

LÁSZLÓ KÁLMÁN
WORD ORDER IN NEUTRAL SENTENCES*

C. Introduction

Hungarian sentences that show a *level prosody*, unless consisting of a single word only, have several main stresses, i.e. there is no distinguished "sentence stress" in them.¹ In Hungarian, level-prosody sentences are neutral, as opposed to corrective sentences that have one or more *eradicating stresses*.²

In the present paper we are not concerned with the discussion of the literature of Hungarian word order; instead, we intend to give a brief descriptive survey of the problem. The paper, however, starts with the necessary theoretical and terminological background (Section 1), to be followed by the description of Hungarian level-prosody sentences: their logical predicate--argument structure (Section 2), the distribution of NP types in them (Section 3), and their constituent structure (Section 4).

1. Some Remarks on Hungarian Sentence Articulation

1.1. Terminology

Besides the characteristic prosody patterns, the immediate neighborhood of the finite verb is also of utmost importance in a Hungarian sentence. As a rule, the finite verb is a \bar{V} (i.e. a complex verb: a verbal modifier plus a finite verb),³ where the verbal modifier is stressed and the verb itself is unstressed. In a level-prosody sentence, the stressed position before a finite verb is the so-called *Hocus position* (as opposed to the *Focus position* of corrective sentences); see Kálmán *et al.* (1984b). The *pre-verbal* part of a sentence precedes the Hocus position.

There is a special type of level-prosody sentence,

where the verbal modifier immediately follows the stressed verb, called *imperfective* sentence, because of the aspect it most often expresses. Another special type to be mentioned is the so-called *identifying* sentence, whose unstressed finite verb is preceded by an argument or adverbial (neither of which is a verbal modifier); any verbal modifier will follow the finite verb immediately.

1.2. Pre- vs. Post-Verbal "Arguments"

If asked, a Hungarian speaker will say that the reason why an argument precedes the verb while others follow it is that the pre-verbal "argument" denotes the thing that is spoken about, whereas the verb and the post-verbal arguments denote what is said about it:

- (1) A 'barátomat 'megharapta a 'kutyám.
 the friend-my-acc pref-bit-3dSg the dog-my
 'My friend was bit by my dog.'
 (Pre-verbal part = *a barátomat*; verbal part = *megharapta a kutyám*; Hocus element = *meg* (a verbal modifier).)
- (2) A 'kutyám 'megharapta a 'barátomat.
 'My dog bit my friend.'

Sentence (1) is about my friend, "adding" that my dog bit him; sentence (2), on the other hand, is about my dog, "adding" that it bit my friend.

The above facts allow two possible interpretations: we can either translate the verb *megharap* 'bite' by a two-place predicate into a semantic metalanguage, assuming that an independent, e.g. theme--rheme, articulation is defined over the parts of a sentence, or else we are to assign different logical predicate--argument structures to the two sentence types. (For reasons to be mentioned in Section 4 we ignore here a third solution which would entail a distinction between their syntactic constituent structures.)

NEUTRAL WORD ORDER

In the following we shall present two phenomena that constitute independent evidence for the second solution; further evidence will be given in Sections 2, 3 and 4.

1.2.1. Verbal Sentences

Verbal sentences, i.e. sentences without a pre-verbal part, tend to express simple events rather than n-ary relations.⁴ The idea that verbal sentences are simply *complex predicates* is supported by the fact that in most cases they can be re-formulated by a single lexical predicate in Hungarian or other languages:

- (3) 'Esik az 'eső. = 'Esik.
falls the rain
'It is raining.'
- (4) 'Esik a 'hó. = 'Havazik.
falls the snow
'It is snowing.'

Native speakers tend to express the intuitive view that verbal sentences say nothing about anybody or anything in particular, they just refer to events:

- (5) 'Kigyulladt az 'iskola.
out-fire-caught-3dSg the school
'The school caught fire.'

A verbal sentence may contain any type of verb (stative, instantaneous, movement, etc. verbs); neither is the "deep case" of the post-verbal arguments relevant:

- (6) 'Jön a 'tanár url
comes the professor Mr.
'The professor is coming!'
- (7) 'Megharapta a 'barátomat a 'kutyám.
'My friend was bit by my dog.'

1.2.2. *The Behavior of Idioms*

In Hungarian, idioms are never split, that is, they never have their first part in the pre-verbal section and the second in the verbal part (an observation due to I. Kene-sei). Since idioms are semantically simple, non-compositional predicates, this fact strongly supports our hypothesis:

- (8) 'Veri az 'ördög a 'feleségét.
 beats the devil the wife-his-acc
 'It is raining and the sun is shining.'
- (9) 'Ördög veri a 'feleségét.
 'Id.'
- (10) Az 'ördög 'veri a 'feleségét. (1)
 'The devil is beating his wife.'
 (no idiomatic reading is possible)

1.3. *Subject--Predicate vs. Modifier--Predicate Relationships*

Among others, the above considerations have led us to describe Hungarian sentence structure in a terminology where (Aristotelian) subject--predicate relationship and modifier--predicate relationships are distinguished. The subject--predicate relationship is something that is sometimes called topic--comment relationship, with two crucial differences: (1) it is not superposed to logical predicate--argument structure but rather follows from the latter; (2) it has nothing to do with the given/new nature of the meaning of the constituents. A complex predicate is a modifier plus a predicate; a sentence, on the other hand, is a subject plus a predicate.

In view of the above, the logical predicate--argument structure of (1) and (2), respectively, are as follows:

NEUTRAL WORD ORDER

(1') [SENT [SUBJ my friend] [PRED [PRED was bit] [MOD by my dog]]]

(2') [SENT [SUBJ my dog] [PRED [PRED bit] [MOD my friend]]]

Notice that the Hungarian verb *megharapta* can participate in (at least) two types of modifier--predicate construction, it can either have an Agent or an Object argument, which is not the case in English, where an Agent complement is only possible if the verb is in the passive, cf. (1'). The surface case of the subject is determined by the whole complex predicate rather than by the main verb.⁵

An interesting property of natural language predicates is that they can form a complex predicate with either of their modifiers, i.e. [PRED [PRED [PRED P] [MOD M₁]] [MOD M₂]] = [PRED [PRED [PRED P] [MOD M₂]] [MOD M₁]], despite the fact that the surface order of modifiers is predefined in some cases. In Hungarian level-prosody sentences the freedom of surface order happens to reflect this property, albeit with some restrictions as we shall see later.

2. Predicate--Argument Structure of the Level-Prosody Sentence

In the sentences shown so far the predicate was the verbal part. The first post-verbal complement forms a complex predicate with the \bar{V} , the subsequent complement forms a complex predicate with the complex predicate, etc. The verbal modifier can be considered to be the closest argument, since the \bar{V} is the complex predicate that most often undergoes lexicalization and shows the presence of incorporation phenomena in Hungarian.

The Hocus position can be occupied by four types of elements:

1. the verbal modifier, cf. (1), (2), (5), (7);
2. the finite verb itself: (a) in imperfective sentences, cf. (3), (4), (6), (8), (10); (b) if the finite verb is a lexical \bar{V} , e.g. a negative verb:

- (11) A 'gyerek 'utálja az 'iskolát.
 the kid hates the school-acc
 'The kid hates school.'

3. a complement, cf. (12), or an adverb, cf. (13), in identifying sentences:

- (12) 'Pista vitte a 'gyereket az 'iskolába.
 Pishta took the kid-acc the school-into
 'The one who took the kid to the school is Pishta.'

- (13) 'Tegnap vitte a 'gyereket az iskolába.
 yesterday
 'When he took the kid to the school was yesterday.'

4. special \bar{V} -adverbs, such as negative particles, *gyakran* 'often', etc.:

- (14) 'Pista 'gyakran vitte a 'gyereket az 'iskolába.
 'Pishta often took the child to school.'

Certain "universally quantified" adverbs (e.g. *mindig* 'always', etc.) must precede the Hocus immediately; otherwise, the pre-Hocus order of adverbs and complements is as free as that of the post-verbal ones (i.e., quite fuzzy: word order alteration never causes ungrammaticality, but the result may be odd). If there is a subject in the sentence, the adverbs between the subject and the Hocus are the modifiers of the predicate, and they are only valid for the sentence in which they occur:

- (15) 'Juli a 'kertben 'olvasott. 'Pista 'verte
 Juli the garden-in reading-was Pishta beating-was
 a 'gyereket.
 the kid-acc
 'Juli was reading in the garden. Pishta was beating
 the kid (not in the garden).

The modifiers of the whole sentence, occurring in a quasi-free order before the subject, and the subject itself, too, may be valid for several sentences:⁶

NEUTRAL WORD ORDER

- (16) A 'kertben 'Juli 'olvasott. 'Pista 'verte a 'gyereket.
'Juli was reading in the garden. Pishta was beating
the kid (probably in the garden).'

From the above we may conclude that the main predicate of a Hungarian sentence is its *post-subject* part.

For the time being, the principles of subject choice are very unclear. We only know for sure that (1) an NP with Agent function can always be a subject; (2) an animate NP can be the subject mostly if the Agent is non-animate (i.e. in cases like 'the machine broke Pishta's arm', whatever the "deep case" of *the machine* may be); (3) the subject is non-animate and non-Agent only if there is no animate complement. Certain NPs (e.g. most of the non-specific ones, see Section 3) cannot be subjects.

3. Distribution of NP Types in Level-Prosody Sentences

Since the so-called non-specific NPs are non-referential, it is reasonable to suppose that they form complex predicates with other predicates. Despite the fact that we have no exact definitions of non-specific NPs at hand, they can still be distinguished at least from explicitly anaphorical and explicitly constant-creating NPs. For the sake of simplicity, we shall call any NP non-specific which is neither anaphorical nor constant-creating.

Now, in Hungarian, non-specific NPs always occur in the verbal part of the level-prosody sentence. The only exception is the case of generic non-specific NPs, as in the statement "An anaphor is bound in its governing category". Another interesting restriction on their distribution is that if the sentence contains one or more non-specific NPs, one of them must occupy the Hocus position. This restriction is lifted in the three marked cases mentioned above, namely (1) a negative adverb or another similar adverb will occupy the

Hocus; (2) in an imperfective sentence, the finite verb will be stressed; (3) in an identifying sentence, the identified NP or adverb will occupy the Hocus position.

Similarly to the verbal modifier, the non-specific NPs which are not in the Hocus position follow the verb immediately. (In fact there is no evidence that they are not verbal modifiers themselves.) This rule is overridden by speech errors and archaisms only.

Anaphoric and constant-creating NPs may occur in any position except Hocus, which they occupy in identifying sentences only.

4. *Constituent Structure of Level-Prosody Sentences*

The syntactic constituent structure of a level-prosody sentence is roughly the same as its predicate--argument structure. This is obvious from the constituency test we employed: in a construction of the form $A X Y B$, X and Y form a constituent if and only if there is a lexical Z that may occupy the position of X and Y . The term *lexical* here means that Z is either a single unit or else its meaning is non-compositional. If X and Y form a discontinuous constituent (in a string of the form $A X B Y C$), then Z cannot be a single item ($Z = Z_1 + Z_2$); in such cases we require that the categories of X and Y should be equal to the categories of Z_1 and Z_2 , respectively.

Since *per definitionem* Z is a simple (or non-transparent) element and still can have the function of $X + Y$, the latter construction is most probably a subject, a predicate or a modifier in $A X (B) Y C$. Consequently, the tree of constituent structure cannot really differ from that of the logical predicate--argument structure. On the other hand, an attempt to assign a hierarchical constituent structure to a string which has a highly free word order will cast the shadow of a doubt. This doubt, however, will be

ignored here.

Discontinuous constituents are extremely rare in Hungarian level-prosody sentences: the only instance is probably a type of auxiliary construction (cf. Kálmán *et al.* (to appear)):

- (17) 'fel akar 'menni
 up wants go-inf
 'he/she wants to go up'

The discontinuous infinitive can be substituted for by a lexical \bar{V} in infinitive form:

- (18) 'fel akar 'vágni
 up wants cut
 'he/she wants to show off'

It is often claimed that possessive constructions can be discontinuous in Hungarian (cf. Szabolcsi (1981, 1984)). This, however, is not the case:

- (19) 'Pistának 'megharapták a 'gyerekét.
 Pishta-dat. Pref-bit-3dPl the child-acc.
 'Pishta had his child bitten.'

In (19), *Pistának ... a gyereket* cannot be substituted by any lexical (idiomatic) construction, whereas *megharapták a gyereket* can:

- (20) 'Pistának 'elment az 'esze.
 Pishta-dat away-went the mind-his
 'Pishta went crazy.'

- (21) 'Pistának 'befellegzett.
 Pishta-dat up-clouded-3dSg
 'Pishta's fate is sealed.'

- (22) *A lopásnak elbocsátották a következtében.
 the theft-dat sacked-3dPl the consequence-its-in
 'As a result of the theft he/she was sacked.'

A lopásnak a következtében can be considered idiomatic because there is no Hungarian noun **következet*.⁷

NOTES

*I am indebted to András Kornai and Gábor Prószéky for their remarks.

1. For exact definitions, see Kálmán *et al.* (to appear), Kornai and Kálmán (to appear).
2. For details see Kálmán *et al.* (to appear). É. Kiss considers only eradicating-stress sentences, although giving neutral translations as a rule, cf. e.g. É. Kiss (1981).
3. See Ackerman and Komlósy (1983), Ackerman (1984), Komlósy (1984).
4. I owe this observation to A. Tich.
5. For similar mechanisms, namely cases where aspectual features of a complex predicate are determined by the whole construction, see e.g. Somers (1980), de Groot (1985).
6. In Hungarian, it is possible to drop the subject and the definite object without using an explicit anaphor; the finite ending of the verb can function as agreement marker (if there is a nominative NP or a definite object) or as anaphor (if one of them is absent).
7. The data in Marácz (1984) contradicting our judgment of (22) are unreliable or archaic.

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NEUTRAL WORD ORDER

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