

## Vowel Epenthesis in Hungarian

Robert Vago

Queens College and The Graduate Center, CUNY

This presentation is focused on the following process in Hungarian: stated in the broadest terms, a low vowel is inserted to break up a  $C_1C_2C_3$  cluster. There are a number of interesting specific properties of vowel epenthesis (VE) that will be discussed and analyzed within the framework of Optimality Theory (Prince & Smolensky 2004).

1. VE is invoked only in verbs (e.g. /áld+nak/  $\Rightarrow$  áld+anak ‘they bless’) but not in any other lexical category: not in nouns (e.g. bolt-nál ‘at (the) shop’) and not in adjectives (e.g. zöld-től ‘from (the) green’). Category-specific effects are well-known in the literature (see Smith 2011). Accordingly, nouns have greater phonological privilege (e.g., they preserve greater variety of phonological contrasts) than verbs; adjectives pattern in between. The apparently universal faithfulness hierarchy  $N > A > V$  (sometimes fused as  $N, A > V$  or  $N > A, V$ ) in terms of positional privilege by lexical category works well in Hungarian: the faithfulness constraint DEP N, A (do not epenthesize in nouns and adjectives) is ranked high, whereas DEP V (do not epenthesize in verbs) is ranked low, in particular after the constraint (see below) against CCC (which has no category restriction specified).
2. VE is variable and optional both within and across speakers. A detailed account of this fact is beyond the scope of this presentation. Rather, my goal will be to identify the loci where epenthesis is possible.
3.  $C_3$  is always coronal. The exhaustive list of C-initial inflectional suffixes that may serve as context to VE is as follows (in all cases suffix-initial V is epenthetic): áld-asz ‘you (sg) bless,’ áld-alak ‘I bless you,’ áld-otok ‘you (pl) bless,’ áld-anak ‘they bless,’ áld-anál ‘you (sg) would bless,’ (áld-ani ‘to bless’). The past tense suffix -t can also be V-inducing; however, it is more complex, having a number of allomorphs (Siptár & Törkenczy 2000). No epenthesis is possible before -j (áld-juk ‘we bless it’; áld-j ‘bless!’) and -h (áld-hat ‘(s)he may/can bless’) – on the view that -hat/het is inflectional (Kenesei 1996). So  $C_3$  might have to be restricted to anterior coronals (palatal j is a posterior coronal), unless further research uncovers a principled basis for this restriction (e.g., perceptual salience).
4. Derivational suffixes participate in a conspiracy to avoid CCC. A particularly clear example obtains with the causative suffix -(t)at / (t)et. Whether this suffix has an initial t or not is not predictable. But in one context its pattern is entirely regular: following CC, -tat/tet is not possible: e.g. cseng-et, \*cseng-tet ‘make the bell ring.’
5. With two exceptions, verbal roots and stems ending in V:t (long vowel plus t) may also may serve as context for VE: e.g. bolond-ít ‘(s)he makes someone crazy’ (-ít = [i:t]), bolondít-ani ‘to make someone crazy.’ As first suggested in Vago (1980), in these cases V:t is analyzed as VCC, where VC tied to a single melody represents a long vowel. Under this analysis, VE is explained.
6. So assume the constraint \*CCC (last C = anterior coronal). CCC clusters (in verbs) can be repaired by C deletion, metathesis with a preceding vowel, and so on. All of these options are

ruled out by high level constraints so that the optimal output is that which repairs the cluster via VE. It then has to be explained why V is epenthesized between C<sub>2</sub> and C<sub>3</sub> and not C<sub>1</sub> and C<sub>2</sub>. A faithfulness constraint protecting input clusters in the root or stem, which are privileged positions over (inflectional) suffixes, will protect the integrity of the C<sub>1</sub>C<sub>2</sub> cluster (Beckman 2013).

7. Several alternating suffixes begin with an “empty V” (V slot not associated with a melody) in underlying structure (Siptár & Törkenczy 2000, and references there). In previous work, I have advocated that empty V has two default values: mid following a segment belonging to the stem, low otherwise (i.e. if V is not directly adjacent to the stem). This explains alternations like the following: *hoz-od* ‘you (sg) bring (def.); vs. *hoz-t-ad* ‘you (sg) brought (def.),’ where the suffix is *Vd* at the underlying level. But then how do I explain the fact that the output of VE is low *a/e* immediately following the stem, where mid *o/ö/e* is expected? I suggest that (surface) high and mid vowels are subject to a faithfulness constraint to the effect that they have to have a correspondent in the input. Put it another way: they cannot be epenthesized, since they have no correspondent segment in the input. Low vowels, on the other hand, are free to be inserted, since they do not need to have a correspondent segment in the input. To be sure, epenthesis is a two staged process: \*CCC forces the insertion of an empty V segment between C<sub>2</sub> and C<sub>3</sub>; V then is filled with a default value. There are two default values under my analysis; however, the mid default value is blocked due to the output – input correspondence constraint.

8. In the 2PL indefinite present suffix the initial epenthetic vowel shows up as mid in a context where low melody is expected: e.g. *áld-otok*, \**áld-atok* ‘you (PL) bless’ (cf. *hoz-tok* ‘you (PL) bring’). In this case, the morpheme is exceptionally indexed to the following reranking: O-Default > Output-Input Correspondence. (For reranking to account for exceptionality, see Gouskova 2013.)

In summary, vowel epenthesis in Hungarian has a number of interesting and challenging components. I intend to establish the facts, flush out residual issues, argue against alternative analyses proposed in the literature, and motivate my analyses within Optimality Theory.