PHONETIC CHANGE, PHONEMIC STATUS AND MORPHOPHONOLOGICAL ALTERNATIONS

TAMÁS SZENDE

HUNGARIAN ACADEMY OF SCIENCES
INSTITUTE OF LINGUISTIC SCIENCES

ABSTRACT

In this paper sources of morphophonological alternations are discussed. It is argued that, as attestable from Hungarian, co-occurrences of several types of reduction phenomena in casual speech and in their phonemic representations result in morphophonemic variants of the language.

The main aim of this research is to shed light on how parallel autonomous lexemic variants, such as Hungarian aztán and azután 'then or mondta and mondotta 'he/she/it said', come into being in the language.

Changes in the morphophonemic structure of a lexeme may led back, in a number of cases at least, to the fact that allegro rules/processes in the language use cause historically determined idiomorphic, i.e. primary, phonemic representations (original or first variant = v_1) to take the form of a phonetic representation that happens to correspond with a possible distinct phonemic structure (subderivative or second variant = v_2). This is sometimes the case even if allegro rules result in morphemic homonymy, see, for example, Hungarian vállat 'enterprise' (derived from vállalat 'id.' by [syllabic] deletion) as opposed to vállat 'shoulder + Acc.', whereby 'iconicity' and '(morphological) naturalness (cf. Dressler 1981) will apparently be damaged. (As for such a type of changes in view of goal conflict of better perception and better articulation--cf., for example, Lindblom 1983--, the hearer can only draw some poor consolation from Kiparsky's (1974) words: "language practises 'therapy' rather than prophylaxis".)

When seeking to reach a better understanding of the way of how and why subderivative, secondary variants (v_2) in (lexemic) morphology can, and in many cases also will, emerge, we are in essence faced with problems surrounding the correspondence of 'phonemic units' the morphemes are built up of, i.e. abstracta, with what is called the 'elementary speech events', i.e. pragmata. Some aspects of this relation turn out to be crucial in the explanation of the phenomenon discussed herein. In this line of thought the most important facts to be taken into consideration are as follows.

(i) The correspondence of 'phonemic units', on the one hand, and 'elementary speech events', on the other, does not always cover a one-to-one relation existing hypothetically between one phoneme size unit and one single articulatory or acoustic unit, cf. Stampe's (1980) divinity →[dəv'ííí] and the problems of 'biuniqueness', see also Hungarian bántsd [ba:dʒd] ↔ /ba:ntʃd/ 'hurt [+ Acc.] him/her/it'.

(ii) Not only in casual but also in formal speech certain elements of phonetic representations corresponding to the respective elements in distinct underlying phonemic representations may coincide such as in [ŋ] in the phonetic representations of the Hungarian lexemes hamvas 'bloomy; downy' [hɔŋɔʃ] and honvéd 'Hungarian soldier' /honve:d/. What is more, some constituents of an underlying phonemic representation may occasionally remain undetermined even for the native speaker (cf., again, Hungarian [ka:ŋor] possibly derivable from, either, /ka:nfor/ or, else, /ka:mfor/ on the basis of the rules:

nf → ŋ / V___V and mf → ŋ / V___V).

(iii) Also relatively homogenous articulatory/ acoustic segments--having no direct reference to a phonemic constituent in the original underlying

representation--may occur in speech, see, for example, French word-final schwa or t-epenthesis in German eigentlich (← eigen + lich). Although it is quite a rare thing in Hungarian that v_2--type variants come about by means of phonematization of non-etymological segments occurring in between of two phoneme realizations, individual cases of volksetymologie may be found, viz. t-epenthesis in szentfedél (← szemfedél) 'face-cloth'.

(iv) In what follows I shall give an overview of allegro phenomena which play an important part in bringing about new morphophonemic variants. With regard to their main categories, i.e. 'lenition' and 'fortition' (cf., among others, Dressler 1984), special attention should be paid to the types of lenition. As a matter of fact, there is no need of considering instances of fortition in this context, either, since morphophonemic variations can not be detected, at least in Hungarian, with the exception of occasional hypercorrect alternants of roots occurring under special communicative circumstances, such as színeművészet ← [si·nəmy·ve·set] ↔ /si:n-my:ve:set/. So, on the basis of a collection of allegro phenomena taken from Hungarian casual speech I here give an outline of a typology of what I call 'reduction'. (As for this typology, it is to be remarked here that, first, it does not cover all the allegro phenomena that occur in spontaneous speech and, secondly, individual items of the typology in question are not superimposed on each other in the hierachy of an ordered set but, rather, they occupy alternative points on a gradual scale.)

(iv/a) 'Weakening', generally speaking, means the lenis-production of a segment instead of its normative articulation as in lento. Weakening is carried out by means of deleting at least one, but not all, of the primary distinctive features the segment consists of, such as, for example, the distinctive feature [rounded] in [o] which latter will in this way be made to be [ɒ] or [ɔ] in instances like hogy 'that'. Secondary distinctive features may either be replaced by other concomitant features or else deleted completely. A second characteristic of weakening and a criteriaon of its delineation from 'loss', at the same time, is that the syllabic structure of the word remains always

the same as determined in the underlying phonemic representation.

Weakening may also spread over a longer sequence of segments with an identical effect and content of its modifying various distinct members of the series. In other words: due to weakening, every single unit may show alternations of the same kind like, for example, loosening the closure in other stops occurring within the word boundaries.

(iv/b) 'Deletion' in a qualified sense is meant to be the dropping of a segment from the sequence such a way as to leaving behind traces in the articulation of the neighbouring segments, both left and right. Deletion, by definition, eliminates all the features that characterize the segment in question. As a consequence of deletion, syllable structure of the word changes to the extent that the number of segments the syllable is built up of changes to be less than the number of the segments in the v_1, i.e. lento, equivalent. This means that closed syllables may be converted into open ones. However, the number of syllables in the word remains unchanged.

As for the phonetic traces left behind after deletion, a normative, i.e. lento type--and often also hypercorrect--articulation of the two adjacent segments is to be observed as, for instance, in [ε·ʃøː] ← [εlʃøː] ↔ első 'first'. In contrast with weakening, deletion affects one unit within the sequence only. Whenever deletion happens to have been carried out, the remnants of the original variant of the word will undergo no further reduction. Accordingly, we find that tehát 'hence' [tehaːt] changes to be [teaˑt] as a result of h-deletion. Notwithstanding, [teaˑt] coincides with the lento realization of the non-homonymous teát 'tea + Acc.', i.e. [teaːt] ↔ /tea:t/. (Note that duration of [aː] may in this place vary between the grades ∅, ˑ, and ː without neutralizing the short/long opposition of /ɔ/ and /a:/.) In spite of the phonetic isomorphy of [teaˑt] ← tehát + h-deletion and [teaˑt] of teát, the former will never be pronounced with an intrusive [j]. So, we find that:

phonemic representation:	/teha:t/	/tea:t/
lento:	[tehaːt]	[teaːt]
allegro:	[teaˑt]	[teʲaˑt]
	[teat] etc.	[tejaˑt]

(It is to be remarked that tehát--as a whole--may in fact undergo further alternations and may become reduced to a one-syllable allegro realization, i.e. [taˑt]. This case of reduction of tehát, nevertheless, falls under the category of 'truncation'--see point (iv/d)--and is due to its specific outside-of-focus position within the sequence it enters into; some details see below.)

(iv/c) By 'loss' of a segment I mean the special class of elision by means of which a segment is dropped from the sequence without fortifying adjacent segments and, in addition, necessarily modifying the syllabic structure of the word it affects. As opposed to deletion, in loss simplification of the syllabic structure also may take the form of deminishing the number of syllables. This happens whenever a vowel is subject to loss, see [sotsəliʃtɔ] ← szocialista 'socialist'.

Although loss represents an extreme instance of reduction, phonetic traces may also be detected in the sequence. This means that in Hungarian allegro, among other things, loss of a vowel goes with the effect that the word maintains the former state of affairs with respect to vowel harmony until chain reduction rules begin to apply. Furthermore, fragments of the eliminated segment are optionally left over in the sequence in the form of what is labeled by Schane (1984) as 'cloning' and 'droning'. The independent phonemic status of eliminated segments is lost.

(iv/d) 'Truncation' is the reduction of a sequence, i.e. the deletion of the magnitude of sequence size units. In this type of reduction a word is reduced to the realization of at least one but not more than $n - 2$ segments the sequence is built up of in terms of a phonemic representation. The original syllabic structure becomes entirely destroyed due to the fact that more than one elementary constituents are eliminated. Accordingly, also phonetic traces can be found only occasionally in the remnants of the original sequence, apparently because of a mutual interaction of the constituents lost crossing each other's effect. Instead, also seemingly arbitrary articulatory/acoustic units may occur in the sequence which cannot be directly tracked back to the underlying phonemic representation of the truncated

word, see [a] in [sa] ← szóval 'then, well' Here, too, the phonemic independent status of the constituents eliminated from the phonemic representation of the lento equivalent ceases to exist.

In case one conceives of weakening, deletion, loss, and truncation (iv/a--d) as allegro processes/rules functioning under specific conditions in casual speech, the question of rule ordering is brought up. I can here give some glimpses of the problem only. I should point out that in certain instances rule ordering may not be stated at all--such as in cases of co-occurrence of 'devoicing' and 'lengthening'--whereas in some others it may. For example, truncation in the strict sense may, and also often is, followed by reduction, i.e. change in the original state in terms of vowel harmony, see [sɔʲɔ, so, sɔ, sa] → [sœ, sə, sə] derived from szóval in two respective steps.

(v) With regard to the present considerations, also one of the allegro phenomena of the next greater size unit of speech should be taken into account. Morphemes, or even complexes of morphemes, outside of focus position, and particularly when put in a phrase-initial or phrase-final position and, furthermore, when endowed with the communicative role of expressing the speaker's attitudes towards the message, the partner or himself (szóval 'well', tudniillik 'namely', végül is 'actually', etc.) are exposed to reduction to a greater extent than those being organic parts of the semantic structure of the text.

(vi) Finally, mention should be made of a trend of probability according to which the greater the number of the segments in the morpheme falling under the above mentioned category (see point(v)) the more likely reduction phenomena--as briefly discussed under point (iv)--will be carried out.

With all this types (processes, rules or tendencies) of allegro phenomena in mind one can conclude that new v_2 type morphemic variants come about if the reduced form may enter into the cycle of reduction, da capo al fine, as an independent unit, see mer --- mert 'because' which in fortition takes the form [merə] like [e:rə] ← ér 'reach'.

Co-occurrences of (i), (iv/c--d) and (v), or (ii) and (iii), or (ii) and (v) in the language use --facilitated by (vi)--result in morphemic alterna-

tion and eventually changes in the mophophonological
system of the language as attestable in Hungarian,
see _mié_ and _mér_ ←— _miért_, _aztán_ ←— _azután_, etc.

References

Dressler, W. (1981): Outlines of a model of morpho-
   phonology.   Dressler, W., Pfeiffer, D. and Renni-
   son, J. (eds.): Phonologica 1980. Innsbruck. 113-
   122.

Dressler, W. (1984): Explaining natural phonology.
   Phonological Yearbook 1, 29--50.

Kiparsky, P. (1974): On the evaluation measure. Bruck,
   A., Fox, R. and La Galy, M. (eds.): Natural Phono-
   logy. Chicago. 328-337.

Lindblom, B. (1983): On the teleological nature of
   speech processes. Speech Communication 2, 115-158.
   (Cited in Dressler 1984.)

Schane, S. (1984): The fundamentals of particle pho-
   nology. Phonological Yearbook 1, 129-155.

Stampe, D. (1980): A dissertation on natural phono-
   logy. New York.

Se 39.1.4