

Generative grammar in Europe

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EDITED BY F. KIEFER AND N. RUWET

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GENERATIVE GRAMMAR
IN EUROPE

Edited by

F. KIEFER and N. RUWET



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FOREWORD

The present volume is intended to give an overall picture of research in progress in the field of generative grammar in various parts of Europe. The term 'generative grammar' must, however, be understood here rather broadly. What seemed to be an easily definable technical term several years ago is becoming more and more vague and imprecise. Research in generative grammar is carried on according to rather diversified methodological principles and being a generative grammarian is often more a matter of confession than any adherence to the common line of methodology which can be traced back to the conception of grammatical description initiated by Noam Chomsky. The direct or indirect influence of this conception is, however, clearly recognizable in most of the papers of this volume. The most difficult thing was, naturally enough, to select appropriate papers in the realm of semantics. Apart from the special trend in generative grammar referred to as 'generative semantics' (though here, too, we might ponder on what 'generative' really means) the term 'generative' is hardly employed in semantics. The search for semantic primes, the application of the methods of mathematical logic, the inquiry into the intricate relationships between syntax and semantics and the utilization of syntactic information in semantics are perhaps the most characteristic traits of contemporary semantics. All of this, of course, is at no variance with the principles of generative grammar, on the contrary, most of it has been made possible through the achievements of generative grammar.

This volume is representative in many but not all respects. The bulk of the papers are devoted to syntax and semantics; two papers deal with morphology, and only one with phonology. One paper is devoted to the history of universal grammar. The neglect of fields of research such as psycholinguistics, sociolinguistics and historical linguistics is deliberate. We thought that these branches of linguistics would deserve a separate volume.

The volume does not contain papers by scholars working in a framework different from that of generative transformational grammar. Thus, we have included no papers on the functional approach to grammar (Petr Sgall and his followers) and on the generative applicational model (S. K. Šaumjan and his followers) though these schools, too, apply the term 'generative'.

Unfortunately, not all of the scholars engaged in work on generative gram-

mar were able to contribute (or not to the extent they would have liked to). A fact which we can only deeply deplore.

It should be made clear that the present collection of articles is not on European generative grammar but on generative grammar in Europe. There is nothing especially European about these papers. They could have been written in any other part of the world. One should not try to look for any special European tradition in this volume either, though it is apparent that the linguistic background with and against which European scholars have to work is in many respects essentially different from the American tradition. Unfortunately, much of the European linguistic tradition has not as yet been exploited for present day linguistic research. In this respect the present volume has not much to offer either.

We wish to express our gratitude to Dr. Manfred Bierwisch who has helped us in various ways in preparing this volume.

THE EDITORS

Paris/Stockholm, July 1, 1971

TABLE OF CONTENTS

FOREWORD	v
WERNER ABRAHAM / The Ethic Dative in German	1
J. M. ANDERSON / Maximi Planudis in Memoriam	20
IRENA BELLERT / Sets of Implications as the Interpretative Component of a Grammar	48
MANFRED BIERWISCH / Generative Grammar and European Linguistics	69
HERBERT E. BREKLE / Über den Begriff und die Begründung einer allgemeinen Sprachlehre. Einige Bemerkungen zum III. Abschnitt von J. S. Vaters <i>Versuch einer allgemeinen Sprachlehre</i> (1801)	112
J. J. CHRISTIE / Some Underlying Structures in Swahili	122
FRANÇOIS DELL / Two Cases of Exceptional Rule Ordering	141
MONIKA DOHERTY / 'Noch' and 'Schon' and their Presuppositions	154
OSWALD DUCROT / French <i>peu</i> and <i>un peu</i> . A Semantic Study	178
MAURICE GROSS / On Grammatical Reference	203
FERENC KIEFER / On Presuppositions	218
W. G. KLOOSTER / Reduction in Dutch Measure Phrase Sentences	243
EWALD LANG / Über einige Schwierigkeiten beim postulieren einer 'Textgrammatik'	284
I. A. MEL'ČUK / On the Possessive Forms of the Hungarian Noun	315
J. MILLER / A Generative Account of the 'Category of State' in Russian	333
HALDUR ÖIM / On the Semantic Treatment of Predicative Expressions	360
H. RÄTSEP / Government Structure Types of the Verbs of Saying and Action Situations	387
C. ROHRER / Some Problems Connected with the Translation of Relative Clauses into Predicate Calculus	407
NICOLAS RUWET / How to Deal with Syntactic Irregularities: Conditions on Transformations or Perceptual Strategies?	419
RUDOLF RŮŽIČKA / Reflexive versus Nonreflexive Pronominaliza- tion in Modern Russian and other Slavic Languages. A Conflict Between Domains of Rule Application	445

TRAUGOTT SCHIEBE / Zum Problem der grammatisch relevanten Identität	482
PIETER A. M. SEUREN / The Comparative	528
EMANUEL VASILIU / Some Semantic Ambiguities Related to 'Tense Category'	565
H. J. VERKUYL / Temporal Prepositions as Quantifiers	582
ANNA WIERZBICKA / In Search of a Semantic Model of Time and Space	616
DIETER WUNDERLICH / Vergleichssätze	629
W. U. WURZEL / Die Flexion der Verben und das Ablautsystem	673

THE ETHIC DATIVE IN GERMAN

In grammars of German, the ethic dative has been given the following descriptions: Behaghel (1923: 629) "The relation holding between the dative constituent and the verb is not one of reality; rather, it signifies the pragmatic constituent that participates in and assesses the event" (free translation from German).

- (1) *Th. Corneille hat ihm [Voltaire] von der englischen Geschichte nur wenig gewußt.*

This dative structure, however, is not at all a good example of an ethic dative. Compare the much cited English and Latin utterances:

- (2) *He plucketh me ope his doublet* (Julius Caesar, Act I, Scene 1)
 (3) *Quid mihi Fluvius agit?*

Both (2) and (3) are ambiguous and can be interpreted not only as ethic datives. The dative in (1), on the other hand, does not seem to be generally accepted and productive in modern German.

Havers (1931: 36) "... a true dative of affective participation is ... the *dativus ethicus*, frequent in popular usage". "In our area only occasional and somewhat arbitrary ...".

- (4) *Du bist mir ein netter Kerl*
 (5) *Gestern habe ich dir etwas Merkwürdiges erlebt*

Jung (1953: 48) "The ethic dative is exclusively a personal pronoun; it indicates a person not actively participating in the event but nevertheless involved emotionally".

Somewhat more explicit syntactic descriptions are given by Regula and Glinz.

As is propounded by Regula (1960: 11-12) there is a first person dative expressing interest:

- (6) *Verachtet mir die Meister nicht*

Naturally, this interpretation fails in the case of the second person dative:

- (7) *Das waren dir Kerle*

ON THE SEMANTIC TREATMENT OF PREDICATIVE EXPRESSIONS

0. GENERAL

In this paper I want to discuss some problems of semantics which, as it seems to me, are crucial with respect to many topics under discussion in present-day semantics but which have so far remained almost unnoticed. I presuppose as the general frame of discussion the theory of generative grammar in the form which has become known under the name of generative semantics.

1. SENTENCES, SPEAKERS AND HEARERS

No linguist will deny the special status of sentences in language. And hardly in any other theory of language has the category of sentence had such an important role as in the theory of generative grammar. The whole description of a language is defined here as description of all the sentences possible in this language. In this respect the theory of generative semantics does not differ at all from the traditional conception of generative grammar. But – surprisingly enough – it does not become clear from this treatment of sentences what a sentence is from the semantic point of view: what are these semantic properties that give sentences their special status in language? Why do we always speak by means of sentences, and not by means of noun phrases or verb phrases, for instance?

It has been generally accepted that the special feature of a sentence is its predicativity. A sentence is a predicative structure in which (or by means of which) something is asserted or questioned about or in which someone is ordered to do something, in contrast to noun phrases, for instance, where such uses are not possible. One may think, therefore, that one has at least partially explained what a sentence is and where it derives its specific status from when one has explained what predicativity is from the semantic point of view.

But what is predicativity? Although in present-day semantic theory such concepts as predicate, presupposition, assertion, etc. are very often used, these by themselves do not give any explanation of predicativity in the sense we are interested in, i.e., predicativity as the phenomenon which underlies the special role of sentences in communication. These notions do not reveal why the sentence is just the unit by means of which people communicate.

Communication is something that always takes place between a speaker and a hearer. Every sentence by means of which something is communicated is formed by a speaker and received and decoded by a hearer. If we are interested in what a sentence is – or, more narrowly, what predicativity is – then we shall have to find out, apparently, what sentences are for the speaker and what they are for the hearer. The first point that I want to emphasize here is that from the point of view of semantics these two aspects – the aspect of the speaker and the aspect of the hearer – are wholly different. In the semantic sense a sentence is for the speaker something quite different from what it is for the hearer. If the function of a sentence in communication is – as it is usually said – to tell something new about something previously known, it is clear that this opposition of new and known information has sense only from the hearer's point of view: the speaker should know previously everything that is contained in the sentence he tells to the hearer. Therefore, there is little hope of solving the problem of the semantic nature of predicativity as long as we look at sentences from a position that is neutral with respect to the speaker and the hearer. From this position sentences are only 'abstract objects' of a certain type that have nothing to do with communication. Only when we accept the position of the speaker or of the hearer do we have the possibility of examining what communication amounts to for one or the other of them, and, correspondingly, why communication occurs in the form of predicative structures.

Although theoretically the position of generative grammar is declared to be neutral with respect to speaker and hearer, in generative semantics, as it seems to me, there is a tendency to accept the position of speaker as the position departing from which the facts of language, among them also the facts connected with predicativity, are treated. For instance, the notions of assertion and presupposition are treated, as a rule, in the contexts 'the speaker asserts that' and 'the speaker presupposes that'. Also, the so-called reference indices are treated as something that 'corresponds to items in the speaker's mental picture of universe' (McCawley, 1968, p. 140). Maybe it is the generative approach itself that suggests the speaker's point of view. In any case, very little has been done to solve the problem of what these notions – in particular, those of assertion and presupposition – constitute when looked at from the position of the hearer. Nevertheless, the claim that I want to make here is just that it is the aspect of the hearer that is most significant when one wants to solve the problem of predication.

In a certain sense, language as a whole exists for hearers and because of hearers (because there are hearers). In this sense, the structure that an expression of language has exists, first of all, for the hearer. When the speaker gives

a sentence a certain structure, he does this with the intention that the hearer be able to decode the message he wants to tell him. Accordingly, it is only from the hearer's point of view that one can decide for certain what a certain structure actually amounts to.

In particular, as I have already said, the predicative organization of sentences makes sense only from the point of view of the hearer. If we agree that in some – however vague – sense the basis of predicativity consists of notions such as 'known information', 'new information', 'adding of new information to the known one', etc., then we have to admit also that predicativity is a phenomenon that is wholly oriented towards the hearer; and so is language as a whole, in so far as it can be said that language consists of sentences.

Accordingly, if one wants to discover the true nature of predication one has to look at this phenomenon from the position of the hearer. One has to find out what the hearer does with the sentences he receives; only then can one understand why speakers always speak by means of sentences.

I want to emphasize that I am not proposing here any theory of linguistic performance. When I speak of 'what the hearer does' I have in view only the facts and regularities that can be established by purely linguistic means. I do not want to describe the real psychological processes which are going on in the head of the hearer. It is just one of the goals of this paper to show that it really is possible to establish the corresponding facts by linguistic means only.

2. PREDICATION – WHAT IT IS FROM THE POINT OF VIEW OF THE HEARER

What does it mean for the hearer, to understand a sentence, a message? Does it mean merely 'relating' the sentence to its semantic representation, as it is described in present-day semantic theory? Hardly.

The fundamental property of natural language is that by means of it, it is not only possible to 'tell something to someone' but it is also possible to communicate on quite definite themes. Communication is, as a rule, ABOUT something – about definite 'objects' (persons, things, places, events, etc.) which the hearer should be able to identify when he receives a message. And communication amounts (for the hearer) to receiving some new information about these objects. In order to identify the objects in question the hearer should have some previous knowledge about these objects. He should have certain 'descriptions' of these objects in his memory. And when receiving new information about these objects he has to change the descriptions of these objects in his memory. Here we come to the central idea of this paper: for the hearer, the meaning of a sentence – of a predicative structure – is not any stable

structure representing some fact or state of affairs in an abstract form. The meaning of a sentence can be explained only through the change it causes in the knowledge of the hearer (=the descriptions) of the objects which the sentence is about. To put it differently, predicative structures should be treated as instructions for the hearer to modify his knowledge of the world in definite points and in definite ways. From this point of view, the task of the semantic description of sentences is to bring out explicitly what these modifications consist in.

Formally, semantic descriptions of sentences should not be given as static structures which merely show hierarchical orderings of predicates. Instead, sentences should be treated as representing certain rules for transforming argument-structures of one form into argument-structures of another form. The 'result' of a sentence in this sense should constitute a definite list of argument-structures which represent new descriptions of the 'objects' the sentence was about.

It should be noted that such a treatment of the meaning of sentences is generally accepted in computational linguistics (see, for instance, such works as Quillian, 1969, or Schwarcz, 1969, among others). But in this context the treatment is practice-oriented rather than theory-oriented. The criteria in accordance with which the analysis of concrete sentences is claimed acceptable are resolved on the basis of practical considerations and, in addition, the set of sentences which are analyzable is usually quite restricted. A principal treatment on the ground of which any sentence could be given a theoretically acceptable interpretation – and which could serve as the basis of practical approaches – is possible only in the frames of linguistics. Almost the only work in this direction that I have met here is D. T. Langendoen's paper 'On Selection, Projection, Meaning and Semantic Content' (1967), where it has been explicitly suggested that the semantic content of verbs (predicates) should be treated as 'purely projective', i.e. that in the process of semantic interpretation of sentences this content should be entirely projected onto corresponding NP's (arguments). I myself have treated the problem in Øim, 1970b.¹

The foregoing general discussion should have already made it clear that the semantic description of a sentence should explicitly bring out at least the following points: (a) what 'objects' – in the most general sense – the sentence is about? (b) what constitutes the hearer's previous knowledge of these objects? (c) what new information does the hearer receive about these objects

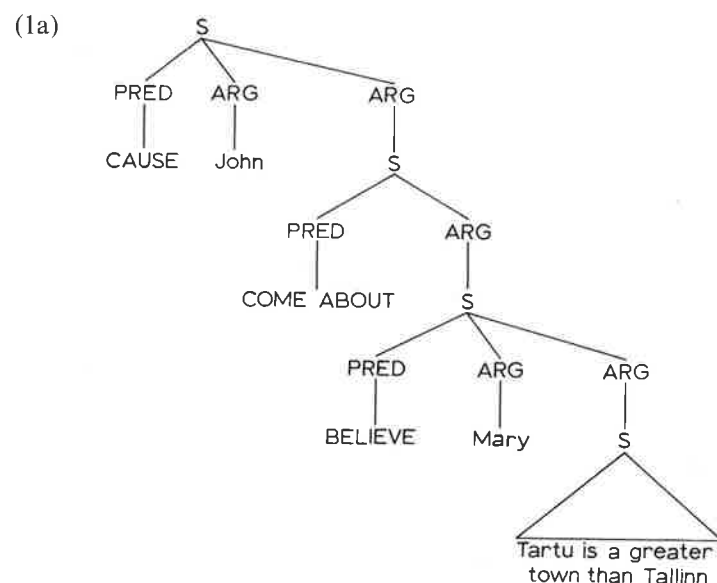
¹ It may be noted also that such a treatment of sentences can be taken as an explication of the well-known viewpoint of Saussure according to which sentences belong to 'parole' and not to 'langue'.

from the given sentence? (d) what are the modifications in the descriptions of these objects that are caused by the new information and, accordingly, what constitute the new descriptions of the objects that remain in the hearer's memory after he has distributed the new information?

It should be quite obvious that no definite answers to questions (a)–(d) can be seen in the usual semantic representations of generative semantics. For instance, let us take the following sentence:

- (1) John persuaded Mary that Tartu is a greater town than Tallinn.

Its semantic representation would be something like (1a) (see, for instance, Lakoff, 1970, p. 59).



We would say that the sentence (1) is about John as well as about Mary, in the sense that the hearer does receive definite new knowledge about both of them. But the structure (1a) does not reveal this in any explicit way, neither does it reveal what the descriptions – the knowledge of the hearer – of these individuals are, before the new information contained in the sentence is asserted about them, and what modifications occur in these descriptions, i.e., what it is that the hearer comes to know about these persons after he has received the sentence. But, as we can easily see, the hearer should at least know about Mary that she formerly did not believe that Tartu is a greater town than Tallinn, that she now believes this and (maybe) that it was John

who made her believe this; and about John he should know that John has made Mary believe the mentioned fact. It means, the 'result' of the sentence (1) should consist of the descriptions of the individuals named John and Mary that contain just the given information. (Note also that the sentence (1) cannot be treated as being – in the same sense – about the towns Tartu and Tallinn, although their names occur in the sentence, since the hearer does not directly obtain any new knowledge of these towns; the towns are involved only through the descriptions of John and Mary.)

There is no need to dwell upon the details of the given sentence. The fact is that the structure (1a), taken by itself, does not answer the questions (a)–(d). From this representation it cannot be seen at all that the sentence (1) should change something in certain descriptions (resp. in someone's knowledge of something). But this means that it cannot be seen that this structure is a predicative one, either. Such representations by themselves are unable to explain what predicativity is.

But how do we nevertheless understand intuitively what holds about Mary and about John as the 'result' of the sentence (1)? For instance, how do we realize that after the sentence (1) is asserted it will hold about Mary that she believes that Tartu is a greater town than Tallinn? Of course, it is because we know the meaning of the predicate *persuade* that we can infer this fact from the sentence (1). Since the structure (1a) shows this knowledge is reduced to knowledge of the meanings of the predicates CAUSE, COME ABOUT and BELIEVE. Apparently, just these predicates are the units that determine what will hold and what will not hold about the corresponding persons after the sentence (1) is asserted. And this is wholly natural. Only predicates that are contained in a sentence, and nothing else, can ultimately determine what the 'result' of the corresponding sentence will be when it is asserted. There should be definite rules connected with every single predicate that determine the modifications this predicate will cause when it is asserted. To know the meaning of a predicate is to know just these rules. Only by the fact that there are such rules connected with every predicate and that we know these rules is it possible to explain how we are always able to decide what the hearer will know after our certain sentence about one or another individual which is mentioned in the sentence. The ability to decide this is undoubtedly one of the most natural components of our linguistic competence.

The task of semantics from the hearer's point of view can be formulated in the following way: first, to determine, in the case of every predicate, what rules belong to it – i.e., what modifications its assertion will cause in its arguments; and second, to describe the interaction of the rules connected with individual predicates in actual sentences. In the following, my attention will

first be directed towards the concretization of the general framework that is required by such treatment of predication and then towards the problem of how the rules of modification – transformations – connected with it are established in the case of a single predicate, and how the corresponding modifications are described. I can make only some general remarks about the treatment of actual sentences.

Now, an important question remains, namely, at which point in the generation of a sentence the described 'processing' should occur. The previous example has already made it clear that this processing is ultimately determined by the elementary predicates that are contained in the corresponding sentence, and by their organization. Consequently, the processing should start from the structures where the elementary predicates and their organization are explicitly given, i.e. in fact from the structures of type (1a). But instead of transforming these structures into surface structure representations the rules under consideration here should process them in the opposite direction – towards the final representations in the hearer's memory.

But before exploring all these problems in detail, I want to present some concrete facts that are relevant to the described approach.

3. SOME RELEVANT FACTS

3.1. In the treatment of 'possible lexical items' the following principle has been formulated, among others: 'lexical items can replace only a constituent which is not labelled S'. (Morgan, 1968). This means that no single word can have the same meaning as the whole sentence. But why is this so? If we treat sentences as static structures, alongside NP's and VP's and the like, we can really only state the given fact – it cannot be derived from any general principle. But if sentences are treated semantically as unstable structures that represent transitions from static (argument) structures of one form to static structures of another form, this fact receives quite a natural explanation.

3.2. One can speak of analytic and synthetic sentences, but it apparently does not make sense to speak of analytic or synthetic noun phrases. The distinction between analyticity and nonanalyticity makes sense only in the case of sentences where something is asserted about something. But again, why is this so? Why does it make sense to say that the sentence *a thing has a shape* is an analytic structure, but does not make sense to say about the noun phrase either *the shape of a thing* or that it is analytic or that it is nonanalytic, although both structures are built from the same basic items, *thing* and *shape*? The reason for this will not be difficult to find if we treat sentences along the lines suggested above.

In addition to analyticity there are also other semantic properties that are connected with sentences but not (at least not in the same sense) with other linguistic structures. For instance, contradictoriness (*The boy who is tall is not tall*) and redundancy (*The tall boy is tall*). It is not at all surprising that the true nature of predicativity appears most clearly in its 'abnormal' types.

3.3. But the facts that most clearly point to the need for a new treatment of predicativity in semantics are connected with pronominalization.

It is generally accepted that the pronominalization transformation, which replaces a NP by a pronoun, can occur only if there is a coreferent NP present in this sentence, to which the pronoun can be said to refer back and if certain formal conditions with respect to relative positions of the two NP's are met (see Ross, 1967; Langacker, 1969; Karttunen, 1968, 1969 – to mention only a few). The apparent semantic reason for such a treatment of pronominalization lies in the fact that in this way it is possible to explain how hearers are able to discover, in the case of such sentences, what exactly the information identified by a pronoun in a given case is. But from the semantic point of view this means that the NP replaced by the pronoun and the antecedent NP should be not merely coreferential but also semantically identical – they should identify precisely the same information.

In most cases the formal treatment of pronouns conforms to their semantic function, i.e. the formal antecedent of the pronoun does indeed identify the same information as we intuitively find to be identified by the pronoun. But it appears that this is not always the case. First, let us take the following piece of discourse.

(2) Mary received a new book. It is about semantics.

In such a case, as has already been pointed out by some authors (e.g. Bellert, 1967), the pronoun *it* does not refer merely to 'a new book' as it would be expected on the ground of formal treatment but, rather, to 'the new book which Mary received'. This means that the pronoun *it* identifies the corresponding object (the book) taken with the information which has already been asserted about it in the previous sentence.

Strictly speaking, the given example is beyond the scope of generative grammar since we have here two independent sentences. But it is not difficult to combine such sentences into one sentence by means of the appropriate conjunctions, so that the observed phenomenon will be preserved. Moreover, if we consider such complex sentences more closely we shall find two clear types among them that differ just in that in the case of one type the information identified by the pronoun is the same as the information identified by its

formal antecedent, while in the case of the other type the information identified by the pronoun already contains the new information asserted about its antecedent in the corresponding clause. The sentences (3a) and (3b) are of the first type, the sentences (4a)–(4c) of the second type.

- (3a) John closed the door since the wind was blowing through it.
 (3b) John closed the door although the wind didn't blow through it.
 (4a) John closed the door ^{and}_{so that} the wind did not blow through it any more.
 (4b) John closed the door ^{and}_{so that} nobody was able to open it.
 (4c) John closed the door but the wind continued to blow through it.

In case of (3a) and (3b), as it can easily be seen, the doors referred to by the pronoun *it* in the corresponding second clauses should be open. And the same should hold about the corresponding doors when these are referred to by the NP's *the door* in the first clauses: this is clearly a presupposition that should hold about the corresponding doors in order that the clauses were meaningful. As we see, in both cases the pronoun *it* and its antecedent identify precisely the same information.

On the other hand, in the case of (4a)–(4c) it is equally easy for us to see that the doors each time referred to by the pronoun *it* should be closed, while the doors referred to by the corresponding antecedent NP's should be open. Precisely as in the case of the example (2) the pronoun *it* identifies here the corresponding object (the door) as taken with the information which is asserted about this object in the clause where the formal antecedent of the pronoun occurs. What is particularly important here is the fact that we are intuitively able to distinguish clearly between these two cases – where the information asserted about the antecedent is already added to the description of the object referred to by the pronoun, and where it is not. This means that these two cases should also receive different treatment in the theory of pronominalization.

From the semantic point of view in sentences (4a)–(4c) the antecedents of *it* cannot be merely the NP-structures underlying the corresponding phrases *the door* in the first clauses of these sentences, since in the semantic representations of these clauses these NP's should identify the corresponding doors as open. The antecedents of the pronouns should be NP-structures that explicitly describe the identified doors as closed. Such NP-structures are not overtly present in these sentences. These structures have to be created in each case, before *it* can be introduced into the corresponding second clauses. And

it should be clear that they can be created only as results of processing the first clauses, in the course of which the new information carried by these clauses – that the corresponding doors become closed – will be added to the corresponding NP-structures. Sentences (3) and (4) differ just in the way in which the processing of the first clause and the introducing of *it* into the second clause are ordered with respect to each other: in the case of the sentences (4) this processing of the first clause precedes *it*-introduction, in the case of the sentences (3) the order is reversed. It is apparent that this ordering is formally determined by the conjunction which connects the two clauses. But essentially it depends on the order of the events expressed by the corresponding clauses; in most simple cases this is merely a temporal ordering (as in the case of the conjunction *and* in (4a) and (4b)) but in more complicated cases some more general relation is involved.² It is not possible here to analyze these facts in detail. These examples are important for us because they reveal with particular clarity what the application of semantic treatment of predication requires. Such examples prove that actual speech – and its understanding – is really built up by transforming argument-structures of one form into argument-structures of another form.

Finally, let me present some more examples in addition to sentences (4a)–(4c) (mostly of types well known from literature, but discussed there in other connections).

- (5) Yesterday Sam found a new girl and kissed her.

her = the new girl Sam found yesterday.

- (6) Before Mary realized that someone had broken into her room, he had stolen her jewels and fled.

he = the one who had broken into Mary's room.

- (7) Whenever you put former servicemen in a room, they start discussing their problems.

they = former servicemen who are put (are?) in a room.

- (8) Mary realized that the boy wanted to take away her bag and she began to scream, so that he hastily ran away.

she = Mary, who realized that . . .

he = the boy who wanted to . . .

² I have treated the types of examples discussed in a little more detail in Öim (1970c); there I have made the claim that this relation is, in fact, the relation of presupposition.

- (9) Mary believed that the boy wanted to take away her bag and she began to scream, so that he hastily run away.

she = Mary, who believed that . . .

he = the boy of whom Mary believed that . . .

4. PRESUPPOSITIONS AND IDENTIFYING STRUCTURES

Treatment of predicativity along the lines described above – as modifying definite argument-structures that present (the hearer's) known information, under the influence of new, asserted information – requires, first of all, that it be possible to differentiate explicitly the known information and the new information which shall be added to the known one in the semantic representation of every single predicative structure. In the present section I will consider the question of determining, in the case of a certain predicative expression, the known information connected with this expression and presenting this information formally.

In fact, the concept we are interested in here – as the whole differentiation under discussion – already exists in semantic theory. This is the concept of presupposed information, or presuppositions, which is contrasted with asserted information. The question lies merely in how the concept of presuppositions should be treated in the present context, i.e. in what sense presuppositions can be considered 'known information'.

First, it should be noted that although the concept of presuppositions has become one of the most popular concepts in semantics, the theoretical function of this concept is not very clear. This vagueness reveals itself most clearly in the fact that the twin-concept of presuppositions – that of new, asserted information – has received almost no attention. Nevertheless, only a little reflection is needed in order to realize that these concepts are only two sides of one and the same phenomenon and that it is just the concept of asserted information which is primary: something can be presupposed only in so far as something will be done on the basis of this presupposition – in this case, some new information will be given to the hearer. It follows that in order to understand the role of presuppositions in the functioning of language we should treat them just in the context of predication.

So far the relation of presupposition has been considered mostly as a relation between whole sentences; and beyond this it has been considered almost exclusively from the point of view of the speaker (*see*, for instance, Fillmore, 1970, p. 59; Lakoff, 1970, Ch. V). There is no doubt, of course, that the one who 'does the presupposing' is always the speaker. But, as I have already pointed out, the real meaning of the phenomena connected with predicativity

will become evident only when we look at what they mean for the hearer.

But what does it mean from the hearer's point of view that certain information is presupposed in the case of a certain sentence, in particular, when contrasted with the new information immediately carried by the sentence? According to our viewpoint, understanding of new information means that this information is added in a definite way – in a way determined by the message itself – to the argument-structures which the message is about. But from this point of view the fact that certain information is presupposed can mean only that this information should already be contained in the corresponding argument-structures, before the new information carried by the message will be added to them. The assertion made in a message should operate upon argument-structures that already contain the presupposed information. In this sense, it can be said that to presuppose certain information means, in fact, to presuppose its existence in the hearer's memory.

But it is important to explain in what sense precisely, 'previous existence in memory' is meant here. It does not mean that not a single sentence can be communicated to a hearer before all the facts identified by the presuppositions of the corresponding sentence are really known to him. But it means that in the case of every individual sentence the hearer should be able to discover all presuppositions connected with this sentence, and when he has discovered them he should first process them – if he did not know them before – and only then can he begin to process the real assertion made by this sentence. Taken by themselves, even presuppositions are nothing but certain messages; but they are messages that precede – or have preceded – the proper assertion of the sentence. And they precede this in the sense that they should be (or should have been) processed and stored by the hearer before the proper assertion. It is only from the point of view of this proper assertion that they are presupposed.³

Let me present some simple examples that illustrate my treatment of presuppositions as discussed above. Take a sentence of the well-known type.

- (10) The door opened.

As is generally admitted, one of the presuppositions of this sentence about the door in question is that it was closed; and the sentence asserts that it became open. If we describe these facts from the point of view of the hearer, it will become obvious that no matter whether the hearer really did or did not know, before receiving this sentence, that the door was closed, he could not

³ In the case of such a treatment, it appears also as quite a natural fact that "for any assertion, it may be the case, then, that all previous assertions in the utterance or discourse act as presuppositions". (Camelot, 1968, p. 17).

understand this sentence appropriately, unless he understood that the door was closed and then became open. He could not change the 'description' of the door under consideration in his memory into the description of an 'opened door', as is required by the given sentence, if he had not understood the description of this door as a closed door. And just this is pointed out by the fact that it is presupposed that the door was closed.

Or let us take an example of a somewhat different kind that still more clearly will demonstrate the nature of presuppositions as 'previous knowledge'.

(11) John is the youngest son of Jones.

Let it be said as an answer to the question 'Who is John?' to someone who already knows who Jones is. In this case, the list of presuppositions of this sentence includes, at least, the following ones.

(11a) Jones has children.

(11b) There are some sons among the Jones' children.

(11c) Among the sons of Jones there are at least three who are of different ages.

(11d) John is one of these sons of Jones.

And the proper assertion made by the sentence (11) is, then:

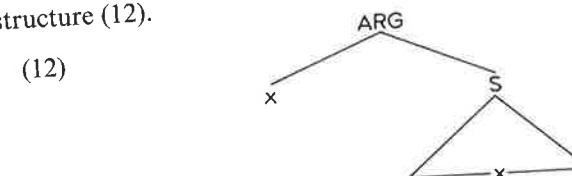
(11e) John is the youngest of Jones' sons.

Again, it is not important whether or not the hearer actually knows some of the facts (11a)–(11d) before he receives sentence (11). All of them may appear new to him. The crucial point is that logically (11a)–(11d) are prior to (11e): it is possible for the hearer to know (11a)–(11d) without knowing (11e), but he cannot know (11e) without knowing (11a)–(11d). And, apparently, the facts (11a)–(11d) in their turn are ordered as they are given above: knowledge of (11d) presupposes knowledge of (11a)–(11c), knowledge of (11c) presupposes knowledge of (11a)–(11b), and so on. From this point of view the hearer's processing of the sentence (11) should be represented as processing the messages (11a)–(11e) one after another in just the order given. The sentence (11) carries immediately only the message (11e). But in order to understand this immediate message the hearer has to take some steps 'backwards', to discover and process the messages (11a)–(11d), and only then can he process the proper assertion of (11).

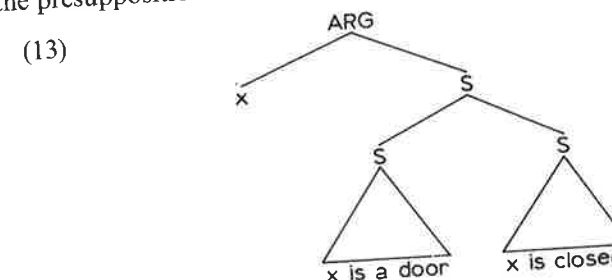
Now we come to the question of in what form – assuming the general frame of formal representations of generative semantics – presuppositions should be given in semantic descriptions of predicative expressions. Of course, I am aware of the complexity of this problem. But I am trying to solve it only

in (and for) the context fixed here; and even in this context the solution should be taken as a tentative one.

The most important fact to be remembered from the foregoing discussion is that according to my treatment, presuppositions are always connected with definite arguments; they present material that is contained in arguments. It may be said that every presupposition is a presupposition about a certain 'object' namely, about one of the objects about which the corresponding sentence (or, more concretely, the corresponding predicate) asserts its new information. And, apparently, the converse also holds: with every argument about which the given predicate asserts something definite presuppositions should be connected which form the identifying description of the 'object' referred to by the corresponding argument. All this suggests for the general form of argument-structures the representation which is illustrated by the structure (12).



Here x is a referential index (representant of the corresponding individual) and S is the sentence (or conjunction of sentences) which presents the presupposition(s) about x (or, more generally, the information which the hearer knows about x and of which the information presupposed about x in case of some concrete assertion forms, in general, only a definite part). The given structure can be thought of as the general form in which descriptions of 'objects' in the hearer's memory are represented – i.e. as the general form of identifying knowledge. For instance, if in the case of the sentence (10), as we pointed out above, the presupposition about the door in question is that it was closed, then the corresponding argument-structure should have, roughly, the following form (if we ignore the question of ordering, or hierarchy, among the presuppositions themselves):



I am unable to present here any conclusive argument for choosing just this form of representation. But nevertheless, many facts can be found that clearly point in this direction. First of all, it should be stressed that since presuppositions have such an important role in the functioning of language, it has to be supposed that language itself has worked out certain standard means for presenting this information. I think there exist facts that indicate that the structure (12) is just the basic form of such representations.

(1) The most typical identifying structures (on the level of surface structure) are undoubtedly noun phrases. Usual types of noun phrases, as we know, are such as adjective + head noun, noun (in genitive) + head noun, head noun + preposition phrase, head noun + relative clause. A question arises as to whether it is possible to find among these types one definite type which can be considered the primary one – in the sense that other types can be derived (in formal as well as in semantical sense) from this type, but this itself cannot be derived from any other type. According to the treatment so far given to noun phrases in generative grammar, such a primary type is head noun + relative clause, i.e. the type which formally matches the structure (12).

Still more, it can be said that from the semantic point of view every single noun is an example of identifying structure; apparently, the form in which semantic material is organized in nouns should very closely reflect the organization of this material in our memory. But, according to the treatment of Bach (1968), as is well known, every noun should be semantically represented by a structure that has just the form of the structure (12).

(2) On the one hand, it is a known fact that relative clauses are always presupposed; i.e. the information they represent is always presupposed about the individual referred to by the head noun. On the other hand, every time we find a certain implicit presupposition to be connected with an identifying expression in a sentence, it is possible to express this presupposed information explicitly in the form of a relative clause without making the whole sentence unmarked. For instance:

- (14a) The door of my room opened.
- (14b) The door of my room, which was closed, opened.
- (15a) My brother regrets now that he did not go to the movie.
- (15b) My brother, who did not go to the movies, regrets now that he did not go to the movies.

In (14b) and (15b) the presupposed information – about the door and my brother, respectively – which is implicit in the corresponding sentences (14a) and (15a) is expressed explicitly by relative clauses. As we see, this transformation does not make these sentences unmarked, although it makes them some-

what redundant; but this is quite natural, since the added relative clauses express information which in both cases is already apparent without them.

It can be inferred that a clear correspondence exists between presupposed information, on the one hand, and information that can be expressed by relative clauses, on the other. This justifies the choice of relative clauses as the primary form for representing presuppositions.

(3) The form chosen here for representing identifying information matches also, it seems to me, the general form of argument-structures as established by Bellert (1969a, 1969b). Bellert distinguishes between three types of arguments, according to three types of operators with which the arguments can be prefixed and which Bellert calls the *iota* operator, the *all* operator and the *indefinite* operator, respectively. As the general forms of the first two types of arguments Bellert offers the following (the third type I. Bellert does not present formally):

- (16) $(\iota x)\varphi(x)$
'the x which is φ '
- (17) $(\text{All } x)\varphi(x)$
'all the x 's which are φ '

In the present paper we are not interested in the differences between arguments which are connected with the use of different operators. In other respects, however, as can be seen, the structure (12) matches completely the structures (16) and (17).

5. PREDICATION AS CHANGING THE IDENTIFYING STRUCTURES

Here I shall try to show, by means of an illustrative example, how I think the modifications of identifying structures take place. I will treat this problem here on the basis of semantic analysis of a concrete predicate word. The problems which are involved in describing actual sentences I will touch upon in the following section.

As the concrete predicate for analysis I have chosen the verb *to understand*, in the meaning which is illustrated by the following sentences.

- (18) The boy understood that he wouldn't escape from the punishment.
- (19) I understood that I had chosen the wrong way.
- (20) From the gloomy expression on John's face I understood that he had failed the examination.

As we saw above (Section 2), the modifications caused by a concrete predicate

in its arguments depend on the elementary predicates into which the meaning of the corresponding word can be analyzed. For instance, in the case of *persuade* we found that the modifications determined by this word depend on the elementary predicates CAUSE, COME ABOUT and BELIEVE. With every elementary predicate individual rules of modification should be connected which the users of the corresponding language know and from which they derive modifications that correspond to concrete (i.e. nonelementary) predicative structures. Consequently, first we have to describe the meaning of *understand* in terms of elementary predicates.

In the situation which the word *understand* (in the given meaning) represents we have quite clearly to do with a fact of acquiring definite knowledge. Each of the sentences (18)–(20) presents a situation where the person mentioned comes to know a definite fact. That the concept of knowledge is really involved in interpreting the verb *understand* can also be seen from the possibility of such sentences as (21).

- (21) I had understood long ago that I had chosen the wrong way but it was very difficult for me to get used to this knowledge.

The main question is how this knowledge is acquired. Understanding something is not identical with acquiring information from direct messages. For instance, we do not generally understand the sentence (19) in the sense that someone directly told me that I had chosen the wrong way. On the other hand, we speak of understanding in the case of such types of indirect information as hints, metaphors etc.

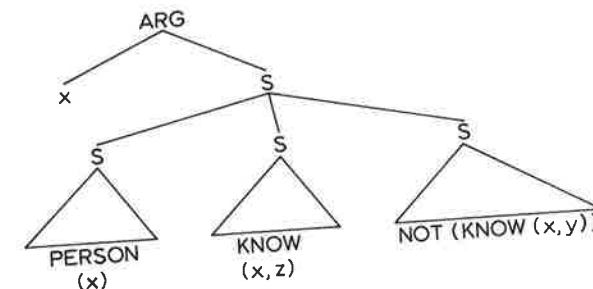
This suggests that understanding in the given sense is in fact analogous to making inferences from definite (previously known) facts, from direct messages, etc. Notice also that, as the sentence (20) shows, in the case of *understand*, just as in the case of *infer*, an expounder can occur that identifies the source from (or on the ground of) which something is understood.

Nevertheless, the situations described by *understand* and by *infer* are not identical, as is intuitively clear to us. If we look more closely, we find that the whole difference in the meanings of these words lies in the fact that *infer* is an active verb, it denotes an activity that is intentionally carried out by the corresponding person, but *understand* does not denote such an activity. We can speak of someone as trying intentionally to understand something, but understanding itself is something that 'happens' and cannot be carried out on intention. This is shown also by the possibility of such expressions as *suddenly he understood that . . .*, *at last he understood that . . .* (**suddenly he inferred that . . .*, **at last he inferred that . . .*). But what the verbs *to understand* and *to infer* have in common is that in both cases the acquired knowledge

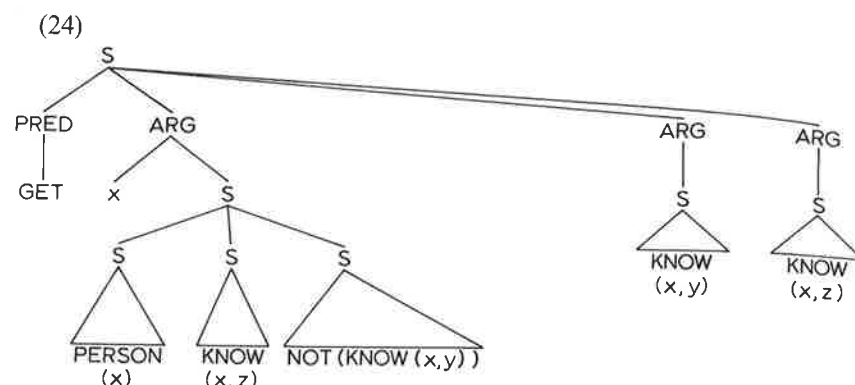
comes from other definite knowledge that the corresponding person already has in his possession.

In brief, we have found the following: the verb *to understand* in the given sense describes a situation in which a certain person acquires—passively—knowledge of a definite fact (a knowledge which he did not consciously possess previously), and this knowledge is derived from definite other knowledge of the same person. So we may say that *understand* as a predicate is about the corresponding person; it asserts that this person—let us denote him as x —gets to know a definite fact, y ; and it presupposes, apparently, two main things about x : that x does not previously know fact y and that he knows a definite other fact, z , from which his knowledge of y is derived. The identifying structure which describes the hearer's knowledge of x before the predicate *to understand* is asserted, should have, then, the following form (we ignore again the question of possible hierarchy among the given presuppositions):

(23)

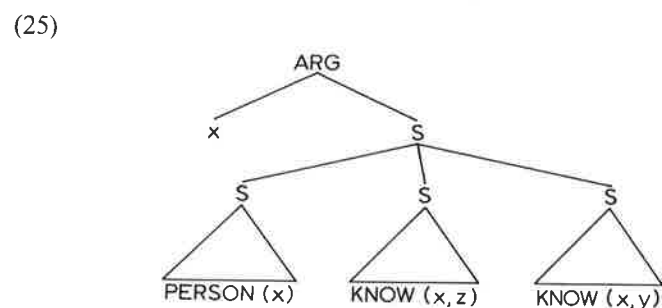


We should ask now what elementary predicate should represent the assertion of *understand*. This is an important question, since it should be a predicate that inherently, but at some more general level, represents the modification that is called for by the predicate *understand*, when asserted. As I have pointed out, what the assertion of *understand* consists in is that x , who does not possess the knowledge of y , comes to possess this knowledge. This idea of 'coming to possess', I think, is just the idea that is carried, at the most general level, by the verb *to get* in its central meaning (= *to obtain*, *to receive*). Apparently, it is not a casual fact that *to get* in this sense has basically the same argument frame as the verb *to understand* (who – what – from where/what). The whole structure corresponding to the predicate *to understand* is the following:



' x , who is a person, who knows z and who does not know y , gets the knowledge of y from his knowledge of z '.

The structure (24) is a predicative structure. The 'outcome' of this structure, as it is clear from the previous discussion, should be an identifying structure that describes x as having the knowledge of y , i.e. the structure



If, in describing semantically the predicate *to understand*, we confine ourselves to giving merely the structure (24), then such an 'outcome' can not directly be read out from this structure. But the structure (24) is to be treated only as an 'instruction' for carrying out definite modifications in the corresponding identifying structures, not as a static structure. The unit which determines the required modifications here is the elementary predicate *GET*. From this point of view the predicate *GET* is nothing but a unit which embodies a definite rule for modifying the argument-structures with respect to which it occurs as a predicate, i.e. about which it is asserted. As the comparison of the structures (23) and (25) reveals, the modification in the given case lies in that the structure under the second argument ($\text{KNOW}(x, y)$) is introduced into the first argument, into the description of x , where it replaces the structure $\text{NOT}(\text{KNOW}(x, y))$. This basic operation is accompanied by definite

other operations which the realization of this basic operation calls for in a natural way: the predicate *GET* is deleted (since it has done its job); the same thing occurs to the symbol *S* dominating the whole structure (and indicating that it is a predicative structure); and, lastly, in the given case, the third argument apparently also gets deleted.⁴ In this way, from the predicative structure (24) we get the identifying structure (25) which represents the modified description of the person x .

The important point here is that the basic modification described above – the insertion of the structure under the second argument into the description of the individual x – is wholly determined by the predicate *GET*. This modification always takes place when *GET* occurs as a predicate. The main requirements that the predicate *GET* itself imposes on its arguments are apparently the following: the first argument should denote an individual; the structure under the second argument can denote anything that one can 'come to possess', and the third argument identifies a 'place' or 'source' in a very abstract sense. The additional function of *understand* is to determine more concretely the content of these arguments: in particular, that the contents of the second and the third argument represent definite knowledge. In this sense, the situation defined by the predicate *understand* can be considered as a concretization of a more 'primitive' situation represented by the predicate *GET*.

There are still many other words that can be considered definite concretizations of the same underlying situation. In fact, the use of the surface verb *to get* itself – as, for instance, in sentences (26)–(27) – can also be taken as one such concretization.

(26) The boy got a new book from his friend.

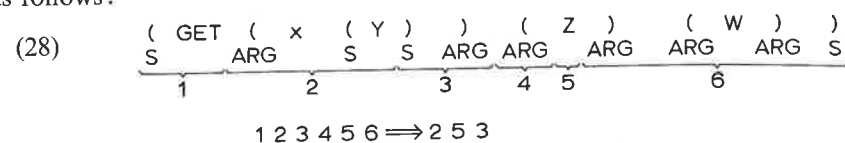
(27) The soldier got a letter from his home.

The received objects in both cases are material things and the 'source' is represented by a person (26) or by a concrete place (27). There is yet one more difference between this use of *get* and the described use of *understand* in that here we would say of the corresponding thing (which has been received) that the person x will *HAVE* it; i.e. that the expression denoting the corresponding thing should in x 's description stand in the object-position of some such predicate as *HAVE*. This fact suggests that perhaps knowledge should also be regarded as something that people have, just as they have things;

⁴ I am not very sure of the position of this third argument. If it is merely deleted, the question may arise, why this argument is needed at all in the given representation. Apparently, in a more profound treatment, a definite semantic relation should be stated between y and z (e.g. that y were deducible from z). But it is not very clear to me how this should be done in the present context.

i.e. that there should be an additional predicate, HAVE, which has the structures KNOW (x, y) and KNOW (x, z) as its objects in the argument-structures representing x 's descriptions in the structures (23)–(25) above, and the function of GET is to bring the content of the second argument – whatever it would be – into the object-position of this predicate HAVE. In fact, it does not contradict our intuition at all to treat the predicate *to know* itself as a concretization of the predicate *to have*. But I am not going to discuss this possibility more thoroughly here.

The complex rule which is embodied by the predicate GET can formally be treated as a transformation in the usual sense of the term and represented as follows:



Many more verbs can be found that can be considered concretizations of the same 'GET-situation' and that are relatively similar to the verb *understand*. Take, for instance, a verb such as *to remember* (in its inchoative meaning). The meaning of this verb does not differ from that of *understand* in anything else than in an additional presupposition about *x* to the effect that *x* at some previous time has known the corresponding fact.⁵ On the other hand, we may take the predicate structure *to become convinced* which differs from the analyzed verb *to understand* by the feature that instead of the predicate KNOW the predicate BELIEVE occurs everywhere. But the modification which these predicates – *get*, *remember*, *become convinced* – cause in their arguments can be described in precisely the same way. This is the modification which is determined by the elementary predicate GET. And it is just for this reason that we can consider all these predicates variants of the 'GET-situation'. What these facts show is that the treatment of predication as described above offers, in addition to other possibilities, a definite basis for analyzing certain semantical groupings of words. It is possible to find it out and describe, in quite formal terms, what in the case of a concrete group of words the semantic basis which connects these words is and in what respects the meaning of the concrete words in this group differ from this basic situation and from one another.

The other important fact to note in connection with the proposed treatment of predication is that such a treatment gives us a quite strong instrument

⁵ It is interesting to note that in Estonian there is a verb *mõistma* and in Finnish there is a verb *muistaa*; they are, undoubtedly, of common historical origin, but the first of them means 'to understand' while the other means 'to remember'.

for deciding how adequate one or another combination of elementary predicates is for describing the meaning of a definite word. If definite rules which determine the modifications to be carried out in the corresponding arguments, are connected with every elementary predicate in describing the meaning of a concrete word, we have to choose a combination of elementary predicates such that the final modifications caused by this combination in the corresponding arguments will be just the modifications which the given word itself determines.

It has to be admitted, lastly, that the treatment given in this section is incomplete in several respects. In order to give more profound treatment of the problems involved here far more extensive analysis of empirical material would be needed. My purpose here was to show in general terms how I imagine the modifications in identifying structures take place and how descriptions of these modifications could be included into general descriptions of predicative expressions.

6. ON THE TREATMENT OF ACTUAL SENTENCES

We have seen how in the case of a single predicate word – a single predicative structure – the idea of predication as changing identifying structures can be realized. In the case of actual sentences the problem is far more complicated. Sentences contain much more semantic material – first of all, they usually consist of several words, and as we know, every word has to be treated as a predicate in the semantic description of a sentence – so that in every concrete case a question arises as to how this material is organized in the sense we are interested in: what part of this material constitutes the new information, what part the identifying information? In a certain sense this is the old and well-known problem of topic – comment analysis of sentences. But, as it seems to me, a great deal of traditional topic-comment problematics turns out to be irrelevant from the point of view of the present approach. In the case of a concrete sentence the question here is not how it could be more naturally divided into topic and comment. We are more interested in analysing messages than sentences. Because of this, in the case of a concrete sentence all possible ways of using this as a message in some concrete situation should be described, and not merely the most ‘natural’ or ‘typical’ use of it should be accounted for. For instance, if we have a typical Subject-Verb-Object sentence, such as (29)

(29) The boy hit the ball.

(29) The boy hit the ball.
it is relatively unimportant for us to decide what is more correct to treat here as presenting the new information: is it the Object, or Verb + Object, or

only the Verb, or something else? Instead, we have to establish all the different possibilities of distributing new (asserted) and presupposed information in this sentence, and every possibility should be described separately, since it presents a different message. That there are several such possibilities will become clear if we begin to paraphrase the given sentence in the following way:

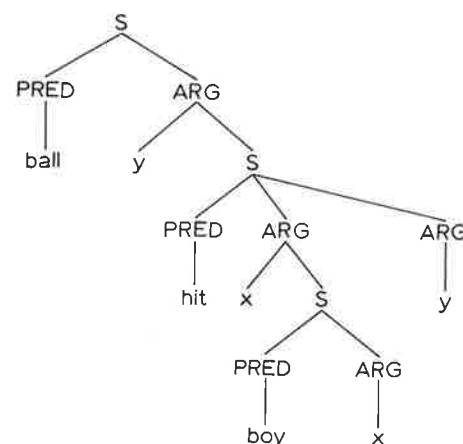
- (29a) What the boy hit was the ball.
 (29b) The one who hit the ball was the boy.
 (29c) What the boy did to the ball was to hit it.

etc.

It should be clear that (29a)–(29c) are all quite different messages. And it should also be clear that depending on the concrete situation, the sentence (29) can be used to carry any of these messages.

The following important point is that once we have chosen to describe one of these interpretations, our choice automatically determines a definite ordering of the material contained in the sentence. In fact, to every predicate contained in the given sentence there corresponds its own 'sentence' (message). One of these is always the last, or the highest one; and, choosing a definite interpretation of a sentence means just determining this last message made by the corresponding sentence. But once this last message has been determined, the possible hierarchical ordering(s) of the other ones is also determined, whereas every message which stands lower in this hierarchy can function as a presupposition with respect to the higher ones. For instance, if we choose the interpretation (29a) of (29) we shall get, roughly, the following hierarchy of the material contained in this sentence:

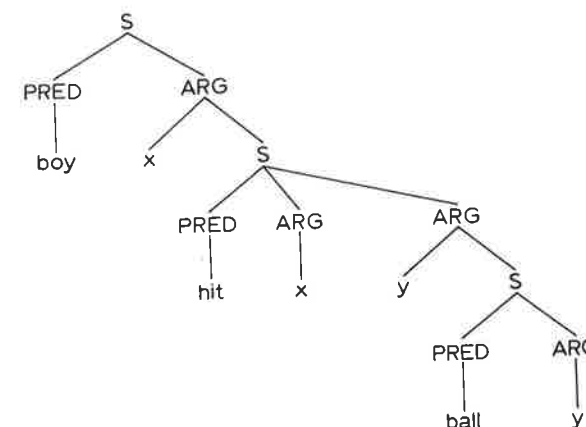
(30)



There was a boy; the boy hit something; what the boy hit was the ball.

If we choose the interpretation (29b), the hierarchy will be the following:

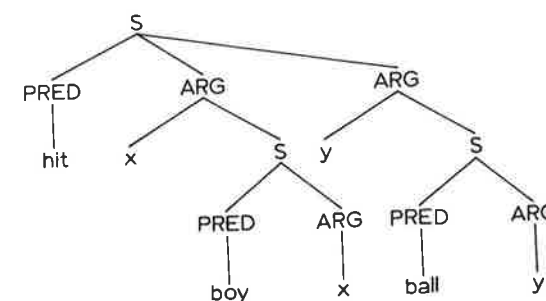
(31)



There was a ball; someone hit the ball; the one who hit the ball was the boy.

And only the interpretation (33c) corresponds, more or less, to the analysis which is usually given to sentences of the type (29):

(32)



There was a boy; there was a ball; the boy did something to the ball; what the boy did to the ball was that he hit the ball.

As the interpretations (30)–(32) show, the usual sentences (as, for instance, (29)) should be treated, from the point of view of semantics, as certain logically ordered discourses rather than single acts of asserting (as is supposed by topic-comment analysis). Through such an approach, I think, it is possible

to connect the treatment of single predicates (as demonstrated earlier) with the treatment of actual sentences. In the case of such an ordered treatment of sentences we always have only one predicate to process at a time. And the material that has resulted from the processing of earlier predicates belongs already to the corresponding arguments and can function as 'previous knowledge' about the objects identified by these arguments when the next higher predicate will be processed.

It is important to note that such an ordered analysis of sentences is by no means a speculatively established procedure but is rather the typical way of interpreting sentences in actual communication (i.e. in the context of a concrete situation where the corresponding sentence is uttered). This claim can also be supported by purely linguistic means, by showing that linguistic context itself often establishes a definite ordering of material in a given sentence. A well known phenomenon in this respect is, of course, emphasis. Emphatic stress always brings out the 'last' message of the corresponding sentence and, thus, also orders the rest of the material contained in the sentence in a definite way. Still other examples can be found where the linguistic context fixes a definite order among the messages in a sentence or clause. We may use here an R. Lakoff's (1968) type of example (used here according to Hakulinen (1970).

(33) John was not happy although many of us thought so.

(34)* John was unhappy although many of us thought so.

These sentences show that in the case of (33) but not of (34) the 'last' predicate in the first clause is the negation predicate (negated is the sentence *John was happy*). The second clause functions in these sentences as an 'order-establishing' context with respect to the corresponding first clause. Since in (34) the order which the second clause requires is impossible in the first clause on implicit grounds, the sentence as a whole becomes unmarked. It may also be pointed out that in the case of (33), normally only the word *not* (and not *happy* or *John*) can be emphatically stressed in the first clause; this demonstrates, in turn, that the 'order of asserting' in this clause is already fixed.

7. CONCLUDING REMARKS

In the above sections I have tried to present the treatment of predicative expressions as instructions (for the hearer) to change in a definite way the identifying structures which the corresponding message is about. As I have said, such an approach is not new in principle. This is well known e.g. in general communication theory or in computational linguistics; but not in

linguistics proper. I tried to show that this approach is also wholly in reach of linguistic semantics. It may be shown that every sentence determines, in a certain sense, its own 'domain of discourse' or 'data base', i.e. the objects about which it gives some new information, and the modifications it causes in the hearer's knowledge of these objects. Apparently, only such a linguistic treatment can offer the final required theoretical basis for carrying this approach through consistently in the corresponding practical fields.

The above treatment is, of course, incomplete in many of its details. In particular, I have analysed only the assertive use of language; but it should be clear that there are in principle no obstacles to treating other uses of language along the same lines also (see, for instance, Schwarcz, 1969). My attention was mainly directed towards exploring the general framework in which the idea under discussion could be realized in linguistics and, in particular, in generative semantics. With this intention I have also specially chosen for the above analysis a verb which inherently has a change-of-state meaning. In the case of such verbs what assertion of a predicate amounts to most clearly comes to light. But the important fact is that principally the same types of modifications occur in the assertion of any predicate. They occur also in the case of such predications as, for instance, *John is walking*. Since the general presupposition is always that the hearer does not previously know the fact that is asserted by the corresponding sentence, interpretations of such sentences should also be something like the following: 'I say to you about John, of whom you don't know that he is walking, that he is walking'.

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GOVERNMENT STRUCTURE TYPES OF THE VERBS OF SAYING AND ACTION SITUATIONS

1. The following analysis represents a part of a more extensive work treating the government structure types of Estonian simple verbs. The government structure type joins all the government structures which are possible in the case of a certain fixed meaning of a certain verb into one unity. To consider all secondary classes (the element forming the subject included) that can occur with the verb and the possibility and/or the form of occurrence of which are fully dependent on the given verb, on its meaning, as the elements of the government structure. These secondary classes may be either obligatory or optional (the latter will be given in parentheses) members of the government structure type. For details about these classes and the ways in which they are presented in the description of the government structure type see Rätsep (1969).

An analysis of the government structure types of Estonian verbs reveals that a different government structure type corresponds to each different meaning of the verb. It becomes evident that even small modifications in the meaning of the verb are connected with a change in the government structure type. The above is also valid for the verbs of saying analyzed below.

The government structure types looked upon in such a way are surface structure phenomena. Their form depends on the structure of the respective language, its morphology. In Estonian certain groups of verbs may have rather complicated government structure types. Undoubtedly one reason lies in the fact that the morphology of the Estonian language is rather complicated and rich in elements (14 cases and parallel to them almost a hundred postpositions, some prepositions, five-six infinitives).

In the deep structure the base of the government structure types is formed by semantic structures and their generalizations, types of semantic structures. In the present paper, situation descriptions are used to present the qualities of such semantic structures. The Estonian verbs of saying and structure types corresponding to them constitute the concrete material.

2. If we consider common simple sentences concentrated around one verb, we can see that the base of each such sentence is formed by a certain situation which is in some way marked by the sentence and with respect to which the speaker presents his attitude. Usually the verb or its equivalent