt

(b) Dem grammatischen System der Schriftssprache steht das der Umgangssprache entgegen

(425) (a) Sie lernen nicht rechnen: das ist gewiß der häufigste Elterneinwand gegen die Neue Mathematik. Ihm kann immer noch die Bitte um Geduld entgegengehalten werden

(b) Diesem Einwand steht die Bitte um Geduld entgegen
(426) (a) Dem wird das Verhalten Polens entgegengehalten
(b) Dem steht das Verhalten Polens entgegen.

A similar relation as that indicated by the above active and passive sentences is also evident in the case of certain verb pairs of transitive and intransitive verbs. Compare unterlegen : unterliegen

(427) Wir sind jetzt gewohnt, dem Verhältnis des Subjekts zum Prädikat einen engeren Sinn unterzulegen
(428) Wir haben einem Text einen anderen Sinn untergelegt
(429) Dem Verhältnis des Subjekts zum Prädikat unterliegt ein engerer Sinn
(430) Dem Text unterliegt ein anderer Sinn
(431) Ich unterlag seiner raschen Wirkung
(432) Dieser Vorgang unterliegt der Geheimhaltung

(427) and (428) are characteristic of the basic active type which in their reduced form (i.e. after agent-deletion) represent the basic non-active type as illustrated by (429) and (430), where the verb unterlegen has been substituted by unterliegen. (431) and (432) also represent the basic non-active type manifesting the configuration of categories AFF + V + 0. Note, however, that in these two cases the sentence opens with the grammatical subject, though it clearly expresses the category Affected, the verb in this context meaning betroffen werden.

zugrunde liegen : zugrunde legen

(433) N. hat seiner Arbeit eine falsche Auffassung zugrunde gelegt
(434) N. hat der überwältigenden Mehrheit der Transformationen seiner generativen Grammatik die Prozesse zugrunde gelegt, die in der menschlichen Psyche vor sich gehen
(435) Seiner Arbeit liegt eine falsche Auffassung zugrunde
(436) Der überwältigenden Mehrheit der Transformationen der generativen
Grammatik liegen die Prozesse zugrunde, die in der menschlichen
Psyche vor sich gehen.

(433) and (434) relate to (435) and (436) in the manner described above.

vorliegen : vorlegen

(437) N. hat mir 72 Erklärungen über das Wahlrecht vorgelegt

(438) N. wird dem Berliner SPD-Landesparteitag am 26. und 27. Mai
87 Anträge vorlegen

(439) Mir liegen 72 Erklärungen über das Wahlrecht vor

(440) Dem Berliner SPD-Landesparteitag werden am 26. und 27. Mai
87 Anträge vorliegen.

beiliegen : beilegen

(441) N. hat einem Brief eine Rechnung beigelegt

(442) N. hat einer Sache erhebliche Bedeutung beigelegt

(443) Einem Brief liegt eine Rechnung bei

(444) Dieser Sache liegt erhebliche Bedeutung bei.

The above sentences (437) - (444) represent the basic active and non-active types. Note the use of the verb have in possible English equivalents of the non-active type:

(445) I have before me 72 statements about the Electoral Law

(446) The SPD Party Congress will have before it 87 applications

(447) A letter has a bill (enclosed) in it

(448) This matter has considerable importance attached to it.

unterstehen : unterstellen

(449) Die Regierung hat private Schulen den Landesgesetzen unterstellt

(450) Wir haben Sie der Aufsicht von N. unterstellt

(451) Sie unterstehen der Aufsicht von N.

(452) Privat Schulen unterstehen den Landesgesetzen

(453) Dem schwedischen Touristenverein unterstehen alle Jugendherbergen.
(449) and (450) represent the basic active type. Note the order accusative-dative here, indicating that unterstellen belongs to the class of verbs I distinguished above which are associated with the basic grammatical pattern

\[ NP_{Nom} + V + NP_{Akk} + NP_{Dat} \]

corresponding to the semantic pattern

\[ A + V + AFF + O \]
or

\[ A + V + O + L. \]

Sentence (451) would appear to indicate the interpretation involving the category Affected, the configuration of categories in this case being

\[ AFF + V + O. \]

Compare in this respect the examples adduced above with the verb unterliegen:

(454) Ich unterlag seiner raschen Wirkung

(455) Dieser Vorgang unterliegt der Geheimhaltung

which manifest the same grammatical and semantic patterns. This interpretation may also apply to (452) and the possible English equivalent:

(456) Private schools are subject to State Law.

Now compare the sentence

(457) Den Landesgesetzen unterstehen Schulen und alle sozialen Einrichtungen

which is characteristic of the basic non-active type, manifesting the configuration of semantic categories

\[ L + V + O. \]

This interpretation also applies to (453), whereas the sentence

(458) Alle Jugendherbergen unterstehen dem schwedischen Touristenverein
is like (452). In (452) and (458), it is not a question of locating Schulen/Jugendherbergen in the way Buch is located in (459) Das Buch liegt auf dem Tisch (0 + V + L) where auf dem Tisch expresses a purely physical location and as such is 'inactive' with respect to the Object; it is rather a question of specifying that Schulen/Jugendherbergen are 'affected' or 'acted upon' by a force - Landesgesetze/Touristverein is in an 'active' relation to Schulen/Jugendherbergen which may be represented in terms of the following configuration of categories:

\[ \text{AFF} + V + 0. \]

Reference has been made throughout this part to the use in Modern English of the passive construction to express the configuration of categories L (or AFF) + V + 0 which is achieved in German by sequential ordering without subjectivization and passivization - the Locative or Affected category simply moves to first position in accordance with its participant role. In the basic type this element in initial position is also characteristically thematic and the sequence of elements consequently and consistently manifests a neutral theme - rheme perspective. This also applies to the English sentences discussed. It is indeed significant that despite differences in linguistic formulation between the two languages, the sequential ordering of constituents is regularly similar in the types discussed in terms of a common presentation of configurations of semantic categories.

There are instances where the passive also occurs in German in the basic type. These are examples of active (agent-oriented) verbs where
the agent is not specified. In such a situation the surface dative expressing the Affected element consistently moves to initial position as thematic basis. A large class of verbs associated with this type are those expressing the 'giving' or 'taking away' of something from somebody, i.e. where the Affected element expresses the notion of beneficiary/recipient or patient. A few examples which illustrate this are:

(460) Dem Comicstrip wird dadurch eine Würde gegeben
(461) Dem Ehepaar Lübbe wurde mit der direkten Anfahrt zum Friedhof eine Vergünstigung gewährt, die ...
(462) Diesem Mann war ein geringes Maß an Einfluß zugedacht
(463) Deutschland war mit diesem Beschluss die Gleichberechtigung in Rüstungsfragen zugestanden
(464) Dem SDS werden Gelder vorenthalten
(465) Dem Studenten sollten die zu ihren Studium erforderlichen Bedingungen nicht versagt werden
(466) Dem Präsidenten ist das Wort verweigert worden
(467) Den Juden wurde das Menschsein aberkannt
(468) Der SED müsse Menschlichkeit abverlangt werden
(469) Den Deutschen ist ein gesundes Vaterlandsgefühl abhandengekommen
(470) Dem inneren Geldkreislauf wurden in beträchtlichem Umfang Mittel entzogen.

Other surface elements than the dative also occur sentence-initially depending on the corresponding active pattern. If, for example, in the case of the two basic active grammatical patterns (cf. Chapter III):

\[
\begin{align*}
\text{NP}_{\text{Nom}} + V + \text{PO} + \text{NP}_{\text{Akk}} \\
\text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Akk}} + \text{PO}
\end{align*}
\]

the agent is not specified, then in the basic type it is the next least
cohesive constituent that moves to initial position as thematic basis. Compare:

(471) Von Großbritannien wird möglicherweise weitere Aktion verlangt
(472) Jede grammatische Einheit ist mit mehreren grammatischen Merkmalen ausgestattet.

This also applies to other basic grammatical patterns. Compare

\[ NP_{\text{Nom}} \ + \ V \ + \ NP_{\text{Akk}} \ + \ NP_{\text{Gen}} \]

(473) Diese Desinfektion war aller menschlichen Bezüge zu den Opfern entkleidet
(474) Der Professor N wurde wegen Aufsässigkeit seines Amtes enthoben
(475) Das Verhältnis zwischen Subjekt und Objekt der Züchtung ist jedes persönlichen Bezuges entkleidet.

These standard patterns for de-agentivized sentences would seem to further substantiate the notion of syntactic hierarchy underlying these sequential orderings which I discussed in detail in the previous chapter.

Many traditionally so-called 'intransitive' verbs associated with a dative object also conform to the non-active basic type. Again we may recall Brinkmann's comment on the order of elements in 'Vorgangssätze' where the category Object is preceded by the 'circumstances' to which it is related. In the case of some verbs associated with a dative element expressing the category Affected it is this constituent that functions as the element to which the state or process is related. This is again in accordance with the non-active basic type which I have sought to illustrate throughout this chapter. I shall briefly list some of these verbs and their associated semantic patterns, sub-dividing these according to the particular way the element in first position is
'affected': the category Affected subsumes Experiencer, Beneficiary/Recipient and Patient.

Verbs expressing mental processes or states of mind in relation to a state or process suggest an interpretation of the Affected element as Experiencer. Compare:

(476) Mir ging ein Licht auf
(477) Mir fiel mit der Zeit auf, daß ...
(478) Den Realisten im Kreml muß längst aufgegangen sein, daß ...
(479) Ihm mußte sein einsamer Zustand äußerst auffallen
(480) Ihm schwebte vor, eine große nationale Stiftung ins Leben zu rufen
(481) Mir ging der Gedanke durch den Kopf, daß ...
(482) Mich durchfuhr ein Gedanke

In (476) - (482), the initial element expresses an animate being 'affected' by some realization or to whom some thought or idea occurs. It may also express the experience of an attitude or emotion, as in

(483) Uns interessiert vor allem die Verschiebbarkeit der Glieder
(484) Dem ist die Anerkennung seiner Arbeit gleichgültig gewesen
(485) Mir ist das gleichgültig
(486) Ihm war dies verständlich
(487) Liberalen Amerikanern war Großbritanniens Klassenstruktur zuwider
(488) Den Gründerstudenten behagte die Rolle, die sie innerhalb dieser neuartigen Universitätsverfassung spielen durften
(489) Dem demokratischen Kongreß reicht es nicht, daß in Indochina keine GIs mehr sterben
(490) Dem Herrn schien aber auch diese Stille noch nicht zu genügen
Ihm täte es nicht besonders leid, wenn die Verhandlungen scheiterten.

Den Russen schien an einer Regelung gelegen zu sein.

Meinem Onkel dauerte das alles schon zu lange.

Mir ist sehr bange

Dem Mädchen gruselte und es eilte weiter.

Possible English equivalents regularly manifest subjectivization and fronting of the Experiencer:

I realized / was struck by / had the idea.

We are primarily interested in the permutability of elements.

He could understand ...

Liberal Americans disliked Britain's class structure.

The Russians seemed anxious to get something settled.

The element in first position commonly denotes the Recipient or Beneficiary. Compare:

Ihm ist die Mission zugefallen, ...

Dem Bundeskanzler stehen viele Befugnisse zu

Den Ländern stehen umfangreiche Gesetzgebungsbefugnisse zu

Ich hoffe, daß Ihnen die Sendung schon bald zugeht

Jeder Oppositionspartei stehen alle angemessenen Wege offen, um ihre Politik zu formulieren

Auf Osswald entfielen 26 von 27 abgegebenen Stimmen

Auf EWG und EFTA zusammengenommen entfällt heute mehr als ein Drittel des britischen Imports.

Alternatively, the description Patient may be more appropriate in cases where the affected element suffers or lacks something:
(508) Dem ehrwürdigen Begriff 'Nationalliteratur' haftet zudem manches Antiquierte an

(509) Den Militärgerichten hängt noch heute der Geruch der Dreyfus-Affäre an

(510) Ihm fehlt die Kraft

(511) Den meisten fehlt die Möglichkeit

(512) Ihm mangelte jeglicher Sinn für das Wesen das Staates

(513) Ihm mangelt es nicht an Selbstgefühl.
CHAPTER V

WORD ORDER AND CONTEXTUAL CRITERIA

This chapter will be primarily concerned with an analysis of the criteria which determine the order of elements in contextually dependent sentences. In the previous chapter word order was discussed in terms of usual configurations of semantic (or case) categories in particular types of sentences, i.e. in terms of semantic sentence patterns. I now propose to investigate what modifications these patterns regularly undergo with the operation of contextual criteria.

It is useful to recall here Sgall's (1972a, 1973) distinction between three layers of TCA (topic/comment articulation). The first (or basic) layer has already been commented on in detail above. Briefly, in the basic layer the hierarchy of CD carried by sentence constituents is in accordance with the hierarchy determined by the semantic category of the respective participants, i.e. CD and communicative importance are in accordance. This may apply to both sentences which presuppose no context and also to contextually dependent sentences where all contextually bound elements have a lower degree of communicative importance than the contextually non-bound elements. In contextually dependent sentences of this type the SSP will be directly reflected in the actual sequential ordering of elements. Alternatively, the degree of CD carried by an element may, in a particular context, be higher or lower than its communicative importance in accordance with the hierarchical systemic ordering of constituents. In such a situation
the SSP (understood as a usual configuration of semantic categories in a relatively context-free situation) of a given sentence may be modified in such a way as to produce a contextual variant of the basic type. Here Sgall speaks of the second layer of TCA. He writes (1973: 47): "The two scales may differ; this occurs when a contextually bound element A has a higher communicative importance than some other element B that is contextually non-bound; we speak then about the second layer of TCA, and we say that A is topicalized: An apple was given to a boy by CHARLES. A boy was given an apply by CHARLES. Here the objects have a lower degree of communicative dynamism but a higher degree of communicative importance than the actor." The third layer, which is also referred to as the constrastive layer, is concerned with cases of the so-called second instance, a notion attributed to Bolinger (1952), who adduced the examples I'm looking for a VACANT house. The ADVANCING soldiers halted. He states that the latter sentence is "almost certainly" connected with "setting someone right who had mistakenly asserted that it was the retreating soldiers" (Bolinger, 1952: 112f.).

In this section I shall be primarily concerned with the second layer, i.e. the level on which the scales may differ. It is on this level that the various criteria which may have a bearing on the sequential ordering of elements are often not in harmony, as in the basic layer, but in conflict. The resultant sequence of elements in contextually dependent sentences will be seen to be the outcome of what Firbas has called 'an interplay (co-operation) of means' Firbas, 1970: 74ff.). It is to this conflict or interplay of the various principles governing word order that I shall devote special attention.
Before proceeding to discuss the interaction of the relevant criteria, I shall first comment on certain important aspects of contextual organization and their significance for the sequential ordering of elements. The basis for this is provided in Part I, where the works of various writers dealing with FSP were reviewed. Danes (1970) lists three aspects of the phenomenon:

1. known (given) information - unknown (new) information
2. theme - rheme (communicative units in the utterance)
3. different degrees of communicative dynamism.

Distinctions 1. and 2. go back to Mathesius. The third aspect, the different degrees of communicative dynamism, has been introduced by Firbas.

There is now general agreement on the distinction and relation between the two variables given - new and theme - rheme, in so far, that is, as given is not equated with theme and new with rheme, though these functions may and do frequently coincide. Following Danes (1970), 'given' is to be understood as referring to information that is recoverable from the preceding context, derivable from the immediate situation or part of the common knowledge of speaker and listener. In the majority of cases elements conveying known information will be thematic and precede elements conveying new information in sequence. This sequential ordering of elements is in accordance with what Firbas (1966: 240) calls 'the basic distribution of CD'.

Contextual dependence, however, is not a necessary criterion for the determination of the theme. The theme does not necessarily convey known information, it can convey new information, cf. Firbas, 1966: 272.
This is the case in a sentence which is in its entirety contextually independent where, as pointed out above, the theme will be determined by its function in the semantic structure of the sentence. Although the theme may convey new information, it will be still the communicatively least dynamic element in the sentence. It is also true that in some circumstances a contextually dependent element may be rhematic and not thematic, i.e. that the rheme does not necessarily convey new information. I shall return to this point shortly. Such cases remain, of course, in the minority.

The above reservations having been stated, it is broadly speaking valid to state that context has the effect of thematizing sentence elements. Firbas makes this claim when he writes: "The operation of the context consists chiefly in 'thematizing' sentence elements (i.e. in rendering them thematic): any element already mentioned in the preceding context normally conveys the lowest degree of CD within a sentence irrespective of the position occupied by it. (Thus in 'he wanted to please Mary', 'Mary' will be rhematic or thematic according to whether it has not or actually has been mentioned in the preceding context.)" (Firbas, 1966: 240). Firbas comments further: "There is a specific group of words predisposed by their semantic content to function as the theme. This group is formed especially by the personal, possessive, demonstrative and reflexive pronouns and the definite article. Under favourable conditions they effectively signal contextual dependence" (1966: 241).

I now propose to discuss certain elements which by their very
nature tend to function as markers of contextual dependence and observe the significance of this for the sequential order of elements. Here I shall include articles, pronouns and quantifiers. Reference will also be made to certain elements which serve to indicate the rhematic function of an element, what Kirkwood (1973) has called 'rheme markers'.

There is a high degree of correlation between the variables definite - indefinite and theme - rheme and a consequent influence on the sequence of elements. Nominals accompanied by an indefinite article regularly introduce relatively new information and have a high degree of communicative value. A definite article, on the other hand, normally indicates that the element it accompanies is known, i.e. recoverable from the context, verbal or situational. Bierwisch (1966: 31f.) points out certain regularities relating to article form and the sequence of elements. He adduces the example sentence

(1) Peter schenkt dem Bruder zu Weihnachten ein Buch

and seeks to demonstrate that permutation of the elements is possible, but subject to certain restrictions. Thus whereas end position of ein Buch is 'completely grammatical' in (2) - (5), sentences (6) - (10), where the indefinite nominal is not in end position, are classified as being non-grammatical:

(2) Peter Schenkt dem Bruder zu Weihnachten ein Buch
(3) Zu Weihnachten schenkt Peter dem Bruder ein Buch
(4) Dem Bruder schenkt Peter zu Weihnachten ein Buch
(5) Peter schenkt zu Weihnachten dem Bruder ein Buch
(6) *Dem Bruder schenkt zu Weihnachten ein Buch Peter
(7) *Dem Bruder schenkt ein Buch zu Weihnachten Peter
(8) *Zu Weihnachten schenkt dem Bruder ein Buch Peter
(9) *Zu Weihnachten schenkt ein Buch Peter dem Bruder
(10) *Dem Bruder schenkt ein Buch Peter zu Weihnachten.

The ungrammaticality of (6) - (10), however, is not really a matter of definiteness or indefiniteness of Buch. Even if das Buch were to be substituted for ein Buch the problem would still pertain. Part of the unacceptability of these sentences is apparently connected with the regularities relating to the possible positions which the grammatical subject may occupy in sentences of this type. I shall return to the question of the position of the grammatical subject in the sequential ordering of constituents presently. For the moment, note that e.g. (9) and (10) are rendered unproblematic if Peter is moved to immediate post-finite position. Compare:

(11) Zu Weihnachten schenkt Peter ein Buch dem Bruder
(12) Dem Bruder schenkt Peter ein Buch zu Weihnachten

Sentences (11) and (12) would normally be interpreted as statements about 'whom Peter gives a book to at Christmas' (11), or 'when it is that Peter gives his brother a book' (12), or formulated in terms of presuppositions, we get:

(11a) Peter gives somebody a book for Christmas
(12a) Peter gives his brother a book sometime.

Somebody and sometime are then specified in the statements (11) and (12) as dem Bruder and zu Weihnachten respectively; these elements constitute the information to be conveyed, they carry information focus, primary accent and function as rheme. Here, then, we have a case of an indefinite noun phrase being contextually recoverable. In such a case, the element ein Buch has no claim to sentence final position. It may,
however, occupy initial position, as in:

(13) Ein Buch schenkt Peter zu Weihnachten dem Bruder
(14) Ein Buch schenkt Peter dem Bruder zu Weihnachten.

(13) and (14) have also another highly probable interpretation, as
Bierwisch suggests, i.e. with contrastive stress on Buch. This
interpretation is signalled by the presence of the indefinite article,
since the same interpretation does not hold if ein is replaced by das:

(15) Das Buch schenkt Peter seinem Bruder zu Weihnachten
(16) Das Buch schenkt Peter zu Weihnachten seinem Bruder.

In non-emphatic, non-contrastive sentences in German, the position
of an indefinite noun phrase will be a clear indication of its contextual
boundness, i.e. of its thematic/rhematic function. Compare the following
textual examples:

(17) Die Gemeinschaft der Sechs ist eine Realität geworden.
    Eine Realität ist sie dadurch geworden, daß ...
(18) Was hat der Vater auf meinen Brief gesagt?
    Einen Brief hat er niemals erhalten.

In both (17) and (18), the indefinite noun phrase introducing the
second sentence of each pair is clearly not conveying new information,
but is derivable from the preceding sentence directly which would explain
why it is fronted as thematic basis in each case. In some cases an
indefinite noun phrase occurring in first position itself contains
a segment which links the entire phrase to the preceding context. Some
examples are:

(19) Ein Indiz dafür ist die Entwicklung des Handels Großbritanniens
(20) Eine Übersicht über die ältesten Belege und Varianten findet

sich bei N.
Ein anderes wichtiges Thema der deutsch-französischen Besprechungen war die Entwicklung in der Tschechoslowakei und in Polen und dessen Bedeutung für die deutsche und französische Ostpolitik.

In (19) and (20), dafür and die ältesten Belege ... constitute clear anaphoric references to the preceding context. In (21), the entire phrase ein wichtiges Thema der deutsch-französischen Besprechungen is recoverable. Alternatively, sentence openings of this kind may not link up with what has gone before, but create a context themselves in respect of which a statement is made. An opening sentence in a newspaper article read:

(22) Eine für den Herbst angekündigte Reise General de Gaulles nach Rumänien ist auf nächstes Jahr verschoben worden.

The thematic function of eine Reise in (22) is clearly evident from the reformulation in (23):

(23) Für den Herbst war eine Reise General de Gaulles nach Rumänien angekündigt worden. Diese Reise ist jetzt auf nächstes Jahr verschoben worden.

Furthermore, die could well be substituted for eine in (22) as it stands.

Although it would not be correct to assume that the non-generic indefinite article will render the element it accompanies rhematic in all cases, it frequently does so, especially when co-occurring with another definite element. Compare the examples adduced by Heidolph (1966: 81):

(24) Der Sturm riß einen Baum um
(25) Den Baum riß ein Sturm um
(26) Der Dieb hatte in dem Zug einen Koffer gestohlen
(27) Der Dieb hatte den Koffer in einem Zug gestohlen
(28) Der Weg führte zu einer Brücke
(29) Zu der Brücke führte ein Weg.

In each of the sentences (24) - (29), the element accompanied by the definite article functions as theme, the element accompanied by the indefinite article as rheme. All sentences manifest a neutral theme – rhyme sequence of elements. Heidolph has formulated rules for permuting sentence elements in accordance with the above observation, assigning the contextual feature (+m) (=mentioned in the preceding context, 'given') or (-m) (=not mentioned in the preceding context, 'new') to each sentence constituent. Once carried out, the assignment of features provides the basis for obligatory permutation rules, for determining the placement of accent, and for the integration of cohesive texts. Taking as the underlying order the order manifest in independent clauses (cf. Bierwisch, 1966: 34) with the verb in end position, the sequence

(-m) subject + (+m) adverbial + (+m) object + q + verb + aux

is permuted by an obligatory rule to

(+m) object + (+m) adverbial + (-m) subject + q + verb + aux.

A further rule places the last (-m) element in the sentence behind the element q. The resultant sequence is thus

(+m) object + (+m) adverbial + q + (-m) subject + verb + aux.

The q-permutation determines the element which receives the primary accent.

The application of these rules explains the difference in sequence and accent placement in the sentences (24) - (29) above, and the difference in accent placement in

(30) Der Sturm riß den Baum um
(31) Der Sturm riß einen Baum um.
It should be pointed out that Heidolph does not equate the variables definite - indefinite, given - new and theme - rheme. This he makes clear when he writes: "Die Sätze ... könnten den Eindruck erwecken, als sei (-m) an den unbestimmten, (+m) an den bestimmten Artikel gebunden. Die Form des Artikels hängt jedoch nur indirekt mit den Kontextmerkmalen zusammen. Nominale Satzglieder mit dem bestimmten Artikel können das Merkmal (-m) haben. So die generellen Nomina (Die Tanne ist ein Nadelbaum) und die Unika (der Mond, der Äquator, die Ionosphäre etc.). Unika können sowohl mit (+m) wie mit (-m) markiert sein:

- Er hat den (-m) Mond beobachtet
- Er hat den (+m) Mond beobachtet.

Andererseits können auch Nomina mit dem unbestimmten Artikel im Text gegeben sein:

- Brigitte wollte eine Puppe haben. Als sie eine Puppe bekam, spielte sie nicht damit.

(Heidolph, 1966: 82).

In the generation of the above sentences it is the contextual feature (+m) or, in other words, the thematic and rhematic status of the elements that determines the sequential ordering. Heidolph adds a further 'topicalization' rule which moves one of the elements with the feature (+m) to first position. This element receives the secondary accent. This rule establishes what Kirkwood (1973) has referred to as thematic basis. Before going on to discuss in greater detail this highly important aspect of German sentence organization, I shall conclude the discussion on article form by making brief reference to the relation
between the function of pronouns and quantifiers and the sequence of elements.

A further indication that it is the degree of CD carried by sentence elements that determines their position in the sequential ordering is provided by the positioning of pronouns. Pronouns are by definition reference items with cohesive function from the point of view of text connexity. As such they are markers of contextual dependence and carry a low degree of CD. They refer to a specific entity recoverable from the context or situation. In German pronouns regularly occupy the characteristically weak position (cf. Drach's 'Schwächerstelle') immediately following the finite verb, often preceding adverbial adjuncts of time and place which also frequently occupy this position in the sequence of elements. Bierwisch (1966: 99) gives, among others, the following examples:

(32) Das Geklapper hat ihm die Freude verdorben
(33) Das Geklapper hat sie ihm verdorben
(34) *Das Geklapper hat die Freude ihm verdorben
(35) Wir haben es euch schon vor vielen Wochen gesagt
(36) *Wir haben euch es schon vor vielen Wochen gesagt.

In certain circumstances, a pronoun may be fronted as thematic basis:

(37) Darin lag für Cézanne die Aufgabe. Ihr opferte er sein Leben
(38) N. ist mein bester Freund. Ich habe ich alles erzählt.

Bierwisch (1966: 32; 102) points to a restriction here with regard to the pronoun er, though this does not apply to the substitute demonstrative pronoun form das, cf.:
A relevant factor here may be the different kind of deixis conveyed by the two pronominal forms: *das* is used anaphorically, referring back to a referent mentioned previously in the text; *es*, on the other hand, may have an anticipatory function. Furthermore, *das* may follow a dative pronoun, *es* may not. Thus we get:

(44) Er hat es mir erzählt
(45) Er hat mir das erzählt
but not
(46) *Er hat mir es erzählt.*

The difference in the specificity of quantifiers is also relevant to the sequence of elements and accent placement. This is pointed out by Kirkwood (1973: 431ff.). He writes: "With certain quantifiers we have to distinguish between reference to a particular subset of a given or identifiable set of entities and instances where the referent is non-specific. In the former case the quantifier has a secondary accent, the element quantified, being given, is unstressed. In the latter case, the element quantified receives the secondary accent. *Ein* in German may correspond to English *a*, in which case it is unstressed, or to English *one (of the)*, which is definite, in which case it receives the secondary accent." An example he adduces as illustration is:

(47) Ich (T) habe *eine* Sache (T) nicht verstanden (R)
(48) *Eine* Sache (T) habe ich (T) nicht verstanden (R).
Further examples given relating to the difference in specificity of noun phrases with the quantifiers _some/einige, many/viele_ also point to the different accent placement discussed. Compare:

(49) I have brought _some boxes_, and John has brought some too.

which is an instance of a non-specific noun phrase, as opposed to reference to a specific entity as in:

(50) _Some_ boxes I couldn't lift, and John couldn't lift them either.

but not

(51) _Some boxes_ I couldn't lift.

Similarly, we will find:

(52) I've read _some novels_ (non-specific)

(53) _Some novels_ I've read / _Some_ of his/the novels I've read

but not

(54) _Some novels_ I've read.

In (52) _novels_ is non-specific and carries primary, rhematic accent. _Some_ in (53) has the secondary, thematic accent, and _read_ the primary, rhematic accent. (51) and (54) are, of course, possible with contrastive stress on the noun phrase. Compare:

(55) Some of the _boxes_ I couldn't lift, but I could lift the trays

(56) Some of his _novels_ I've read, but I haven't read any of his plays.

In German, the distinction partitive/non-partitive, specific/non-specific is manifest in the sequence of elements, e.g.

(57) _Many_ (of the) students (T) were standing in front of the _university_ (R). (Others ...)
(58) There were many students (R) standing in front of the university (T).

In (57) a specific entity is located, whereas in (58) the existence of a non-specific entity (=rheme) is established with respect to a given location (=theme). In German the order of elements is permuted to maintain a constant neutral theme-rheme sequence:

(59) Viele Studenten (T) standen vor der Universität (R). (Andere ...)

(60) Vor der Universität (T) standen viele Studenten (R).

Similarly,

(61) Some girls (T) arrived this morning (R)

(62) Some girls (R) arrived this morning (T)

become in German:

(63) Einige Mädchen (T) sind heute früh (R) angekommen

(64) Heute früh (T) sind einige Mädchen (R) angekommen.

Kirkwood also refers at this point to the use of the passive in English, which allows a thematic element to be moved to the front of the sentence. Compare:

(65) John bought a few books (R)

(66) John (R) bought a few (of the) books.

The active sentence (66), allowing foregrounding of the rheme, has a passive alternant

(67) A few (of the) books were bought by John (R)

which manifests end position of the rhematic element John.

The above discussion illustrates the relation between the variables...
definite / specific : indefinite / non-specific
theme (=thematic basis) : rheme
secondary accent : primary accent

It was seen that the quantified element could function as both theme and rheme depending on whether it is a specific or non-specific entity. Furthermore, according to the circumstances, the quantifier or the quantified element may be stressed\(^1\). Qualitatively, stress may be further determined as secondary or primary accent. This would appear to suggest four possible situations which may be empirically investigated.

Compare:

**THEMATIC FUNCTION**

I  Qu + NP
II  Qu + NP (secondary accent)

**RHEMATIC FUNCTION**

III  Qu + NP
IV  Qu + NP (primary accent)

The situations I - IV are illustrated in the following two quadruples of English and German sentences:

(68)  I  Some students were injured (R)
II  Some students were injured (R)
III  Some students (R) were injured
IV  Some (R) students were injured

(69)  I  Einige Studenten wurden verletzt (R)
II  Einige Studenten wurden verletzt (R)
III  Einige Studenten (R) wurden verletzt
IV  Einige (R) Studenten wurden verletzt.

\(^1\) I do not claim that this necessarily applies in all cases, merely to the quantifiers dealt with here.
Before proceeding to discuss each possibility in greater detail, certain aspects of contextual dependence still require further clarification. As the discussion of Heidolph's analysis of contextual relations indicated, more than one element may be contextually dependent and hence thematic in a sentence, or in his terms, be assigned the feature (*f_m*). This is also implicit in Firbas' notion of different degrees of CD, which furthermore suggests a hierarchy among the contextually recoverable elements (cf. also the distinction between theme and thematic basis). Two questions which the notion of contextual boundness raise are (i) which elements are contextually bound and how is this determined, and (ii) what is the relation of one contextually bound element to another assuming functional heterogeneity implicit in the notion of varying degrees of CD.

The above reference to articles, pronouns and quantifiers shows that purely formal criteria of this kind are only a guide, though quite a generally valid one for determining contextual dependence. I have also suggested that word order in German, much less so in English, is a relevant indicator and it is this that I shall seek to substantiate throughout the present chapter, bearing in mind that resultant sequential ordering of constituents is the outcome of the interplay of a number of factors which in some circumstances may be in harmony, but in others may be in opposition, in which case one criteria may prove to be dominant. Other means of ascertaining contextual boundness are e.g. formulation of underlying questions, the notion of presupposition (in the sense in which this is referred to above), direct anaphoric reference to the preceding context, indirect implicit reference to the preceding context.
Sgall (1973) deals in some detail with the notion of contextual boundness. He proposes the question test as a means of ascertaining the contextually bound constituents which in turn determines what he calls the 'boundness juncture', the boundary in the sentence between the bound and the non-bound elements, i.e. between what Sgall refers to as the 'bound segment' on the one hand, and the 'focus' on the other. The bound segment is also referred to as 'topic'. Consider the following sentence:

(70) Hans hat seinem Bruder ein Buch geschenkt

which could be an answer to any of the following questions:

(71) Was hat Hans gemacht?
(72) Was hat Hans seinem Bruder geschenkt?
(73) Was ist geschehen?

In all cases ein Buch functions as rheme, it is not mentioned in any question and is clearly non-bound. Now consider the status of seinem Bruder which is referred to in (72) but not in (71) or (73). According to the assumptions of the question test, this constituent is bound in the context established in (72) and non-bound in the contexts (71) and (73). Similarly, Hans is bound in all cases except (73). The assumption concerning the functional heterogeneity of seinem Bruder would seem to be valid in the light of permutation restrictions operative here. In the case of (72) the answer might be formulated as either

(74) Hans hat seinem Bruder ein Buch geschenkt

or

(75) Seinem Bruder hat Hans (er) ein Buch geschenkt

leaving aside the spoken question-answer situation which might result in the formulation
(76) Ein Buch hat Hans (er) seinem Bruder (ihm) geschenkt
or simply
(77) Ein Buch.

Considering now (71) and (73), it would seem that only (74) would be
a natural response. As an answer to (71), (75) would seem to be
unacceptable since *seinem Bruder* is clearly topicalized here (i.e.
functions as thematic basis – cf. discussion below) which is not at all
motivated by the formulation in (71): *Bruder* is new, non-recoverable
information and consequently not a candidate for the thematic basis.
In the case of (73), (75) would be even more inappropriate since
*seinem Bruder* refers to *Hans* and thus presupposes *Hans*, but *Hans* is not
mentioned in the question either. This being so, *seinem Bruder* may
follow, but not precede *Hans* in conformity with the semantic structure
of the sentence. It is the criterion of semantic structure, in fact,
that determines the relative position of *Bruder* and *Buch* in the context
of (71) and the order of elements in the context of (73). To summarize
the point I wish to make here, the questions
(71) Was hat Hans gemacht?
(73) Was ist geschehen?
may have as an answer the formulation
(74) Hans hat seinem Bruder ein Buch geschenkt
but not
(75) Seinem Bruder hat Hans ein Buch geschenkt.
(75) is, however, a natural and possible answer to question (72) where
*seinem Bruder* is a bound constituent.

Danesč (1970) has pointed out that the contextual determination of
givenness is far from being a simple phenomenon. He points out that 'contextually given' refers to semantic information which is mentioned directly or indirectly. Direct recoverability does not necessarily imply identical wording. Direct reference is achieved by substitution of a synonymous expression or a paraphrase. Compare:

(76) Diese Fragen sind nicht gelöst. Ihrer Lösung wollen wir hier unsere Hauptaufmerksamkeit schenken

(77) Der Anzug ist zu teuer. Was heißt 'zu teuer', mein Herr, den Anzug trägt der Junge in zwanzig Jahren nicht ab

(78) Die Regierung hat vor einigen Tagen einige unerwartete Maßnahmen zur Ankurbelung der Wirtschaft verkündet. Diese neue Richtung ...

(79) Der Kellner schluckte. Dann nickte er. Sprechen konnte er nicht. Er begriff nichts. Verstand und Sprache waren erstickt von zwei dicken Tränen. Sehen konnte er auch nicht, denn, ...

(80) Die Rote Flotte ist also das militärische Instrument einer auf Expansion ausgerichteten sowjetrussischen Außenpolitik. Diese Strategie trägt sowohl imperialistische wie neokoloniale Züge.

In (76) and (77) we have cases of identical wording: gelöst-Lösung; Anzug; teuer. Cf. also sprechen-Sprache in (79). (78) - (80) contain examples of synonymous substitution or paraphrase: unerwartete Maßnahmen: neue Richtung; begreifen:Verstand; eine auf Expansion ausgerichtete Außenpolitik: diese Strategie. Note especially the position of elements in these cases. The thematic status of the sentence opening element in German will be discussed in detail presently. By indirect reference, Danes understands 'semantic inference (or implication)'. He speaks of 'associative' relations as exemplified by such pairs as: illness:health; restaurant:lunch; summer:vacations. Compare further the following:
(81) Der Staat allein wird das Geld kaum aufbringen. Für die Industrie und für die Kirche wäre es eine noble Aufgabe, sich an diesem Solidaritätswerk zu beteiligen.

(82) Außenpolitisch sind die von den wichtigen Moskauer Verhandlungen beeinflussten Ereignisse, innenpolitisch sind es die Vorbereitungen auf den zum Herbst vorgesehenen Kanzlerwechsel, die ...

(83) Alexander Dubček hat die Schlacht gewonnen; den Krieg hat er noch nicht gewonnen.

(81), (82) and (83) illustrate the kind of associative relation that Daneš refers to: Staat-Industrie-Kirche; außenpolitisch-innenpolitisch; Schlacht-Krieg.

The question of indirect inference from the preceding context is also taken up by Kirkwood (1970, 1973). He gives, among others, the following as illustration:

(84) The north-east of the country was hit by the storm.

Also affected were some areas in the south

(85) I won't be able to bring my car today.

The brakes are broken

In (84), hit and affected are related by implication, hit implies affected. Similarly, in (85) the thematic element broken is indirectly inferable by means of an implication which may be formulated as a presupposed 'linking statement' (cf. Kirkwood, 1970), e.g. 'Something is wrong with my car/something is broken', or perhaps by an implied question 'What's wrong/broken?'. The actual information conveyed, the rheme of the sentence, is the specification of what is wrong/broken i.e. the brakes. Further examples of indirect recoverability will be given later. This kind of inference from the preceding context proves useful in explaining
the initial positioning of a predicative element in German and the use of special constructions in English as thematic options of a textual cohesive nature.

A further and related aspect pointed out by Daneś (1970) is that the communicative feature of 'givenness' assigned to particular sentence elements is a graded property, that there are different degrees of 'knownness' or 'givenness'. This is important in situations where there are more than one thematic element. Such is the case in the sentence adduced by Firbas (1959: 42)

(86) Every evening he used to come to see her, and stop to supper at the farmhouse.

Firbas' analysis is as follows: "As to the elements before the comma, 'he' is undoubtedly the theme proper: 'her' and 'every evening' are also thematic, but communicatively more dynamic than 'he', 'every evening' being in its turn more dynamic than 'her': the words 'used to' are transitional, 'come and see' thematic. After the comma, the expression 'at the farmhouse' is perhaps the most dynamic thematic element, whereas 'stop to supper' are rhematic, 'supper' probably being the most dynamic element, and consequently the rheme proper of the entire sentence". What is interesting about this example from the point of view of recoverability is the hierarchical ordering of thematic elements according to their degree of CD which Firbas is proposing. Take the pronouns 'he' and 'her', both of which are thematic on the grounds that they both convey recoverable information, 'her' being, it is claimed, more dynamic than 'he'. Kirkwood (1973: 111) seeks explication of this in terms of what he calls the 'thematic derivation' of the contextually
dependent elements. He adduces the contextualized example:

\[ T_1 \quad R_1 \]

(87) John relied very much on his friend Peter

\[ T_2(-T_1) \quad T_3(-R_1) \]

He went to see him in London every weekend

and comments: "The element 'John' represents a 'hypertheme' which runs through the whole of the discourse. Following the first mention of this element in thematic function, subsequent 'derived' themes with the same referent will carry a very low degree of CD in the sense of the extent to which they contribute to the further development of the communication. ... What I am arguing is, very briefly, that an element that is derived from a hypertheme is communicatively less dynamic than an element derived through a rheme - theme conversion, and it is the communicatively least dynamic element that we tend to associate with the function subject." We may recall here the rheme - theme conversions and the instances of indirect cohesive reference in some of the German sentences quoted earlier, cf.:

(88) Diese Fragen sind nicht gelöst. Ihrer Lösung wollen wir hier unsere Aufmerksamkeit schenken

(89) Der Anzug ist zu teuer. Was heißt 'zu teuer', mein Herr, den Anzug trägt der Junge in zwanzig Jahren nicht ab

(90) Alexander Dubček hat die Schlacht gewonnen; den Krieg hat er noch nicht gewonnen.

Sentences (88) - (90) indicate that German is less inclined than English to put thematic subjects in first position when there are other thematic elements in the sentence carrying a higher degree of CD, cf.:

(91) These questions are not yet solved. We propose here to make their solution our main priority
(92) The suit is too expensive. What do you mean by 'too expensive', Sir, the boy won't wear the suit out in twenty years.

(93) Alexander Dubček has won the battle; he has not yet won the war.

Example (93) is an interesting one: the rhyme of the sentence and bearer of the primary sentence accent is here the element war, which in the corresponding German sentence functions as thematic basis.

Compare further:

(94) Er hat den Krieg noch nicht gewonnen

(95) Er hat noch nicht den Krieg gewonnen.

Sentences (93) and (95) indicate that an element which is derivable from the context may, in certain circumstances, be rhematic. I shall return to this point. In German, however, it is frequently the communicatively most dynamic thematic element, being 'less given' in the sense that it is introduced later in the text than other thematic elements, that is fronted as thematic basis in German. In other words, the 'interval of givenness' (Daneš, 1970: 4ff.) is greater in the case of a hypertheme than it is in the case of a thematic element derived through a rhyme-theme conversion, where the 'interval of givenness' may be confined to two consecutive sentences of a text, whereas the 'interval of givenness' of a hypertheme might be a whole paragraph, group of paragraphs or chapter. Similarly, in (89) and (90) the 'interval of givenness' is greater in the case of Junge and Dubček than it is in the case of the elements Anzug and Krieg. Consequently, it is the elements Anzug and Krieg that are topicalized (=made thematic basis) and the elements Junge and er (Dubček) that, as carriers of the lowest degrees of CD (theme proper), are referred to immediate postfinite position.
The above discussion provides some indication of the relation between contextual relations and the function of the first position in German sentences. The functional heterogeneity of thematic sentence elements in a given sentence finds expression in topicalization, by which is meant the selection and fronting of a thematic element as thematic basis. The term 'basis' was used by Beneš (1959) which he understood as a 'point of departure', which he characterized as the element that "links up the utterance with the context and situation, selecting from several possible connections one that becomes the starting point, from which the entire further utterance unfolds and in regard to which it is oriented" (Beneš, 1959: 216, quoted in Daneš, 1970: 8; cf. also Beneš, 1964: 9). In a later paper, Beneš (1971) writes the following about the contextual function of the sentence opening element in German sentences: "Im Vorfeld steht eine thematische Komponente von etwas höherem Mitteilungswert, die die Mitteilung ein wenig vorantreibt, während die etwaigen übrigen thematischen Komponenten (von geringerem Mitteilungswert) erst dem Verbum finitum nachfolgen. Die Vorfeldbasis ist dann in der Regel hervorgehoben. Dieser Anschluß setzt eine planende, vorausschauende Textgestaltung voraus. Er kommt deshalb besonders oft in der Sachprosa vor, wo er zur schärferen Herausarbeitung und Konturierung der inhaltlichen Zusammenhänge dient und dem Leser (Hörer) die Orientierung im Text erleichtert" (1971: 168). This conception of the contextual function of the first position in German sentences would appear to correspond to Daneš' notion of 'utterance theme' (cf. also Admoni, 1966: 275ff.; Brinkmann, 1962: 510; Erben, 1966: 167; Kirkwood, 1969: 89).
Danes says the following about the choice of the utterance theme: "We may not content ourselves with a statement that certain sentence elements convey the known information (in contrast to others, conveying the new one), but we ought to find out the principles according to which exactly this and not another portion of the mass of known information has been selected. With other words, we have to inquire into the principles underlying the thematic choice and the thematic progression" (1970: 8). Danes' basic assumption claims that text connexity is represented, inter alia, by thematic progression, by which he understands the choice and ordering of utterance themes. He describes four main types of thematic progression:

(1) Simple linear thematic progression (or thematic progression with linear thematization of rhemes):

\[
\begin{align*}
T_1 & \rightarrow R_1 \\
& \downarrow \quad T_2 (=R_1) \rightarrow R_2 \\
& \downarrow \quad T_3 (=R_2) \rightarrow R_3
\end{align*}
\]

(where the horizontal arrow \(\rightarrow\) indicates the T - R nexus within an utterance, while the vertical one indicates the contextual connection of T).

An example of this type of thematic progression is (cf. Danes, 1970a):

(96) Unsere Wirtschaft sucht rationelle Arbeitsverfahren.

Rationelle Arbeitsmethoden verlangt auch die Wissenschaft.

This type represents the most basic, elementary thematic progression in which \(R_1\) of a \(T_1 - R_1\) nexus in a sentence is converted to \(T_2\) in the \(T_2 - R_2\) nexus of the following sentence.
(2) Thematic progression with a continuous (constant) theme, i.e.:

\[
\begin{align*}
&\text{T}_1 \rightarrow R_1 \\
&\downarrow \\
&\text{T}_1 \rightarrow R_2 \\
&\downarrow \\
&\text{T}_1 \rightarrow R_3
\end{align*}
\]

An example of this type is:

(97) Goethe war überzeugt von dem Fortschritt der menschlichen Entwicklung. Er trat für die Erziehung des Menschen zur friedlichen Entwicklung ein. Goethes Humanismus ging aus von dem Glauben an das Gute im Menschen. Goethe nannte sich "ein Kind des Friedens".

(3) Thematic progression with derived themes. This may be represented as follows:

\[
\begin{align*}
&\text{T} \\
&\downarrow \\
&\text{T}_1 \rightarrow R_1 \\
&\downarrow \\
&\text{T}_2 \rightarrow R_2 \\
&\downarrow \\
&\text{T}_3 \rightarrow R_3
\end{align*}
\]

In this type of thematic progression the themes are derived from a 'hypertheme' (e.g. of a paragraph), e.g.:

(4) The 'exposition of a split rheme'. This type of thematic progression is characterized by the fact that a certain R is explicitly or implicitly doubled \((R' + R'')\) or multiplied \((R' + R'' + R''' + ...\)), so that it gives rise to a pair (triple, ...) of thematic progressions: first \(R'\) is expounded and after this progression, \(R''\) becomes \(T\) of the second progression. This may be represented diagrammatically as follows:

An example is

(99) Die Widerstandsfähigkeit in feuchter und trockener Luft ist bei verschiedenen Arten pathogener Viren sehr unterschiedlich. Poliomyelitisviren sterben in trockener Luft sofort ab, während sie bei einer Luftfeuchtigkeit von 50% relativ stabil sind. (...) Bei Grippeviren ist es hingegen umgekehrt; wenn die Luftfeuchtigkeit unter 40% bleibt, so halten sie sich recht gut, sie gehen aber rasch zugrunde, wenn die Luftfeuchtigkeit höher steigt. (...) 

Daněš presents these types of thematic progression as "abstract principles, models, or constructs. The implementation (manifestation)
of these models in particular languages depends on the properties of
the given language, especially on different means available of
expressing FSP" (Danesč, 1970: 21).

In actual texts, these model progressions may not be realised
in their 'pure' form, but are frequently subject to modifications.
They may be also employed in different combinations. Furthermore,
TP are often complicated by various insertions or asides. I shall
now present a somewhat simplified analysis of an actual fragment text
whereby I am primarily concerned with clarifying the following aspects:

(i) combination of various types of TP;
(ii) selection of the thematic basis from several thematic
elements;
(iii) difference in word order in English and German in the
adaptation of a sentence to different contexts.

(i) The text below is one example of how different TP can be
combined.¹ In a somewhat simplified form this may be
represented in the following way:

---

¹ The type of TP is indicated on the right in each case by a number
according to the following key:

(1) simple linear TP
(2) TP with constant T
(3) TP with derived T
(4) 'split R' TP
Aus der Kindheit meiner Mutter will ich hier einiges aufzeichnen. Sie wuchs in München auf, als einziges Mädchen unter drei Brüdern. Was sie mir vom Hause, dem Garten und dem großen Taubenschlag des Großvaters in früher Zeit erzählte, haftete in mir. Die Tauben gediehen und vermehrten sich stark, weil ...

Mir fiel mit der Zeit auf, daß sie wenig erzählte, daß sie schweigsam war. Dachte sie an ihre Kindheit nicht gern zurück. (...) Ihr Schweigen gab mir zu denken, und die Vermutung stieg in mir auf, daß ein schmerzlicher Riß sie von ihrer Kinderzeit trenne. Über diese Zeit hat mir ihr Bruder Paul manches erzählt.

In ihr entfaltete sich ein Drang nach Selbständigkeit, der sie von allen Verhältnissen, in denen sie heranwuchs, absonderte. Während ihres ganzen Lebens war die Reiselust in ihr stark; sie sehnte nach fremden und neuen Landschaften. In ihr war ein Zug von ungeduldiger Kraft und Zuversicht, der sich früh regte, ein eigener Wille und ein Vertrauen, das sie nie verließ. Sie haftete nicht an der Umgebung, in der sie geboren und aufgewachsen war, sie strebte aus ihr heraus und erkannte schon aus ihren ersten selbständigen Gedanken, daß die Erziehung, die sie erhalten hatte, das verhinderte.

Den Zwiespalt, in den sie geriet, schlichtete sie selbst. Ihre Leidenschaft, die bis zur Wildheit gehen konnte, war nie ohne Besonnenheit. Bei einem jungen Mädchen sind Scharfsinn und Vorahnung eins, und sie täuschte sich weder über ihre eigenen Kräfte noch ließ sie sich hinreißen.
T* (=narrator)  
(To * R0)

1

(1)

(2)

(3)

(4)

(1)

(2)

(1)

(1)

(2)

1 T* denotes the narrator, the hypertheme of the entire text. There is also a second recurring T (= Kindheit meiner Mutter or, meine Mutter (=T1*)) which I shall refer to as 'secondary hypertheme', possibly derived through a rheme – theme conversion: T0 * ---- R + T1* (=R0) \longrightarrow R1 e.g. Mir wurde damals viel von der Kindheit meiner Mutter erzählt. Davon will ich hier einiges aufzeichnen.
Some of the suggested TP above require a few words of clarification. I stress again that for the sake of overall clarity some simplifications have been made, though on the assumption that these do not affect the main arguments. The TP I wish to refer to now are: \( T_3 \) and \( T_4 \); \( T_8 \); the letter subscripts \( x, y, k, l, m, n \) of certain \( T \); and finally \( (T_5) \)

\( T_3 \) and \( T_4 \): I have analysed the complex sentence in 1.2 and 1.3 of the text in terms of simple sentences:

\( (T_3) \) Sie erzählte mir vom Hause \( (R_3') \), dem Garten \( (R_3'') \) und dem großen Taubenschlag des Großvaters \( (R_3'''') \)

\( (T_4) \) Das (=ihre Erzählungen vom ...) \( (T_4 = T_2 + R_3) \) haftete in mir \( (R_4) \).

Viewed in this way \( T_4 \) is derived from a combination of a constant theme TP and a rheme - theme conversion TP. Similarly, \( T_{16} \) is derived from \( T_{16} + R_{16} \) i.e. diese Verbindung = die Ausgeglichenheit von Lebensgenüβ und Genügsamkeit.

\( T_8 \): This is again a complex sentence. Basically, the sentence is about 'das Schweigen meiner Mutter über die Kinderzeit' and the information sought is a reason for this, an answer to the implicit question 'Warum erzählt sie wenig darüber?' - answer: 'ein schmerzlicher Riß'. Expressed in terms of simple sentences, we might get:

\( (T) \) Das Schweigen meiner Mutter über diese Zeit gab mir zu denken \( (R) \)

\( (T) \) In mir stieg eine Vermutung \( (R) \) auf:

\( (T) \) Von dieser Zeit trennt sie ein Riß \( (R) \).

In combining these sentences the elements in mir, von dieser Zeit and sie can be most easily dispensed with: they are thematic throughout (cf. hyperthematic) and consequently less obvious candidates for the function of thematic basis of a condensed sentence. We now have:

\( (T) \) Ihr Schweigen gab mir zu denken, zu vermuten, daß es ein Riß \( (R) \) war,
Vermutung being thematicized in the context of zu denken geben.

Thus, the entire sentence in question could be replaced by the following:

\( T_8 \) Ihr Schweigen war auf einen schmerzlichen Riß (R8) zurückzuführen. Darüber \( T_9 = R_6 \) hat mir ihr Bruder Paul manches erzählt.

This line of analysis underlies my suggested TP simplification here.

It also throws some light on the criteria relevant to the determination of which thematic element is selected as thematic basis (discourse theme), a point which I shall return to presently.

\( x, y; k, l, m, n \): Each of these letters indicates that the derived \( T \) in question contains information not directly derivable from the immediately preceding context, but which is thematic by association, implication, contrast etc., i.e.:

\( T_{11} = R_{10} \) (Schule) + \( x \) (an den Sonntagen und in den Ferien)

where the link is clearly evident in the substitute phrase

\( an \) den schulfreien Tagen;

\( T_{13} = T_{12} \) (München) + \( x \) (der achtziger und neunziger Jahre)

\( = das \) damalige München

\( T_{14} = T_{13}x \) (damals) + \( y \) (heute) = damals wie heute

\( T_{15} = T_{12} \) (München) + \( y \) (das Land) = Bayern

\( T_{16} = R_{15} \) (Irdisches) + \( x \) (Lebensgenuß) + \( y \) (Genügsamkeit)
presented as thematic in association with Irdisches, aspects of Bavaria

\( T_{19} = T_{18} (=T_1) \) (meine Mutter) + \( k \) (ihre ganzes Leben) = während ihr ganzes Leben

\( T_{24} = T_{18} (=T_1) \) (meine Mutter) + \( l \) (selbständige Gedanken) = schon aus ihren ersten selbständigen Gedanken
\[ T_{27} = T_{18} (=T_1) \text{ (meine Mutter)} + m \text{ (Leidenschaft)} = \text{ihre Leidenschaft} - \text{quality associated with her} \]

\[ T_{29} = T_{18} (=T_1) \text{ (meine Mutter)} + n \text{ (ein junges Mädchen)} = \text{bei einem jungen Mädchen.} \]

\[ T_{25} : \text{This TP is not derivable directly, but indirectly. It is condensed in the Zwiespalt, in den sie geriet. Den Zwiespalt (T}_{26} \] is derived from a rheme - theme conversion; \text{Sie (T}_{25} \] geriet in einen Zwiespalt (R}_{25}), \text{Diesen Zwiespalt (T}_{26} (=R}_{25}) \] schlichtete sie selbst. Further examples of 'implicit sentences' will be adduced at a later stage. These are relevant to determining the function of certain elements in first position in German sentences, indicating its thematic derivation. Cf. also Danes (1970): TP with an omitted link (or with a thematic jump); Danes (1970a: 78): "TP mit einem thematischen Sprung. Es handelt sich darum, daß in einer Progression ein Glied der thematischen Kette ausgelassen wird (und zwar ein solches Bindeglied, das leicht aus dem Kontext ergänzt werden kann)."

(ii) Some indication as to which thematic element is selected as thematic basis (discourse theme) is given in the above discussion. There would appear to be a relation between thematic function and thematic derivation. Consider some of the relevant examples in the above sample text:

(100) Aus der Kindheit meiner Mutter will ich hier einiges aufzeichnen

(101) Ihr Schweigen gab mir zu denken

(102) Über diese Zeit hat mir ihr Bruder Paul manches erzählt

(103) An den Sonntagen und in den Ferien kam sie nach Hause

(104) In ihrer Heimatstadt München hat sie damals schon vieles erlebt
(105) Den Zwiespalt, in den sie geriet, schlichtete sie selbst.

(106) Den Anzug trägt der Junge in zwanzig Jahren nicht ab

(107) Es war einmal ein König. Der hatte drei Töchter (Dem gebar
die Königin drei Töchter). Diese liebte er so sehr, daß ...

(108) Diese Fragen sind noch nicht gelöst. Ihrer Lösung wollen
wir hier unsere Hauptaufmerksamkeit schenken

(109) Dubček hat die Schlacht gewonnen; den Krieg hat er noch
nicht gewonnen

(110) Darin lag für Cézanne die Aufgabe. Ihr opferte er sein Leben.

All the sentence opening elements in the above sentences have the same function in common: that of thematic basis carrying secondary accent. They are also similar in their thematic derivation. In each case the thematic elements in immediate postfinite position have already appeared in thematic function earlier in the text e.g. as 'hyperthemes' or 'constant themes' and carry very low degrees of CD. Elements which appear for the first time in thematic function, on the other hand, are much 'closer' to rhemes from the point of view of their derivation. This is clearly evident in the case of elements derived through a rheme - theme conversion. It is significant that in such instances the textual link is 'intersentential' rather than 'transsentential'. In other words, the 'interval of givenness' is greater in the case of a 'hypertheme' or 'constant' or 'derived theme' than in the case of an intersentential rheme - theme conversion. The former will carry much lower degrees of CD than the latter, which are second only to the rheme in prosodic weight; consequently, it is the element that is topicalized and fronted as thematic basis in German that carries secondary accent.
This would seem to suggest a hierarchy of TP types from the point of view of which have a relatively 'strong' and which a relatively 'weak' role in the topic selection process. Consider also the apparent hierarchy in the case of the more thematic elements in the sample text analysed above: 'ich' (=narrator) is in its function as hypertheme the least likely constituent to be selected as thematic basis where other thematic elements are present. In second position comes the element I have referred to as secondary hypertheme i.e. 'meine Mutter'/'sie'/'in ihr'. Whereas this latter element does frequently function as 'discourse theme' in the text quoted, it is significant that there is no other thematic element with a higher degree of CD present in the same sentence with which it has to contest for topic position.

(iii) It has already been pointed out that the relation between TP and word order may vary from language to language depending on the extent to which different criteria are operative in determining the surface structuring of a sentence. Thus in Modern English, for example, the first position in the sentence often has different functions than the initial position in German sentences, e.g. that of designating grammatical subject function. It is important to recall, however, that the grammatical subject in initial position not infrequently expresses the theme (cf. Mathesius). This 'conflation of functions' in the grammatical subject is particularly evident in English, though certain developments in German syntax point in the same direction e.g. the use of verbs with the prefix be-: Auf die Frage wurde geantwortet/die Frage wurde beantwortet; or the conversion of a surface dative in initial position to a surface nominative: mir graut vor ihm/ich graue mich vor ihm.
Returning to the sample text, a comparison of some English renderings of selected German sentences will show the differences in surface sequential ordering, particularly as far as the function of the initial sentence position in German as thematic basis is concerned.

Compare:

(111) Aus der Kindheit meiner Mutter will ich hier einiges aufzeichnen

(112) I am going to record here some events from my mother's childhood

(113) Über diese Zeit hat mir ihr Bruder Paul manches erzählt

(114) Her brother Paul has since told me much about this time

(115) An den Sonntagen und in den Ferien kam sie nach Hause

(116) She came home Sundays and in the holidays

(117) Diese Verbindung fand sich auch bei meiner Mutter

(118) My mother also revealed this combination/had this combination in her

(118a) This combination was also to be found in my mother

(119) In ihr entfaltete sich ein Drang nach Selbständigkeit

(120) An urge for independence developed in her

(120a) She developed an urge for independence

(121) In ihr war ein Zug von ungeduldiger Kraft und Zuversicht

(122) In her was a trait of impatient energy and optimism

(122a) She had a trait of impatient energy and optimism in her.

A comparison of the sentences (111) - (121) gives an indication of the different functions that may be ascribed to the first position in German and English: in German it is the function of thematic basis which clearly appears as a dominant criterion in the selection of the
sentence opening element; in English, on the other hand, it is first and foremost the function of grammatical subject that is associated with the element in initial position. Furthermore, the grammatical subject in English may express the theme proper (the communicatively least dynamic element) as in (112), (114), (116), or the thematic basis as in German (cf. conflation of functions) as in (118a), (120a), (122), (122a), or the grammatical subject may even express the rheme of the sentence at which point the German and English probable equivalents show the greatest degree of divergence in the distribution of communicative value, cf.: (118), (120).

There are two residual questions regarding contextual dependence and sequential ordering of elements that I propose to discuss briefly at this point. Firstly, I should like to refer to a statement made by Sgall (1972a; 1973) concerning the operation of the context on the theme-rheme structure of the sentence. Secondly, I wish to return to an earlier point that the rheme need not necessarily convey new information, but may convey information which is derivable from the preceding context.

(1) Sgall states (1972a: 2): "What is perhaps most decisive as an argument for the autonomy of TCA (= topic/comment articulation) is that the preceding context does not always determine uniquely the choice of topic and comment in a sentence." This contrasts sharply with Daneš' response to Halliday's still less cautious claim (1967) that "thematization is independent of what has gone before". Daneš (1970: 4) states that "such a conclusion appears very doubtful in the light of the fact that the choice of the themes of particular
utterances can be hardly fortuitous, unmotivated, and without any structural connection to the text." In German, and very probably in other languages with a relatively free word order, a study of texts (cf. the textual analysis presented above) shows that the choice and distribution of themes in a text reveal a certain patterning, theme here being understood as thematic basis, i.e. the element that establishes a link to the preceding context and serves as a point of departure for the further development of the text. In English the patterning will be less obvious, since on account of other criteria influencing the sequence of elements, the initial element may in fact be rhematic (cf. (118) and (120)) and have no connection with the preceding context. (It is perhaps in this respect that Halliday's comment above is to be evaluated, remembering that his conception of theme is based on positional criteria irrespective of the variable given - new.) In German, as we have seen, the selection of the sentence opening element will very often have a direct or indirect (e.g. by semantic inference (implication)) connection with the preceding text.

Sgall adduces the following examples to illustrate his claim about the autonomy of TCA:

(123) Yesterday was the last day of the Davis Cup match between Australia and the U.S.
(124) Australia won the match
(125) The match was won by Australia.

Kirkwood (1973: 270) compares similar German example sentences:

(126) Im ersten heutigen Match der Hockey-Weltmeisterschaft spielte Schweden gegen Finnland
(127) Den Match hat Finnland gewonnen  
(128) Finnland hat den Match gewonnen  

and comments: "The interesting point here it would seem to me is that match/der Match represents the hypertheme of the text and does not stand in opposition to any other element. Hence, this element will remain thematic throughout the text. On the other hand, **Australia** is in opposition to U.S. (Schweden to Finnland) and win to lose (gewinnen to verlieren). It is from these opposing pairs of elements that the rhyme of the following sentence is chosen (with implicit contrast with the other member of the pair). The important thing is that the speaker is free to choose in such situations which element is to be presented as thematic and which as rhematic (match/der Match remaining thematic throughout)." In either case the theme is indeed selected from the mass of information accumulated in the preceding context, whether by explicit mention or by way of semantic inference.

Compare further the examples:

(129) Alexander Dubček hat die Schlacht gewonnen; den Krieg hat er noch **nicht** gewonnen  
(130) Mr. Dubček has won the battle; he has not yet won the war.

These examples indicate that the selection of theme and rhyme may vary from language to language. Here we have opposition between Schlacht and Krieg (battle and war) and gewinnen/nicht gewinnen (win/not yet win). In German, **Krieg** is chosen as thematic basis by way of implicit contrast with Schlacht, the interpretation being roughly as follows: 'He has won the battle, but as for the war, he has not yet won that'. The English sentence reflects the other possible
interpretation: 'He has won the battle, but he has still to win the war'. The second interpretation is also possible in German:

(131) Er hat aber noch nicht den Krieg gewonnen

or

(132) Gewonnen hat er aber noch nicht den Krieg.

In English, the restrictions on the permutability of elements would appear to have an influence on the option selected in examples of this type, the fronting of the object being less natural than in German:

(133) He has won the battle, the war he hasn’t yet won.

Although it might be possible to speak of an option of selection in determining the theme – rheme structure of the above sentences, it does not necessarily follow from this that the operation of the context is of no significance here. Furthermore, as (133) illustrates, there may be other factors of a language-specific nature which also may play a part in the choice of theme and rheme e.g. criteria restricting the permutability of elements. Compare further the following example:

(134) She came home on Sundays and in the holidays

which is multifunctional in the absence of contextual criteria. It may be interpreted as a statement about 'what she did on Sundays and in the holidays':

(135) She came home on Sundays and in the holidays

(136) On Sundays and in the holidays she came home

or, as a statement about 'when she came home':

(137) She came home on Sundays and in the holidays.

In the case of (136) and (138)

(138) An den Sonntagen und in den Ferien kam sie nach Hause

the interpretation is quite clear. Compare now (134) and (139)
(139) Sie kam an den Sonntagen und in den Ferien nach Hause
in equivalent contexts:

(140) My mother was sent to school to the Sisters of St. Mary's
        Convent. She came home on Sundays and in the holidays

(141) Meine Mutter wurde zu den Englischen Fräulein in die Schule

According to my interpretation, the rhyme of (140) would be the
temporal adverb on Sundays and in the holidays in the most natural
reading of the sentence, whereas in the case of the second German
sentence in (141) I would assign primary rhematic accent to Hause.
The actual reading would seem to be an outcome of an interplay between
contextual criteria and positional criteria. In the German sentence
in (141) the temporal adverb may readily be interpreted as a thematic
element in the prosodically weak immediate postfinite position, primary
accent being assigned to nach Hause in which case syntactic and thematic
criteria are 'in harmony'. This situation changes immediately, of
course, if the temporal adverb is reinforced in some way, as in:

(142) Sie kam nur an den Sonntagen und in den Ferien nach Hause
where the rhyme is clearly the temporal adverb. In this latter case
nach Hause is rendered thematic by way of implicit contrast with in die
Schule gehen which implies vom Hause weggehen which is in opposition to
nach Hause kommen. Compare:

(143) Nach Hause kam sie (nur) an den Sonntagen und in den Ferien.
This opposition is perhaps less readily 'foregrounded' in (141) where
nach Hause occurs at the end of the sentence after the characteristic
thematic interpretation has been assigned to the adverbial of time.
In English, one could argue the opposite since in (140) home appears
before the temporal adverb. Similar problems relating to the assignment of primary accent in English have been raised earlier. We may recall the position with instrumental adverbs. Compare

(144) N. sliced the salami with a knife / N. sliced the salami with a knife

(145) N. hat mit einem Messer die Wurst geschnitten

(146) N. hat die Wurst mit einem Messer geschnitten.

Compare further:

(147) He wrote his father a letter
(148) He wrote a letter to his father
(149) Er schrieb seinem Vater einen Brief
(150) Er schrieb einen Brief an seinen Vater
(151) He made a log into a canoe
(152) He made a canoe out of a log, or: made a canoe out of a log
(153) Er machte aus einem Baumstamm ein Boot
(154) Er machte ein Boot aus einem Baumstamm.

These examples raise the interesting question whether the position of an element in sequential ordering can have an affect on the degree of CD it carries. Here we may point to what appear to be conflicting statements by Firbas on the position of elements in linear sequence and their thematic or rhematic function. Firbas (1958: 51) points out that theme and rhyme "keineswegs auf einen bestimmten Platz gebunden sind". Elsewhere (cf. Firbas 1964: 115; 1970: 8f.), he does in fact suggest that the position of an element in a sentence may determine the degree of CD it carries. With regard to the sentences:

(155) Thanks to the doctor's prescription he found himself extremely well
(156) He found himself extremely well thanks to the doctor's prescription he writes: "Provided that he and himself convey known facts, the semantic content of the causal adverbial element, together with the free semantic relation the element displays with regard to the verb, operates on the FSP level in such a way as to leave it to the sentence position to determine what degree of CD is to be carried by the adverbial element" (1964: 115). Considering the examples (157) He gave a boy an apple (158) He gave an apple to a boy each of which contains a contextually independent indirect and a contextually independent direct object, Firbas writes (1970: 8f.): "Of the two objects, the one occurring later evidently carries a higher degree of CD. Similarly, a contextually independent infinitive of purpose will carry a lower degree of CD when occurring initially than when occurring finally: In order to meet his friend, he went to Prague; He went to Prague in order to meet his friend. In all these cases it is the linear arrangement that decides the degree of CD." It could be argued, on the other hand, that a certain position is determined by the amount of CD to be carried by an element where positional variants are possible. In some of the English sentences adduced above, however, there are no positional variants. In the light of the examples adduced there would seem to be some indication that an element can be rhematized by position. Though Firbas' statements seem to conflict, they may both, in given circumstances, prove relevant.

As well as the relative surface order of elements, the respective
order of two consecutive sentences of a text may have a bearing on the
determination of the theme – rheme structure. Compare the following
textual examples:

(159) Kinder machen furchtbar gern Lärm. Sie poltern Treppen
auf und ab und schreien wie die Wilden
(160) Kinder poltern Treppen auf und ab und schreien wie die Wilden.
Sie machen furchtbar gern Lärm, or:
Sie machen Lärm furchtbar gern.

In (159) Lärm is introduced for the first time and functions as rheme.
The following sentence adds substance to the claim. In (160) Lärm
is derivable from poltern and schreien. Because Lärm is recoverable
in this way, it may well be that the last sentence is the more natural
of the two, i.e. with stress on gern. However, the first (with stress
on Lärm) is also possible as a repetitive, reinforcing statement. In
other words, both are possible in (160), yet the selection of the rheme –
be it Lärm or gern – is not arbitrary but depends on which of two
possible interpretations the speaker wants to communicate.

(2) Some of the examples discussed under point (1) above indicate
that an element that is recoverable from the preceding context,
directly or indirectly, may function as rheme, i.e. that the rheme
need not necessarily convey known, recoverable information. Halliday
(1967: 7f.) has pointed out that the new piece of information is 'new'
not in the sense that "it has not been previously mentioned, although
it is often the case that it has not been, but in the sense that the
speaker presents it as not being recoverable from the preceding
discourse". Danes (1970: 6f.) qualifies the second part of this
statement when he writes: "what is new is the connection ... . The
property of being new has two, independent aspects: (1) 'new' in the
sense of 'not mentioned in the preceding context', (2) related as
Rheme to a Theme to which it has not yet been related. In the former
case, the property 'new' is assigned to the expression itself, while
in the latter it is the T - R nexus that appears as new." This
recalls Firbas' notion of the 'ad hoc narrow scene' (cf. 1966: 246):
with regard to the common knowledge of speaker and listener the notion
conveyed may be known, yet in regard to the narrow, ad hoc scene, it
may appear as unknown, new, contextually independent. Consider the
following examples:

(161) Diese Verbindung fand sich auch bei meiner Mutter

(162) Die Kritik entzündet sich besonders an den Artikeln 12 und
53a. Im Artikel 12 heißt es: "Für Zwecke der Verteidigung
kann die Freiheit eingeschränkt werden". Nicht weniger
umstritten ist der Artikel 53a: ...

(163) "Kutscher", rief der junge Mann.
"Wo ist er denn?" fragte die junge Frau.
Der junge Mann öffnete die Tür zu dem kleinen Wirtshause;
an einem Tisch mit ein paar anderen Leute saß der Kutscher.

In each of the sentences (161), (162) and (163) the Rheme (i.e. Mutter,
Artikel 53a and Kutscher) is in each case contextually recoverable.
In (161) Mutter is the secondary hypertheme of the text (cf. sample
text above). Diese Verbindung is also a bound element referring
anaphorically to the preceding sentence, constituting the thematic
basis to which Mutter is related. It is the relation of Mutter to
Verbindung, to which it has not previously been related, that determines
the thematic/rhematic function of elements here. In terms of 'focus'
we may say that *diese Verbindung* is in focus following the theme-rheme connection of the preceding sentence and *Mutter* is brought into focus (from the wider context) i.e. recalled into the focus of attention as rheme. Similarly, in (162) *Artikel 53a* is directly recoverable (identical wording) from what has gone before. *nicht weniger umstritten* is established as thematic basis by way of being indirectly recoverable (by semantic inference/implication), cf.:

(162a) *Artikel 12 wird scharf kritisiert = ist umstritten.*

*Nicht weniger umstritten ist der Artikel 53a.*

Once again *Artikel 53a* is recalled into the focus of attention by being related to *umstritten*. In (163), it is not the location of the *Kutscher* that is conveyed, but the existence of the *Kutscher* in a given location (*im Wirtshaus*). It is the existence of the *Kutscher* in the setting/location of the inn that constitutes the information to be conveyed and not the expression *Kutscher* itself that is new. *Kutscher* is contextually independent in the ad hoc narrow context, though it is clearly contextually bound in the wider context from which it is recalled.

I shall now return to the quadruples (68) and (69) above and review the variants I – IV in the light of the contextual criteria discussed, paying particular attention to word order and the thematic function of the sentence opening element. These will provide further material for a contrastive analysis of German and English from the point of view of sequential ordering and the regularities and restrictions operative in the two languages.
Variant I:

(164) Some students were injured

(165) Einige Studenten wurden verletzt.

A possible context for (164) and (165) might be:

(166) Some students at the Free University of Berlin were severely injured today in clashes between left-wing extremists and neo-fascists

(167) Einige Studenten der Freien Universität Berlin wurden heute bei Zusammenstößen zwischen Linksextremisten und Neofaschisten schwer verletzt.

This represents a relatively context free situation in so far as both (166) and (167) could occur as initial sentences in a discourse.

Variant II:

(168) Some students were injured

(169) Einige Studenten wurden verletzt.

Here the contextual situation is slightly different. In (166) and (167) some students specifies a particular set of the mentioned or contextually implied class of people. It is asserted that a particular set of the named or contextually inferable people have been adversely involved in / affected by some identifiable incident such that they were severely injured. The element referring to the contextually bound set is thematic, what is predicated about this element is rhematic.

(Note that students is bound by way of implication (inference) from the situation, i.e. the Free University of Berlin and a specified incident in this location.) In (168) and (169), on the other hand, reference
is made to a subset of a specified set. Of this specified set it is asserted that there is a particular subset that have been adversely affected by a particular situation. This is the case with some of the examples quoted earlier, which it may be useful to recall here:

(170) Many (of the) students were standing in front of the university
(171) Viele Studenten standen vor der Universität
(172) Some (of the) girls arrived this morning
(173) Einige Mädchen sind heute früh angekommen.

A textual example may help to clarify the difference in the contextual reference involved here. Compare:

(174) Ende April und in Mai 1966 kam es zu blutigen Unruhen an der Universität in Rom, die sich zu einem Streik der Professoren, Assistenten und Studenten an allen Universitäten Italiens ausweiteten. Äußerer Anlaß war ein Betrugsmanöver bei der Wahl der römischen Studentenvertretung. Das Ergebnis waren Zusammenstöße zwischen Linksextremisten und Neofaschisten, in die auch ein Teil der neutralen Studenten hineingezogen wurde. Ein Student verunglückte tödlich.

In the last sentence of this textual example, the secondary (thematic) accent falls on ein, cf.:

(175) Ein Student verunglückte tödlich (=einer der Studenten)
(176) One (of the) students was fatally injured

as opposed to:

(176) Ein Student verunglückte tödlich
(177) A student was fatally injured

which would be examples of Variant I, occurring in a context such as:

(178) In Südamerika demonstrieren und rebellieren die breiten Schichten der Bevölkerung gegen miserable Arbeitsbedingungen. Vor kurzem erreichten die Unruhen einen Höhepunkt. Es kam zu

In (178) Arbeiter and Student refer to groupings within die breiten Schichten der Bevölkerung by way of reference to which they are rendered thematic; they are inferable from the context. In (174), (175) and (176) the class of students is directly derivable from the preceding context. Hence reference is made here to a subset of a given or identifiable set. This may be represented formally in so far as the set may be pronominalized:

(179) Einige (von ihnen) wurden verletzt
(180) Einer von ihnen verunglückte tödlich.

In (174) reference is made to a subset of a set; in (178) to a set within a larger set.

It is important to note that other factors may influence the accent placement e.g. semantic class of verb. Consider the following fragment text:


The last sentence is an example of Variant I, cf.:

(182) Demonstrationszüge (T) wurden auseinandergeknüpfelt (R)
(183) Studenten (T) wurden vom Studium ausgeschlossen (R)
(184) Studenten (T) wurden verhaftet (R)
(185) Studenten (T) wurden bestraft (R).
Now consider:

(186) Versammlungen wurden abgehalten
(187) Versammlungen wurden gesprengt
(188) Versammlungen wurden abgehalten und gesprengt
(189) Demonstrationen fanden statt.

In (186) and (189) the verbs would tend not to be assigned primary accent on account of their semantic class: the distinction here relates to the semantic properties of the verbs abhalten and stattfinden, expressing the notion of being in/bringing into existence, which are semantically weaker than sprengen, and also in (182), auseinandernnehmen. (188) shows the effect of verbs of different semantic values being brought into opposition to each other: in opposition to sprengen, abhalten predicates of the entity Versammlungen, cf.:

(190) Meetings were convened and disbanded;
without this opposition abhalten, like stattfinden in (189) serves to introduce the entity referred to by the subject, i.e. Versammlungen, Demonstrationen respectively, cf.:

(191) Meetings were convened
(192) Demonstrations took place
as opposed to:

(193) Meetings were disbanded
(194) Demonstrations were broken up.

Compare further:

(195) Heute verunglückten einige Studenten
(196) Heute verunglückten einige Studenten tödlich.

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\(^1\) For further discussion of the question of accent placement see Bresnan (1972) and Kirkwood (1973)
In (196) tödlich verunfallen is in implicit opposition to verletzen or schwer verletzen and predicates about how the students were affected. In (195), on the other hand, the information conveyed is rather 'there was/occurred an accident involving some students'.

Variant III:

(197) Some students were injured

(198) Einige Studenten wurden verletzt.

Here we have an example of a non-specific entity carrying primary rhematic accent. Injured in this type is contextually dependent and hence thematic. In other words, some students specifies a particular set belonging to the class of students which has not been specified in the preceding context. Injured refers to an identifiable event about which is being asserted the particular set of students affected.

Possible contexts are:

(199) Gestern hat sich ein großes Unglück ereignet. Dabei erlitten viele Insassen der Flugmaschine körperliche Schäden. Schwer verletzt wurden auch einige Fußgänger

(200) Gestern hat sich ein großes Unglück ereignet. Verletzt wurden aber nur einige Studenten

Of a specified incident and consequence (i.e. verletzt) is asserted the involvement of a particular set belonging to the class of Fußgänger (or Studenten) which has not been specified hitherto. Verletzt is recoverable directly in (199), indirectly by semantic inference in (200) which might be expressed by the implicit statement: 'Es gab Verletzte'; or by an implicit question: 'Wurden viele dabei verletzt?' Note the possibility of permuting the word order in German here: the contextually dependent predicative element verletzt may be
fronted in German as thematic basis. This is not so natural in English: we would not normally find

(201) Injured were (also) a few pedestrians/(only) a few students
but rather

(202) A few pedestrians were also injured
(203) Only a few students were injured

though it is possible to say

(204) Also injured were a few pedestrians

where also reinforces the contextual link. Compare, however, other possibilities in English of achieving a theme-rheme sequence:

(205) The injured also included some pedestrians/included only a few students
(206) There were also some pedestrians among the injured.

Variant IV:

(207) Some students were injured
(208) Einige Studenten wurden verletzt

Variant IV relates to Variant III as Variant II does to Variant I. Here we have reference to a subset of a particular set as in III. Unlike III, the particular set in question is specified in the preceding context. Thus in IV all the elements are contextually bound except for the quantifier. Perhaps the clearest way to illustrate this is by means of implicit underlying questions, e.g.:

(209) Befinden sich einige/viele Studenten unter den Verletzten?
(210) Wurden einige/viele Studenten verletzt?
(211) Unter den Verletzten befinden sich nur einige/viele/keine Studenten
(212) Verletzt wurden nur einige/viele/keine Studenten
(213) Studenten wurden nur einige/viele/keine verletzt.

Again the sequence of elements in German is significant here. As in the case of Variant III the quantifier + quantified element may be moved towards the end of the sentence in keeping with its rhematic function. Furthermore, since it is the quantifier in these examples which is the only non-recoverable entity, it may stand alone in final position and the quantified noun phrase, being contextually bound and hence thematic, may be placed in first position as thematic basis.

Further examples will illustrate this point. Compare:

(214) (Gibt es Hotels in diesem Ort?)
Hotels in diesem Ort gibt es viele
(215) (Wurde an diesem Abend getrunken?)
Getrunken wurde an diesem Abend sehr viel
(216) (Gab man ihm etwas zu essen?)
Zu essen gab man ihm nur wenig
(217) (Erhob er Einwände?)
Einwände erhob er nur wenige
(218) (Gingen sie ins Kino?)
Ins Kino gingen sie alle
(219) (Hat er Kunden?)
Kunden hat er nur ein paar
(220) (Stehen dort Autos?)
Autos stehen dort mehrere
(221) (Gibt es weitere Möglichkeiten?)
Weitere Möglichkeiten gibt es keine
(222) (Gibt es hier Bohnen?)
Bohnen gibt es hier keine.
Common to all these examples is that all elements are contextually bound except for the element expressing the quantification. Such statements thus amount to the quantification of recoverable information. In a similar way it is possible to negate or affirm a statement or assertion, the only new information being the negation or affirmation itself. Compare:

(223) Einen Importstopp für deutsche Waren gibt es nicht
(224) Weit ist es nicht
(225) Die CDU opponiert gegen das Gesamthochschulkonzept der Regierung. Ein Unglück ist das nicht
(226) Gesprochen hat sie nicht
(227) Das mag ich ja geträumt haben. Aber den Vogel habe ich nicht geträumt
(228) Ein Wunder ist der Aufschwung nicht
(229) Ängste stellen sich ein, und doppelsinnig sprechen wir von einem kalten Winter, der uns drohe. Zur Panik aber reicht der Anlaß nicht.

The sentences (223) - (229) are negations of the following assertions:

(223a) Es gibt einen Importstopp für deutsche Waren
(224a) Es ist weit
(225a) Das ist ein Unglück
(226a) Sie hat gesprochen
(227a) Das hast du geträumt. Du hast auch den Vogel geträumt
(228a) Der Aufschwung ist ein Wunder
(229a) Der Anlaß reicht zur Panik

Note that in all the above cases it is the rheme of the statements (223a) - (229a) that is fronted as thematic basis when the sentences
are negated. The same conversion would appear to apply to (214) - (222) also: the rhyme of the question functions as thematic basis for the answer. Compare further:

(230) Hast du **Einzände**? - Du hast wohl **Einzände**

(231) **Einzände** habe ich *viele / nur wenige / mehrere / keine / nicht / nie / nur selten / schon öfters / nur manchmal*

In (231) the entity raised in the question is quantified or negated. Alternatively, the question or assertion could be simply affirmed, in which case **Einzände** may function again as thematic basis carrying secondary accent in the manner described above, primary accent falling on the verb, as in

(232) Ja, **Einzände** habe ich schon, or: (Einige) **Einzände** habe ich schon (einige)

which is an unqualified affirmation as the following example in English:

(233) Yes, I have / do (have (some) objections)

as opposed to the qualified statement with the implication yes ... but:

(234) Ja, **Einzände** habe ich schon, aber ...

(235) Yes, objections I have / do have, but ...

(Note that the particle *schon* is stressed in (234) but unstressed in (232). For a discussion of the unstressed use of the particles schon and auch as verb reinforcers and the connotations they bring out see Kirkwood, 1969; 1970; 1973).

Returning to the statements (223a) - (229a), these might be affirmed as follows:

(236) **Einen Importstopp** für deutsche Waren gibt es schon

(237) **Weit ist es schon**
The particle auch may also function as 'rheme marker' reinforcing the verb, bringing out, for example, the connotation: 'Er sagte, er wollte einen Importstopp verhängen und einen Importstopp hat er auch verhängt'. Compare further:

(238) Ein Unglück ist das schon

(239) Gesprochen hat sie schon

(240) Den Vogel habe ich schon geträumt

(cf. Du hast den Vogel geträumt - Geträumt habe ich den Vogel schon)

(241) Ein Wunder ist der Aufschwung schon

(242) Zur Panik reicht der Anlaß schon.

(243) ("Es ist weit")

Weit war es auch

(244) ("Das wird ein Unglück sein")

Ein Unglück war es auch

(245) ("Nach dieser therapeutischen Behandlung wird sie sprechen")

Gesprochen hat sie auch

(246) ("Du wirst von einem Untier träumen")

Von einem Untier habe ich auch geträumt

(247) ("Der Aufschwung wird ein Wunder sein")

Ein Wunder war es auch

(248) ("Der Anlaß wird zur Panik führen")

Zur Panik hat der Anlaß auch geführt.

A consistent possibility throughout is the conversion of the rheme in the underlying question or statement (which may be explicit or implicit according to the contextual circumstances) to thematic basis in the
final utterance. This word order clearly indicates the communicative function that the initial element in German may perform.

I shall now conclude this section on general contextual criteria by referring briefly to the function of certain particles as 'rheme-markers'. These also have implications for the sequence of elements in terms of the 'contextual reference' they express. In the light of actual instances I shall also show that these particles may also serve as 'theme-markers' or 'topic-markers' since the elements which they accompany, being 'reinforced' or 'singled out', naturally carry a relatively high degree of CD, i.e. regularly function as thematic basis.

In the following examples the particles mark out the rheme.

*auch*

(249) Ich fand auch meinen Vater krank vor

(250) Veränderungen im politischen Kräftefeld lassen sich auch in Moskau registrieren

(251) Viele Offiziere sind *auch* unzufrieden

(252) Auch Palästinenser haben Anspruch auf individuelle Gerechtigkeit

(253) Ihre Argumentation und auch ihre Methoden des Protests decken sich weitgehend mit denen ihrer Komilitonen in der Bundesrepublik. Auch beider gesellschaftlichen Vorstellungen sind identisch

*erst*

(254) Über ihren endgültigen Rang mag dann erst die Zukunft entscheiden

(255) Dies gab der britische Verteidigungsminister erst gestern bekannt

(257) Militärisch überlegen in der Paktorganisation ist dabei nur Amerika.

(258) Unter den Sechs verfolgt nur Holland eine liberale Verkehrspolitik.

(259) In einer Atmosphäre der Angst kann nur Haß gedeihen.


(261) Einen Hang zu Idealen haben die Deutschen ja immer gehabt - nur die Richtung hat oft nicht gestimmt.

(262) Niemand beachtete ihn, nur ein paar Ladenmädchen blickten mit leichter Neugier zu ihm auf.


(264) Das ist oft schon aus der Wortstellung ersichtlich, oft aber auch erst durch die weitere Folge.


Consider first the examples with auch. Standing before the element it is marking, auch is unstressed. If auch follows the rhyme, on the other
hand, as in (251) it is auch that carries the stress according to what appears to be a rule of accent shift (cf. Kirkwood, 1973: 298).

In each case the particle auch accompanies the rheme. This also applies to the other particles erst, nur, schon, though these always precede the rheme and remain unstressed.

A further point for consideration here concerns the various word order possibilities in the case of sentences of this type. The element marked out by the particle as rhematic may move to or towards the end of the sentence in accordance with the basic distribution of communicative dynamism. But as the examples adduced above appear to indicate, a rhematic element preceded by a particle which formally highlights it as rheme frequently occupies initial position which in German, unlike English, would normally give rise to a marked sequence of elements (i.e. marked for emphasis or contrast). An explanation of this may possibly be given in terms of the contextual reference inherent in these particles. Consider the sentences:

(266) Ich fand auch meinen Vater krank vor
(267) Auch meinen Vater fand ich krank vor
(268) Ich fand meinen Vater krank vor
(269) Meinen Vater fand ich krank vor

In (268) and (269), if Vater is rheme, the presupposition accompanying the sentence may be formulated as 'I found someone ill' and the actual information conveyed is the specification of that someone, i.e. 'my father'. (266) and (267), on the other hand, presuppose more. This may be formulated in the following way: 'I found someone ill, and then I found someone else ill', where 'someone else' is brought into relation with the first named 'someone' as in:
Ich fand auch meinen Vater krank vor

which may be shortened to:

(271) ... und meinen Vater auch

... und auch meinen Vater (fand ich krank vor)

after which the thematic section may be tagged on as in the brackets in (271), which is frequently the case when the exact wording is not repeated as in example (253): 'x deckt sich mit y, und auch z (ist identisch), z ist auch (identisch), (identisch ist) auch z². An important aspect of this type of contextual relation between sentences would seem to concern the neutral order of theme-rheme and the relationship established between them: a rhematic element is brought into relation with a thematic element and it is the establishment of this theme – rheme nexus which constitutes an important aspect of the communicative act. In the case of the examples above (for which (266), (267), (270), and (271) serve as a model) this relating of a rheme to a theme has already taken place in the preceding context and thus there is not the same motivation to repeat this in the form of a theme – rheme structure. The situation changes if the particle is deleted. Compare:

(272) Viele Offiziere sind unzufrieden
(273) Einige Professoren haben sich mit ihnen solidarisiert
(274) Meinen Vater fand ich krank vor

where the initial element is marked for emphasis or contrast (cf. Brinkmann's 'harter Einsatz'). A further factor would seem to be the contextual expectancy or predictability of the element which the particle accompanies. For example, meinen Vater is contextually
compatible with meine Mutter, i.e. it is not an unexpected entity for which the hearer or listener has to be contextually prepared. Consider further (255) and (256) in this respect: die dritte Generation is inferable from the context in (256), gestern in (255) is not. It would seem to me that the initial positioning of erst die dritte Generation is more acceptable than that of gestern, cf.

(275) Erst gestern gab er das bekannt

which is marked for heavy emphasis on gestern, the neutral sequence being:

(276) Er gab das (das gab er) erst gestern bekannt.

Some particles may also accompany a thematic element, frequently occupying initial position as thematic basis. A few examples are:

(277) Erst vor kurzem wurde ein Antrag, die strengen Bestimmungen zu lockern, im Unterhaus mit großer Mehrheit abgelehnt

(278) Erst am Sonntag hatte eine Boeing 707 der Lufthansa mit 93 Personen an Bord auf dem Flughafen von Anchorage notlanden müssen

(279) Die heutige Zeit ist von Unruhen beherrscht. Auch am vergangenen Dienstag kam es zu schweren Zusammenstößen zwischen den Studenten und der Polizei

(280) Die Mitglieder des Sozialistischen Deutschen Studentenbundes wurden 1961 aus der SPD ausgeschlossen. Der Sozialdemokratische Hochschulbund bereitet heute der SPD wieder ähnliches Kopfzerbrechen wie früher der SDS. Auch der Ring Christlich Demokratischer Studenten bereitet der CDU und der CSU Schwierigkeiten

(281) Schon das ist nur durch Provokation möglich

(282) Dazu kommt das bekannt geringe Interesse der breiten Studentenschaft an Wahlen zu den Studentenausschüssen und
The difference between particles as theme-markers and rheme-markers is evident if we compare the following, where the particle reinforces the rheme, with the above:

(283) Der Antrag wurde erst gestern gestellt
(284) In letzter Zeit ist es zu schweren Zusammenstößen gekommen. Dazu kam es auch am vergangenen Dienstag wieder
(285) Der CDU bereitet auch der HCDS Schwierigkeiten
(286) Durch Provokation ist schon-alles möglich
(287) Zur Übernahme von AStA-Funktionen sind nur wenige Studenten bereit.

I now propose to investigate the interrelation between the various criteria governing word order and the extent to which the one or the other determines the actual sequence of elements in the light of illustrative examples of various sentence types. In Chapters III and IV various basic word orders were postulated which in contextually relatively independent sentences were based on the semantic structure of the sentence, determined by the semantic category of the verb. On the basis of the semantic structure, basic types of thematic structure can be postulated in which the degree of CD carried by an element is related to its semantic relation to the verb. The different degrees of syntactic cohesion of elements with the verb are also related to semantic relationships, and the criteria of semantic structure and syntactic cohesion may operate in the same direction in determining
the actual sequence of elements. Contextual variants may thus be seen as modifications of basic types through the operation of the context. The extent to which the basic types are susceptible to modification such that the linear sequence of elements reflects the theme – rheme structure depends on the outcome of an interplay of the different criteria, and the degree to which the different criteria operate on the actual sequence of elements will differ from language to language.

I shall now seek to show to what extent the order of elements in the basic types is susceptible to permutation in accordance with contextual criteria, paying particular attention to situations where various criteria are 'in conflict'. An explanation of the regularities and restrictions which are operative in German in such cases will be partly sought in terms of the 'strength' of the predicative bracket (cf. the characteristic feature of 'Distanzstellung') against the 'pressure' exerted by a non-bracket-forming constituent functioning as rheme pushing it towards the end of the sentence in accordance with the basic distribution of CD. I shall begin the active basic type discussed in Chapter III. Throughout attention will be given to the following factors: (i) 'strength' of the sentence bracket (= resistance of degree of syntactic cohesion of a non-rhematic element to a less cohesive element with a higher degree of CD); (ii) position of a non-thematic subject; (iii) relative order of nuclear and extra-nuclear constituents.

In sentences expressing goal-directed action the agent represents the source from which the action directed towards a goal proceeds.
Thus, in a contextually relatively independent sentence the agent has a lower degree of CD than the action and goal in accordance with the relation observed in the previous chapter between the amount of CD carried by an element and the semantic category it expresses. In Sgall's terms (1973) the goal (frequently expressed by the accusative (direct) object) ranks highest on the scale of 'communicative importance'; in terms of syntactic cohesion, it has the highest degree of syntactic cohesion with the verb and in keeping with the characteristic feature of 'Distanzstellung' it moves to or towards the end of the sentence. Since the goal in such a case also functions as rheme (carries the highest degree of CD) the criteria of thematic structure and of syntactic cohesion operate in the same direction, are 'in harmony'. In a contextually dependent situation the situation remains the same if the object is contextually independent and expresses the rheme: the element carrying the highest degree of CD is at the same time the element most closely linked to the verb. Consider the following examples:

(288) Dem Bericht zufolge unternehmen amerikanische Piloten zur Zeit auf dem kalifornischen Flugstützpunkt Edwards mit zwei der vier Beuteflugzeuge Probeflüge

(289) Nach inoffiziellen Erhebungen haben die Amerikaner im Vietnam-Krieg bisher insgesamt 12 155 Gefallene und 73 925 Verwundete zu beklagen

(290) Nach dem Staatsakt gab Bundespräsident Lübke für die Staatsoberhäupter und Regierungschefs in der Villa Hammerschmidt ein kleines Essen. Außenminister Brandt gab währenddessen für die anderen geladenen Gäste einen Imbiß im AuswärtigenAmt

The position of the objects underlined is in accordance with the comments
immediately above. In thematic function, extra-nuclear elements 
e.g. adverbials of time and place, outlining a temporal or local setting 
for the activity, occupy characteristically positions preceding or 
following the finite part of the verb. The second sentence in (290) 
illustrates what happens when the object is not in rhematic function: 
einen Imbiß is rendered contextually dependent and hence thematic by 
direct reference to ein kleines Essen, the implication being 'The other 
guests were entertained (given lunch) somewhere else' - im Auswärtigen 
Amt. It is possible to postulate an implicit question with the 
formulation: 'If a and b were given lunch in V, what happened to the 
others?, where were they entertained? - Answer: im Auswärtigen Amt.

As the last instance indicates, the extra-nuclear adverbial may, 
in certain contextual situations, be rhematic, where the nuclear 
elements are thematic by contextual dependence. Thus, the order of 
elements in the following example:

(291) In ganz Frankreich nahmen sie mit Tonbandgeräten 
gewöhnliche Unterhaltungen auf

may be permuted to give:

(292) In ganz Frankreich nahmen sie Unterhaltungen mit 
Tonbandgeräten auf

if Unterhaltungen is contextually recoverable and thematic. Other 
similar examples are:

(293) Nach etwa zweistündiger Zwangsaufenthalt konnte Brandt 
den Flug zusammen mit den übrigen rund 150 Passagieren 
mit einer Ersatzmaschine fortsetzen

(294) Der britische Innenminister wird die Gesetzesnovelle erst 
nach der Sommerpause einbringen.
In these cases, the criteria of thematic structure and syntactic cohesion are 'in conflict' and the former overrides the latter such that the rhematic adverbial moves outside the bracket. In such cases we may speak of 'postposition', i.e. the positioning of an adverbial element after a syntactically more cohesive nuclear constituent.

It is quite usual for a contextually dependent noun in the function of object to occupy initial position in German, as in:

(295) Kurz darauf wollten die Kinder einen Fahrradschuppen haben, und den bauten sie sich ganz allein - ohne irgendwelche Hilfe von Erwachsenen.

In English, strict adherence to the SVO order does not permit the permutation OVS, though OSV is sometimes possible. It would seem to be a natural means of achieving a similar distribution of communicative dynamism in this instance, e.g.:

(296) Shortly afterwards the children wanted a bicycle-shed, and this they built completely by themselves, or: and they built this completely by themselves.

In cases where the object is contextually dependent the rheme may be an adverbial, the subject or the verb itself. Compare:


(298) Diese Aufgabe erfüllt das atlantische Bündnis seit einer Generation

(299) Den Preis bekam ein Karlsruher Professor der Architektur

(300) Alles wie sonst. Bloß kein Blumenstrauss auf den Fenstertisch. Den stellte Mutter hin

(301) Die Hauptlast in jener schweren Zeit trugen die Frauen, die Mütter
(302) Diesen Standpunkt vertritt auch N.

(303) Den Unterschied in den Briefauffassungen Goethes und Gellerts hat vor allem N herausgearbeitet.

(304) Den Vorsitz führte N.

(305) Eine eingehende Untersuchung hierzu bieten N und M.

(306) Endgültige Einzelheiten darüber kann die Regierung noch nicht bekanntgeben, weil die Verhandlungen noch nicht abgeschlossen sind.

English may resort to special constructions to achieve a similar distribution of communicative dynamism as is achieved in German by permutation of the sequence of elements. One common example is the use of the passive which enables a contextually dependent object of an active sentence to move to initial position as subject and the subject of the active sentence to move to the end of the sentence accompanied with the preposition by, thereby achieving a theme - rheme sequence. A frequent option in these cases is the selection of the construction it was ..., one function of which is to highlight a rhematic element, to give it prominence by foregrounding it. Compare:

(299a) The prize was won by a Professor of Architecture from Karlsruhe.

   It was a Professor of Architecture from Karlsruhe who won the prize.

   The one/person who won the prize was ... .

(300a) That was put there by my mother.

   It was my mother who put that there.

(301a) The heaviest burden was carried by the women, the mothers.

   It was the women, the mothers who carried the heaviest burden.

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1 These constructions are discussed in detail by Kirkwood (1969; 1969a; 1970; 1973).
(302a) This position is also held by N
    It is N who holds this position

(303a) The difference in ... has been worked out by N
    It is N who has worked out the difference in ...

(305a) A detailed analysis of this is proposed by N and M
    It is N and M who have proposed a detailed analysis of this.

It is important to distinguish initial-positioning of such
contextually dependent noun phrases from initial positioning of
contextually independent, i.e. rhematic, noun phrases which are marked
for emphasis. Some examples are:

(307) Einen Fahrradschuppen haben sie gebaut

(308) Eine gefährliche Operation unternahm ein Soldat der belgischen
      Luftwaffe heute

(309) Einen großen Tag erlebte das kleine Fürstentum Liechtenstein
gestern

(310) 21 Tote und 70 Verletzte forderte dieser Zugzusammenstoß in
der Nähe von Karl-Marx-Stadt am Montag morgen

neutral sequences being:

(311) Sie haben einen Fahrradschuppen gebaut

(312) Ein Soldat der Belgischen Luftwaffe unternahm heute eine
      gefährliche Operation

(313) Das kleine Fürstentum Liechtenstein erlebte gestern einen
großen Tag

(314) Dieser Zugzusammenstoß ... forderte 21 Tote und 70 Verletzte.
Now consider the position where the subject is contextually independent, i.e. rhematic, and the object thematic by contextual dependence, but where the object does not occupy initial position as in the above examples, thus allowing the subject to move to the end of the sentence in a consistent theme - rheme perspective. Compare:

(315) Das Mittelmeer ist eine Zone der Spannungen. Die Atlantische-Allianz verfolgt mit wachem Mißtrauen die politische und militärische Entwicklung in ihrer Südostflanke. Besonders beunruhigen die Bewegungen der Roten Flotte die Nato

(316) An manchen Universitäten verteilen die Professoren selbst die Fragebogen

(317) Der Wandel mag nicht von Dauer sein. Aber zunächst einmal bestimmen neue Faktoren die Lage

(318) Seit einiger Zeit bilden vor allem die Radikalen den dunklen Punkt in der nationalen Front.

In all these cases, it is the subject that functions as rheme, which moves towards the end of the sentence in accordance with its high degree of CD but does not (at least in these examples) 'break' the bracket formed by the accusative object and the verb. There is a conflict here between two word order principles, i.e. between the sequence according to the closeness of the relation to the verb (causing the object to be placed sentence finally) and the sequence according to the relative degree of CD (causing the rhematic subject to challenge the object for end position). We now need to test further the strength of the bracket formed by a verb and an object (including dative and prepositional objects of certain classes of two-place verbs) which enter syntactically into a very close construction in cases where it is the subject that constitutes the rheme of the sentence. Consider the following examples:
(319) a. In letzter Zeit hat nur die SPD dieses Ziel verfolgt  
b. In letzter Zeit hat dieses Ziel nur die SPD verfolgt  

(320) a. Bei uns hat auch J. Erben diese Auffassung vertreten  
b. Bei uns hat diese Auffassung auch J. Erben vertreten  

(321) a. Bei uns hat sich auch J. Erben dieser Auffassung angeschlossen  
b. Bei uns hat sich dieser Auffassung auch J. Erben angeschlossen  

(322) a. Im Ausland hat insbesondere H.J. Abs auf diesen beachtlichen Tatbestand hingewiesen  
b. Im Ausland hat auf diesen beachtlichen Tatbestand insbesondere H.J. Abs hingewiesen  

The above pairs would seem to indicate that in some contextual circumstances the subject may follow the accusative, dative or prepositional object in sequence, thus moving outside the syntactic bracket. What is of importance here is again the function of the particles I have referred to above: auch, nur, insbesondere single out an element for special attention which has the effect of 'heightening' its communicative weight (cf. Firbas' term 'Wertverleiher'). Without the particle the b. sentences in each of the above pairs would seem less natural than the a. sentences:  

(323) In letzter Zeit hat dieses Ziel die SPD verfolgt  
(324) Bei uns hat diese Auffassung J. Erben vertreten  
(325) Bei uns hat sich dieser Auffassung J. Erben angeschlossen  
(326) Im Ausland hat auf diesen beachtlichen Tatbestand H.J. Abs hingewiesen.  

Much may depend here on the type of element functioning as a non-thematic subject, or rather the kind of reference this element expresses. Consider the following:
In letzter Zeit haben dieses Ziel viele führende Politiker verfolgt.

In letzter Zeit hat dieses Ziel mein Freund verfolgt.

In letzter Zeit hat dieses Ziel Hans verfolgt.

If the latter assumption is correct, then (327) is more natural than either (328) or (329). The reason for this is that mein Freund and Hans refer to specific entities which are recoverable or derivable from the context or situation and do not in themselves carry sufficient 'weight' to move outside the bracket; in (328) and (329) they are singled out by their position to a degree which conflicts with their inherent contextual reference, they cannot satisfy communicatively the tension which their late positioning creates in the hearer or listener. The element viele führende Politiker in (327), on the other hand, is by contrast non-specific and does not refer to a category of individuals or member of a class of individuals which is derivable from the consituation, but represents new information and as such has a sufficiently high degree of communicative dynamism to maintain and satisfy the tension created by its position in the sequence of elements. A further means of 'reinforcing' an element other than the use of particles is a following relative clause dependent on the rhematic element, as in:

Auch bei unseren Verbündeten werden an dieser Erkenntnis diejenigen nicht vorbeikommen, die Bonn gern einen Mangel an politischer Flexibilität vorwerfen.

Auf der Versteigerung sorgten für die wohl spannendste Passage die Lithographien von Otto Mueller, die sich in den letzten Jahren eine frappierende Preisebene erobern konnten.
A relevant factor in discussing the relative positions of subject and objects in sequential ordering is the semantic (case) category of the respective elements. In the above examples, the subject expresses the category Agent. As we saw in the previous chapter, however, the grammatical subject may frequently express the category Object with certain semantic categories of verbs and as such functions as rhyme in the basic case, occupying a position at or near the end of the sentence. In the case of the basic configuration of categories AFF + V + O for example, it is in fact the subject which constitutes the bracket-forming element with the verb. The relation between the category Object occurring with these verbs (expressed by the grammatical subject) and an accusative object with active verbs is clear if one compares sentence types such as:

(332) a. Der Lehrer hat den Schülern eine schwierige Aufgabe zugeeilt
   b. Den Schülern ist eine schwierige Aufgabe zugeeilt worden
   c. Den Schülern ist eine schwierige Aufgabe zugefallen

(333) a. Wir haben dem Text einen anderen Sinn untergelegt
   b. Dem Text ist ein anderer Sinn untergelegt worden
   c. Dem Text unterliegt ein anderer Sinn

(334) a. Er hat der Arbeit eine falsche Auffassung zugrunede gelegt
   b. Der Arbeit wurde eine falsche Auffassung zugrunede gelegt
   c. Der Arbeit liegt eine falsche Auffassung zugrunede.

In sentences of this type similar regularities and restrictions to those observed in the case of the accusative element in sentences of the goal-directed action type would seem to apply to the nominative element expressing the semantic category Object. Hence the nominative may remain in end position even in cases where it is the dative (Affected) element that functions as rhyme. Compare:
In the examples (335) - (337), the nuclear constituents express the categories Affected and Object respectively. The relevance of this for the sequence of elements is underlined if we compare related active sentences where the same sequence of categories may apply. Consider:

(338) a. Man hat nur dem Bundeskanzler dieses Recht zuerkannt
   b. Man hat dieses Recht nur dem Bundeskanzler zuerkannt

(339) a. Man hat allen alleinstehenden Müttern diese Vergünstigung zuerteilt
   b. Man hat diese Vergünstigung allen alleinstehenden Müttern zuerteilt

(340) a. Man hat auch Deutschland die Gleichberechtigung in Rüstungsfragen zugestanden
   b. Man hat die Gleichberechtigung in Rüstungsfragen auch Deutschland zugestanden
In each case the element with the highest bracket-forming potential is
the Object; the Affected element may be moved outside (or rather
postposed, since there is a verbal bracket in these instances) if it is
rhematic as illustrated by the b. sentence in each pair. We can test
the claim that the motivation for postposition (moving outside the non­
verbal bracket) is a high degree of CD, or rather a higher degree of CD
than the element with the highest degree of syntactic cohesion (SC) by
carrying out certain permutation tests. Consider the following quadruples:

(341) a. Im Nahen Osten unterlief, den Russen eine gefährliche
Fehlkalkulation (CD/SC)

? b. Im Nahen Osten unterlief eine gefährliche Fehlkalkulation (SC/CD)
den Russen

c. Im Nahen Osten unterlief eine gefährliche Fehlkalkulation (SC)
auch den Russen (CD)

d. Im Nahen Osten unterlief auch den Russen (CD) eine
gefährliche Fehlkalkulation (SC)

(342) a. Dabei ist dem Prädikatsverb eine obligatorische
Fügungspotenz (SC/CD) eigen

? b. Dabei ist eine obligatorische Fügungspotenz (SC/CD) dem
Prädikatsverb eigen

c. Dabei ist diese obligatorische Fügungspotenz (SC) auch
dem Prädikatsverb (CD) eigen

d. Dabei ist auch dem Prädikatsverb (CD) diese obligatorische
Fügungspotenz (SC) eigen

(343) a. Im Rahmen der europäischen Integrationspolitik kommt
der Verkehrspolitik eine wesentliche Aufgabe (CD/SC) zu

? b. Im Rahmen der europäischen Integrationspolitik kommt
eine wesentliche Aufgabe (CD/SC) der Verkehrspolitik zu

c. Im Rahmen der europäischen Integrationspolitik kommt
die größte Aufgabe (SC) der Verkehrspolitik (CD) zu

d. Im Rahmen der europäischen Integrationspolitik kommt
der Verkehrspolitik (CD) die größte Aufgabe (SC) zu.

\[1\] Postscript (CD) denotes the element carrying the highest degree of CD;
(SC) the element with the highest degree of syntactic cohesion.
In these examples, the element with the highest degree of CS may only be followed by an element carrying a higher degree of CD. Hence the b. sentences in each quadruple are deviant or marked in some way: they deviate from both the syntactic and the thematic norm and are marked for heavy emphatic accent on the (CD/SC) constituent in each case. Note further that the configuration of categories in the predicative section of the sentence are AFF + 0 in the basic type (sentence a.) expressed by the grammatical categories NP_{Dat} + NP_{Nom} respectively. Now consider the following:

(344) a. Damals diente dieses System einem bösen Zweck (CD/SC)  
   b. Damals diente einem bösen Zweck (CD/SC) dieses System  
   c. Damals diente diesem Zweck (SC) das sog. Encomienda-System (CD)  
   d. Damals diente das sog. Encomienda-System (CD) diesem Zweck (SC)

In (344), the configuration of grammatical categories in the basic type (=sentence a.) is NP_{Nom} + NP_{Dat}, thus indicating that it is the dative element that carries the higher degree of SC. Furthermore, the configuration of semantic categories is different also. Here it is the dative element that realizes the category Object, which is further evidence in support of the degree of SC attributed to it, the nominative expressing the means by which the goal (Object) is achieved. A further example where the dative has the higher degree of CD and SC in the basic type is:

(345) a. Damals entsprach die Agressionspolitik den wahren Interessen der Nation (CD/SC)  
   b. Damals entsprach den wahren Interessen der Nation (CD/SC) die Agressionspolitik  
   c. Damals entsprach den wahren Interessen der Nation (SC) vor allem die Agressionspolitik (CD)  
   d. Damals entsprach vor allem die Agressionspolitik (CD) den wahren Interessen der Nation (SC)
In (345), the syntactic relations holding between the elements are similar to those in (344), cf. also the compounds 'zweckdienlich', 'dementsprechend'. Again sentence b. is the deviant sequence. Since entsprechen expresses a correspondence relation between an entity A and an entity B ('A corresponds to B', 'A realizes the function or role B'), we might expect sentences expressing an equivalence relation between two nouns by means of a copular verb (e.g. be/sein) to be subject to similar regularities and restrictions with regard to the sequential ordering of elements. Compare:

(346) a. Früher war Berlin die Hauptstadt Deutschlands (CD/SC)

? b. Früher war die Hauptstadt Deutschlands (CD/SC) Berlin

c. Früher war die Hauptstadt Deutschlands (SC) Berlin (CD)

d. Früher war Berlin (CD) die Hauptstadt Deutschlands (SC)

Here, the syntactically most cohesive unit is die Hauptstadt Deutschlands sein and not Berlin sein. Similarly in quadruple (347) the element with the higher degree of SC is eine Millionenstadt (cf.: zu den Millionenstädten gehören/zählen):

(347) a. Früher war Berlin eine Millionenstadt (CD/SC)

? b. Früher war eine Millionenstadt (CD/SC) Berlin

c. Früher war eine Millionenstadt (SC) auch Berlin/ Berlin auch (CD)

d. Früher war auch Berlin (CD) eine Millionenstadt (SC)

The semantic structure underlying (347) is that of a locational sentence: A is located with respect to the class B. The element expressing the location eine Millionenstadt may be made more explicitly locative by selecting a locative prepositional phrase. A further set of examples manifesting combinations of the categories O and L are:
The grammatical category NP\textsubscript{Dat} may also express the category locative. Compare the following set of examples with the verb *folgen* (cf.: *auf etwas folgen*), where the dative expresses the category locative, the nominative the category Object:

(349) a. Wie immer folgte der Frieden einem langen Krieg (CD/SC)  
? b. Wie immer folgte einem langen Krieg (CD/SC) der Frieden  
 c. Wie immer folgte dem Krieg (SC) ein langer Frieden (CD)  
 d. Wie immer folgte ein langer Frieden (CD) dem Krieg (CS)

In (349), the dative is the more cohesive element\(^1\) and only precedes the nominative (if both appear in the predicate) where the nominative carries a higher degree of CD, which will, in fact, frequently be the case, since it expresses the category Object and a combination of semantic categories commonly associated with the verb *folgen* (see Chapter IV) is L + V + O.

\(^1\) The degree of SC carried by the dative here would seem to be confirmed by the order of elements in the sentence: *In dieser Hinsicht ist Großbritannien den Sechs voraus* if *voraus* carries the rhematic accent. This is an analogous situation to the one referred to above in connection with the basic order of objects, e.g. the order of elements (i.e. dative-accusative) in *Hans hat dem Kind das Buch geschenkt* is the natural order if the primary accent falls on *geschenkt*.  

(348) a. Meines Erachtens gehört Fritz Langs 'Metropolis' zu den besten Filmen der Nachkriegszeit (CD/SC)  
? b. Meines Erachtens gehört zu den besten Filmen der Nachkriegszeit (CD/SC) Fritz Langs 'Metropolis'  
 c. Meines Erachtens gehört zu den besten Filmen der Nachkriegszeit (SC) Fritz Langs 'Metropolis' (CD)  
 d. Meines Erachtens gehört Fritz Langs 'Metropolis' (CD) zu den besten Filmen der Nachkriegszeit (SC)
The function of locative elements as bracket-forming constituents appears to be quite complex. I shall be mainly concerned here with prepositional phrases expressing the category locative, but consider first one further example where the dative element has locative meaning:

(350) Langsam näherte sich das Schiff dem Hafen.

Expressing the locative more explicitly we may get:

(351) Langsam lief das Schiff in den Hafen ein.

In both (350) and (351) the locative adverb forms the sentence bracket with the verb, it is also the rheme of the sentence. If Hafen is thematic in (350) and Schiff rhematic, the order may be reversed, as in

(352) Langsam näherte sich dem Hafen ein schönes, großes Schiff.

There are, however, some locative elements which do not readily give up their position at the end of the sentence, e.g. directional adverbs.

Thus if Schiff is rhematic in (351), the more natural ordering of elements is

(353) Langsam lief ein altes Schiff in den Hafen ein

and not

(354) Langsam lief in den Hafen ein altes Schiff ein.

One aspect of the problem might concern the contextual deletability of the locative element with certain verbs of existence and emergence. Compare the following examples:

(355) Im September 1968 fand an der Universität der Westindischen Inseln, in Port of Spain auf Trinidad eine Konferenz über den Mathematikunterricht an Schulen statt

(356) Zur Zeit findet in Moskau ein gründliches Durchdenken der Nahost-Krise statt

(357) Nach dem Bekanntwerden des Rücktrittsangebots hatten in Ägypten Massenkundgebungen stattgefunden.
The syntactic status of the locative expressions in (355) - (357) is difficult to determine. They are deletable in each case:

(358) Im September 1968 fand eine Konferenz über den Mathematikunterricht statt

(359) Zur Zeit findet ein gründliches Durchdenken der Nahost-Krise statt

(360) Danach hatten Massenkundgebungen stattgefunden

yet occurring with a verb of existence like stattfinden they do not have the same status as sentence adverbials of the type:

(361) N. hat in London Bücher gekauft = als er in London war

but are more like the locative adverb in

(362) N. wohnte in London ≠ *als er in London war.

Postposition is possible, but the most natural interpretation may then be to assign the adverb rhematic function, as in

(363) Im September 1968 fand eine Konferenz über den Mathematikunterricht an der Universität Trinidad statt.

Consider also examples with the verb herrschen:

(364) a. In diesem Sommer herrscht an den Colleges ein äußerst klösterliches Leben

b. In diesem Sommer herrscht ein äußerst klösterliches Leben an den Colleges

(365) a. Auch am Sonntag herrschte an den Fronten Ruhe

b. Auch am Sonntag herrschte Ruhe an den Fronten

(366) a. Seit einiger Zeit herrschen in Nigeria besondere Umstände

b. Seit einiger Zeit herrschen besondere Umstände in Nigeria

(367) a. Heute herrscht in den Rathäusern Trübsal

b. Heute herrscht Trübsal in den Rathäusern

(368) a. Seit einigen Tagen herrscht über diesen Punkt Einigkeit

b. Seit einigen Tagen herrscht Einigkeit über diesen Punkt
In the above pairs (364) - (368) the adverb may be placed before or after the subject. Even where it is postposed the adverb may readily be interpreted as thematic. The option of initial positioning is open in each case.

One point relevant to the syntactic status of these adverbs is that they are not as much an essential amplification of the meaning of the verb as are adverbs occurring with verbs with low semantic content such as 'liegen', 'stehen', 'legen', 'stellen', 'fahren', 'sein'. Nevertheless, their deletability would seem to depend on the contextual recoverability of the location: the sentence es herrscht Trübsal is only meaningful if the local specification e.g. in den Rathäusern is inferable from the context or situation. Consider also the following sentence with a verb of emergence:


In this example, the adverb clearly represents recoverable information and could be left out:

(370) So entstand ein gewaltiges industrielles Kraftfeld.

Compare also:

(371) Es ergibt sich ein interessantes Bild (aus diesen Zahlen)

(372) Es erheben sich zwei große praktische Schwierigkeiten (dabei/hier)

(373) Es hat sich ein lebhafter Disput entwickelt (aus diesem Anlaß).

Adverbs co-occurring with verbs like 'liegen', 'stehen', etc. carry a high degree of SC and are obligatory complements of the verb.
In thematic function they frequently appear in initial position in accordance with the basic semantic type L + V + O. If some other thematic element is selected for first position, however, they normally occupy sentence-final position in keeping with their degree of SC. Compare:

(374) a. Auf dem Tisch lagen Krümel
    b. Es lagen Krümel auf dem Tisch

(375) a. Vor der Tür steht ein Auto
    b. Es steht ein Auto vor der Tür

(376) a. Über dem Strom lag leichter Nebel
    b. Es lag leichter Nebel über dem Strom

(377) a. Vor das Sonnenlicht traten Schatten
    b. Es traten Schatten vor das Sonnenlicht

(378) a. An der Ecke steht ein junger Mann
    b. Es steht ein junger Mann an der Ecke.

Adverbs occurring with verbs of motion and certain verbs such as 'bleiben', 'wohnen', 'sich aufhalten' also have a high degree of SC and function as bracket-forming elements with the finite verb. These are frequently rhematic. Compare:

(379) N. wohnt seit einigen Jahren in London

(380) N. hält sich zur Zeit in Berlin auf

(381) Die beiden Flugzeugführer blieben aus unbekannten Gründen in Syrien zurück

(382) Der Präsident ist am Freitag nach einem inoffiziellen Besuch in der Bundesrepublik nach Paris weitergeflogen

(383) Die Bundesrepublik mußte nach dem Zusammenbruch wieder in die Weltwirtschaft eingegliedert werden
Die Russen bewegen sich jetzt langsam ins 20. Jahrhundert.

Even where these highly cohesive adverbs are thematic by way of contextual dependence, they normally still remain in end position maintaining the sentence bracket. Compare:

(385) N. wohnt schon seit vier Jahren (R) in London/dort

(386) Die Flugzeugentführer blieben aus politischen Gründen (R) in Syrien zurück

(387) Der Präsident ist erst am Freitag (R) nach Paris gefahren

(388) In den Nachkriegsjahren mußte auch Deutschland (R) wieder in die Weltwirtschaft eingegliedert werden.

Directional adverbs co-occurring with the case category Object frequently occupy initial position in thematic function in accordance with the basic configuration \( L + V + O \). A few examples are:

(389) Unter diese Regel fallen auch alle durch alten Sprachgebrauch gefestigten Wortpaarungen, die zumeist durch Anreim oder Reim verbunden sind

(390) Zu den beiden heutigen Westmächten USA und UdSSR wird auf jeden Fall China treten

(391) An ihre Stelle trat die Konzeption der Koexistenz

(392) Aus den Blumen und Gewächsen hinter der Scheibe tauchte das Gesicht eines Herrn.

In sentences expressing movement towards a goal, the directional adverb may occupy initial position if thematic by contextual dependence, e.g.:

(395) Oben auf dem Felsen steht die Ruine des Dunbar Castle. Hierhin floh Maria Stuart 1566, nach der Ermordung ihres Sekretärs Rizzio.

When not occupying initial position the bracket may still be maintained even when the adverb is thematic. This is the case in the following sentences where the subject is in rhematic function:
Zur Eröffnung der Frankfurter Buchmesse tritt in diesem Jahr kein Literat ans Rednerpult.

Zu einer Tournee kommt am 20. Oktober das "Royal Philharmonic" in die Bundesrepublik.

Bei öffentlichen Gelegenheiten entfernte er sich nur selten von ihrer Seite.

Obwohl der Kardinal noch immer da ist, schleicht sich allmählich ein moderner Geist in die Hierarchie ein.

Früher trat die politische Gegenwart vorwiegend nur im feierlichen Gewand in die Hörälne ein.

A rhematic accusative object will also normally precede a thematic directional adverb:

Er hat auch mehrere Bücher auf den Tisch gelegt.

Ich hatte ihm auch ein Bett in dieses Zimmer gestellt.

I shall now briefly consider the relative position of objects and the influence of contextual criteria on the sequential ordering of elements. The basic type (syntactic norm) set up in Chapter III will serve as a basis for the comparison of contextual variants.

Consideration will be given to the effect contextual boundness and the corresponding degree of CD carried by an element has on the position of that element in the sequence of elements taking the sequential ordering of the syntactic norm as base. The bound elements may be ascertained by formulating presuppositions accompanying sentences or by postulating underlying questions which make explicit the communicative motivation of the speaker. We need to observe to what extent the contextual formulation of sentences leads to a permutation of the basic ordering.
and to what extent the latter remains intact in accordance with the
notion of syntactic cohesion.

Consider first the relative ordering of $\text{NP}_{\text{Dat}}$ and $\text{NP}_{\text{Ack}}$ where $\text{NP}_{\text{Dat}}$ precedes $\text{NP}_{\text{Ack}}$ in the basic type, taking as an example the sentence:

(403) Hans hat gestern der Mutter Blumen geschenkt.

Possible contexts to which (403) may be adapted may be represented in
the form of diagnostic boundness-questions (i.e. underlying questions
which serve to diagnose the bound (contextually dependent) elements).

Compare the following possibilities:

(i) Diagnostic b-question: Was ist gestern geschehen?

Statement: Hans hat gestern der Mutter Blumen geschenkt.

According to the formulation of the question gestern is the only bound
element. Yet I shall also propose that Hans also be considered a bound
constituent on the assumption that the statement is uttered in a
particular context or situation in which Hans represents recoverable
information, i.e. is given and can serve as a starting point about which
something can be predicated. The statement can now be represented in
terms of its contextual boundness in the following way:

(404) Hans hat gestern der Mutter Blumen geschenkt

\[\begin{array}{ccccc}
\text{b} & \text{b} & \text{n-b} & \text{n-b} & \text{n-b} \\
\end{array}\]

The question in (i) above (Was ist geschehen?) can of course be
associated with a contextual situation from which more than the agent
can be recovered. Consider the following situation:

(405) Vorige Woche hat sich Hans mit seiner Mutter überworfen.

(Was ist geschehen?) Gestern hat Hans (er) seiner Mutter (ihr)
Blumen geschenkt.

\[1\text{ where b denotes a bound and n-b a non-bound constituent}\]
In (405) *Mutter* is rendered bound and thematic by means of direct recoverability from the preceding context. The implication of the question *'Was ist geschehen?' in (405) is 'What did John then do concerning his mother, regarding this incident with his mother?' or 'What happened next in the relationship between John and his mother?' In such a case the contextually non-bound segment is "Blumen geschenkt".

(ii) Diagnostic b-question: Was hat Hans gemacht?

Statement: Hans (er) hat der Mutter Blumen geschenkt.

Here the situation is similar to (i), the bound elements corresponding to those in (404). Note that since both accusative and dative are non-bound, the dative precedes the accusative in sequence in accordance with the semantic structure of the sentence, the 'Goal' or 'Object' carrying a higher degree of CD than the 'Recipient'/'Beneficiary'. The element realizing the category Object (i.e. the accusative) is also the element carrying the highest degree of SC. Semantic and syntactic criteria are in harmony.

(iii) Diagnostic b-question: Was hat Hans der Mutter geschenkt?

Statement: Hans hat der Mutter / Der Mutter hat Hans Blumen geschenkt

where the only non-bound element is thus Blumen:

(406) Hans hat der Mutter Blumen geschenkt.

(iv) Diagnostic b-question: Wem hat Hans Blumen geschenkt?

Statement: Hans hat Blumen seiner Mutter geschenkt / Blumen hat Hans seiner Mutter geschenkt
where, as in (iii) there is only one non-bound element, i.e. Mutter:


Note that in (407) the dative (carrying the highest degree of CD) follows the accusative (carrying a lower degree of CD but a higher degree of SC). In some cases, however, the criterion of syntactic cohesion may still operate when the accusative is a bound segment and the dative a non-bound segment. In example (407) above it is the criterion of the degree of CD that determines the sequence of elements, in the following examples it is the closeness of the relation of the accusative to the verb:

(408) Schließlich hat die Regierung der Notenbank diese Aufgabe zugedacht.

(409) Dabei hat man vor allem der Rezeption eine entscheidende Rolle zuerkannt.

An alternative to (407) is thus:

(410) Hans hat seiner Mutter Blumen geschenkt.

(v) Diagnostic b-question: Was hat Hans seiner Mutter geschenkt?

Statement: Hans (er) hat seiner Mutter (ihr) / Seiner Mutter (ihr) hat Hans (er) Blumen geschenkt

where the only non-bound element is Blumen. Hence we get:

(411) Hans hat seiner Mutter Blumen geschenkt.

In this case the element with the highest degree of SC also carries the highest degree of CD as in the basic type.
(vi) Diagnostic b-question: Was hat Hans mit den Blumen gemacht?

Statement: Hans (er) hat die Blumen (sie) seiner Mutter geschenkt.

Here the non-bound segment is constituted by the dative and the verb:

(412) Hans hat die Blumen seiner Mutter geschenkt.

Note that here the option indicated in (410), i.e. of positioning elements according to their relative degree of SC does not appear to apply in this contextual situation. In terms of bound and non-bound elements this would lead to the following distribution:

(413) Hans hat seiner Mutter die Blumen geschenkt.

This sequential ordering seems questionable considering the given contextual recoverability of the respective elements since it leads to a separation of the non-bound constituents, i.e. the insertion of a bound constituent between two non-bound elements. It is, however, possible to replace Blumen in (413) by another element, provided that it is non-bound cf.:

(414) Hans hat die Blumen seiner Mutter zum Geburtstag geschenkt.

An important point concerning the position of a rhematic element with a high degree of SC is that any displacement of such an element from the end of the sentence towards the left will result in a marked sequence of elements, the effect being greater the further towards the left the element is shifted. Consider:

(415) a. Der Minister hat am Freitag dem Präsidenten den Gesamtplan vorgelegt

b. Der Minister hat am Freitag den Gesamtplan dem Präsidenten vorgelegt

c. Den Gesamtplan hat der Minister am Freitag dem Präsidenten vorgelegt.
Sentence (415a) represents the neutral syntactic norm. (415b) is a departure from both the syntactic and the thematic norm with the result that it is marked for emphatic or contrastive accent on den Gesamtplan. Compare further:

(416) a. Hans hat seiner Mutter ein Buch geschenkt
    b. Hans hat ein Buch seiner Mutter geschenkt
    c. Ein Buch hat Hans seiner Mutter geschenkt.

(415c) and (416c) are marked for heavy emphatic or contrastive stress on the initial element.

Elements with particularly strong bracket-forming potential are objects which have entered into a close syntactic construction with a verb forming what is referred to as a 'feste Verbindung'. Consider the following examples:

(417) Während in der Einübung durch Bewusstmachung die Bedeutung der sprachlichen Einheiten eine wichtige Rolle spielt, legt die Automatisierung hauptsächlich auf die grammatische Struktur Wert

(418) Das gegenwärtige Parlament schenkt auch der Agrarlobby zuviel Gehör

(419) Es soll nun festgestellt werden, inwieweit es auf die Gesamtwirkung, die eine Geschichte hat, Einfluß nimmt

(420) ... Begriffe die auch für andere Sprachen Gültigkeit haben

(421) Die verschiedenartige wirtschaftliche, soziale und politische Entwicklung in den zwei Teilen Deutschlands findet auch im Sprachleben ihren Niederschlag.

In all these instances the communicatively most dynamic element would seem to be some other element than the object standing in end position. This rhematic element is in all cases except one a prepositional phrase
dependent on the verbal complex NP + V (in (418) the dependent element is a dative object). There is what has been referred to as a 'conflict' between the sequence according to the closeness of the relation to the verb and the sequence according to the relative degree of CD.

An analysis of a large corpus of material reveals that (leaving aside initial positioning) there are basically three word order possibilities for verbo-nominal structures of the type $\overline{NP + V} + PO$. Compare:

(422) a. N. wird für ihre Probleme Verständnis haben (basic type)
   b. N. wird Verständnis haben für ihre Probleme (extraposition)
   c. N. wird Verständnis für ihre Probleme haben (postposition)

(the difference between 'extraposition' and 'postposition' is not formally marked when there is no infinite verb form present as in N. hat Verständnis für ihre Probleme). The phenomenon of 'Ausklammerung' in Modern German appears to be exceedingly complex and it is not possible to deal with the problem exhaustively here. Primarily I am concerned with the post- or extraposition of prepositional phrases of the type illustrated above from the point of view of any relation this may have to the interaction of various word order principles. I shall proceed on the assumption that one consequence of — though not necessarily motivation for — the placement of a prepositional phrase after the head noun is that it may lead to a theme — rheme sequence being achieved if the prepositional phrase is rhematic. This would be in keeping with the basic distribution of CD and the accent placement characteristic of neutral German sentences. Another consequence of 'Ausklammerung' has been pointed out by Grubačić (1965) and would appear to be in conflict
with the above assumption regarding the postposition of a rhematic prepositional phrase. She writes "Ausklammerung hat nun einen neuen Spannungsverlauf zur Folge. Dass Sinnwort ist ins Innere des Satzes verlagert, die Lösung der Spannung tritt viel eher ein und der Satz fällt sanft ab bis zum Ende" (1965: 70). This statement would seem to imply that German sentence intonation is assuming characteristics not dissimilar from those of Modern English. Some of the examples given to illustrate this are:

(423) Ich erschrak, als ich bemerkte, daß ihre Gesichter plötzlich Freude zeigten über meinen Anblick

(424) Ja, das sei die Frage, ob der Mensch Schuld habe am Absterben seiner Wurzelkräfte.

Grubačić reiterates this finding in one of her concluding remarks. I mention it here for general interest and because it relates to some recent claims about the development of the structure of Modern German to which I shall refer in the conclusion. She writes (1965: 77): "Der Schwerpunkt des Satzes muß auch in der geschriebenen Sprache nicht an einem bestimmten Platz (auf oder vor dem rahmenschliessenden Satzteil) gebunden sein. Er zeigt vielmehr die Tendenz, nach vorne, in die Mitte des Satzes zu rücken, wozu Ausklammerung, Umstellungen und Fernstellungen beitragen."

Sentences (417) - (421) above indicate how word order in sentences containing verbo-nominal structures of the type under discussion may conform to the syntactic norm. This would appear to be especially true in the case of a verbo-nominal complex and a dependent dative object. In the following examples the 'closeness' of the relation of the nominal to the verb is formally marked in so far as the complex is qualified by an adverb:
(425) Das ist eine Grenze, die den Nervösen leicht Furcht einflößen kann.

(426) Es ist schwer vorstellbar, daß er den Europäern aktiv den Hof macht, damit sie bessere Bündnispartner sind.

A rhematic dative element will not normally displace the accusative element. The same applies in the case of a rhematic subject:

(427) Die Preissteigerungen bereiten auch allen Verantwortlichen in der Bundesrepublik Sorgen.

(428) Kaum eine wagte ihm zu widersprechen. Die einzige, die es tat, war Grete. Und dann hat ihm natürlich auch Maler oft Zucker gegeben.

End position of a dative or nominative element in rhematic function is, however, possible if the accusative is moved to initial position, as in:

(429) Sorgen bereiten den Herstellern weiterhin die Niedrigpreisimporte aus Asien.

(430) Richtigen Spaß macht das nur den Kindern.

Sentences containing structures of the type \[ NP + V \] + PO manifest a greater number of word order permutations. Some examples of the various possibilities are:

(1) PO + NP_{Akk}


(432) Die Bundesregierung nimmt an diesen Bemühungen im Rahmen ihrer Möglichkeiten voll Anteil.
De Saussures enthistorisierter Ansatz einer Sprachanalyse übte auf Weisgerber nur geringen Einfluß aus.

N. bezweifelt, daß der neue Ruf nach sozialer und rassischer Gerechtigkeit bei der Arbeitserschaft Anklang finden wird.

Die SA übte von der Polizei ungestört an ihren Gegnern Rache.

In der Mehrzahl der Fälle wird aber von einer anderen Lösung Gebrauch gemacht.

Die Präambel zum Vertrag nimmt auf die Ziele und Grundsätze der Charta der Vereinten Nationen Bezug.


In (431) - (435) the prepositional element is contextually dependent and hence thematic in each case; it is the accusative nominal that constitutes the rheme. In (436) - (438), on the other hand, the prepositional complement is rhematic, the order of elements being determined by syntactic criteria. Permutation of this ordering is, however, possible, cf.:

... wird Gebrauch von einer anderen Lösung gemacht;
... wird Gebrauch gemacht von einer anderen Lösung;
... nimmt Bezug auf die Ziele und Grundsätze der Charta der Vereinten Nationen;
... fand seinem gesetzlichen Niederschlag im Bundesbahngesetz vom 13.12.1951.

It is important to note here that the motivation for the sequence NP + PO in (436a) - (438a) is not necessarily the thematic structure of the sentence. Similar sequential orderings are also possible in the case of (431) - (435). Compare:
(431a) ... machen reichlich Gebrauch von der betreffenden Umschreibung
(432a) ... nimmt voll Anteil an diesen Bemühungen
(433a) ... übte nur geringen Einfluß auf Weisgerber aus
(434a) ... Anklage bei der Arbeiterschaft finden wird
(435a) ... übt Rache an ihren Gegnern.

(ii) NP_Akk + PO

(439) Er gab den Anstoß zu der Untersuchung
Er gab zu der Untersuchung den Anstoß
(440) Die Sprache erhebt keinen Anspruch auf Systematik
Die Sprache erhebt auf Systematik keinen Anspruch
(441) Sie hatten kein eigenes Interesse daran
Sie hatten daran kein eigenes Interesse
(442) Daneben nimmt es auch Bezug auf Fragen der Zuordnung des
Wortgutes zu bestimmten Stilschichten
... nimmt auch auf Fragen der Zuordnung Bezug
(443) Die Niederlage der deutschen Armee im Jahre 1918 kam als eine
vollige Überraschung und die Dolchstoßlegende fand auch Widerhall
unter den Korporationen
... fand auch unter den Korporationen Widerhall
(444) Diese Wörter haben in den letzten Jahren auch Eingang in
unsere Publizistik und Umgangssprache gefunden
... auch in unsere Publizistik Eingang gefunden
... auch Eingang gefunden in unsere Publizistik

These examples confirm some of the word order possibilities. There
would seem to be sufficient reason to conclude that 'Ausklammerung'
is not to be solely identified with thematic organization but is a much
wider issue. Length of a postposed prepositional phrase and a
following relative clause are, of course, also factors to be taken
into account.
Prepositional phrases dependent on verbo-nominal structures may, if thematic by contextual dependence occupy initial position as thematic basis. A few examples of this are:

(iii) \( PO + V + \ldots + NP_{\text{Akk}} \)

(445) Hierauf legt vor allem die amerikanische Richtung Gewicht

(446) Zu der Erklärung von Bundespostminister Dollinger über die Forderungen der Zonen-Post nahmen am Wochenende die beiden Juristen Professor Pöggel (Leipzig) und Professor Bäcker (Dresden) Stellung

(447) Gegen die vom Konvent der Freien Universität formulierte Urabstimmungsfrage machen jetzt zehn Studenten der Juristischen Fakultät Front

(448) Von der FU Berlin hat die neue Entwicklung ihren Ausgang genommen

(449) An den Problemen der Entwicklungsländer nehmen weite Kreise der britischen Bevölkerung großen Anteil

(450) An der Realität des Wandels gibt es keinen Zweifel

(451) Von den Besuchen des Bundespräsidenten wurde jedoch offenkundig wenig Notiz genommen

(iv) \( NP_{\text{Akk}} + V + \ldots + PO \)

Fronting as thematic basis may also apply to the NP constituent:

(452) Direkten Bezug nahm der KPÖ-Chef auf die Resolution des Parteipräsidiums vom 21 August 1968

(453) Hoffnungen hatte die Regierung auch auf die Vollversammlung gesetzt

(45' ) Äußerst scharfe Kritik üben die Studenten an den Herrschaftsverhältnissen, an Parteien und Politikern

(v) \( \sum NP_{\text{Akk}} + PO \rightarrow + V + \ldots \)

If both constituents NP and PO are contextually dependent, they may both be moved to first position. Compare:
Further examples are:

(456) Leichten Zugang zu Drogen hatte er nach Abbruch des Gymnasialstudiums als Lehrling in einer Apotheke

(457) Einen wesentlichen Anteil an der Entwicklung des Leistungsbilanz der Bundesrepublik Deutschland hatten die Einnahmen von fremden Truppen

(458) Heftige Kritik an der Preispolitik der Regierung übt der französische Unternehmerband in seinem letzten Monatsheft

There is also the possibility of attaching finite verb forms to these two constituents in first position, as in:

(459) Den Anstoß zum Rücktritt von N gegeben hat der Rektor selbst

(460) Einen wesentlichen Beitrag zu den großen Devisenüberschüssen der Bundesbank geleistet haben auch rein finanzielle Vorgänge

A special problem in the case of complex structures of this kind concerns the status of the PO constituent: it may function as an independent prepositional object of the verbal complex or, in some cases and under some circumstances, attach itself to the noun phrase as an attribute. In such cases we may speak of a rank-shift ('Gliederungsverschiebung'). Some clear instances of rank-shift are:

(461) Es scheint uns zudem völlig sinnwidrig zu sein, den Zugang zu den weiterführenden Schulen zu erweitern

(462) Die Opposition erzwang am Schluß der Debatte eine Abstimmung über der Weiterführung der Verteidigungspolitik
(463) Den Anteil der unehelichen Kinder an der Zahl der ehelichen Geburten je Jahr bezifferte N. auf fünf Prozent

(464) Solche parteipolitischen Streitereien werden die Aussichten Großbritanniens auf einen Beitritt zur EWG nicht verbessern

(465) Von diesem Ansatz aus wird eine Lehre entwickelt, die Einblick in sprachliche Kernvorgänge ermöglicht

(466) Es komme darauf an, so erklärte N., in der Öffentlichkeit keinen fälschen Eindruck über die Haltung der Opposition entstehen zu lassen

(467) Dem Studentenführer wurden in einer regelrechten Belagerung Auskünfte über den Sinn und Zweck des Ostpreußenjahres abgerungen.

None of the sentences (461) – (467) contains a 'feste Verbindung' and the prepositional phrase is attached to the nominal as an attribute.

A complication arises in that the prepositional attribute may be separated from the head noun, as in:

(468) Über die Entspannungspolitik der zurückliegenden Jahre scheint eine neue Diskussion ausgebrochen zu sein

Compare (468) with:

(469) Es scheint eine neue Diskussion über die Entspannungspolitik ausgebrochen zu sein.

There would appear to be various possibilities concerning the thematic structure of prepositional attributes of this kind. In (469) the entire structure (head noun + prepositional attribute) may be interpreted as rhematic. In terms of distributional subfields (cf. Svoboda, 1968) sentence (469) can be analysed as follows:

\[
\begin{array}{c}
R_0 \\
\hline
T_1 \\
R_1
\end{array}
\]

Es ist eine neue Diskussion über die Entspannungspolitik ausgebrochen
The rhematic subfield may be analysed into a thematic \( T_1 \) and a rhematic unit \( R_1 \). In English we might get:

(470) (There is) a new discussion (is) going on about détente

where the attribute is detached from the head noun. This element constitutes the rhematic unit within the subfield and is optionally separated from the head noun and moved to end position. The head noun, constituting the thematic unit of the rhematic subfield, is moved towards the front of the sentence, being either introduced by the optional existential there, or fronted as grammatical subject.

This thematic substructure is reflected in German in the sequence:

(471) Es ist eine neue Diskussion ausgebrochen (und zwar) über die Entspannungspolitik.

The subfield 'Diskussion über die Entspannungspolitik' may also be thematic, though with a different category of verb, cf.:

(472) Die Diskussionen über die Entspannungspolitik sind an der Haltung der UdSSR gescheitert

(473) The discussions failed on account of the attitude of the Soviet Union.

Now consider (468). Here 'über die Entspannungspolitik der zurück-liegenden Jahre' is thematic by way of contextual dependence; 'eine neue Diskussion' represents new, non-recoverable information and is rhematic. Thus we have:

\[
\begin{array}{c}
R \\
\hline
T
\end{array}
\]

Es ist eine neue Diskussion über die Entspannungspolitik ausgebrochen

In such a situation the thematic, bound element may be fronted in

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1 Cf. Kirkwood/Hannay (1975) where the problem of attribute detachment is raised in the case of English.
German as thematic basis, the rhematic, non-bound constituent moving towards the end of the sentence. The detachment and fronting of the thematic prepositional attribute is not possible in English where an obligatory rule requires the verb to be preceded by a subject. One possibility is to subjectivize the prepositional phrase and then front it, as in:

(474) The question of détente has led to new discussions (being held).

Alternatively, the rheme may be foregrounded and the theme backgrounded as in:

(475) New discussions are going on / being held on the question of détente.

Finally, 'Diskussion' may be recoverable from the context and hence thematic, 'Entspannungspolitik' contextually independent and rhematic.

Consider the context:

(476) Zum gegenwärtigen Zeitpunkt werden auf höchster Ebene wichtige Gespräche geführt. Eine weitere Diskussion scheint über die Entspannungspolitik ausgebrochen zu sein / Es ist auch eine Diskussion über die Entspannungspolitik ausgebrochen.

In English this may be formulated as:

(477) A discussion is also going on on the subject of détente.

I shall now return briefly to the distinction between prepositional attribute and prepositional object in combination with a 'feste Verbindung'. Consider the following:

(478) Wenn die Chinesen ihren potentiellen Anspruch auf die sibirischen Gebiete erheben, dann geschieht das, um die Russen ...

(479) Die meisten politisch interessierten Studenten haben kein Verhältnis zu einer der bestehenden Parteien
(480) Und es ist auch nicht notwendig, daß die Familien von Streikenden generell einen rechtmäßigen Anspruch auf zusätzliche Unterstützung haben

(481) ..., wenn sie gewisse Aussichten auf Erfolg bietet

(482) Ich bin gerne bereit, Ihnen Auskunft über diese Frage zu geben.

The status of the prepositional phrase as attributes to the nominal constituent is supported by the following paraphrases which indicate the loss of independent status of the PO constituent, i.e. that a rank-shift has taken place. Compare:

(478a) Wenn die Chinesen ihren potentiellen Anspruch auf diese Gebiete geltend zu machen versuchen

(479a) Die Studenten haben kein Verhältnis zu einer der bestehenden Parteien angeknüpft

(480a) ... daß ihnen ein Anspruch auf Unterstützung zugestanden wird

(481a) ... wenn sie gewisse Aussichten auf Erfolg mit sich bringt

(482a) ... sie mit Auskunft über diese Frage zu versorgen.

A similar problem to that of the relative positions of the constituents NP and PO in structures of the kind to which I have just referred, is presented by some predicative adjectives which combine with a prepositional phrase which might be regarded as being dependent on the complex V + ADJ + Präd. In some cases the predicative adjective closes the group prepositional phrase + adjective, in other cases it may precede the prepositional phrase. In the case of nouns in the dative and genitive which are dependent on adjectives the adjectives always follow the noun. A few examples are:

A similar problem to that of the relative positions of the constituents NP and PO in structures of the kind to which I have just referred, is presented by some predicative adjectives which combine with a prepositional phrase which might be regarded as being dependent on the complex V + ADJ + Präd. In some cases the predicative adjective closes the group prepositional phrase + adjective, in other cases it may precede the prepositional phrase. In the case of nouns in the dative and genitive which are dependent on adjectives the adjectives always follow the noun. A few examples are:
(i) combination adjective + noun in the dative

(483) Diese Vorgänge sind einer Explosion vergleichbar

(484) Dieser Kongreß ist jeglichem Interventionismus abhold

In (484) an attitude regarding an entity is ascribed to an individual or set of individuals, where the element expressing the set of individuals (Kongreß) is theme and the element expressing the attitude rheme. In (483) a given entity (theme) is assigned a property (rheme). In some cases where predicative adjectives occur with a dative element the meaning expressed on the level of semantic structure is the assignment of a quality or attitude to an individual, where the individual is realized by the dative element:

(485) Ihm ist eine große Zuversicht eigen

(486) Fast allen ist der leidenschaftliche Protest gegen Ungerechtigkeit und Unterdrückung gemeinsam

(487) Gemeinsam ist den aufgebrachten Studenten der westlichen hochindustrialisierten Länder ein oft sehr vages Unbehagen an den Lebensformen der modernen, am Konsum orientierten Gesellschaft.

In examples (485) – (487) the predicative adjective has verbal function (cf. ihm ist eigen – ihm eignet) and serves to relate an attitude or quality (rheme) to an individual (theme). This may be regarded as representing the basic type: the configuration of semantic categories being AFF + V + O which was established as a basic configuration in Chapter IV. Note that in (486) the predicative adjective gemeinsam forms the predicative bracket with the finite verb. If thematic by contextual dependence the predicative adjective may be fronted as thematic basis. A contextual example which illustrates this is:
Studenten in aller Welt protestieren und demonstrieren. Die unmittelbaren Anlässe, die direkten Ziele ihrer Unruhe sind oft sehr verschieden. Gemeinsam jedoch ist fast allen eine völlige Neuordnung der Gesellschaftsstruktur where gemeinsam is recoverable from the context by way of semantic contrast to verschieden. In the following examples the individual expressed by the surface dative realized the category Affected in initial position and is characteristically thematic, the predicative adjective expressing the attitude of the individual to a given entity or situation:

(489) Dem ist die Anerkennung seiner Arbeit gleichgültig gewesen

(490) Ihm war dies verständlich

(491) Meiner Mutter war diese Lebensweise heilig

(492) Ihm sind diese Verhältnisse fremd.

The entity about which an attitude is expressed may also occupy initial position as thematic basis according to contextual circumstances, as in:

(493) Diese Namen sind uns allen, ohne Unterschied der Volkszugehörigkeit wert und teuer

(494) Seine Gegner blieben ihm unterlegen.

(ii) combination adjective + noun in the genitive

(495) Amerika ist des weltweiten Wächteramtes müde

(496) In Großbritannien sind wir unserer Demokratie und unserer Verfassung so sicher, daß wir es nicht für notwendig erachten, Vorbeugungsmaßnahmen gegen diese Entwicklungen zu ergreifen

(497) Ich kann dieser Rituale nicht recht froh werden

In terms of semantic and thematic structure these examples are similar to the ones immediately above: an attitude, property or quality is assigned to an individual, expressed here by the grammatical subject. Again this element is thematic and expresses the category AFF
in accordance with the basic semantic pattern established earlier. The predicative adjective forms the predicative bracket in accordance with the syntactic norm.

(iii) Combination adjective + prepositional phrase

In this combination also, the criterion of syntactic cohesion may prevail over that of the relative degrees of CD and the adjective moves to the end of the sentence. Compare:

(498) Die Stärke der Strahlung war nur von der Menge Uran in der Verbindung abhängig
(499) Dies wurde in den beiden Verfahren noch an einem weiteren Umstand deutlich
(500) Dies ist schon aus der Wortstellung ersichtlich
(501) Diese Verordnungen und Gesetze machten die Juden von einer ihnen totfeindlichen Herrschaft abhängig
(502) Die Delegierten zeigten sich zuversichtlich, nachdem auch Frankreich vor allem in der Erweiterungsfrage offenbar zu größerem Entgegenkommen bereit ist, als zu Zeiten General de Gaulles.

In some cases the predicative adjective may also precede the dependent prepositional phrase. Note that in the combinations (i) and (ii) above the adjective always follows the noun in the dative and genitive respectively. Some examples of the sequence ADJ + PP are:

(503) Sie sind unzufrieden mit Politik und Gesellschaft in der Bundesrepublik. Ein Großteil der Gruppe ist bereit zum Protest
(504) Er ist recht zufrieden mit sich und seiner Position
(505) Das war heilsam vor allem für die Minister. Heilsam auch für die westliche Öffentlichkeit.

In the case of certain predicative adjectives, the adjective usually precedes the prepositional phrase in the sequence of elements. Some
common examples are: reich an; voll von/mit; frei von; stolz auf.

Some instances to illustrate this are:

(506) Das Land ist reich an Bodenschätzen
(507) Die Arbeit war voll von Fehlern / voll(er) Fehler
(508) Die Wände waren voll(er) Risse
(509) Er hatte den Kopf voll Sorgen / Ihm war der Kopf voller Sorgen
(510) Dennoch ist niemand frei von der Geschichte
(511) Selbstlosigkeit entwickelt sich nur sehr langsam, und nicht einmal sie ist völlig frei von Eigennutz
(512) Großbritannien war stolz auf dieses riesige Imperium.

The instances with reich, voll and frei are particularly interesting. Their function in sentences of this type is basically that of a quantifier. It was observed above that in a relatively context-free situation the quantifier will not be assigned the accent, but that this would be placed on the quantified element. This is the case in the above examples, where it is the element quantified in each case that carries the primary accent. The adjective may only be stressed if the element quantified is thematic by contextual dependence, as in:

(513) Das Land ist sehr/außerordentlich reich daran
(514) Die Arbeit war absolut voll davon
(515) Jetzt bin ich endlich frei von diesen Menschen.

In cases such as (513) and (514), where the adjective is reinforced by a modifier increasing its communicative weight, the adjective may follow the prepositional phrase:

(516) Das Land ist an Bodenschätzen außerordentlich reich.

Under such contextual circumstances, the prepositional phrase may move to initial position as thematic basis in the same way as the quantified element and quantifier were separated in sequence in sentences of the type:
In this example, a contextually dependent element (Frage) is moved to the front of the sentence and the element to which it is attached is moved towards the end of the sentence. This sequence of elements achieves distinct relief between thematic and rhematic elements. The dissociation from the head of the noun phrase of quantifiers would appear to be fairly common in Modern German. Similar considerations motivate the sequence of elements in the following sentences:

(518) An Bodenschätzen ist das Land außerordentlich reich
(519) Von Fehlern war die Arbeit absolut voll
(520) Von diesen bösen Menschen bin ich jetzt völlig frei.

In sentences (518) - (520) there are two peaks of prominence, the thematic element in initial position carrying the secondary accent, the rhematic element, which is referred to the end of the sentence, carrying the primary accent. This criterion of distinct relief between the thematic and rhematic sections of the sentence has been commented on throughout this chapter, with special reference to the function which the initial position in German has as thematic basis. The sequential ordering of thematic and rhematic constituents in the predicate was seen to be the outcome of an interaction between the various relevant criteria. Particular attention was paid to situations where various principles were in conflict and it was observed in each case whether it was the criterion of relative degrees of communicative dynamism or the principle of relative degrees of syntactic cohesion which finally determined the sequential ordering in each case.
CONCLUSION

The main task of this work has been to take account of the different sets of criteria relevant to the sequential ordering of sentence elements and the extent to which the one or the other has a bearing on the order of elements in English and German sentences. The main emphasis has been laid on German, though the criteria relevant to the sequence of elements in English have served as a basis for comparison throughout. I have been concerned at all times to adduce not inextensive empirical material from both languages as illustration and substantiation of points made. It is in the light of actual instances that all theoretical assumptions and hypothetical statements and proposals stand or fall, and I regard the presentation and application of this linguistic material as one of the contributions this study has to make to a description and explication of the structures of Modern English and Modern German.

The individual criteria investigated were:

(i) grammatical criteria: position is an indication of grammatical function - the sequence SVO has a grammatical function where subject and object are not clearly marked as such by inflection. In English, there is an obligatory rule which states that the grammatical subject must precede the verb. It was seen that as a consequence of this grammatical rule the subject in initial position may express a variety of 'syntactic meanings' (e.g. Affected, Instrument, Locative, Source) which in German are more naturally (frequently even
obligatorily) expressed explicitly in the form of a prepositional phrase, cf.:

(1) The first conference did not include any representatives of the Empire of India

(2) An jener ersten Konferenz nahmen keine Vertreter des Kaiserreichs Indien teil

(3) The plan involves the cooperation of 3 experts

(4) An der Ausführung des Planes wirken 3 Experten mit.

A not unimportant aspect is the development and use of such verbs as include and involve. We may recall the late Latin alternant for mihi est, i.e. habeo and the implication of this for sentence structure. In the following German sentence, the first element realizing the semantic category Affected is an example of the 'habeo'-type construction, the second an example of the semantically more explicit 'mihi est'-type:

(5) Das Verhältnis von NSDAP und Staat wurde ursprünglich so gedacht, daß die Partei die politische Führung und Initiative hätte, dem Staat dagegen die Verwirklichung der Weisungen überlassen sei.

Compare further:

(6) Er hatte den Weg frei

(7) Ihm stand der Weg frei

(8) Der SDS erhielt keine finanzielle Unterstützung mehr

(9) Dem SDS ist keine finanzielle Unterstützung mehr zuteil

(10) Die Gesellschaft besitzt/hat im Grunde nur ein wirkungsvolles Mittel: die Wahl

(11) Der Gesellschaft steht im Grunde nur ein wirkungsvolles Mittel zu: die Wahl

(12) Die Amerikaner wurden gewahr, wie sich in Osteuropa der Satellitengürtel konsolidierte

(13) Den Amerikanern wurde klar/ fiel auf, wie ...
Die ersten Monate des Jahres 1938 brachten wieder Ereignisse von großer Tragweite.

In den ersten Monaten des Jahres 1938 kündigten sich wieder Ereignisse von großer Tragweite an / trafen wieder Ereignisse von großer Tragweite ein.

The substitution of elements in the nominative case (i.e. functioning as grammatical subject) for forms which previously were in e.g. the dative case in the development of English was illustrated with reference to Fries (1940):

(16) Me wes gegiefen an boc (= I was given a book)

(17) Hem nedede no help (=They needed no help).

There are also signs of a similar development in Modern German.

We may recall here the examples:

(18) Ich unterlag seiner ras'chen Wirkung

(19) Wir begegneten bei diesem Menschen einer besorgnisregenden Verständnislosigkeit (cf: Uns begegnete bei diesem Menschen...)

(20) Der Vorstand sieht sich einem Defizit gegenüber(gestellt).

There are some exceptions to the pre-verb subject-placement rule in English, cf.: the use of the existential there and what in constructions of the type what is important is, though here one might argue that the elements there and what preceding the verb form is function, at least formally, as subjects. It is, however, possible to find in certain contextual circumstances sentences of the type:

(21) More worrying at the moment is the power of the unions

(22) Especially reassuring is the agreement between the TUC and the CBI.

The last two examples point to the importance not only of contextual criteria, but also to the significance of distinguishing between different sentence types.
(ii) syntactic criteria: the place an element has in the hierarchical order of elements, determined by the closeness of its relation to the verb. Without the operation of contextual criteria, the closeness of the relation of an element to the verb determines the position of that element in the linear sequence of elements. This applies mainly to nuclear constituents for which a hierarchical ordering can be established on the basis of their varying degrees of SC. The reflection of this systemic hierarchy in the sequential order of elements constitutes the 'syntactic norm' ('syntactische Ruhelage'). Various grammatical theories (e.g. valency theory, transformational generative grammar, case grammar) were reviewed from the point of view of the relevance of the notion of syntactic cohesion which motivated some slight modifications.

The assumption that the actual sequence of elements will reflect the degrees of SC of the nuclear constituents without the operation of contextual criteria was examined in the light of a wide selection of sentence types. It was found that different combinations of grammatical categories could be explained in terms of the underlying semantic (or case) categories they expressed. A particularly important insight in this respect concerned the relative sequential ordering of surface dative and accusative objects. It is generally assumed that the basic order is dative-accusative, this order reflecting the hierarchy in terms of the different degrees of SC attached to the dative and accusative object respectively. This was indeed found to be the case, but not with all verbs. A category of verbs was discovered which in the basic type combine with an accusative and a dative object, the neutral sequence of these being accusative-dative. This amounts to the establishment of a new syntactic norm for the combination of dative and accusative objects.
when co-occurring with a certain category of verbs. Some examples are:

(23) Die Organization is bemüht, unterdrückte Völker in aller Welt der Allmacht des Despotismus zu entwinden

(24) Immer mehr muß das Volk den Kirchen und ihren Organen, den Pfarrern entwunden werden

(25) N. lieferte einige kleine europäische Staaten und Volksgruppen der politischen Willkür Moskaus aus

(26) N. hat einen guten Freund dem allgemeinen Spott ausgesetzt.

Examples (23) - (26) manifest the order accusative-dative in the basic type. In each case the underlying combination of semantic categories is \( A + V + \text{AFF} + 0 \), which with the other, major category of verbs governing a dative and accusative object is realized on the surface grammatical level by the pattern \( \text{NP}_{\text{Nom}} + V + \text{NP}_{\text{Dat}} + \text{NP}_{\text{Akk}} \).

We thus have two distinguishable syntactic norms in surface structure corresponding to a single configuration of semantic categories on the level of semantic structure of the sentence.

(iii) semantic criteria: the relation between the semantic (case) category of an element and sequential ordering. In a relatively context-free situation, the order of elements may be explained in terms of usual configurations of semantic categories (Benes). This claim was investigated in the light of a large corpus of material, a distinction being made between active sentence (i.e. those with an agent) and non-active sentences (those without an agent). It became clear that grammatical categories (e.g. a surface dative) are assigned different positions in the sequence of elements in the basic type according to the particular semantic category they express. For example, a dative element expressing the syntactic meaning 'Affected' in a non-active sentence will regularly occupy initial position in the basic type. A common feature of such sentences is
the combination of categories $\text{AFF} + V + O$ realized by the surface grammatical pattern $\text{NP}_{\text{Dat}} + V + \text{NP}_{\text{Nom}}$. Compare:

(27) Großbritannien stehen zur Zeit viele Probleme gegenüber

(28) Dem politischen Willen zur europäischen Einheit stehen die zentrifugalen Kräfte und Bestrebungen entgegen, die...

It was found that the sequence of elements in corresponding English sentences also reflected the same combinations of case categories. This was achieved by consistent use of the passive:

(29) Great Britain is faced with many problems at the present time

(30) The political desire for unity is opposed by those centrifugal forces and aspirations, which ... .

A related combination of categories realized in surface structure by the above GSP is the pattern $L + V + O$. Here, too, English may achieve a similar distribution of categories in the actual sequence of elements in surface structure by means of the passive construction. Consider the following examples:

(31) Der Ehe geht eine Verlobungszeit voraus

(32) Der Landung auf dem Mars werden in Kürze Landungen auf den äußeren Planeten folgen

(33) Marriage is preceded by a period of engagement

(34) The landing on Mars will shortly be followed by landings on the outer planets.

These insights would seem to confirm Fillmore's assumption about the relation between word order and the case structure of sentences: "The variables that determine and constrain the freedom of word order in the languages of the world are very likely to have many important connections with the case structure of sentences; but this is an area which I have not examined at all" (Fillmore, 1968:60).
(iv) thematic structure: the position of elements is determined by the relative amount of communicative dynamism they carry. Permutations of the 'syntactic norm' are possible, within certain limits, in contextually dependent sentences in German. English, with its relatively fixed word order, may employ other means than the permutation of the sequence of elements to achieve a distribution of communicative value in accordance with the requirements of the context and situation.

Contextual dependence is a highly complex phenomenon. Elements may be recoverable from the context either directly or indirectly (e.g. by way of semantic implication). 'Givenness' as a communicative feature assigned to particular sentence elements is a graded property (cf. Danes, 1970) and has important consequences for the positioning of the thematic elements, especially the selection of the initial element in German as thematic basis. The function of the sentence opening element in German of giving a certain prominence to a particular recoverable constituent to which the rheme is related is particularly pronounced in cases where an element (such as e.g. a quantifier) is dissociated from the head of the noun phrase. We may recall the following examples adduced in the previous chapter:

(35) Erhob er Einwände? - Einwände erhob er nur wenige
(36) Du hast das geträumt - Geträumt habe ich das schon

In (35) Einwände is contextually dependent (in this case recoverable from the question) and is moved to the front of the sentence. The information to be conveyed is the quantification of this entity, i.e. nur wenige. This item (i.e. the quantifier) is detached from the noun phrase and moved towards the end of the sentence. This
sequence of elements achieves distinct relief between thematic and rhematic elements. The situation is similar in (36), except that here the contextually recoverable element geträumt is affirmed. As in (36), the recoverable item moves to first position as thematic basis and primary accent is located on the auxiliary habe which is reinforced by the unstressed particle schon.

The degree to which the different criteria operate on the actual sequence of elements was seen to differ in the two languages. In German, the sequence of elements can be more easily manipulated to conform to the requirements of FSP than in English, which avails itself to a greater extent than German of special constructions which may be seen as deriving largely from the requirements of FSP - they are a means of overcoming the constraints of a grammatical nature imposed on the language by the rigid SVO principle. An important aspect of the adaptation of basic sentence types or patterns to actual contexts is the extent to which the various criteria pull in the same direction and the extent to which they are 'in conflict'. Certain regularities and restrictions could be discerned regarding the interaction of the various criteria in a contextually dependent situation. Particular attention was given to the rigidity, or rather degree of rigidity of the sentence bracket in German. One aspect of the weakening of the bracket construction clearly relates to the relatively high degree of CD of the element which moves outside the bracket. On the other hand, it was observed, for example, in the case of certain verbo-nominal structures with a dependent prepositional phrase, that the prepositional phrase could be postposed even when
thematic, thus indicating that the phenomenon of 'Ausklammerung' is a much wider issue than that of the distribution of degrees of CD over the sentence elements and any subsequent manipulation of the sequence of elements this may effect.

It is important to recall that word order is only one means of FSP and that multifunctionality of a given sequential ordering of constituents even in languages with relatively fixed word order is exceedingly rare in a contextually dependent situation. An obvious compensatory means for restrictions imposed on the permutability of elements by grammatical rule is relative freedom in the placement of primary, rhematic accent in the sentence. In German there is strong pressure for the location of primary accent at or near the end of the sentence in accordance with the basic distribution of CD, whereas in English primary accent frequently falls on the initial sentence element (e.g. a rhematic subject in initial position) without that element being particularly heavily emphasized or contrastively stressed:  

(37) A nasty accident occurred today  
(38) It was the following morning. A rising bell was rung soon after six  
(39) The unromantic style of his language is connected with this  
(40) Changes are imminent.  

High probability neutral equivalents in German would manifest a word order more in line with the basic distribution of CD, cf.:  

(41) Heute hat sich ein schweres Unglück ereignet  
(42) Es war am nächsten Morgen. Kurz nach sechs hatte eine Glocke zum Aufstehen geläutet
(43) Damit hängt nun auch das Unromantische seiner Sprache zusammen.

(44) Es stehen Änderungen davor.

In contrasting two or more language systems it is important to bear in mind that language is in a constant state of flux, though structural change is a very slow development. Thus, although two languages may differ considerably in a given aspect, e.g. in the distribution of degrees of CD and primary accent placement as the examples (37) - (44) illustrate in the case of English and German, there may be other aspects of linguistic structure in which they show or are beginning to show some similarities. Languages have, at a given time, their own sentence structure 'norms', but this adherence to a 'natural norm' (cf. Behaghel's use of the term 'Ruhelage' (1903)) is subject to possible change, however gradual this process might be. I am thinking in this context of the phenomenon of 'Ausklammerung' in German and the significance this might have at the present stage in the development of German sentence structure. Some recent work on language types and the possible change a language might undergo over a lengthy period from one type to another has led to some interesting insights into the changes German is at present undergoing and into the possible future development of the language. I am referring here particularly to the researches of Bartsch (1973) and Vennemann (1973, 1973a). It is relevant to review these here and find out if they have any relevance for the notions that have been investigated above. It will be interesting to see what the various approaches have in common and where they differ, and also to see whether some of the apparent differences can be reconciled as different aspects or approaches to the same problems.
Vennemann (1973a) refers to the principle that a fixed word order reflects 'relational dependencies of logical structures' in linear syntactic structures. This principle of natural serialization is, according to Vennemann (1973: 40f.), based on another principle proposed by Bartsch: the principle of natural constituent structure. He writes (1973: 41): "This principle says that elements belonging together in the hierarchy of semantic representation tend to be lexicalized and serialized in the surface representation in such a way that hierarchical dependencies are directly reflected in categorial operator-operand relationships and the closeness of constituents to each other in the surface string. The natural serialization principle comprises the natural constituent structure principle but says that furthermore, the operator-operand relationship tends to be expressed by unidirectional serialization: \( \text{Operator} \downarrow \text{Operand} \) tends to be serialized either as \( \text{Operator} \downarrow \text{Operand} \downarrow \) throughout, or as \( \text{Operand} \downarrow \text{Operator} \downarrow \) throughout." The direction of the serialization of the operator-operand relation in the surface representation is significant for language types in so far as a language which behaves like an SOV language in this regard (e.g. German) will manifest the serialization operator before operand, whilst exactly the opposite serialization prevails in SVO languages, e.g. English.

The principle of natural serialization immediately calls to mind the principles of 'Kontaktstellung' and 'Distanzstellung' discussed in Chapter III. Vennemann gives the following example of the mirror image behaviour of the types SOV (German) and SVO (English) with regard to serialization (1973a: 271):
(45) (a) \( \text{(weil) Maria} \_{\text{gestern auf dem Balkon}} \)

\( \_{\text{ihrren neuen Freunden das Buch gegeben haben muß}} \)

(b) \( \text{(because) Mary} \_{\text{must have given the book}} \)

\( \text{to her new friends on the balcony, yesterday} \)

However, Vennemann is not happy with the serialization in the main clause in German, since this has the finite form of the verb in second position as in an SVO language. He writes (1973:46):

"Bartsch's principles of natural constituent structure and natural serialization have predictive power for language change. They explain many of the word order changes that follow the basic verb shift which is at the heart of all syntactic type changes. This is very transparent in contemporary German. German has a very bad syntactic system due to its incomplete shift from SOV to SVO. The finite verb has shifted in main clauses, but not in dependent clauses. The order of all other constituents is still that of an SOV language: adverbials are serialized from right to left (in English, from left to right); verbs serialize from right to left (in English, from left to right); direct and indirect objects are serialized from right to left (in English from left to right in John gave the book to Mary, with John gave Mary the book still available from the old SOV days). All these concomitants of the SOV pattern are perfect for dependent clauses, but for main clauses they are all "bad". Since the verb position of the main clause pattern is basic (it is "unmarked": most frequent, learned earliest by children, etc.), Bartsch's principles predict that German will change all its old serialization rules until all constituents are again serialized naturally. In short, German must undergo similar
syntactic development in the future as English has in the last 1500 years. ... The theory predicts that German will develop into a pure SVO language by replacing its unnatural serialization rules with natural ones."

Although I feel myself in no position to challenge these predictions for the future of the syntactic system of German, I would like to raise a few points here relating to the serialization of nuclear constituents in English and German as it is observable in the language of the present day. The relevance of the principle of syntactic cohesion which I have treated exhaustively above is obvious here. The first point I wish to make is that the relative sequence of verb and nuclear constituents in English does not constitute a natural serialization in the sense Vennemann understands it. Secondly, I am claiming that German does reflect natural serialization in Vennemann's sense or rather does so to a much greater extent than English in so far as the SvOV structure of the main clause in German does regularly allow the verb and the element with the highest degree of SG to stand together in sequence, the operator-operand relationship being unidirectionally serialized as \[ \text{Operator} \text{Operand} \]. This position would be considerably weakened if the finite verb form were to be joined by the infinite verb forms in the middle of the sentence and it is precisely this positional change which Vennemann's predictions require the infinite form of the verb in German to undergo. If this is so (and if this were in fact to come about), consider the effect on the 'natural serialization' of verb and nuclear constituents.
First consider the suggestion I am making that nuclear elements are not serialized naturally in Modern English. Compare:

(46) John gave a boy a book today
(47) John gave a book to a boy today
(48) John gave the man it
(49) John gave it to the man
(50) John put a book on the table
(51) John gave the girl a look
(52) *John gave a look to the girl
(53) John brought the matter to a conclusion.

I have argued the point about the relative positions of indirect and direct objects in English already above and have questioned some of the claims put forward by Maling (1970) in this respect (see Chapter III). I would still maintain that (46) represents the basic ordering here. Furthermore, I would accept (48) which Vennemann rejects. Considering the argument put forward that the dative-accusative order is a remnant from the SOV days, observe the order of elements in (50). If the old ordering indirect object-direct object became reversed to direct object-indirect object (to + NP), following the movement of the verb from end to second position, it seems inconsistent that this process did not affect the relative ordering of the other nuclear elements in a similar way. Directional adverbs have a higher degree of SC than direct objects and if the alleged new natural serialization were consistent one would expect the establishment of a new sequential ordering verb-directional adverb-direct object-indirect object. Yet this did not happen, and so as far as the position of adverbs of direction in the sequential ordering of elements is concerned, there seems to be cause to question the applicability of the principle of natural
serialization in Modern English. Consider further (51) and (52), where the two elements give and look, which together enter into a close syntactic construction (cf.: to look at) are also not serialized naturally: (52) is a non-occurring sequence. A similar situation exists in the case of (53).

Now compare the position of Modern German in the light of the above comments. Consider:

(54) Hans hat heute einem Jungen ein Buch geschenkt
(55) Hans hat ein Buch auf den Tisch gelegt
(56) Hans hat die Angelegenheit zum Abschluß gebracht.

Assuming for German the deep structure order of an SOV language, it would seem possible to justify the claim that nuclear constituents are serialized naturally in the above sentences (54) - (56), or expressed in terms of syntactic cohesion, to which the principles of natural constituent structure and natural serialization clearly relate, we may conclude that the sequential ordering of elements in German is determined in the basic type by syntactic criteria (by the closeness of the relation of elements to the verb) and that elements are serialized in such a way that they directly reflect hierarchical dependencies in categorial operator-operand relationships. The more extensive use of the perfect tense in German corresponding to the simple past tense in English may be a relevant factor here.

One interesting feature concerning the sequential ordering of nuclear constituents in English is that there seems to exist a bracket construction including only nuclear constituents. Consider:
(57) I have left you a note on the table
(58) I recently put some money into the bank (cf. banked some money)
(59) I put some money into the bank recently
(60) The Government yesterday put £n million into British Leyland
(61) The Government put £n million into British Leyland yesterday.

Note the sequential ordering of the nuclear constituents and
the separation of syntactically close constituents in sequence in
a characteristic German fashion. The adverbial positions are also
significant: they occur at the beginning of the sentence:
(62) Yesterday the Prime Minister announced new measures in the House
at the end of the sentence following all nuclear constituents:
(63) The Prime Minister announced new measures in the House yesterday
or, in formal style, sentence adverbials of time may be placed between
the subject and the verb:
(64) The Prime Minister yesterday announced new measures in the House.

In all cases non-nuclear constituents do not interrupt the linear
string of nuclear constituents. There would appear to be a reflection
of syntactic hierarchies in the sequential ordering of nuclear
elements in English sentences, though they are not naturally
serialized in the sense that this is being used here, since the
verb is in the 'wrong' position.

The principles of natural constituent structure and natural
serialization have also been applied to the sequential ordering of
Here, too, the principle of natural serialization is only satisfied
if the serialization is unidirectional. This can be done from
right to left or from left to right. The right-to-left order tends to be employed by SOV languages, including - as we would expect - German. The left-to-right order tends to be employed by SVO languages, including English. This can be illustrated in terms of the operator-operand relation in the following way:

\[ \overbrace{A_n A_{n-1} \cdots A_2 A_1 \sqrt{V}}^{\text{OV languages}} \]

\[ \overbrace{A_n A_{n-1} \cdots A_2 A_1 \sqrt{V}}^{\text{VO languages}} \]

As with the nuclear constituents, similar predictions for linguistic development in German are also made in the case of adverbs. Thus the present OV serialization:

(65) Hans (segelte) trotz seiner Halsschmerzen wegen des guten Windes ausgiebig (segelte)

(where the main clause and subordinate clause verb positions are both indicated) will, according to Bartsch (1973:21), be re-serialized to yield the following, the new ordering revealing itself first in the main clause and subsequently in the subordinate clause:

(66) Hans segelte ausgiebig wegen des guten Windes trotz seiner Halsschmerzen.

Leaving aside the argument about verb position in German and the judgments about 'bad' or 'good' structuring, and assuming end position of the verb in German (i.e. an OV situation) then the unidirectional serialization criterion would seem to be satisfied in the case of German for adverbial categories as for nuclear constituents. Consider the following examples from the point of view of the
operator-operand relationship being a direct reflection of hierarchical dependencies:

(67) Hans hat gestern in London drei Stunden gewartet

(68) Hans hat zehn Jahre in London gewohnt

(69) Das deutsche Thema wurde auf der Konferenz erst am Dienstag eingehend behandelt

(70) Er hat schnell ein Buch gelesen

(71) Er hat das Buch schnell gelesen

(72) Er hat gestern in seinem Zimmer fleißig gearbeitet.

The above examples (67) - (72) illustrate clearly the relation between hierarchical ordering and sequential ordering. The low position of adverbials of time and place is clear, and that the sequence time-place is also hierarchically determined would also appear valid since there are greater restrictions on the occurrence of place adverbials than time adverbials, the latter being dependent on the tense marker in the sentence. Now consider drei Stunden in (67). The hierarchy here can be easily tested. Compare:

(73) *Er hat in London drei Stunden eine Entscheidung getroffen

with (67). It is clear that adverbs of duration will only co-occur with durative verbs which implies a relatively high hierarchical relationship between these two, they are closer than say in London and warten and this abstract hierarchical ordering would appear to be directly reflected in the sequence of elements. There is also a close relation between manner adverbs like fleißig in (72) and eingehend in (69). The same applies to schnell in (71) but not in (70).

Compare also the following English sentences in this respect:

(73) He quickly read a book

(74) He read the book (exceedingly) quickly.
In (71) and (74) *schnell* and *quickly* operate directly on their respective verbs *lesen* and *read*. Note also that they are rhematic, carry the rhematic accent. The same applies to the following manner adverbs:

(75) He died *suddenly* (R)
(76) Er ist plötzlich gestorben
as opposed to:
(77) He suddenly died / suddenly he died (R)
(78) Plötzlich starb er / er starb plötzlich.

The English examples suggest that, given the relative greater freedom in the positioning of adverbial categories in English, word order shows an interestingly high susceptibility to the requirements of FSP. One would also expect this to be the case in German, of course, and this can be easily demonstrated:

(79) Sie dachte nicht gern an ihre Kindheit zurück
(80) Sie dachte an ihre Kindheit nicht gern zurück
(81) Ulbricht hat sich in jüngster Zeit intensiv mit einer neuen Wirtschaftspolitik beschäftigt
(82) Ulbricht hat sich in jüngster Zeit mit der neuen Wirtschaftspolitik intensiv (sehr intensiv) beschäftigt
(83) In Zeitungsberichten war erklärt worden, Teile der Unionsfraktion hätten sich scharf gegen die Haltung Kiesingers ausgesprochen
(84) In Zeitungsberichten war erklärt worden, Teile der Unionsfraktion hätten sich gegen die Haltung Kiesingers scharf ausgesprochen
(85) a. Yet in London, in Bonn, and above all in Paris he was not deflected from his purpose of asking questions, listening carefully and very sincerely asking questions
b. Doch weder in London und Bonn, noch insbesondere in Paris wurde er von seinem Vorhaben abgelenkt, Fragen zu stellen,
aufmerksam zuzuhören und sich aufrichtig um freundschaftliche Beziehungen zu bemühen

(86) a. He pursued friendly relations very sincerely

b. Er hat sich um freundschaftliche Beziehungen aufrichtig bemüht.

In contrast to the relatively high degree of freedom observable in manipulating the sequence of adverbial categories in accordance with contextual criteria, compare the position of certain manner adverbs in this respect:

(87) Die synchronische Perspektive wurde nach seiner Meinung erst durch de Saussures Systemgedanken ausführlich entwickelt

(88) Das deutsche Thema wurde auf der Konferenz erst am Dienstag eingehend behandelt.

The low degree of susceptibility to positional change on the part of adverbs such as eingehend would seem to underline the closeness of the dependency relation holding between the adverb and the verb on which it operates and is nicely in line with the principle of natural constituent structure. Yet, at least for Bartsch and Vennemann, the problem of unidirectional serialization, without which the principle of natural serialization is not satisfied, remains, and we are left with their conclusions and predictions: "Das deutsche befindet sich mitten in diesem umorganisierungsprozeß", and "Das deutsche entwickelt sich auf den typus zu, der durch das englische und die romanischen sprachen bereits viel klarer vertreten ist" (Vennemann, 1973a:270-271), and with sequential orderings such as

(89) Das Thema wurde behandelt eingehend auf der Konferenz am Dienstag

(90) The topic was treated exhaustively at the conference on Tuesday.

However, adverbial categories, along with nuclear non-verbal constituents, represent interesting constituents from the point of view of hierarchical dependencies and the sequential ordering of elements.
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