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ABSTRACT

The order of constituents in Finnish clauses having free word order is analyzed. It is proposed that these clauses are defined only in terms of their immediate constituency, and that the logically possible permutations of these constituents form another set of sequence constructions, which transcend individual clause types. Each sequence construction encodes, by default, a particular pragmatic value and the definiteness of the order of the noun phrases. The formal concomitants of the sequence constructions are the order of the constituents and the accentual pattern. Thus, the same formal constituents in different combinations realize different constructions. The implicit claim is that sentences are not interpreted just against their context, but that the constructions themselves encode the pragmatics of their use. The analysis begins with a discussion of the traditional views of Finnish word order and proceeds to illustrate what pragmatic values word order encodes, how word order interacts with various kinds of definiteness, and how the partitive subject interacts with definiteness. Finally, the rules for the sequence construction are outlined. (MSE)

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FINNISH WORD ORDER AS A SET OF SYNTACTIC CONSTRUCTIONS

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In the heyday of transformational grammar free constituent/word order (WO) was considered to be a matter of stylistics. WO, however, even in a 'free-word-order' language, can have systematic semantic and/or pragmatic effects. Finnish is a free-word-order language where most clause types have free constituent order. I propose to define these clauses in terms of their immediate constituency only, and the logically possible permutations of these constituents then form another set of Sequence Constructions (SeqConstr), which transcend individual clause types. Each SeqConstr encodes by default a particular pragmatic value and the definiteness of the NPs. The formal concomitants (FC) of the SeqConstrs are the order of constituents and the accentual pattern. Thus, the same FCs in different combinations realize different constructions. I am implicitly making the claim that sentences are not interpreted just against their context, but the constructions themselves encode the pragmatics of their use. I will begin by discussing the traditional views of WO in Finnish, and next show what pragmatic values WO encodes, how WO interacts with various kinds of definiteness, and how the partitive subject interacts with definiteness. Last I will state the rules for the SeqConstrs.

1. Earlier Views

Word order in Finnish has not been studied thoroughly (Hakulinen 1983). Most observations on it have to do with existential clauses (e-clauses) which are typically defined in terms of one particular order, XVS, and its pragmatic function of introducing new discourse referents (Hakulinen & Karlsson 1979; Vilkuna 1987; Vähämäki 1984). These clauses actually have two unmarked orders, SVX and XVS, and the traditional view is that order expresses the difference between old information (OldInfo) and new information (NewInfo): the initial subject carries OldInfo and the final NewInfo (Ikola 1964:51 on native species). It has also been proposed that the initial subject presupposes the existence of its referent, while the final one asserts this existence (Ikola 1964:28), and that the initial subject names its referent, while the final subject classifies its referent as a member of a specific class (Siro 1964:52); these two claims can be understood as stating that WO expresses definiteness. Hakulinen (1983) discusses the functions of WO in general, but she does not propose any specific overall account. More recently it has been proposed that WO overall has to do with the expression of topic and focus, but these terms, however, do not have any agreed upon interpretations (Blum 1981; Kay & Karttunen 1985; Vilkuna 1987).

The consensus thus is that alternation in WO is to a large extent a pragmatic phenomenon. But WO also expresses definiteness in Finnish, which is what some of the traditional approaches tried to capture. This has

been explicitly denied recently (Vilkuna 1987), but I challenge this denial. Certain positions in the sequence of constituents do have default interpretations as definite or indefinite, but these defaults can be overridden by demonstratives, possessives, and other morpholexical means, and intonation. This means that the positional interpretation is not absolute, and it is this fact that probably has created the impression that WO is not, after all, involved in the expression of definiteness. Since definiteness is a multiply ambiguous term, I need to comment on it before discussing WO in detail.

## 2. Three Kinds of Definiteness

In the following discussion three different uses of the term definiteness will be involved. To avoid confusion, I will employ different names for each type. The first is definiteness as identifiability or locatability of the referent in the universe of discourse (Hawkins 1978; Karttunen 1968; Heim 1983). These will be called as follows: IdentDef for definite as identifiable or locatable in the discourse world, and IdentIndef for indefinite as not so identifiable or locatable. The following English examples illustrate this distinction:

1. The cat (IdentDef) is on the mat.
2. There is a cat (IdentIndef) on the mat.

Another kind of definiteness in Finnish linguistics is called the 'notive definiteness' which is equivalent to OldInfo and NewInfo (Enkvist 1978). These notions have to do with whether or not the speaker can assume that the addressee is able to reconstruct the denotation of the constituent in a particular context, i.e., Old and NewInfo is a property of constituents, not of entities (Välilimaa-Blum, in progress):

3. John (OldInfo) ate the apple (NewInfo).
4. It was the apple (NewInfo) that John ate (OldInfo).

The third group is called the 'quantitative definiteness' in the Fennistic tradition, and this distinction is expressed by the nominative and partitive case. The nominative denotes an exhaustive, delimited amount or entity, and the partitive a non-exhaustive, non-delimited amount or entity (Hakulinen & Karlsson 1979:169). Quantitative definiteness is most clearly manifest in the subject function in Finnish, and less so, e.g., in the object, where the nominative-partitive distinction also expresses aspect. I will call these two kinds of definiteness QuantDef and QuantIndef.

5. The girls (QuantDef ~ nominative) ate apples.
6. Some of the girls (QuantIndef ~ partitive) ate apples.

There are thus three different notions behind the single term definiteness. One has to do with whether or not the entities involved are uniquely identifiable in the

domain of discourse, one with whether or not the denotation of a constituent can be expected to be reconstructible at this point of the discourse, and one with the boundedness of the referent. All of these are involved with WO in Finnish.

### 3. On Constructions

I follow Fillmore (1985), Fillmore et al. (1987), and Zwicky (1987, 1988) and assume that syntax provides the speakers with a relatively large set of constructions, which are realized by a relatively limited set of FCs. Each construction has a specific meaning and/or pragmatic value. Syntactic constructions, thus, are linguistic signs in the sense of Saussure. Clausal constructions which have free WO, like e-clauses and transitive clauses, are characterized in terms of their immediate constituency, and their meaning is compositional. Clauses like the possessive construction, whose order is not completely free and whose meaning is arbitrary, must, of course, have their meaning and linear order independently stipulated (Vilimaa-Blum 1988). But for all the clauses which have free WO we can posit a set of constructions whose central FC is WO. Each SeqConstr has a default pragmatic value, and default semantics which relates to the definiteness of the NPs. We can account for the alternation of WO in Finnish with three constructions which share basically the same FCs, but in different combination in each.

### 4. The Pragmatic Values of Word Order

I will now consider the logically possible orders of S, V, and X in existential and transitive clauses. This alternation pattern can be found in any clause type having free WO, and my proposal is intended to cover all these types:

7. a. SVX - Sorsa ui lammessa.  
          duck-NOM swim-3sg pond-INE.
- b. SXV - Sorsa lammessa ui.
- c. XSV - Lammessa sorsa ui.
- d. XVS - Lammessa ui sorsa.
- e. VSX - Ui sorsa lammessa.
- f. VXS - Ui lammessa sorsa.

The above alternants can be divided into two groups (8A) and (8B) below, which have overlapping default pragmatics and semantics. These defaults may be overridden by morpholexical content and/or intonation, as stated above, but the basic idea is that we have defaults at many levels. Some are very general, but others are more and more specific, and the specific ones override the general ones (Zwicky 1986).

8.	A	B
i.	SVX	XVS
ii.	XSV	SXV
iii.	VSX	VXS

The verb-medial orders in (8i) are the neutral ones; their default accent pattern is the neutral contour (on intonation in these constructions see Välimaa-Blum, in progress). The initial constituent is the sentence-topic, what the whole sentence is about. These are also the orders whose final constituents introduce new discourse referents non-contrastively. It is also these two which most clearly express the IdentDef distinction, as we will see below. I define markedness pragmatically: the marked orders are always associated with specific propositional presuppositions, while the unmarked ones are associated either with existential or no presuppositions (Enkvist 1978:76). The following illustrate the neutral orders (OBJ/PAR and OBJ/GEN mean that the syntactic feature OBJECTIVE is morphologically realized by partitive or genitive, respectively):

9. Anna leikkii puutarhassa.  
Anna-NOM play-3sg garden-INE  
Anna is playing in the garden.
10. Hametta koristaa punainen nauha.  
skirt-OBJ/PAR adorn-3sg red-NOM ribbon-NOM  
The skirt is adorned with a red ribbon.

The verb-final orders in (8ii) encode a contrast whose scope is the first constituent. The entity denoted by this constituent is already present in the discourse model (Kay & Karttunen 1985), but it is introduced at this point as NewInfo contrastively; the rest of the sentence carries OldInfo. An important FC of this order is its initial focus or special phonetic prominence.

11. OMENAN Kalle söi.  
apple-OBJ/GEN Kalle-NOM ate-3sg  
It was an apple that Kalle ate.
12. KALLE omenan söi.  
It was Kalle who ate the apple.

To make explicit what it means to say that the first constituent is contrasted with something else in the universe of discourse, we can imagine (11) and (12) to be responses to something like the following, respectively:

- 11'. Kalle ate a pear.  
12'. Ville ate an apple.

The verb-initial orders in (8iii), too, have an initial focus by default:

13. UI sorsa lammessa.  
swam-3sg duck-NOM pond-INE  
The duck DID swim in the pond.
14. UI lammessa sorsa.  
swam-3sg pond-INE duck-PAR  
In the pond there DID swim a duck.



Now the initial constituent, however, does not have a contrastive reading the way the previous set had. These orders emphatically assert the proposition expressed by the corresponding neutral orders (13') and (14'), it being implied that the truth of this proposition has been challenged.

13'. Sorsa ui lammessa.  
 duck-NOM swam-3sg pond-INE  
 The duck was swimming in the pond.

14'. Lammessa ui sorsa.  
 pond-INE swam-3sg duck-NOM  
 There was a duck swimming in the pond.

We have now identified specific pragmatic values for the various WO-alternants. The verb-medial orders are the neutral ones whose first constituent is the sentence-topic. The verb-final orders encode contrast on the initial constituent, and the verb-initial orders emphatically affirm the truth of the whole proposition.

##### 5. Definiteness and Word Order

It has often been noted in the literature that a particular WO sounds strange (e.g., Kay and Karttunen 1985) with one lexical content, but the same order is perfectly fine with some other words. I propose that the reason for this is that there is a mismatch between the semantics of that particular order and some property associated with the lexical items. For example, the neutral order for transitive clauses is SVO, but (15) with the OVS-order is the only unmarked variant of this particular clause (Heinämaa 1976); (16) with the SVO-order cannot be unmarked, though it is possible with a marked accentual pattern (17), which signals that the default interpretation is not applicable.

15. Minua puri k#ärme.  
 I-OBJ/PAR bit-3sg snake-NOM  
 I was bitten by a snake.

16. \*K#ärme puri minua.  
 snake-NOM bit-3sg I-OBJ/PAR

17. K#ärme puri MINUA.  
 The snake bit ME!

In e-clauses with a nominative subject both XVS (18) and SVX (19) can be unmarked orders:

18. Lammessa ui sorsa.  
 pond-INE swam-3sg duck-NOM  
 There was a duck swimming in the pond.

19. Sorsa ui lammessa.  
 duck-NOM swam pond-INE  
 The duck was swimming in the pond.

However, there are e-clauses whose nominative subject cannot be neutrally final (20) and (21), or initial (22), as Hakulinen (1983), too, notes:

20. \*Pihalla juoksee se.  
yard-ADE run-3sg it-NOM
21. \*Iappeenrannassa asuu Kirsi.  
Lappeenranta-INE live-3sg Kirsi-NOM
22. \*Nälänhätä on Etiopiassa.  
famine-NOM be-3sg Ethiopia-INE

A clue to the unacceptability of these examples comes from (18) and (19) where we can see that constituent order encodes the definiteness of the subject. When the subject is final, it is interpreted as IdentIndef (18), while the initial subject is interpreted as IdentDef (19). This definiteness interpretation applies to non-subject constituents, too, but additional factors like the expression of aspect may also be involved, as noted already, and these make the picture less transparent for non-subjects. The sequencing gives the default interpretations, which we see overridden by intonation in (17) and by a possessive pronoun in (16').

- 16'. Meidän käärme puri minua.  
our-GEN snake-NOM bit-3sg I-OBJ/PAR  
Our snake bit me.

If the sequencing indeed encodes definiteness, then we see why (16) and (20) - (22) were not acceptable. In (20) and (21) there is a mismatch between the final position and the definiteness of the subject: final constituents are interpreted as IdentIndef by default, while a pronoun and proper noun are inherently IdentDef. This explains also (16): the subject is pragmatically IdentIndef, and thus its unmarked position is at the end. In (22) the subject is lexically inherently indefinite and thus its neutral position, too, is final.

The nominative subject can thus be unmarked in both the initial and the final position, but only as long the noun itself can have both the IdentDef and IdentIndef interpretations, which was this was the case in (18) and (19). But if the subject denotation is inherently or pragmatically either IdentDef or IdentIndef, then in the unmarked order it can only be initial or final, respectively, but not both. (16) and (20) - (22) illustrate these instances.

In the contrastive orders the referent of the initial constituent is contrasted with some alternative(s) in the universe of discourse, but the definiteness of the contrasted item depends on the context, i.e., the initial constituent is ambiguous in this respect:

23. PUUSSA orava istuu.  
tree-INE squirrel-NOM sit-3sg  
It's in the/a tree that the squirrel is sitting.



24. ORAVA puussa istuu.  
squirrel-NOM tree-INE sit-3sg  
It's a/the squirrel that sits in the tree.

In these orders all but the contrasted constituent carry OldInfo. The second constituent is interpreted as IdentDef. Consider the following example where the IdentDef second position noun denotes famine, an entity which is inherently IdentIndef:

25. ?ETIOPIASSA nɔlɔnhɔtɔ on.  
Ethiopia-INE famine-NOM be-3sg  
?It's in Ethiopia where the famine is.

(25) is odd as such, even though a context like (26) might make it felicitous:

26. Sudanissa on nɔlɔnhɔtɔ.  
Sudan-INE be-3sg famine-NOM  
There is famine in Sudan.

But if we add a demonstrative se 'that' before the subject in (25), the utterance is perfectly natural.

- 25'. ETIOPIASSA se nɔlɔnhɔtɔ on.  
Ethiopia-INE that-NOM famine-NOM be-3sg  
It's in Ethiopia where that famine is.

The verb-initial emphatic orders also interact with definiteness. The constituent after the verb is interpreted as IdentDef and the final as IdentIndef. The propositions that the verb-initial orders emphasize relate to the unmarked orders as follows:

- 27a. marked VSX emphasizes the neutral SVX  
b. marked VXS emphasizes the neutral XVS

Thus, (28) below is the emphatic affirmation of (29), and (30) of (31). (30) is odd, apparently because it emphatically affirms the proposition (31) expresses which is itself already odd due to the mismatch of WO and the subject's inherent indefiniteness.

28. ON Etiopiassa nɔlɔnhɔtɔ.  
be-3sg Ethiopia-INE famine-NOM  
There IS indeed famine in Ethiopia.

29. Etiopiassa on nɔlɔnhɔtɔ.  
Ethiopia-INE be-3sg famine-NOM  
There is famine in Ethiopia.

30. ?ON nɔlɔnhɔtɔ Etiopiassa.  
be-3sg famine-NOM Ethiopia-INE  
?The famine IS indeed in Ethiopia.

31. \*nɔlɔnhɔtɔ on Etiopiassa.  
famine-NOM be-3sg Ethiopia-INE

We have seen in this section how WO interacts with definiteness. Particular positions in the sequence of

constituents have default interpretations as either IdentDef or IdentIndef. A lexical item may violate this assignment either inherently or pragmatically, and the resulting utterance will be either impossible or marked.

## 6. The Partitive Subject and Word Order

It is generally agreed that the neutral position for a partitive subject is at the end, while the initial position is marked for these subjects. For example, Vähämäki (1988) and Hoover (1984) explicitly note that the initial position is a marked one for partitive subjects. No explanation, however, is offered for why the final position should be unmarked, or why the initial position should be marked. The answer lies in the semantics of the partitive subject. They are QuantIndef: they denote non-exhaustive, non-delimited entities. As such they are interpreted as inherently IdentIndef, which gives them their unmarked position at the end. (32) illustrates the only neutral order for partitive subjects.

32. Puutarhassa istui naisia.  
garden-INE sat-3sg women-PAR  
There were women sitting in the garden.

The contrastive orders with partitive subjects are not different from those with nominative subjects. The partitive can be contrasted (33), and it can also be the IdentDef constituent (34) because it is already contextually established in this order.

33. NAISIA puutarhassa istui.  
women-PAR garden-ADE sat-3sg  
It is WOMEN that were sitting in the garden.

34. PUUTARHASSA naisia istui.  
garden-ADE women-PAR sat-3sg  
It was in the GARDEN that women were sitting.

The sentences below have the emphatic, verb-initial orders:

35. ISTUI puutarhassa naisia.  
sat-3sg garden-ADE women-PAR  
There DID sit women in the garden.

36. ?ISTUI naisia puutarhassa.  
sat-3sg women-PAR garden-ADE

(36) is odd in a very subtle way, which oddity was already discussed above. The proposition that this utterance emphatically affirms is that expressed by the corresponding partitive-initial neutral order (36'), which itself is odd with the neutral intonation:

- 36'. \*Naisia istui puutarhassa.  
women-PAR sat-3sg garden-INE.

In the emphatic orders, too, the final position is interpreted by default as IdentIndef. When this position

is filled by a proper noun or a pronoun, the utterance is odd with the default intonation (37) of this order. If we have a double focus, the resultant utterance is normal, but it has the added semantics 'at least' (38).

37. \*MENI kouluun Jussi/ hän.  
went-3sg school-ILL Jussi-NOM she/he.

38. MENI kouluun JUSSI/HÄN.  
At least JUSSI/SHE/HE (deictic) went to school.

The reason why the partitive subject is final by default thus has to do with its semantics: partitive nouns denote QuantIndef entities, and as such they are interpreted also as IdentIndef. Consequently, their neutral position is final, while clause-initially they are marked.

I have now discussed the pragmatic values of WO, how WO interacts with IdentDef and IdentIndef interpretations, and how QuantIndef partitive subjects pattern with the IdentIndef subjects. Next I will state the rules for these SeqConstrs using an informal version of unification formalism.

### 7. The Sequence Constructions

The formal concomitants of the SeqConstrs are their constituent order and the accent pattern. Each SeqConstr encodes by default a certain pragmatic value, and each also has a default interpretation with respect to the definiteness of the NPs, which is most transparent for the subject. The rules proposed here are intended to embrace all clause types in Finnish that have free constituent order. But also those clauses whose order and semantics must be arbitrarily stipulated can be seen to conform to this same pragmatic and semantic skeleton (Välilimaa-Blum, in progress). The first rule is for the overall default. The accent pattern is not specified in the rule because it is the overall default intonation, which consists of a downstepping sequence of L+H<sup>+</sup> accents, the finite verb being accentless (see *ibid.*)

OVERALL            Constituent set: NP<sub>1</sub>, V, NP<sub>2</sub>.  
DEFAULT:           Category: S  
                      Sequence: <NP<sub>1</sub>, V, NP<sub>2</sub>>

Pragmatic value: unmarked

Semantics: NP<sub>1</sub> is interpreted as IdentDef  
and NP<sub>2</sub> as IdentIndef by default

The next rules are for the marked orders. They both have an initial focus but its interpretation is different depending on the order. First comes the contrastive construction:

CONTRAST: Constituent set: (NP<sub>i</sub> [+Focus]), V, NP<sub>i</sub>.  
Category: S  
Sequence: <(NP<sub>i</sub> [+Focus]), NP<sub>i</sub>, V>  
Pragmatic value: marked; contrast on  
 [+Focus] constituent  
Semantics: NP<sub>i</sub> is interpreted as IdentDef  
 by default

The emphatic orders have the verb at the beginning, and the Focus has the whole proposition in its scope:

EMPHATIC: Constituent set: NP<sub>i</sub>, (V [+Focus]), NP<sub>i</sub>.  
Category: S  
Sequence: <(V [+Focus]), NP<sub>i</sub>, NP<sub>i</sub>>  
Pragmatic value: marked; emphatic  
 affirmation of the proposition  
Semantics: NP<sub>i</sub> is interpreted as IdentDef  
 and NP<sub>i</sub> as IdentIndef by default

### 8. Summary

We have examined the order of constituents in those clauses in Finnish which have free WO. I proposed three SeqConstrs: one overall default, one contrastive and one emphatic. The major FC in each is the sequence of the constituents; intonation is another FC. Each construction encodes a unique pragmatic value, and a specific semantic interpretation for the NP positions. Each construction may also have non-default pragmatic functions and semantics, in which case they also have a non-default accentual pattern. The defaults are values that are assumed unless something else is indicated. This overriding can be done by morpholexical means and/or intonation.

It has been noted that in morphology the same FC can participate in the realization of several distinct constructions. Zwicky (1988) illustrates this with 'English laxing' and German Umlaut, which appear in many distinct rules. Anderson (to appear) shows the same in Icelandic: one 'morpheme' has several distinct functions depending on the construction. We have an identical phenomenon here. Virtually the same FCs are involved in each of the three SeqConstrs, but the way they are combined makes a difference. This idea of sharing FCs is the foundation of the rule-constellations that Janda and Joseph (1987) propose.

In positing independent constructions for WO enables us to capture the important generalization that WO transcends the individual clause types in Finnish. Defining the existential clause in terms of one particular order misses the fact that the same order is found in other clause types, too, and with exactly the same pragmatics and semantics. The adoption of the constructional approach also gives us a better understanding of the uses of sentences in discourse. A text involves a rapid unfolding of linguistic material. It is to the benefit of both the

speaker and the addressee to have to perform the minimum number of non-conventional operations per utterance. If we have sentence-level linguistic signs, which have a conventional form, meaning and function, this facilitates both the production and comprehension of the text.

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