Overview

Distinct sets of vowels and consonants are usually the subject of studies on correspondence; but what if the distinction is not so clear?

Vowels are not always static in constriction degree, and they may in fact involve consonant-like "inter-
ruptions," in theory allowing for non-local interactions with "marginal" (onset, coda) consonants.

These have been handled as OCP effects: a feature [ϕ] is specified in some structural domain, with align-
ment (potentially mid-vowel) determined by phonetic implementation. Multiple assignments of the same [ϕ] in a local unit may lead to unlicensing or removal of one at a "distance."

ABC, with recent expansions to account for segment-internal structure (Shih and Inkelas, 2014), can similarly model these outcomes: unstable sur-
face correspondence compels constricted mid-vowel segments to become more consonant-like; this might disagree with a language’s phonotactics and dissimilation may result (Bennett, 2013).

Here, we investigate two putative cases of this phe-
nomenon, both of which involve vowel interruptions CV with feature(s) [ϕ] that are "uncomfortably" simi-
lar to their onsets.

References and Thanks

versity of Washington.
Kuhl, P. (1991). Human adults and human infants show a "per-
ment (Q) with "marginal" (onset, coda) consonants.

Shih, S. and Inkelas, S. (2014). A subsegmental approach to con-
sonant dissimilation may result (Bennett, 2013).

Vowel Subsegments and Surface Correspondence

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ABC is most often used to model long-distance interaction between consonants (Rose and Walker, 2004) or, more recently, vowels (Rhodes, 2010); these two sets are distinct from one another to where V±C correspon-
dences are perhaps not expected.

However, a particularly consonant-like portion of a vowel could well correspond with a nearby consonant or set of consonants; this possibility is explored below for Huautla Mazatec and Aghem.

Repositioning Correspondence

ABC ↔ Conference

Vowel Subsegments and Surface Correspondence

ABC—Q (Shih and Inkelas, 2014): segments (Q) consist of at most three subsegments (qϕ); a complex vowel’s CV is qϕ in the diagrams below

Dissimilation occurs to avoid correspondence with an onset; accomplished by changing features of ϕ (Bennett, 2013); see below left for details

Aghem:

| qϕ | qϕ | qϕ |
| qϕ | qϕ | qϕ |

Huautla Mazatec:

| qϕ | qϕ | qϕ |
| qϕ | qϕ | qϕ |

Constraint Grammar

Aghem: [±slo], and CORR only goes into force if C and CV use the same articulators ([+slo]).

AGHEM VELARS

Two falling diphthongs [ui] and [ui] may have velar interruption (Hyman, 1979); these are unit vowels at some level of the phonological grammar (evidence from high tone spreading). Velars not realized (⇒ plain diphthongs) in certain environments, depending on onset place and rounding of diphthong (note contextually rounded [ow]).

Mazatec Laryngeals?

Huautla Mazatec has both creaky [+c] and breathy [+sg] vowels; non-modal phonation is variably timed and can occur separated from the onset by some brief modal voicing (Goldston and Kehrein, 1998), but the restriction only applies to breathy vowels in closely related Jalapa de Diaz (Garellek and Keating, 2011).

Constraint Grammar

After Bennett (2013); Shih and Inkelas (2014):

\*ϕṽϕv: OCP-like—no identical specification for ϕ at some short distance

\*CORR is optimally avoided by changing [ϕ] on a non-onset, here the CV

Aghem:

| qϕ |
| qϕ |

From (Kirk, 1966). Caveat: data is surprisingly fragmentary

Disimilation pattern:

to avoid CORR, [qϕ] does not appear if preceded by an onset of the same [LAB] and [VEL]

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Note same feature [ϕ] in CORR-[ϕ] and IDENT-[ϕ]: given approximate similarity, identity is optimal. Phonological categories are known to exhibit this "magnetic" effect generally (Kuhl, 1991).

Satisfying CORR is made costly by a high-ranked constraint that penalizes candidates that satisfy CORR and thus IDENT (Bennett, 2013); multiple [ϕ] in close proximity might present suboptimal levels of articulatory difficulty

The effect (below): dissimilation in CV, not in any V—see especially Aghem’s [+rd] diphthongs, which do not unround but lose their CV