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Once more on the melodic segmentation of Hungarian utterances

In this article I return to my views on the melodic segmentation of the Hungarian utterance (Varga 2002 : 87–124), in the light of some of the criticisms that Péter (2003) and Kenesei (2003) have levelled at them. In particular, I will concentrate on three areas: (a) the division of the utterance into major blocks, (b) the syntactic background of so-called equivalent blocks, and (c) the problem of sentence splitting versus afterthought addition.

1 The division of utterances into major blocks

By the MELODIC SEGMENTATION of an utterance I mean the division of the utterance into tonosyntactic blocks. This happens in the second stage of the syntax–phonology mapping (see Varga 2002 : 8–9, 87–124).[1] I use the term TONOSYNTACTIC BLOCK to refer to syntactically based units that are relevant to establishing the melodic structure of utterances.

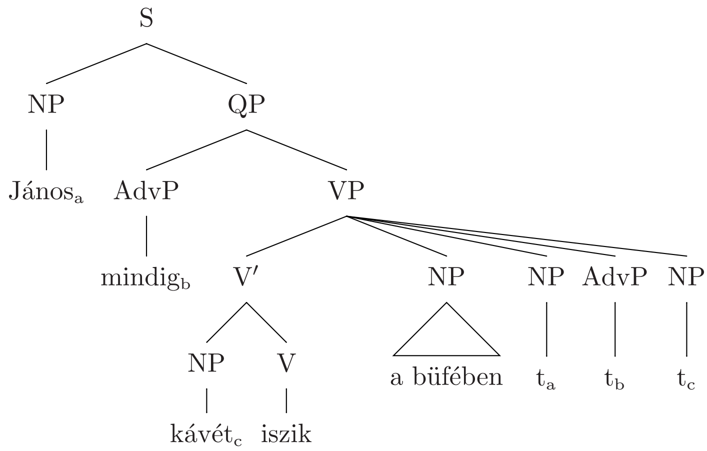
An UTTERANCE is both a prosodic unit (see, for example, Vogel 1987), and a communicative unit (see Péter 1991 : 125–130) of language. It can be simple or complex. A simple utterance is the spoken realization of a single highest-ranking sentence. A highest-ranking sentence is a sentence which is not itself part of an even higher-ranking sentence. A SENTENCE is a syntactic category. The prototypical sentences are structural-functional entities. They are structural because they realize a particular (sometimes elliptical but reconstructible) structure which is regarded as sentence structure (see É. Kiss 1998 : 31–57), and they are functional because they perform independent illocutionary acts. For instance, the sentence in (2) (overleaf) is a structural-functional sentence, displaying sentence structure and performing the illocutionary act of making a statement.

In contrast, the sentences in (1) are only functional, i.e., they have a particular illocutionary force each, but they do not realize a construction that could be structurally identified with a sentence.

(1)	a. Igen. ‘Yes.’	b. Nem. ‘No.’	c. Persze. ‘Of course.’
	d. Tessék? ‘Pardon?’	e. Kuss! ‘Shut up!’	f. Jaj! ’Ouch!’

[1] The first is the stage of stress fixing (cf. Varga 2002 : 6–7, 138–148). Consequently, what enters the stage of melodic segmention is a STRESSED SYNTACTIC SURFACE STRUCTURE, in which the stressed and pitch-accented elements are indicated.

(2)



John always coffee-ACC drinks the snackbar-in
'John always drinks coffee in the snackbar.'

That the functional sentences are also sentences is proved by their ability to join the structural-functional sentences in coordination, as in (3a), or in subordination, as in (3b):

(3) a. Hozzáért, és bumm! Literally: 'He touched it and bang!'
b. Úgy összeverték, hogy na! Literally: 'They beat him so that wow!'

Prosodically a highest-ranking sentence corresponds to a MAJOR TONOSYNTACTIC BLOCK or MAJOR BLOCK for short. A major block enjoys melodic autonomy: its last (rightmost) intonation contour is chosen freely by the speaker to express the communicative type (direct illocution) of that particular highest-ranking sentence and the special attitude associated with it. This intonation contour is not determined by any other intonation contour within the utterance. Each of the examples in (1), (2) and (3) realizes a single highest-ranking sentence (a single major block) and so each of them has a final intonation contour that depends on nothing but the speaker's illocutionary intention and attitude. That is to say, each of the examples we have seen so far is a simple utterance. In the stage of melodic segmentation simple utterances are provided with primary intonational phrase boundaries on either side. This is to indicate that they form primary intonational phrases, cf. (4).

(4) a. | János mindig kávét iszik a ˋbüfében. | b. | ˋIgen. | c. | ˋNem. |
d. | ˋPersze. | e. | ^Tessék? | f. | ˋKuss! | g. | ˋJaj! |
h. | Hozzáért, és ˋbumm! | i. | Úgy összeverték, hogy ˋna! |[2]

[2] The vertical lines (|) represent intonational phrase boundaries. The symbols ˋ, ˊ, ^, ˈ are tonetic stress marks, which indicate falling, rising, rising-falling and half-falling intonation contours beginning on the syllable whose orthographic form they precede, and simultaneously, stress (pitch accent) on that syllable. Accent marks *over* certain vowel letters, as in

In later steps of the melodic segmentation these major blocks are analysed further into constituent blocks which I call MINOR TONOSYNTACTIC BLOCKS, or just MINOR BLOCKS (see section **2** below). Since some of the minor blocks may be accommodated in separate intonational phrases, some of the primary intonational phrases in (4) may be broken down into series of smaller intonational phrases. For instance, the original single, primary intonational phrase of (4h) can be divided into two intonational phrases, cf. (4h′).

(4) h.′ | ˊHozzáért, | és ˋbumm! |

But utterances can also be complex. A complex utterance consists of more than one major block, i.e., more than one highest-ranking sentence and, consequently, more than one primary intonational phrase.[3] Consider, for instance, (5).

(5) | ˋHurrá, | ˋ indulunk! |
hurray start-we
'Hurray, we are starting out!'

In (5) there are two highest-ranking sentences (two major blocks) put side by side, and each of them is associated with the performance of a separate illocutionary act. Although the highest-ranking sentences in a complex utterance are in separate intonational phrases, these intonational phrases are prosodically united into an utterance. One of the means to achieve their prosodic unity is making less substantial pauses between them than between separate utterances. In (5), for example, even if there is a pause between *hurrá* and *indulunk*, it is relatively short to prevent interpretation of the two intonational phrases as two separate utterances. Another device of complex utterance formation is the realization of downdrift between the intonational phrases of the same utterance. In (5) the second fall may have a slightly lower peak than the first.

The unity of the two major blocks in (5) is also corroborated by their uneven semantic-communicative significance within the complex utterance. I think that in a complex utterance the speaker usually regards one of the major blocks as being communicatively more important than the other(s), and this is the force that holds these major blocks together. For instance, in (5), in which a functional sentence, *hurrá*, is followed by a structural-functional sentence, *indulunk*, the latter sentence is the communicatively more important part. In his criticism, Péter (2003) finds this unconvincing. He says that this assumption runs counter to the definition of the utterance as a unit of linguistic communication and suggests that we should consider complex utterances as having synthesised communicative meanings rather than clusters of individual communicative meanings. I agree that certain configurations of major blocks that are often used together in complex utterances do occasionally make a kind of synthesised interpretation possible, but I still think that within a complex utterance such as (5) the illocutions of *hurrá* and *indulunk*

e.g., *János*, indicate vowel length in Hungarian orthography, and have nothing to do with intonation.

[3] In a complex utterance some of the major blocks can be inorganic (e.g., quoting clauses, vocatives, etc., see Varga 2002 : 93–97). I am not going to deal with these possibilities here.

preserve their relative independence and this explains their intonational autonomy. This view does not contradict the principle that "an utterance is a unit of linguistic communication" because such a unit can also be envisaged as being composed of a main part and a subsidiary part intimately attached to it.

2 The syntactic background of equivalent blocks

After dividing the complex utterance into primary intonational phrases, which correspond to the major blocks (highest-ranking sentences) that constitute the utterance, further divisions are made. This time the major blocks are divided into their syntactic constituents and the latter into their syntactic constituents and so forth until we reach the syntactically undecomposable constituents. It is these sub-major-block constituents that I call minor blocks. Minor blocks are pitch-accented expressions that correspond to the syntactic constituents of sentences and of subsentential syntactic constituents, but since they incorporate the non-pitch-accented syntactic constituents as well, they are not necessarily always co-extensive with the syntactic constituents. On the basis of their syntactic class, most types of minor blocks are complementary blocks (CBs), some are equivalent blocks (EBs), and a few can be either CBs or EBs (see Varga 2002 : 100–115).

It is my contention that within spoken Hungarian major blocks, i.e., highest-ranking sentences, at least when they are pre-planned, there are right-to-left melodic dependencies between the sister minor blocks. This means that the selectable intonation contours of non-final minor blocks are constrained by the intonation contour of their final (rightmost) sister. In the case of COMPLEMENTARY BLOCKS, the non-final blocks are incomplete without the final block. The typical intonational signalling of this fact is to provide the non-final block(s) with intonation contours that may differ from the intonation contour of the final block in some characteristic ways. For instance, the topic, when pitch-accented, and the comment constitute complementary blocks that belong together (are each other's sisters). When the comment ends in a falling intonation, the topic before it may have a rise, as in (6a). But when the comment ends in a rise, as in (6b), or a rise-fall, as in (6c), the topic before it is unlikely to have a rise, it will rather have a fall.

(6) a. | Az ˊújságot | ˋfelhozták. |
the newspaper-ACC up-brought-they
'They've brought up the paper.'

b. | És ha az ˋújságot | ˊfelhozták? |
and if
'And (what) if they've brought up the paper?'

c. | Az ˋújságot | ^felhozták? |
'Have they brought up the paper?'[4]

In this article I am not going to deal with complementary blocks any further because my aim is to examine equivalent blocks. EQUIVALENT BLOCKS (EBs) form pairs in

[4] For a detailed study of Hungarian topic intonation see Varga (2003).

which the non-final and the final members "say the same thing"; the speaker treats them as existentially equivalent. This equivalence is expressed melodically: there is right-to-left intonational concord between the two blocks, the non-final equivalent blocks are marked by having the same intonation contour as their final sisters.

That the intonational concord between equivalent blocks proceeds from right to left is not obvious at first sight. One might think that it would be psychologically more justified to assume that it proceeds from left to right. However, we are interested in the properties of pre-planned sentences as wholes, and not in the psychological processes of on-line sentence formation. From this perspective it is perfectly possible to see the end of the sentence when we are still at the beginning or middle of it. (To use well-known Chomskyan terminology, our interest lies in sentences as the ideal constructs of competence rather than in performance, even if speakers may deviate from these ideals in actual language use.) The other reason for assuming a right-to-left intonational concord is more compelling. It simply follows from the fact that we break up tonosyntactic blocks in a top-down manner. Consider for instance, example (8) (overleaf). Sentence (8a), i.e., CB0, ends with a falling intonation contour. This is the only contour which the speaker is free to choose, in accordance with the illocutionary force and special attitude of the sentence. The sentence is then broken up into CB1, a topic that ends in a rising intonation, and CB2, a comment that ends in a falling intonation, as is often the case with complementary blocks of this kind, cf. (8b). Now, CB1, the topic NP, internally contains EB1, a smaller NP (*a nagyapja* 'his grandfather'), and EB2, a non-restrictive relative clause (*aki fogorvos* 'who is a dentist'). (This combination could also be treated as a pair of CBs, but let us suppose the speaker treats them as a pair of equivalent blocks.)[5] Since EB2 already has a rising intonation contour, this can be copied by EB1 only in a right-to-left manner, cf. (8c). In the meantime the comment is broken up into two CBs, CB3 and CB4, from which CB3 *mindent* 'everything-ACC' receives a half falling contour (which does not constitute a separate intonational phrase).

Typical examples of equivalent blocks contain subordinated clauses in initial position, followed by a main clause initiated by a demonstrative pronoun which refers to the initial clause. Consider (7).

(7) a. | Hogy ˋelkésett, |ˋaz bosszantotta. |
that$_{conj}$ was-late-3sg that$_{dem}$ annoyed-3sg-him
'It was the fact that he was late that annoyed him.'
Literally: 'That he was late, that annoyed him.'

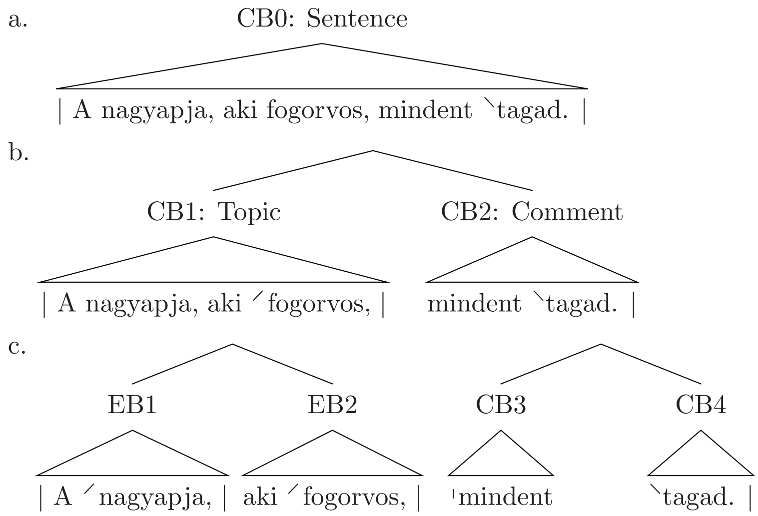
b. | Hogy ^elkésett, |^az bosszantotta? |
'Was it the fact that he was late that annoyed him?'
Literally: 'That he was late, that annoyed him?'

Since the demonstrative is in the F position of the sentence (i.e., in focus position, see É. Kiss 1998 : 41–45), the verb after it has reduced stress or is unstressed, and

[5] Such structures can be treated both as CBs and as EBs (see Varga 2002 : 113), depending on the speaker's choice.

is, therefore, incorporated in the EB containing the pitch-accented demonstrative. Whereas in (7a) the final EB has a falling intonation and so the initial EB must also have a falling intonation, in (7b) the final EB has a rise-fall and so the initial EB must also have a rise-fall.

(8) A nagyapja, aki fogorvos, mindent tagad.
the grandfather-his who dentist everything-ACC denies
'His grandfather, who is a dentist, denies everything.'



In Varga (2002 : 101) I wrote about (7a) and (7b) that "the subclause *hogy elkésett* is preposed from behind the demonstrative *az*, together with which it occupies the F position of the main clause." This was in conformity with É. Kiss's long-established opinion, according to which "the demonstrative word and the subclause belonging to it form a single constituent in the underlying structure, viz., an NP. [...] The demonstrative word and the subclause [...] are in a relation of coordination, apposition with each other" (É. Kiss 1998 : 132; cf. also É. Kiss 1981).[6] Kenesei (1984, 1992, 1994), however, has been dissatisfied with this view and has tried to prove on syntactic grounds that in such examples "there is no preposing at all, because the subclauses are generated in their surface position, and they are referred back to in the main clause by a demonstrative pronoun [...] or a referring expression containing a demonstrative [...]" (Kenesei 1992 : 662).[7] In his criticism Kenesei (2003) repeats this view.

In Varga (2002) I chose É. Kiss's structural analysis rather than Kenesei's because, by appealing to the appositive relation, É. Kiss's account seemed to offer a better explanation of intonational concord. Today, however, I think that the intonational concord observed here can be reconciled with either analysis, since the real

[6] My translation, L.V.

[7] My translation, L.V.

cause of the concord is the equivalence relation that exists between the subclause and the demonstrative. This equivalence relation can follow from both analyses. The equivalence relation holds when the subclause moves as a separated "twin" of the demonstrative (É. Kiss's view), but it also holds when the subclause does not move and is only anaphorically connected with the demonstrative (Kenesei's view).

Parallel to the sentences in (7), structures like those in (9) also represent pairs of equivalent blocks.

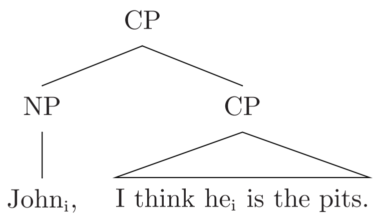
(9) a. | A ˋtelefon, |ˋaz szól. |
the telephone that$_{\mathrm{dem}}$ rings
'It is the telephone that is ringing.'
Literally: 'The telephone, that's ringing.'

b. | A ^telefon, |^az szól? |
'Is it the telephone that is ringing?'
Literally: 'The telephone, that's ringing?'

To the best of my knowledge, such structures have not been dealt with in the literature. In Varga (2002 : 102) I explained them in the same fashion as the sentences of (7). I assumed that the NP *a telefon* had been preposed from F position. Kenesei (2003) disagrees and proposes the alternative: the NP *a telefon* is generated on the left periphery. This is analogous to Kenesei's explanation of the status of the subclause in (7).

Kenesei's proposal reminds me of the standard account of *left dislocation* in English sentences, such as e.g., *John, I think he is the pits* (Radford 1988 : 530). In this example, the NP *John* is not likely to have moved leftward from the sentence because the subject of the sentence is filled by the resumptive NP *he*. Instead, it is thought to have been left-adjoined to the sentence (CP) by a base rule, as is shown in (10).

(10)



In a similar fashion, one can assume that, in the sentences of (9), the NP *a telefon* has been simply left-adjoined to the sentence and coindexed with *az*. Given the analogous nature of the sentences in (7) and (9), the plausibility of Kenesei's analysis of (9) provides additional support for Kenesei's analysis of (7).

Having said this, however, I must confess that I still do not think that the other explanation, viz., the one which derives the sentences of (9) by moving the NP *a telefon* out of a common NP, is any less plausible. The hypothesised common NP would be not [az a telefon] 'that telephone', as Kenesei thinks, but [az, a telefon] 'that, the telephone', which is an appositive construction and, as such, it can be broken up, making movement of *a telefon* possible. At the moment it is difficult to choose between the two alternative analyses and I leave the question open.

3 Sentence splitting or afterthought addition?

In his criticism, Péter (2003) has pointed out that the phenomenon of sentence splitting, which I did not explicitly deal with in Varga (2002), is also relevant to the melodic segmentation of utterances. Sentence splitting has a fairly extensive literature, and is ususally defined as the breaking up of a sentence into several utterances, see Péter (1991 : 128, 206–211). As an illustration, Péter (2003) uses the following example:

(11) | Képes voltál hazudni. | Nekem. | A legjobb barátodnak. |
able were-2sg to-lie me-to the best friend-your-to
'You've lied. To me. To your best friend.'

This mechanism, in which we deliberately cut up a sentence into separate prosodic chunks, certainly exists. It can be used as a rhetorical device and can serve for assigning equally strong emphasis to each of these chunks and thus it is a means of achieving strong dramatic effects.

However, in the un-premeditated speech of most everyday speakers, it seems that the actual mechanism is often the exact opposite of "splitting". What usually happens is that the speaker *adds* newer and newer details to a sentence which s/he has already finished but found in some respect unsatisfactory afterwards. The additions are like improved repetitions of the first sentence. That is to say, instead of "splitting", we "add" material in the form of afterthoughts, and these afterthoughts follow in the order in which they come to our mind. This order would not always be possible in a real sentence. For instance, within a grammatical sentence the nationality adjective must come after the other adjectives, as is shown in (12).

(12) a. Erős, francia cigarettát szívott.
strong French cigarette-ACC smoked-3sg
'He was smoking a strong, French cigarette.'

b. *Francia, erős cigarettát szívott.
'He was smoking a French, strong cigarette.'

Nevertheless, we accept the sequence in (13) without hesitation.

(13) | ˋCigarettát szívott. |ˋFranciát. |ˋErőset. |
cigarette-ACC smoked-3sg French-ACC strong-ACC
'He was smoking a cigarette. A French one. A strong one.'

This shows that we have good reason to suppose that (13) is not a single sentence cut into three but rather a series of three sentences: the "first edition" and two "later editions" of it. Of course the members of the series do belong together, and their coherence is shown by linguistic means: by the repeated accusative case and the repeated intonation contour in each. The subsequently added chunks automatically repeat the intonation contour of the first sentence, because they represent the same illocutionary act as the first sentence does. Though the intonational repetition could, in principle, be attributed to sentence splitting as well, I think it receives a more natural explanation from the afterthought account that I am proposing. Moreover, the afterthought account is further confirmed by the fact that the same kind of grammatical and intonational repetition can be experienced when the speaker adds a subsequent correction to his original utterance, as in (14).

(14) | És ^elmentek Keszthelyre? | Vagyis ^Hévizre? |
and went-3pl Keszthely-to or Héviz-to
'And have they left for Keszthely? I mean for Héviz?'

The corrective addition is also a kind of "improved repetition" of a sentence that has been finished but found unsatisfactory. The repetition of case and intonation shows that the new chunk is a corrected version of the old one and that they belong together. In my view, subsequent addition and correction are both afterthoughts and represent performance phenomena.

The intonational repetition here may seem to be a case of left-to-right intonational concord, but I refuse to treat it as such and do not formulate a rule to account for it because it differs from the kind of intonational concord that we find between equivalent blocks. The latter does deserve a rule because, as we have seen in section **2** above, it takes place between *syntactically identifiable equivalent blocks* within one and the same sentence and its direction is right-to-left, which is the general direction of melodic dependencies within the sentence. In contrast, the addition of afterthoughts and the intonational repetition associated with it is not restricted to certain syntactic structures within the sentence, and proceeds from left to right. It takes place *between utterances* and may take place even *after another speaker's response* has intervened, as in (15). In (15) Speaker A uses the word *koktélbe* with the *-be* version of the inflectional suffix *-ba*/*-be* 'into', which Speaker B finds vulgar and corrects to *-ba*. In the third turn of the exchange Speaker A repeats the word with the corrected version of the suffix and uses the same intonation as in the first turn. Intonational repetition signals that the third turn is meant to be a revised version of the first.

(15) A: | Hát már a ^reklám is belekerül a koktélbe? |
well already the advertisement too in-gets the cocktail-in
'So the commercial has also become part of the TV-cocktail?'

B: | KoktélˋBa. |

A: | ^Koktélba? |

Afterthoughts belong to performance and their melodic behaviour follows a universal principle which need not be formulated in a rule. According to this principle, when an utterance U2 is added as an afterthought to utterance U1, *U2 is in a* *pragmatic sense a repetition of U1, and so U2 automatically repeats the intonation of U1.*

4 Conclusion

In the present paper I have clarified, and gathered additional justification for, my analysis of three kinds of phenomena relevant to intonational segmentation in Hungarian, which I originally offered in Varga (2002). These are: (a) complex utterances, (b) equivalent blocks, and (c) afterthoughts. Although other analyses of these phenomena have also been proposed, I have now tried to show that my analysis is feasible in all three areas and possibly superior in (a) and (c).

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