LICENSING LICENSING BY CUE





MFM20

•The overview:

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•Licensing-by-Cue (Steriade 1997): <u>Contrastive cues are more</u> <u>likely to be expressed in contexts where they are better-recoverable by the listener</u>.

Licensing-by-Cue offers a compelling explanation for many
 cases of <u>long-distance-triggered dissimilative deletion</u> (in
 Latin, in Sanskrit, in American English, etc.).

- Outline: •The data •Ohala's "hyper-correction" proposal
- The "Licensing-by-cue" alternative Exceptions explained
- Gerfen's Challenge
 Rejoinder to Gerfen
 Conclusion

•The data:

•Ohala 1989:

Examples of di	ssin	nilation at a d	listance.			
Languages involved			Example			
Indo-European Pre-Classical	>	Sanskrit Classical	*bhendh	>	band ^h -	'bind' 'hair'
Greek	>	Greek	*thrikhos	>	trik ^h os	
Latin	>	Italian	quĩnque	>	cinque	'five'
Ancient						
Chinese	>	Cantonese	*pjam	>	pin	'diminish'
Proto-		Toursellt	#lete e		1-11	4Cl 2
Quichean Proto-	>	Tzutujil	*k'aq	>	k' ^j aq	'flea'
Quechumaran	>	Quechua	*t'ant'a	>	t'anta	'bread'

• Hall 2009 on American English rhotic distal dissimilation:

adve(r)sary	'ædvəˌsɛri				
afte(r)ward(s)	'æftə _, wə^dz				
ape(r)ture	a0ə^ te bar'bıtfuət ard bə'nard a(r)dino bə'nə'dino bə'zə^k er bambə'dir rie kə'madə^i ry 'kæn(t)ə bə~i	cereb(r)al palsy checke(r)board ci(r)cumference	ˌsɛrəbəl ˈpalzi ˈt∫ɛkəˌbord səˈkʌmfrəns ˈkʌmfərə~		
approp(r)iate					
A(r)thur					
barbitu(r)ate		comfo(r)ter			
(St.) Be(r)nard		cont(r)oversy	'kantə və•si		
(San) Berna(r)dino		co(r)morant co(r)ner	'komə~ənt konə~		
be(r)serk					
bomba(r)dier		co(r)poration	kopəˈreɪʃən ˈkrɪbəform diˈfɪbjəleɪrə∽		
cam(ar)aderie		crib(r)iform			
Cante(r)bury		defib(r)illator			
cate(r)cornered	ˈkæɾəˌkornə·d	do(r)mitory	'domə tori		
cate(r)pillar celeb(r)atory	ˈkæɾəˌpɪlə⁴ ˈsɛləbəˌtori	easte(r)ner	'istənə		
	•				

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Aspiration's intended	Listener's assign the span to
segmental affiliations are	the "wrong" segment:
actualized as a span:	
Speakers intend: /thrikhos/	
Speakers produce: [thrikhos]	Listeners hear:]thrikhos[
	Listeners guess:\trikhos\

Rhoticity's intended segmental affiliations are actualized as a span:

Speakers intend: /khɔɪnɪ/

Speakers produce: [khɔɪnɪ] Listeners hear:]khɔɪnɪ/

Listeners guess: \khɔɪnɪ/

• The problems for "hyper-correction":

- Over-reliance on theoretical constructs:
 - •Ohala relies on the traditional **segment**, in the sense that listeners are formulating hypotheses about the *intended* segmental affiliation of particular acoustic cues.
 - •Ohala relies on **underlying representations**, in that he assumes listeners "undo", "factor out" or "correct" supposed "distortions" in the speech signal. Such distortions may be characterized as such only if we assume the existence of an idealized "undistorted" (underlying, phonemic) state. Such an assumption is characteristic of structuralist, and especially generativist phonology.

•Incorrect predictions:

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•Ohala's account does not predict that long-distance dissimilations typically involve deletion at the *beginning*-edge of the span, not the *final*-edge of the span (labial dissimilation, Grassman's Law, rhotic dissimilation in American English, etc.).

- Ohala's account overpredicts cases of dissimilation:
 - •Why does nasal place never dissimilate from following stops?
 - Why do stop-stop sequences almost never dissimilate their manner properties?

- Most significantly, Ohala proposes a highly dubious conjectural mismatch between speaker intent and listeners' conclusions about speaker intent.
- •How can linguists know that aspects of speakers' speech is unintended?
- How can listeners know this?

- The Licensing-by-Cue alternative (exemplified by Latin labial dissimilation:
- Listeners may indeed hear a span of labiality from the first
 velar-vocoid sequence through the second velar-vocoid
 sequence: [k^wink^we]
- •The first glide-vowel sequence possesses meager F2 transitions, due to the pervasive labiality during the early portion of the span: $[k^{\text{w}}i\eta...]$
 - •The second glide-vowel sequence possesses robust F2 transitions, due to the change in lip posture from rounded to unrounded: [...ķ^we]
 - The result is a span of labiality with its cues most prominent during the second glide-vowel sequence.

- Due to the acoustic robustness of these particular transitions,
 listeners may attend to—and come to rely most heavily
 upon—this particular acoustic component of the span.
 - •In time, the cues that precede this latter velar-vocoid sequence may become less important, thus precipitating their diachronic demise.
 - Rhotic and aspiration dissimilation (etc.) may be accounted for in comparable terms.

Exceptions explained:

- •Ejectives (Quechumaran *t'ant'a → Quechua t'anta) are arguably most salient after the first pop, for aerodynamic reasons: subglottal pressure is likely to be high early in the utterance, lower later in the utterance.
- •English Rhoticity spans ending in labial- \mathbf{I} clusters ($\mathbf{sex} \mathbf{b} \mathbf{I} \mathbf{I} \rightarrow \mathbf{sex} \mathbf{b} \mathbf{I}$) are arguably more salient at the beginning of the span, due to low F3 interference.

•Gerfen's challenge: Eastern Andalusian Spanish

•Historic s has become h both word-finally, and, when a consonant immediately follows, word-internally as well (accompanied by post-h consonant gemination).

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ganas \rightarrow ganah "desire"

boske \rightarrow bohkæ "forest"

esla\betao \rightarrow ehl\alpha\betao "Slavic"
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•Gerfen:

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- •There is little *phonetic* motivation for an s-to-h change in word-internal contexts in particular, since s does not rely on its context for the salient expression of its cues.
- •Rather, s possesses salient "internal" cues that should not be subject to loss, regardless of its context
- •Gerfen's conclusion: $s \rightarrow h/$ ___]_{σ} (i.e., licensing by cue fails)

• Rejoinder to Gerfen:

- •Diachronically speaking, first, $s \rightarrow h$: in utterance-final position, oral airflow may weaken and/or overall energy may diminish.
- •This establishes an h s alternation: in the relevant words, we find word-final h utterance-finally, whereas we find word-final s utterance-internally.
 - •The pattern may readily generalize toward **h** in *all* word-final contexts, even when not utterance final.

- •Concomitantly, since word-final s is increasingly headed toward h, and this h is typically followed by a (word-initial) consonant, the pattern may generalize to include comparable word-internal phonotactic contexts: we end up finding h—and increasingly rarely find s—when this value is lexically nonprevocalic: $sC \rightarrow hC$
- •This is the pattern found in Andalusian today.

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•No reference to syllable structure. Instead, a sound change that has its origins in phonetic naturalness—that of s-to-h in utterance-final position—may sow the seeds for its own expansion into contexts that are not necessarily phonetically natural, but nonetheless are phonotactically analogous.

•Implications:

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- •The licensing-by-cue account of the dissimilatory changes:
 - •Offers a compelling explanation for the *final*-edge robustness observed in these patterns,
 - Offers a compelling explanation for exceptions to this generalization
 - No segments No derivations No underlying representations
 - •No "guessing games" about speaker intent by linguists and listeners

•...Just LICENSING BY CUE

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