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The Communicative Function of Word Order in Finnish  
Simple Clauses with Two-Place Predicates

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of the requirements for

Masters degree in Linguistics

A handwritten signature in cursive script, reading "Carl M. Lockwood".

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THE COMMUNICATIVE FUNCTION OF WORD ORDER  
IN FINNISH SIMPLE CLAUSES WITH  
TWO-PLACE PREDICATES

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A THESIS

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

MASTER OF ARTS

Department of Linguistics and Oriental and  
African Languages

1981

## ABSTRACT

### THE COMMUNICATIVE FUNCTION OF WORD ORDER IN FINNISH SIMPLE CLAUSES WITH TWO-PLACE PREDICATES

By

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Word order in simple clauses with two-place predicates has a communicatively functional role in Finnish: it serves to distinguish between the topic and the comment, which reflect clause internal relations. These notions are connected to the consituation so that the topic has to be thematic and the comment rhematic. Among the six logically possible alternants of these clauses, which are all used in the language, we can distinguish two different groupings based on the choice of the topic and the comment. These two groups share the same three communicative patterns. The choice of a particular arrangement is influenced by the speaker's intentions, the sememic level, and purely pragmatic matters. Only first instance utterances are examined. The basic framework is stratificational (as in David G. Lockwood: Introduction to Stratificational Linguistics), and the text-linguistic notions come from Firbas and Daneš.

## ACKNOWLEDGMENTS

I would like to thank my advisory committee, Chairman David G. Lockwood and professors Ruth M. Brend, and Seok C. Song for their valuable comments during the preparation of this thesis. Especially I wish to thank Professor Lockwood, who read several early drafts, and pointed out many flaws both in the content and the form. I greatly appreciate his comments which considerably improved my own understanding. I also would like to thank Professor Barbara Abbott for helpful discussions, and my fellow-student Michael Eric Bennett for his aid in the planning, and for the drawing of the diagrams in the last chapter.

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EILALLE JA LEEVILLE,  
JA MARKUKSELLE

## INTRODUCTION

My aim in this study is to examine which factors determine and influence the choice of word order in Finnish simple clauses with two-place predicates. These clauses have six logically possible different arrangements, and all of these are used in the language. I hope to show that the major function of word order is communicative (syntactic functions being expressed by suffixes) -- to signal the choice between "what I am talking about," the topic, and "what I am saying about it," the comment. There exists some indication that the topic is always a carrier of lower degrees of communicative dynamism (CD), i.e., it is thematic, and the comment is always rhematic, a carrier of higher degrees of CD.

We can distinguish among the six different arrangements two separate groupings based on the choice of the topic and the comment. There are two alternatives to choose from: the topic can be either the subject or the verb complement, and the comment is the other of these two, the verb complement or the subject, respectively. I will consider each variant with one (the unmarked, when necessary, with two) stress pattern(s). It appears that the loud stress indicates the rheme, the highest degree of CD, but in the unmarked utterances there is no loud stress; in these cases all the

clause elements receive equal prominence while one of them still is the rheme.

Whether a certain lexical item is the topic or the comment, and thus also thematic or rhematic, depends on the speaker's intentions and the whole consituation (= context and situation). But also semantic factors operate so that some particular semantic components are inherently thematic or rhematic, and thus also inherently render the lexical items involved the topic or the comment. Additionally, certain purely pragmatic factors influence the choice between the topic and the comment so that, e.g., a pragmatically indefinite subject can only function as the comment.

We can superimpose on the above relations three of the principles that Firbas (1964) has proposed to account for word order in all languages. The three are: (1) the principle of the basic distribution of CD, which would cover the speaker's intentions and part of the contextual dependence; (2) the semantic word order principle which would include the semantic features determining the thematicity/rhematicity of the items; (3) the emotive word order principle, also covering the speaker's intentions and part of the contextual dependence to generate emotionally loaded, marked, utterances.

I will begin by discussing some views of Finnish word order, and related notions. It is in this connection that I will divide the six possible arrangements into two types. Next I will examine some textlinguistic notions by Daneš and

Firbas, members of the Prague School. The theoretical framework used here is the stratificational model as outlined by Lockwood (1972). This model is compatible with the basic framework of the above two Czech linguists. Finally, I will apply the textlinguistic notions discussed to some Finnish data: a few existential, transitive and intransitive clauses, and a couple of so-called introductory utterances. In the last chapter I will provide a catalysis using the networks of stratificational theory.

## II. DISCUSSION OF THE FINNISH WORD ORDER

### Syntax Versus Communication

Hakulinen (1964, 401) compares word order in Danish and Finnish and concludes that its development has led to a more economical result in Danish than in Finnish. Danish marks syntactic functions by arrangement while Finnish marks them by case suffixes. In spite of this difference, both languages have the same unmarked order both in declaratives (SVO) and interrogatives (VSO), and from this Hakulinen infers that in Finnish there is in these instances a tautological emphasis on already expressed syntactic facts. He omits at this point the second unmarked arrangement in Finnish, OVS. Also, he only considers the VSO? interrogative as unmarked while the VOS? appears to me to be equally unmarked (e.g., Onko siellä kahvia? -- "is there coffee?").

When Hakulinen calls this "overlap" of word order and case markings tautological, his assumption must be that the arrangement has to serve primarily syntactic purposes. But we could also view the question differently. Maybe word order in Finnish is reserved for ends other than syntactic. To me it appears to have a clear communicative function, and not a syntactic one, not even in the unmarked cases. If the arrangement in Finnish is seen as duplicating already

established syntactic notions, why would it do it only in the unmarked arrangements and not in the marked ones? In Danish, word order also expresses syntactic functions in the marked variants. Maybe Finnish is not as uneconomical as Hakulinen suggests here.

In fact, he himself in his next paragraph refers to other aspects that word order expresses. He gives the following set of sentences:

- |     |   |   |
|-----|---|---|
| 1a. | <u>Juho</u> <u>lyö</u> <u>Heikkiä</u> .<br>Juho hits Heikki | Juho is hitting Heikki.                               |
| b.  | <u>Juho</u> Heikkiä <u>lyö</u> .                            | It is Juho who is hitting Heikki.                     |
| c.  | Heikkiä <u>Juho</u> <u>lyö</u> .                            | It is Heikki whom Juho is hitting.                    |
| d.  | Heikkiä <u>lyö</u> <u>Juho</u> .                            | It is by <u>Juho</u> that <u>Heikki</u> is being hit. |
| e.  | <u>Lyö</u> Juho Heikkiä.                                    | Juho is indeed hitting Heikki.                        |
| f.  | <u>Lyö</u> Heikkiä <u>Juho</u> .                            | Heikki is indeed being hit by <u>Juho</u> .           |

The underlining indicates the loudest stress in the clause. The first one (1a) is unmarked and there the stress falls evenly on each word. Hakulinen notes that all these sentences express essentially the same basic idea -- the hitting of Heikki by Juho -- but in different variants focuses and emphases of secondary importance have been added.

In examining what the differences of arrangement express in general (1968, 403), he states that it is primarily the distinction between the psychological subject and the

psychological predicate. These notions he defines as follows: the former is something about which something is being said, and the latter is that which is being said about the psychological subject. The subject, he goes on, is relatively well known or its familiarity is presupposed; the predicate, on the other hand, regularly expresses something new and more interesting, and thus it has a more prominent position than the psychological subject.

For example, Hakulinen illustrates, in sentence(1b), what is presupposed, what is the psychological subject, is the hitting of Heikki, while the psychological predicate, what is being said about the subject, is that it was done by Juho, and no-one else. Thus, he says, by placing the psychological predicate at the beginning (and emphasizing it by stress) we bring in new information indicating who the actor is while the action and goal are already known.

Another example that Hakulinen gives, is that in (1d) (Heikkiä lyö Juho) we have, according to him, the verb hit as the psychological subject, and the psychological predicate has two parts -- the initial object and the final subject. He gives as the presupposition that (Heikki is being hit by Juho and) "the others by someone else." Thus he assumes there to be a double contrast here, which is possible if the two stresses are of equal strength. This sentence to me, however, suggests also another division. If the stress on the first item is somewhat weaker than that on the last item, then the fact that Heikki is being hit by someone is



presupposed, and what is new is the actor. Thus the psychological subject would be the object and the verb, and the psychological predicate the grammatical subject. I will adopt the view I propose here in my subsequent discussion of this word order variant, since I exclude from consideration cases with double contrast as somewhat particular instances. On the same grounds I would consider also (1f) with one loud stress only (Lyö Heikkiä Juho). In this latter example, Hakulinen implies a double contrast as he did in (1d).

#### Existential Clauses

As was mentioned above, Finnish has two unmarked word orders. These are found in many types of clause but they are characteristic of so-called existential clauses, where they express species, which essentially refers to the definiteness/indefiniteness of the subject. Siro (1964, 49) defines these clauses as those intransitive clauses which have the following members: subject, quasipredicate (with its stem), and a certain type of intransitive verb, also called the existential verb. These verbs express some kind of existence (also coming into or ceasing to be in existence), or movement.

A quasipredicate is a locative case suffix, preposition or postposition which relates its head to another, specific member in the clause (Siro, 1964, 27). There is a difference between transitive and intransitive clauses: in

intransitive clauses the quasipredicate refers to the subject, and in transitive to the object (Siro, 1964, 28). The following example illustrates how the quasipredicate (-lle) relates its stem and the subject:

- |   |                                      |
|---|--------------------------------------|
| 2. Juna saapui asemalle.<br>train arrived station-<br>to (allative) | The train arrived at the<br>station. |
|---|--------------------------------------|

The expression asemalle "to the station" is not complete alone, but it is with its complement, the train; they have a character of nexus. And what is essential to the existential clauses, according to Siro, is that there the emphasis has been transferred from the predicate to the quasipredicate. An additional fact about the existential clauses is that they alone take partitive subjects, along with the usual nominative ones.<sup>1</sup>

Ikola defines the same type of clause in connection with his discussion of the partitive subject. Thus: the existential clause in the first place expresses the existence of the referent of the subject, even though the predicate at the same time may express something about this referent's movement, position, or other state. The verbs which can occur as the predicate in these clauses have the meaning of existence (in general, or existence in some place or state), coming into existence, ceasing to exist, movement or change into another state. The referent of the subject is generally not expressed as functioning actively, and when the subject is in the plural, the action is not thought of as distributive,

performed separately by each individual, but as a collective action (Ikola, 1964, 31).

An example of this collective versus individual action is the following (Ikola, 1964, 30):

3a. Omenapuita kasvaa puutarhassa.  
 appletrees grow garden-in (inessive)

In the garden there grow appletrees.

3b. \*Omenapuita kasvaa hitaasti puutarhassa.  
 slowly

In the garden there grow slowly appletrees.

In the former (3a) the referent of the subject is being thought of as a mass or group, and the growing is understood as a collective event. However, in (3b) the adverbial brings into the foreground the separate, individual growing of each tree, and the sentence is unacceptable.

One more definition -- Hakulinen specifies existential clauses as follows: the intransitive verb expresses existence, coming into or ceasing to be in existence; these clauses have locative adverbials which express who has something or where it is; to whom or to where something comes; from whom or from where something disappears; they also have nominal subjects, often having indefinite species (though sometimes also definite species) (1964, 458). Penttilä has listed close to three hundred existential verbs, which list, however, is far from being exhaustive (Ikola, 1964, 23-25). The following items exemplify Finnish existential clauses:

- 4a. Laineilla ajelehtii lastu.  
waves-on drifts chip

On the waves there drifts a wooden chip.

- 4b. Mummo istuu verannalla.  
grandma sits verandah-on

Grandma is sitting on the verandah.

- c. Karhu kömpii pesäänsä.  
bear crawls den-into-its

The bear crawls into its den.

- d. Kattilassa poreilee vettä.  
kettle-in simmers water

In the kettle there simmers water.

### Species

The term species comes originally from the Swedish linguist Adolf Noreen, who distinguished three categories of species: definite, indefinite, and generic (Ikola, 1964, 13). These notions have been further developed to apply to Finnish. Siro (1964, 51) has specified two categories of definite and indefinite species in Finnish: the notive and the quantitative. The notive species is expressed by word order so that in existential clauses the subject is either at the beginning or at the end. If it is at the beginning, the subject has a known referent and its species is definite. If the subject is at the end, its referent is unknown, and the species is indefinite. Knownness is to be understood here in terms of the discourse, rather than in any absolute sense.

The quantitative species is expressed by the case system: the nominative and the partitive. If the subject is in the nominative case, its species is definite and it refers to a definite, delimited set or amount. In the partitive case the species is indefinite and the subject's referent is an undetermined, unspecified set or amount. The following table illustrates these two kinds of species in the existential clauses:

	Notive		Quantitative	
	Def. Initial	Indef. Final	Def. Nom.	Indef. Part.
5. Ukko on tuvassa man- is cottage-in nom. The old man is in the cottage.	X		X	
6. Tuvassa on ukko. There is an old man in the cottage.		X	X	
7. Ruokaa on pöydällä. food- is table-on part. There is food on the table.	X			X
8. Pöydällä on ruokaa. On the table there is food.		X		X

Siro suggests that stress may alter these relations when it comes to the notive species. Thus, for example in sentence (5) if we place a loud stress on the first word,

5b. Ukko on tuvassa.

we should, according to Siro, have an indefinite notive species in the subject. Thus (5b) and (6) would have the same species of the subject. Siro concludes that since the subjects have the same notive species and the clauses have the same psychological predicate (ukko) and subject, the notive species and the psychological subject/predicate describe the same thing, and they are expressed by stress, and not word order (1964, 51). The definition he considers for the psychological subject is that it is familiar, mentioned earlier, and the psychological predicate is then related/connected to it. It appears to me also that the notive species and the psychological subject/predicate are closely related notions, but I would not agree that they are expressed by stress alone.

There is one important difference between (5b) and (6) which Siro does not discuss. We have propositional presuppositions attached to (5b) -- we already know that there is someone in the cottage while in (6) the presuppositions are only existential. Also, and more importantly, (5b) is a so-called second instance utterance (Bolinger 1952, Firbas 1962): an utterance which is used rather in "a metalinguistic communication," e.g., to set someone right who is hard of hearing, and missed some points in the first utterance of the sentence, and thus "the contextual dependence of such a sentence is certainly of a very particular kind" (Firbas, 1962, 146). Any sentence can become a second instance utterance, where any sentence element can be

emphasized so as to bring it into prominence as the carrier of the new information, in the metalinguistic sense. However, we must distinguish the second instance utterances from the first instance utterances which are those used for "true" communication.

It is because of this difference in the purposes of communication that I do not wish to apply the terms notive species and psychological subject/predicate to both kinds of utterances on an equal footing. In the second instance, as was mentioned above, any element can be emphasized, while this is not true of the first instance. It is for this reason that I am not convinced that the two notions are expressed by stress and not word order.

My aim is to examine only first instance utterances and therefore utterances like (5b) are excluded from consideration. I cannot of course discuss all first instance utterances which would be possible within my scope, but I would like to exclude the second instance utterances.

#### Naming and Classifying Functions

Siro (1964, 52) discusses another way to describe the subject of an unmarked existential clause. In the example ukko on tuvassa (5) the initial subject refers to a known entity about which something is being said. In this case the noun has a naming function. In tuvassa on ukko (6) the

subject noun classifies a certain entity belonging to the class of old men: in the cottage there is an entity belonging to the class of old men. This, as Siro points out, is much the same as the above species description, but we have now attached something to a common noun or appellative. Thus appellatives have two functions: they either name or classify.

Then Siro contrasts appellatives with proper nouns which inherently name some specific entity. Because of this inherent character, they generally appear at the beginning of an unmarked existential clause. If they occur after the predicate they have the tendency to lose their proper noun nature and acquire an air of classification. The following example (from Siro, 1964, 52) shows an instance of this -- the final proper nouns appear to have a classificatory role:

9. "Äideillä" oli lapset mukanaan.  
mothers had children with-them

The mothers had their children with them.

A:lla oli Petri, B:lla" oli Maija ja Terhi.  
A had Petri B had Maija and Terhi

A had Petri, B had Maija and Terhi.

Thus Siro suggests that subject nouns can have both naming and classifying functions which in the existential clauses are connected with the word order: at the beginning they name and at the end they classify.

It appears that the psychological subject/predicate, the notive species, and the different functions of noun all



work together. Maybe they reflect different aspects of the same thing. Maybe they cooperate in expressing the different degrees and kinds of information of the clauses. The information could be new or old (in a relative sense) as the notive species suggests, and as part of the definition of the psychological predicate suggests. The new information could also be that which is being said about the psychological subject, which would be the given information. In fact Enkvist (1975, 79) has suggested that the notive species could be considered as part of the text strategy, since it expresses given or new information. And this in fact is what I would like to propose here -- not only that the notive species but also the psychological subject/predicate and the naming and classifying functions are different faces of the communicative structure of the language which is expressed by word order.

In the examples to follow we will see that the notive species influences the word order, not only in the unmarked variants but also in the marked ones: in the different alternants the species remains the same and since it remains the same, it probably has to do with the possibilities of arrangement. And the psychological subject/predicate function in a parallel fashion; the naming/classifying functions are closely related to both of these notions.

The Definiteness Dichotomy

We can look at some Finnish examples now to see more clearly how the arrangement works. The following examples illustrate the two unmarked variants of the existential clauses:

<p>10Aa. Kissa nukkuu sängyssä.                cat sleeps bed-in                The cat sleeps in the bed.</p>	<p>10Ba. Sängyssä nukkuu kissa.                bed-in sleeps cat                There sleeps a cat                in the bed.</p>
--	---

I consider these sentences to be two distinct variants, and not one being a variant of the other even if the absolute semantics of the lexical items and the semantic relations are the same. The reason is that we are speaking about different things in them: in the first one we speak about a definite, known cat, while in the second the cat is indefinite, unknown (again, I emphasize, the knownness is determined only in terms of the discourse). When we take all the possible "permutations" of the two, we necessarily get two distinct sets (columns A and B), where the (un)knownness of the subject is retained. That is, we can only have two additional variants of the first sentence to be still able to say that the cat is a known cat. The same applies to the second case:

<p>10Aa. Kissa nukkuu sängyssä.                cat sleeps bed-in                The cat sleeps in the bed.</p>	<p>10Ba. Sängyssä nukkuu kissa.                bed-in sleeps cat                There sleeps a cat                in the bed.</p>
--	---

- |  |  |
|--|--|
| <p>b. <u>Sängyssä</u> kissa nukkuu.<br/>It's in the bed that the cat sleeps.</p> <p>c. <u>Nukkuu</u> kissa sängyssä.<br/>The cat does indeed sleep in the bed.</p> | <p>b. <u>Kissa</u> sängyssä nukkuu.<br/>It's a cat that sleeps in the bed.</p> <p>c. <u>Nukkuu</u> sängyssä kissa.<br/>There does indeed sleep a cat in the bed.</p> |
|--|--|

As we see, we need different variants to tell the knownness of the cat. Thus we cannot, for example, say that (10Bc) is a variant of (10Aa) because in (10Bc) we are not speaking about any particular, known cat. In (10Bb) we already know that something is sleeping in the bed and we bring in as new information contrastively that it is a cat and nothing else that sleeps there. In (10Ab) we know that the cat sleeps somewhere and the contrastive new information is that it is in the bed where it sleeps.

The a-forms are unmarked, they carry only existential presuppositions, and they bring in new information non-contrastively. We could also say that in these forms, (Aa) and (Ba), we are talking about the cat's sleeping, and the sleeping of something in the bed, respectively, and what we say about these, is carried by the final element. In the b-forms the initial element, which corresponds to the final element of the a-forms, is contrasted with some other alternative while the rest of the clause is presupposed. In the c-forms, according to Hakulinen, the speaker wants to reassure us that the action indicated by the verb is indeed true. One could also say that they are used when the underlying propositions (Aa and Ba, respectively) have been

challenged, and the speaker meets this doubt or refutation by giving an emphatic affirmation.

Thus what we have here is two underlying propositions three times (3 x 2) and not one underlying proposition six times (6 x 1). Another way to put it is to say that (10Ab) and (c) on the one hand, and (10Bb) and (c) on the other, are the marked, emotive variants of the propositions expressed by the unmarked (10Aa) and (10Ba), respectively. The marked B-variants do not have the same relation to the unmarked A-variant as they have to the unmarked B-variant. The same applies to the marked A-variants and the unmarked B-form.

We can regroup Hakulinen's example (1) according to this pattern:

- |   |  |
|---|--|
| 11Aa. Juho lyö Heikkiä.<br>J. hits H.<br>J. is hitting H. | 11Aa. Heikkiä lyö Juho.<br>H. is being hit by J.     |
| b. Heikkiä Juho lyö.<br>It's H. whom J. is hitting.       | b. Juho Heikkiä lyö.<br>It's J. who is hitting H.    |
| c. Lyö Juho Heikkiä.<br>J. is indeed hitting H.           | c. Lyö Heikkiä Juho.<br>H. is indeed being hit by J. |

Here we do not have species in question but rather something else, which was also found in the existential clauses. If we think of that part of the psychological subject/predicate which mentions "that which I am talking about" and "that which I say about it," or the topic and the comment, respectively, as they were called in the introduction,

we can find that these two notions are different in the two columns, and the difference is expressed by word order.

In the A-column we are talking about Juho and his hitting, and in the B-column about Heikki's being hit. In the a-forms the first word, and perhaps the second, too, is the topic, and the last item is the comment, which at the same time is the most informative element in the clause. In the b-clauses the first element indicates what we are saying about the rest, which is presupposed. The last pair (c) is somewhat more complicated: the final item indicates what we say about the beginning, while at the same time the initial verb carries the emphatic affirmation, which together with the last element contains the new information. The second item is the topic and the least informative item.

As far as I have been able to observe, the different word order alternants are usually considered to be variants of one underlying proposition. In a way this is of course true, since we only have one event sememe with the same two participants (circumstantials). However, as we saw, we can choose one of the participants as the topic of the utterance and the remaining participant is then the comment. And since we have two possible options, we have two alternative propositions. One example of this thinking, that all variants are based on the same underlying form, comes from Auli Hakulinen (in Enkvist, 1975, 79). She gives the following pair and indicates that the latter is derived from the former transformationally:

12Aa. Marssijat pysäyttivät liikenteen.  
demonstrators blocked traffic

The demonstrators blocked the traffic.

12Ba. Marssijat liikenteen pysäyttivät.  
demonstrators traffic blocked

It was the demonstrators who blocked the traffic.

The 3 x 2 alternants of the above sentences are the following:

12Aa. Marssijat pysäyttivät liikenteen.  
The demonstrators blocked the traffic

b. Liikenteen marssijat pysäyttivät.  
It was the traffic that the demonstrators blocked.

c. Pysäyttivät marssijat liikenteen.  
The demonstrators did indeed block the traffic.

12Ba. Liikenteen pysäyttivät marssijat.  
The traffic was blocked by the demonstrators.

b. Marssijat liikenteen pysäyttivät.  
It was the demonstrators who blocked  
the traffic.

c. Pysäyttivät liikenteen marssijat.  
The traffic was indeed blocked by  
the demonstrators.

As we notice, this grouping gives the two examples by A. Hakulinen as belonging to different sets: (Bb) does not belong to the same column as (Aa). (Aa) and (Ba) do not speak about the same thing -- the former says something about the demonstrators while the latter is speaking about the traffic. And this relation is retained throughout in the two columns. Thus we see that (Bb) and (Aa) speak about different things. Therefore, when A. Hakulinen says that

(Bb) has undergone stress assignment and verb rhematization, I feel she is not right. In her terms I would rather say that (Bb) has undergone rheme fronting (and stress assignment) -- (Ba) became (Bb) and not (Aa) became (Bb). This on the basis that (Aa) says something about the demonstrators while (Bb) is speaking about the traffic.

As was mentioned earlier, the case of the subject is either nominative or partitive. When the subject is in the nominative plural, this form is identical with the accusative plural, and we cannot formally distinguish between subject and object. Enkvist thinks that even with its rich morphology Finnish in these cases has to resort to word order (1976, 9). I, however, would consider these as cases of ambiguity. If we look at the following sentences, I think the word order is not of much help. In a context they are probably understood, but the interpretation is likely to be based on extralinguistic factors; maybe stress facilitates it also.

13Aa. Tytöt näkivät pojat.  
The girls saw the boys.

b. Pojat tytöt näkivät.  
It was the boys that  
the girls saw.

c. Näkivät tytöt pojat.  
The girls indeed saw  
the boys.

13Ba. Pojat näkivät tytöt.  
It was by the girls  
that the boys were seen.

b. Tytöt pojat näkivät.  
It was the girls who  
saw the boys.

c. Näkivät pojat tytöt.  
The boys were indeed  
seen by the girls.

In the next chapter I will discuss how theme and rheme are understood by Firbas and Daneš, and then I will apply these notions to some Finnish data to see how they could be used to predict the word order in these simple clauses.





### III. TEXTLINGUISTIC NOTIONS

#### Language and Communication

I take as a basic premise here that "to . . . make communication possible is the global and basic purpose of any language system" (Daneš, 1971, 127) -- to exchange messages, to convey information about extralinguistic reality. This means that

. . . all items of the language are eventually operative -- directly or indirectly -- as means of communication . . . the basic function of language systems is to be available for producing utterances. Let us call this global external function of language the utterance function.  
(ibid.)

Thus in our linguistic analysis of any language, among the facts to be explained is how this utterance function is fulfilled, what is the function of the various means employed by the language. This involves, e.g., the study of how the language integrates the consituation into the message, be it linguistic or non-linguistic or both. Or, the other way around -- how the consituation influences the organization of the message.

Different languages have different means for the utterance function, and one language may have several means for the same function. One of the important things here is

to distinguish between the communicative means and the constitutive means. A way to do this is to view language as a stratified system where the communicative level is distinct from the semantic and the syntactic levels, which contain the constitutive means. Another important distinction in this connection is that between sentence and utterance. The term "sentence" is often used to cover both of these functions but it is better for the sake of clarity to distinguish between them. Sentence and utterance have been discussed in a somewhat parallel fashion by Strawson (1967) and Daneš (1966). Although there are differences between them, both draw the distinction between language and its use, between a certain pattern, and its use in communication. Language itself is more or less static while its use is dynamic, or as Strawson puts it, "the expression itself does not refer to anything; though it can be used, on different occasions, to refer to innumerable things" (1967, 113).

I will thus use the terms "sentence" and "utterance" in the following way which captures the relevant aspects of both of the above authors' conceptions: sentence = "a syntactic structure having a specific lexical content and a non-contextualized theme/rheme structure determined solely by its lexico-syntactic structure," and utterance = "the structure obtained from a sentence by superposition of a specific communicative articulation into theme and rheme" (Holman, 1976, 128).

Linguistic Levels and Their Functions

I view language to be a stratified system essentially as represented in stratificational grammar (Lockwood, 1972). Daneš, in his discussion of the functional sentence perspective (FSP) identifies three levels of syntax:

1. level of the grammatical structure of sentence
2. level of the semantic structure of sentence
3. level of the organization of utterance (1966, 225)

The use of the terms sentence and utterance follows the outline set above. Daneš's model of language is thus also stratified. However, in this discussion the term stratificational model/theory/grammar refers to that outlined by Lockwood.

In stratificational model we have four strata of language: phonology, morphology, lexology, and semology. The last two largely correspond to Daneš's grammatical and semantic levels, respectively. In stratificational grammar, the lexemic level involves, in a complete description of a language, all the possible well-formed syntactic patterns. If we deprive the patterns generated at this level of all but the minimal, constitutive requirements for enabling us to call a sequence a well-formed, non-contextualized sentence, we have a sentence (sentence pattern) in the strict sense as defined by Daneš -- a minimal communicative unit. In Finnish this would involve "an abstract and static invariant structure (scheme), not a sequence of particular

words in a particular utterance" (Daneš, 1966, 231). The actual order is irrelevant; only the case markers for syntactic functions count in Daneš's system at this level in a language like Finnish.

Daneš's semantic structure involves the linguistically relevant semantic content of individual lexical items and their mutual semantic relations. The former are abstract word categories and relations between them (e.g., living being, quality, action, etc.) (Daneš, 1966, 226). These would correspond to the sememes or meaning components in stratificational grammar. The semantic relations are part of the predication structure in the stratificational model, where we have event sememes (verbs) with their accompanying optional and obligatory participants having various roles (agent, patient, instrument, etc.) plus circumstantials.

The level of the organization of utterance has its counterpart in the gnostemic stratal system of stratificational theory, which is part of semology in its broadest sense. The gnostology controls "the external compatibility of propositions . . ." and its "basic cycle must extend all the way to the text" (Lockwood, 1972, 166). In Daneš's system the organization of utterance "makes it possible to understand how the semantic and the grammatical structures function in the very act of communication, i.e., at the moment they are called upon to convey some extra-linguistic reality reflected by thought and are to appear in an adequate

kind of perspective" (Firbas, 1962, 137). Also Firbas subscribes to the use of the three levels as proposed by Daneš (1964, 116-117).

Thus the level of the organization of utterance represents the functional sentence perspective, the way a proposition is organized into an utterance, the way the information conveyed by the utterance is organized into a particular communicatively applicable perspective. This organization involves for Daneš the use of (1) "non-grammatical, but systemic means" like, e.g., word order and stress/intonation in Finnish and Slavic languages, and (2) the use of "some grammatical elements, which, however, do not belong to the constitutive features of a sentence pattern (e.g., . . . moods, tenses . . .)" (Daneš, 1966, 229-230).

As Daneš points out, this distinction between the different levels highlights the fact that notions like subject and object are units of the grammatical level (lexology), and agent, goal, instrument, etc., are elements of the semantic (sememic) structure.<sup>2</sup> Units of the organization of utterance (gnostology) are the theme and the rheme, and also the topic and the comment which will be "named" only in the next chapter.

Thus I consider gnostology to be responsible for the use of language, for the FSP, in the stratificational model. Gnostology organizes propositions into particular, contextually appropriate perspectives, and this gives dynamic

variability to the language. Semology and lexology are responsible for the constitutive manifestations of language in addition to realizing the communicative functions. For example, in Finnish, word order would be a non-constitutive element and thus it can be seen as a realization of certain gnostemes (topic and comment in essence, as will be seen later) while in English for example, where word order is constitutive, it would realize sememes (agent, patient, goal).

Gnostology of course may use means other than word order in its realization in Finnish, for example stress and certain morphemes. As an example of the latter we can consider a clitic particle "-pa." It has various uses and it is attached to the first word in a clause. It is difficult to pinpoint any specific meaning to it, but the one given by Karttunen (1975, 236) seems to capture its pragmatic nature: "I invite no response." Often this particle is attached to the first word of a fairy tale.

Thus gnostology has all the linguistic levels in its use, but of course the utterances themselves must be compatible with semantics, syntax, and pragmatics. That is, gnostology may organize freely only as long as it does not produce syntactically, semantically, or pragmatically ill-formed utterances.

For example, in Swedish, which expresses syntactic functions by word order, like English, object initial clauses

are acceptable as long as the semantics of the lexical items themselves makes it clear what is the object and what is the subject (the example from Enkvist, 1975, 71):

14. Osten åt råttan i går.                    The cheese the rat ate  
       cheese ate rat yesterday                yesterday.

If the object was musen -- "the mouse," we could not use the above order. Also the scope of the adverbials depends on their sentence position and this puts constraints on the functioning of the gnostology. The following two sentences thus are not communicative variants of the same proposition:

- 15a. Clearly Mary had written her name there.  
       b. Mary had written her name there clearly.

Thus, syntax, semantics, and pragmatics impose constraints on the functioning of the FSP.

#### Theme and Rheme

When we think of language as a means of communication, one of the basic assumptions is that the utterances carry information. "In harmony with the character of human apprehension" (Firbas, 1971, 138) the information in texts is sequenced in the linear organization of language so that texts often open with thematic elements, i.e., elements which "convey the facts that constitute the communicative



basis of the sentence . . . (which) . . . contribute least toward the development of the discourse," and close with rhematic elements, i.e., elements which "contribute most towards the development of the discourse." These two "are usually linked up by means of transitional elements (i.e., the transition)" (Firbas, 1964, 112). This is called the basic distribution of communicative dynamism (CD) (Firbas, 1971, 138). The following example by Firbas (1964, 112) exhibits this basic distribution: "The situation (theme) has become (transition) quite dangerous (rheme)."

But also in accordance with the human perceptual abilities this can only be an idealization -- we cannot continuously receive accumulating, new information. Therefore in every discourse we have elements which are contextually dependent (Firbas's term). That is, there are elements in the discourse which are established as conveying given information in the sense that they have been referred to earlier in the discourse, or that they refer to the present consituation, or that they are otherwise taken for granted due to, e.g., shared experiences, basic facts of life, etc. The contextually independent (also from Firbas) items are those which bring in new information, "cumulative to or contrastive with what has preceded" (Halliday, 1967, 211).

I have used the words item and element above and said that they convey different degrees of information, but this, of course, is only a way of speaking. In fact, no

lexical item as such, in isolation, conveys any information, except in relation to the rest of the text and the consituation. This has to be kept in mind all through this discussion, but I go on speaking of items doing this and that because items are more concrete than relations. According to stratificational theory there are no items in language, only relations. However, since I am discussing utterances, i.e., language in use, and not sentences, it is legitimate even within this theory to speak of items.

The known information is thus established as that which is contextually dependent -- its familiarity is presupposed. The new information is contextually independent. Halliday and Hasan define these notions in a similar way: "what the speaker is treating as information that is recoverable to the hearer (given) and what he is treating as non-recoverable (new)" (1976, 27). The former I call, following Firbas, the theme, and the latter the rheme.

But these are not all-inclusive definitions. If we want to analyze complete texts, including introductory utterances which typically contain no contextually dependent material, we have to relativize the notion of information (and contextual (in)dependence), and speak of it only in terms of the unit under analysis. Of course, even now we don't understand by new information only factually new information but "the newness may lie in the speech function, or it may be a matter of contrast with what has been said before or what might be expected" (Halliday, 1967, 206).

Thus Firbas notes that the rheme may contain elements which are already established contextually, but which function as rheme due to the particular communicative purposes of the utterance. He calls this "the narrow scene, i.e., . . . the very purpose of the communication" (1971, 136), i.e., the purpose of that utterance in that particular consituation.

But how do we analyze the initial utterances in a discourse which typically contain only contextually independent items? Would we say that these utterances are homogeneous in their information content? Firbas's answer is no. Let us look at one example:

16. Oli kerran prinsessa.      Once upon a time there  
       was once    princess      was a princess.

An utterance like this, according to the given definition would have no theme. But, as Firbas (1966) suggests, in examining utterances like the one above carefully, it becomes obvious that the elements in relation to each other are not homogeneous in their information content but heterogeneous. The first item oli, "was," is less informative than the following one, kerran, "once," while the last item, prinsessa, is the most informative element in the clause. (This utterance is an example of how the purpose of communication renders a usually highly emotive, contextualized word order into an unmarked utterance:

the sentence above is uttered with the neutral stress pattern which is used in non-contextualized utterances, and it carries no propositional presuppositions.)

Thus even in an utterance which contains only contextually independent elements we can see the gradual increase of informative content. It is to cover also these types of utterance that Firbas (1966, 1971) developed the notion of communicative dynamism which has already been referred to. This Firbas specifies as follows:

By CD I understand a property of communication, displayed in the course of the development of the information to be conveyed, and consisting in advancing this development. By the degree or amount of CD carried by a linguistic element, I understand the relative extent to which the element contributes to the development of the communication, to which, as it were, it "pushes the communication forward" (1971, 135-136).

This notion enables us to analyze all utterances in terms of theme and rheme.

All those items that carry lower degrees of CD are thematic while the carriers of higher degrees of rhematic -- this in relation to other elements in the same utterance (unit) and their semantic content and mutual semantic relations, and consituation. Thus we potentially have several thematic and several rhematic items. To make the discussion more fluent I will call theme that which Firbas calls the theme proper, i.e., the carrier of the lowest degree of CD, and rheme the rheme proper (1971, 142), the

element with the highest degree of CD. What remains in between Firbas calls transition. However, the three-word utterances that I am discussing here can be handled with theme/rheme alone without the notion of transition since we can probably identify all the elements easily as belonging either to the theme or the rheme; the transition is negligible in these short clauses.

Firbas emphasizes the fact that "the degrees (amounts) of CD do not constitute multiples of some basic unit or quantity of information" but, as explicated above, "they are to be understood in terms of the mutual relations of the elements in regard to CD within a distributional field" (1971, 141). A distributional field is naturally the whole discourse/text but it can be subdivided into lower level fields like chapter, sentence, clause. Thus the clause, which I am concentrating on here, is only one among the many possible distributional fields of CD.

Firbas (1964) has suggested that a handful of principles accounts for word order in all languages. Four of them are:

1. grammatical word order principle
2. semantic word order principle
3. emotive word order principle
4. word order principle of basic distribution of CD

The last one, as can be inferred from the above discussion, tends to place elements carrying lower degrees of CD at the beginning and the carriers of higher degrees of CD at the end. The grammatical principle means that a language uses word order to express the grammatical functions, e.g., subject and object. The emotive principle renders word orders with emotive overtones as opposed to the unmarked arrangements. The semantic principle influences that part of the utterance which conveys new information so that the elements with particular semantic properties are naturally in certain positions in relation to the rest of the clause. For example action and goal at the syntactic level have a natural order -- object following the predicate -- if both are contextually independent.

None of these principles functions alone in a language, but they are operative together. However, one is normally the primary organizing principle, another the secondary, etc. It appears to me that the primary organizing principles in Finnish are the principle of the basic distribution of CD and the emotive one. Also the semantic principle is involved, but unlike the situation in English, the grammatical principle has very little, if any application.

#### How Communicative Dynamism Works

To understand how the system of CD works let us discuss the way Firbas (1971) explains it. First, all

linguistic elements that convey some meaning are capable of carrying CD. The items that are contextually dependent carry the lowest amounts of CD and they have this function irrespective of their sentential position. When we look at the contextually independent elements we have two factors in play in determining the degrees of CD for each one: the semantic structure and the position of the elements within the linear arrangement. The latter is not relevant here due to the shortness of the utterances in question, but it would, e.g., arrange direct object and indirect object in some particular order depending on the purposes of communication.

In the operation of the semantic structure the semantic contents of the individual lexical items and their semantic relations work together in the act of communication. This means that there are certain semantic facts in individual lexical items that make these items necessarily carriers of higher degrees of CD in relation to the rest of the non-contextual part of the utterance. This would exemplify the semantic word order principle. To take an example, the object is communicatively more important than the verb, if both are contextually independent, and thus it would carry a higher degree of CD than the verb. The object would thus be the rheme in the example "I have read a fine book."

Another illustration that Fibras (1971) gives is that if we have an existential verb, and the subject and the verb are both contextually independent, the subject carries a higher degree of CD than the verb. This is because "communicatively speaking an unknown person or thing appearing on the scene is found to be more important than the fact of existence or act of appearing itself" (1971, 137).

This could be illustrated by the Finnish unmarked existential clause, which places the unknown subject at the end (OVS). Thus, for example, when in English and German we would say "a girl came into the room" and "ein Mädchen kam ins Zimmer," the subject would be the rheme (note the indefinite article), but the same in Finnish would be "huoneeseen tuli tyttö" with the order location-verb-subject. But, since we have two unmarked alternatives in the Finnish existential clauses, it appears that it is not the sememic level but the gnostemic one, which determines the order here. I will return to this point later. The sememic level, however, functions in Finnish in some instances so that certain nouns, for example, cannot operate as, e.g., thematic subject.

Thus the three factors influencing the distribution of the degrees of CD over the sentence elements are: (1) context, (2) semology, and (3) the linear arrangement (this last one is not involved here, as stated above). The



context will overrule the other two -- it renders everything contextually dependent as a carrier of lower degrees of CD regardless of their semantic content or linear position. The other two function effectively only within the contextually independent parts of the distributional field. Thus, e.g., the basic distribution of CD is manifested by the other two giving the unmarked, non-emotive word orders.

Since CD renders contextual (in)dependence and thus also the terms theme and rheme relative, in that even contextually independent utterances are to be viewed as heterogeneous in the amount of CD carried by their parts, we have to emphasize that consequently theme is not to be identified with given information, even though given information is always thematic. And, on the other hand, while not all new information is rhematic, rheme is always contextually independent.

As was implied above, the theme does not always precede the rheme but their order may also be the reverse. Theme precedes the rheme in the unmarked, non-emotive clauses where we have the basic distribution of CD; this order is also found in introductory utterances. But occasionally the context, and the semantic structure, may be "acting counter to the basic distribution of CD" (Firbas, 1966, 270). This means that the rheme would precede the theme. This may or may not involve different word orders in general, but

in my examples here, whenever we have the rheme preceding the theme, the arrangement is marked.

Daneš (1967) has suggested that emotive or marked word orders manifest a discrepancy between the order of elements in the actual utterance and the neutral order on any of his three levels. The unmarked arrangements at the syntactic level in Finnish would be SVO and OVS; at the sememic level they would be agent-action-goal and goal-action-agent, and at the gnostemic level, theme-rheme (and topic-comment). This is much what Halliday seems to have in mind when he speaks of "the element of structure . . . (being) . . . a complex of structural roles" (1967, 215), that is, e.g., a nominal may be a complex of actor, subject, given, and theme. However, this discrepancy, or difference in the bundles of various roles, depends on the particular communicative functions. They are the effect, not the cause.

To summarize, in the basic distribution of CD the degrees of CD go from lower degrees toward high ones as the utterance advances. But under certain conditions of contextual dependence a rheme may precede a theme rather than follow it. Thus theme and rheme are not tied to any sentence position but are determined, as stated above, by context, semantics, and linearity.

Two Sides in Theme and Rheme

The founder of the Prague School, Vilem Mathesius defined theme as "that which is known or at least obvious in the given situation, and from which the speaker proceeds in his discourse" (in Firbas, 1966, 268) and as "that (which) is being spoken about in the sentence" (in Firbas, 1966, 280). Firbas himself in discussing CD took the point of view of the hearer since he is the one whom "the information is intended for" (1966, 269) -- the hearer is the one who has to decipher the utterances. The approach taken by Mathesius also involves the speaker's side, how he organizes the message.

Daneš has developed this line of Mathesius's thought, and he defines theme and rheme, not only as "concerning . . . the sentence as a contextual unit, but its internal structure viewed in the light of the relations between theme and rheme" (Firbas, 1966, 280). Thus Daneš defines theme and rheme from two viewpoints. Still, he sees variation in word order to be a function of "contextual dependence and applicability" -- he states that even the unmarked variants presuppose certain context or a "certain class of contexts." His definition is as follows:

(a) theme = something one is talking about (to be called topic)

rheme = what one says about the theme (to be called comment)

(b) in terms of the consituation:

theme = that which is already given, known, etc.

rheme = new piece of information (1967, 504)

Daneš notes that according to Mathesius these two aspects, the thematic (= a) and the contextual (= b), usually coincide and thus it is not always necessary to differentiate between them. In the second part (b) of this definition we can impose Firbas's view and see the theme and the rheme in terms of CD.

Thus the speaker, in organizing his message takes into account the whole consituation -- what has been talked about, what hasn't yet, and what he wants to say now. Thus he must take into account the contextual dependence and what he himself wants to say. And it may well be that these two coincide so that theme is that which is being talked about and at the same time it carries the lower degrees of CD. Similarly, what the speaker says about the theme may well carry higher degrees of CD, and thus be rhematic. And this is in fact, what, as I hope to show, happens in the clauses to be discussed.

Halliday (1967) has defined theme as "what is being talked about, the point of departure for the clause as a message" and "what I am talking about (or "what I am talking about now")"(212). But for him, theme is tied to the clause initial position, and therefore his view is not applicable here as such.

The notion of "basis" as developed by Beneš, is much the same: "the opening element of the sentence (that) links up the utterance with the context and the 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 orientated" (in Firbas, 1966, 276). The "basis" is almost the same as "what I am talking about" but it is also tied to the clause initial position.

We can recognize here that this "double" definition of theme and rheme is much the same as Hakulinen's, and others', definitions of the psychological subject and predicate.

What I will propose here is that the primary organizing principle is to distinguish between "what I am talking about now" and "what I am saying about it." These are related to the consituation and the sememic level, so that the former is always thematic and the latter always rhematic, though they need not be theme proper and rheme proper, respectively.

As we remember, the notive species is defined in terms of contextual dependence and thus when the subject is thematic, it is (in the unmarked cases) in the initial position and when rhematic, in the final position. It appears to me that the semantic principle operates here, too, so that certain nouns are inherently indefinite, or definite, and thus they have indefinite or definite notive

species inherently, respectively. To give an example we can look at the following pair:

- |   |                             |
|---|-----------------------------|
| 17a. Maassa on routa.<br>ground- is frost<br>in | The ground is frozen.       |
| b. *Routa on maassa.<br>frost is ground-in      | The frost is in the ground. |

Here the rhematicity of the subject is determined by the semological properties of the noun, i.e., the sememic level, and thus also the semantic word order principle. The second alternant is unacceptable because it implies that there is a specific, definite frost that is in the ground. Examples like this provide some indication that the comment has to be rhematic, because whenever a lexical item is inherently rhematic, it can be only the comment, and when an item is inherently thematic, it cannot always be the comment.

The exclusive rhematicity of the subject can also be a result of purely pragmatic factors as in the following example (18a comes from Heinämäki (1976) who also suggests that Finnish appears to have two unmarked arrangements as far as unmarked or "dominant (word) order (is taken) to mean something like 'neutral', 'non-emphasized', " and which variants can answer the question "what happened?" (p. 96)).

- |   |                          |
|---|--------------------------|
| 18a. Minua puri kää <sup>''</sup> ärme.<br>me bit snake | I was bitten by a snake. |
| 18b. *Kää <sup>''</sup> ärme puri minua.                |                          |

The second alternant (18b) is not possible with the neutral, unmarked stress pattern. If it was, it would imply that there is only one snake that could have done it and we know exactly "who" this snake is. If it was indeed a definite snake, e.g., a pet, we would specify the subject by a demonstrative or like, (tuo kää"rme puri minua -- "that snake bit me") or use its name. However, in comparing (18a) and (18b), the former is the unmarked utterance which carries only existential presuppositions. Thus the sememes of the lexical items and the context may render words exclusively thematic or rhematic, context not only in linguistic terms, but as a pragmatic fact of life, e.g., we don't know the snakes individually.

Thus, we can conclude at this point that the thematicity and rhematicity of the lexical items (thus also whether they are the topic or the comment) is a result of the interaction between the speaker's intentions (word order principle of the basic distribution of CD, and of emotiveness), sememic level (the semantic word order principle), and the context (the emotive principle and the principle of the basic distribution of CD), and these factors determine the word order in a clause.

#### IV. ANALYSIS OF SOME DATA IN TERMS OF THEME/RHEME AND TOPIC/COMMENT

##### Arrangement and Stress Pattern

My interest in this study is word order, but this necessarily involves discussion of stress, too. I will not include all possible first instance stress patterns of each variant, but only one of each marked variant, and two for the unmarked arrangements (one of which, however, is not canonical but results from sememic and pragmatic facts). As stated earlier, I will only consider clauses with at most one contrastive stress. The stress patterns to be discussed are those found in Hakulinen's example (1a-f) with the above reservation. These are the following:

Unmarked: I call the SVO and OVS arrangements unmarked even though they may occur, depending on the speaker's intentions, semantics, and pragmatics, as marked utterances, i.e., as utterances with a marked stress pattern as opposed to the neutral one where each word carries approximately equal stress. The absence of underlining, which indicates stress, means that the variant has a neutral stress pattern, and as such it is either acceptable or unacceptable. These two alternants are the characteristic unmarked variants of the existential clauses, but they



are also found as unmarked both in other intransitive, and transitive clauses.

Often, however, especially in transitive clauses, the OVS variant has a final stress, which, as implied above, is a result of an interplay of various semantic and contextual factors. The first item is also stressed but the stress there is weaker than on the final element, but louder than that of the medial word. Since the final stress is the loudest, only it will be indicated. I will, however, propose that the canonical stress pattern for these two variants, SVO and OVS, is the neutral one.

Marked: In the marked arrangements the OSV and SOV variants have the initial element stressed for contrast, which is called here contrastive stress/emphasis. Sometimes the contrast is only implicit but it appears that it is always there. Also in these variants there are three degrees of stress, but only the loudest is indicated, i.e., the first element is underlined. In the VSO alternant the medial word has the medium stress, and in the VOS the final element carries the medium stress, and the first element, the verb, carries the loudest stress, which is the only one indicated in these variants. Thus the following patterns will be considered:

- |            |              |
|------------|--------------|
| A. SVO     | B. OVS (OVS) |
| <u>OSV</u> | <u>SOV</u>   |
| <u>VSO</u> | <u>VOS</u>   |

Enkvist (1975, 75) gives examples of how different thematic variants can have different patterns of emphasis:

- 19a. Kalle s<sup>o</sup>i omenan.            It was Kalle who ate an apple.  
       Kalle ate apple
- b. Kalle s<sup>o</sup>i omenan.            Kalle ate the apple (and didn't  
       do anything else with it).
- c. Kalle s<sup>o</sup>i omenan.            It was an apple that Kalle ate.

These variants (with loud stress), however, all appear to be second instance utterances. In the following example (also from Enkvist) not every item can carry the loud stress:

- 20a. Omenan Kalle s<sup>o</sup>i.            It was an apple that Kalle ate  
       apple Kalle ate.            (and not, e.g., an orange).
- b. Omenan Kalle s<sup>o</sup>i.            An apple Kalle ate (but some-  
       thing else he didn't).
- c. \*Omenan Kalle s<sup>o</sup>i.

The second alternant (20b) has a double contrast. The third is not acceptable and the reason appears to lie in the fact that it presents as new something which is already presupposed, as we will see later.

In Hakulinen's 1946 edition (pp. 197-199) I found a discussion of the expression of species in Finnish using stress and word order. His discussion implies the same 2 x 3-set of alternants as was proposed above, if we allow the identification of indefinite with rhematic, new, and definite with thematic, given. He uses expressions like "if

X is initial because it is stressed, then (e.g.) indefinite subject is placed there and there . . .," but he never says why some X would be initial and emphasized. However, his comments give support to the 2 x 3 division. The native species conforms to the patterns proposed by him.

The unmarked arrangements could also be called non-contrastive arrangements. This is due to the fact that they bring in new information non-contrastively as opposed to the OSV and SOV variants, which do have contrast on the first item. As was implicit above, the rheme in marked cases is always accompanied by stress. But as we saw in (20c) we cannot place the stress just anywhere -- the arrangement seems to reserve certain positions exclusively for either new or given, but not both.

I would like to point out that I am studying what word order potentially does; the relations posited here may be changed, and expressed, by pragmatic particles, determiners, and by added lexical content in general. Thus I am studying what word order can do, and does, in the absence of other elements expressing the same relations. I limit myself here to three-word utterances, but we can find the same principles operating in larger contexts, too.

I begin my discussion with existential clauses, then look at some transitive, and intransitive clauses. I will also examine a few unmarked utterances with marked arrangements, i.e., introductory utterances.

Existential Clauses

I begin the discussion of existential clauses with an earlier example and see how the notions theme/rheme and topic/comment à la Firbas and Daneš apply here.

21Aa. Ukko on tuvassa.  
man is cottage-in  
The old man is in  
the cottage.

21Ba. Tuvassa on ukko.  
cottage- is man  
in  
There is an old man  
in the cottage.

b. Tuvassa ukko on.  
It's in the cottage  
that the old man is.

b. Ukko tuvassa on.  
It's an old man that  
is in the cottage.

c. On ukko tuvassa.  
The old man is in the  
cottage.

c. On tuvassa ukko.  
There is an old man  
in the cottage.

In the a-forms the first item is the carrier of the lowest degree of CD, and it also names what we are talking about. The last item brings in new information non-contrastively, it carries the highest degree of CD, and it also indicates what we say about the theme.

We can note again how the notive species functions here: in Aa the subject is known, presupposed and it is at the initial position. In Ba the subject is unknown and it is at the end. Thus when the subject is contextually dependent, thematic, it is at the beginning, and when it is contextually independent, rhematic, it is at the end. Of course, these alternants may appear as completely contextually independent utterances but these same thematic relations

would still obtain, i.e., theme at the beginning, and rheme at the end.

These same relations extend also to the location in the sense that when we want to express the location of the subject as new information, we place it at the end, and when, on the other hand, the location is presupposed, and we want to express what there is at that location, we place the locative at the beginning. Thus in these simple clauses we have two choices for what to talk about, and consequently one choice is left for what to say about it.

The unmarked a-variants carry only existential presuppositions, while in all the other alternants we have propositional presuppositions involved. In the b-forms, the first word carries the new information, while the rest of the clause is presupposed already. The new information is brought in contrastively so that we could, e.g., imagine (21Ab) and (21Bb) to be responses to utterances of the following nature:

Ab to - "the old man is in the boathouse."

Bb to - "there is an old woman in the cottage."

In (21Ab) we are still talking about the old man but the item carrying the lowest degree of CD is the final verb. In the same way, in (21Bb) we are talking about the cottage but the most thematic item is the final verb. The

initial elements in both variants bring in the new information, and they also indicate what we say about the item we are talking about. Thus we notice that the rheme and what we say about the topic, coincide, but the theme and the topic do not.

If we look at the c-forms we find out that in both cases the second item is presupposed, and this also indicates the thing we are talking about. But the initial element is the carrier of the highest degree of CD and thus the rheme, while the last item seems to indicate what we are saying about the theme. These variants could be imagined to be reactions to the negation or other challenge of the underlying propositions (which look like the a-forms). For example, the following could be set up:

21Ac reacts to - "the old man is not in the cottage."

21Bc reacts to - "there is no old man in the cottage."

I consider the verb to be the most rhematic element because it is the verb that directly meets the challenge of the preceding linguistic/non-linguistic situation. The verb, or more accurately, the emphatic affirmation it carries, gives us the information which is not recoverable from the context. The last item, which indicates what we are saying about the theme, is also rhematic, but less so than the verb. In the c-forms all the items are already contextually established but it is the "narrow scene," the

very purpose of the act of communication that determines the rheme. In other words, the theme and rheme are established in terms of the relations within this one clause where all elements are contextually dependent in a parallel fashion to the establishing of the same relations within introductory utterances where all words are contextually independent.

Since we now have clearly a situation where what we are talking about and what we are saying about it on the one hand, and the theme/rheme on the other, do not coincide completely, it is better to make this distinction explicit. Thus I will use the terms theme and rheme for the different degrees of CD following Firbas, but the other choice, as already indicated, is between topic and comment:

- A. topic = what I am talking about now  
comment = what I say about the topic
- B. theme = presupposed, contextually dependent, carrier  
of the lowest degree of CD  
rheme = contextually independent, carrier of the  
highest degree of CD<sup>3</sup>

Thus we can now say that theme and topic, and also rheme and comment coincide in the unmarked forms; in the b-forms the rheme and comment coincide but not the theme and the topic; in the last pair, the c-forms, the theme and the topic coincide, but not the rheme and the comment.

We could note here that in the b-forms the rhematism of the initial word lies more in the contrast than in the content of the lexical item itself, even though the content also interacts with the consituation. But in the final items of the a-forms it is the contents of the words themselves that are the carriers of the new information. And in the c-forms the rheme is the emphatic affirmation carried by the verb, and not the content of the verb itself.

Now we see that in the two columns, A and B, we have constant topic and comment: in column A the topic is always the subject and the comment is always the location. In column B the topic is always the location, and the subject is always the comment. These notions overlap positionally in all the variant-pairs in the two columns.

Also the theme and the rheme overlap positionally in the columns but they vary vertically between a-, b-, and c-forms as to the lexical items they are attached to. In Aa (SVO) the theme is the subject, the rheme is the location; in Ba (OVS) the theme is the location and the rheme is the subject. In Ab (OSV) the location is the rheme but the verb is the theme; in Bb (SOV) the subject is the rheme and the final verb the theme, the least informative element. In Ac (VSO) and Bc (VOS) the initial word is the rheme (the verb), in Ac the theme is the subject and in Bc the theme is the location.



All these notions thus overlap positionally in each pair in the two columns. Below I give first the positional distribution of the theme and the rheme (and the loudest stress), and then the same for the topic and the comment, and stress. The third part illustrates how these two distributions are superimposed over each other in the six variants.

i)	<u>A + B</u>			ii)	<u>A + B</u>		
	<u>pos. 1</u>	<u>pos. 2</u>	<u>pos. 3</u>		<u>pos. 1</u>	<u>pos. 2</u>	<u>pos. 3</u>
a.	Theme		Rheme	a.	Topic		Comment
b.	<u>Rheme</u>		Theme	b.	Comment	Topic	
c.	<u>Rheme</u>	Theme		c.	_____	Topic	Comment

iii)	<u>A + B</u>		
	<u>pos. 1</u>	<u>pos. 2</u>	<u>pos. 3</u>
a.	Topic Theme		Comment Rheme
b.	Comment <u>Rheme</u>	Topic	Theme
c.	<u>Rheme</u>	Topic Theme	Comment
A.	SVO	B.	OVS
	<u>O</u> SV		<u>S</u> OV
	<u>V</u> SO		<u>V</u> OS

Let us look at another existential clause and see how these notions apply there:

- |  |  |
|--|--|
| <p>22Aa. Takki riippuu naulakossa.<br/>coat hangs      coatrack-in<br/>The coat hangs on the<br/>coatrack.</p> <p>b. <u>Naulakossa</u> takki riippuu.<br/>It's on the coatrack that<br/>the coat is hanging.</p> <p>c. <u>Riippuu</u> takki naulakossa.<br/>The coat <u>does</u> hang on the<br/>coatrack.</p> | <p>22Ba. Naulakossa riippuu takki.<br/>coatrack-in hangs      coat<br/>There hangs a coat on<br/>the coatrack.</p> <p>b. <u>Takki</u> naulakossa riippuu.<br/>It's a coat that is<br/>hanging on the coatrack.</p> <p>c. <u>Riippuu</u> naulakossa takki.<br/>There <u>does</u> hang a coat<br/>on the coatrack.</p> |
|--|--|

In the a-variants above the first item is the topic and also the theme, and the last item is the comment and the rheme. In the b-forms the first item is the comment and rheme, the second item is the topic, and the last item is the theme. In the last pair the first item is the rheme, the second the theme and the topic, and the last item is the comment.

When we compare the distributions of the theme/rheme and the topic/comment, we notice that the topic is always thematic, presupposed, though not always the theme proper, and the comment is always rhematic though not always rheme proper. We will see in the examples to come that this requirement seems to be an inherent property of topic and comment. And this appears to be a pragmatically obvious prerequisite since topic is what we are talking about, and of course that which we are talking about carries lower degrees of information than that which we say about it, which again pragmatically ought to be more important, informative, than the topic.

Below, I give a couple of examples of existential clauses where we can observe in all their 3 x 2 alternants the thematic and topical relations proposed above:

- 23 I. Auto ajaa kadulla.      The car is being driven on  
      car drives street-on      the street.
- II. Laiva kulkee merellä.      The ship is travelling on  
      ship moves ocean-on      the ocean.
- III. Lapsi leikkii pihalla.      The child is playing in the yard.  
      child plays yard-on
- IV. Koira juoksi torille.      The dog ran to the market-place.  
      dog ran market-  
                                  place-to
- V. Juna lähti asemalta.      The train departed from the  
      train departed station- station.  
    from

In the above examples we had two unmarked forms -- SVO and OVS -- which can be contextually independent as a whole so that no word is contextually dependent, and they follow the basic distribution of CD. It was mentioned in the preceding chapter that Firbas, when discussing existential verbs, stated that if we have a verb of the type specified, and a subject, and both are contextually independent, then the subject is the rheme due to the operation of the semantic structure. As we see, this is not the case here. It is probably due to the particular nature of Finnish existential verbs. Thus what we have here is simply that due to communicative purposes either the subject or the location is rhematic, and this choice is indicated by

placing the rheme at the end, i.e., as the comment. Thus the communicative purpose -- what we want to say about something -- renders certain lexical items rhematic due to the speaker's intentions, which we can identify with the word order principle of the basic distribution of CD (and in marked arrangements the emotive word order principle). Thus in the Ba variant where the subject is rhematic, it is rhematic due to the speaker's intentions rather than to the sememic structure.

Ikola (1964, 28) has pointed out that the difference in order may also indicate whether the existence of the subject is presupposed or whether it is expressed by the utterance. The following example illustrates this clearly. The A-column presupposes the existence of the subject while the B-column rather expresses the existence of the subject in general. And this in fact reflects the speaker's intentions and the context -- what has been talked about, and what is being said now:

24Aa. Isäntä on talossa.  
squire is house-in  
The squire is in the  
house.

24Ba. Talossa on isäntä.  
house-in is squire  
The house has a squire.

b. Talossa isäntä on.  
It's in the house where  
the squire is.

b. Isäntä talossa on.  
The house has a squire.  
(and nothing else)

c. On isäntä talossa.  
The squire is in the house.

c. On talossa isäntä.  
The house does indeed  
have a squire.

In set A we express the location of the subject -- his existence is already presupposed, while in set B the information is that the house has a squire, we are not talking about his location. The following set exemplifies this same phenomenon:

- |   |   |
|---|---|
| <p>25Aa. Autotalli on alakerrassa.<br/>garage is basement-in<br/>The garage is in the<br/>basement.</p> | <p>25Ba. Alakerrassa on autotalli.<br/>basement-in is garage<br/>There is a garage in the<br/>basement.</p> |
| <p>b. <u>Alakerrassa</u> autotalli on.<br/>It's in the basement where<br/>the garage is.</p>            | <p>b. <u>Autotalli</u> alakerrassa on.<br/>It's a garage that is<br/>in the basement.</p>                   |
| <p>c. <u>On</u> autotalli alakerrassa.<br/>The garage <u>is</u> in the<br/>basement.</p>                | <p>c. <u>On</u> alakerrassa autotalli.<br/>There <u>is</u> a garage in<br/>the basement.</p>                |

But the semantic structure may influence the arrangement. The sememic components definite and indefinite, not as the notive species, but rather as inherent features of certain lexical items, may determine the arrangement by rendering certain words inherently thematic (definite) or inherently rhematic (indefinite, unspecifiable). In the following examples we have subjects which are inherently indefinite or definite, and thus also inherently rhematic or thematic. In the forms to follow immediately below, the subject is indefinite:

- |  |  |
|--|--|
| <p>26Aa. *Kuivuus vallitsee Saharassa.<br/>drought obtains Sahara-in</p> | <p>26Ba. Saharassa vallitsee/<br/>Sahara-in/ kuivuus.<br/>obtains drought<br/>In Sahara there<br/>obtains drought.</p> |
|--|--|

- |  |   |
|--|---|
| b. * <u>Saharassa</u> kuivuus vallitsee.                 | b. Kuivuus Saharassa<br>vallitsee.<br>It's drought that obtains<br>in the Sahara.                         |
| c. * <u>Vallitsee</u> kuivuus Saharassa.                 | c. <u>Vallitsee</u> Saharassa<br>kuivuus.<br>There obtains indeed<br>drought in the Sahara.               |
| 27Aa. *Routa on maassa.<br>frost is ground-in            | 27Ba. Maassa on routa.<br>ground-in is frost<br>The ground is frozen.                                     |
| b. * <u>Maassa</u> routa on.                             | b. ? <u>Routa</u> maassa on.<br>It is frozen that<br>the ground is.                                       |
| c. * <u>On</u> routa maassa.                             | c. <u>On</u> maassa routa.<br>The ground is indeed<br>frozen.   |
| 28Aa. *Nälänhätä on Etiopiassa.<br>famine is Ethiopia-in | 28Ba. Etiopiassa on nälänhätä.<br>Ethiopia-in is famine<br>There is famine in<br>Ethiopia                 |
| b. <u>Etiopiassa</u> nälänhätä on.                       | b. <u>Nälänhätä</u> Etiopiassa on.<br>There is <u>famine</u> in<br>Ethiopia (and not, e.g.,<br>abundance) |
| c. * <u>On</u> nälänhätä Etiopiassa.                     | c. <u>On</u> Etiopiassa nälänhätä.<br>There is indeed famine<br>in Ethiopia.                              |

27Bb is not quite acceptable since it is difficult to imagine with what the frost or the state of being frozen could be contrasted. Thus this is a purely pragmatic matter. In columns A above, the subjects, which were inherently indefinite, unspecified by nature, appeared in a slot for definite, thematic elements, and the results were bad, while in B-columns all variants were good (except for 27Bb).

The following examples have an inherently definite subject, a proper noun, which cannot refer to but a single, clearly identifiable object or set:

29Aa. Suomi sijaitsee pohjoisessa.  
Finland is located north-in  
Finland is located in the  
north.

b. Pohjoisessa Suomi sijaitsee.  
It's in the north that  
Finland is located.

c. Sijaitsee Suomi pohjoisessa.  
Finland is indeed located  
in the north.

29Ba. \*Pohjoisessa sijaitsee Suomi  
North-in is located Finland.

b. \*Suomi pohjoisessa sijaitsee

c. \*Sijaitsee pohjoisessa Suomi.

30Aa. Kekkonen asuu Tamminiemessä.  
Kekkonen lives Tamminiemi-in  
Kekkonen lives in Tamminiemi.

b. Tamminiemessä Kekkonen asuu.  
It's in Tamminiemi where  
Kekkonen lives.

c. Asuu Kekkonen Tamminiemessä.  
K. does indeed live in Tamminiemi.

30Ba. \*Tamminiemessä asuu Kekkonen  
Tamminiemi-in lives Kekkonen.

b. Kekkonen Tamminiemessä asuu  
It's Kekkonen who lives in  
Tamminiemi.

c. \*Asuu Tamminiemessä Kekkonen

Example (30Bb) is acceptable because Kekkonen can be easily contrasted with somebody else (e.g., Koivisto). The unacceptability of the second column (B) is caused by the inherent thematicity of the subject, which cannot take on the classifying function of the final position, which implies a certain degree of non-specificity. Also the thematicity of the location is involved: in (29B) the location is not inherently thematic while in (30Bb) it is. This fact probably makes on its part (30Bb) acceptable.

The example below has a pronoun subject, an inherently thematic item, and we see the same as in the above examples -- the second column is less acceptable:

- |  |   |
|--|---|
| 31Aa. Se menee Helsinkiin.<br>it goes Helsinki-to<br>It goes to Helsinki.  | 31Ba.*Helsinkiin menee se.<br>Helsinki-to goes it |
| b. <u>Helsinkiin</u> se menee.<br><u>It's to Helsinki</u> that<br>it goes. | b.? <u>Se</u> Helsinkiin menee.                   |
| c. <u>Menee</u> se Helsinkiin.<br>It <u>does</u> go to Helsinki.           | c.*Menee Helsinkiin se.                           |

These last examples have shown us how the sememic level operates in rendering certain lexical items inherently definite or indefinite, and at the same time inherently thematic or rhematic, respectively. These sentences thus illustrate the functioning of the semantic word order principle, and the requirement that the topic cannot be rhematic and the comment cannot be thematic.



We can thus now conclude that the traditional notions of notive species, nouns' classifying functions, whether the existence of the subject is presupposed (topic) or whether it is expressed (comment) are subsumed under the topical and thematic structure; they are part of the text strategy. Word order is not only determined by the speaker's intentions, which would be covered by the word order principle of the basic distribution of CD and the emotive principle, but also by the semantic structure of the language. In the next section we will see examples where purely pragmatic factors render subjects rhematic, i.e., the arrangement is influenced by factors outside the discourse and the language.

### Transitive Clauses

The first two examples of transitive clauses have been looked at already earlier but now we can see how the notions developed this far apply there:

- |  |  |
|--|--|
| 32Aa. Juho lyö Heikkiä.<br>Juho hits Heikki-part.<br>Juho is hitting Heikki. | 32Ba. Heikkiä lyö Juho.<br>Heikki- part hits Juho.<br>Heikki is being hit by Juho. |
| b. Heikkiä Juho lyö.<br>It's Heikki that J. is hitting                       | b. Juho Heikkiä lyö.<br>It's Juho who is hitting Heikki.                           |
| c. Lyö Juho Heikkiä.<br>Juho is indeed hitting Heikki.                       | c. Lyö Heikkiä Juho.<br>Heikki is indeed being hit by Juho.                        |

- 33Aa. Marssijat pysäyttivät liikenteen.  
demonstrators blocked traffic-gen.  
The demonstrators blocked the traffic.
- b. Liikenteen marssijat pysäyttivät.  
It was the traffic that the demonstrators blocked.
- c. Pysäyttivät marssijat liikenteen.  
The demonstrators did indeed block the traffic.
- 33Ba. Liikenteen pysäyttivät marssijat.  
traffic-gen. blocked demonstrators  
The traffic was blocked by the demonstrators.
- b. Marssijat liikenteen pysäyttivät.  
It was the demonstrators who blocked the traffic.
- c. Pysäyttivät liikenteen marssijat.  
The traffic was indeed blocked by the demonstrators.

In the examples above we retain the same thematic and topical relations that were found in the existential clauses. In the a-forms, the first item is the topic and theme. Now, however, the Ba-form is not unmarked but marked, but the comment, which is emphasized, is still non-contrastive and rhematic. The last item in the Aa-forms is unstressed, and it is also, as in (Ba), the comment and the rheme. The b-forms have a contrastive initial comment/rheme while the rest is presupposed; the second element is the topic and the final one the theme. In the last pair, the c-forms, the first item is emphatically affirmative and carries the rheme, the second item is the topic and the theme, and the last one is the comment. The comment is rhematic in this last pair, though it is not the rheme proper.

These relations are found in all the 2 x 3-variants of the following sentences:

- |    |   |  |
|----|---|--|
| 34 | I. Routa syövyttää maata.<br>frost corrodes ground-<br>part.    | Frost corrodes the ground.                       |
|    | II. Valaat syövät planktonia.<br>whales eat plankton-<br>part.  | Whales eat plankton.                             |
|    | III. Mirja säestää Leenaa.<br>Mirja accompanies Leena-<br>part. | Mirja accompanies Leena (on<br>e.g., the piano). |
|    | IV. Caesar hallitsee Roomaa.<br>Caesar governs Rome-<br>part.   | Ceasar governs Rome.                             |
|    | V. Naapuri löysi kirjan.<br>neighbor found book-<br>gen.        | The neighbor found a book.                       |

One difference from the existential clauses we can note immediately: the proper noun in final position does not acquire any unacceptable classifying functions as was the case often in the existential clauses. In the existential clauses there was a nexus between the subject and the location -- the emphasis was on the quasipredicate -- and not between the verb and the subject as is the case here. Also, in transitive clauses there is a nexus between the verb and the object, and thus the verb has a clearly more prominent role in these types of clause than in the existential clauses where the verb was almost negligible. This difference probably explains why the nouns behave differently --

closer relations to the verb might influence the whole clause. This difference in the nature of the verb, and its relation to the complement perhaps is the source of the frequent final stress in the OVS-variant.

In the above examples only the (Aa) (SVO) was unmarked, but in the following cases this same (Aa) cannot occur with the unmarked stress pattern but only with a marked one, and therefore they are indicated as unacceptable. The Ba-form is the unmarked alternant in these cases:

- |   |   |
|---|---|
| 35Aa. *Käärme puri minua.<br>snake bit me                               | 35Ba. Minua puri käärme.<br>me bit snake<br>I was bitten by a snake.                  |
| b. <u>Minua</u> käärme puri.<br>It was me who was bitten<br>by a snake. | b. <u>Käärme</u> minua puri.<br>It was a snake that bit me.                           |
| c. * <u>Puri</u> käärme minua.  | c. <u>Puri</u> minua käärme.<br>I was indeed bitten by a<br>snake.                    |
| 36Aa. *Kihti vaivaa jalcaani.<br>arthritis bothers leg-<br>my           | 36Ba. Jalcaani vaivaa kihti.<br>leg-my bothers arthritis<br>Arthritis bothers my leg. |
| b. * <u>Jalcaani</u> kihti vaivaa.                                      | b. <u>Kihti</u> jalcaani vaivaa.<br>It's arthritis that<br>bothers my leg.            |
| c. * <u>Vaivaa</u> kihti jalcaani.                                      | c. <u>Vaivaa</u> jalcaani kihti.<br>Arthritis does indeed<br>bother my leg.           |

We see that (35Ab) is acceptable and this is because we easily find a contrast for the object, and the subject in this utterance has been linguistically identified in the

preceding context. The same does not apply to (36Ab) because arthritis has a different semantic composition, it cannot, e.g., be counted the same way snakes can. However, the importance of these examples is that the (Ba) is the unmarked alternant and not the (Aa). In these clauses the rhematicity of the subject is determined partly (in case of the snake, completely) pragmatically, and not linguistically. This would imply that these common nouns cannot in clauses like these, take the naming function (initial position) but only the classifying one (final). Thus the rhematicity of the subject may be determined, not only by the speaker's intentions and the sememic level, but also by the pure pragmatics of the situation.

The following example illustrates how both a-forms can be unmarked in a transitive clause if the nature of the subject and the object conform to the underlying communicative pattern. The marked variants are somewhat odd since it would be difficult to imagine a natural context for them, but the importance of these utterances lies in the two unmarked alternants:

- |  |   |
|--|---|
| 37Aa. <u>Tuska</u> ahdisti sydäntäni.<br>pain plagued heart-my<br>The pain plagued my heart. | 37Ba. <u>Sydäntäni</u> ahdisti tuska.<br>heart-my plagued pain<br>My heart was plagued by pain. |
| b.? <u>Sydäntäni</u> tuska ahdisti.<br>It was my heart that the<br>pain plagued.             | b.? <u>Tuska</u> sydäntäni ahdisti.<br>It was a pain that<br>plagued my heart.                  |
| c.? <u>Ahdisti</u> tuska sydäntäni.<br>My heart was indeed<br>plagued by the pain.           | c.? <u>Ahdisti</u> sydäntäni tuska.<br>A pain did indeed<br>plague my heart.                    |

We saw in this section that in transitive clauses we may also have two unmarked alternants -- SVO and OVS. The purpose of the arrangement is to distinguish between the topic and the comment. But these notions have to be connected to the consituation in such a way that topic is always thematic and comment is always rhematic. What is thematic depends on the speaker's intentions -- what he wants to present as new and given, and this is naturally also tied to the whole consituation. But also semantic factors are involved here in that certain nouns are inherently thematic or rhematic, and thus also inherently the topic or the comment, respectively. In addition to this, the pragmatic facts of life may render certain elements as inherently rhematic, and thus they also would be the comment inherently.

### Intransitive Clauses

We will find the same communicative structure in the intransitive clauses below as we found earlier:

- |   |   |
|---|---|
| <p>38Aa. <u>Ruoka</u> kelpasi sialle.<br/>               food was pig-to<br/>                       acceptable<br/>         The food was palatable<br/>         to the pig.</p> | <p>38Ba. <u>Sialle</u> kelpasi ruoka.<br/>               pig-to was food.<br/>                       acceptable<br/>         The pig found the food<br/>         palatable.</p> |
| <p>b. <u>Sialle</u> ruoka kelpasi.<br/>         It was to the pig that<br/>         the food was palatable.</p>   | <p>b. <u>Ruoka</u> sialle kelpasi.<br/>         It was the food that<br/>         the pig found palatable.</p>  |
| <p>c. <u>Kelpasi</u> ruoka sialle.<br/>         The food was found indeed<br/>         palatable by the pig.</p>  | <p>c. <u>Kelpasi</u> sialle ruoka.<br/>         The pig found that the<br/>         food was indeed palatable.</p>  |

- 39Aa. Lumi sulaa keväällä.  
snow melts spring-adess.  
The snow melts in the spring.
- 39Ba. Keväällä sulaa lumi  
In the spring the snow melts.
- b. Keväällä lumi sulaa.  
It's in the spring that  
the snow melts.
- b. ?Lumi keväällä sulaa.  
It's the snow that melts  
in the spring.
- c. Sulaa lumi keväällä.  
The snow does melt in  
the spring.
- c. Sulaa keväällä lumi.  
In the spring the snow  
does indeed melt.
- 40Aa. ?Tuli raivosi öljykentillä.  
fire raged oilfields-in  
The fire raged in the  
oilfields.
- 40Ba. Öljykentillä raivosi tuli.  
oilfields-in raged fire  
In the oilfields there  
raged a fire.
- b. ?Öljykentillä tuli raivosi.  
It was in the oilfields that  
the fire raged.
- b. Tuli öljykentillä raivosi.  
It was fire that raged  
in the oilfields.
- c. ?Raivosi tuli öljykentillä.  
The fire raged indeed in the  
oilfields.
- c. Raivosi öljykentillä tuli.  
There raged indeed a  
fire in the oilfields.
- 41Aa. Me keskustelimme politiikasta.  
we discussed politics-relative.  
We discussed politics.
- b. Politiikasta me keskustelimme.  
It was politics that we discussed.
- c. Keskustelimme me politiikasta.  
We did indeed discuss politics.
- 41Ba. \*Politiikasta keskustelimme me.  
politics-elat. discussed we
- b. Me politiikasta keskustelimme.  
It was us who discussed politics.
- c. \*Keskustelimme politiikasta me.

In these examples we have the same relations between topic/comment and theme/rheme as earlier. In (40) the sememic level, and also pragmatics, render the subject

inherently rhematic, and thus it is inherently comment, too. In (41) the subject pronoun is of course inherently contextually dependent, and as such the topic. We also found two unmarked arrangements, which were determined by the speaker's intentions and the context, i.e., the word order principle of the basic distribution of CD.

### Introductory Utterances

Firbas proposed the use of communicative dynamism because it would enable us to use the same terms, theme and rheme, for both contextually dependent and independent utterances. We thus analyze introductory utterances in terms of the relations within the utterance itself. Each of the following examples begins a fairy tale, and thus has no preceding context (from Haavio, 1978):

- |    |   |  |
|----|---|--|
| 42 | <p>I. Oli kerran prinsessa.<br/>was once princess</p> <p>II. Oli emäntä muinoin.<br/>was farmer's ages ago<br/>wife</p> <p>III. Rakensi pääskynen pesän.<br/>built swallow nest</p> <p>IV. Kylvi mies nauriita (kerran...)<br/>sowed man rutabagas (once...)</p> <p>V. Elipä kuninkaan kartanon sikolätissä Sika Sippurahäntä.<br/>lived king's court's sty-in pig curly-tail<br/>Once upon a time there lived in the king's court's<br/>sty Piggy the Curly-Q.</p> | <p>Once upon a time there was<br/>a princess.</p> <p>Once upon a time, ages ago,<br/>there was a (particular)<br/>farmer's wife.</p> <p>The swallow built a nest.</p> <p>Once upon a time the<br/>man sowed rutabagas...</p> |
|----|---|--|



All these sentences are uttered with the neutral, unmarked stress pattern, even though they have marked word orders, i.e., they are unmarked utterances.<sup>4</sup>

As was established earlier (42 I) contains heterogeneous degrees of CD, and it follows the basic distribution of CD. We find the same thing in all the examples in (42). We can also analyze these utterances in terms of topic and comment in the same way as before. These would be topical variants of A and B columns as follows: I and V would correspond to the c-form in column B (VOS), and II, III, and IV would belong to column A (VSO).

Thus we can notice that for example in (42 I) the subject, which is the comment, is indefinite and thus rhematic, while in (42 II) the subject is definite, it is the topic. Of course the definiteness is relative, but we are speaking about the subject (emăntă) here, and the time adverbial is the comment. In (42 I) we are speaking rather about some point in time long past, and what we want to say about this is that the princess existed at that time, the princess being the comment.

We have now analyzed introductory utterances in terms of the same topic/comment--structure as was found in the contextualized utterances. The theme/rheme-structure, however, follows the basic distribution of CD which is also characteristic of the unmarked arrangements. It is the immediate purpose of communication, the "narrow scene,"

that determines the theme and the rheme in these utterances.

## V. CATALYSIS

We have now examined some existential, transitive, and intransitive clauses, and a couple of unmarked utterances with marked arrangement, and it appears that we can find a communicatively functional use of word order in these examples. The arrangement depends on what the speaker is speaking about, and what he is saying about it. He may choose for the topic either the subject or the verb complement, and depending on this choice, the comment is the verb complement or the subject, respectively. The choice is thus tied to specific lexical items, and expressed by word order. This choice is, however, constrained not only by the speaker's intentions and the consituation, but also by the sememic level, and the pragmatics of the total situation, so, that the topic is always thematic, and the comment is always rhematic. Thus the speaker's intentions and the consituation may render certain lexical items thematic or rhematic, and also the semantics and the pragmatics of the consituation occasionally render items inherently thematic or rhematic.

The notions topic/comment and theme/rheme cover the notive species, and also the naming and classifying functions of nouns, which are closely related to the idea of whether

the existence of the subject was presupposed or expressed. The psychological subject and predicate were in fact defined by Hakulinen in terms of theme/rheme and topic/comment without using these particular terms.

We can divide the utterances discussed into those with marked word order and those with unmarked word order. In the latter group, we have utterances with an underlying neutral stress pattern. In these, we find that the advancement of the theme and the rheme follows the basic distribution of CD, with the theme preceding the rheme. Here we would say that it is the word order principle of basic distribution of CD that is in operation, and this would cover part of the speaker intentions. Also the semantic word order principle is effective here. And pragmatic facts of the consituation may be influential -- this can perhaps most conveniently be taken care of by the gnostemic level. The sememic level and some pragmatic facts may render a sentence with an unmarked word order a marked utterance, i.e., an utterance with a marked stress pattern.

In the utterances which have marked arrangements, the emotive word order principle is the main organizing principle, which also covers the speaker intentions. Naturally the other principles are also involved in, e.g., determining the thematicity/rhematicity of the elements. These utterances bring in new information either contrastively,

or with emphatic affirmation. The contrast is not always explicit -- it is often only by implication, or in an exclusive sense. In these utterances we have the rheme preceding the theme. But also here the "narrow scene" operates so that these marked arrangements, especially the verb initial variants, may appear as unmarked utterances.

We can notice that, as Daneš suggested, the topic and the theme coincide in most cases -- and where they don't, the topic is still thematic even if not theme proper. Similarly the comment is always rhematic even if not rheme proper.

As has become clear by now, I consider the SVO and OVS variants (the a-forms) to have the unmarked word order. But, as we have seen, these variants may, due to various factors, also appear as marked utterances, i.e., with marked stress pattern. Also, due to communicative purposes, at least two of the marked word orders (VSO and VOS -- the c-forms) may appear as unmarked utterances, i.e., with unmarked stress pattern, but I do not propose that these two word order variants also be considered unmarked in their arrangement.

Why I do not propose this is clear: the introductory utterances have a specific distribution; they only occur in clearly stateable environments in the discourse -- in a way they are "allo-forms" of the same alternants with the marked stress pattern. They never occur in the same

environment. But the unmarked arrangements with marked and unmarked stress patterns are not distributed that way. Their stress pattern cannot be predicted by position, but it is determined by the speaker intentions, the semantic structure, and the pragmatics of the consituation. And thus they can be unmarked both in initial and non-initial positions which is not the case with the verb initial variants.

I will give below two diagrams depicting the relevant choices at each level -- one diagram for the sememic structure and one for the lexotactics.<sup>5</sup> The diagrams give us the underlying semologically relevant notions (diagram I) and the corresponding word order patterns with their canonical stress patterns (diagram II). Deviations from this pattern are seen as a result of interaction of various semological and pragmatic matters as they meet in one utterance. Consequently, these are idiosyncracies of individual utterances and therefore I will not attempt to include these in the diagrams. If I did, they would appear in the semotactics as constraints on the co-occurrence possibilities of various sememes, and would also be reflected in the lexotactics.

In the first diagram, the semotactics, we have a predication structure with one event sememe (verb), agent (stands for any subject realizee), and a complement (which can be another participant, circumstantial, etc.). The topic and the emphasis are conditioned (the dotted line) so

that the utterance can have at most one of each, topic being an obligatory choice and emphasis optional. These two are controlled from the gnostology; if there is no signal for emphasis coming from above, we take the zero-choice.

The topic is thus obligatory and its choice is ordered so that the agent or the complement is elected first for the topic, and then the remaining of these two may optionally be emphasized. And if emphasis is chosen for either agent or complement, the event may not be emphasized; otherwise the event may be emphasized, but it need not be since this choice is optional. We only need the topic and the emphasis here since the comment and the theme/rheme are predictable if the former are known -- it would be redundant to include them, too.

The same applies to lexotactics (diagram II). If we know the topic and the emphasized element, we can predict all the alternants. What this diagram expresses is the following: we go down the first line from the downward AND-triangle and take the first line under the downward ordered OR-"bracket," which gives us further below either the subject, the verb, or the complement (S, V, or C, respectively). If no emphasis is indicated, we have to take the topic of the second line under that same downward OR, which gives us either the subject or the complement.

The second position is filled following the second line from the top. If topic has not occurred in the first

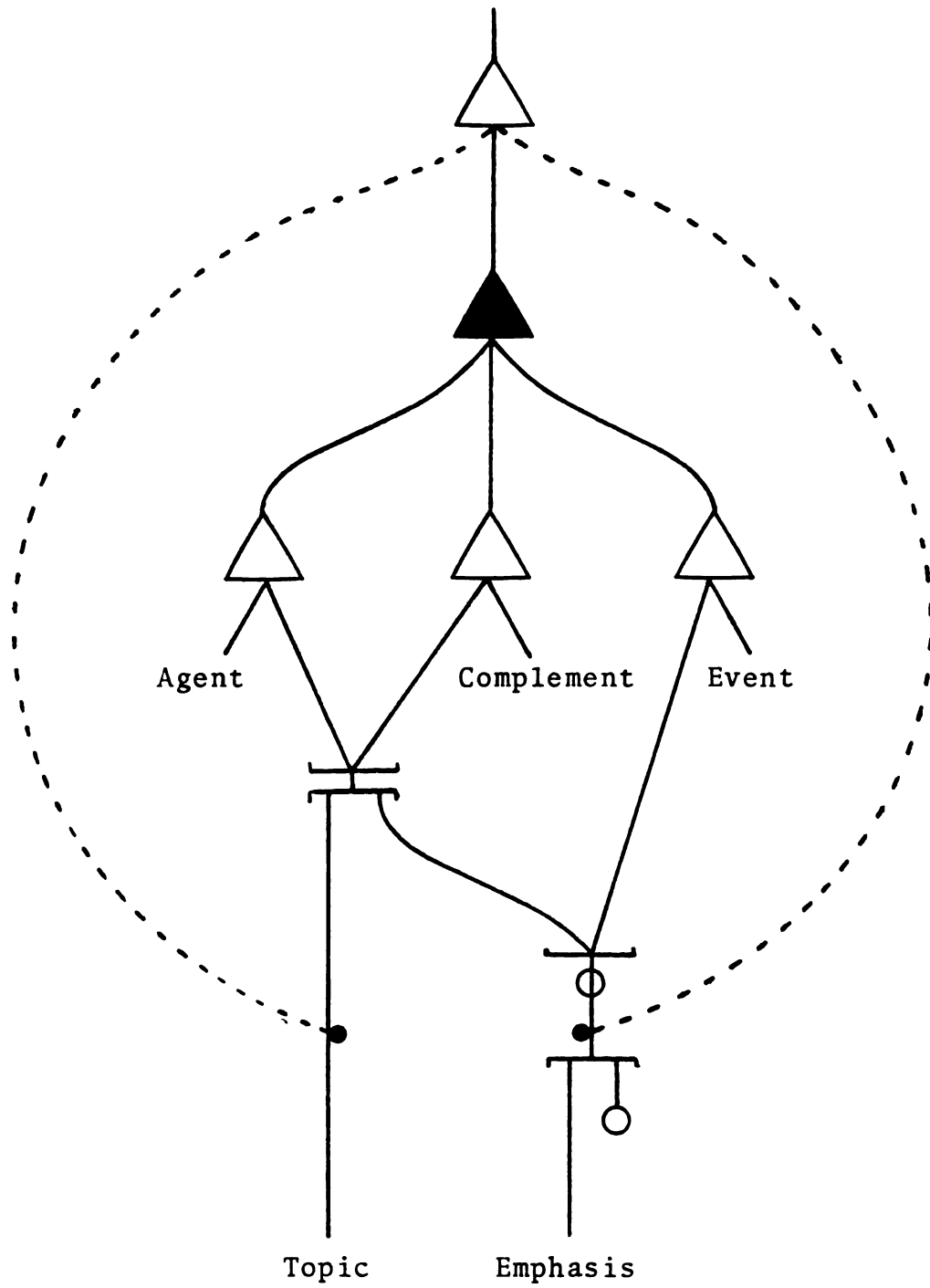


Diagram I. Semotactics.



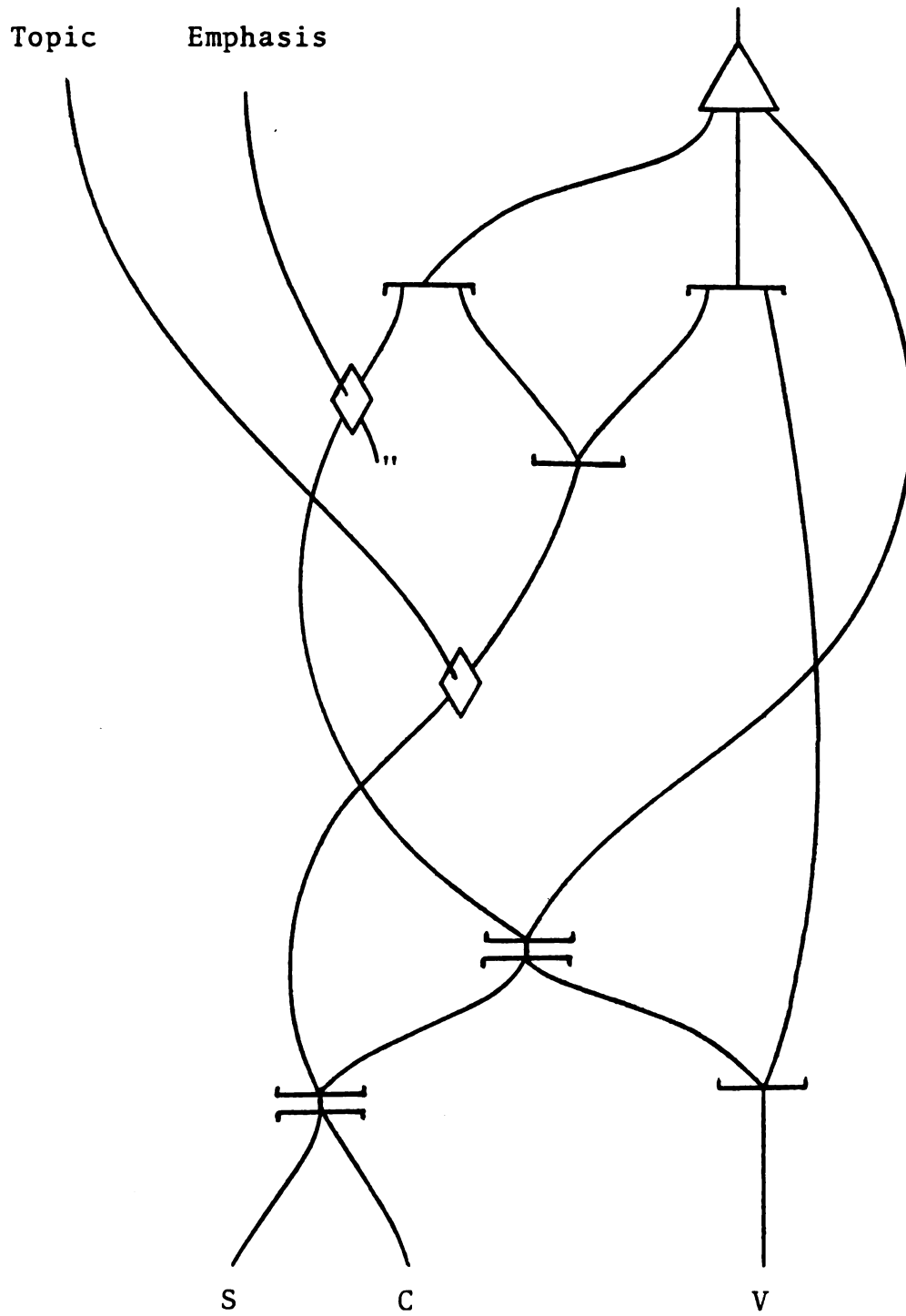


Diagram II. Lexotactics.

position, we have to take it; if it has occurred, we take the verb, which is always second in the unmarked arrangements. Thus the first lines under the OR-"brackets" give us the marked word orders, and the second, the unmarked ones. The third position is filled by whatever is left after the first two choices. This is a performance model so that we cannot make the same choice twice (e.g., have two subjects) unless indicated; when one choice is used up, we cannot take it any more.

Thus these diagrams give us the following arrangements (with their corresponding stress patterns), and nothing else (in an appendix I will give some traces of these diagrams using examples from earlier chapters):

A. SVO	B. OVS
<u>O</u> SV	<u>S</u> OV
<u>V</u> SO	<u>V</u> OS

I will repeat below the distributional charts of theme/rheme and topic/comment which are predictable on the basis of information from gnostology and semology, and which are distributed over the arrangements above in three patterns which are identical in the two columns.

- i)                    A + B
- |    | <u>pos. 1</u> | <u>pos. 2</u> | <u>pos. 3</u> |
|----|---------------|---------------|---------------|
| a. | Theme         |               | Rheme         |
| b. | <u>Rheme</u>  |               | Theme         |
| c. | <u>Rheme</u>  | Theme         |               |
- 
- ii)                    A + B
- |    | <u>pos. 1</u>  | <u>pos. 2</u> | <u>pos. 3</u> |
|----|----------------|---------------|---------------|
| a. | Topic          |               | Comment       |
| b. | <u>Comment</u> | Topic         |               |
| c. | _____          | Topic         | Comment       |
- 
- iii)                    A + B
- |    | <u>pos. 1</u>           | <u>pos. 2</u>  | <u>pos. 3</u>    |
|----|-------------------------|----------------|------------------|
| a. | Topic<br>Theme          |                | Comment<br>Rheme |
| b. | Comment<br><u>Rheme</u> | Topic          | Theme            |
| c. | <u>Rheme</u>            | Topic<br>Theme | Comment          |

Word order thus appears to have a communicatively functional role in the clauses discussed. It distinguishes between topic and comment. Stress, an inseparable accompaniment, is always involved with the highest degree of CD but not vice versa. Stress, however, cannot be placed everywhere and thus it is the word order indicating the topic and the

comment which controls the stress assignment. This reflects the fact that topic is always thematic and thus cannot carry the loud stress. An example of this incompatibility was given in Chapter IV by example (20C) from Enkvist where the topic, if stressed, made the utterance unacceptable. The comment is always rhematic; it can take the stress but need not because the rhematicity, like thematicity, is often determined in terms of the relations within one clause only. These same relations between the topic and the comment can probably be extended to longer utterances than these, but then we would need to make use of the notion of transition.

## NOTES

1. The nominative and partitive subjects have been under lively discussion for a long time. We can distinguish between them roughly so that the nominative subject refers to a totality, an indivisible subject, while the partitive subject has as its referent part of some larger unit. This is only a simplified statement since it is, for example, sometimes difficult to decide whether the subject is divisible or not. The following examples illustrate these two subject-cases:

- |  |   |
|--|---|
| a. Sotaväki tuli kaupunkiin.<br>military came city-to<br>-nom.   | The military came into the city.        |
| b. Sotaväkeä tuli kaupunkiin.<br>military came city-to<br>-part. | There came military into the city.      |
| c. Ruoka on pöydällä.<br>food is table-on<br>-nom.               | The food is on the table.               |
| d. Pöydällä on ruokaa.<br>table-on is food-<br>part.             | There is food on the table.             |
| e. Lapsia juoksee pihalla.<br>children run yard-on<br>-part.     | There are children running in the yard. |
| f. Lapset juoksevat pihalla.<br>children run yard-on<br>-nom.    | The children are running in the yard.   |

2. Following the usage in stratificational framework. I am using the terms semantic and sememic/semological in a way parallel to the way the terms phonetic and phonemic/

phonological are used. Thus semantic refers to meaning in general, as it relates to the substance of language, and sememic/semological refers to meaning relevant to the form of language (cf. Daneš's semantic level contains only meaning which is linguistically relevant).

3. I am aware that Kiefer (1976) at least has given the definitions the other way around, i.e., topic = "given," theme = "what I am talking about," etc., but since I am using Firbas's notion of communicative dynamism, I prefer my way.

4. Incidentally, I found few, if any, introductory utterances with the b-form arrangements (OSV and SOV). Maybe they carry more clearly propositional presuppositions than the other forms.

5. For further details about the notation, see Lockwood 1972.

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### Abbreviations used:

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TLP = Travaux linguistiques de Prague

Finnish titles are given a translation in brackets.

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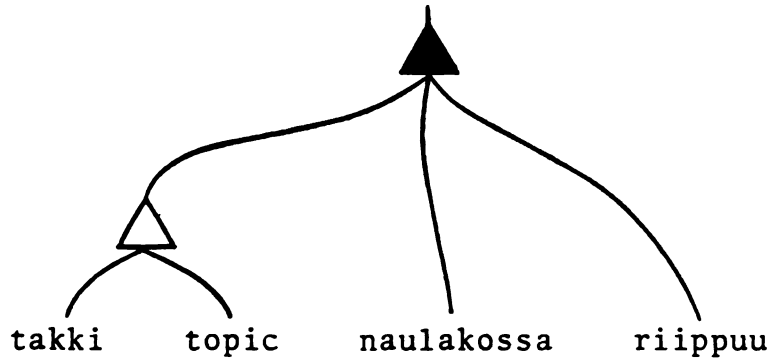


APPENDIX

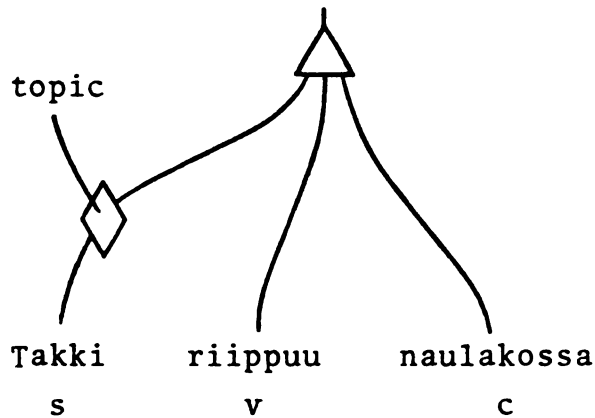
What follows are traces from the major diagrams given on pages 77 and 78. The examples come from the three different clause types discussed.

Traces for 22Aa (page 55) Takki riippuu naulakossa.  
coat hangs coatrack-in  
The coat hangs on the coatrack.

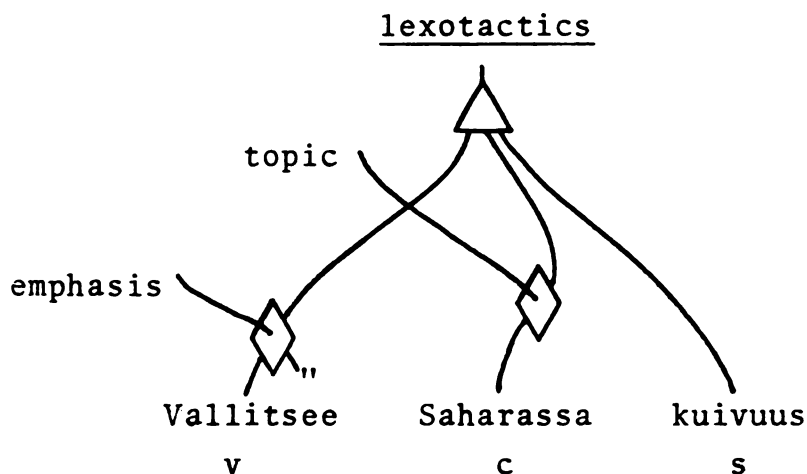
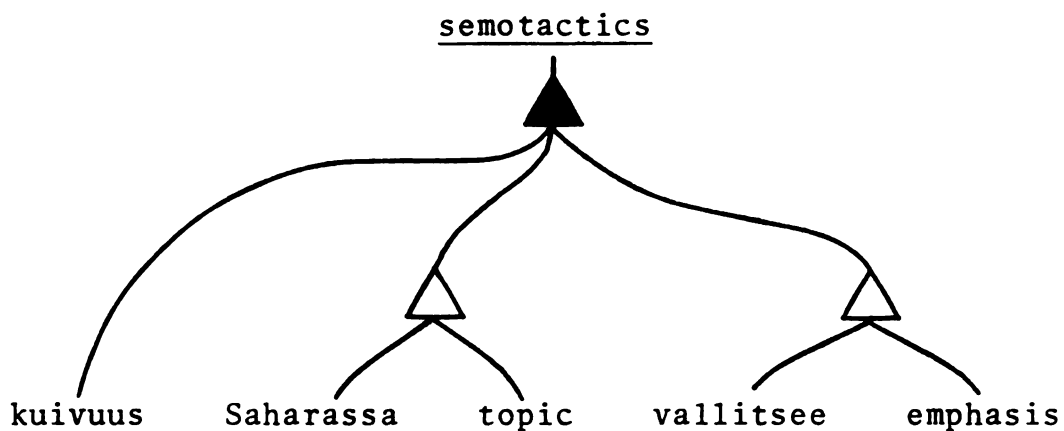
semotactics



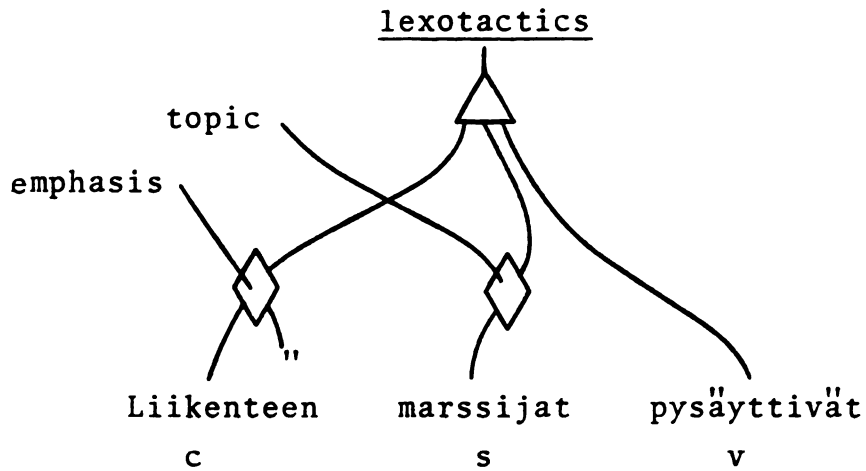
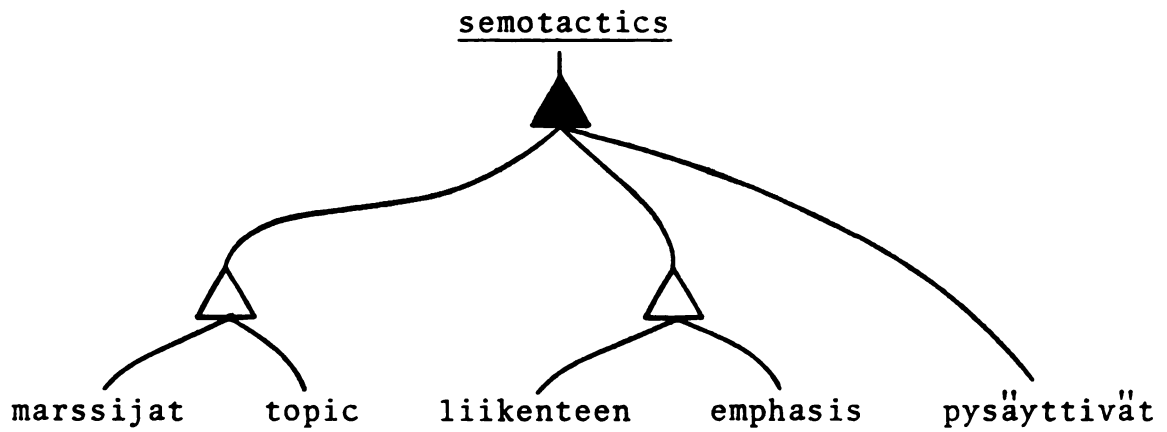
lexotactics



Traces for 26Bc (p. 59) Vallitsee Saharassa kuivuus.  
 obtains Sahara-in drought  
 There obtains indeed drought in the  
 Sahara.

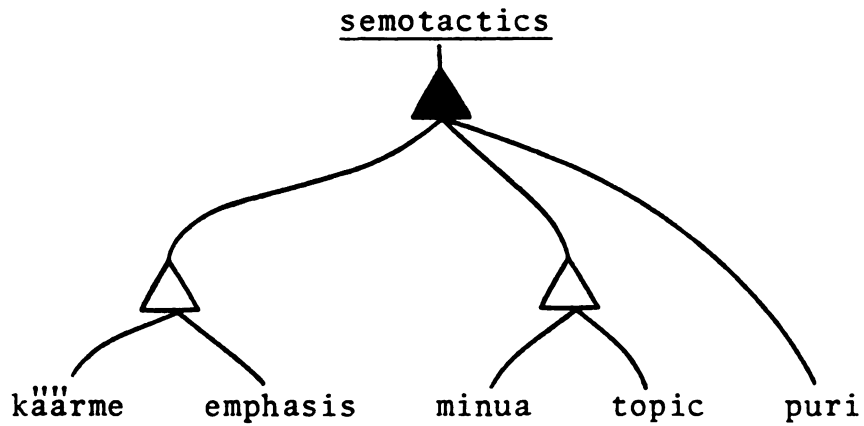


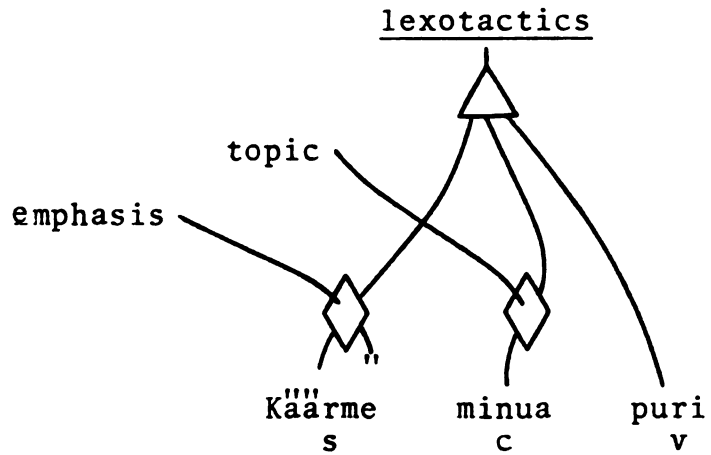
Traces for 33Ab (p. 63) Liikenteen marssijat pysäyttivät.  
 traffic demonstrators blocked  
 It was the traffic that the demonstra-  
 tors blocked.



Traces for 35Bb (p. 65)

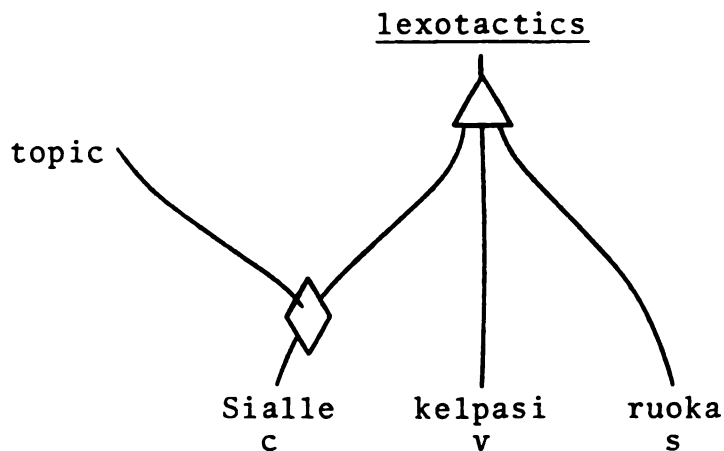
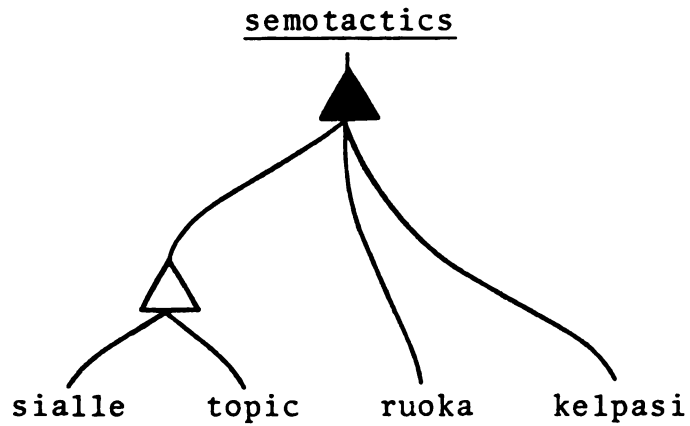
Käärme minua puri.  
snake me bit  
It was a snake that bit me.





Traces for 38Ba (p. 67)

Sialle kelpasi ruoka.  
 pig-to was food  
 acceptable  
 The pig was happy to have  
 palatable food.



Traces for 39Ac (p. 64)      Sulaa lumi keväällä.  
 melts snow spring-in  
 The snow does melt in the spring.

