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BOOK REVIEW

László Hunyadi: Hungarian sentence prosody and Universal Grammar — On the phonology–syntax interface. Peter Lang, Frankfurt am Main, 2002, 328 pp.

1. Introduction

The aim of the book is to show that sentential prosody, in particular intonation and stress, are vital tools available to the hearer in his/her task to uncover the logical proposition intended by the speaker. The author seeks to uncover the mechanisms of "the direct relation between LF and PF" (15). His main claim is that operator–scope relations are marked prosodically: in particular, languages may put main stress on either the operator or its scope. Hunyadi applies this to many attested word order variations and potential scope-readings of complex Hungarian sentences involving more than one operator. Ultimately, Hunyadi's goal is to derive the well-known ordering of constituents in the Hungarian left periphery (i.e., Topics–Quantifier–Focus–Verb). He also extends the cross-linguistic coverage of the theory to Finnish, Japanese, Hebrew and English.

The connections between semantics/pragmatics and prosody form the topic of much contemporary research, including, for instance, Reinhart's (1995) work on the prosodic nature of focus-marking in English, Büring's (1997) work on topic and focus in German, Zubizarreta's (1998) work on focus in Spanish, or Frascarelli's (2000) work on focus in Italian. An important aspect of Hunyadi's book that marks it out compared to its peers is that the data that forms the basis of the proposed prosodic theory is the result of phonetic experiments. This is very important, given the often controversial nature of judgements about stress placement and relative strength of stresses. Hunyadi's main claim that operator–scope relations may directly effect the prosody of an utterance is highly innovative. The variety of data that he encompasses is exceptionally large, involving the interactions between many different Hungarian operators such as *csak* 'only', the FOCUS operator, diverse types of topics, negation and various

types of quantifiers. Even though this is an attractive feature of the book, it seems to me that sometimes the net is cast too wide and the detailed analysis of the wealth of facts is less precise than one would have liked. All in all, I believe that Hunyadi's *Hungarian Sentence Prosody and Universal Grammar — On the Phonology–Syntax Interface* should be read by anybody interested in the syntax–phonology interface, the interaction between discourse and prosody or the syntax of the "left periphery".

There are ten chapters altogether, and two appendices. But the book has two major parts. The first part explains the proposal itself (Chapters 1–6); the second part consists of an application of the proposal to Hungarian data (Chapters 7–8), and cross-linguistically (Chapter 9). Chapter 10 concludes the monograph. In what follows, I will concentrate on certain aspects of the book, such as Hunyadi's treatment of Hungarian prosody (Section **2**), his views on the connections between discourse and prosody (Section **3**), and his main proposal: the idea that stress marks scope (Section **4**). My review complements another review by Kenesei (2005) in the *Journal of Linguistics* with a somewhat different emphasis.

2. Hunyadi's theory of Hungarian prosody

Hunyadi (26–7) regards prosodic structure as not completely independent from, but also not directly dependent on, syntactic structure. (Although note that no specific syntax–prosody mapping rules are given.) His adopted framework is a metrical theory of prosody. He assumes the existence of prosodic structure made up of phonological words, prosodic phrases and intonational phrases.

As is well known, the physical characteristics of stress are rather elusive: stress often associates with pitch movement, but also with changes in the energy level. Hunyadi proposes to solve the notorious problem of stress identification and unite the effects of pitch and intensity in the following way. He defines a measure that he calls PET (pitch and energy over time), which is a number that we get at each point in the utterance, by subtracting the normalised energy value from the normalised pitch value at that point (48). As a result, the PET score at any given moment is 0 if pitch and energy change at the same rate at the point of measurement. Positive PET-values indicate that pitch is higher compared to the overall pitch of the utterance than energy is, compared to overall energy in the utterance; negative PET-values indicate the supremacy of energy over pitch. He claims that stress has the following characteristics: it starts with relative prominence of pitch, followed by an even larger relative prominence of energy, followed by a similar relative prominence of pitch (49–50). Although, at first sight, one has the impression that PET subtracts 'apples' from 'oranges', it should be noted that it does seem to provide easily readable diagrams, even for the untrained eye, which may turn out to be an advantage. But being based on discrete pitch and energy values, it will, of course, never be more than a function of these values.

In Hungarian, facts about the placement of main and secondary stresses have been a matter of some controversy (compare Kálmán–Nádasdy 1994; É. Kiss 1994; etc.) One of the most important aspects of Hunyadi's work is that he provides phonetic measurements of native speakers' recordings to support his claims. Alongside the diagrams that accompany every utterance given in the text, there is an additional database of recordings of 26 Hungarian utterances by 7 female and 7 male speakers in the Appendices. This in itself makes the book a very important source for phonetically inclined researchers of the syntax–phonology interface of Hungarian.

3. Prosody–discourse connections

It is well known that Hungarian has specialised preverbal, left-peripheral syntactic positions for topics, focus and wide-scope quantifiers. The order of elements is in (1). ("*" marks recursivity.)

(1) [Topic* [Quantifier [Focus [V. . .]]]

Chapter 3 addresses the question whether the pragmatic functions of focus, contrastive topic and the "neutral part" can be considered as "semantico-logical functions directly related to their prosodic realization" (55). Let us concentrate on focus, which is in any case the constituent whose analysis is the most detailed in the book.

Hunyadi aligns himself with the so-called "focus-to-accent" approach (Ladd 1996), which claims that prosodic prominence (i.e., main stress and/or corresponding accent) marks the focus of the utterance, and not the other way around. He gives two arguments for this claim. First, as (2) shows, in Hungarian, utterances containing multiple foci involve only one instance of movement, the second (and any further) focus is *in situ*. Given that both moved and *in-situ* foci bear main stress and accent, it follows that it is the prosody, rather than the position that marks focus (56–7).[1] (Capitals mark main stress.)

(2) JÁNOS olvasta a KÖNYVET.
'JOHN read the BOOK.'

The second argument concerns universal quantifiers. These are excluded from the syntactic focus position because of the incompatibility between the semantics of this position (i.e., exclusion by identification) and the universality of the quantifiers. As Hunyadi shows, notwithstanding this semantic incompatibility, the **prosodic** characteristics of a fronted (or *in-situ*) focus can also appear on fronted universal quantifiers, as in (3). So, focal meaning, in the sense of discourse pragmatics, rather than semantics, can be marked prosodically, even when syntactic marking is impossible.[2]

(3) MINDIG olvasta a könyvet.
always read the book
'He/she ALWAYS read the book.'

[1] In a later remark, Hunyadi (152) claims that the syntactic focus position indicates the presence of a "FOCUS operator", whose semantic function is "identification". A similar idea is spelt out in great detail by Horvath (2000 and subsequent work). (Hunyadi discusses the semantic characteristics of *in situ* focus in Chapter 6, Section 6.2.)

[2] A similar stress-to-focus-type proposal is put forward in Szendrői (2001); Szendrői (2003). The main difference between the two proposals is that the existence of an independent syntactic FOCUS-operator is not assumed there. Rather, it is claimed that focus movement targets the position where main stress is assigned by the rules of Hungarian prosody. In that work, no direct connections are drawn between scope assignment and prosody.

4. Prosodic scope marking

But, according to Hunyadi, it is not only the case that the discourse notion 'focus' is prosodically marked in every langauge. Rather, languages indicate operator–scope relations in general prosodically. In particular, the language universal in (4) is the central claim of this monograph (210).

(4) Principle of scope assignment
Assign scope by stress.

Hunyadi takes (4) to have a direct effect on prosody. The Hungarian stress assignment rules (90) state that in the unmarked case there are "even stresses on all or almost all phonological words" (97). The prosodic operation "stress reduction" is taken to be the primary operation effecting stress assignment in Hunyadi's system.[3] The application of this operation is directly conditioned by the "operator status" of the elements involved: an operator that takes wide scope induces stress reduction on the elements in its scope (111). In other words, in Hungarian, stress on the operator and stress reduction on its scope are the consequences of semantically-driven prosodic operations.

Hunyadi (90) also assumes that there is a specific hierarchy of operators for stress reduction. This enables him to give an account of a wide set of data, encompassing interactions between the operator *csak* 'only', the FOCUS operator, sentential negation, constituent negation, emphatic *is* 'also', contrastive *is* 'even', verbal particles marking perfectivity, numerals, referentiality and modals. Even if one does not always precisely agree with the specific analyses, Chapter 8 is a great source of interesting and important observations for anyone working on the interaction of operators in Hungarian, from a semantic, syntactic or prosodic point of view.

To give just one example, Hunyadi (153–5) argues that the *csak* 'only' operator is different from the FOCUS operator and it is higher in the hierarchy of stress reduction. In an utterance like (5), this is clearly shown by the fact that the operator, which takes scope over the focal element, bears main stress, while the focus itself, which is lower in the hierarchy, undergoes stress reduction.

(5) CSAK Jánossal találkoztam.
only John-with met-I
'I only met JOHN—and noone else.' (DP focus)

However, the *csak* 'only' operator does not obligatorily attract main stress in Hungarian. The utterance in (6) is equally grammatical, in fact, on one reading, (5) and (6) are synonymous. Hunyadi argues that the reason for the optionality of stress on

[3] Another prosodic operation "neutralization" is also defined (104). This operation ensures that elements whose pragmatic status is given undergo stress reduction. The operation creates the discourse domain called "the neutral part", which follows the focus. The neutral part is prosodically unmarked, no special tune is attached to it. This puts it in contrast to focus and topic, which both have distinctive tunes. So, Hunyadi takes the position, even if he does so implicitly, that the prosodic operation associated with focus is distinct from the one associated to givenness (see also Reinhart 1995; and contra Schwarzschild 1999).

the *csak* 'only' operator is due to the fact that it is a **lexical** operator, which is therefore capable of marking its scope syntactially (in Hunyadi's (153) words, "by linear precedence"), rather than prosodically.

(6) Csak JÁNOSSAL találkoztam.
only John-with met-I
'I only met JOHN—and noone else.' (DP focus)

This, of course, means that the claim in (4) has to be weakened, as it turns out that lexical operators may mark their scope syntactically, not only prosodically (153). At the same time, we get an interesting explanation for the following fact. In contrast to the utterance in (5), which only allows the reading indicated there, the utterance in (6), repeated here in (6′), is ambiguous.[4]

(6′) Csak JÁNOSSAL találkoztam.
only John-with met-I

(a) 'I only met JOHN—and noone else.' (DP focus)
(b) 'I only met JOHN—and nothing else happened.' (IP focus)[5]

It transpires from Hunyadi's argumentation that prosodic marking on the scope of *csak* 'only' (i.e., on the focus of the utterance) is necessary to get focal ambiguity. If for some independent reason the operator is stressed, and not the focus, the ambiguity disappears. This is a very interesting point about the interaction of prosody and operators like *csak* 'only', with potential implications for issues such as the semantic debate about the focus-sensitivity of *only*.

As for the surface order of Hungarian operators (see (1) above), Hunyadi argues (116) that it follows from the proposed stress reduction rule, the left-to-right direction of its application, and the assumed hierarchy of the operators for stress reduction. This proposal represents an original approach to the Hungarian left periphery. In fact, it is probably a unique attempt to explain the order of elements, rather than just stating it. Nevertheless, I think certain issues remain unsolved. What I believe to be the most important one concerns the assumed hierarchy of operators. It seems to me that many of the derived orderings rely heavily on this hierarchy. At the same time, the hierarchy itself is to a large extent not independently motivated, although Hunyadi shows that at least certain aspects of it are valid cross-linguistically (see Chapter 9).

A more concrete issue concerns topics. Non-contrastive, unstressed topics such as *a postást* 'the postman-acc' in (7) indeed receive wide scope as their syntactic position suggests, but they do not induce destressing of any constituents in their scope, contrary to what one would expect under the proposed theory. On the other hand, contrastive topics, as in (8), receive their own main prominence within their own intonational

[4] Note that although Hunyadi claims that subtle prosodic differences may distinguish the two readings, I do not think this would be true in general.

[5] Hunyadi calls this reading "VP-focus", I prefer the indicated "IP focus" or "all-focus". But this is not important, as his point is simply that wide focus is possible here; whether it is VP or IP is irrelevant.

phrase. Contrastive topics, arguably, take narrow scope with respect to a following focus. According to Hunyadi (63–5), the reason why it is the focus rather than the topic that takes wider scope is that the intonational tune attached to the focus is an independent one, while the tune on the topic suggests incompleteness. This may be so, in fact this is probably very close to the truth, but nevertheless, this is an extra assumption that the author has to take on board to derive the order in (1).

(7) A postást megharapta a kutya.
the postman-acc prt-bit the dog
'The dog bit the postman.'

(8) A postást, megharapta a kutya. A szomszédot, nem.
the postman-acc prt-bit the dog the neighbour-acc not
'The postman was bitten by the dog. The neighbour wasn't.'

As far as the cross-linguistic generalisation of the theory is concerned, in Chapter 9, Hunyadi states that there is parametric variation amongst languages as to the way the principle in (4) gets realised:

(9) (a) Assign scope by stressing the scope.
(b) Assign scope by reducing the stress of the scope.

Let us concentrate here on the discussion on Finnish. Hunyadi (212) claims that Finnish subscribes to 'stressing the scope' while, we may recall that Hungarian 'reduces stress of the scope'. In addition, he provides data showing that Finnish does not have fronted unstressed topics and that it is not possible to distinguish prosodically a contrastive topic from a focus in this language. He claims that these facts follow from the idea that Finnish marks scope by stress, rather than by reducing stress, as Hungarian does.

In my opinion, the data that he gives to support this position is not sufficiently detailed. It is, of course, completely understandable that the empirical scope of the proposal is more limited in the case of the languages considered here than in the case of Hungarian. However, this makes it difficult to evaluate the proposal. For instance, there seems to be "a phonological rather than logical requirement for a sentence-initial word to bear stress" in Finnish (215). It is not clear to me how this claim can be incorporated into the system of stress assignment that Hunyadi proposes. It is also not clear whether this claim is compatible with another claim made elsewhere, stating that in Finnish, the direction of stressing is to the right (211). This is important, because the presence of an obligatory main stress on the leftmost phonological word may actually provide an alternative explanation to the unavailability of unstressed topic fronting in the language.

5. Conclusion

I would like to conclude that the innovativity of Hunyadi's approach to the interactions between semantics and prosody and its extensive phonetic experimentation is very much to be appreciated, even if I sometimes disagree with the details of his analysis on specific data.

On a more text-oriented note, given the complex nature of the subject matter of the book, it would have benefited from more rigorous editing. (Although it must be noted that the abstracts at the beginning of each chapter are of great help to the reader.) There are missing glosses (e.g., for the Finnish examples (289–91)) and sometimes one has the impression that the phonetic diagrams may have been accidentally mismatched with their descriptions in the text (e.g., (18a) is clearly not the same as (18); example (36) and the text immediately after it).

Kriszta Szendrői

References

Büring, Daniel 1997. The meaning of topic and focus—The 59th Street Bridge accent. Routledge, London.

É. Kiss, Katalin 1994. Sentence structure and word order. In: Katalin É. Kiss – Ferenc Kiefer (eds): The syntactic structure of Hungarian (Syntax and semantics 27), 1–90. Academic Press, New York.

Frascarelli, Mara 2000. The syntax–phonology interface in focus and topic constructions in Italian. Kluwer, Dordrecht.

Horvath, Julia 2000. Interfaces vs. the computational system in the syntax of focus. In: Hans Bennis – Martin Everaert (eds): Interface strategies, 183–206. Holland Academic Graphics, Amsterdam.

Kálmán, László – Ádám Nádasdy 1994. A hangsúly [Stress]. In: Ferenc Kiefer (ed.): Strukturális magyar nyelvtan 2: Fonológia [A structural grammar of Hungarian 2: Phonology], 393–467. Akadémiai Kiadó, Budapest.

Kenesei, István 2005. Hungarian in focus (Review article). In: Journal of Linguistics 41 : 409–35.

Ladd, Robert 1996. Intonational phonology. Cambridge University Press, Cambridge.

Reinhart, Tanya 1995. Interface strategies (OTS Working Papers in Theoretical Linguistics). OTS, Utrecht.

Schwarzschild, Roger 1999. GIVENness, Avoid F and other constraints on the placement of focus. In: Natural Language Semantics 7 : 141–77.

Szendrői, Kriszta 2001. Focus and the syntax–phonology interface. Doctoral dissertation, University College London. (http://www.phon.ucl.ac.uk/home/kriszta/)

Szendrői, Kriszta 2003. A stress-based approach to the syntax of Hungarian focus. In: The Linguistic Review 20 : 37–78.

Zubizarreta, Maria-Luisa 1998. Prosody, focus, and word order. MIT Press, Cambridge MA.