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BOOK REVIEW

Péter Siptár – Miklós Törkenczy: The phonology of Hungarian. Oxford University Press, Oxford, 2000, 319 pp.

This excellent, rule-based description of Hungarian phonology was published in 2000. It is the only extensive description of Hungarian in English in a modern (post-SPE) framework. *The phonology of Hungarian* (henceforth PH) is divided into three parts: 'Background', 'Systems', and 'Processes'. The 'Background' section contains two chapters. Chapter 1 is an introduction, which outlines the aims, scope, and coverage of the book, a brief overview of previous literature, and a description of the framework and assumptions that the authors adopt. Chapter 2, entitled 'Preliminaries', contains brief descriptions of the Hungarian language in terms of its speakers, classification, and word stock, vowel and consonant inventories and their orthographic representations, dialect variation, stress and intonation, derivation and compounding, verbal and nominal inflection, and word order. The 'Systems' section has three chapters, the first deals with the vowel system, including length alternations and vowel harmony, the second covers the consonant system, including voicing and the status of /x/ and /v/. The third is devoted to the phonotactics of Hungarian. The 'Processes' section is divided into four chapters. The first is devoted to processes involving vowels, particularly vowel harmony and lengthening and shortening processes. The second focuses on processes involving consonants: palatalization, sibilant rules, voicing and devoicing, and processes involving nasals and liquids. The third is devoted to processes conditioned by syllable structure. The fourth covers various surface phenomena including variation in vowel length, compensatory lengthening, hiatus filling, degemination, and cluster simplification.

This book contains a wealth of useful information. The chapter on phonotactics is particularly noteworthy for its extensive coverage. Anyone contemplating working on any area of Hungarian phonology should consult PH, for it contains not only discussions of the previous literature and many examples, it also contains information that is not included in more superficial discussions of the phenomena. For example, in spite of the attention to obstruent voicing and voice assimilation in the recent literature, including that on Hungarian, there are facts about voicing in Hungarian obstruents that have not been treated in the literature. For instance, although Hungarian has obstruents with voicing during closure in word-initial position (including stops that are prevoiced), and clusters of obstruents in word-initial position, there are no voiced obstruent clusters in word-initial position in Hungarian, as S&T point out. In this respect, then, Hungarian is different from Polish and Russian, for example, which also have word initial clusters of obstruents, have prevoiced stops, but do have clusters of voiced obstruents word initially.

The strengths of this book are the clear and comprehensive data presentation and the extensive coverage of the literature. The weakness, if there is one, is in the contribution to linguistic theory. But, since the primary aim of the book is to provide a comprehensive and clear description of Hungarian phonology, it cannot be faulted for not having broad-reaching theoretical implications.The analysis is couched (mainly) in Lexical Phonology.

As S&T note, one of the best known phenomena in Hungarian is vowel harmony, and hence readers will be particularly interested in their treatment. Chapter 3 presents a detailed description of vowel harmony, including discussion of neutral (transparent) vowels, disharmonic stems, and stems with vacillating suffixes. Extensive examples of all types of stems are given. S&T's analysis of vowel harmony (Chapter 6) is somewhat difficult to understand because of significant typographical errors, and hence it seems worthwhile to discuss their proposal in some detail. They assume that vowels are specified as follows:

(1)

	COR	LAB	DOR	
$-$open$_1$	i	ü	u	$-$open$_2$
		ö	o	**+open$_2$**
+open$_1$	e		a	

The chart given here is corrected. There is an unfortunate typo in this chart in the book (p. 55): the feature [+open$_2$] (bold on chart) is given as [$-$open$_2$]. (These features are from Clements–Hume (1995): [$-$open$_2$] equals [+high], [+open$_2$] equals [$-$high], [$-$open$_1$] equals [$-$low] and [+open$_1$] equals [+low]).

In their analysis of vowel harmony, S&T assume that, in general, the place features (COR, LAB, DOR) are assigned to the entire morpheme rather than associated with specific vowels. In the simplest cases, morphemes have a single floating place feature. There is a general rule, *Link Place*, that associates a floating place feature with every vowel that is unspecified for place ((3a), p. 158) and a specific *Link* DOR rule ((3b), p. 159) which applies to floating DOR features.

(2) *Link Place*

V
¦
P

where V = the VOCALIC node
P = any place feature
encircling: unassociated (placeless V or floating P)
apply maximally (multiple targets may be non-adjacent)

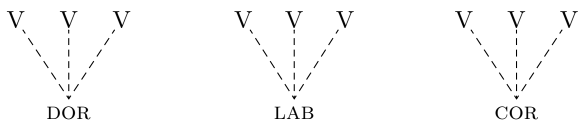
The *Link* DOR rule has a crucial typo in figure (3b) on p. 159: The rule should link any floating DOR feature to any vowel, **whether it is specified for place or not**. Hence, the V should not be encircled as it is in the figure. This typo is extremely unfortunate, since it may render the proposed analysis incomprehensible to the reader. The correct formulation of the rule is given in (3). This linking rule also applies maximally, meaning targets may be non-adjacent.

(3) *Link* DOR

V
¦
DOR

S&T assume that in cases where both link rules are applicable, the more specific rule, *Link* DOR, takes applicational precedence. A stem with only front, round vowels, such as *köszörű* 'grinder', would have, in the underlying representation, only the floating LAB place feature, which would be linked to all vowels by the rule *Link Place* (see (4) below). Much is left to the phonetic implementation module (p. 55) which interprets the first two vowels, which are [LAB, $+$open$_2$] on the surface, as a mid **front** rounded [ö] and the last, which is specified as [LAB, $-$open$_2$], as a high, **front**, round vowel, [üː]. In contrast, a stem with only back vowels, such as *koszorú* 'wreath', would only have a floating DOR feature. Here, both *Link Place* and *Link* DOR could potentially apply, but *Link* DOR would take precedence. The first two vowels would then be specified as [DOR, $+$open$_2$] after the application of *Link* DOR, and would be phonetically interpreted as mid, back, **round** vowels, [o]. The final vowel would be interpreted as a high, back, **round** vowel, [uː] (see (4) below). The basic idea of the analysis is that morpheme-size floating place features determine the harmony type for the whole word, including suffixes. A stem with a floating DOR will always govern back harmony. A stem with a floating COR (which will only contain neutral vowels, e.g., *rekettye* 'gorse') will always govern front harmony, and a stem with a floating LAB feature will always govern front harmony, too:

(4) (a) koszorú (b) köszörű (c) rekettye

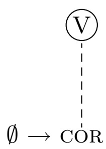


Link DOR applies in the derivation of *ház-nak* 'for (the) house' and *ház-tól* 'from (the) house' as follows.

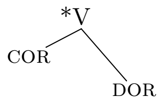
(5) (a) ház-nak (b) ház-tól

In addition to the two linking rules, S&T assume a rule that specifies vowels that have no place specification as COR, *Default* COR, and two constraints. One constraint prevents vowels from being specified as both COR and DOR (i.e., it prevents vowels being specified as both front and back) and one prevents vowels from being specified as both [$+$open$_1$] and LAB, since there are no low, front, round vowels in Hungarian. The default COR rule is reproduced in (6), and the constraints in (7):

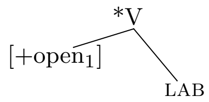
(6) *Default* COR



(7) (a)

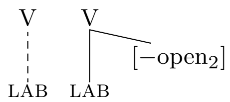


(b)

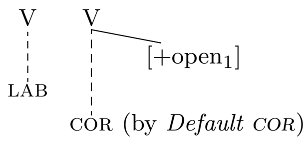


In the case of a stem with a floating LAB feature, such as *tűz* 'fire', the rules and constraints apply as in (8):

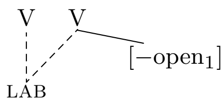
(8) (a) tüz-ünk 'our fire'



(b) tűz-nek 'for (the) fire'



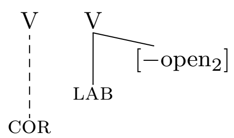
(c) tűz-höz 'to (the) fire'



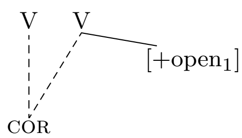
In the case of (8a), the floating LAB associates with the stem vowel by the general *Link Place*. Nothing else happens (the suffix vowel is already specified for place) and the suffix vowel is interpreted as a **front**, round, high vowel. In the case of (8b), again the floating LAB associates with the stem vowel. Although the suffix vowel is not specified for place, the general *Link Place* is blocked by the constraint (7b). The default COR then applies to specify the suffix vowel as COR. In (8c), the floating LAB is associated with both vowels by *Link Place*.

In the case of a floating COR feature, such as in *víz* 'water', the rules and constraints apply as in (9):

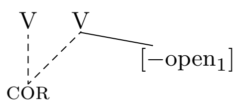
(9) (a) viz-ünk 'our water'



(b) víz-nek 'for (the) water'



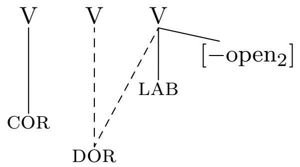
(c) víz-hez 'to (the) water'



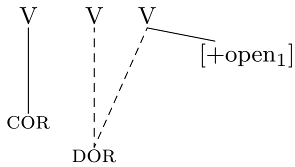
Here in (9a) the floating COR is linked to the stem vowel by *Link Place*. *Link Place* does not apply to the second vowel because it is already specified as LAB. LAB vowels that are not also specified as DOR , automatically are interpreted as **front**. In the case of (9b) and (9c), however, the floating COR is linked to the suffix vowels because they have no place features.

In cases such as *piros* ‘red’ and *papír* ‘paper’, these rules and constraints operate as in (10).

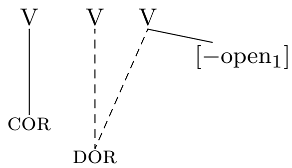
(10) (a) piros-unk ‘our red one’



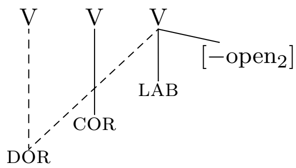
(b) piros-nak ‘for (the) red one’



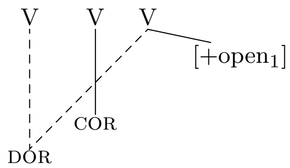
(c) piros-hoz ‘to (the) red one’



(d) papír-unk ‘our paper’



(e) papír-nak ‘for (the) paper’

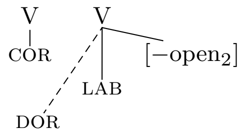


In the case of the stem *piros* the first vowel is linked to COR and there is a floating DOR feature. In (10a) the suffix vowel is specified as LAB. By *Link DOR*, the floating DOR is linked to all vowels except the first, which is blocked by the constraint that prohibits vowels from being linked to both DOR and COR. In the case of (10b), the suffix vowel is specified only as [+open$_1$], and again, by *Link DOR*, the floating DOR is linked to the suffix vowel, but not the preceding stem vowel. In (10c) the floating DOR feature is linked to the suffix vowel which is not specified as LAB, but this vowel is interpreted as round, since all DOR vowels are interpreted as round except those specified as [+open$_1$]. These forms exhibit that in S&T’s analysis the back vowels [o] and [u] are sometimes specified as both DOR and LAB (as for example in the suffix vowel in (10a)) and sometimes only as DOR (as, for example, in the suffix vowel in (10c) and the second stem vowel in (10a)). Hence, representationally different vowels are interpreted as phonetically identical. Such representational differences are, of course, necessitated by the analysis: a suffix vowel that is always round must be specified as LAB, whereas a non-low stem vowel that is always back may be just DOR and will be interpreted as round.

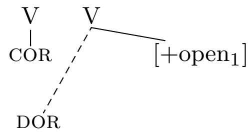
In the case of *papír* the stem is specified with a floating DOR feature and the second stem vowel is linked to COR. In (10d) the floating DOR links to the first stem vowel and the suffix vowel by *Link DOR*, which is assumed to apply maximally, i.e., to targets that are not necessarily adjacent. The second COR vowel is skipped because linking the DOR to this vowel would violate the constraint against DOR/COR vowels. In (10e) the DOR feature is linked, again by *Link DOR*, to the suffix vowel which is specified as [+open$_1$]. (There is an error in the diagram representing the derivation of (10e) *papír-nak* ((21c) in the book on p. 168), which has been corrected here.)

Stems like *híd* 'bridge', which S&T call antiharmonic, and which exceptionally govern back harmony, have the stem vowel linked to a COR feature and also have a floating DOR feature. The DOR cannot link to the stem vowel (because of the constraint against vowels specified as both DOR and COR), but by *Link DOR* it is linked to suffix vowels as illustrated in (11):

(11) (a) hid-unk 'our bridge'

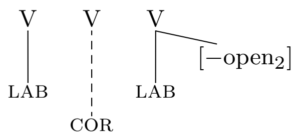


(b) híd-nak 'for (the) bridge'

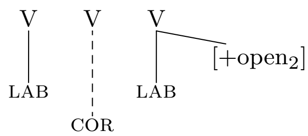


In the case of a form like *öreg* 'old', S&T assume that both the stem vowels are linked to place features, the first to LAB and the second to COR. It appears, however, that the same results obtain if the COR is floating as illustrated in (12).

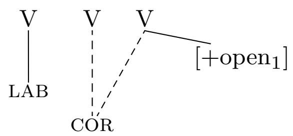
(12) (a) öreg-ünk 'our old one'



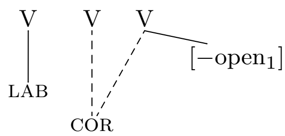
(b) öreg-től 'from (the) old one'



(c) öreg-nek 'for (the) old one'



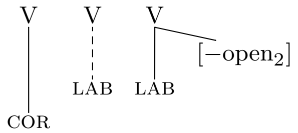
(d) öreg-hez 'to (the) old one'



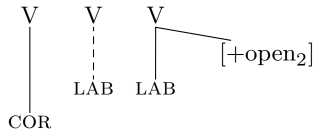
In the case of (12a) and (12b), the floating COR would be linked, by *Link Place*, to the second stem vowel. It could not link to the suffix vowels in either form because that vowel is already specified for place. In (12c) and (12d), however, the floating COR would link to both the second root vowel and the suffix vowels.

In the case of a stem like *szemölcs* 'wart', there is a mismatch between the text and the diagram. The intent in the text is clearly that the LAB feature be associated with the suffix vowel to give *szemölcs-höz* 'to (the) wart', but the LAB is not associated in the diagram in (19d) in the book (p. 167). If forms with front unrounded vowels which precede front rounded vowels (such as *szemölcs*) are assumed to have COR linked to the first vowel and a floating LAB feature, then the correct forms will be derived. This is illustrated in (13):

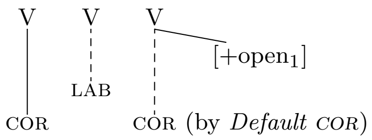
(13) (a) szemölcs-ünk 'our wart'



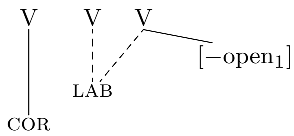
(b) szemölcs-től 'from (the) wart'



(c) szemölcs-nek 'for (the) wart'

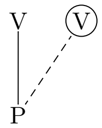


(d) szemölcs-höz 'to (the) wart'



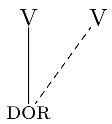
In addition to the two linking rules, the two constraints, and the default COR rule, S&T assume two spreading rules, *Spread Place* and *Spread* DOR. The spreading rules are given in (14).

(14) (a) *Spread Place*



apply locally (targets adjacent)
iterative left-to-right

(b) *Spread* DOR

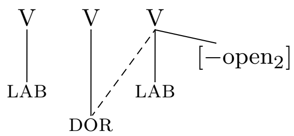


apply locally (targets adjacent)
iterative left-to-right

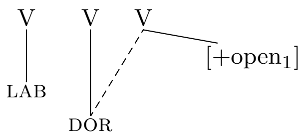
The *Spread Place* rule applies to spread a **linked** place feature to any adjacent vowel that is not already specified for place. The *Spread* DOR rule spreads any linked DOR feature to an adjacent vowel, whether that vowel is specified for place or not. As with the *Link* rules, the more specific *Spread* DOR takes applicational precedence if both are applicable.

These rules are involved in the derivations with exceptional stems such as *nüansz* 'nuance', which have both front and back harmonic vowels.

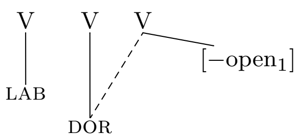
(15) (a) nüansz-unk 'our nuance'



(b) nüansz-nak 'for (the) nuance'



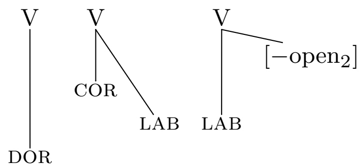
(c) nüansz-hoz 'to (the) nuance'



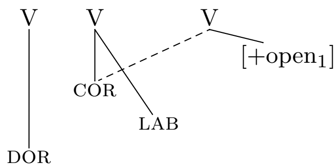
In the case of (15a), both the *Spread Place* and the *Spread* DOR rules are applicable, but the specific *Spread* DOR applies to link the DOR feature to the suffix vowel. In (15b) again the *Spread* DOR applies to spread the DOR feature to the suffix vowel that is unspecified for place. In (15c), again the DOR feature is spread to the adjacent suffix vowel by *Spread* DOR.

In a form such as *sofőr* 'driver', the first vowel is linked to the feature DOR, and the second vowel underlyingly linked to **both** LAB and COR. This dual specification is necessary to block the DOR feature from incorrectly spreading to it. As illustrated in (16a), nothing happens when a suffix vowel linked to LAB follows this stem.

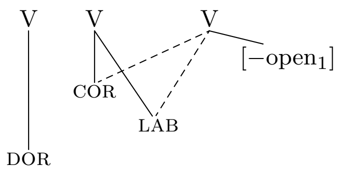
(16) (a) sofőr-ünk 'our driver'



(b) sofőr-nek 'for (the) driver'



(c) sofőr-höz 'to (the) driver'



In (16b), the COR specification spreads, by *Spread Place*, to the suffix vowel. LAB cannot spread because it is blocked by the constraint against LAB [+open$_1$] vowels. In (16c) both COR and LAB spread to the suffix vowel by *Spread Place*.

In this discussion, we have seen how the analysis proposed by S&T works, something that is made quite difficult by several serious typographical errors in the book under review. What is particularly interesting is that the *Spread* rules turn out to be necessary only to account for exceptional forms. As illustrated above, all the regular cases (and even one exceptional case, the *híd* 'bridge' type) are accounted for with the two general *Link* rules and the *Default* COR rule, and two constraints that are necessary in any analysis. Hence, the analysis proposed by Siptár and Törkenczy is actually much simpler than it might appear at first glance.

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Reference

Clements, George N. – Elizabeth Hume 1995. The internal organization of speech sounds. In: John A. Goldsmith (ed.): The handbook of phonological theory, 245–306. Blackwell, Cambridge MA & Oxford.