



# Two Repairs in One Grammar?

## Obligatory Epenthesis & Variable t/d deletion in English

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### 1. Introduction

Some processes that affect regular past tense forms in English:

- **Vowel Epenthesis:** /wet+d/ → [wetld] *waited*
- **Voicing Assimilation:** /kls+d/ → [klsd] *kissed*
- **T/D Deletion** optionally applies to clusters whose members are not both coronal stops, deleting suffix coronal. The more features the 2 segments share, the more likely it is that deletion of the final coronal will occur (Guy & Boberg 1997)

/kls+d/ → klsd → [kls] *kissed*

**Epenthesis & deletion both repair marked sequences.  
How to choose the correct repair for each case?**

With rules: Epenthesis bleeds deletion

	/wet+d/ (wait+PAST)	/kls+d/ (kiss+PAST)
epenthesis	wetld	-----
deletion	-----	kls
output	[wetld]	[kls]

In OT:

1. To get epenthesis, DEP must be dominated by constraints ruling out coronal stop sequences (see Bakovic 2005)

/wet+d/	NoGem	Agree[voi]	MAX-C	DEP-V	Ident[voi]
wetld		*!			
wett	*!				*
wet			*		
☞ wetld				*	

2. To get deletion, MAX must be variably ranked wrt constraints militating against clusters (see Côté 2004)

/kls+d/	Agree[voi]	DEP-V	*st	MAX-C	Ident[voi]
klsd	*!				
◊ klst			*!		*
◊ kls				*!	
klsld		*!			

Note the ranking paradox! If DEP-V >> MAX-C, epenthesis would be correctly ruled out in *kissed*, incorrectly so in *waited*. If MAX-C >> DEP-V, deletion would be ruled out in *waited*, but epenthesis predicted for *kissed*.

### 2. The Problem

- The specific repair chosen must result from the relative ranking of faithfulness constraints (which can't be variable!). Given ranking  $M_1 \gg F_1 \gg M_2 \gg F_2$ , violation of  $F_2$  will be preferred repair for both  $M_1$  and  $M_2$  violations - unless some other constraint C distinguishes F-violating candidates across derivations. What form could C take?

- Can't distinguish the final clusters morphologically, since all involve same past tense morpheme.

- Looks like a case for Licensing-by-Cue (Steriade 1997): explode Faith constraints so a high-ranked MAX rules out deletion candidate [wet]. BUT: MAX(t)/t\_ >> MAX(t)/s\_ is contra claims of L-by-C.

/kls+d/	NoGem	Agree[voi]	MAX(t/_)	DEP	*st	MAX(t/s_)	Ident[voi]
klsd		*!					
◊ klst					*!		*
◊ kls						*!	
klsld				*!			

/wet+d/	NoGem	Agree[voi]	MAX(t/_)	DEP	*st	MAX(t/s_)	Ident[voi]
wetld		*!					
wett	*!				(*)		*
wet			*			*	
☞ wetld				*			

- L-by-C doesn't explain why the segment w/ poorest cues (post-coronal [d]) is saved by epenthesis rather than deleted.

### 3. A Level-Ordering Account

- Not a typical case of opacity: both generalizations are surface-true and -apparent, and no intermediate representations are needed. Thus OT machinery which has been proposed for dealing with these aspects of opacity (e.g. Sympathy) is not helpful.

- Each process potentially bleeds the other
- Not possible to derive different repairs from same constraint ranking, without formulating constraints in a way that refer specifically to structure being repaired. To maintain independence of markedness violations and repair, must locate repairs at different levels (corresponding to Lexical and Post-Lexical)

Proposal: High-ranked MAX-Morpheme constraint ensures that past-tense suffix is preserved; low-ranked general MAX-C means deletion is still possible in monomorphemic forms at Lexical level, resulting in higher deletion rates for these forms (see Guy 1991)

#### First level: Faithfulness to morphemes

/wet+d/	NoGem	Agree[voi]	MAX-morph	DEP-V	*st	MAX-C
wetld		*!				
wett	*!				(*)	
wet			*!			*
☞ wetld				*		

/kls+d/	NoGem	Agree[voi]	MAX-morph	DEP-V	*st	MAX-C
klsd		*!				
☞ klst					*	
kls			*!			*
klsld				*!		

/mlst/	NoGem	Agree[voi]	MAX-morph	DEP-V	*st	MAX-C
◊ mlst					*	
◊ mls						*
mlslt				*!		

#### Second level: Morphemes expendable

/wetld /	NoGem	Agree[voi]	DEP-V	MAX-C	*st	MAX-morph
☞ wetld						
wett				*!		*

/klsd /	NoGem	Agree[voi]	DEP-V	MAX-C	*st	MAX-morph
◊ klsd				*	*	*
◊ kls				*	*	*
klsld			*!			

/mlst/	NoGem	Agree[voi]	DEP-V	MAX-C	*st	MAX-morph
◊ mlst				*	*	*
◊ mls				*	*	*
mlslt			*!			