Class 10: Correspondence review

To do

- Fijian assignment (on last week's material) is due tomorrow (Fri)
- Next reading is Moreton 2008 (due Tuesday)
- Project: have 1st meeting with me by the end of this week

1 Trick question

• Does /tui/ \rightarrow [ty] violate IDENT-IO(round)?

2 Correspondence (McCarthy & Prince 1995) = Part-numbering

- Every segment in the input bears a unique index (and perhaps every unit of structure, including features, moras, syllables...), usually written as a subscript number.
- The relation of *correspondence* between input and output segments is encoded by identical indices (subscripted numbers).

	/t ₁ u ₂ i ₃ /	IDENT(round)	IDENT(back)
а	$[t_1y_2]$		*
b	$[t_1y_3]$	*	

- Candidate *a* says that $/t_1$ corresponds to $[t_1]$, and $/u_2$ corresponds to $[y_2]$.
 - Another way to write that: $Corr(/t_1/,[t_1]), Corr(/u_2/,[y_2]).$
 - Yet another way: Candidate *a*'s correspondence relation = $\{(/t_1/, [t_1]), (/u_2/, [y_2])\}$
 - We can also draw it:

input	output
/t/	[t]
/u/	[y]
/i/	-•-

• You'll probably never see a tableau with candidates this outrageous, but they are candidates:

	$p_1a_2t_3o_4k_5/$	
а	$[p_1a_2t_3o_4k_5]$	
b	$[p_5a_1t_4o_2k_3]$	
С	$[p_1a_1t_1o_1k_1]$	
d	$[p_6a_7t_8o_9k_{10}]$	

(I left space in case we want to consider some constraints that this violates)

3 Good and bad correspondence relations

Faithfulness constraints (aka *correspondence constraints*) regulate these relations. Here are the ones proposed by McCarthy & Prince. We add "**IO**" to specify that we're talking about **input-o**utput correspondence.

IDENT(F)-IO	(don't change feature values)	If an input segment and an output segment correspond, they must bear identical values for feature [F]
MAX-C-IO	(don't delete)	Every consonant in the input must have a correspondent in the
MAX-V-IO		Every vowel in the input must have a correspondent in the output.
DEP-C-IO	(don't insert)	Every consonant in the output must have a correspondent in the input
DEP-V-IO		Every vowel in the output must have a correspondent in the input.
LEFT-ANCHOR(X)-IO		If there is an input segment A at the left edge of X (X = word, stem, phrase, whatever) in the input, and an output segment B is at the left edge of the same X in the output, A must correspond to B.
RIGHT-ANCHOR(X)-IO		If there is an input segment A at the right edge of X (X = word, stem, phrase, whatever) in the input, and an output segment B at the right edge of X in the output, A must correspond to B.
UNIFORMITY-IO	(don't coalesce)	Nothing in the output can have more than one correspondent in the input.
INTEGRITY-IO	(don't split)	Nothing in the input can have more than one correspondent in the output.
LINEARITY-IO	(don't metathesize)	If A precedes B in the input, and A and B both have correspondents in the output, then A's output correspondent has to precede (but not necessarily immediately precede) B's output correspondent.
O-CONTIGUITY-IO	(don't intrude)	If A immediately precedes B in the input, and A and B both have correspondents in the output, then A's output correspondent has to <u>immediately</u> precede B's output correspondent.
I-Contiguity-IO	(don't skip)	If A immediately precedes B in the output, and A and B both have correspondents in the input, then A's input correspondent has to immediately precede B's input correspondent.

(MAX = *maximize* the preservation of material in the input

DEP = every segment in the output should *depend* on a segment in the input.)

- \circ Given the input /p₁a₂t₃o₄k₅/, devise, for each of the correspondence constraints above, an output candidate that violates it.
- Can you think of a candidate that violates DEP but not I-CONTIG?
- Can you think of a candidate that violates MAX but not O-CONTIG?
- Can you think of a candidate that violates DEP and L-ANCHOR(Word) in the same place?
- Can you think of a candidate that violates MAX and R-ANCHOR(Word) in the same place?

○ Does $/p_1a_2t_3o_4a_5/ \rightarrow [p_1a_2t_3w_4a_5]$ violate MAX-C-IO?

4 Where it gets tricky

○ Does this violate O-CONTIG: $/p_1a_2t_3o_4k_5/ \rightarrow [p_1a_2t_3a_4u_4k_5]$? I-CONTIG?

We usuall don't worry about it. CONTIG constraints were designed to regulate deletion and insertion inside a candidate (as opposed to at the edge), so they probably wouldn't appear in a tableau with that candidate.

○ Does this violate IDENT(round): $/t_1u_2i_3/ \rightarrow [t_1y_{2,3}]$?

Struijke 2001 & Struijke 2000, working on reduplication, proposes that faithfulness constraints should be defined <u>existentially</u>:

• IDENT(F)-IO: if A is an input segment with one or more output correspondents, at least one of A's output correspondents must have the same value for [F] as A does.

because this is asymmetrical, I guess we'd also need

• IDENT(F)-OF: if B is an output segment with one or more input correspondents, at least one of B's input correspondents must have the same value for [F] as B does.

5 Strings that can be subject to correspondence

- Input-Output
- Base-Reduplicant
- Output-Output (Benua 1997; Crosswhite 1998; Kenstowicz 1996; Steriade 2000; Burzio 1999 and many others)
- Variant-Variant (Kawahara 2002)

References

- Benua, Laura. 1997. Transderivational Identity: Phonological Relations between Words.. University of Massachusetts, Amherst.
- Burzio, Luigi. 1999. Surface-to-surface morphology: When your representations turn into constraints.. Baltimore, MD.
- Crosswhite, Katherine M. 1998. Segmental vs. prosodic correspondence in Chamorro. Phonology 15(3). 281-316.

Kawahara, Shigeto. 2002. Similarity among Variants: Output-Variant Correspondence.

- Kenstowicz, Michael. 1996. Base-identity and uniform exponence: alternatives to cyclicity.. In Jacques Durand & Bernard Laks (eds.), *Current Trends in Phonology: Models and methods*, 363–393. Paris-X and Salford: University of Salford Publications.
- McCarthy, John J & Alan Prince. 1995. Faithfulness and Reduplicative Identity.. In Jill Beckman, Laura Walsh Dickey, & Suzanne Urbanczyk (eds.), *University of Massachusetts Occasional Papers in Linguistics 18*, 249–384. Amherst, Mass.: GLSA Publications.
- Steriade, Donca. 2000. Paradigm uniformity and the phonetics-phonology boundary.. In Janet Pierrehumbert & Michael Broe (eds.), Acquisition and the Lexicon (Papers in Laboratory Phonology 5), 313–334. Cambridge: Cambridge University Press.
- Struijke, Caro. 2000. Why constraint conflict can disappear in reduplication.. In Masako Hirotani (ed.), *Proceedings* of the North East Linguistics Society 30, 613–626. Amherst, Mass.: GLSA Publications.
- Struijke, Caro. 2001. Existential faithfulness: A study of reduplicative TETU, feature movement, and dissimilation.. University of Maryland, College Park.