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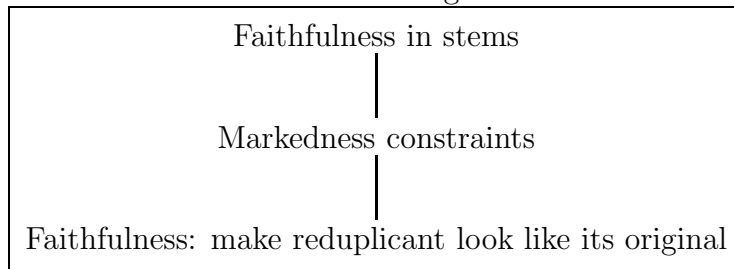
# Week 9 – Prosody and Reduplication II

April 14 and 16, 2008

## 1 Reduplication

### 1.1 The Emergence of the Unmarked

- (1) The emergence of the unmarked (TETU) is a theoretical term which refers to the general tendency for there to be a reduction of material in reduplicants.
- (2) The copy is less marked than the original.
  - a. This has been taken to be an argument for OT: there is a Markedness sandwich



- (3) More generally, TETU effects in reduplication have been taken as “UG in action”, rather like the reduction processes seen in child speech, and involve the same issues.<sup>1</sup>
- (4) Fast-speech Ilokano light reduplication

trabaho	‘work’
?agin-tra-trabaho	‘pretend to be working’
?agin-ta-trabaho	‘pretend to be working (fast speech form)’

Fundamental ranking: IO-FAITHFULNESS >> PHONO-CONSTRAINT >> BR-FAITHFULNESS

★ Work out an OT analysis for Ilokano light reduplication in fast speech form above.

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<sup>1</sup>For phonetically-based naturalness in reduplication, see Fleischhacker, Heidi (2005) Similarity in Phonology: Evidence from Reduplication and Loan Adaptation, UCLA diss., <http://www.linguistics.ucla.edu/faciliti/diss.htm>

- (5) Balangao (Austronesian, McCarthy and Prince 1994 NELS, after Shetler)

ka + RED + ?uma	ka-?uma-?uma	‘always making fields’
ka + RED + ?ubulot	ka-?ubulo-?ubulot	‘believers of everything’
ma + RED + tajnan	ma-tajna-tajnan	‘repeatedly be left behind’
maŋ + RED2 + tagtag	ma-nagta-tagta-tagtag	‘running everywhere repeatedly’

- a. Note coda loss is possible only in final position since contiguity would otherwise be disrupted.

★ Present a tableaux illustrating TETU in Balangao.

## 1.2 Reverse TETU and IR correspondence

- (6) Are there any cases when the reduplicant is more faithful to the underlying input than the base? McCarthy and Prince (1995) say ‘Yes’.

- (7) Reduplication/Reduction/Syncope in Klamath (Clements & Keyser 1983: 140f.)

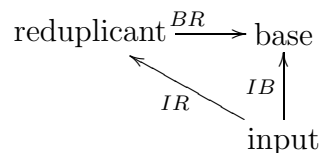
- a. Syncope in base

/DIST+mbody'+dk/	mbomp_ditk	‘wrinkled up (dist.)’
/DIST+sm'oq'y+dk/	sm'osm q'itk	‘having a mouthful (dist.)’
/DIST+pniw+abc'+a/	pnipn o:pc'a	‘blow out (dist.)’
/DIST+njoy+el'g+a/	njonj i:lga	‘are numb (dist.)’
/DIST+poli:+k'a/	pop li:k'a	‘little policemen (dist.)’

- b. Reduction in base

/DIST+dmesga/	dedmcsga	‘seize (dist.)’
/DIST+sipc+a/	siscpca	‘put out a fire (dist.)’
/DIST+natdk'+a/	nancttk'a	‘are cold (dist.)’
/DIST+pikca+'a:k'/	pipckcaa:k	‘little pictures (dist.)’
/DIST+sa+la+ak'w+ebli/	sasclk'obli	‘puts round black object across oneself (dist.)’

- (8) McPrince (1995) have used such cases of ‘reverse TETU’ to justify the full model.



### 1.3 Fixed segmentism

- (9) Some fixed segmentism really does seem to be “overwriting”—however that is ultimately to be done.
- (10) But much fixed segmentism in reduplicants looks like TETU low sonority vowels, like reduced vowels
- (11) Reference: Alderete, J., J. Beckman, L. Benua, A. Gnanadesikan, J. McCarthy & S. Urbanczyk (1999). Reduplication with Fixed Segmentism. *Linguistic Inquiry* 30. 327-364.
- (12) Yoruba Reduplication

gbóna	gbí-gbóna	‘be warm, hot’/ ‘warmth, heat’
jɛ	jí-jɛ	‘eat’/ ‘act of eating’
rí	rí-rí	‘see’/ ‘act of seeing’

- a. Note H tone, an unlikely but possible default (e.g. Sekani, Hargus 19xx)
- (13) Nancowry is a case harder to handle with TETU because the fixed segment varies according to context:

coronal stops	fut	‘to rub’	?it-sut	‘to kick with the foot’
	kij	‘to monkey’	?in-kij	‘to show the teeth like a monkey’
non-coronal stops	niák	‘binding’	?uk-niák	‘to bind’
	rom	‘flesh of fruit’	?um-rom	‘to eat pandanus fruit’

- (14) Perhaps we could analyze fixed segmentation better as a kind of *melodic overwriting* like English “fancy-shmancy” reduplication.
- (15) Note also in English (and in other languages like Bengali (Khan 2006)) often the reduplicated word must begin with a different consonant than the specified overwriting element(s). E.g. in English: “Shmalts-\_\_\_\_\_ . My own grandmother used Crisco.”

### 1.4 Gaps in the factorial typology

#### 1.4.1 Kager-Hamilton Paradox

- (16) The Kager Hamilton problem exists because the OT model of reduplication (correspondence theory) accounts for and predicts back copying effects (where the realization of the reduplicant affects the realization of the base).
- a. For segmental processes, this looks good.
- b. But the templatic requirements on the reduplicant never back-copy onto the base!

(17) We saw how we get partial reduplication:

/RED+tipaku/	RED= $\mu\mu$	IO-MAX	BR-MAX
a. tipa-tipa		k!u	
☞ b. tipa-tipaku			ku
c. tipaku-tipaku	*!		

(18) But we can also get truncating of the base in the typology!

/RED+tipaku/	RED= $\mu\mu$	BR-MAX	IO-MAX
☞ a. tipa-tipa			ku
b. tipa-tipaku		k!u	
c. tipaku-tipaku	*!		

### 1.4.2 Wholesale markedness reduction

(19) Total reduplication is common, but wholesale markedness reduction in such cases apparently does not occur. e.g., /RED+blapmafarit/ → [bamapari-blapmafarit]

a. The individual changes seen here are all possible, but not on a wholesale basis, as theory currently predicts.

★ Develop a ranking of the constraints that generates total reduplication but with no codas in the reduplicant. Illustrate with /RED+badkiptol/.

## 1.5 Other approaches to Reduplication

(20) Why does the reduplicant look like the base?

a. In OT, that's because of base-reduplicant correspondence constraints.

b. In earlier theories you read about last week, templatic copying.

(21) Here are two other theories “on the market”:

### 1.5.1 Raimy 2000

(22) Raimy (2000) rejects the OT approach due to the issues above, among others.

(23) Raimy's proposal: Representations of words explicitly include what he calls ‘precedence relations’, which really the immediate precedence relations, or contiguity relations in a word.

a. Thus [badupi] is really

# → b → a → d → u → p → i → %

b. You can also think of this as a set of such relations:

$$\{ \# \rightarrow b, b \rightarrow a, a \rightarrow d, d \rightarrow u, u \rightarrow p, p \rightarrow i, i \rightarrow \% \}$$

c. There is a **linearization procedure** that turns this set into [badupi].

(24) Reduplication is just adding one more precedence relation to make a loop. E.g. let's add (d→b) to the set.

# → b → a → d → u → p → i → %

a. The linearization procedure turns this into [bad-badupi].

(25) See Raimy's dissertation for the details of how linearization works (i.e. how it knows when to stop so we avoid [badbadbadbadupi].)

a. We'll just assume it works for now.

(26) Transparent application

a. E.g. Tagalog intervocalic d-tapping (/RED+daPan/→[da-raʔan] 'road?').

b. In Raimy's analysis: phonological rule follows linearization

★ Show the derivation.

(27) Overapplication

a. E.g. Madurese Nasal harmony intervocalic d-tapping (/RED+mowa/→[wã-mõwã] 'faces').

b. In Raimy's analysis: phonological rule precedes linearization

c. Note here the reduplicating morpheme has to make some changes w.r.t. to the left word boundary.

★ Show the derivation.

(28) Underapplication

a. E.g. Japanese g-lenition (/RED+gara/→[gara-gara], \*[gara-ŋara] 'rattle').

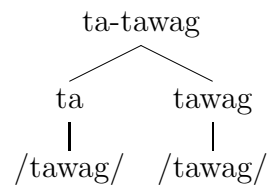
b. In Raimy's analysis: phonological rule stipulate *all* environments must match the structural description.

★ Show the derivation.

- ★ What makes the reduplicant similar to the base in Raimy's analysis?

### 1.5.2 Inkelas and Zoll 2000

- (29) *Double Generation*. Create two copies of the stem, which may be subject to different co-phonologies (e.g. different rankings)



- a. The reduplicant is handled by co-phonology-X, but the base by co-phonology-Y, where co-phonology-X requires truncation, but co-phonology-Y doesn't.
- (30) Co-phonologies have been used to also explain different 'layers' in the lexicons. (Ito and Mester 1995 "Japanese Phonology")